NOT FOR RELEASE OR DISTRIBUTION IN THE UNITED STATES OR TO U.S. PERSONS

INDIAN HIGHWAY CONCESSIONS TRUST

(Registered in the Republic of India as an irrevocable trust set up under the Indian Trusts Act, 1882, and registered as an infrastructure investment trust under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, on February 24, 2020 having registration number IN/InvIT/19-20/0013)

Principal place of business: Unit No. 699, 6th Floor, "VEGAS" Plot No. 6, Pocket 1, Sector 14, Dwarka, South Delhi, New Delhi 110 075
Tel: +91 (22) 6817 6666; **Compliance Officer**: Ankit Dewan
E-mail: compliance@maplehighways.com; **Website**: www.maplehighways.com

Sponsor	Investment Manager	Trustee
Maple Highways Pte Ltd	**Maple Infra InvIT Investment Manager Private Limited**	**Axis Trustee Services Limited**

INFORMATION MEMORANDUM FOR LISTING 352,170,000 UNITS OF FACE VALUE OF INR 100 EACH OF INDIAN HIGHWAY CONCESSIONS TRUST ("TRUST" AND SUCH UNITS, THE "UNITS") ON BSE LIMITED ("BSE")

NO UNITS ARE PROPOSED TO BE ISSUED OR OFFERED FOR SALE PURSUANT TO THIS INFORMATION MEMORANDUM

GENERAL RISKS

Investments in Units involve a high degree of risk and Investors should not hold an investment in the Units unless they are prepared to take the risk of losing all or part of their investment. Investors are advised to carefully read the section entitled "*Risk Factors*" on page 47 and other disclosures included in this Information Memorandum before making an investment decision relating to the Units to be listed in terms of this Information Memorandum. Investors are advised to consult their own advisors about the consequences of an investment in Units. A copy of this Information Memorandum has been delivered to BSE Limited.

INVESTMENT MANAGER'S AND SPONSOR'S ABSOLUTE RESPONSIBILITY

The Investment Manager having made all reasonable inquiries, accepts responsibility for, and confirms that, this Information Memorandum and all other submissions made to BSE Limited contains all information with regard to the Trust, which is material in the context of the listing of the units of the Trust and that the information contained in this Information Memorandum is true and correct in all material respects and is not misleading in any material respect, that the opinions and intentions expressed herein are honestly held and that there are no other facts, the omission of which makes this Information Memorandum as a whole or any of such information or the expression of any such opinions or intentions, misleading in any material respect.

The Sponsor, severally (and not jointly or jointly and severally) having made all reasonable inquiries, accepts responsibility for and confirms that this Information Memorandum contains all information with regard to itself, which is material in the context of the listing of the units of the Trust and such information contained in this Information Memorandum is true and correct in all material respects and that the opinions and intentions expressed herein are honestly held. The Sponsor does not assume responsibility for any other statements including statements made by the Trust or any other person(s) in this Information Memorandum.

LISTING

The Units of the Trust are proposed to be listed on the BSE Limited ("**BSE**"). The Trust shall be submitting a copy of this Information Memorandum to BSE and the same shall also be available on the website of the Trust. The Information Memorandum shall also be available on the website of BSE at www.bseindia.com.

LEAD MANAGER	REGISTRAR AND UNIT TRANSFER AGENT
Axis Capital Limited Axis House, 1st Floor, Wadia International Centre, Pandurang Budhkar Marg, Worli Mumbai – 400 025 **Tel.:** + 91 22 4325 2183 **E-mail:** ihct.listing@axiscap.in **Website:** www.axiscapital.co.in **Investor grievance mail:** complaints@axiscap.in **Contact Person:** Harish Patel/Akash Aggarwal **SEBI Registration No:** INM000012029	**Kfin Technologies Limited** *(formerly known as "Kfin Technologies Private Limited")* Address: Selenium, Tower B, Plot No- 31 and 32, Financial District, Nanakramguda, Serilingampally, Hyderabad, Rangareddi 500 032 Telangana, India. Telephone Number: +91 40 6716 2222 Toll free number: 1800 309 4001 Website: www.kfintech.com Email: Ihct.ipo@kfintech.com Investor grievance e-mail: einward.ris@kfintech.com Contact Person: M Murali Krishna SEBI Registration No.: INR000000221 CIN: U72400TG2017PTC117649

This Information Memorandum is dated June 15, 2023.

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DEFINITIONS AND ABBREVIATIONS

This Information Memorandum uses the definitions and abbreviations provided below which you should consider when reading the information contained herein.

References to any legislation, act, regulations, rules, guidelines, circulars, notifications, clarifications or policies shall be to such legislation, act, regulations, rules, guidelines, circulars, notifications, clarifications or policies as amended, supplemented, or re-enacted from time to time and any reference to a statutory provision shall include any subordinate legislation made under that provision.

The words and expressions used in this Information Memorandum, but not defined herein shall have the meaning ascribed to such terms under the InvIT Regulations, the SEBI Act, the Depositories Act, and the rules and regulations made thereunder.

Notwithstanding the foregoing, the terms not defined but used in the sections entitled "Audited Financial Statements" and "Legal and other Information" on pages 261, and 247, respectively, shall have the meanings ascribed to such terms in those respective sections.

In this Information Memorandum, unless the context otherwise requires, a reference to "we", "us" and "our" refers to the Trust, and the Project SPVs on a consolidated basis.

Trust Related Terms

Term	Description
Audited Financial Statements	Collectively, the Consolidated Financial Statements and the Standalone Financial Statements.
Associate	Associate shall have the meaning under Regulation 2(1)(b) of the InvIT Regulations. It is clarified that the portfolio companies of each of the Sponsor and its affiliates shall not be considered Associates of the Sponsor, the Investment Manager or the Project Manager (including the Trust and the Project SPVs).
Auditors	S R Batliboi & Co. LLP, the statutory auditors of the Trust
Business day	Business day shall be any day from Monday to Friday, excluding any public holiday
Capital Contribution	The aggregate per Unit price at which Units are issued by the Trust, as agreed and paid by the Unitholders to the Trust for acquiring Units of the Trust, in accordance with the provisions of the Trust Documents.
Claims Benefit Assignment Agreement	The claims benefit assignment agreement dated June 7, 2022, entered into between SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee))
Claims Management Agreement	The claims management agreement dated January 20, 2021 entered into between the SJEPL, Simplex Infra Development Private Limited, Simplex Infrastructures Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)) read with the agreement to clarify and supplement the understanding in the claims management agreement dated June 7, 2022 entered into between SJEPL, Simplex Infra Development Private Limited, Simplex Infrastructures Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee))
Clarification Agreement to the Claims Management Agreement	The agreement to clarify and supplement the understanding in the claims management agreement dated June 7, 2022 entered into between SJEPL, Simplex Infra Development Private Limited, Simplex Infrastructures Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee))

Term	Description
Clarification Agreement to the Securities Purchase Agreement	The agreement to clarify and supplement the understanding in the securities purchase agreement dated June 7, 2022 entered into between the Trust (acting through the Investment Manager (acting on behalf of the Trustee)), SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG
Concession Agreements	Collectively, the SJEPL Concession Agreement and the NCREPE Concession Agreement
Consolidated Financial Statements	The consolidated financial statements of the Trust and the Project SPVs which comprises the consolidated Balance sheet as at March 31, 2023, the consolidated Statement of Profit and Loss for the year ended March 31, 2023, including other comprehensive Income, the consolidated Statement of Cash Flows for the year ended March 31, 2023 and the consolidated Statement of Changes in Unit holders' equity for the year then ended March 31, 2023, the consolidated Statement of Net Asset at fair value as at March 31, 2023, the consolidated Statement of Total Returns at fair value and the Statement of Net Distributable Cash Flows for the year ended March 31, 2023, prepared in accordance with Ind AS read with InvIT Regulations.
Corporate Governance Framework	The corporate governance framework adopted by the Investment Manager on behalf of the Trust. For details, please see the section entitled "*Corporate Governance*" on page 132
Earn Out Agreement	The earn out agreement dated January 20, 2021 entered into between the SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Galfar Engineering & Contracting SAOG and Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee))
Equity Shares	Equity shares of the SPVs
Holding Company or HoldCo(s)	A holding company, as defined under Regulation 2(1)(sa) of the InvIT Regulations
Indenture or Indenture of Trust	The amended and restated indenture of trust of Indian Highway Concessions Trust dated June 13, 2023 entered into between Megha Sethi and the Trustee
Infrastructure Projects	An infrastructure project, as defined under Regulation 2(1)(u) of the InvIT Regulations
Initial Indenture	The indenture of trust of Indian Highway Concessions Trust dated November 6, 2019 entered into between Megha Sethi and the Trustee, read along with the amendment dated Octobet 4, 2021
Investor	A person who has or may invest in the Units of the Trust, subject to applicable law
Investment	Investment by the Trust in Holding Companies or SPVs in accordance with the Trust Documents and as permitted under applicable law
Investment Management Agreement	The amended and restated investment management agreement dated June 13, 2023 entered into between the Trust (acting through its Trustee), the Investment Manager and the Project SPVs.
Investment Manager	Maple Infra InvIT Investment Manager Private Limited
Investment Objectives	The object and purposes of the Trust, as provided under the section entitled "*Overview of the Trust*" on page 17
Investment Strategy	The investment strategy and investment policy of the Trust described in this Information Memorandum issued on behalf of the Trust, as modified, supplemented or amended, in writing, from time to time as provided under the section entitled "*Overview of the Trust*" on page 17
Listing	The listing of the units of the Trust on the Stock Exchange
InvIT or Trust	Indian Highway Concessions Trust
Key Personnel	Key Personnel shall mean key personnel of the Investment Manager in accordance with the InvIT Regulations
NCREPE	NCR Eastern Peripheral Expressway Private Limited
NCREPE Concession Agreement	The concession agreement dated May 6, 2022 entered between NCREPE and NHAI, including all amendments and supplements made thereto
NCREPE Project Implementation and Management Agreement	The project implementation and management agreement dated October 13, 2022 entered into amongst the Trustee, the Project Manager, the Investment Manager and NCREPE

Term	Description
NCREPE Shareholder Loan Agreement	The loan agreement dated October 13, 2022, entered into between NCREPE and the Trust (acting through the Trustee and represented by the Investment Manager) in relation to the facility availed by NCREPE from the Trust.
Parties to the Trust	Collectively, the Sponsor, the Trustee, the Investment Manager and the Project Manager
Project Implementation and Management Agreements	SJEPL Project Implementation and Management Agreement and NCREPE Project Implementation and Management Agreement
Project Manager	Maple Highway Project Management Private Limited
Projects	The six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha and the Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region
Project SPVs	SJEPL and NCREPE
Projections of Revenue from Operations and Cash Flow from Operating Activities	Projections of revenue from operations cash flows from operating activities and the underlying assumptions of Indian Highway Concessions Trust, SJEPL and NCREPE, and each of SJEPL and NCREPE individually,for the years ending March 31, 2024, March 31, 2025 and March 31, 2026 along with the basis of preparation and other explanatory information and the significant assumptions
Registrar and Unit Transfer Agent	Kfin Technologies Limited *(formerly known as "Kfin Technologies Private Limited")*
Related Parties	Related parties, as defined under Regulation 2(1)(zv) of the InvIT Regulations.
Securities Purchase Agreement or SJEPL SPA	The securities purchase agreement dated January 20, 2021 entered into between the Trust (acting through the Investment Manager (acting on behalf of the Trustee)), SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG for the acquisition of 100% of the outstanding equity share capital in SJEPL by the Trust read with the agreement to clarify and supplement the understanding in the securities purchase agreement dated June 7, 2022 entered into between SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited, Galfar Engineering & Contracting SAOG and the Trust (acting through the Investment Manager (acting on behalf of the Trustee))
SJEPL	Shree Jagannath Expressways Private Limited
SJEPL Concession Agreement	The concession agreement dated August 6, 2010 entered between SJEPL and NHAI, including all amendments and supplements made thereto
SJEPL Project Implementation and Management Agreement	The project implementation and management agreements dated June 8, 2022 entered into amongst the Trustee, the Project Manager, the Investment Manager and SJEPL
SJEPL Shareholder Loan Agreement	The loan agreement dated June 7, 2022, including the first amendment agreement dated June 24, 2022, entered into between the Trust (acting through the Trustee and represented by the Investment Manager) and the SJEPL in relation to the facility availed by SJEPL from the Trust
Sponsor	Maple Highways Pte Ltd.
SPV(s)	Special purpose vehicles, as defined under Regulation 2(l)(zy) of the InvIT Regulations
Standalone Financial Statements	The standalone financials statements of the Trust comprises the standalone Balance sheets as at March 31, 2023, March 31, 2022 and March 31, 2021, the standalone Statement of Profit and Loss, including the standalone Statement of Other Comprehensive Income for the years ended March 31, 2023, March 31, 2022 and March 31, 2021, the standalone Statement of Cash Flows for the years ended March 31, 2023, March 31, 2022 and March 31, 2021, the standalone Statement of Changes in Unit holders' equity for the years then ended on March 31, 2023, March 31, 2022 and March 31, 2021, the standalone Statement of Net Asset at fair value as at March 31, 2023, March 31, 2022 and March 31, 2021, the standalone Statement of Total Returns at fair value and the Statement of Net Distributable Cash Flows for the years ended March 31, 2023, March 31, 2022 and March 31, 2021, prepared in accordance with Ind AS read with InvIT Regulations.

Term	Description
TOT Bundle 7 Project or NCREPE Project	Tolling, operation, maintenance and transfer of Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on toll, operate and transfer model
Tripartite Agreement	The tripartite agreement dated November 23, 2021 entered between NHAI, SJEPL and the Trust (acting through the Investment Manager (acting on behalf of the Trustee))
Trust Assets	The assets owned by the Trust, whether directly or through an SPV or a Holding Company, and shall include all rights, interests and benefits arising from and incidental to ownership of such assets , in accordance with applicable law and Trust Documents
Trust Documents	The Indenture of Trust, the Investment Management Agreement, the Project Implementation Agreements, any agreements among the Trustee, the Investment Manager and the Unitholders, in relation to the Trust, the Units, any debt securities or instruments or obligations issued by the Trust, any offering document in connection with a capital or debt issuance by the Trust, including any draft letter of offer or final letter of offer, policies as executed, issued, adopted and amended, modified, supplemented or restated from time to time
Trust Expenses	The expenses determined by the Investment Manager in consultation with the Trustee incurred out of the Trust Assets as specified in the Indenture of Trust
Trustee	Axis Trustee Services Limited
Unitholder	Any person who owns any Unit of the Trust
Units	An undivided beneficial interest in the Trust, and all issued and allotted Units together representing the entire beneficial interest in the Trust
Valuation Reports	The valuation reports dated May 31, 2023 issued by the Valuer, which sets out its opinion as to the fair enterprise value of SJEPL, NCREPE and the Trust as on March 31, 2023
Valuer	BDO Valuation Advisory LLP

Technical and Industry Related Terms

Term	Description
BoCW	Building and Other Construction Workers
BOT	Build Operate Transfer
CRISIL	CRISIL Market Intelligence & Analytics, a division of CRISIL Limited
CRISIL Report	A report entitled 'An assessment of the roads sector in India' dated May 2023, prepared by CRISIL
EPC	Engineering, Procuring and Construction
O&M	Operations and Maintenance
NCREPE Traffic Consultant	IBI Group India Private Limited
NCREPE Traffic Report	The traffic report prepared by the NCREPE Traffic Consultant entitled "Toll traffic and revenue assessment for Eastern Peripheral Expressway under TOT-B7" dated May 2023.
NCREPE Technical Consultant	Samarth Infraengg Technocrats Private Limited
NCREPE Technical Report	The technical report prepared by the NCREPE Technical Consultant entitled "Final Technical Diligence Report – Tolling, Operation, Maintenance & Transfer of Eastern Peripheral Expressway (from km 1.000 to km 136.000) of NE – II in the National Capital Region (NCR)" dated May 2023.
SJEPL Traffic Consultant	Steer Davies Gleave India Private Limited
SJEPL Traffic Report	The traffic report prepared by the SJEPL Traffic Consultant, "Traffic and Revenue Forecasts for Bhubaneswar-Chandikhol" dated April 2023.
SJEPL Technical Consultant	Ramboll India Pvt. Ltd.
SJEPL Technical Report	The technical reports prepared by the SJEPL Technical Consultant, entitled "Technical Review Report – Chandikhole – Jagatpur – Bhubaneshwar Section of NH-5" dated May 5, 2023
Technical Consultants	The SJEPL Technical Consultant and the NCREPE Technical Consultant
Technical Reports	The SJEPL Technical Report and the NCREPE Technical Report
TOT	Toll Operate Transfer
Traffic Consultants	The SJEPL Traffic Consultant and the NCREPE Traffic Consultant
Traffic Reports	The SJEPL Traffic Report and the NCREPE Traffic Report

Abbreviations

Term	Description
AIF	Alternative Investment Fund as defined in and registered with SEBI under the SEBI AIF Regulations
BSE	BSE Limited
CAF	Common Application Form
CAN	Confirmation of Allocation Note
CCI	Competition Commission of India
CDSL	Central Depository Services (India) Limited
CIN	Corporate Identity Number
Civil Code	The Code of Civil Procedure, 1908
Companies Act	Companies Act, 1956 and/or the Companies Act, 2013, as applicable
Companies Act, 1956	Companies Act, 1956 (without reference to the provisions thereof that have ceased to have effect upon notification of the sections of the Companies Act, 2013) along with the relevant rules made thereunder
Companies Act, 2013	Companies Act, 2013, to the extent in force pursuant to the notification of the Notified Sections, along with the relevant rules, regulations, clarifications, circulars and notifications issued thereunder
Competition Act	Competition Act, 2002
Consolidated FDI Policy	Consolidated Foreign Direct Investment Policy notified by the DPIIT through notification dated October 15, 2020 effective from October 15, 2020
CRC	Central Registration Centre
Depositories Act	Depositories Act, 1996
Depository	A depository registered with SEBI under the Securities and Exchange Board of India (Depositories and Participants) Regulations, 2018
Depository Participant	A depository participant as defined under the Depositories Act
DIN	Director Identification Number
FBIL	Financial Benchmark India Private Limited
FEMA	Foreign Exchange Management Act, 1999, read with rules and regulations thereunder
FEMA Rules	Foreign Exchange Management (Non-debt Instruments) Rules, 2019
Financial Year or Fiscal Year or Fiscal	Period of 12 months ended March 31 of that particular year, unless otherwise stated
FPI	Foreign portfolio investors
FVCI	Foreign venture capital investors, as defined under the SEBI FVCI Regulations
GAAR	General Anti-Avoidance Rules
GoI or Government	Government of India
GST	Goods and Services Tax
ICAI	Institute of Chartered Accountants of India
IFRS	International Financial Reporting Standards
Ind AS	Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended), prescribed under Section 133 of the Companies Act, 2013
Indian GAAP	Accounting standards notified under section 133 of the Companies Act, 2013, read with Companies (Accounting Standards) Rules, 2006, as amended and the Companies (Accounts) Rules, 2014, as amended
Indian GAAS	Generally Accepted Auditing Standards in India
InvIT	Infrastructure Investment Trust
InvIT Regulations	Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 and circulars, notifications, guidelines and clarifications issued thereunder
IRDAI	Insurance Regulatory and Development Authority of India
IT Act	The Income Tax Act, 1961
MCA	Ministry of Corporate Affairs
MoA	Memorandum of Association
MoEF	Ministry of Environment, Forest and Climate Change
MoRTH	Ministry of Road Transport and Highways
NCLAT	The National Company Law Appellate Tribunal, New Delhi

Term	Description
NCLT	The National Company Law Tribunal, Ahmedabad Bench
NDCF	Net distributable cash flows available for distribution
NEFT	National Electronic Funds Transfer
NHAI	National Highways Authority of India
Notified Sections	The sections of the Companies Act, 2013 that were notified by the Ministry of Corporate Affairs, Government of India
NSDL	National Securities Depository Limited
NSE	The National Stock Exchange of India Limited
PAN	Permanent Account Number
RBI	Reserve Bank of India
Regulation S	Regulation S under the Securities Act
RoC	Registrar of Companies
Rs./Rupees/INR/₹	Indian Rupees
RTGS	Real Time Gross Settlement
SCR (SECC) Regulations	Securities Contract (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2018
SCRA	Securities Contracts (Regulation) Act, 1956
SEBI	Securities and Exchange Board of India
SEBI Act	The Securities and Exchange Board of India Act, 1992
SEBI AIF Regulations	Securities and Exchange Board of India (Alternative Investments Funds) Regulations, 2012
SEBI FPI Regulations	Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019
SEBI FVCI Regulations	Securities and Exchange Board of India (Foreign Venture Capital Investors) Regulations, 2000
SEBI ICDR Regulations	Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018
SEBI VCF Regulations	Securities and Exchange Board of India (Venture Capital Funds) Regulations, 1996
Securities Act	U.S. Securities Act of 1933, as amended
Securities Exchange Act	U.S. Securities Exchange Act of 1934, as amended
Stock Exchanges	BSE and NSE
U.S./USA/United States	United States of America
USD/US$	United States Dollars
U.S.Person	Has the meaning given to that term in Rule 902(k) of Regulations S
VCF	Venture capital funds as defined under the SEBI VCF Regulations

PRESENTATION OF FINANCIAL DATA AND OTHER INFORMATION

Certain Conventions

All references in this Information Memorandum to "India" are to the Republic of India.

Unless stated otherwise, all references to page numbers in this Information Memorandum are to the page numbers of this Information Memorandum.

Financial Data

Unless stated otherwise or unless context requires otherwise, the financial information in this Information Memorandum in relation to the Trust or the Project SPVs is derived from the Consolidated Financial Statements or the Standalone Financial Statements, as the case may be.

The Audited Financial Statements have been prepared in accordance with the requirements of the InvIT Regulations, Ind AS as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with the InvIT Regulations. For further details, please see the section entitled "*Audited Financial Statements*" on page 261.

Further, this Information Memorandum includes summary of financial statements of the (i) Sponsor, as of and for the financial years ended December 31, 2022, December 31, 2021 and December 31, 2020, prepared in accordance with IFRS; and (ii) Investment Manager, for the financial years ended March 31, 2023, March 31, 2022 and March 31, 2021, prepared in accordance with Ind AS. For further details, please see the sections entitled "*Summary Financial Information of the Sponsor*" and "*Summary Financial Information of the Investment Manager*" on pages 28 and 32, respectively.

Further, this Information Memorandum includes projections of revenue from operations and cash flows from operating activities and the underlying assumptions of the Trust and the Project SPVs for the financial years ended March 31, 2024, March 31, 2025 and March 31, 2026, prepared in accordance with the InvIT Regulations and guidelines issued by SEBI. For further details, please see the section entitled "*Projections of Revenue from Operations and Cash Flow from Operating Activities*" on page 412.

The financial year for the Trust, the Investment Manager and the Project SPVs, commences on April 1 and ends on March 31 of the next year, and accordingly, all references to a particular financial year or fiscal year, for each of the Trust, the Investment Manager and Project SPVs, unless stated otherwise, are to the 12-month period ended on March 31 of that year. The financial year for the Sponsor, commences on January 1 and ends on December 31 of the same year, and accordingly, all references to a particular financial year or fiscal year, for the Sponsor, unless stated otherwise, are to the 12-month period ended on December 31 of that year.

The degree to which the financial information included in this Information Memorandum will provide meaningful information is entirely dependent on the reader's level of familiarity with Indian accounting policies and practices, the Companies Act, the Indian GAAP, Ind AS, IFRS and the InvIT Regulations. Any reliance by persons not familiar with Indian accounting policies and practices or IFRS on the financial disclosures presented in this Information Memorandum should accordingly be limited.

In this Information Memorandum, any discrepancies in any table between the total and the sums of the amounts listed are due to rounding off. All figures and percentage figures have been rounded off to two decimal places.

Non-GAAP Measures

EBITDA and EBITDA Margin (together, "**Non-GAAP Measures**"), presented in this Information Memorandum are a supplemental measure of our performance and liquidity that is not required by, or presented in accordance with, Ind AS, Indian GAAP, IFRS or US GAAP. Further, these Non-GAAP Measures are not a measurement of our financial performance or liquidity under Ind AS, Indian GAAP, IFRS or US GAAP and should not be considered in isolation or construed as an alternative to cash flows, profit/ (loss) for the years/ period or any other measure of financial performance or as an indicator of our operating performance, liquidity, profitability or cash flows generated by operating, investing or financing activities derived in accordance with Ind AS, Indian GAAP, IFRS or US GAAP. In addition, EBITDA and EBITDA Margin are not standardised terms, hence a direct comparison of these Non-GAAP Measures between companies may not be possible. Other companies may calculate these Non-GAAP Measures differently from us, limiting its usefulness as a comparative measure. Although such Non-GAAP Measures are not a measure of performance calculated in accordance with applicable accounting standards, the Investment Manager believes that they are useful to an investor in evaluating us as they are widely used measures to evaluate our operating performance.

Currency and Units of Presentation

All references to:

- "Rupees" or "₹" or "INR" or "Rs." are to Indian Rupees, the official currency of the Republic of India; and
- "USD" or "US$" or "$" or "U.S. dollars" are to United States Dollars, the official currency of the United States.
- "CAD" or "CA$" or "C$" are to Canadian Dollars, the official currency of Canada.
- 'SGD' are to Singapore Dollars, the official currency of Singapore.

Except otherwise specified, certain numerical information in this Information Memorandum has been presented in "million" units. One million represents 1,000,000 and one billion represents 1,000,000,000. However, certain numerical information in this Information Memorandum has been presented in "lakhs" where one lakh represents 1,00,000 or "crore" where one crore represents 1,00,00,000.

Unless the context requires otherwise, any percentage amounts, in relation to us as set forth in this Information Memorandum, have been calculated on the basis of the Audited Financial Statements.

Exchange Rates

This Information Memorandum contains conversion of certain other currency amounts into Indian Rupees. These conversions should not be construed as a representation that these currency amounts could have been, or can be converted into Indian Rupees, at any particular rate.

The following table sets forth, for the periods indicated, information with respect to the exchange rate between the Rupee and the US$:

(in ₹ per US$)

Currency	As of March 31, 2023	As of March 31, 2022	As of March 31, 2021
1 US$	82.21	75.80	73.50

Source: www.rbi.org.in and www.fbil.org.in

Industry and Market Data

Unless stated otherwise, industry and market data used in this Information Memorandum has been obtained or derived from publicly available information, publications of the Government, the Technical Reports, the CRISIL Report, which is a commissioned report, and other sources. Such information has not been independently verified by us, the Sponsor, or their respective legal, financial or other advisors, and no representation is made as to the accuracy of such information. The industry and market data provided in this Information Memorandum is presented as of specific dates and may no longer be current or reflect current trends. The Investment Manager has commissioned the CRISIL Report, to provide an independent estimation of the assessment of roads sector in India, which is based on historical data and certain assumptions. The CRISIL Report is issued by CRISIL and is subject to the following disclaimer:

"*CRISIL Market Intelligence & Analytics, a division of CRISIL Limited (CRISIL) has taken due care and caution in preparing this report (Report) based on the Information obtained by CRISIL from sources which it considers reliable (Data). However, CRISIL does not guarantee the accuracy, adequacy or completeness of the Data / Report and is not responsible for any errors or omissions or for the results obtained from the use of Data / Report. This Report is not a recommendation to invest / disinvest in any entity covered in the Report and no part of this Report should be construed as an expert advice or investment advice or any form of investment banking within the meaning of any law or regulation. CRISIL especially states that it has no liability whatsoever to the subscribers / users / transmitters/ distributors of this Report. Without limiting the generality of the foregoing, nothing in the Report is to be construed as CRISIL providing or intending to provide any services in jurisdictions where CRISIL does not have the necessary permission and/or registration to carry out its business activities in this regard. Maple Infra InvIT Investment Manager Private Limited will be responsible for ensuring compliances and consequences of non-compliances for use of the Report or part thereof outside India. CRISIL Market Intelligence & Analytics operates independently of, and does not have access to information obtained by CRISIL Ratings Limited, which may, in their regular operations, obtain information of a confidential nature. The views expressed* *in this Report are that of CRISIL Market Intelligence & Analytics and not of CRISIL Ratings Limited. No part of this Report may be published/reproduced in any form without CRISIL's prior written approval*"

Industry publications as well as Government publications generally state that the information contained in such publications has been obtained from various sources believed to be reliable but that their accuracy and completeness are not guaranteed and their reliability cannot be assured. Accordingly, no investment decisions should be based solely on such information. Although the Investment Manager and the Sponsor believe that the industry and market data used in this Information Memorandum is reliable, it has not been independently verified by the Investment Manager or the Sponsor or the Trustee or any of their respective affiliates or financial, legal or other advisors. The data used in these sources may have been re-classified for the purposes of presentation. Data from these sources may also not be comparable. Such data involves risks, uncertainties and numerous assumptions and is subject to change based on various factors, including those disclosed in the section entitled "*Risk Factors*" on page 47. Accordingly, investment decisions should not be based solely on such information.

The extent to which the market and industry data used in this Information Memorandum is meaningful depends on the reader's familiarity with and understanding of the methodologies used in compiling such data. There are no standard data gathering methodologies in the industry in which the business of the Trust is conducted, and methodologies and assumptions may vary widely among different industry sources.

Traffic Data

The Traffic Reports, prepared by the Traffic Consultants, in relation the SJEPL entitled "Traffic and Revenue Forecasts for Bhubaneswar-Chandikhol" dated April 2023 and in relation to NCREPE entitled "Toll traffic and revenue assessment for Eastern Peripheral Expressway under TOT-B7" dated May 2023 were commissioned by the Investment Manager for purposes of the Listing. The Traffic Reports are issued by the Traffic Consultants and are subject to the following disclaimers:

NCREPE Traffic Report

"IBI Group India Private Limited while preparing the report relied on the Primary and Secondary data collection past data during the month of Sep-2021 and historic data related to project from various time periods on the project road and in the various relevant projects through various sources. Wherever the information is not readily available, reasonable assumptions have been made, in good faith to draw meaningful inferences and these have been mentioned in the respective sections of the report. All such assumptions are subject to further corroboration based on availability of information. The results of this study constitute the opinion of IBI Group. This opinion is based on professional effort with respect to the study's scope of work and based on the information available to IBI at the time of execution of this study. IBI cannot guarantee or assure future events in connection to this traffic and revenue forecast

IBI Group and its officers, employees shall not be liable for any direct, indirect, incidental, consequential, or special loss or damage or other liability of any nature arising from its use of the Report or reliance upon any of its content. To the maximum extent permitted by law, such release from and indemnification against liability shall apply in contract, tort (including negligence), strict liability, or any other theory of liability."

SJEPL Traffic Report

"This report has been produced for the sole benefit of Indian Highway Concessions Trust ("the ***Client****"). The report may only be relied upon by Approved Addressees in accordance with the terms of our engagement letter. This Report (the "****Report****") is confidential and disclosed only for information purposes, and it may not be relied upon by any party other than the Client or a Party to a Reliance Letter, and Steer: a) makes no warranty, expressed or implied, with respect to the use of any information or methods disclosed in this Report; and b) assumes no liability with respect to the use of any information or methods disclosed in this document. Any such party by its acceptance or use of this Report releases Steer from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise .*

The Report is based on standard professional efforts, and information available to us at the time the review took place and is subject to time and budget constraints of the Report's scope of work. This Report, information and statements contained herein, are all based on third party data provided to us, or sourced by us, and Steer has not sought to establish the reliability of the data, except as specifically stated in the Report. Steer bears no responsibility for the results of any actions taken on the basis of third-party data.

Certain forward-looking statements in the Report are estimates based on interpretations or assessments of information available at the time of writing. The Report is thus to be viewed as an assessment that is time-relevant, *specifically referring to conditions at the time of the review. Steer undertakes no obligation to update the Report for any reason.*

While the estimates contained in the Report are not precise forecasts, they do represent, in our view a reasonable expectation of the future, based on information we have been provided with or sourced. However, the estimates necessarily rely on numerous assumptions and judgements, and circumstances may occur over the timeframe of the project that go counter to these assumptions and judgements and that affect the project's realized revenues. Actual events may differ from those assumed, and events are subject to change. Therefore, Steer makes or provides no warranty, whether implied or otherwise, as to the accuracy of forward-looking information presented. Further, it is important to note that forecasts presented represent long term growth profiles; the results for individual time periods may vary from forecasted values.

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Information Memorandum that are not statements of historical fact constitute "forward-looking statements". Investors can generally identify forward-looking statements by terminology such as "aim", "anticipate", "believe", "continue", "can", "could", "estimate", "expect", "intend", "may", "objective", "plan", "potential", "project", "pursue", "shall", "should", "will", "would", or other words or phrases of similar import. Similarly, statements that describe the strategies, objectives, plans or goals of the Trust are also forward-looking statements. However, these are not the exclusive means of identifying forward-looking statements.

All statements regarding the Trust's and the Project SPVs' expected financial conditions, results of operations, business plans and prospects are forward-looking statements. These forward-looking statements include statements as to the Trust's and the Project SPVs' business strategy, planned projects, revenue and profitability, new business and other matters discussed in this Information Memorandum that are not historical facts.

The Valuation Report included in this Information Memorandum, is based on certain projections and accordingly, should be read together with assumptions and notes thereto. For further details, please see the "*Valuation Report*" attached as Annexure A.

Actual results may differ materially from those suggested by forward-looking statements due to certain known or unknown risks or uncertainties associated with the Investment Manager's expectations with respect to, but not limited to, the actual growth in the infrastructure sector, the Investment Manager's ability to successfully implement the strategy, growth and expansion plans, technological changes, exposure to market risks, general economic and political conditions in India, changes in competition in the infrastructure sector, the outcome of any legal or regulatory proceedings and the future impact of new accounting standards. By their nature, certain of the market risk disclosures are only estimates and could be materially different from what actually occurs in the future. As a result, actual future gains, losses or impact on net income could materially differ from those that have been estimated.

Factors that could cause actual results, performance or achievements of the Trust to differ materially include, but are not limited to, those discussed under the sections entitled "*Risk Factors*", "*Industry Overview*", "*Business*" and "*Discussion and Analysis by the directors of the Investment Manager of the financial condition, results of operations and cash flows of the Projects SPVs of the Trust*", on pages 47, 156, 166 and 195, respectively. Some of the factors that could cause the Trust's actual results, performance or achievements to differ materially from those in the forward-looking statements and financial information include, but are not limited to, the following:

- The Trust is a new entity and has limited established operating history, which will make it difficult for our future performance to be assessed;

- No trading history available for the Units. Further the Units of the Trust are being listed without any new issuance or offer for sale relying on the exemption granted by SEBI vide its letter dated February 28, 2023 and accordingly there is no benchmark on the price at which the Units would be listed on BSE;

- The Project SPVs rely on certain third party vendors and operators for operations in relation to the Project Assets;

- The Project SPVs' financing agreements entail interest at variable rates, and any increases in interest rates may adversely affect our results of operations, financial condition and cash flows. Further, the Project SPVs are subject to restrictive covenants under their financing agreements that could limit our flexibility in managing our business or to use cash or other assets; and

- The Valuation Report by BDO Valuation Advisory LLP (the "Valuer") are not opinions, express or implied, as to the future price of Units or the financial condition of Trust and in the event the assumptions included in the Valuation Report are not met, the valuation of the Project SPVs may be affected as set out in the Valuation Report.

The forward-looking statements, Valuation Report, Technical Reports and Traffic Reports reflect current views as of the date of this Information Memorandum and are not a guarantee of future performance or returns to Investors. These statements are based on certain beliefs and assumptions, which in turn are based on currently available information. Although the Investment Manager and the Sponsor believe that the expectations and the assumptions upon which such forward-looking statements are based, are reasonable at this time, none of the Investment Manager or the Sponsor can assure Investors that such expectations will prove to be correct or accurate.

The Trust, the Investment Manager, the Sponsor or any of their affiliates or advisors (financial, legal or otherwise), undertake no obligation to update or revise any of statements reflecting circumstances arising after the date hereof or to reflect the occurrence of underlying events, whether as a result of new information, future events or otherwise after the date of this Information Memorandum. If any of these risks and uncertainties materialize, or if any of the Investment Manager's underlying assumptions prove to be incorrect, the actual results of operations or financial condition or cash flow of the Trust could differ materially from that described herein as anticipated, believed, estimated or expected. All subsequent forward-looking statements attributable to the Trust are expressly qualified in their entirety by reference to these cautionary statements. Given these uncertainties, Investors are cautioned not to place undue reliance on such forward-looking statements, and not to regard such statements to be a guarantee or assurance of the Trust's future performance or returns to investors.

DESCRIPTION OF THE PROJECT SPVS

Details of arrangement pertaining to the Trust

The Trust's Project SPVs comprise of (i) Shree Jagannath Expressways Private Limited ("**SJEPL**") and (ii) NCR Eastern Peripheral Expressway Private Limited ("**NCREPE**"). The details of the Project SPVs as of the date of this Information Memorandum are provided below:

Shree Jagannath Expressways Private Limited

SJEPL was incorporated on June 15, 2010 under the Companies Act, 1956 (CIN: U45203WB2010PTC150429) as a special purpose vehicle. Its registered office is located at Simplex Infrastructures Limited, Simplex House, 27 Shakespeare Sarani, Kolkata 700 017.

The Company was incorporated as a special purpose vehicle for undertaking the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha, on a design, build, finance, operate and transfer basis, under the SJEPL Concession Agreement.

Capital structure of SJEPL

Name of the Equity Shareholder	Number of Equity Shares	Percentage Holding (%)
Indian Highway Concessions Trust	14,78,69,999	100.00
Maple Infra InvIT Investment Manager Private Limited (as a nominee of Indian Highway Concessions Trust)	1	Negligible
Total	**14,78,70,000**	**100.00**

NCR Eastern Peripheral Expressway Private Limited

NCRPE was incorporated on April 25, 2022 under the Companies Act, 2013 (CIN: U45209DL2022PTC397246) as a special purpose vehicle. Its registered office is located at Unit No. 699, 6th Floor 'VEGAS', Plot No. 6, Pocket 1, Sector 14, Dwarka, South Delhi, New Delhi 110075 India.

The Company was incorporated as a special purpose vehicle for undertaking the tolling, operation, maintenance and transfer of Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on tolling, operation, maintenance and transfer basis, under the NCREPE Concession Agreement.

Capital structure of NCREPE

Name of the Equity Shareholder	Number of Equity Shares	Percentage Holding (%)
Indian Highway Concessions Trust	77,45,73,490	100.00
Maple Infra Invit Investment Manager Private Limited (nominee of Indian Highway Concessions Trust)	10	Negligible
Total	**77,45,73,500**	**100.00**

SJEPL

SJEPL was acquired by the Trust pursuant to the SJEPL Securities Purchase Agreement between SJEPL, the Trust, acting through the Investment Manager (acting on behalf of the Trustee), Simplex Infra Development Private Limited ("**SIDPL**"), Galfar Engineering & Contracting (India) Private Limited ("**Galfar India**"), Galfar Engineering & Contracting SAOG ("**Galfar Oman**") and Bharat Road Network Limited ("**BRNL**" and such transaction, the "**SJEPL Transaction**"). SIDPL, Galfar India, Galfar Oman and BRNL are collectively referred to as the "**Sellers**".

Earn Out Agreement

The Trust, acting through the Investment Manager (acting on behalf of the Trustee), has entered into the Earn Out Agreement dated January 20, 2021 with SJEPL, Simplex Infra Development Private Limited, Galfar Engineering

& Contracting (India) Private Limited, Galfar Engineering & Contracting SAOG and Bharat Road Network Limited. Pursuant to the Earn Out Agreement, upon achievement of certain conditions including, the traffic growth rate being greater that the base growth rate assumption and/or the receipt of an extension to the concession period in accordance with the concession agreement executed between SJEPL and NHAI, the sellers will be entitled to receive additional amounts from the Trust. Pursuant to the SJEPL SPA, as a part of the final purchase consideration, the payments under the Earn Out Agreement have been made, in the manner specified in the Clarification Agreement to the Securities Purchase Agreement.

Representations and Warranties:

The representations and warranties provided by each party under the Earn Out Agreement, pertain to, amongst others:

(i). due incorporation and existence under the laws of India; and
(ii). non-contravention of charter documents, applicable law and agreements to which such entity is a party.

Claims Management Agreement read along with the Clarification Agreement to the Claims Management Agreement

The Trust, acting through the Investment Manager (acting on behalf of the Trustee), has entered into the Claims Management Agreement with, SIDPL, Galfar India, SIL, BRNL and SJEPL, to govern the management of certain claims (which will continue after change in the management control of SJEPL pursuant to the SJEPL Transaction) including, amongst others (i) claims filed by SIL against SJEPL under the EPC contracts executed between SIL and SJEPL; and (ii) claims filed by RKD Construction Private Limited ("**RKD**") under the EPC contracts executed between RKD and SJEPL; (collectively, the "**Claims**"); in accordance with and subject to the conditions under the Claims Management Agreement. Further, the Claims Management Agreement also governs the management of certain claims in relation to toll related litigations and other litigations ("**Litigation Claims**").

In accordance with the in-principle approval dated July 23, 2021 and letter dated October 21, 2021 received from the NHAI in relation to the transfer of 100% equity shares of SJEPL to the Trust, NHAI has required that all claims (those filed by SJEPL against NHAI and those filed by NHAI against SJEPL) to be resolved by way of a conciliation process ("**Conciliation Proceedings**"). In terms of the Claims Management Agreement, the Sellers are authorised to institute, defend, handle, control and pursue (i) the claims pertaining to a period prior to the Completion Date, and in the event of claims that are resumed/initiated after failure of the Conciliation Proceedings, in accordance with the dispute resolution mechanism specified in the Concession Agreement and in accordance with applicable laws; and (ii) the Litigation claims subject to the provisions of the Claims Management Agreement. However, authorizations in relation to the Litigation Claims shall cease to be valid and subsisting after a period of five years from the Completion Date, subject to certain conditions and exceptions as provided for in the Claims Management Agreement.

Covenants and Indemnification:

Each of the Sellers and the relevant Reassuring Party have agreed to severally indemnify, defend and hold harmless, SJEPL, the Trust, other SJEPL shareholders, the Sponsor, the Trustee, the Investment Manager, the Project Manager and their respective directors, officers, authorized representatives and employees in respect of any and all losses incurred or suffered by the indemnified persons on account of, amongst others, (i) breach of the provisions of the Claims Management Agreement; (ii) in relation to a counter claim by NHAI alleging a breach of the SJEPL Concession Agreement by SJEPL and/or the existing shareholders (as defined in the Claims Management Agreement) prior to the Completion Date, where such counter claim is raised after the period of 7 years from the Completion Date, as part of a claims proceeding which is continuing after the period of 5 years as contemplated herein (ii) any additional tax payments required to be made, which are not contemplated under the Claims Management Agreement; and (iii) any fraud, negligence or misconduct by the indemnifying parties. In accordance with the Claims Management Agreement, the relevant provisions of the SJEPL SPA pertaining to indemnity are incorporated by reference and apply *mutatis mutandis* to any indemnity claim under the Claims Management Agreement.

Clarification Agreement to the Claims Management Agreement

An agreement to clarify and supplement the understanding in the Claims Management Agreement dated June 7, 2022 has been entered into between SJEPL, SIDPL, SIL, Galfar India, BRNL and the Trust acting through the Investment Manager (acting on behalf of the Trustee). Whilst, the Claims Management Agreement intended to cover resolution of all claims in all forms, the process of resolution of claims by way of conciliation was not explicitly set out in the Claims Management Agreement. Accordingly, the Clarification Agreement to the Claims Management Agreement has been entered into to, amongst others, to clarify the understanding, rights and obligations of the parties to the Claims Management Agreement, in respect of, the operations of the Claims Management Agreement in context of Conciliation Proceedings and treatment of certain claims made by SJEPL against NHAI and NHAI against SJEPL, which are now proposed to be governed by the Claims Benefit Assignment Agreement. Further, the Clarification Agreement to the Claims Management Agreement also sets out the mechanism of case tracking post Completion (as defined in the Clarification Agreement to the Claims Management Agreement) in respect of each claim.

Tripartite Agreement

The Trust, acting through the Investment Manager (acting on behalf of the Trustee), has entered into a Tripartite Agreement dated November 23, 2021, with NHAI and SJEPL("**Tripartite Agreement**"). SJEPL received the in-principle approval of NHAI for the transfer of 100% equity shares of SJEPL to the Trust ("**Transfer**") on July 23, 2021 ("**In-principle approval**"), subject to certain conditions, which included, amongst others, that all deficiencies and claims, as specified in the In-principle approval shall pass on to SJEPL and the Trust. Thereafter, SJEPL received the final approval of NHAI on October 21, 2021, for the Transfer, subject to certain conditions, including but not limited to execution of the Tripartite Agreement. Accordingly, by way of the Tripartite Agreement, SJEPL has undertaken to settle all claims, (as listed in the In-principle approval provided by NHAI) through amicable conciliation and clear all dues that have been or become payable to NHAI on completion of the process of conciliation.

Further, the Trust acting through the Investment Manager (acting on behalf of the Trustee) has undertaken to ensure that all the claims (as specified in the In-principle approval) are settled through amicable conciliation and that all dues that may have been or have become payable to NHAI on completion of the process of conciliation shall be duly cleared by the SJEPL. Additionally, it is also agreed in the Tripartite Agreement that Bharat Road Network Limited, Simplex Infra Development Private Limited, Galfar Engineering & Contracting SAOG and Galfar Engineering & Contracting (India) Private Limited shall not hold any right over the accrued claims and the same shall vest with new Promoters or Concessionaire i.e. SJEPL (as defined in the Tripartite Agreement).

Additionally, in accordance with the In-principle approval, the Trust acting through the Investment Manager (acting on behalf of the Trustee) also submitted an undertaking dated August 20, 2021 to the NHAI, by way of which it submitted, amongst others, that (i) the Trust will be a privately placed InvIT, (ii) there will be no change in the O&M capacity of SJEPL pursuant to the change in ownership of SJEPL and the relevant O&M requirements will be met as per the SJEPL Concession Agreement, (iii) SJEPL shall complete all the remaining work and maintenance of the project within the time limit assessed by the independent engineer, and if there are any such works pending as on the date of the change in ownership of SJEPL, the Trust will undertake to cause SJEPL to complete the above work; and (iv) in the event there is a replacement of the Project Manager, it shall be done with an entity with equal or better O&M capabilities, subject to approval of the NHAI.

Claims Benefit Assignment Agreement

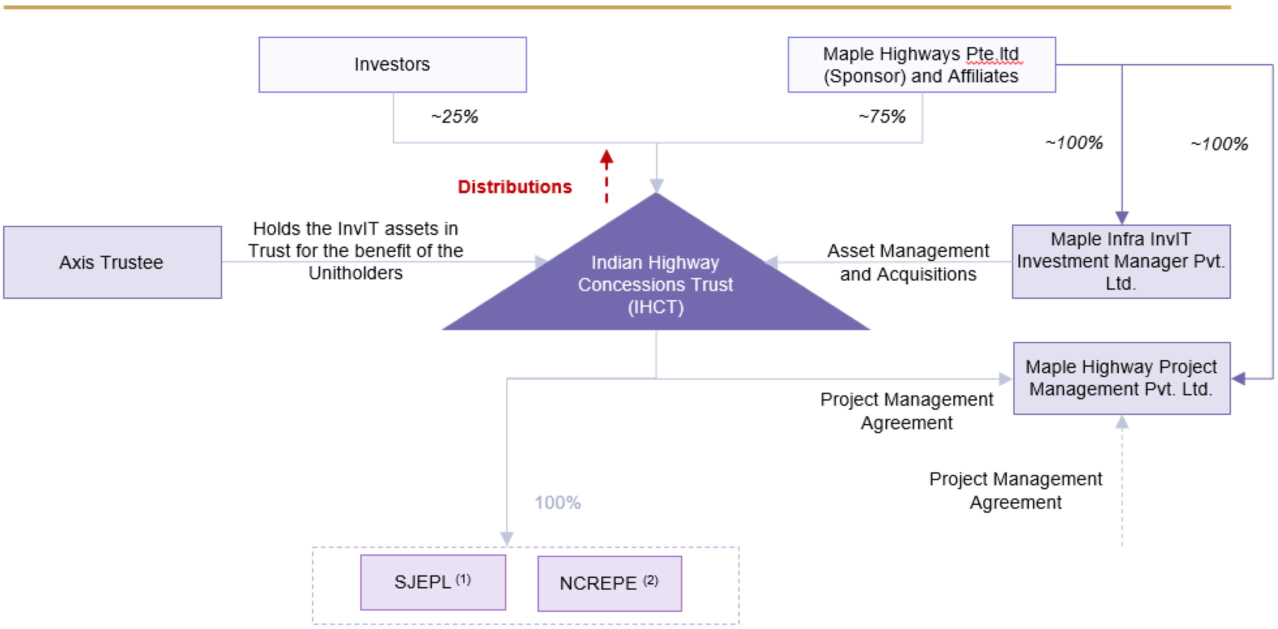
The Trust, acting through the Investment Manager (acting on behalf of the Trustee), has entered into a Claims Benefit Assignment Agreement dated June 7, 2022, with SJEPL, SIDPL, Galfar India and BRNL (SIDPL, Galfar India and BRNL are collectively referred to as the "**Existing Shareholders**"), for the purposes of managing, amongst other things, certain claims made by SJEPL against NHAI and NHAI against SJEPL ("**CBAA Claims**") and transferring of the benefits of the aggregate of the CBAA Claims from SJEPL to the Existing Shareholders. In terms of the Claims Benefit Assignment Agreement, the Existing Shareholder are authorised to institute, defend, handle, control and pursue the CBAA Claims. Further, in consideration of the consideration amount set out in the Claims Benefit Assignment Agreement, SJEPL agreed to transfer the benefits of all the CBAA Claims to the Existing Shareholders. Additionally, the Parties have agreed that certain SJEPL receivables relating to the period prior to the Completion Date will be to the sole account and benefit of the Existing Shareholders and the Existing Shareholders shall be entitled to pursue the recovery of such receivables, in the same manner as a CBAA Claim. For the claims made by NHAI, SJEPL will have to make a payment (a) to NHAI, if NHAI is successful in its claim, or (b) pursuant to assignment of benefit of the claims, to SIDPL, Galfar India and BRNL, if NHAI is not successful in its claim. Such payment to SIDPL, Galfar India and BRNL, if any, is *inter alia*, subject to achievement of certain identified milestones including obtainment of the final completion certificate and resolution of all claims made by NHAI. Further, such payment to SIDPL, Galfar India and BRNL is also subject to rights of the Trust and SJEPL to set off amounts due to an indemnified person under any indemnity obligation of the Sellers against the amounts receivable by them under the Claims Benefit Assignment Agreement.

Covenants and Indemnification:

Each of the Existing Shareholders and the relevant Reassuring Party have agreed to severally indemnify, defend and hold harmless, SJEPL, the Trust, other SJEPL shareholders, the Sponsor, the Trustee, the Investment Manager, the Project Manager and their respective directors, officers, authorized representatives and employees in respect of any and all losses incurred or suffered by the indemnified persons on account of, amongst others, (i) breach of the provisions of the Claims Benefit Assignment Agreement; (ii) any additional tax payments required to be made, which are not contemplated under the Claims Benefit Assignment Agreement; and (iii) any fraud, negligence or misconduct by the indemnifying parties. In accordance with the Claims Benefit Assignment Agreement, the relevant provisions of the SJEPL SPA pertaining to indemnity are incorporated by reference and apply *mutatis mutandis* to any indemnity claim under the Claims Benefit Assignment Agreement.

InvIT Structure

The following structure illustrates the relationship between the Trust, the Trustee, the Sponsor, the Investment Manager, the Project Manager and the Unitholders:



OVERVIEW OF THE TRUST

The following overview is qualified in its entirety by, and is subject to, the more detailed information contained in, or referred to elsewhere, in this Information Memorandum. The statements contained in this summary that are not historical facts may be forward-looking statements. Such statements are subject to certain risks, uncertainties and assumptions that could cause actual results of the Trust to differ materially from those forecasted or projected in this Information Memorandum. Under no circumstances should the inclusion of such information herein be regarded as a representation, warranty or prediction of the accuracy of the underlying assumptions by the Trust, the Parties to the Trust or any other person or that these results will be achieved or are likely to be achieved.

Structure and description of the Trust

The Sponsor set up the Trust on November 6, 2019, pursuant to the Initial Indenture which was subsequently amended by first amended and restated Indenture of Trust dated December 19, 2019 and further amended and restated on October 4, 2021 and June 13, 2023, as an irrevocable trust under the provisions of the Indian Trusts Act, 1882. The Trust was registered with SEBI as an infrastructure investment trust under the InvIT Regulations on February 24, 2020 having registration number IN/InvIT/19-20/0013. The Trust has been settled for an initial sum of ₹ 10,000 (the "**Initial Settlement**") and shall not have any beneficial interest in the Initial Settlement. The Initial Settlement and any accretions shall be donated to the Indian Red Cross Society, having its registered office at 1, Red Cross Road, New Delhi - 110011 upon the termination of the Trust.

For details of the registered office and contact person of the Sponsor, please see the section entitled *"General Information"* on page 87.

Maple Infra InvIT Investment Manager Private Limited has been appointed as the Investment Manager, and Maple Highway Project Management Private Limited has been appointed as the Project Manager to the Trust. For further details, please see the section entitled "*Parties to the Trust*" on page 91.

Investment Objectives

The object and purpose of the Trust shall be to carry on the activity of an infrastructure investment trust under the InvIT Regulations. Investment by the Trust shall only be in Holdcos, SPVs, Infrastructure Projects, securities in India or other permitted investments in accordance with the InvIT Regulations, the Investment Strategy and the Trust Documents. The principal investment objective of the Trust is to own, maintain, operate and invest in Infrastructure Projects in India, directly or through Holdcos or SPVs and make other investments and undertake such activities in such jurisdictions as may be permissible under the InvIT Regulations, other applicable law and the Trust Documents (collectively, the "**Investment Objectives**"). The Trust shall not engage in any business or activities except as permitted under Trust Documents and subject to the InvIT Regulations.

The Trustee, in consultation with the Investment Manager, shall ensure that the Capital Contributions and other Trust Assets shall be utilized solely for the purpose of the Investment Objectives set out above, and incurring Trust Expenses in accordance with the Trust Documents.

Subject to applicable law, the Trustee shall, in consultation with the Investment Manager, ensure that the Capital Contribution and other Trust Assets shall not be utilized for: (a) investing in units of any other infrastructure investment trust; or (b) launching any schemes under the Trust. The Trustee shall, in consultation with the Investment Manager, also ensure that the Trust complies with any additional conditions as may be specified by the SEBI.

The Trustee, in respect of the Trust, shall, in consultation with the Investment Manager, do all other things necessary and conducive to the attainment of the Investment Objectives, directly or through the Investment Manager or the Project Manager.

All Trust Assets are registered in the name of the Trust or the Trustee (on behalf of the Trust), as permissible.

Investment Strategy

The Trust has been established with the principal objective of raising commitments from investors and utilising such commitments to acquire, hold, operate, manage, and transfer infrastructure projects as permitted under the InvIT Regulations.

Amount received from the unit holders shall be invested in operational and/or under construction infrastructure projects and/or for developing greenfield projects, in compliance with the InvIT Regulations.

Infrastructure projects may be purchased from the Sponsor or from third parties or developed greenfield or acquired by way of bidding. The Trust would finance any such acquisition or development, either through debt or internal accruals or fresh issue of units or combination of these. Such fresh issue of units could be offered to existing investors and/or to new investors. To achieve the investment objective of regular distributions, the Trust will adopt the following investment strategies:

(i). ***Organic growth strategy***: Manage projects in the portfolio to maintain or improve, to the extent reasonably possible, income from the Trust Assets. This would be achieved by seeking, to the extent reasonably possible, reduction in costs and revenue growth;

(ii). ***Acquisition growth strategy***: The Trust would also expand its project portfolio by selective acquisition of infrastructure projects in accordance with the Future Assets Acquisition Policy, details of which are provided in the section entitled "*Corporate Governance – Future Assets Acquisition Policy*" on page 142. Indicatively, any additional project shall meet the below mentioned investment criteria:

- *Return benchmark*: Trust would acquire projects that provide returns which are as per the Future Acquisition Policy;
- *Technical specifications*: Trust would acquire projects that meet the specifications prescribed in the respective concession agreements;
- *Size threshold*: Trust would acquire projects above a certain asset size, so that the time spent evaluating projects for acquisition has potential to have significant positive impact on unitholder distribution;
- *Residual concession life:* Trust will select such projects that have balance concession life which is sufficient to realize growth and provide stable returns;
- *Traffic characteristics:* For toll road projects, traffic study may be conducted to reasonably forecast, to the extent possible, future revenues and only such projects that have potential for growth would be considered for acquisition; and
- *Other criteria:* The Trust will also take into account other criteria such as evaluation of maintenance costs based on technical assessment, and requirements under the InvIT Regulations with respect to proportion of revenue generating and under-construction projects.

Fee and expenses

Annual Expenses

The expenses in relation to the Trust, other than such expenses incurred in relation to operations of SJEPL and NCREPE, would broadly include fee payable to: (i) the Trustee; (ii) the Investment Manager; (iii) the Project Manager; (iv) the Auditors; (v) the Valuer; and (vi) other intermediaries and consultants.

The estimated recurring expenses on an annual basis (exclusive of out of pocket expenses, taxes and escalations), including but not limited to, are approximately as follows:

(₹ in million)

Payable by the Trust	Estimated Expenses
Fee payable to the Valuer	0.80
Fee payable to the Auditors	9.50
Fee payable to Trustee	0.75
Fee payable for accounting and investor services	6.72
Fee payable to Investment Manager	Please see Note 1 below
Fee payable to Project Manager	Please see Note 2 below
Fee payable to the Registrar	0.30
Fee payable to the Depositories	0.15
Fee payable to the Traffic Consultants*	0.60
Fee payable to the Technical Consultants*	0.54
Fees Payable to Stock Exchange	1.30
Miscellaneous expenses	10.03

Note 1: *The Investment Manager shall be paid fees (inclusive of all taxes) for the services provided by the Investment Manager under the Investment Management Agreement in accordance with the Distribution Policy ("**Management Fees**"). The Management Fee, excluding any goods and services tax, shall be the higher of (A) ₹ 185 million for the financial year ending March 31, 2021 escalated by 7% per annum; and (B) 0.74% of the net asset value of the Trust, as determined by the Valuer, for the immediately preceding financial year, as determined in accordance with the InvIT Regulations. The Management Fees may be revised for every financial year with approval of the unitholders as may be specified under the InvIT Regulations, however, for avoidance of doubt, it is clarified that approval of the Unitholders as specified in the Investment Management Agreement will be provided. However, for avoidance of doubt it is clarified that the approval of the Unitholders shall not be required in relation to the annual escalation in Management Fees contemplated in point (A) and (B) above.*

Note 2: *The Project Manager shall be paid fees (inclusive of all taxes) for the services provided by the Project Manager in accordance with the Project Implementation and Management Agreement. The fees payable to the Project Manager shall be the higher of (A) ₹ 65 million for the Financial Year ending on March 31, 2021 escalated by 7% (seven percent) per annum payable by each of the SPVs in the ratio of the net asset value of such SPV; and (B) 0.26% of the net asset value of the SPV for the immediately preceding financial year, as determined in accordance with the InvIT Regulations. The fees may be revised for every financial year as specified in the Project Implementation and Management Agreement. However, it is clarified that the approval of the Unitholders shall not be required in relation to the annual escalation in fees contemplated in point (A) and (B) above.*

Details of credit ratings

SJEPL has been assigned and reaffirmed, from time to time, by ICRA, the credit rating of '[ICRA] A -(Stable)', '[ICRA]A-(SO) (Stable)', '[ICRA] A-(Stable)', '[ICRA] A-(Stable)', '[ICRA] A-(Stable)' '[ICRA] A-(Stable)' '[ICRA] AA -(Stable)' and '[ICRA] AA -(Stable)', for the ₹ 10,295 million fund based term loan on, December 8, 2017, February 14, 2018, March 6, 2018, July 8, 2019, July 1, 2020 and September 24, 2021, September 28, 2022 and January 27, 2023 respectively.

The Trust has been assigned the credit rating of '[ICRA]AAA(Stable)', by ICRA on January 10, 2023, for certain bank facilities availed amounting to ₹ 500 million.

NCREPE has been assigned the credit rating of '[ICRA]AAA (Stable)', by ICRA on November 15, 2022, for certain bank facilities availed amounting to ₹ 38,600 million.

SUMMARY FINANCIAL STATEMENTS OF THE TRUST

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Summary Standalone Balance Sheet data

(All amounts in ₹ lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31, 2022	March 31, 2021
ASSETS			
Non-current assets			
Financial assets			
i) Investments	1,00,983.68	-	-
ii) Loans	2,08,711.85	-	-
Total non-current assets	**3,09,695.53**	**-**	**-**
Current assets			
Financial assets			
i) Cash and cash equivalents	32,450.81	4.01	-
ii) Other bank balances	7,627.36	-	-
iii) Other financial assets	14,969.34	-	-
Other current assets	11.65	8.00	-
Total current assets	**55,059.16**	**12.01**	**-**
TOTAL ASSETS	**3,64,754.69**	**12.01**	**-**
EQUITY AND LIABILITIES			
EQUITY			
Unit capital	3,51,786.87	-	-
Other equity	10,890.71	(350.15)	(173.92)
Total unitholders' equity	**3,62,677.58**	**(350.15)**	**(173.92)**
LIABILITIES			
Current liabilities			
Financial liabilities			
i) Borrowings	-	30.00	-
ii) Trade payables			
-Total outstanding dues of micro enterprises and small enterprises	-	-	
-Total outstanding dues of creditors other than micro enterprises and small enterprises	1,933.92	329.75	173.77
iii) Other financial liabilities	16.03	0.70	-
Other current liabilities	123.03	1.71	0.15
Current tax liability (net)	4.13	-	
Total current liabilities	**2,077.11**	**326.16**	**173.92**
TOTAL EQUITY AND LIABILITIES	**3,64,754.69**	**12.01**	**-**

Summary Standalone Statement of Profit and Loss data

(All amounts in ₹ lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31,2022	March 31, 2021
INCOME			
Revenue from operations	14,884.69	-	-
Other income	969.48	-	-
Total income	**15,854.17**	**-**	**-**
EXPENSES			
Finance cost	88.52	14.79	-
Investment management fees	1,896.74	-	-
Valuation expenses	24.19	2.50	-
Trustee fees	8.85	7.50	-
Payment to auditors	204.66	54.96	8.11
Other expenses	1,975.95	96.48	165.81
Total expenses	**4,198.91**	**176.23**	**173.92**
Profit / (loss) before tax	**11,655.26**	**(176.23)**	**(173.92)**
Tax expense			
i) Current tax	414.40	-	-
ii) Deferred tax	-	-	-
Total tax expense	**414.40**	**-**	**-**
Profit / (loss) for the year	**11,240.86**	**(176.23)**	**(173.92)**
Other comprehensive income, net of tax	**-**	**-**	**-**
Total comprehensive income/ (loss) for the year	**11,240.86**	**(176.23)**	**(173.92)**

Summary Standalone Statement of Cash Flows data

(All amounts in ₹ lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31, 2022	March 31, 2021
A) Cash flows from operating activities			
Net profit/(loss) before tax	11,655.26	(176.23)	(173.92)
Interest expense on intercorporate deposit from related party	1.57	0.78	-
Interest income on loans given to subsidiaries	(14,884.69)	-	-
Interest income on bank deposits	(969.48)	-	-
Impairment of current asset	-	26.68	-
Operating profit/(loss) before working capital changes	**(4,197.34)**	**(148.77)**	**(173.92)**
Adjustments for:			
Increase in trade payables	1,604.17	155.98	173.77
Increase in other current liabilities	121.33	1.48	0.15
Increase in other financial liabilities	16.03	-	-
Increase in other current assets	(3.65)	(34.68)	-
Total of changes in working capital	**1,737.88**	**122.78**	**-**
Cash used in operations	(2,459.46)	(25.99)	-
Income tax paid	(410.27)	-	-
Net cash used in operating activities (A)	**(2,869.73)**	**(25.99)**	**-**
B) Cash flows from investing activities			
Equity investment in subsidiaries	(1,00,983.68)	-	-
Loan given to subsidiaries	(2,10,151.11)	-	-
Loan repaid by subsidiaries	1,439.25	-	-
Interest received on loan given to subsidiaries	11.28	-	-
Investment in bank deposits (Net of proceeds)	(7,627.36)	-	-
Interest received on bank deposits	873.55	-	-
Net cash generated/ (used) in investing activities (B)	**(3,16,438.07)**	-	-
C) Cash flows from financing activities			
Proceeds from issue of unit capital	3,52,170.00	-	-
Units issue expenses	(383.13)	-	-
Proceeds from intercorporate deposit from related party	165.00	30.00	-
Repayment of intercorporate deposit taken from related party	(195.00)	-	-
Interest paid on related party intercorporate deposit	(2.27)	-	-
Net cash generated from financing activities (C)	**3,51,754.60**	**30.00**	**-**
Net increase in cash & cash equivalents (A+B+C)	32,446.80	4.01	-
Cash and cash equivalents at the beginning of the year	4.01	-	-
Cash and cash equivalents at the end of the year	**32,450.81**	**4.01**	**-**

Summary Balance Sheet data

(All amounts in ₹ lakhs, unless otherwise stated)

Particulars	March 31, 2023 (Consolidated)	March 31, 2022 (Standalone)
ASSETS		
Non-current assets		
Property, plant and equipment	136.48	-
Intangible assets	7,61,687.51	-
Right of use asset	105.84	-
Intangible assets under development	107.10	-
Financial assets		
(i) Other financial assets	39.26	-
Non-current tax assets	88.81	-
Other non-current assets	81.17	-
Total non-current assets (A)	**7,62,246.17**	-
Current assets		
Financial assets		
(i) Investments	3,430.72	-
(ii) Trade receivables	216.99	-
(iii) Cash & cash equivalents	38,373.36	4.01
(iv) Other bank balances	32,184.49	-
(v) Other financial assets	1,006.85	-
Other current assets	2,111.65	8.00
Total current assets (B)	**77,324.06**	**12.01**
TOTAL ASSETS (A+B)	**8,39,570.23**	**12.01**
EQUITY AND LIABILITIES		
Equity		
Unit capital	3,51,786.87	-
Other equity	(15,677.61)	(350.15)
Total unitholders' equity (C)	**3,36,109.26**	**(350.15)**
LIABLITIES		
Non-current liabilities		
Financial liabilities		
(i) Borrowings	4,77,073.10	-
(ii) Lease liabilities	93.38	-
Provisions	1,135.41	-
Total non-current liabilities (D)	**4,78,301.89**	-
Current liabilities		
Financial liabilities		
(i) Borrowings	4,830.25	30.00
(ii) Lease liabilities	10.94	-
(iii) Trade payables		
a) Total outstanding dues of micro enterprises and small enterprises;	38.02	-
b) Total outstanding dues of creditors other than micro enterprises and small enterprises	4,538.12	329.75
(iv) Other financial liabilities	4,632.34	0.70
Provisions	10,879.45	-
Other current liabilities	225.83	1.71
Current tax liabilities (net)	4.13	-
Total current liabilities (E)	**25,159.08**	**362.16**
Total liabilities (F=D+E)	**5,03,460.97**	**362.16**
TOTAL EQUITY AND LIABILITIES (C+D+E)	**8,39,570.23**	**12.01**

Summary Statement of Profit and loss data

(All amounts in ₹ lakhs, unless otherwise stated)

Particulars	March 31, 2023 (Consolidated)	March 31, 2022 (Standalone)
INCOME		
Revenue from operations	31,897.18	-
Other income	2,030.60	-
Total income	**33,927.78**	**-**
EXPENSES		
Valuation expenses	24.19	2.50
Investment management fees	1,896.74	-
Project management fees	666.42	-
Trustee fees	8.85	7.50
Operating expenses	3,786.80	-
Payment to auditors	204.66	54.96
Insurance and security expenses	397.04	-
Engineering, procurement, and construction cost ('EPC')	152.08	-
Employee benefits expense	358.71	-
Finance costs	20,966.09	14.79
Depreciation and amortization expense	11,859.73	-
Provision for major maintenance obligations	5,064.29	-
Other expenses	3,463.57	96.48
Total expenses	**48,849.17**	**176.23**
Loss before tax	**(14,921.39)**	**(176.23)**
Tax expense		
i) Current tax	414.40	-
ii) Deferred tax	-	-
Total tax expense	**414.40**	**-**
Loss after tax	**(15,335.79)**	**(176.23)**
Other comprehensive income, net of tax		
Items that will not be reclassified to profit or loss		
Re-measurement losses on defined benefit obligations	8.33	-
Income tax relating to these items	-	-
Total comprehensive income/(loss) for the year	**(15,327.46)**	**(176.23)**
Profit/(loss) for the year	**(15,335.79)**	**(176.23)**
Attributable to:		
Unitholders	(15,335.79)	(176.23)
Other comprehensive income/(loss) for the year	**8.33**	**-**
Attributable to:		
Unitholders	8.33	-
Total comprehensive income/(loss) for the year	**(15,327.46)**	**(176.23)**
Attributable to:		
Unitholders	(15,327.46)	(176.23)

Summary Statement of Cash flows data

(All amounts in ₹ lakhs, unless otherwise stated)

Particulars	March 31, 2023 (Consolidated)	March 31, 2022 (Standalone)
A. CASH FLOW FROM OPERATING ACTIVITIES		
Net loss before tax	**(14,921.39)**	**(176.23)**
Adjustments for:		
Depreciation and amortisation expense	11,859.73	-
Gain on change in fair value of investment in mutual funds	(152.20)	-
Sundry balances written back	(2.05)	-
Interest income on bank deposits	(1,718.29)	-
Receivables written-off	10.00	-
Provision for doubtful debts	9.63	-
Provision for major maintenance obligations	5,064.29	-
Finance costs	20,966.09	0.78
Operating profit/(loss) before working capital changes	**21,115.81**	**(175.45)**
Adjustments for changes in working capital		
Increase/(Decrease) in trade payables	301.13	155.98
Increase/(Decrease) in other financial liabilities	46.90	-
Increase/(Decrease) in other current liabilities	(492.74)	1.48
Increase/(Decrease) in provisions	(1,400.17)	-
(Increase)/Decrease in trade receivables	289.59	-
(Increase)/Decrease in other current assets	(581.67)	(8.00)
(Increase)/Decrease in other non-current assets	53.50	-
(Increase)/Decrease in financial assets	(542.73)	-
Cash generated from operations	**18,789.62**	**(25.99)**
Income tax paid (net of refund)	(434.22)	-
Net cash flow generated from/(used in) operating activities	**18,355.40**	**(25.99)**
B. CASH FLOW FROM INVESTING ACTIVITIES		
Acquisition of property, plant and equipment	(46.49)	-
Proceeds from disposal of property, plant and equipment	0.09	-
Interest received on bank deposits	1,344.62	-
Payment for acquisition of subsidiary (net of cash acquired)	(21,279.21)	-
Investment in bank deposits (net)	(21,187.13)	-
Acquisition of intangible assets	(6,24,593.79)	-
Acquisition of right to use	(3.79)	-
Acquisition of intangible assets under development	(5.42)	-
Net cash flow used in investing activities	**(6,65,771.12)**	-
C. CASH FLOW FROM FINANCING ACTIVITIES		
Proceeds from issue of units	3,52,170.00	-
Unit issue expenses paid	(383.13)	-
Proceeds from long-term borrowings	4,86,636.00	-
Repayment on account of refinancing of loan	(1,01,148.00)	-
Repayment for subordinate loans	(25,105.61)	-
Proceed from inter corporate deposit from related party	165.00	30.00
Repayment of inter corporate deposit from related party	(195.00)	-
Repayment of long-term borrowings	(5,738.06)	-

Particulars	March 31, 2023 (Consolidated)	March 31, 2022 (Standalone)
Repayment of lease liabilities	(4.87)	-
Interest paid on inter corporate deposit from related party	(2.27)	-
Interest on bank borrowings paid	(18,844.44)	-
Other finance cost and processing charges paid	(1,764.55)	-
Net cash flow generated from financing activities	**6,85,785.07**	**30.00**
Net increase in cash and cash equivalents (A+B+C)	**38,369.35**	**4.01**
Cash and cash equivalents at the beginning of the year	4.01	-
Cash and cash equivalents at the end of the year	**38,373.36**	**4.01**

SUMMARY FINANCIAL INFORMATION OF THE SPONSOR

The summary financial information of the Sponsor is included in this Information Memorandum as per the requirements of the InvIT Regulations.

The degree to which the summary financial information included herein below will provide meaningful information is entirely dependent on the reader's level of familiarity with IFRS.

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Summary Balance sheet data

(in Singapore dollars)

Particulars	As at 31st December 2022	As at 31st December 2021	As at 31st December 2020
Assets			
Cash	2,163,228	14,282,646	11,412,117
Accounts Receivable	12,941	9,757	37,590
Investments at fair value	94,635,715	7,188,931	8,386,252
Total assets	**96,811,884**	**21,481,334**	**19,835,959**
Liabilities			
Trade and other payables	229,768	401,433	96,852
Advance payable	84,091,340	1,313,582	647,359
Total liabilities	**84,321,108**	**1,715,015**	**744,211**
Net assets	**12,490,776**	**19,766,319**	**19,091,748**
Shareholder’s equity			
Share Capital	29,711,127	29,711,127	24,692,352
Accumulated losses	(17,220,351)	(9,944,808)	(5,600,604)
Total shareholder’s equity	**12,490,776**	**19,766,319**	**19,091,748**

Summary Statement of Profit and Loss data

(in Singapore dollars)

Particulars	31st December 2022	31st December 2021	31st December 2020
Income			
Interest income	23,648	565	34,065
Total Income	**23,648**	**565**	**34,065**
Operating expenses			
Transaction cost and others	(3,306,448)	(2,475,179)	(3,010,738)
Consulting Services	(614,087)	(784,856)	(420,063)
Professional Services	(75,953)	(110,015)	(47,613)
Total operating expenses	**(3,996,488)**	**(3,370,050)**	**(3,478,414)**
Net operating loss	**(3,972,840)**	**(3,369,485)**	**(3,444,349)**
Net loss on investments at fair value and foreign currency transactions			
Net unrealised loss on investments at fair value	(3,388,356)	(1,197,321)	(513,006)
Net Foreign Exchange gain (loss)	85,653	222,602	(157,614)
Total net loss on investments at fair value and foreign currency transactions	**(3,302,703)**	**(974,719)**	**(670,620)**
Loss before taxation	**(7,275,543)**	**(4,344,204)**	**(4,114,969)**
Less: Current income taxes	0	0	0
Less: Deferred income taxes	0	0	0
Net loss for the year	**(7,275,543)**	**(4,344,204)**	**(4,114,969)**
Other Comprehensive income	0	0	0
Total Comprehensive loss for the year	**(7,275,543)**	**(4,344,204)**	**(4,114,969)**

Summary Statement of Cash flows data

(in Singapore dollars)

Particulars	31st December 2022	31st December 2021	31st December 2020
CASH FLOW FROM OPERATING ACTIVITIES			
Loss before taxation	(7,275,543)	(4,344,204)	(4,114,969)
Adjustments for:			
Net unrealised loss on investments at fair value	3,388,356	1,197,321	513,006
Interest income on bank accounts	(23,648)	(565)	(34,065)
Operating cash flows before changes in working capital	**(3,910,835)**	**(3,147,448)**	**(3,636,028)**
Changes in working capital			
(Increase) decrease in accounts receivable	(3,184)	27,833	(37,255)
(Decrease) increase in trade and other payables	(171,665)	304,581	54,312
Cash flows used in operations	**(4,085,684)**	**(2,815,034)**	**(3,618,971)**
Interest income received	23,648	565	34,065
Payment for net purchase of investments	(90,835,140)	0	0
Increase in advance payable	82,777,758	666,223	647,359
Net cash flows used in the operating activities	**(12,119,418)**	**(2,148,246)**	**(2,937,547)**
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from capital contributions	0	5,018,775	3,034,901
Net cash flows from financing activity	**0**	**5,018,775**	**3,034,901**
Net (decrease) increase in cash	**(12,119,418)**	**2,870,529**	**97,354**
Cash, beginning of year	14,282,646	11,412,117	11,314,763
Cash, end of year	**2,163,228**	**14,282,646**	**11,412,117**

SUMMARY FINANCIAL INFORMATION OF THE INVESTMENT MANAGER

The following tables set forth the summary financial information derived from the audited financial statements of the Investment Manager, which was prepared in accordance with Ind AS, as defined in Rule 2(1)(a) of Companies (Indian Accounting Standards) Rules, 2015, as amended, prescribed under the Section 133 of the Companies Act, as of and for the fiscal 2022.

The degree to which the summary financial information included herein below will provide meaningful information is entirely dependent on the reader's level of familiarity with Indian accounting practices, Ind AS, the Companies Act and the InvIT Regulations. Accordingly, any reliance by persons not familiar with Indian accounting practices, Ind AS, the Companies Act and the InvIT Regulations on the summary financial information presented below should be limited.

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Summary Statement of Profit and Loss data

(Rs. in millions)

Particulars	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2020
Income			
Other income	0.12	4.26	158.27
Total income	**0.12**	**4.26**	**158.27**
Expenses			
Employee Benefits Expenses	58.75	15.82	1.22
Depreciation and Amortisation Expenses	6.60	0.05	-
Finance Cost	4.64	-	-
Other expenses	27.06	6.11	1.81
Total expenses	**97.05**	**21.98**	**3.03**
(Loss)/Profit before tax	**(96.93)**	**(17.72)**	**155.24**
Tax expense			
Current tax			
- for the year	-	-	-
- for prior years	-	-	(0.12)
Deferred tax expense	-	-	-
Total tax expense	**-**	**-**	**(0.12)**
(Loss)/Profit for the year	**(96.93)**	**(17.72)**	**155.36**
Other comprehensive income for the year, net of tax	**-**	**-**	-
Total comprehensive (loss)/income for the year	**(96.93)**	**(17.72)**	**155.36**
Earnings per equity share (Nominal value per share Rs 10/- each)			
Basic earnings per share (Rs.)	(0.65)	(0.12)	1.04
Diluted earnings per share (Rs.)	(0.65)	(0.12)	1.04

Summary Balance Sheet data

(Rs. in millions)

Particulars	As at March 31, 2022	As at March 31, 2021	As at March 31, 2020
ASSETS			
Non-current assets			
Property, plant and equipment	34.54	0.30	-
Right of use assets	102.96	-	-
Other Intangible Assets	0.06	0.08	-
Non-Current Tax Assets(net)	0.33	0.87	0.55
Other non-current assets	12.26	1.08	0.02
Total non-current assets	**150.15**	**2.33**	**0.57**
Current assets			
Financial assets			
i. Cash and cash equivalents	278.72	429.86	472.03
ii.Loans	3.00	-	-
iii. Other financial assets	36.25	21.12	-
Other Current Assets	3.48	0.01	-
Total current assets	**321.45**	**450.99**	**472.03**
Total assets	**471.60**	**453.32**	**472.60**
EQUITY AND LIABILITIES			
Equity			
Equity share capital	1,494.23	1,494.23	1,494.23
Other equity	(1,138.06)	(1,041.13)	(1,023.41)
Total equity	**356.17**	**453.10**	**470.82**
LIABILITIES			
Non-Current liabilities			
Financial Liabilities			
(i)Lease liabilities	95.83	-	-
Current liabilities			
Financial Liabilities			
(i)Lease liabilities	6.17	-	-
(ii) Trade payables			
- Due to Micro, Small and Medium Enterprises	-	-	-
- Due to other than Micro, Small and Medium Enterprises	12.05	0.22	0.90
Provisions	0.99	-	0.61
Other current liabilities	0.39	-	0.27
Total current liabilities	**19.60**	**0.22**	**1.78**
Total Liabilities	**471.60**	**453.32**	**472.60**

Summary Statement of cash flows data

(Rs. in millions)

	Particulars	Year ended March 31, 2022	Year ended March 31, 2021	Year ended March 31, 2020
A	**Cash flow from operating activities :**			
	Profit before tax	**(96.93)**	**(17.72)**	**155.24**
	Adjustments for:	-	-	-
	Depreciation & Amortization	6.60	0.05	-
	Interest income	(0.04)	(4.25)	(5.49)
	Liabilities no longer required written back	-	(0.01)	-
	Interest expenses on lease	4.64	-	-
	Profit on sale of equity shares	-	-	(152.62)
	Operating Loss before working capital changes	**(85.73)**	**(21.93)**	**(2.87)**
	Change in operating assets and liabilities	**(19.57)**	**(23.74)**	**1.51**
	(Decrease)/Increase in trade payables	11.83	(0.67)	0.68
	(Decrease)/Increase in provisions	0.99	(0.61)	0.61
	(Decrease)/Increase in other current liabilities	0.39	(0.27)	0.24
	(Increase) in loans	(3.00)	(1.50)	-
	(Increase) in other current financial assets	(15.13)	(19.62)	(0.02)
	(Increase) in Other current assets	(3.47)	(0.01)	-
	(Increase) in Other non current assets	(11.18)	(1.06)	-
	Cash used in operations	**(105.30)**	**(45.67)**	**(1.36)**
	Income tax paid	0.55	(0.32)	1.43
	Net cash used in/from operating activities	**(104.75)**	**(45.99)**	**0.07**
B	**Cash flows from investing activities**			
	Payment of lease liability	(11.67)		
	Purchase of Property plant and equipment (including Capital Work in progress)	(34.75)	(0.34)	-
	Purchase of Intangible Assets	(0.01)	(0.09)	-
	Interest received	0.04	4.25	7.10
	Proceeds in Bank Deposits	-	-	111.80
	Profit on sale of equity shares	-	-	152.62
	Sale of Investments	-	-	200.00
	Net Cash generated from / (used in) investing activities	**(46.39)**	**3.82**	**471.52**
	Net Increase / (Decrease) in Cash & cash equivalents	**(151.14)**	**(42.17)**	**471.59**
	Cash and cash equivalents as at the beginning of the financial year	429.86	472.03	0.44
	Cash and Cash equivalents as at the end of the year	**278.72**	**429.86**	**472.03**

SUMMARY OF INDUSTRY

The information in this section is derived from various publicly available sources, government publications and other industry sources, including the CRISIL Report. The industry and third party related information in this section has not been independently verified by us, or our or their legal, financial or other advisors, and no representation is made as to the accuracy of this information. Industry sources and publications generally state that the information contained therein has been obtained from sources generally believed to be reliable, but their accuracy, completeness and underlying assumptions are not guaranteed and their reliability cannot be assured, and accordingly, investment decisions should not be based on such information. Industry publications are also prepared based on information as of specific dates and may no longer be current or reflect current trends.

Industry sources and publications may also base their information on estimates, projections, forecasts and assumptions that may prove to be incorrect. Accordingly, investors must rely on their independent examination of, and should not place undue reliance on, or base their investment decision solely on this information. The recipient should not construe any of the contents in this section as advice relating to business, financial, legal, taxation or investment matters and are advised to consult their own business, financial, legal, taxation, and other advisors concerning the Listing and the Units.

References to "we", "us" and "our" are to the Trust, and the Project SPVs, on a consolidated basis.

Overview of the Indian economy

In 2015, the Ministry of Statistics and Programme Implementation (MoSPI) changed the base year for calculating India's gross domestic product (GDP) to fiscal 2012 from fiscal 2005.

Based on the change, India's GDP clocked a compound annual growth rate (CAGR) of 5.6% to Rs 159.7 trillion in fiscal 2023 from Rs 87.4 trillion in fiscal 2012.

This was despite the stress inflicted by the pandemic that saw the GDP — which was already experiencing a slowdown and had grown 3.7% in fiscal 2020 — contract 5.7% in real terms in fiscal 2021 to Rs 137 trillion.

The economy bounced back as the pandemic-related shocks subsided, resulting in growth of 9.1% on-year in real GDP to Rs 149 trillion in fiscal 2022.

After contracting in the first half of fiscal 2021 because of Covid-19, the economy rebounded in the second half, growing 0.5% and 1.6% on-year in the third and fourth quarters, respectively. While the economy shrank in fiscal 2021 as a whole, agriculture and allied activities, and electricity, gas, water supply and other utility services were the outliers, logging growth. On the other hand, contact-intensive trade, hotel and transport, and services related to broadcasting were hit the most and contracted in all the quarters. Construction — a labour-intensive sector — was also severely hit in the first half but rebounded in the second half.

Per capita net national income (NNI) at constant prices

India's per capita income, a broad indicator of living standards, rose from Rs 63,462 in fiscal 2012 to Rs 94,270 in fiscal 2020, at 5.1% CAGR. This growth was led by better job opportunities, propped up by overall GDP growth. Moreover, population growth remained stable at ~1% CAGR. However, per capita income declined 9.7% on-year in fiscal 2021 owing to the economic impact of Covid-19. The per capita income rose 7.5% on-year in the next fiscal, but is yet to recover to pre-pandemic levels in absolute terms.

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19RE	FY20RE	FY21 2nd RE	FY22RE	FY23 SAE
Per-capita net national income (Rs)	63,462	65,538	68,572	72,805	77,659	83,003	87,586	92,133	94,270	127,065	148,524	172,000
On-year growth (%)		3.3%	4.6%	6.2%	6.7%	6.9%	5.5%	5.2%	2.3%	34.8%	16.89%	15.81%

Revised estimates PE: Provisional estimates; P: Projected by CRISIL MI&A Consulting; RE: Revised estimates AE: Advanced estimate SAE: Second Advanced estimate

Source: Advanced estimates of national income 2020-21, 2022-23, CSO, MoSPI, CRISIL MI&A Consulting

Road network in India

India has the second-largest road network in the world, spanning 6.331 million km as of fiscal 2023. Road transportation, the most frequently used mode of transportation in India, accounted for ~86% of passenger traffic and close to ~64% of freight traffic as of fiscal 2022. Although national highways span nearly 144,955 km, constituting just 2% of road length, they accounted for about 40% of total road traffic in fiscal 2022. Secondary road system comprises state roads and major district roads, which accounted for the remaining 60% of traffic and 98% of road length.

Road network in India in FY23

Road network	Length ('000 km)	Percentage of total length	Percentage of total traffic	Connectivity to
National highways	145.0	~2%	40%	Union capital, state capitals, major ports, foreign highways
State highways	167.1	~3%	60%	Major centres within the states, national highways
Other roads	6,019.8	~95%		Major and other district roads, rural roads - production centres, markets, highways, railway stations

Source: MoRTH Annual Report 2021-22 & 2022-23, CRISIL MI&A Consulting

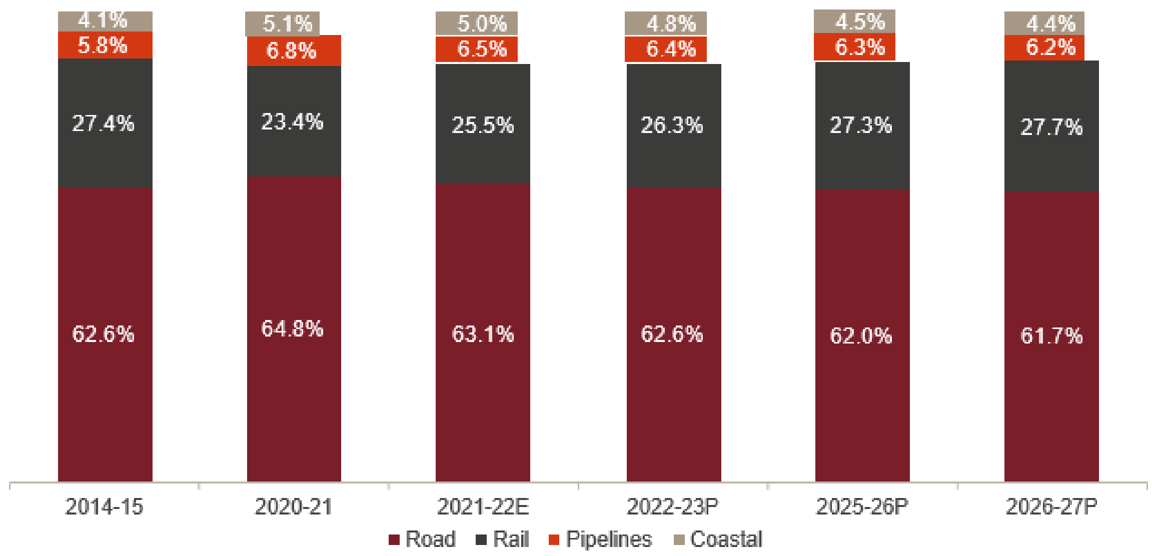
Break-up of road length across different regions (in km)

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
National highways	97,991	101,011	114,158	126,350	132,500	132,995	136,440	140,995	144,955
State highways	167,109	176,166	175,036	186,908	186,528	194,900	176,818	171,039	167,079
Other roads	5,207,044	5,326,116	5,608,477	5,902,539	6,067,269	6,165,660	5,902,539	6,059,813	6,019,757
Total	5,472,144	5,603,293	5,897,671	6,215,797	6,386,297	6,493,555	6,215,797	6,371,847	6,331,791

Source: MoRTH Annual Report 2021-22 & 2022-23, CRISIL MI&A Consulting

Roads sector is estimated to have a share of ~63 % in overall freight movement compared with the ~23% of rail mode as of fiscal 2023. We expect road freight traffic to increase at a CAGR of 5-7% in BTKM terms between fiscals 2022 and 2027. During the period, railways is expected to grow at a CAGR of 7-9%, growing faster than roads.

Share of roads in total freight movement (in terms of BTKM)



E: Estimated; P: Projected

Source: CRISIL MI&A Consulting

Overview of PPP framework and models in operations

PPP is an arrangement between a government/statutory entity/government-owned entity and a private sector entity for the provision of public assets and/or public services through investments made and/or management undertaken by the private sector entity for a specified period of time. In this arrangement, allocation of risk between the private sector and the public entity is defined well. The private entity receives performance-linked payments that conform with (or are benchmarked to) specified and pre-determined performance standards, measurable by the public entity or its representative.

Types of PPP models

Type of project	Description	Development risk	Financing risk	Traffic risk and accrual of toll fee collection	Net cash outflow for the government	Revenue for private party	Concession period	Award criteria
BOT-toll	Private party builds the road, undertakes O&M and collects toll	Concessionaire	Concessionaire	Concessionaire	Yes (in the form of grant/equity support)	Toll	20-30 years for the NHAI** and other authorities	Highest revenue sharing bid/highest premium/ lowest equity support
BOT-annuity	Private party builds the road, undertakes O&M* and collects annuity from the granting authority	Concessionaire	Concessionaire	Authority	Yes, net payment to be made is the difference between the toll collection and the annuity payable	Annuity payment	15-20 years for the NHAI and other authorities	Lowest annuity
BOT-HAM	Private party builds the road, undertakes O&M. Gets 40% of payment during construction and 60% as annuity along with interest	Concessionaire	Concessionaire	Authority	40% during construction and 60% as semi-annual annuity along with interest, net of toll collected	Construction grant plus annuity payments, interest on annuities, inflation-indexed O&M payments	Around 15 years of operations plus additional construction period	Lowest project cost plus O&M cost
EPC	Private party builds the road, based on the cost incurred by the government	Concessionaire	Authority	Authority	Yes	Contract amount	Not required	Lowest contract price requested
OMT	Private party collects toll, and undertakes O&M and major maintenance	No development risk except minimal risk in case of paved shoulders	Concessionaire	Concessionaire	No	Toll	Up to nine years for NHAI projects	Highest % of toll revenue share or highest premium per year
Tolling	Private party pays the estimated toll upfront to the authority and collects it during the	No development	Concessionaire	Concessionaire	No	Toll	One year for NHAI projects	Highest revenue-sharing bid

	concession period							
TOT	Private party pays an upfront bid concession fee (summation of NPV of free cash flow based on concessionaire estimates) to the authority, undertakes O&M plus certain capex and collects the toll during concession period	Authority (in case upgradation of lanes is taken up during the concession period)	Concessionaire	Concessionaire	No	Toll	15, 20, 30 years#	Highest upfront payment

Note: Development risk refers to construction risk in developing a road project

**Operations and maintenance*

*** National Highways Authority of India*

#As per TOT bundles of NHAI in 2021-22

Source: CRISIL MI&A Consulting, NHAI

Key transactions in road sector

Recent private equity transactions

Date	Target	Investor	Transaction	Target company details
April-2022	KKR & Co's road platform in India	Ontario Teachers	Committed Rs 13.33 billion ($175 million)	Ontario Teachers' Pension Plan Board committed an investment to boost alternative investment company KKR & Co's road platform in India.
Feb-2021	Sadbhav Infrastructure Projects Ltd	Allianz Global Investors joined by AMP Capital	To raise Rs 7 billion ($96 million) through non-convertible debenture	The company is a developer and operator of highways, roads and related projects. Capital raising is part of a larger funding exercise to help the company repay debt and fund ongoing hybridannuity road assets.
Jan-2021	Debt-ridden Chennai Elevated Tollway Ltd	JC Flowers Asset Reconstruction Company	Acquire over half of the debt of a stressed road developer at a discount of over 80%	The debt was picked up from State Bank of India (SBI), Central Bank of India, Bank of Baroda, and Bank of Maharashtra.
Dec-2020	Chenani Nashri Tunnelway Ltd Asset, a road tunnel, from Infrastructure Leasing & Financial Services Ltd	Cube Highways and Infrastructure Pvt. Ltd.	Rs 39.0 billion ($528 million)	
Oct-2020	Road assets	NIIF		NIIF made progress towards integrating its road and highway portfolio. It acquired Essel Devanahalli Tollway and Essel Dichpally Tollway through the NIIF Master Fund. These road infra projects will be supported by Athaang Infrastructure, NIIF's proprietary road network.

Sep-2020	Road assets - Farakka-Raiganj Highways Ltd (operating toll road in West Bengal	Cube Highways and Infrastructure Pte	Rs 15.08 billion (USD 205 million).	Cube Highways completed a transaction to acquire a road project from a unit of Hindustan Construction Company Ltd

Source: CRISIL MI&A Consulting

Recent key asset sales

Date	Target	Buyer	Seller	Deal value (Rs mn)	% sought
Apr-2023	Kundapur-Surathkal section (90.1 km road project in Karnataka, comprising 74.8 km Kundapur-Surathkal section and 15.3 km Mangaluru-Kerala border section	KKR & Co	Navayuga Udupi Tollways	9240	NA
Apr-2023	Baharampore-Farakka Highways Ltd	Cube Highways and Infrastructure Pte Ltd	HCC Group	13,230	NA
Mar-2023	Aurang Tollway (section of NH 6 between Aurang in Chhattisgarh and Odisha border)	Macquarie Group	BSCPL	16,000	NA
Feb-2023	5 completed HAM assets (Welspun Delhi Meerut Expressway Pvt Ltd, Welspun Road Infra Pvt Ltd, MBL (CGRG) Road Ltd, MBL (GSY) Road Ltd, Chikhali Tarsod Highways Pvt Ltd) and one operating BOT toll asset (Welspun Infrafacility Pvt Ltd)	Actis and Welspun Enterprises	5 completed HAM assets (Welspun Delhi Meerut Expressway Pvt Ltd, Welspun Road Infra Pvt Ltd, MBL (CGRG) Road Ltd, MBL (GSY) Road Ltd, Chikhali Tarsod Highways Pvt Ltd), and Welspun Infrafacility Pvt Ltd	NA	NA
Nov-2022	Eastern Peripheral Expressway	CDPQ-backed Maple Highways	NHAI	62,670	NA
Oct-2022	InvIT (across 7 states: Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, Telangana)	CPPIB and Ontario Teachers' Pension Plan Board	National Highways Infra Trust	NA	NA
Sep-2022	Andhra Pradesh and Gujarat assets (Tada Nellore)	Adani Group	Macquarie Group	31,100	NA
Aug-2022	SP Jammu-Udhampur Highway Ltd	NIIF	Shapoorji Pallonji Group	22,800	100%
Jul-2022	Navayuga Quazigund Expressway Pvt. Ltd	NIIF	Navayuga Quazigund Expressway Pvt Ltd	30,350	NA
Jun-2022	Six operating highway toll projects	Actis' Long Life Infrastructure Fund	Welspun Enterprises Ltd	60,000	100%
Jun-2022	Five operational road projects	IndInfravit Trust, an InvIT led by Canada Pension Plan Investment Board	Brookfield	93,750	100%
Jul-2021	One highway concession	KKR Asian Fund III LP	Global Infrastructure Partners	-	39%
Jan-2021	Shree Jagannath Expressways Pvt. Ltd	Indian Highway Concessions Trust	Bharat Road Network	7,300	74%

Dec-2020	Jorabat Shillong Expressway Ltd	Sekura Roads Ltd	IL&FS Transportation Networks Ltd	9,300	100%
Dec-2020	Chenani Nashri Tunnelway Ltd.	Cube Highways and Transport Assets Advisors Private Limited	IL&FS Transportation Networks Ltd	39,000	100%
Jun-2021	Navayuga Road Projects Pvt. Ltd. - two road projects	Sekura Roads Ltd	Navayuga Road Projects Pvt Ltd	-	100%
Jan-2020	KNR Walayar Tollways Pvt Ltd	Cube Highways and Transport Assets Advisors Private Limited	KNR Construction Ltd	6,200	100%
Aug-2019	Five under construction HAM projects - Dilip Buildcon Ltd	Cube Highways and Transport Assets Advisors Private Limited	Dilip Buildcon Ltd	7,300	100%
Aug-2019	KNR Shankarampet Projects Pvt Ltd	Cube Highways and Transport Assets Advisors Private Limited	KNR Construction Ltd	1,000	100%
Feb-2019	Two road projects - KNR Construction Ltd	Cube Highways and Transport Assets Advisors Private Limited	KNR Construction Ltd	2,000	100%

Source: Industry, CRISIL MI&A Consulting

SUMMARY OF BUSINESS

The information in this section should be read together with the more detailed financial and other information included in this Information Memorandum, including the information contained in "Business", "Industry Overview", "Risk Factors", "Discussion and Analysis by the directors of the Investment Manager of the financial condition, results of operations and cash flows of the Projects SPVs of the Trust" and "Audited Financial Statements" on pages 166, 156, 47, 195 and 261, respectively and the Technical Reports and Traffic Reports", respectively.

Overview

Indian Highway Concessions Trust is an Indian infrastructure investment trust sponsored by Maple Highways Pte Ltd, a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of Caisse de dépôt et de placement du Québec ("**CDPQ**").

CDPQ was established on July 1, 1965, by an act of the provincial legislature of Québec, Canada (namely, *the Act respecting the Caisse de dépôt et placement du Québec*). CDPQ is a legal person without share capital or shareholders, headquartered at 65, rue Sainte-Anne, Price building, 14th floor, Québec (Québec) G1R 3X5 and with a principal place of business at 1000, place Jean-Paul-Riopelle, Montréal, Québec H2Z 2B3, Canada. CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans. CDPQ invests globally in major financial markets, including public and private equity, fixed income, infrastructure and real estate. As of December 31, 2022, CDPQ held approximately CAD 401.89 billion in net assets. CDPQ has also received a credit rating of "AAA" from S&P Global Ratings, DBRS Ltd. and Fitch Ratings and "Aaa" from Moody's Investors Service.

CDPQ is amongst the three largest institutional investors in infrastructure in the world, with nearly 25 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 54.64 billion (net assets as at December 31, 2022) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks It has infrastructure investments in over 15 countries globally comprising both developed markets as well as targeted growth markets. Through its subsidiary CDPQ Infra, CDPQ also acts as a developer in certain infrastructure projects by providing integrated management of the planning, financing, construction and operating phases.

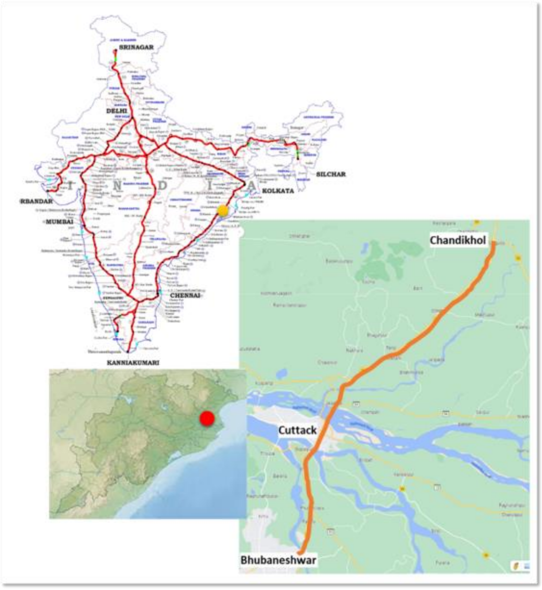
CDPQ has extensive global experience of investing in the transportation sector in developed markets and targeted developing markets, including the REM - public transit project in Montréal, Canada, the Conmex toll road in Mexico, Indiana Toll Road in the United States of America, WestConnex tollroad in Australia and a Multisectoral (including toll roads) Infrastructure Platform with CKD IM in Mexico.

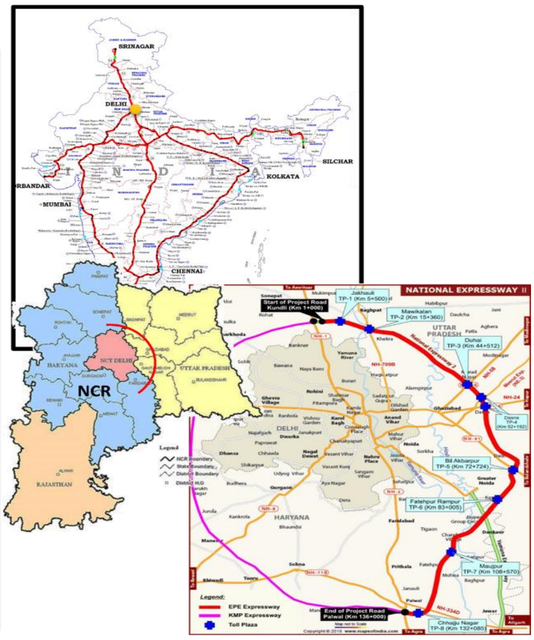
India is one of the key growth markets of focus for CDPQ. CDPQ typically works in partnership with local firms to create institutional platforms for the long term.

SJEPL has undertaken the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha, on a design, build, finance, operate and transfer basis, under the SJEPL Concession Agreement. NCREPE has undertaken the Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on tolling, operation, maintenance and transfer basis, under the NCREPE Concession Agreement.

The map* below illustrates the location of the SJEPL Project and the NCREPE Project:

SJEPL **NCREPE**





The Investment Manager will also have the flexibility to acquire new projects through acquisitions from the Sponsor or from third parties or acquisitions by way of bidding or develop greenfield projects.

Maple Infra InvIT Investment Manager Private Limited is the Investment Manager for the Trust. The Investment Manager was originally incorporated as a public limited company on September 26, 1995.Prior to acquisition by the Maple Highways Pte Ltd, it was engaged in the business of generation, accumulations, distribution and supply of electricity. Maple Highway Project Management Private Limited, is the Project Manager and was originally incorporated on January 28, 2010 and is approximately 100% owned by the Maple Highways Pte Ltd.

For further details of the Sponsor, the Project Manager and the Investment Manager, please see the section entitled "*Parties to the Trust*" on page 91.

Axis Trustee Services Limited is the Trustee of the Trust. The Trustee is a registered intermediary with SEBI under the Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993, as a debenture trustee.

Strengths

The Investment Manager believes the following to be the key strengths of the Trust:

1. *Strategically located Projects*

   The Projects are located in corridors that have a mix of high commercial and passenger vehicular traffic, located in a parts of India with high gross state domestic product growth. The principal features of the Projects are as follows:

The SJEPL Project forms a part of the National Highway 16 which is called as the 'Golden Quadrilateral'. It is a key connector of Chennai to Kolkata corridor. The SJEPL Project is a National Highway in the eastern state of Odisha along NH16. Being part of the Golden Quadrilateral, it becomes a key connector of Chennai-Kolkata corridor. At the same time, the east-west highway of NH55 connects to the SJEPL Project just south of the toll plaza. Therefore, the traffic moving between Mumbai and Kolkata is also captured on the SJEPL Project. The SJEPL Project passes through the urban settlements of Bhubaneswar and Cuttack, which are two of the largest economic activity centers in Odisha, Bhubaneswar also being the capital of the state. The city of Puri and Konark are historical and religious centers and attract a lot of tourists from within Odisha as well as other states. Almost 50% of the national production of iron ore, 75% of the national production of Bauxite and nearly the entire national production of Chromite comes from the state of Odisha, where the SJEPL Project is located. Steel plants by major steel conglomerates like Essar steel, Tata steel, Bhushan steel and Jindal steel plants, are located in the immediate catchment area of the SJEPL Project. The SJEPL Project is part of the NH16 corridor which is in proximity to the major mining and mineral processing sections around Talcher-Angul area, Joda Barbil area, Balasore, Chandikhol and Keonjhar. Its connections with three operational ports, namely, Paradip port, Dharma port and Gopalpur port also make it an asset of strategic importance. These ports are at a distance of about 340km from the iron ore mining clusters of Joda-Koira. *(Source: Traffic Report)*. For further details, please see the "*Traffic Reports*" at Annexure C.

The NCREPE Project connects Kundli to Palwal via Ghaziabad. The NCREPE Project is a solar powered, greenfield expressway which not only decongests the roads in Delhi but also is a green, safe and afficient route for a number of commuters travelling from and towards the National Capital Region ("**NCR**"). The NCREPE Project offers connectivity between Delhi/NCR, Haryana and Uttar Pradesh. NCREPE Project is surrounded by industries engaged in IT/ITES, Electronics, Agro, cement and ceramic, etc. situated along the eastern side and industries engaged in textiles, automobiles and ancillary manufacturing, agro-processing, electronics, pharmaceuticals and dairy processing on the western side. In addition, the proposed Noida International Airport and the Defense Industrial Corridor may result in establishment of smaller ancillary industries in close vicinity resulting in attracting traffic to the NCREPE Project.

The Investment Manager believes that the Projects cater to growth sectors and population densities that will utilise these Projects on an increasing basis, thereby contributing to expected growth in the Trust's toll revenues.

2. *Long operational track record and long-term income generating assets with high traffic volume or annuity assets*

SJEPL started collecting tolls in December 2011. From Fiscal 2020 to Fiscal 2021, toll collections by SJEPL increased by 1.8% , from ₹ 1,751 million to ₹ 1,782 million and from ₹1,782 million in Fiscal 2021 to ₹ 1,736 million in Fiscal 2022. Further, SJEPL collected ₹ 1,950 million toll as of March 31, 2023. The NCREPE Project started collecting tolls from November 11,2022 and has collected ₹ 1,699 million as of March 31, 2023. According to the Traffic Reports, it is expected that toll collections will continue to increase for the same reason and other factors for such increase include construction or upgradation activities on routes, implementation of FASTag etc. For further details, please see the section entitled "*Discussion and analysis by the Directors of the Investment Manager of the financial condition, results of operations and cash flows of the Project SPVs of the Trust*" on page 195 and the *"Traffic Report"* at Annexure C.

3. *Strong support from the Sponsor, Project Manager and Investment Manager*

Indian Highway Concessions Trust is an Indian infrastructure investment trust sponsored by Maple Highways Pte Ltd, a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of CDPQ. CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans. CDPQ invests globally in major financial markets, including public and private equity, fixed income, infrastructure and real estate. CDPQ is amongst the three largest institutional investors in infrastructure in the world, with nearly 25 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 54.64 billion (net assets as at December 31, 2022) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has infrastructure investments in over 15 countries globally comprising both developed markets as well as targeted growth markets. Through its subsidiary CDPQ Infra, CDPQ also acts as a developer in certain infrastructure projects by providing integrated management of the planning, financing, construction and operating phases. We believe that such experience of CDPQ, will help us grow our portfolio in respect of acquisition of future projects.

Maple Infra InvIT Investment Manager Private Limited is the Investment Manager for the Trust. The Investment Manager was originally incorporated as a public limited company on September 26, 1995 and was engaged in the business of generation, accumulations, distribution and supply of electricity. Maple Highway Project Management Private Limited, is the Project Manager and was originally incorporated on January 28, 2010 and is approximately 100% owned by the Maple Highways Pte Ltd .

For more details, please see the section entitled "*Parties to the Trust*" on page 91.

The Trust will benefit from the experienced management team at the Investment Manager and the Project Manager which comprises seasoned professionals with extensive management and/or operational experience in the roads sector.

4. *Attractive industry sector with favourable government policies*

Further development of the infrastructure sector, in particular road infrastructure, is a priority for the GoI and has been the subject of enhanced investment from the public sector through traditional means of public investment and new channels such as PPPs. The number of vehicles on Indian roads has increased by approximately 9.2% per year in recent years, and road transport has emerged as the dominant segment in India's transport sector. With initiatives such as the NHDP, the Special Accelerated Road Development Programme and the National Highways Interconnectivity Improvement Project, the GoI had set funding targets of US$ 14.85 billion for Fiscal 2021, with US$ 7.87 billion earmarked for national highways and the remainder for rural roads. *(Source: indiabudget.gov.in)*. Through the PPP model, among others, the Investment Manager believes that the Trust will capture through acquisitions, a reasonable share in the PPP format of the road infrastructure sector.

For further details on the market opportunity for the road infrastructure industry in India, please see the section entitled *"Industry Overview"* on page 156.

5. *Skilled and experienced management team of the Investment Manager and Project Manager with relevant industry experience*

The Trust is being managed by qualified personnel of the Investment Manager who have management and operational experience in the roads, infrastructure and highways sector with vast experience. The directors and Key Personnel of the Investment Manager also have experience in various other fields, including, banking, finance, accounting, business administration and corporate strategy. For further details, see "*Parties to the Trust – The Investment Manager – Maple Infra InvIT Investment Manager Private Limited*" on page 113. We believe that the experience and leadership of these teams will contribute to our growth and success and will position the Project SPVs to be operated and managed in an efficient manner.

Business Strategies

The Investment Manager believes the following to be the key strategies of the Trust:

1. *Institute and maintain prudent capital and risk management policies*

The Investment Manager has implemented appropriate policies and diversified its sources of financing with the objective of minimizing our overall cost of capital to retain enough flexibility to make acquisitions in the future while also maximising distributions to Unitholders.

2. *Efficient and active asset management*

The Trust intends to continue to manage its road assets through the services of the Project Manager. The Project Manager will be responsible for supervising O&M activities of the Project SPVs pursuant to the provisions of the Project Implementation and Management Agreements. For further details in respect of the Project Implementation and Management Agreements, please see the section entitled "*– Parties to the Trust – Key terms of the Project Implementation and Management Agreements*" on page 118.

3. *Expand the portfolio of road assets*

The Investment Manager will carry out the activities of Trust and make investments pursuant to the terms of the InvIT Regulations and the Indenture of Trust. The Investment Manager also hopes to actively source and acquire quality assets from third parties or by way of bidding on a case-by-case basis, on behalf of the Trust, in accordance with the Indenture of Trust. The Investment Manager believes that it will be able to leverage CDPQ's established network of relationships and experience in the roads sector in India to source high quality projects in line with the investment strategy of the Trust.

RISK FACTORS

An investment in the Units involves a high degree of risk. Investors should carefully consider all the information in this Information Memorandum, including the risks and uncertainties described below. If any of the following risks actually occur, the business, results of operations,financial condition and cash flows of the Trust could suffer, the price of the Units could decline and Investors could be materially and adversely affected including the lose of all or part of their investments. The risks and uncertainties described below are not the only risks that the Trust faces or may face. Additional risks and uncertainties not presently known to the Investment Manager and the Trust, or that they currently believe to be immaterial, may also have an adverse effect on the business, results of operations,financial condition and cash flows of the Trust and as a result, the returns on investments of the Unitholders. If any of the following risks, or other risks that are not currently known or are currently considered immaterial, actually occur, our business prospects, results of operations, cash flows and financial condition could suffer, the price of the Units could decline, and prospective investors could be materially and adversely affected including the lose of all or part of their investments. Unless specified or quantified in the relevant risk factors below, the Investment Manager and the Sponsor are not in a position to quantify or specify the financial or other implications of any of the risks described in this section.

In making an investment decision, Investors must rely on their own examination of the Trust including the merits and risks involved. To obtain a complete understanding, this section should be read in conjunction with the sections entitled "Business" and "Discussion and Analysis by the Directors of the Investment Manager of the financial condition, results of operations and cash flows of the Project SPVs of the Trust" on pages 166 and 195, respectively as well as the financial statements and other financial information included elsewhere in this Information Memorandum.

This Information Memorandum also contains forward-looking statements that involve risks and uncertainties and assumptions. The Trust's actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including considerations described below and in the section entitled "Forward-Looking Statements" on page 11.

Prospective investors should be aware that the price of the Units, and the income from them, may be subject to volatility. If any of the risks described below occurs, our business and prospects could be materially and adversely affected and investors could lose all or part of their investment.

References to "we", "us" and "our" are to the Trust and the Project SPVs, on a consolidated basis.

1. The Trust is a new entity and has limited established operating history, which will make it difficult for our future performance to be assessed.

The Trust was established pursuant to the initial indenture, being November 6, 2019 and has acquired 100% of the issued and paid-up equity share capital of SJEPL (the "**Share Capital**"), pursuant to the SJEPL Securities Purchase Agreement, in June, 2022 and incorporated NCREPE as a special purpose vehicle for undertaking the tolling, operation, maintenance and transfer of the TOT Bundle 7 Project. For further details, please see the section entitled "*Overview of the Trust*" on page 17. Accordingly, the Trust, as an infrastructure investment trust, does not have a long operating history or historical financial information by which our past performance may be judged. This will make it difficult for investors to assess our future performance. There can be no assurance that we will be able to generate sufficient revenue from our operations or the Project SPVs will be able to generate sufficient cash flows from their operations to make distributions to our Unitholders.

The Consolidated Financial Statements and the Standalone Financial Statements consisting of historical financial data of the Trust and the Project SPVs, as applicable, have been included elsewhere in this Information Memorandum, and there are estimates and judgments inherent in the preparation of such data. There can be no assurance that our future performance will be consistent with the estimates of past financial performance.

Further, the Standalone Financial Statements are not directly comparable to the Consolidated Financial Statements and reliance on the Consolidated Financial Statements and the Standalone Financial Statements should be made keeping in mind the limitations of the applicability of such statements. Accordingly, there is limited historical financial information available for the Trust and the Project SPVs and may make it difficult to assess our financial position, future prospects, results of operations or cash flows.

2. ***No trading history available for the Units. Further the Units of the Trust are being listed without any new issuance or offer for sale relying on the exemption granted by SEBI vide its letter dated February 28, 2023 and accordingly there is no benchmark on the price at which the Units would be listed on BSE.***

The Units of the Trust are being listed on BSE without there being any new issuance or offer for sale of Units under an offer document, in accordance with the exemptions granted by SEBI by way of its letter dated February 28, 2023. Accordingly, there is no benchmark on the price at which the Units would be listed and if at all there would be an active market for the Units post listing.

3. ***The Project SPVs rely on certain third party vendors and operators for operations in relation to the Project Assets.***

According to the NCREPE Concession Agreement, Toll Management Systems ("**TMS**") are awarded by NHAI to certain third party vendors that are to control TMS operations till 2025. NCREPE will have limited control over the vendor appointed during such period, for instance, since the NCREPE Project is a closed loop toll system and requires entry and exit data to be recorded, in case of missing information, the TMS architecture automatically maps the farthest or the nearest toll plaza, based on the instructions from NHAI to TMS vendor. Further, NCREPE may not be able to seek modifications, improvements or rectifications to the TMS until 2025. Any modifications made to the TMS by such vendor under directions from NHAI may adversely affect the revenue. NCREPE has limited control over such decisions and limited room to lodge claims with NHAI.

Separately, at four locations, NHAI has awarded EPC contracts to third party vendors as per provisions of the SJEPL Concession Agreement. The construction is ongoing at these locations and the structures built at these locations will be handed over to SJEPL for maintenance. While these contracts contain certain defects liability period, there can be no assurance that there will be no defects, damages, deficiencies, among others which may include structural shortcomings in the future.

4. ***The Project SPVs' financing agreements entail interest at variable rates, and any increases in interest rates may adversely affect our results of operations, financial condition and cash flows. Further, the Project SPVs are subject to restrictive covenants under their financing agreements that could limit our flexibility in managing our business or to use cash or other assets.***

The financing agreements entail interest at variable rates with a provision for the periodic reset of interest rates. Under the Project SPVs' financing agreements, the lenders are entitled to change the applicable rate of interest on any date and accordingly, the Project SPVs are susceptible to changes in interest rates and the risks arising therefrom. Any increase in interest rates may have an adverse effect on our results of operations, financial condition and cash flows.

Further, the financing agreements entered into by the Project SPV with certain banks and financial institutions contain certain restrictive covenants and cross default provisions. The financing agreements restrict the Project SPVs from, amongst other things, (i) incurring any indebtedness without prior approval of the lenders, other than indebtedness incurred pursuant to the documents executed in connection with the facility from the lenders; (ii) making any investments other than investments in certain permissible instruments such as Government securities; (iii) making any changes in memorandum or articles of the company, except as required by law, (iv) amending or modifying the capital structure of the company, and (v) effecting changes in its ownership without prior approval of the lenders. These may restrict our ability to conduct business and any breach thereof may adversely affect our results of operations,financial condition and cash flows. In the event of any breach of any covenant contained in these financing agreements, apart from other consequences, the security trustee may enforce the security under the financing agreements which may adversely affect our business, financial condition, results of operations and cash flows. We may also be required to immediately repay our borrowings either in whole or in part, together with any related costs.

In addition, our ability to meet the debt service obligations and repay the outstanding borrowings of the Project SPVs will depend primarily on the cash generated by our business. We cannot assure you that we will generate sufficient cash to service existing or proposed borrowings or fund other liquidity needs, which could have an adverse effect on our business, cash flows and results of operations. We may be required to refinance our outstanding borrowings in the future. There is no assurance that we will be able to obtain such financing, on favorable terms, or at all, which may have a material adverse effect on our business, financial condition results of operations and cash flows.

For further details in relation to the financing arrangements entered into by the Project SPVs, please see the section entitled "*Financial Indebtedness*" on page 184.

5. *The Valuation Report By BDO Valuation Advisory LLP (the "Valuer") is not an opinion, express or implied, as to the future price of Units or the financial condition of Trust and in the event the assumptions included in the Valuation Report are not met, the valuation of the Project SPVs may be affected as set out in the Valuation Report.*

BDO Valuation Advisory LLP was appointed as the independent valuer (the "**Valuer**") to undertake independent appraisals of the Project SPVs. The Valuer issued a letter and reports appended to it dated May 31, 2023, which set out their opinion as to the fair market value of SJEPL and NCREPE as of March 31, 2023. The Valuation Report is based on various assumptions with respect to the Project SPVs. Such assumptions are based on the information provided by, and discussions with, the Investment Manager. Further, the Valuation Report is based on estimates of future financial performance or opinions, which represent reasonable expectations at a particular point of time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, a particular event will occur or that a particular price will be offered or accepted. Additionally, for disclaimers involving SJEPL and NCREPE, please refer to paragraph 4 of the Valuation Report included as Annexure A.

The Valuation Report is not an opinion, express or implied, as to the future price of Units or the financial condition of the Trust. The Valuation Report does not purport to contain all the information that may be necessary or desirable to fully evaluate the commercial or investment merits of the Trust. The Valuation Report does not confer rights or remedies upon investors or any other person, and does not constitute and should not be construed as any form of assurance as to the financial condition or future performance of the Trust or the Project SPVs. Further, the Valuation Report are necessarily based on financial, economic, monetary, market and other conditions as of the date of the Valuation Report. The Valuation Report has not been updated since the date of its issue and does not take into account any developments subsequent to the date of its issue.

Further, the outbreak of COVID-19 pandemic has created significant uncertainty in valuation and accordingly, the Valuer has recommended a degree of caution to the values arrived under current circumstances, as the same may change rapidly depending on the changing market scenario. Due to the outbreak of the COVID-19 pandemic, the valuation exercises undertaken by the Valuer are based on significant assumptions within the valuation approach and methodology, which are based on factors whose outcome are uncertain and hence, results in lower certainty of the value determined in the Valuation Report, than would otherwise be in this case.

There can be no assurance that the assumptions included in the Valuation Report will be met and accordingly that may affect the valuation of the Project SPVs as set out in the Valuation Report or that other independent valuers would arrive at the same valuation. Accordingly, investors should not unduly rely on the Valuation Report in making an investment decision to purchase Units of the Trust. For details, please see the "*Valuation Report*" at Annexure A.

6. *SJEPL may not have obtained NHAI approval for previous changes in its shareholding, under the terms of the concession agreement.*

The SJEPL Concession Agreement stipulates that any acquisition of 15% or more of the total equity of SJEPL; or any acquisition of any control of the board of directors of SJEPL, shall constitute a change in ownership and shall require prior approval of NHAI from a national security or public interest perspective. The SJEPL Concession Agreement further states that if any transaction results into a material variation in the proportion of the equity holding of any member of SREI Infrastructure Finance Limited, Simplex Infrastructures Limited and Galfar Engineering & Contracting SAOG, to the total equity of SJEPL prior to the expiry of the construction period and two years thereafter, in terms of the SJEPL Concession Agreement ("**Lock-In Period**"), it shall constitute a change in ownership and may require NHAI's prior approval. The shareholding pattern of SJEPL has undergone multiple changes pursuant to investments by group companies of SREI Infrastructure Finance Limited, Simplex Infrastructures Limited and Galfar Engineering & Contracting SAOG, the proportion of their shareholding could be seen as being materially varied, as a result of which such approval requirements may have been triggered. However, no such approvals were obtained. It may be noted that an application for approval had been made to NHAI, in relation to the acquisition of 100% shareholding of SJEPL by the Trust, which disclosed the existing capital structure of SJEPL and NHAI had approved the same. The Trust cannot assure investors that we will be able to obtain approval from NHAI in relation to the previous change in shareholding of SJEPL, or that there will be no adverse consequential implications in the future.

7. The independent auditor's report on the Trust's Projections of Revenue from Operations and Cash Flow from Operating Activities contains restrictions with respect to the purpose and use of the report by investors in the United States.

The independent auditors' report on the Trust's Projections of Revenue from Operations and Cash Flow from Operating Activities, contains the following restrictions:

The report is required by the InvIT Regulations requiring the independent auditor to issue a report on the Projection Information and is issued for the sole purpose of the Listing in accordance with the Indian InvIT Regulations. The independent auditor's work has not been carried out in accordance with auditing or other standards and practices generally accepted in jurisdictions outside India, including in the United States, and accordingly should not be relied upon as if it had been carried out in accordance with those standards and practices. U.S. securities regulations do not require profit forecasts to be reported by a third party. The report should not be relied upon by any prospective investors in the United States, including persons who are qualified institutional buyers as defined under Rule 144A under the United States Securities Act of 1933. The independent auditors accept no responsibility and deny any liability to any person who seeks to rely on the report and who may seek to make a claim in connection with any offering of securities on the basis that they had acted in reliance of such information under the protections afforded by the law of the United States.

8. The accuracy of statistical and other information with respect to the road infrastructure sector and the traffic assessment reports commissioned by the Investment Manager for the Projects contained in this Information Memorandum cannot be guaranteed.

Statistical and other information in this Information Memorandum relating to India, the Indian economy or the road infrastructure sector have been derived from various government publications, research reports from reputable institutions and communications with various Indian government agencies that are believed to be reliable. However, there can be no guarantee as to the quality or reliability of such information.

SJEPL and NCREPE are exclusively toll based. In relation to SJEPL and , the information reflected in its Traffic Report is subject to various limitations and is based upon certain estimates and assumptions that are subjective in nature. The Traffic Reports reflect current expectations and views regarding future events, and contain forecasts, projections and other forward-looking statements that relate to future events. The future events referred to in the Traffic Reports are subject to risks, uncertainties and factors such as gross domestic product growth, current and future traffic mix, per capita income changes, development of alternate/ feeder routes etc., which may cause the actual traffic volumes to be materially different from any future traffic volumes expressed or implied by the Traffic Reports.

While reasonable care has been taken in the reproduction of the information, no assurance can be made as to the accuracy of such facts and statistics, which may not be consistent with other information compiled within or outside India. Due to possibly inconsistent or ineffective collection methods or discrepancies between published information and market practice, the statistics contained in the Traffic Reports and the Technical Reports may be inaccurate or may not be comparable to statistics produced for other economies and should not be unduly relied upon. Further, there is no assurance that the statistics are stated or compiled on the same basis or with the same degree of accuracy as may be the case with information from elsewhere.

Further, the Technical Consultants have prepared the Technical Reports concerning SJEPL and NCREPE which are contained in this Information Memorandum. We commissioned the Technical Reports for the purposes of conducting technical assessments of SJEPL and NCREPE. Neither we, nor the Trustee, the Sponsor, the Investment Manager nor any other person has verified all the information in the Technical Reports. Further, the Technical Reports have been prepared based on information as of specific dates and may no longer be current or reflect current trends. Opinions in the Technical Reports based on estimates, projections, forecasts and assumptions may prove to be incorrect. The Technical Reports are subject to various limitations and are based upon certain bases, estimates and assumptions that are subjective in nature and that are based, in part, on information provided by and discussions with or on behalf of us and the Investment Manager. There can be no assurance that the bases, estimates and assumptions adopted by the Technical Consultants for the purposes of preparing the Technical Reports will prove to be accurate. Future reports for the Project SPVs could be materially different from those that are set forth in the Technical Reports and this Information Memorandum. The Technical Reports are not a recommendation to invest or disinvest in the Trust, SJEPL or NCREPE. Prospective investors are advised not to unduly rely on the Technical Reports when making their investment decision.

9. ***The flexibility of the Trust and the Project SPVs to utilise available funds may be restricted by the escrow arrangements they are required to maintain under the concession agreements.***

Under the terms of the concession agreements, the Project SPVs required to establish an escrow account. The Project SPVs are required to deposit all their cash inflows and receipts into the escrow accounts, including, among other things, tolls collected from the project and any payments (including termination payments) by the concessioning authority. The funds in such an escrow account is to be utilised only in the manner prescribed in the escrow agreement and the concession agreements. The escrow arrangement typically prioritises the payment of all taxes due and payable by the Project SPVs, followed by the payment of expenses in connection with, amongst others: (i) the construction of the project, (ii) O&M expenses and other costs and expenses incurred by the Project SPVs and the concessioning authority, (iii) the concession fee due and payable to the concessioning authority, (iv) debt servicing of the senior project lenders, (v) any payments and damages payable to the concessioning authority, (vi) debt servicing in respect of the subordinated debt, (vii) any reserve requirement as per the relevant financing documents, and (viii) the balance if any in accordance with the instructions of the Project SPVs.

Any withdrawals from the escrow accounts by the Project SPVs during the concession period must be made strictly in accordance with the terms of the concession agreements, debt documentation and escrow agreement, thereby limiting the flexibility of the Project SPVs in utilising available funds to plan for, or react to, changes in their business needs, which could have an adverse effect on its business, financial condition, results of operations and cash flows.

With respect to withdrawals on termination of the concession agreements, the escrow arrangement typically prioritises the payment of all taxes due, followed by the payment of prescribed percentage of debt due to project lenders (excluding subordinated debt), the payment of any outstanding concession fee, the payment of damages in relation to the concession, retentions and payments arising out of liability for any defects, the remainder of debt due, subordinated debt, operation and maintenance expenses and any other payments under the concession agreements, after which the balance may be withdrawn by the Project SPVs for its own purposes.

The loans/advances by the shareholders of the Project SPVs will be classified as subordinated debt and equity under the concession agreements, unless the same is otherwise approved by the concessioning authority. Accordingly, the ability of the Trust to access such termination payments or payments during the concessioning period in relation to the loans/advances by the shareholders will be subordinated to the discharge of all obligations towards the project lenders and the payment of, among other things, any outstanding concession fees and damages. Any shortfall in the termination payments received from the concessioning authority may prevent us from recovering our investments or returns in the Project SPVs adequately or at all. Also, on termination of the concession agreements and/or default under the financing documents executed with the project lenders, the payments/withdrawals from the escrow account of the Project SPVs may be entirely controlled by the discretion of the concessioning authority and/or the project lenders

10. ***The Auditors have drawn our attention to certain emphasis of matter relating to the Consolidated Financial Statements. We cannot assure you whether such matter of emphasis will not arise in the future.***

The Auditors have drawn our attention to certain emphasis of matter relating to the Consolidated Financial Statements, which are as follows:

(i) Attention is drawn to the Consolidated Financial Statement which states thatthere are delays in completion of 67 Kms of toll project road on Chandikhole-Bhubaneshwar section (‘Project Highway’) and non-receipt of completion certificate in respect of intangible assets of the trust group as on date and the consequential uncertainty of potential penalties and/or termination of Concession Agreement and impairment of these assets.

(ii) Attention is drawn to the Consolidated Financial Statements, which describes the presentation of “unit capital” as “equity” to comply with InvIT Regulations and not as compound financial instrument as would be required under Ind AS.

Investors should consider these matters in evaluating our financial position, cash flows and results of operations. There is no assurance that our auditors' reports for any future periods will not contain such matters of emphasis.

11. NCREPE has been acquired pursuant to a bid process and relied upon limited assessment of the asset. Accordingly we cannot assure you that there would not be any adverse impact on the Trust pursuant to reliance on such information.

NCREPE was acquired by the Trust (acting through its Investment Manager) pursuant to a bid transaction. Since NHAI runs a time sensitive request for proposal process for TOT bidding wherein the time frame is inadequate for conducting detailed and comprehensive technical assessments of the asset. The Trust has relied on best market practices while engaging technical advisors and undertaking equipment based due diligence. Considering large scale destructive testing is not allowed by NHAI and reliance is placed on visual observations only along with NHAI feasibility reports, it may be possible that an increase in repair and O&M costs along with additional defects are identified upon detailed review during operations. Accordingly, NCREPE may take up works which were not originally envisaged or were to be undertaken by NHAI. Several items within scope as previously quantified by NHAI and described in the request for proposal may increase in scope and such Change in Scope may not be permitted under the provisions of the NCREPE Concession Agreement leading to an increase in O&M costs and/or reduction in operational efficiencies.

***12. Most of SJEPL's business approvals, permits and consents, and applications for business approvals, permits and consents were obtained by the RKD Construction Private Limited and Simplex Infrastructures Limited, in their capacity as EPC contractors, in their names, pursuant to the EPC contracts*.**

Pursuant to the Securities Purchase Agreement, entered into between the Trust (acting through the Investment Manager), Simplex Infra Development Private Limited ("**SIDPL**"), Galfar Engineering & Contracting (India) Private Limited ("**Galfar India**"), Galfar Engineering & Contracting SAOG ("**Galfar Oman**") and Bharat Road Network Limited ("**BRNL**" and collectively with SIDPL, Galfar India and Galfar Oman, the "**Sellers**"), the Sellers, in respect of SJEPL, have represented and warranted to the Trust that all authorizations necessary for the conduct of the business of SJEPL have been obtained and such authorizations are valid, subsisting and in full force and effect. However, these representations were subject to the disclosures in the disclosure letter and updated disclosure letter provided in terms of the Securities Purchase Agreement.

Further, most permits and consents that were required to be obtained by SJEPL were obtained by the RKD Construction Private Limited and Simplex Infrastructures Limited, in their capacity as EPC contractors, in their names, pursuant to the EPC contracts. We cannot confirm that all consents and clearances required for construction and operation of the project up until the acquisition of the SJEPL by the Trust have been obtained either by SJEPL, RKD Construction Private Limited or Simplex Infrastructures Limited, and that all conditions specified under such consents and clearances have been complied with, and there are no notices/claims received for violation of any applicable law or the terms and conditions of such consents and clearances. For further information in relation to the aforementioned applications, please see the section entitled "*Regulatory Approvals*" on page 245. Further, there can be no assurance that in the event of any legal proceeding or regulatory action against the SJEPL in relation to such applications or approvals, SJEPL will not face adverse consequences or penalties on account of not holding ownership in relation to such applications or approvals in its name.

13. We have recently submitted a bid for a project for which we have relied upon publicly available information and accordingly we cannot assure you that there would not be any adverse impact on the Trust pursuant to reliance on such information.

The Trust (acting through its Investment Manager) had submitted a bid for a TOT project on May 10, 2023 comprising the TOT bundle 12 asset under the National Highways Authority of India asset monetization scheme containing single stretch of four lane Lalitpur-Sagar-Lakhnadon fom Km 99+005 and Km 415+089 section of National Highway 26 with in the states of Uttar Pradesh and Madhya Pradesh ("**TOT Bundle 12 Project**"). The bid results are currently awaited. Accordingly, we cannot assure you that we will win the bid or in the event we win the bid, the timely completion of the acquisition of the project by the Trust.

Further, there is also no financial information, valuation or technical details currently available for the TOT Bundle 12 Project. Accordingly, we cannot assure you that there would not be any adverse impact on the Trust, in the event such bid is won and subsequently if the project is acquired.

14. The Audited Financial Statements of the Trust and the Project SPVs in this Information Memorandum may not be indicative of the future financial condition,results of operations or cash flows of the Trust.

The Audited Financial Statements of the Trust and the Project SPVs may not necessarily give an indication of the financial position, results of operations or cash flows of the Trust or the Project SPVs in the future.

After the listing of the Trust, there may be certain changes to the Trust's cost structure, levels of indebtedness and operations, and these could differ materially from the historical combined cost structure and levels of indebtedness presented in the financial statements.

The financial projections contained in this Information Memorandum are based on historical financial information, Technical Reports, Traffic Reports, included as Annexure B and Annexure C, respectively, and certain estimates and assumptions. There can be no assurance that the Project SPVs will be able to generate sufficient cash from the operations of the Projects for the Trust to make distributions to Unitholders or that such distributions will be in line with those set out in the section entitled *"Projections of Revenue from Operations and Cash Flow from Operating Activities"* on page 412. The future financial performance of the Trust could vary materially from the financial projections and some of such projections' underlying assumptions might change or not materialise as expected. Unfavourable events or circumstances not anticipated may also arise. There can be no assurance that the assumptions will be realised or actual distributions will be as anticipated.

15. Our actual results may be materially different from the expectations, express or implied, or Projections of Revenue from Operations and Cash Flows from Operating Activities included, in this Information Memorandum.

In compliance with the InvIT Regulations, this Information Memorandum includes certain forward-looking statements, such as Projections of Revenue from Operations and Cash Flows from Operating Activities, expectations, plans and analysis of the Projections, as set out in the section entitled *"Projections of Revenue from Operations and Cash Flows from Operating Activities"* on page 412. The financial projections contained in this Information Memorandum are based on historical financial information and certain estimates and assumptions. There can be no assurance that the Project SPVs will be able to generate sufficient cash from the operations of the projects for the Trust to make distributions to the Unitholders or that such distributions will be in line with those set out in the section entitled *"Projections of Revenue from Operations and Cash Flow from Operating Activities"* on page 412. The future financial performance of the Trust could vary materially from the financial projections and some of such projections' underlying assumptions might change or not materialise as expected. Unfavourable events or circumstances not anticipated may also arise. There can be no assurance that the assumptions will be realised or actual distributions will be as anticipated. Should any of the Project SPVs be unable to meet the expected financial projections for any reason, this would materially and adversely affect our ability to meet our financial projections. Further, although revenue from operations and cash flow from operating activities for the projections period have been calculated on the same basis as the corresponding historical metrics,they are subject to the inherent limitations generally involved in presenting projection figures, as well as the assumptions set forth in the projections. Such assumptions and inherent limitations may distort comparability across historical and projection periods.

The projections are based on a number of assumptions which are subject to uncertainties and contingencies that are outside of our control. This may adversely affect our ability to achieve the forecasted and projected distributions as events and circumstances assumed may not occur as expected, or events and circumstances may arise which are not anticipated. No assurance is given that the assumptions will be realized, and that the actual distributions will be as forecast and projected.

There continue to be limitations associated with the Projections even though the calculations are based on historical performance metrics and certain other assumptions in the Projections. Given that future performance is based on assumptions, there could be uncertainties and contingencies, which could adversely affect the Investment Manager's ability to achieve the Projections. The Auditor's report under Standard on Assurance Engagement 3400 on our projections of revenue from operations and cash flow from operating activities contains certain matters to indicate that:

assumptions used for the preparation of the statement of projections have been provided to the Auditors by the Investment Manager and relied upon by the Auditors as regards certain matters included therein, including but not limited to estimates as under:

(a). technical estimates of expected traffic, future toll tariff; changes in wholesale price index based on traffic study reports and estimated future expenditure for major maintenance of roads based on reports issued by various third-party external experts,

(b). Investment Manager's current assumptions and expectations regarding future events and factors such as country's gross domestic product growth; general economic conditions; current and future traffic mix; per capita income and demographic changes; development of alternate/ feeder routes; alternate means of transportation; fuel prices; reduction in commercial or industrial activities in the regions served by the roads and natural disasters; government polices around mining, extraction of minerals etc.

Variation of the above factors may cause the actual traffic volumes to be materially different from any future traffic volumes expressed or implied by the traffic study reports and considered in the statement of projections.

Further, the Investment Manager cannot assure you that the assumptions will be realized and the actual revenue from operations and cash flows from operating activities, will be as projected.

16. The Project SPVs have entered into Concession Agreements which contain certain onerous provisions and any failure to comply with such Concession Agreements could result in adverse consequences including penalties and the substitution of the concessionaire.

The Project SPVs have entered into Concession Agreements with the concessioning authority with which the Project SPVs have limited ability to negotiate the terms of the Concession Agreements. As a result, the Concession Agreements contain terms that may be onerous to the Project SPVs in relation to, among other things, compliance with and monitoring of O&M requirements. The O&M requirements include, among other things, permitting the safe, smooth and uninterrupted flow of traffic, undertaking routine maintenance, including repairs of potholes, cracks, joints, drains, embankments, structures, markings, lighting, signage and other control devices, undertaking major maintenance such as resurfacing of pavements, repairs to structures, and repairs and refurbishment of system and other equipment, and preventing, with the assistance of the concerned law enforcement agencies, any encroachments on, or unauthorized use of the project. Failure to comply with these requirements could result in adverse consequences, including the Project SPVs being liable for compensating the concessioning authority for such breach or termination. In the past, NHAI has highlighted certain breaches by NCREPE and SJEPL of its obligations with respect to maintenance of the project, as provided for under their respective Concession Agreements. NHAI has also issued letters highlighting requirement for pavement design rectification, etc. by SJEPL. Further, the independent engineer is also entitled to provide observations on a regular basis, in relation to operation and maintenance of the project stretch.

There are terms in the Concession Agreements which require the concessioning authority's prior written approval before the Project SPVs can create encumbrance or security interest over, or transfer its rights and benefits under, the Concession Agreements. There is no assurance that the concessioning authority will approve the actions of the Project SPVs in time or at all. Even if, in the future, approval from the concessioning authority is obtained for any proposed creation of encumbrance or transfer of rights and benefits, there is no assurance that the transfer of the rights and benefits under the respective concession agreements would have no adverse effect on the Unitholders. The concession agreements also contain terms which require the Project SPVs to obtain approval of the concessioning authority prior to, amongst others, amending the project agreements and replacing the O&M contractor. There is no assurance that the concessioning authority will approve the actions of the Project SPVs in time or at all. The restrictions and uncertainties impose constraints on the flexibility of the Trust to conduct its business and its financial conditions, results of operations and cash flows may be adversely affected.

In addition, the Concession Agreements also contain clauses which will allow the concessioning authority to step in, in place of the Project SPVs , in the event of a suspension or termination of the Concession Agreements. Further, in case of the Project SPVs which have been granted a concession by the NHAI, according to the circular dated January 29, 2014 issued by the NHAI, the NHAI or the lenders of such project may substitute the Project SPVs in the event that the Project SPVs is in "financial default"; that is, for example, if the NHAI or the lenders of such project have a reason to believe that the Project SPVs are likely to face financial distress and are likely to default in their obligations under the terms of the concession agreements. The NHAI may also impose a penalty on the defaulting Project SPVs.

NHAI has made certain commitments to NCREPE as part of their defects liability period in relation to defects on the NCREPE Project. The NCREPE Project is to be repaired either by EPC contractors or by NHAI directly. It is possible that NHAI does not undertake these repairs and asks NCREPE to undertake these under a change in scope. It is possible that estimates for such a change in scope are not in line with market standards and consequently NCREPE may have to incur cost escalations for such works. Further, there could be delays in payment from NHAI which could also cause cash flow issues at NCREPE. NCREPE might not be able to complete these works within the time envisaged which could lead to additional damages. Further, the concession agreements have provisions that enable NHAI to undertake capacity augmentation which covers widening of roads or adding specific items like an underpasses, flyover, etc. These additions will be handed over to us for maintenance post their completion. There is a possibility that construction of these could be delayed which could impact our operations. Since there are limited protections available under the concession agreements to address such issues the same could have quality issues and we may be held responsible if defects appear post defects liability period of EPC vendors engaged by NHAI. Such a development could have an impact on toll rates and revenue.

The Concession Agreements also require the Project SPVs to indemnify the concessioning authority, including for losses arising out of, or with respect to, the failure of the concessionaire to comply with applicable laws and permits, payment of taxes payable by the concessionaire or the non-payment of amounts arising out of materials or services provided to the concessioning authority, among others.

In the event that any change in law under a project's Concession Agreements imposes a financial burden on the Project SPVs, the Project SPVs may be entitled to approach the concessioning authority to amend its concession agreements or seek compensation such that the Project SPVs are placed in its former financial condition. The Project SPVs and the concessioning authority each have, in the past, raised claims for compensation against each other, under the Concession Agreements, some of which are still pending. The claims raised by the Project SPVs include, amongst others, claims in relation to change of scope, change of law, shifting of utilities and force majeure claims (claims on account of the disruption caused by COVID-19 outbreak and demonetization of certain currency notes by the Government of India). There is no assurance that the Project SPVs will receive compensation from the concessioning authority in the amounts claimed, in a timely manner, or at all. There is also no assurance that the Project SPVs will receive compensation from the concessioning authority for any amounts that may be claimed in the future. This could have an adverse effect on the Trust's financial performance. The concessioning authority has also raised claims against the Project SPVs, which are still pending. The adverse settlement of such claims, including the payment of damages, fines or other penalties by the Project SPVs could adversely affect the business, prospects, financial condition,results of operations and cash flows of the Project SPVs.

Further, the GoI may, on the occurrence of certain events, suspend toll collection at the project. For example, as part of the GoI's demonetisation exercise, the GoI announced a toll exemption for all vehicles across all toll plazas from November 9, 2016 to December 2, 2016. Further, during the national lockdown imposed from March 24, 2020 in India on account of the COVID-19 pandemic, the concessioning authority suspended toll collection for a certain period. The national lockdown and these instances resulted in huge revenue loss and other work constraints (such as availability of labour and spare parts) for entities operating in the road sector, including the Project SPVs. There is no assurance that if such situations occur in the future, to the extent the Trust faces any loss of revenue, it would be able to claim for such loss of revenue and any such claim would be successful.

The form of the concession agreements has evolved in the previous decade and there is limited guidance available on the interpretation of the terms and conditions contained in such concession agreements. In addition, certain terms of the concession agreements are ambiguous and untested and accordingly, their interpretation by the concessioning authority may differ from that of the Project SPVs. In the event that the interpretation of the Concession Agreements are unfavourable to the Project SPVs, its business, financial condition,results of operations and cash flows may be adversely affected.

17. The Concession Agreements may be terminated prematurely under certain circumstances.

Under the terms of our Concession Agreements, we have obligations to maintain our road project in good working order and maintain the roads periodically. Our road project requires repair or maintenance due to natural disasters, accidents and other factors beyond our control. The concessioning authority will periodically carry out tests through one or more engineering firms to assess the quality of roads and their maintenance. If we fail to maintain the roads to the standards set forth in the concession agreements, the concessioning authority may impose penalties, recover damages and demand remedies within cure periods. If we fail to cure our defaults in a timely manner within such time as may be prescribed under the concession agreements, our concession agreements may be terminated.

The contract for our road project typically specifies certain operation and maintenance standards and specifications to be met by us while undertaking our operation and maintenance activities and develop a maintenance manual. These specifications and standards require us to incur operation and maintenance costs on a regular basis. The operation and maintenance costs of our project may increase due to factors beyond our control, including but not limited to:

- standards of maintenance or road safety applicable to our project prescribed by the relevant regulatory authorities;

- we may be required to restore our project in the event of any landslides, floods, road subsidence, other natural disasters accidents or other events causing structural damage or compromising safety;

- unanticipated increases in material and labour costs, higher axle loading, traffic volume or environmental stress leading to more extensive or more frequent heavy repairs or maintenance costs. The cost of major repairs may be substantial and repairs may adversely affect traffic flows;

- increase in electricity or fuel costs resulting in an increase in the cost of energy; or

- other unforeseen operational and maintenance costs.

Further, in relation to NCREPE, there may be risks associated with the operation and maintenance costs owing to the change in vendors and the exit of its erstwhile agencies appointed to undertake the operations and maintance requirements before the acquisition. The discontinuity may lead to pending dues for services provided by such agencies and intermediaries which may have to be paid by NCREPE and reimbursed from NHAI. These factors could lead to an increase in O&M costs and/or reduction in operational efficiencies.

Any failure by the Project SPVs to maintain the project according to the terms of the concession agreements will entitle the concessioning authority to terminate the concession agreements or take remedial actions at the risk and cost of the Project SPVs and recover such cost and damages from the Project SPVs from the escrow account as if such costs and damages were O&M expenses. In the past, SJEPL has received a “cure period notice” from NHAI, alleging several non-compliances by SJEPL of the provisions of the SJEPL Concession agreement. The non-compliances include, among others, non-submission of drawings in totality, failure to submit video recording, delays in six-laning, delays in completing the punch list items, non-maintenance of roads etc. In this regard, NHAI has also levied damages in this respect to be paid by SJEPL, as per the covenants of the SJEPL Concession agreement the imposition of damages in this regard by NHAI is being discussed by the parties on a consolidated basis along with other claims, penalties and extension of time requests. Further, if such delays are shown to be solely on the account of SJEPL, then the fee collected during the period between the scheduled completion and the actual completion of the delayed milestones would be disbursed to NHAI, instead of SJEPL, in addition to other remedies available to NHAI, such as encashment of performance security and termination of the concession agreement. NHAI has also levied damages against NCREPE alleging non-rectification of the defects and deficiencies in operation and management.

If the concession agreements are terminated by the concessioning authority due to a default by the Project SPVs, the Project SPVs may be exposed to additional liability as it is obliged to repair or rectify, at its own cost, any defects or deficiencies identified by the independent engineer of the project for a period specified in the concession agreements upon such termination. In addition, the termination payment by the concessioning authority due to a default by the Project SPVs, will be calculated according to the terms of the concession agreements, which may be less than the actual cost incurred by the Project SPVs on its project. Consequently, not only would the Project SPVs recover less than the costs incurred, but such an occurrence would also have an adverse effect on the Trust’s financial performance. Unless otherwise approved by the concessioning authority, the termination payments to the Trust, pursuant to a default by the Project SPVs, may be contested by the concessioning authority on the ground of the same being in nature of loans/advances by the shareholders of the Project SPVs.

If the concession agreements are terminated by the concessioning authority due to a default by the Project SPVs, or by the Project SPVs due to a default by the concessioning authority, the Project SPVs are entitled to termination of payments or otherwise from the concessioning authority in accordance with the terms of the concession agreements. The loans/advances from the shareholders (including the Trust) may be for a maturity term that exceeds the maturity term of the original facilities obtained from the project lenders. There can be no assurance that the concessioning authority will recognize such amounts as outstanding after the term of the original facilities obtained by the Project SPVs from its respective senior lenders. There can also be no assurance that the concessioning authority will pay the termination payments promptly or at all or that any termination payments will be adequate to enable us to recover our investments or returns in the Project SPVs.

If any concession agreements are terminated prematurely, the business, financial condition, results of operations and cash flows of the Project SPVs could be adversely affected. Please see the section entitled "*Summary of Concession Agreements*" on page 175.

18. Lower than expected returns on our investment in our Projects may adversely affect our financial results.

In our toll-based Projects or Projects with a toll component, our toll revenue depends on, and will depend on, the tolling rates set by the concessioning authority in accordance with the SJEPL Concession Agreement and the NCREPE Concession Agreement ("**Concession Agreements**") and the actual traffic volume using our roads. Such tolling rates may be revised by the concessioning authority annually in accordance with the provision of the Concession Agreements and applicable law. Our decision to undertake road projects is largely based on our estimate of our expected toll revenue, which in turn partly based on our estimate of the traffic volume using our roads.

Traffic volume may be affected by a number of factors beyond our control, including general economic conditions, alternate routes, alternate means of transportation, location of toll plazas, weather conditions, demographic changes, fuel prices, reduction in commercial or industrial activities in the regions served by the roads and natural disasters, government polices around mining, extraction of minerals etc. Thus, the actual traffic volume may be lower than our estimate. Decreases in traffic volume, could result in a significant loss of our toll revenue. In addition, our Concession Agreements typically limit and regulate increases in tolling rates. Typically, the NHAI sets the applicable tolling rates as per a standardised WPI linked formula and we may not be able to increase tolling rates to cover increases in our operational costs.

There are no provisions in the Concession Agreements protecting us against increases in interest rates or cost of raw materials. Our lenders may have the right to periodically adjust our interest rates and our applicable interest rates may increase based on their review of our credit profile and perceived risks in our operations. Our operational costs may also increase substantially during the operation of our project due to shortage of raw materials or substantial increases in prices of raw materials required for operation and maintenance beyond the permitted scope of adjustment due to occurrence of certain events under the relevant provisions of the Concession Agreements. Many factors causing such adverse changes are beyond our control and we are usually not able to demand matching increases in our tolling rates over and above fixed increase, as provided for in the Concession Agreements. Even if we invoke the inflation adjustment clauses in our Concession Agreements, the increase may not be adequate to offset the negative impact of increases in interest rates or cost of raw materials.

As our Projects often requires significant capital investment with potential returns spread over a long period of time, inadequate toll revenues collected from our Projects may result in a low return or even loss on our investment, which may adversely affect our liquidity, business, financial condition,results of operation and cash flows.

19. The Projects' revenues from tolls are subject to significant fluctuations due to amongst others, force majeure events, changes in traffic volumes and the mix of traffic and a decline in traffic volumes could adversely affect its business prospects, financial condition, results of operations**, cash flows **and its ability to make distributions.

The Projects comprise exclusively of toll payments. Toll revenues depend on toll receipts and are affected by changes in traffic volumes and the mix of traffic. Traffic volumes are directly or indirectly affected by a number of factors, many of which are outside the Project SPVs' control, including toll rates, fuel prices, the affordability of automobiles, the quality, convenience and travel time on alternate routes and the availability of alternate means of transportation, including rail networks and air transport. Moreover, the Project SPVs' cash flows are affected by seasonal factors, which may adversely affect traffic volumes. India experiences monsoon rains during the period from June or July until September or October each year, which can affect the volume of traffic on the Projects. During such periods of curtailed activity, the Project SPVs may continue to incur operating expenses but receive reduced toll revenues. Such fluctuations may adversely affect the Project SPVs' business, financial condition or results of operations or cash flows.

The toll revenues of the Project SPVs may also be affected by various regulatory and statutory conditions and restrictions. On May 26, 2021, the NHAI issues guidelines to ensure service time of not more than 10 seconds per vehicle even at peak hours at the toll plazas on the National Highways. In accordance with these guidelines, queues of vehicles at toll plazas must not exceed 100 meters, and in the event of queues longer than 100 meters the vehicles will be allowed to pass without paying toll till the queue comes within 100 meters from the toll booth. Such conditions on the payment of toll may adversely affect the Project SPVs' business, financial condition,results of operations or cash flows.

Traffic volumes are also influenced by the convenience and extent of a toll road's connections with other parts of the state and national highway and toll road network, as well as the cost, convenience and availability of other means of transportation and alternative routes. There can be no assurance that future changes affecting the road network in India, through road additions and closures or through other traffic diversions or redirections, or the development of other means of transportation, such as air or rail transport, will not adversely affect traffic volume on toll roads.

The toll-linked Projects may experience high traffic levels and congestion at certain times of the day or on certain days of the week. Although the Project SPVs may consider possible solutions and take appropriate steps in order to ease traffic flow and reduce congestion, there can be no assurance that the saturation problems will be resolved under conditions that are economically satisfactory to the Project SPVs. This could also lead to user dissatisfaction and could potentially reduce traffic volume.

20. Leakage of the tolls collected on the toll-linked Projects may adversely affect the Project SPVs' revenues and earnings.

The Projects are exclusively toll based. Toll receipts are primarily dependent on the integrity of toll collection systems. The Project SPVs that has a toll component generates revenue from the project through the collection of tolls. On Indian toll roads, each motorist generally pays a one-time entry tariff to the toll operator at the point of entry to the toll road based on the average trip distance calculated for all users of the toll road. The Project SPV employs toll management software to monitor its operations.

Further, there have been occasions where political parties and local communities protest against the collection of tolls on roads and some of these occasions have turned violent and resulted in the destruction of toll collection booths. During such an event, the Project SPVs could have a limited ability to collect tolls. Under the terms of the Concession Agreements, in the event that the concession agreement is terminated by either party as a result of an occurrence of a political event, the concessioning authority is required to make payments to the Project SPVs as a result of such an event; however there is no assurance that concessioning authority will do so in a timely manner or at all.

The level of revenues derived from the collection of tolls may be affected by reduction in toll rates as determined by the concessioning authority. Toll revenues may also be affected by leakage through toll evasion, theft, fraud or technical faults in the toll systems or forced violations by users of toll roads. At times, there may be a need to allow users of tolls roads to pass through without paying applicable tolls due to heavy traffic build up, or there may be an inability to collect tolls due to political protests or agitations relating to tolling. In addition, in certain circumstances, the governmental authorities or Indian courts could seek to suspend toll collection for or during certain periods, in full or in part, which suspension would result in a reduction in revenues. Further, while there are provisions under the concession agreement to compensate the Project SPVs, there may be a considerable delay in the receipt of such compensation or compensation if received may not be adequate. Although the Project SPVs have systems in place to minimise leakage through fraud and pilfering, any significant failure to control leakage in toll collection systems could have an adverse effect on the business, prospects, financial condition,results of operations and cash flows of the Project SPVs.

21. Systems failures, cyber security breaches and attacks and resulting interruptions in our toll-linked project could adversely affect our business, financial condition, cash flows and results of operations.

The proper functioning of our technology infrastructure is essential to the conduct of our business. As SJEPL and NCREPE are and will be reliant on an electronic toll collection system, our transaction-processing systems and our network infrastructure are critical to our success.

Our electronic toll collection systems may experience service interruptions or degradation or other performance problems because of, amongst other, hardware and software defects or malfunctions, unexpected high volume of transactions, cyberattacks and cyber-security breaches , infrastructure changes, human error, natural disasters, power losses, disruptions in telecommunications services, unauthorized access, fraud, military or political conflicts, terrorist attacks, legal or regulatory takedowns, computer viruses, ransomware, malware, or other events. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time. Further, as techniques used to obtain unauthorized access to or sabotage systems change frequently and may not be known until launched against us, we may be unable to anticipate, or implement adequate measures to protect against, these attacks.

Our insurance coverage may not be sufficient to cover all of our losses that may result from interruptions in our service as a result of systems failures and similar events and we may need to expend significant financial and development resources to analyse, correct, or eliminate errors or defects or to address and eliminate vulnerabilities. Any failure to timely and effectively resolve any such errors, defects, or vulnerabilities could adversely affect our business, financial condition, cash flows and results of operations.

22. The Project SPVs have a limited period to operate the project as the concession period granted to the Project SPVs is fixed.

The Concession Agreements entered into by the Project SPVs provide for a fixed term concession, at the end of which the operation of the project will be transferred to the concessioning authority. For details of the concession period of the Project SPVs, please see the section entitled "*Business*" on page 166. Further, SJEPL in the past sought extensions for the concession period of the SJEPL Concession Agreement and is currently also in discussion with NHAI for extension of the current concession period by 5.2 years. The Trust has also made upfront payments pursuant to the Earnout Agreement to the Sellers of SJEPL under the assumption that the extension of the concession period by a full 5.2 years will be granted by NHAI. However, there is no assurance that concessioning authorities will grant the current extension or any extensions in the future and the Trust may have limited recourses under the Earn Out Agreement. In addition, there can be no assurance that the Trust will be able to successfully acquire new assets to replenish its portfolio once the existing concession agreement expires. Further, if the operating period of the project is shortened or disrupted or SJEPL or NCREPE's rights to operate their respective projects is terminated before the expiration of the concession, the business, financial condition, results of operations and cash flows of the Trust may be adversely affected.

23. Our toll-linked project may have certain pending construction work and may be subject to cost overruns or delays.

At the time of transfer of the TOT Bundle 7 Project to NCREPE, the project will still be under a defects liability period in relation to the EPC contractors, engaged by NHAI for construction of the TOT Bundle 7 Project. Further, SJEPL has not received a final completion certificate from NHAI or the relevant independent engineer as required in terms of the SJEPL Concession Agreement. Certain aspects of the Project SPVs may be under-construction and development. Accordingly, the completion of such construction and development is subject to substantial risks, including various planning, engineering and construction risks.

We may also suffer from the unavailability of equipment or supply, work stoppages, labour or social unrest, environmental activism, adverse weather conditions such as cyclones and monsoons, natural calamities, delays in construction, delays in clearances, unforeseen construction- related and/or operational delays and defects, delivery failures by contractors, increased cost of raw materials, unavailability of adequate funding, legal defects and irregularities of title to the land, failure to develop within budget and in accordance with the required specifications, additional interest costs incurred due to project delays, legal actions brought by third parties, changes in government, regulatory and tax policies, foreign exchange movements, adverse trends in the road sector or general economic conditions in India.

Any delays or cost overruns in the completion of such construction may adversely affect our business, financial condition, cash flows and results of operations.

24. The Project SPVs, which are responsible for the operation and maintenance of the Projects, may be directed by the concessioning authority to undertake, and the Project SPVs will be obliged to perform, additional construction work.

Under the terms of the Concession Agreements, the Project SPVs are responsible for the operation and maintenance of the Projects during the applicable concession period. The concessioning authority may require the Project SPVs to provide additional work and services not included in the original scope of the Concession Agreements. For example, if SJEPL is required to construct fast tag lanes, in addition to the construction, it needs to facilitate electronic toll lanes and build weigh-in motion equipment to check for the overloading of vehicles, among other things. There is no assurance that the money spent on complying with a change of scope order will be reimbursed in a timely or complete manner. In the past, SJEPL has acceded to such change of scope requests from NHAI. However, payments with regard to the completed change of scope activities currently remain pending and under dispute, since the costs incurred by SJEPL were higher than the costs estimated by the independent engineer. The Trust cannot assure investors if the costs incurred by the Project SPVs will be recovered. Additionally, NHAI may also undertake descoping of any balance work, as a result of which the grant payable to the Project SPVs may be significantly reduced or the Project SPVs may be required to pay certain amounts to NHAI on account of descoping of work, causing significant financial losses to the Trust, in addition to budgeting constraints for the project, which may be forced into a standstill. The Trust cannot assure its investors if it will be able to mitigate such adverse impacts in the future.

Further, in accordance with the Concession Agreements, the concessioning authority may require the Project SPVs to procure capacity augmentation in relation to the Projects or may require the Project SPVs to maintain the capacity augmentation undertake by the concessioning authority which may result in significant capital and operating expenditure for the Project SPVs. On refusal or non-acceptance by the Project SPVs to undertake such augmentation, or on the failure of the Project SPVs to undertake such augmentation as per the timelines set out by the concessioning authority, or on the failure to maintain the same the concessioning authority may in its discretion terminate the Concession Agreements or may claim damages from the Project SPVs.

25. Newly constructed roads or existing alternative routes may compete with the project and result in the diversion of the vehicular traffic and a reduction of tolls that the Project SPVs can collect.

The Projects are toll based projects. Under the terms of the concession agreement entered into by the Project SPVs, the concessioning authority or any other government instrumentality is entitled to construct a competing road or an additional tollway for use by traffic which may serve as an alternate route to the project from the appointed date as set out in the concession agreements, depending on the terms of the concession agreements. Notwithstanding that the concessioning authority shall compensate the Project SPVs for such a competing road, if in breach of the Concession Agreements, during subsistence of such breach and the concession period will accordingly increase, the development of such an additional tollway during the subsistence of the Concession Agreements could compete with the project and attract users (who would have otherwise used the project) to use the additional tollway and divert vehicular traffic from the project, thereby reducing toll collections by the Project SPVs which could have an adverse effect on its business, financial condition or results of operations or cash flows. Please see the section entitled "*Summary of Concession Agreements*" on page 175.

There is no assurance that any alternative roads built or improved will not compete with the project and have an adverse effect on the Trust's business, financial condition, revenues and operations. As an illustration, the upgradation of the Talcher - Duburi section of the NH53 highway may impact the traffic flow on the SJEPL Project in the future. For further details, please see "*Traffic Reports*" at Annexure C of this Information Memorandum.

26. An inability to obtain, renew or maintain the required statutory and regulatory permits and approvals or to comply with the applicable laws may have an adverse effect on the business of the Project SPVs.

The Project SPVs require certain approvals, licenses, registrations and permissions under regulations, guidelines, circulars and statutes regulated by the Indian regulatory and government authorities to be obtained at various stages and by a number of parties. There can be no assurance that the relevant authorities will issue these approvals or licenses, or renewals thereof, in a timely matter, or at all. In addition, the Project SPVs are required to comply with a wide variety of Indian laws and regulations. There can be no assurance that the Project SPVs are in compliance with such laws and regulations, have obtained all necessary approvals or that they will continue to obtain the necessary approvals or have been and will continue to be in compliance with all applicable laws and regulations. In the event of any failure to obtain or renew the approvals or if there is a delay in the obtaining of such approvals, the development, business and financial condition of the Project SPVs could be adversely affected. Further, these permits, licenses and approvals could be subject to several conditions, and the Trust cannot assure investors that the Project SPVs have complied with all such conditions and will be able to continuously meet such conditions or be able to prove compliance with such conditions to the authorities. Any non-compliance may lead to cancellation, revocation or suspension of relevant permits, licenses or approvals, which may result in the interruption of the development or operations of the Project SPVs and may adversely affect the business, financial condition, results of operations and cash flows of the Trust.

Further, certain terms and conditions in the Project SPVs' concession agreements, financing agreements, and our other approvals require the concessioning authority's prior written approval to be obtained for one or more of the following actions, among others:

- amendment, modification, or replacement by the Project SPVs of any project agreements (including financing agreements) relating to the operation of the road asset to which the Project SPVs are a party if the amendment, modification, or replacement of such agreement increases or imposes any financial liability or obligation on the concessioning authority;

- the creation of any encumbrance or security interest over, or transfer of rights and benefits of the Project SPVs under, the concession agreement or any project agreements; and

- the selection or replacement of any engineering, procurement and construction contract, operation and maintenance contractor and execution of the engineering, procurement and construction agreements and the operation and maintenance agreements.

The concession agreements of the Project SPVs also requires the submission to the concessioning authority, for its review and comments, all project agreements to which the Project SPVs are a party prior to entry, amendment, or replacement of such agreements, even if such agreements do not affect the financial liability or obligations of the concessioning authority.

The restrictions described above may impose constraints on our flexibility to conduct our business. Further, if as a result of these restrictions, we are unable to pursue a favourable course of action or to respond to an unfavourable event, condition, or circumstance, then our business, financial condition, results of operations and cash flows may be materially and adversely affected.

27. Failure to comply with and changes in, safety, health and environmental laws and regulations in India may adversely affect the business, prospects, financial condition, results of operations and cash flows of the Project SPVs.

The Project SPVs are required to adhere to various environmental, health and safety laws and regulations and various labour, workplace and related laws and regulations in India as per the requirements of the concession agreement entered into. For details, please see the section entitled "*Regulations and Policies*" on page 237. If the Project SPVs fail to meet environmental, health or safety requirements, it may also be subject to administrative, civil and criminal proceedings by government authorities, as well as civil proceedings by environmental groups and other individuals, which could result in substantial fines and penalties against the Project SPVs as well as orders that could limit or halt the development or operations of the Project SPVs. The Trust cannot assure investors that the Project SPVs have been and will continue to be in compliance with all environmental, health and safety and labour laws and regulations. Further, may be the risk of occurrence of accidents on the assets being maintained by the Project SPVs which could lead to additional liabilities (monetary and other wise) on the Project SPVs under applicable laws and the Concession Agreements.

Further, any changes in, or amendments to, these standards or laws and regulations could further regulate the operations of the project and could require the Project SPVs to incur additional, unanticipated expenses in order to comply with these changed standards. The scope and extent of any new environmental, health and safety regulations, including their effect on the operations of the project and the cash flows of the Project SPVs, cannot be predicted with certainty. The costs and management time required to comply with these requirements could be significant. The measures taken in order to comply with these new laws and regulations may not be deemed sufficient by government authorities and compliance costs may significantly exceed estimates.

Addtionally, the Project SPVs may engage third party contractors for executing O&M and other related works. We cannot assure you that arrangements entered into with such contractors will be in compliance with all environmental, health and safety and labour laws and regulations.

NCREPE is a closed loop expressway and is a high visibility asset owing to its location at Delhi and also a bypass to the NCR region. Access to the NCREPE Project is prohibited for two wheelers, tractors and such other slow moving vehicles. However these vehicles illegally access the NCREPE Project and NCREPE has limited control or policing powers to restrict such movement. In the event that NHAI instructs NCREPE to police such illegal users, and insists on time bound action, NCREPE may not be able to complete such action due to the legal nature of the issues and owing to limited authority.

There can be no assurance that the Project SPVs will not become involved in future litigation or other proceedings or be held responsible in any such future litigation or proceedings relating to safety, health and environmental matters in the future. Clean-up and remediation costs, as well as damages, payment of fines or other penalties, other liabilities and related litigation, could adversely affect the business, prospects, financial condition, results of operations and cash flows of the Project SPVs.

28. The current insurance coverage for the Projects may not protect the Project SPVs from all forms of losses and liabilities associated with its business.

Road infrastructure development project contracts are subject to various risks including:

- political, regulatory and legal actions that may adversely affect a project's viability;
- changes in government and regulatory policies;
- design and engineering defects;
- breakdown, failure or substandard performance of equipment;
- improper installation or operation of equipment;
- labour disturbances;
- terrorism and acts of war;
- inclement weather and natural disasters, including earthquakes, flooding, tsunamis and landslides; and
- adverse developments in the overall economic and capital financing environment in India.

SJEPL and NCREPE have in place various project-specific insurance policies covering SJEPL and NCREPE against, among other things, standard fire and special perils for various assets relating to the project, such as the roads, bridges, toll plaza and road side assets, burglary, public liability, directors and officers liability, electronic equipment, machinery breakdown, and terrorism and sabotage. For further details, please see the section entitled "*Business*" on page 166. However, there can be no assurance that all risks are adequately insured against or that the Project SPVs will be able to procure adequate insurance coverage at commercially reasonable rates in the future. Natural disasters in the future may disrupt traffic, thereby adversely affecting toll collections and causing significant disruption to the operations of the project, and causing damage to the project and the environment that could have an adverse impact on the business and operations of the Project SPVs. In addition, not all of the above risks may be insurable on commercially reasonable terms, or at all. For example, the Project SPVs are required, under the concession agreement, to maintain the quality of the roads and to repair the roads in the event of damage to the roads on account of accidents or other reasons. Accordingly, there may be significant expenditure incurred by the Project SPVs to repair damaged roads and maintain the project in good condition, particularly if the damage is major, unanticipated or uninsured. The insurance obtained in relation to the Project SPVs may not provide adequate coverage in certain circumstances and is subject to certain deductibles, exclusions and limits on coverage. In addition, these insurance policies are subject to annual review by insurers, and there can be no assurance that they will be renewed on similar or otherwise acceptable terms, if at all. To the extent that the Project SPVs suffer any damage or loss which is not covered by insurance, or exceeds the insurance coverage, the loss would have to be borne by the Project SPVs. Further, the Project SPVs may have, from time to time, insurance claims pending, with respect to its insurance policies. The proceeds of any insurance claim may also be insufficient to cover rebuilding costs as a result of inflation, changes in regulations regarding infrastructure projects, environmental and other factors. The resulting costs could have an adverse effect on the Trust's business, prospects, financial condition or results of operations or cash flows and no assurance can be given that losses in excess of insurance proceeds will not occur in the future. Further, pursuant to the concession agreement, the concessioning authority may be required to be added as a beneficiary to these insurance policies. No assurance can be given that we will be able to procure the required insurance coverage with the concessioning authority as a beneficiary in the future.

29. The cost of repairing and refurbishing existing equipment for operating, maintaining and monitoring the Projects could be significant and could adversely affect the results of operations, cash flows and financial condition of the Project SPVs.

Our operations may be adversely affected by interruptions or failures in the technology and infrastructure systems that we use to support our operations, including toll road collection and traffic measurement systems. Some of the equipment used by the Project SPVs at the project have pre-determined useful lives. Furthermore, accidents and natural disasters may also disrupt the construction, operation or maintenance of our project and concession. Accordingly, the Project SPVs are required to repair or refurbish such equipment at periodical intervals, pursuant to the terms of the concession agreements. These obligations have been previously undertaken by the O&M contractor pursuant to the O&M agreement. There can be no assurance that such replacement or refurbishment will be undertaken in a timely or efficient manner, and any increased costs to the Project SPVs as a result of such replacement or refurbishment will not affect the profit margin of the Project SPVs and adversely affect its cash flow. Further, we may be required to fund such increases in costs by availing further indebtedness which may in turn require approval from our lenders. Any delay in the receipt or non-receipt of approvals from our lenders may hamper the operations of the Projects and may affect our business and financial conditions.

Any significant increase in operations and maintenance costs beyond our budget and any failure by us to meet quality standards may reduce our profits and could expose us to regulatory penalties and could adversely affect our business, financial condition, results of operations and cash flows.

30. The cost of implementing new technologies for collection of tolls and monitoring our Projects could materially and adversely affect our business, financial condition, results of operations and cash flows.

The future success of the Project SPVs will depend, in part, on our ability to respond to technological advances and emerging standards and practices on a cost effective and timely basis. In addition, rapid and frequent technology and market demand changes can often render existing technologies and equipment obsolete, requiring substantial new capital expenditures or write-down of assets. The concessioning authorities may also require the Project SPVs to implement and adhere to certain technologies in connection with the Projects in the future and there can be no assurance that we would be able to do so in a timely manner, or at all. Failure to successfully adopt such technologies in a cost effective and a timely manner could increase the costs of operating the Projects. There is no guarantee that the cost of implementing new technologies for the Projects will be fully reimbursed by the concessioning authority and any such cost may therefore have an adverse effect on our business, results of operations, financial condition and cash flows.

31. The business and financial performance of the Trust, the operations of the Projects and any future projects that the Trust may acquire, are significantly dependent on the policies of, and relationships with, various government entities in India and could be affected if there are adverse changes in such policies or relationships.

The operations of the Projects and any future projects that the Trust may acquire, are and will be significantly dependent on various central and state government entities, in terms of policies, incentives, budgetary allocations and other resources provided by these entities for the surface transportation industry, as well as the terms of the contractual arrangements, concessions and other incentives available from these government entities for the projects. Sustained increases in budgetary allocations by the GoI and various state governments for investments in the infrastructure sector, the development of structured and comprehensive infrastructure policies that encourage greater private sector participation and increased funding by international and multilateral development financial institutions in infrastructure projects in India have resulted in, and are expected to continue to result in, an increase in the amount of transportation infrastructure projects undertaken in India. Any adverse change in the focus or policy framework regarding infrastructure development or the surface transportation industry, of or change in the Trust’s relationships with the GoI or various government entities in India, could adversely affect the project, the opportunities for the Trust to secure new projects and the business, financial condition,results of operations and cash flows of the Trust.

In addition, the projects in which government entities participate may be subject to delays, extensive internal processes, policy changes, changes due to local, national and internal political pressures and changes in governmental or external budgetary allocation and insufficiency of funds. Since government entities are responsible for awarding concessions and are parties to the development and operations of projects, projects are directly and significantly dependent on their support. Any withdrawal of support or adverse changes in their policies may lead to the agreements being renegotiated and could also adversely affect the financing, capital expenditure, revenues, development or operations relating to the Project.

32. ***The projects awarded to SJEPL and NCREPE are subject to and may be subject to legal or regulatory action and SJEPL and NCREPE may be required to incur substantial expenses in defending any such actions and there is no assurance that SJEPL or NCREPE will be successful in defending such actions.***

In granting the in-principle approval dated July 23, 2021 and letter dated October 21, 2021 the NHAI in relation to the transfer of 100% equity shares of SJEPL to the Trust, has made various claims on SJEPL and has required that all claims (those made by NHAI against SJEPL and those made by SJEPL against NHAI) be referred to conciliation. There is no guarantee that the conciliation proceedings will be successfully concluded (by a satisfactory settlement agreement) or that the conciliation will be concluded in a time bound manner. In the event the conciliation process is not successful, then resolution of all such claims will likely involve litigation and such litigation may involve substantial expenses. Further, there is no assurance SJEPL will be successful in the claims made by SJEPL or will be successful in defending the claims brought by the concessioning authority. Further, there can be no guarantee that the eventual costs and amounts finally payable consequent to such claims will not be in excess of such good faith estimates made by the Trust. All such costs incurred in relation to such proceedings could have an adverse effect on the Trust's business, financial condition, results of operations, cash flows and prospects.

Additionally, pursuant to the Claims Benefit Assignment Agreement and the Claims Management Agreement, monies received upon a successful claim by SJEPL or in respect of the reserves created for claims where SJEPL is eventually successful in defending the claim made by NHAI, will not be available for the benefit of the SJEPL and will have to be paid by SJEPL to SIDPL, Galfar India, SIL, BRNL. For further details on the Claims Benefit Assignment Agreement and the Claims Management Agreement, please see the section entitled "*Overview of the Trust*" on page 17.

SJEPL and NCREPE may also become involved in legal proceedings at different levels of adjudication before various courts, tribunals and regulatory authorities. For instance, SJEPL has claims and proceedings pending for conciliation and before high courts in India, against it, in relation to toll fee collection. Further, arbitration and litigation proceedings in India can be time consuming and SJEPL and NCREPE may have to incur costs and devote considerable resources towards defending the outstanding legal proceedings. There is no assurance that such legal proceedings will be decided in favour of SJEPL and NCREPE. The legal proceedings may be decided against SJEPL and NCREPE or changes in the relevant laws and regulations may adversely affect the outcome of such legal proceedings.

Further, the independent engineer entitled to provide observations on a regular basis to SJEPL has highlighted that obligations with respect to maintenance of the project, requirement for pavement design rectification, etc as provided for under SJEPL Concession Agreement, has not been fulfilled by SJEPL. While the IE has through various letters brought the same to SJEPL's attention, unless the IE is satisfied that remedial measures at the risk and cost of the concessionaire are not undertaken by SJEPL, it may recommend onerous measures to NHAI which may lead the SJEPL to incur costs and devote considerable resources towards defending the claim.

Further, the maximum aggregate liability of the Project Manager for any material non-compliance in terms of the PIMA in a particular year, shall be limited to the fee payable by each SPV for that year in which any non-compliance is reported. There can be no assurance that the Trust will be able to successfully bring a claim and invoke the indemnity obligations against the Project Manager or any O&M contractor. Any substantial costs incurred by the Project SPVs towards defending legal proceedings or any unfavourable outcome in relation to such proceedings could have an adverse effect on the Trust's business, financial condition, results of operations, cash flows and prospects. For more details, please see the section entitled "*Legal and Other Information*" on page 247.

33. ***The Project SPVs, parties to the Trust and their respective associates are involved in legal proceedings, which if determined against such parties, may have an adverse effect on the reputation, business, results of operations and cash flows of the Trust.***

The Project SPVs and associates of the Sponsor, the Investment Manager and Project Manager and their associates, are involved in certain legal proceedings, including in relation to criminal matters, tax matters, civil and arbitration proceedings, which are pending at different levels of adjudication before various courts, tribunals and appellate authorities. There is no assurance that these legal proceedings and regulatory matters will be decided in favour of the respective entities. Decisions in any of the aforesaid proceedings adverse to the 'relevant entities' interests may have an adverse effect on the Project SPVs' business, future financial performance, results of operations and cash flows.

34. ***The Project SPVs may be held liable for the payment of wages to the contract labourers engaged indirectly in the operations of the Trust.***

The Project SPVs may appoint independent contractors who, in turn, engage on-site contract labour to perform certain operations. Although the Project SPVs do not engage the labourers directly, in the event of default by any independent contractor, the Project SPVs may be held responsible for any wage payments due to the labourers of such contractor. Any violation of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 (the "**Contract Labour Act**") by the Project SPVs may result in penalties pursuant to the provisions of the Contract Labour Act. If the Project SPVs are required to pay the wages of contracted workmen and subjected to other penalties under the Contract Labour Act, the reputation, results of operations, cash flows and financial condition of the Trust could be adversely affected.

35. ***The results of operations of the Project SPVs could be adversely affected by strikes, work stoppages or increased wage demands by its employees, employees of the Project Manager or employees of other sub-contractors.***

In the event of any strikes or work stoppages by employees of the Project Manager, the Project SPVs or other sub-contractors due to increased wage demands or the inability of the Project Manager, Project SPVs or other sub-contractors to either retain or recruit employees and sub-contractors with suitable credentials, the ability of the Project SPVs to collect tolls and maintain and operate the project will be adversely affected. In addition, any disruption to the services provided by the employees will have an adverse effect on the operations of the Project SPVs. There can be no assurance that future disruptions will not be experienced due to disputes or other problems with the work force, which may adversely affect the business, results of operations and cash flows of the Project SPVs.

36. ***SJEPL and NCREPE have experienced losses in previous years and any losses suffered by the Project SPVs in the future could adversely affect the Trust's business, financial condition and the results of its operations, its ability to make distributions and the value of the Units.***

SJEPL has experienced losses for all Fiscals in the last three Fiscals. NCREPE has experienced losses in the last Fiscal. Under the Companies Act, 2013, companies that do not generate "distributable profits" are not permitted to pay dividends. Accordingly, if the Project SPVs fail to generate such distributable profits, it will not be permitted to pay dividends to the Trust which will adversely affect the Trust's ability to make distributions to Unitholders.

37. ***The Project SPVs may be required to pay additional stamp duty if any concession agreements are subject to payment of stamp duty as a deed creating leasehold rights, or as a development agreement.***

Currently, concession agreements are treated as agreements which are not lease deeds and stamp duty ranging between ₹ 100 - ₹ 500 is typically paid for such concession agreements. Stamp duty authorities of certain states in India have issued notices to some concessionaires alleging inadequate stamp duty on the concession agreements executed between the concessionaires and the concessioning authorities. The stamp authorities allege that since the concession agreements relate to the letting of tolls to the concessionaires in the form of leases, or as development agreements, such agreements were required to be stamped as lease agreements or development agreements, as applicable. Accordingly, concession agreements that have not been stamped as such could be considered to be inadequately stamped. The High Courts of Allahabad and Madhya Pradesh have also held that a concession agreement ought to be stamped as a lease agreement and have upheld the imposition of a higher stamp duty on such agreements.

The stamp duty for a lease agreement or a development agreement ranges between 1.0% and 11.0% of the annual rent or premium payable or the market value of the property. Furthermore, stamp duty authorities may impose penalties for payment of inadequate stamp duty, which could extend up to 10 times the amount of the stamp duty payable.

If the concession agreements were determined to be inadequately stamped, then such agreements would be inadmissible as evidence in any legal action, until the deficient amount of stamp duty together with penalties, if any, was paid. Any deficiently stamped document can also be impounded by any person having authority, by law or consent, to receive evidence or every person who is in-charge of a public office. Such persons impounding the deficiently stamped documents can either levy the appropriate stamp duty and penalty or send them to revenue authorities for that purpose. In addition, a person who signs an instrument chargeable with stamp duty will be subject to a fine if such instrument is not duly stamped.

Concession agreements contain change in law provisions which extend to a change in the interpretation or application of any Indian law by a court of record after the date of the concession agreement or the submission of the bid documents, as the case may be. Under the terms of the concession agreements, if any financial burden exceeding a certain prescribed threshold is imposed on a concessionaire as a result of such change in law, then it may be entitled to approach the concessioning authority to amend the concession agreements or seek compensation to place the concessionaire in its former financial condition. However, relief under the concession agreements may be limited in nature. There can be no assurance that the concessioning authority will consider additional stamp duty on the concession agreements as a change in law for which they will amend the concession agreements or agree to provide compensation to the concessionaire. Further, while we believe that there may not be any obliagtion on us for this liability, we cannot guarantee that the regulator or the state will not issue notices to our Projects SPVs. Any disagreement between the concessionaire and the concessioning authority may result in arbitration proceedings between the parties which could lead to increased costs.

Any imposition of a demand for payment of a higher stamp duty or imposition of penalty would increase the costs of the project, to the extent such additional costs are not recoverable from the concessioning authorities, and could adversely affect the business, results of operations, cash flows and prospects of the Project SPVs.

38. We have entered into material related party transactions and may continue to do so in the future, which may potentially involve conflict of interests with the Unitholders.

The transactions resulting from the Indenture of Trust, the Project Implementation and Management Agreements, the Investment Management Agreement, and the Shareholder Loan Agreement are related party transactions and their terms may not be deemed as favourable to us as if they had been negotiated solely amongst unaffiliated third parties. Furthermore, it is likely that we will enter into additional related party transactions in the ordinary course of our business subject to applicable law and upon obtaining the necessary approvals. Such future transactions may involve a conflict of interest, and individually or in the aggregate, could have an adverse effect on our business, prospects, financial condition, results of operations and cash flows. For additional details, please see the sections entitled "*Related Party Transactions*", "*Overview of the Trust*" and "*Parties to the Trust*" on pages 234, 17 and 91, respectively.

39. There may not be any eligible acquisition opportunities in the future, which may adversely affect the Trust's business, financial condition, results of operations, cash flows ***and prospects.***

The Trust aims to achieve portfolio growth through its acquisition growth strategy supported by future third party acquisitions and strategic acquisitions of toll-operate-transfer projects through a bidding process. Accordingly, in respect of future acquisitions, the Trust may depend on third parties as a source of attractive acquisition opportunities and on the availability of toll-operate-transfer project opportunities. There can be no assurance that any such acquisition opportunities will materialise and the Trust will be able to avail of the same.

Eligible acquisition opportunities may also not materialise or the Trust may face increased competition from other InvITs and third parties, which may cause the price at which the Trust is able to acquire a given asset to not be financially desirable. An inability to grow through prudent acquisitions may adversely affect the Trust's business, financial condition,results of operations and cash flows.

40. The Trust may not be able to successfully fund future acquisitions of new projects due to the unavailability of debt or equity financing on acceptable terms, which could impede the implementation of its acquisition strategy and negatively affect its business and we may face limitations and risks associated with debt financing, refinancing and restrictions on investment.

The Trust's total outstanding consolidated net debt (including deferred payments of the Trust)(excluding shareholders debt) shall be approximately ₹ 41,487.46 million (net of cash and cash equivalents), which will constitute approximately 42.20% of the value of the InvIT Assets. We are subject to regulatory restrictions in relation to our debt financing and refinancing. We may from time to time require debt financing or refinancing to carry out the Investment Manager's investment strategy. In the event that we undertake debt financing or refinancing, we may be limited to Indian law as to the form of the financing or refinancing. As a listed InvIT, we will be subject to the leverage limits specified under the InvIT Regulations. Pursuant to SEBI letter dated February 28, 2023, SEBI has granted us an exemption from the requirement to have a mandatory 'AAA' credit rating and a track record of six distributions to raise debt above 49% of the value of the InvIT Assets and up to 70% of the value of the InvIT Assets, subject to obtaining a credit rating from a credit rating agency recognised by SEBI and disclosing it to the designated stock exchange in accordance with the timelines prescribed by SEBI, and obtaining a one time Unitholder approval for consolidated borrowings above 49% and upto 70% of the value of the InvIT Assets, for a period of three years.

In the event that we undertake debt financing or refinancing, we may also be subject to risks associated with debt financing or refinancing including the risk that our cash flow may be insufficiant to meet the required payments of principal and interest under such financing and to make distributions to the Unitholders. Our ability to generate sufficient cash to satisfy our debt obligaitons will depend on our future operating performance, which may be affected by prevailing economic conditions and financial, business and other factors beyond our control. There is no assurance that we will be able to generate sufficient cash flow to meet all our debt obligations.If we are unable to make payments due under our debt facilities, the lenders may be able to declare an event of default and initiate enforcement proceedings relating to any security provided in respect of the loan facilities, and/or call upon any guarantees, and this may materially and adversely affect our ability to make distributions to Unitholders. In case of default, lenders could initiate proceedings against the InvIT Assets and the InvIT Assets which remain after recovery of the defaulted amount would be remitted to the Unitholders on a proportionate basis. Such default may also result in the termination of certain concession agreements by the concessioning authority.

The Trust will rely on debt and equity financing to expand its portfolio of projects through acquisitions, which may not be available on favourable terms or at all.

Debt financing to fund the acquisition of a project may not be available on short notice or may not be available on acceptable terms. Since the timing and size of acquisitions cannot be readily predicted, the Trust may need to be able to obtain funding on short notice to benefit fully from opportunities. In addition, the level of indebtedness of the Project SPVs may affect the Trust's ability to borrow without prior Unitholders' approval.

Restrictions imposed by the Reserve Bank of India may limit the Trust's ability to borrow overseas for future projects and hence could constrain its ability to obtain financing on competitive terms and refinance existing indebtedness. In addition, there can be no assurance that any required regulatory approvals or borrowing in foreign currencies will be granted to the Trust without onerous conditions, or at all.

The Trust may also fund the consideration (in whole or in part) for future acquisitions through the issuance of additional Units. Such issuances may result in the dilution of the interests in the Trust held by existing Unitholders. The Trust may not be able to complete the issuance of the required number of Units on short notice or at all due to a lack of investor demand for the Units at prices that it considers to be in the interests of then-existing Unitholders. As a result of a lack of funding, the Trust may not be able to pursue its acquisition strategy successfully. Potential vendors may also view the prolonged time frame and lack of certainty generally associated with the raising of equity capital to fund any such purchase negatively and may prefer other potential purchasers.

Debt financing may increase the Trust's vulnerability to general adverse economic and industry conditions by limiting its flexibility in planning for or reacting to changes in its business and its industry. The Trust will also be subject to the risk that certain covenants in connection with any future borrowings may limit or otherwise adversely affect its operations and its ability to make distributions to its Unitholders. Such covenants may also restrict the Trust's ability to acquire additional projects or undertake other capital expenditure by requiring it to dedicate a substantial portion of its cash flows from operations to interest and principal payments on its debt.

41. The use of additional leverage by the Investment Manager and the Trust are subject to risks.

Although the Investment Manager will seek to use leverage in relation to the Trust in a manner it believes is prudent and manage the Trust according to the Investment Objectives, the use of leverage will generally magnify both the opportunities for gain and risk of loss from any given asset. The cost and availability of leverage is variable and it is not always possible to obtain or maintain the desired degree of leverage. The use of leverage will also result in interest expense and other costs that will limit distributions made by the Trust or appreciation of its investments. An increase in interest rates may decrease the profitability of the Trust or the Project SPVs. A leveraged capital structure will increase the Project SPVs' exposure to any deterioration in market conditions, competitive pressures, an adverse economic environment or rising interest rates, which could accelerate and magnify declines in the value of the Trust's investments. If the Project SPVs are not able to generate adequate cash flow to meet debt service, the Trust may suffer a partial or total loss of capital invested in the Project SPVs.

42. The actual performance of the Trust is subject to significant business, regulatory, and tax risks, uncertainties and contingencies that could cause actual results to differ materially from the forward-looking statements in this Information Memorandum.

This Information Memorandum contains forward-looking statements which are based on a number of assumptions, many of which are outside the control of the Trust. The underlying assumptions are inherently uncertain and are subject to significant business, legal, regulatory, and tax risks, uncertainties and contingencies that could cause actual results to differ from the proposed results. In addition, the revenue of the Trust is dependent on a number of factors, including the toll receipts from the project, which may decrease for a number of reasons. This may adversely affect the ability of the Trust to achieve proposed results as some or all of the events and circumstances assumed may not occur as expected, or events and circumstances, which are not currently anticipated, may arise. No assurance can be given that the assumptions underlying in the forward-looking statements will remain true or relevant.

43. The ability of the Trust to make or maintain consistency in distributions to Unitholders depends on the financial performance of the Project SPVs and its profitability.

The amount of future distributions, if any, will depend upon various factors including future earnings, financial condition, cash flows, working capital requirements and capital expenditures of the Project SPVs and the dividends, interest payments and repayments of indebtedness that are distributed to the Trust. The income earned from the project depends on, among other things, the amount of income generated from toll receipts and the level of operating and other expenses incurred. If the project does not generate sufficient operating profit, the income of the Trust, cash flows and ability to make distributions to Unitholders will be adversely affected.

The ability of the Project SPVs to make dividend payments is subject to, among other things, applicable laws and regulations in India and other contractual restrictions that they may be bound by and the ability of Trust to make distributions to the Unitholders out of the repayment and interest received on the shareholder loan will be subject to the terms and conditions of the Shareholder Loan Agreement. Under the terms of the InvIT Regulations, in the event any assets are sold by the Trust or the Project SPVs or if the equity shareholding or interest in the Project SPVs is disposed of by the Trust and the proceeds of such sale are proposed to be re-invested in another infrastructure asset, then the Trust is not obligated to make any distributions from such proceeds to the Unitholders.

In addition, the InvIT Regulations provide that the Trust must distribute not less than 90% of net distributable cash flows of the Project SPVs in proportion of its holdings in the Project SPVs subject to the applicable provisions of the Companies Act, 2013 and in compliance with the terms of the loan agreements entered into. The distributions to the Unitholders must be declared and made not less than once every financial year and must not be made later than 15 days from the date of such declaration. There is no assurance that the Trust will be able to make distributions to the Unitholders or that such distributions will be consistent across various periods.

Further, the method of calculating the net distributable cash flows of the Project SPVs is subject to change and any change in the applicable laws in India or elsewhere may limit the Trust’s ability to pay or maintain consistency in distributions to Unitholders. There is also no assurance that the expansion of the Trust’s portfolio of infrastructure assets will increase the Trust’s cash flows and thereby result in an increase in the level of distributions to Unitholders over time.

44. It may be difficult for the Trust to dispose of its non-performing assets.

The projects held by the Project SPVs may be illiquid as a result of the current market condition or the limited residual life of the project, among other things. In the event that the project is performing poorly, the Trust may experience difficulty in realising, selling or disposing its shareholding in the project at the appropriate time or at all or at an attractive price, and this may have an adverse effect on the business, prospects, financial condition, results of operations and cash flows of the Trust.

45. We cannot assure that we will be in compliance with the minimum public unitholder requirement specified under the InvIT Regulations on an ongoing basis due to factors beyond our control

We cannot assure you that we will be in compliance with the minimum public unitholders requirement (“**MPU Requirement**”) specified under the InvIT Regulations on an ongoing basis due to certain factors that may be beyond our control. In the event there is no cure period granted for complying with such requirements, we will require guidance from certain governmental, statutory and regulatory authorities, including SEBI.

RISKS RELATING TO OUR ORGANISATION AND STRUCTURE

46. Changes in government regulation could adversely affect our profitability, prospects, results of operations, cash flow and ability to make distributions to our Unitholders.

Regulatory changes in India, particularly in respect of the InvIT Regulations and other taxation legislations such as the Finance Act, 2023, could expose us to tax liability and other liabilities. The application of various Indian sales, value-added and other tax laws, rules and regulations to our services, currently or in the future, may be subject to differing or stricter interpretation by applicable authorities, which could result in an increase in our tax payments (prospectively or retrospectively) and/or subject us to penalties, which could affect our business operations and affect our ability to make distributions to our Unitholders. The InvIT Regulations also require us to maintain certain investment ratios, including the requirement that not less than 80% of the value of our assets should be eligible infrastructure projects, in accordance with Regulation 18(4) of the InvIT Regulations, which may prevent us from acquiring additional assets to achieve our growth strategy.

47. We depend on the Investment Manager, the Project Manager and the Trustee to manage our business and assets, and our financial condition, results of operations and cash flows and our ability to make distributions may be harmed if the Investment Manager, Project Manager or the Trustee fail to perform satisfactorily. The rights of the Trust and the rights of the Unitholders to recover claims against the Project Manager, the Investment Manager or the Trustee may be limited.

The success of our business and growth strategy and the operational success of our assets will depend significantly upon the managers' satisfactory performance of these services. Our recourse against the Project Manager, the Trustee and Investment Manager is limited. The maximum aggregate liability of the Project Manager for any material non-compliance in terms of the PIMA in a particular year, shall be limited to the fee payable by each SPV for that year in which any non-compliance is reported. If the Trustee is required by the InvIT Regulations or any applicable law to provide information regarding the Trust or the Sponsor or the Unitholders, the investments made by the Trust and income therefrom and provisions of such presents, and complies with such request in good faith, whether or not it was in fact enforceable, the Trustee shall not be liable to the Unitholders or to any other party as a result of such compliance or in connection with such compliance. The Trustee is also not liable on account of anything done or omitted to be done or suffered by the Trustee in good faith in accordance with, or in pursuance of any request or advice of the Investment Manager. Further, the Trustee is not liable for any act or omission or (as the case may be) failing to do any act or thing which may result in a loss to a Unitholder (by reason of any depletion in the value of the Project SPVs or otherwise), except in the event that such loss is a direct result of fraud, gross negligence or wilful default on the part of the Trustee or results from a breach by the Trustee of the Indenture of Trust, as determined by a court of competent jurisdiction. The liability of the Trustee shall be limited to the extent of the fees received by it, in all circumstances whatsoever except (a) in case of any negligence or misconduct or fraud on the part of the Trustee as may be determined by a court of competent jurisdiction, or (b) any failure on the part of the Trustee to protect the interests of the Unitholders. The Investment Manager's liability to Trustee, its directors, employees and officers for breach of its obligations under the Investment Management Agreement in each financial year is limited to the aggregate fees paid to the Investment Manager for the immediately preceding financial year under the agreement, except in the event that such liability arises out of any gross negligence, wilful default or misconduct or fraud of the Investment Manager, as determined by the competent court of jurisdiction. Further, the Investment Manager is not liable for any act or omission which may result in a loss to a Unitholder (by reason of any depletion in the value of the Project SPVs or otherwise), except in the event that such loss is a result of the Investment Manager's fraud or gross negligence or wilful default. Accordingly, the Unitholders may not be able to recover claims against the Project Manager, the Trustee or the Investment Manager.

If the management agreements were to be terminated or if their terms were to be altered, our business could be adversely affected, as the Trustee may not be able to immediately replace such services, and even if replacement services were immediately available, the terms offered or obtained with the new managers could be less favourable than the ones currently offered by the Investment Manager and the Project Manager.

48. Our success depends in large part upon the management and personnel that the Investment Manager and Project Manager employ, and their ability to attract and retain such persons.

Our ability to make consistent distributions to our Unitholders depends on the continued service of management teams and personnel of the Investment Manager and Project Manager. Each of the Investment Manager and Project Manager may face challenges in recruiting and retaining a sufficient number of suitably skilled personnel. Generally, there is significant competition for management and other skilled personnel in our industry in India, and it may be difficult to attract and retain the skilled personnel that the Investment Manager and Project Manager need for our operations. Furthermore, the Investment Manager and Project Manager may not be able to adequately re-deploy and re-train their employees to keep pace with evolving industry standards and changing customer preferences. The loss of key personnel of either of the Investment Manager or the Project Manager, may have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows of the Trust.

49. The Investment Manager has limited experience and may not be able to successfully implement its investment strategy for and Investment Objectives of the Trust or to manage the Trust's growth effectively.

The combined experience of the directors and employees of the Investment Manager is over several years. However, none of the Investment Manager and its directors and employees has experience in investment management activities for an InvIT.

Further, there can be no assurance that the Investment Manager will be able to implement its investment strategy or Investment Objectives successfully or that it will be able to expand the portfolio of the Trust at all, or at any specified rate or to any specified size or make distributions as projected. The results of the operations of the Trust will depend on many factors, including but not limited to, its ability to operate and manage the project efficiently, changes in the regulatory framework, competition for assets or macro-economic condition. These factors will, in turn, affect the availability of further opportunities for the acquisition of road assets and the availability of finance to achieve leverage. The Trust will be relying on external sources of funding to expand its asset portfolio, which may not be available on favourable terms, or at all. Even if the Trust is able to successfully acquire additional road assets, portfolio growth and expansion could place significant demands on the management and administrative resources of the Investment Manager and the capital resources of the Trust and there can be no assurance that the Trust will be able to efficiently manage such assets and achieve its intended return on such acquisitions.

The Investment Manager can also stop acting as the Investment Manager by providing notice under the Investment Management Agreement or the Trust may replace the Investment Manager in accordance with the terms of the Indenture of Trust. There is no assurance that the financial performance of the Trust would not be affected upon the appointment of a new investment manager.

50. The Sponsor and its Associates may be able to exercise significant influence over activities of the Trust on which Unitholders are entitled to vote. The Sponsor's interests may be different from Unitholders.

Under the InvIT Regulations, the Sponsor must continue to own all of its Units for one year and must own 15% of the outstanding Units for three years from the date of allotment of the Units, subject to the conditions specified in the InvIT Regulations. Depending on (i) the number of Units held by the Sponsor and its Associates and (ii) the voting thresholds applicable to various matters in accordance with the InvIT Regulations and applicable law, the Sponsor, may be able to control the outcome of matters on which Unitholders are entitled to vote and for which the Sponsor is not prohibited from voting due to a conflict of interest. The interests of the Sponsor may be different from those of the Unitholders and the Unitholders may not have a direct recourse against the Sponsor.

51. The Trust may be dissolved, and the proceeds from the dissolution thereof may be less than the amount invested by the Unitholders.

The Trust is an irrevocable trust registered under the Indian Registration Act, 1908 and it may only be extinguished: (i) if it is impossible to continue with the Trust or if the Trustee, on the advice of the Investment Manager, deems it impracticable to continue with us; (ii) on the written recommendation of the Investment Manager and upon obtaining the prior written consent of such number of the Unitholders as is required under the InvIT Regulations; (iii) if the SEBI passes a direction to wind up the Trust; or (iv) in the event our activities are rendered illegal. Should the Trust be dissolved, depending on the circumstances and the terms upon which our assets are disposed of, there is no assurance that our Unitholder will recover all or any part of its investment.

If a default is triggered under the financing documents the Trust is a party to, the Trustee may have to take steps to cure such default and/or to repay the affected lender by appropriate means, including divesting or liquidating the assets of the Trust or raising additional financing, in accordance with such financing documents and applicable laws. If such default is not cured, and the affected lender initiates proceedings against the Trust, the Trust will be terminated in accordance with applicable laws. In the event of a termination of the Trust, the net assets which will be paid to the Unitholders will take into account the debt, liabilities and obligations of the Trust. There is no assurance that Unitholders will recover all or any part of their investments.

52. Information and the other rights of Unitholders under Indian law may differ from such rights available to equity shareholders of an Indian company or under the laws of other jurisdictions.

The Indenture of Trust and various provisions of Indian law govern the Trust's affairs. Legal principles relating to these matters and the validity of procedures, fiduciary duties and liabilities, and Unitholders' rights may differ from those that would apply to a company in India or a trust in another jurisdiction. Unitholders' rights and disclosure standards under Indian law may also differ from the laws of other countries or jurisdictions. For details, please see the section entitled "*Rights of Unitholders*" on page 255.

53. Parties to the Trust are required to satisfy the eligibility conditions specified under Regulation 4 of the InvIT Regulations on an ongoing basis. We may not be able to ensure such ongoing compliance by the Sponsor, the Investment Manager, the Project Manager and the Trustee, which could result in the cancellation of the registration of the Trust.

Each of the Parties to the Trust is required to satisfy the eligibility conditions specified in the InvIT Regulations on an ongoing basis. These eligibility conditions include, among other things, that: (a) the Sponsor, Investment Manager and Trustee are separate entities; (b) the Sponsor has a net worth of not less than ₹ 1,000 million and has a sound track record in the development of infrastructure or fund management in the infrastructure sector; (c) the Investment Manager has a net worth of not less than ₹ 100 million and has not less than five years' experience in fund management or advisory services or development in the infrastructure sector or development in the infrastructure sector or the combined experience of the directors, partners and employees of the Investment Manager in fund management or advisory services or development in the infrastructure sector is not less than 30 years; (d) the Trustee is registered with the SEBI under Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993 and is not an Associate of the Sponsor or Investment Manager; and (e) each of the Sponsor, Investment Manager, Project Manager and Trustee are "fit and proper persons" as defined under Schedule II of the Securities and Exchange Board of India (Intermediaries) Regulations, 2008 on an ongoing basis. We may not be able to ensure such ongoing compliance by the Sponsor, the Investment Manager, the Project Manager and the Trustee, which could result in the cancellation of the registration of the Trust.

54. We are governed by the provisions of, amongst others, the InvIT Regulations and the Securities Contracts (Regulation) Act, 1956 ("SCRA"), the implementation and interpretation of which, is evolving. The evolving regulatory framework governing infrastructure investment trusts in India may have a material adverse effect on the ability of certain categories of investors to invest in the Units, our business, financial condition, results of operations and cash flows and our ability to make distributions to the Unitholders.

The Trust has been constituted under the InvIT Regulations which were issued in 2014, as amended and supplemented with additional guidelines and circulars.

As the regulatory framework governing infrastructure investment trusts in India comprises a separate set of regulations, interpretation and enforcement by regulators and courts involves uncertainties. Furthermore, regulations and processes with respect to certain aspects of infrastructure investment trusts, including, but not limited to, follow-on public offers and bonus issues, the liabilities of the Unitholders, and the procedure for dissolution of infrastructure investment trusts have not yet been issued. For example, and infrastructure investment trusts are not "companies" or "bodies corporate" within the meaning of the Companies Act, 2013 and various SEBI regulations, including the Securities and Exchange Board of India (Buy-back of Securities) Regulations, 2018 and the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011.

The InvIT Regulations and other corresponding changes to applicable law, are largely untested in their implementation. Uncertainty in applicability, interpretation or implementation of any amendment to, or change in, law, regulation or policy, including due to an absence, or a limited body, of administrative or judicial precedent may be time consuming and costly for us to resolve and may impact the viability of our current business or restrict our ability to grow our business in the future and consequently, our ability to make distributions to the Unitholders. Changes to our organizational structure, changes to our agreements, cost increases, fines, legal fees or business interruptions may result from changes to regulations, from new regulations, from new interpretations by courts or regulators of existing regulations or from stricter enforcement practices by regulatory authorities of existing regulations. In addition, new costs may arise from audit, certification and/or self-assessment standards required to maintain compliance with new and existing InvIT Regulations, which may render it economically unviable to continue conducting business as an infrastructure investment trust or otherwise have a material, adverse effect on our business, financial condition, results of operations and cash flows.

Further, SEBI has the right to, with or without prior notice, order inspection of the books of accounts, records and other documents pertaining to our operations, either on its own or, upon receipt of complaint. Upon review of the inspection report, SEBI is entitled to, if it so deems appropriate (in the interest of the securities markets or our investors) (a) to require us to surrender our certificate of registration; (b) to wind-up our operations; (c) to sell our assets; (d) direct us to not operate or access the capital markets for a specified period; or (e) direct us to not do such things as SEBI may deem appropriate in the interest of our investors. Any such occurrence may have a material adverse effect on our business, result of operations, financial conditions and cash flows.

Additionally, with effect from April 1, 2021, units and other instruments issued by an InvIT have been included in the definition of '*securities*' under section 2(h) of the SCRA. Such amendments have come into effect on April 1, 2021 and consequently, the implementation and interpretation of these amendments is untested and evolving. Accordingly, the applicability of several regulations (including regulations relating to intermediaries, underwriters, merchant bankers, takeover, insider trading and fraudulent and unfair trade practices) to the Trust is unclear and subject to the interpretation and clarifications issued by regulatory bodies such as SEBI.

There can be no assurance that the legal framework for infrastructure trusts will not impose additional regulations and policies which could impact our operations and it is difficult to forecast how any new laws, regulations or standards or future amendments to the InvIT Regulations, the SCRA and other applicable law will affect infrastructure trusts and the infrastructure sector in India. Such changes may adversely affect our business, results of operations, cash flows and prospects, to the extent that we are unable to suitably respond to and comply with any such changes in applicable law and policy. We may incur increased costs and other burdens relating to compliance with such new regulations, which may also require significant time and other resources, and any failure to comply with these changes may adversely affect our business, results of operations, cash flows and prospects.

55. It may be difficult for the Unitholders to remove the Trustee or the Investment Manager.

Under the InvIT Regulations, the Trustee or the Investment Manager cannot be removed without the prior approval of Unitholders where the votes cast in favour of the resolution shall not be less than one and a half times the votes cast against such resolution. Accordingly, the Unitholders may face difficulties in removing and replacing the Trustee or the Investment Manager. Further, under the InvIT Regulations, prior approval of SEBI is required for change in the Investment Manager of the Trust.

56. Unitholders will have no vote in the election or removal of directors in the Investment Manager and will be able to remove the Investment Manager and Trustee only pursuant to a majority resolution.

The Investment Manager has the responsibility of managing the Trust.

Unitholders have no vote in the election or removal of directors in the Investment Manager. Unitholders' recourse is the removal of the Investment Manager in accordance with the Investment Management Agreement and the InvIT Regulations by way of a resolution where Unitholders holding at least 60% of the Units must vote in favour of the resolution. In comparison, the Companies Act, 2013 requires the removal of a director of a private limited company to be by way of an ordinary resolution approved by a simple majority.

Similarly, Unitholders may remove the Trustee only if they believe that the acts of the Trustee are detrimental to the interests of the Unitholders and by way of a resolution where the votes cast in favour of the resolution must meet the required percentage as set out in the InvIT Regulations. Further, the Investment Manager and the Trustee cannot be discharged until a suitable replacement is appointed in their place, and there can be no guarantees that a suitable replacement will be appointed, or that appointment will take place in a timely manner, or at all.

Accordingly, as opposed to shareholders removing a director of a private limited company, it may not be possible for Unitholders to remove the Investment Manager or the Trustee.

RISKS RELATING TO THE UNITS

57. Under Indian law, foreign investors are subject to restrictions that limit their ability to transfer or redeem Units, which may adversely impact the value of the Units.

Under foreign exchange regulations currently in force in India, transfers of units between non-residents and residents are permitted, subject to certain exceptions, if they comply with the pricing and reporting requirements specified by RBI. If a transfer of units is not compliant with such pricing or reporting requirements or falls under any of the exceptions specified by RBI, then RBI's prior approval is required.

Additionally, unitholders who seek to convert Indian rupee proceeds from a sale of units in India into foreign currency and repatriate that foreign currency from India require a no-objection or a tax clearance certificate from the Indian income tax authorities.

We cannot assure you that any required approval from RBI or any other Governmental agency can be obtained on any particular terms or in a timely manner, or at all.

In terms of the InvIT Regulations, an infrastructure investment trust may redeem units only by way of a buyback and may be subject to additional conditions and restrictions under Indian regulations.

58. Any future issuance of Units by us may dilute investors' Unitholding. The sale or possible sale of a substantial number of Units by the Sponsor or another significant Unitholder could adversely affect the price of the Units.

Unitholders who do not, or are not able to, participate in the new issuance of Units may experience a dilution of their interest in the Trust.

Under the InvIT Regulations, the Sponsor is required to hold a certain percentage of units for a specified time period. If the Sponsor, following the lapse of either of the aforesaid lock-in period, directly or indirectly sells, or is perceived as intending to sell a substantial number of its Units, or if a significant Unitholder other than the Sponsor directly or indirectly sells or is perceived as intending to sell a substantial number of its Units, the value of the Units could be adversely affected.

59. Rights of Unitholders under Indian law may be more limited than under the laws of other jurisdictions.

Indian legal principles related to corporate procedures, directors' fiduciary duties and liabilities, and unitholders' rights may differ from those that would apply to a company in another jurisdiction. Unitholders' rights under Indian law may not be as extensive as unitholders' rights under the laws of other countries or jurisdictions. Investors may have more difficulty in asserting their rights as unitholder in an Indian entity than as unitholder of a corporation in another jurisdiction.

RISKS RELATING TO INDIA

60. Our results may be adversely affected by the outbreak of the Novel Coronavirus ("COVID-19") in India and can be adversely affected by other future unforeseen events, such as adverse weather conditions, natural disasters, terrorist attacks or threats, future epidemics or pandemics or other catastrophic events.

Unforeseen events, such as adverse epidemics, pandemics, weather conditions, natural disasters, threatened or actual armed conflicts, terrorist attacks, efforts to combat terrorism or other catastrophic events can adversely impact our business. We cannot predict the affect any such events will have on our business, prospects, financial condition, results of operations, cash flows, future operations and performance; however, they could be material.

The World Health Organization declared COVID-19 outbreak a Public Health Emergency of International Concern on January 30, 2020, and a pandemic on March 11, 2020. The rapid and diffused spread of COVID-19 and global health concerns relating to this pandemic have had a severe negative impact on, among other things, financial markets, liquidity, economic conditions and trade and could continue to do so or could worsen for an unknown period of time. The extent to which the COVID-19 outbreak impacts our business, cash flows, results of operations,financial condition and cash flows will depend on future developments, including the timeliness and effectiveness of actions taken or not taken to contain and mitigate the effects of COVID-19 both in India and internationally, which are highly uncertain and cannot be predicted. A rapid increase in severe cases and deaths where measures taken by governments fail or are lifted prematurely, may cause unprecedented economic disruption in India and in the rest of the world. The scope, duration and frequency of such measures and the adverse effects of

COVID-19 remain uncertain and are likely to be severe.

If the outbreak of this virus, or any other similar outbreak, continues for an extended period, occurs again and/or increases in severity, it could have an adverse effect on economic activity in India, and could materially and adversely affect our business, financial condition, results of operations and cash flows. Similarly, any other future epidemics/ pandemics in India or elsewhere could materially and adversely affect our business, prospects, financial condition, results of operations, cash flows, future operations and performance. While we have assessed the possible impact of COVID-19 on the recovery of the Projects and believe that the pandemic is not likely to impact the recovery of the carrying value of our Projects.

61. We are exposed to risks associated with the road sector in India.

We derive and expect to continue to derive in the foreseeable future, most of our revenues and operating profits from India. Changes in macroeconomic conditions generally impact the road industry and could negatively impact our business. Accordingly, our business is highly dependent on the state of development of the Indian economy and the macroeconomic environment prevailing in India. Since the use of our project, our expansion plans and future projects depend or will depend on macroeconomic factors that may negatively impact demand the development of road infrastructure projects in India, or the timely commencement of their operations could in turn have a material adverse effect on our growth prospects, business and cash flows. In addition, access to financing may be more expensive or not available on commercially acceptable terms during economic downturns. Any of these factors and other factors beyond our control could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

62. Our performance and growth are dependent on the factors affecting the Indian economy.

Our performance and the growth are dependent on the performance of the Indian economy, which, in turn, depends on various factors. The Indian economy has been affected by the recent global economic uncertainties, volatility in interest rates, currency exchange rates, commodity and electricity prices, adverse conditions affecting agriculture and various other macroeconomic factors.

Conditions outside India, such as a slowdown or recession in the economic growth of other major countries and regions, especially in U.S., Europe and China, have an impact on the growth of the Indian economy, and GoI policy may change in response to such conditions. While recent Indian governments have been focused on encouraging private participation in the industrial sector, any adverse change in policy could result in a further slowdown of the Indian economy. The rate of economic liberalisation could decrease, and specific laws and policies affecting foreign investment, currency exchange rates and other matters affecting investment in India could change as well. In the road sector, there can be no assurance that the GoI's engagement with and outreach to private sector operators, including the Trust, will continue in the future. A significant change in India's economic liberalisation and deregulation policies, in particular, those relating to the road sector, could disrupt business and economic conditions in India generally and our business in particular. In addition, adverse developments in the Indian economy could also impact companies and banks that provide services to us. For example, on March 5, 2020 and November 17, 2020, respectively, the GoI, in consultation with RBI placed Yes Bank Limited and Lakshmi Vilas Bank under moratorium, imposed limitations on their operations as well as on withdrawals by depositors and payments to creditors over certain specified amounts for a limited period of time from the date of such moratorium coming into effect. The limitations on operations and the moratorium were subsequently lifted in both cases. The occurrence of any such development in the future may impact our banking channels, and we may or may not be able to recover our deposits, in part or in full. This could result in potential write-offs on our books of accounts, and materially and adversely affect the business, prospects, financial condition, results of operations and cash flows.

Additionally, an increase in trade deficit or a decline in India's foreign exchange reserves could negatively impact interest rates and liquidity, which could adversely impact the Indian economy and our business. Any downturn in the macroeconomic environment in India could materially and adversely affect the business, prospects, financial condition, results of operations and cash flows.

63. We may be exposed to variations in foreign exchange rates. Fluctuations in the exchange rate of the Indian Rupee with respect to the U.S. Dollar or other currencies could affect the foreign currency equivalent of the value of the Units and any distributions.

Our revenues are in Indian rupees, and currently there are no interest payments and loan repayments in foreign currency in relation to debt availed for utilisation at the Project SPVs. The Indian rupee has depreciated in recent years, and in the future may continue to depreciate, against the U.S. dollar, leading to increases in the Indian rupee cost for us to service and repay foreign currency borrowings. In addition, in the event of disputes under any of our foreign currency borrowings, if we raise foreign currency debt in future, we may be required by the terms of those borrowings to defend ourselves in foreign courts or arbitration proceedings, which could result in additional costs. A depreciation of the Indian rupee would also increase the costs of imports and may have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows.

Fluctuations in the exchange rates between the Indian Rupee and other currencies could also affect the foreign currency equivalent of the Indian Rupee price of the Units. The fluctuations could also affect the amount that Unitholders will receive in foreign currency upon conversion of any cash distributions or other distributions paid in Indian Rupees by the Trust on the Units, and any proceeds paid in Indian Rupees from any sale of the Units in the secondary trading market.

64. A decline in India's foreign exchange reserves may reduce liquidity and increase interest rates in India, which could have an adverse impact on us.

Flows to foreign exchange reserves can be volatile, and past declines have adversely affected the valuation of the Indian rupee. During the first half of 2014, emerging markets including India, witnessed significant capital outflows due to concerns regarding the withdrawal of quantitative easing in the U.S. and other structural factors in India such as high current account deficits and lower growth outlook. As a result, the Indian rupee depreciated significantly. To manage the volatility in the exchange rate, the RBI took several measures including increasing the marginal standing facility rate by 200 basis points and reducing domestic liquidity. The RBI also subsequently announced measures to attract capital flows, particularly targeting the non-resident Indian community. The RBI intervened again in February 2016 as a result of increased volatility of the exchange rate. Depreciation of the Indian rupee in 2018 led to RBI further intervening and increasing the interest rates. Any increased intervention in the foreign exchange market or other measures by the RBI to control the volatility of the exchange rate may result in a decline in India's foreign exchange reserves, reduced liquidity and higher interest rates in the Indian economy, which could adversely affect our ability to obtain financing on adequate terms or at all, which in turn could affect our business and future financial performance.

65. Social, economic and political conditions and natural disasters could have a negative effect on our business.

The Project SPVs are incorporated in India and it derives all of its revenue from India. In addition, all of our assets are located in India. Consequently, our business and the value of our Units may be adversely affected by the social, economic and political conditions in India and its neighbouring countries. Specific risks, such as the following could adversely influence the Indian economy, thereby having a material adverse effect on our business, financial condition, results of operations and cash flows:

- political instability, riots or other forms of civil disturbance or violence;
- war, terrorism, invasion, rebellion or revolution;
- Government interventions, including expropriation or nationalisation of assets, increased protectionism and the introduction of tariffs or subsidies;
- changing regulatory regimes;
- underdeveloped industrial and economic infrastructure;
- changes in exchange rates and controls, interest rates, government policies, taxation and economic and political developments;
- changes in policies such as, the fiscal and economic policy, industrial policy, direct and indirect taxes and the export-import policy; and
- changes in state specific regulation and conditions.

Pandemics, such as the outbreak of the COVID-19, and natural disasters such as floods, earthquakes or famines, events and conditions linked to climate change have in the past had a negative impact on the Indian economy. Potential effects may include damage to infrastructure and the loss of business continuity and business information. If our facilities are affected by any of these events, our operations may be significantly interrupted, which could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

66. Any fluctuation of India's debt rating by rating agencies could have a negative impact on our business.

India's sovereign rating increased from a Baa3 with a "negative" outlook in 2020 to a Baa3 with a "stable" outlook in 2021 by Moody's and from BBB- with a "negative" outlook in 2021 to BBB- with a "stable" outlook in 2022 by Fitch. India's sovereign rating could downgraded or upgrade in the future due to various factors, including changes in tax or fiscal policy or a decline in India's foreign exchange reserves, which are outside our control. Any adverse revisions to India's credit ratings by rating agencies may adversely affect our ability to raise additional financing, and the interest rates and other terms at which such additional financing is available. This could materially and adversely affect our ability to obtain financing for capital expenditure, which could in turn materially and adversely affect our business, prospects, financial condition, results of operations and cash flows. India's sovereign debt rating could be downgraded due to various factors, including changes in tax or fiscal policy or a decline in India's foreign exchange resources, which are outside our control.

67. Financial instability in other countries may cause increased volatility in Indian financial markets.

The Indian market and the Indian economy are influenced by economic and market conditions in other countries, including conditions in the United States, Europe and certain emerging economies in Asia. Financial turmoil in Asia, Russia and elsewhere in the world in recent years has adversely affected the Indian economy. Any such financial instability may cause increased volatility in the Indian financial markets and, directly or indirectly, adversely affect the Indian economy and financial sector and us.

Although economic conditions vary across markets, loss of investor confidence in one economy may cause increased volatility across other economies, including India. Financial instability in other parts of the world could have a global influence and thereby negatively impact the Indian economy. Financial disruptions, such as recessions and increase in interest rates in various countries, could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

The global credit and equity markets have experienced substantial dislocations, liquidity disruptions and market corrections. The dislocation of the sub-prime mortgage loan market in the United States since September 2008, and the more recent European sovereign debt crisis, has led to increased liquidity and credit concerns and volatility in the global credit and financial markets. These and other related events have had a significant adverse impact on the global credit and financial markets as a whole, including reduced liquidity, greater volatility, widening of credit spreads and a lack of price transparency in the global credit and financial markets. Further, economic developments globally can have a significant impact on our principal markets. Following the United Kingdom's exit from the European Union ("**Brexit**"), there remains significant uncertainty around the terms of their future relationship with the European Union and, more generally, as to the impact of Brexit on the general economic conditions in the United Kingdom and the European Union and any consequential impact on global financial markets. For example, Brexit could give rise to increased volatility in foreign exchange rate movements and the value of equity and debt investments.

In addition, China is one of India's major trading partners and there are rising concerns of a possible slowdown in the Chinese economy as well as a strained relationship with India, which could have an adverse impact on the trade relations between the two countries. In response to such developments, legislators and financial regulators in the United States and other jurisdictions, including India, implemented a number of policy measures designed to add stability to the financial markets. However, the overall long-term effect of these and other legislative and regulatory efforts on the global financial markets is uncertain, and they may not have the intended stabilizing effects. Any significant financial disruption could have a material adverse effect on our business, financial condition, results of operation, and cash flows. These developments, or the perception that any of them could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity, restrict the ability of key market participants to operate in certain financial markets or restrict our access to capital. This could have a material adverse effect on our business, financial condition, results of operations, and cash flows, and reduce the price of the Units.

68. If inflation rises in India, increased costs may result in a decline in profits.

Inflation rates in India have been volatile in recent years, and such volatility may continue. Increasing inflation in India could cause a rise in the price of transportation, wages, raw materials and other expenses. There can be no assurance that increased toll charges will sufficiently offset our increased costs due to inflation which could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows. Inflation may also have an impact on interest rates, which can affect our profitability.

69. Significant differences exist between Ind AS and other accounting principles, such as IFRS, Indian GAAP and U.S. GAAP, which may be material to investors' assessments of our financial condition, result of operations and cash flows.

The Consolidated Financial Statements included in this Information Memorandum are prepared and presented in conformity the Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended), prescribed under Section 133 of the Companies Act, 2013 ('Ind AS') read with SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and the circulars issued thereunder ('InvIT Regulations') and other accounting principles generally accepted in India, consistently applied during the periods stated in those Consolidated Financial Statements, and no attempt has been made to reconcile any of the information given in this Information Memorandum to any other principles or to base the information on any other standards. Ind AS differs from accounting principles with which prospective investors may be familiar in other countries, such as IFRS, Indian GAAP and U.S. GAAP. Accordingly, the degree to which the Consolidated Financial Statements included in this Information Memorandum will provide meaningful information is entirely dependent on the reader's level of familiarity with Indian accounting practices. Persons not familiar with Indian accounting practices should limit their reliance on the financial disclosures presented in this Information Memorandum.

Ind AS has certain differences with IFRS and Indian GAAP. In addition, as the mandated transition to Ind AS is very recent, there is no significant body of established practice from which we can draw on in forming judgments regarding the implementation and application of Ind AS, as compared to established IFRS or Indian GAAP generally, or in respect of specific industries.

70. Unitholders may not be able to enforce a judgment of a foreign court against us.

The enforcement of civil liabilities by overseas investors in the Units, including the ability to effect service of process and to enforce judgments obtained in courts outside of India, may be adversely affected by the fact that (i) the Trust is constituted under the laws of the Republic of India, (ii) the Investment Manager and the Trustee are limited liability companies incorporated under the laws of the Republic of India, (iii) most of the directors and Key Personnel of the Investment Manager reside in India and (iv) all of the assets of the Trust and the Investment Manager are located in India. All of the assets of the Trust and the assets of the Directors are also located in India. As a result, it may be difficult to serve process upon the Trust, the Investment Manager, the Trustee or any of these persons outside of India or to enforce in India judgments obtained against such persons in courts outside of India.

India is not a party to any international treaty in relation to the recognition or enforcement of foreign judgments. Recognition and enforcement of foreign judgments are provided for under Section 13, Section 14 and Section 44A of the Civil Procedure Code. The GoI has, under Section 44A of the Civil Procedure Code, notified certain countries as reciprocating countries. Section 13 of the Civil Procedure Code provides that a foreign judgment will be conclusive regarding any matter directly adjudicated upon, between the same parties or between the parties whom they or any of them claim are litigating under the same title, except: (i) where the judgment has not been pronounced by a court of competent jurisdiction; (ii) where the judgment has not been given on the merits of the case; (iii) where it appears on the face of the proceedings that the judgment is founded on an incorrect view of international law or a refusal to recognise the law of India in cases in which such law is applicable; (iv) where the proceedings in which the judgment was obtained were opposed to natural justice; (v) where the judgment has been obtained by fraud; or (vi) where the judgment sustains a claim founded on a breach of any law in force then in India. Section 44A of the Civil Procedure Code provides that where a foreign judgment has been rendered by a superior court in any country or territory outside India, which the GoI has, by notification, declared to be a reciprocating territory, it may be enforced in India by proceedings in execution as if the judgment had been rendered by the relevant court in India. However, Section 44A of the Civil Procedure Code is applicable only to monetary decrees not being in the nature of any amounts payable in respect of taxes or other charges of a similar nature or in respect of a fine or other penalties and does not include arbitration awards. The United Kingdom and some other countries have been declared by the GoI to be a reciprocating territory for the purposes of Section 44A. However, the United States has not been declared by the GoI to be reciprocating territories for the purposes of Section 44A. A judgment of a court in the United States may be enforced in India only by a suit upon the judgment, subject to Section 13 of the Civil Procedure Code and not by proceedings in execution.

There may be considerable delays in the disposal of suits by Indian courts. It may be unlikely that a court in India would award damages on the same basis as a foreign court if an action is brought in India. Furthermore, it may be unlikely that an Indian court would enforce foreign judgments if it viewed the amount of damages awarded as excessive or inconsistent with the public policy in India. A party seeking to enforce a foreign judgment in India is required to obtain prior approval from the RBI to repatriate any amount recovered pursuant to execution and any such amount may be subject to income tax in accordance with applicable laws. Any judgment or award in a foreign currency would be converted into Indian Rupees on the date of the judgment or award and not on the date of the payment which could be subject to foreign exchange risk. Generally, there are considerable delays in the processing of legal actions to enforce a civil liability in India, and therefore it is uncertain whether a suit brought in an Indian court will be disposed of in a timely manner or subject to considerable delays.

Further, the Sponsor is incorporated in Singapore and accordingly, the enforcement of civil liabilities by overseas investors in the Units including the ability to effect service of process and to enforce judgments, against the Sponsor, will be subject to the applicable laws of Singapore.

71. We may be affected by competition law in India and any adverse application or interpretation of the Competition Act, 2002 ("Competition Act") could adversely affect our business.

The Competition Act regulates practices having an appreciable adverse effect on competition in the relevant market in India. Under the Competition Act, any formal or informal arrangement, understanding or action in concert, which causes or is likely to cause an appreciable adverse effect on competition, is considered void and results in the imposition of substantial monetary penalties. Further, any agreement among competitors which, directly or indirectly, involves the determination of purchase or sale prices, limits or controls production, supply, markets, technical development, investment or provision of services, shares the market or source of production or provision of services by way of allocation of geographical area, type of goods or services or number of customers in the relevant market or, directly or indirectly, results in bid-rigging or collusive bidding, is presumed to have an appreciable adverse effect on competition. The Competition Act also prohibits abuse of a dominant position by any enterprise. The Competition Commission of India ("**CCI**") has extra-territorial powers and can investigate any agreements, abusive conduct or combination occurring outside India if such agreement, conduct or combination has an appreciable adverse effect on competition in India. There can be no assurance as to the impact of the provisions of the Competition Act on the agreements that the Project SPVs have entered into. We are not currently party to any outstanding proceedings, nor have we received notice in relation to non-compliance with the Competition Act. However, if we are affected, directly or indirectly, by the application or interpretation of any provision of the Competition Act, or any enforcement proceedings initiated by the CCI, or any adverse publicity that may be generated due to scrutiny or prosecution by the CCI, or if any prohibition or substantial penalties are levied under the Competition Act, it could materially and adversely affect our business, prospects, financial condition, results of operations and cash flows.

RISKS RELATING TO TAXATION

72. Changes in legislation or the rules relating to tax regimes could materially and adversely affect our business, prospects, cash flows and results of operations.

The President of India had granted assent to the Finance Act, 2021 (the "**Finance Act**") on March 28, 2021. By way of the Finance Act, the GoI, amongst others, amended the Securities Contracts (Regulation) Act, 1956 ("**SCRA**") to recognise pooled investment vehicles and recognise the units, debentures, other marketable securities and other instruments issued by InvITs as "*securities*". The Finance Act exempted the payment of tax deducted at source on dividends paid to InvITs. For further details, please see the sections entitled "*Risk Factors – Unitholders may be subject to Indian taxes arising out of capital gains on the sale of Units and on any dividend or interest or any other distrubutions being made by the Trust to the Unitholders*" and "*Risk Factors – We are governed by the provisions of, amongst others, the InvIT Regulations and the Securities Contracts (Regulation) Act, 1956 ("SCRA"), the implementation and interpretation of which, is evolving. The evolving regulatory framework governing infrastructure investment trusts in India may have a material adverse effect on the ability of certain categories of investors to invest in the Units, our business, financial condition and results of operations and our ability to make distributions to the Unitholders*" on pages 79 and 71.

There have been two major reforms in Indian tax laws, namely the introduction of the Goods and Services Tax ("**GST**") and provisions relating to general anti-avoidance rules ("**GAAR**"). The GST regime came into effect on July 1, 2017, combining taxes and levies by the Government and State Governments into a unified rate structure.

Additionally, there is limited clarity on the availability of input tax credit, and any unfavourable orders in this regard may have a material adverse impact on our financial position and cash flows. Further, any application of existing law or future amendments may affect our overall tax efficiency, and may result in significant additional taxes becoming payable.

Tax laws and regulations are subject to differing interpretations by tax authorities. Differing interpretations of tax and other fiscal laws and regulations may exist within governmental ministries, including tax administrations and appellate authorities, thus creating uncertainty and potential unexpected results. The degree of uncertainty in tax laws and regulations, combined with significant penalties for default and a risk of aggressive action by the governmental or tax authorities, may result in tax risks being significantly higher than expected.

The GAAR regime came into effect on April 1, 2017. The tax consequences of the GAAR provisions being applied to an arrangement could result in denial of tax benefit, among other consequences. In the absence of any precedents on the subject, the application of these provisions is uncertain. If the GAAR provisions are made applicable to the Trust or any member of the Trust, it may have a material adverse tax impact on the Trust.

Such transactions are declared as impermissible avoidance arrangements and the consequence in relation to tax arising from such arrangements, including denial of a tax benefit or a benefit under a tax treaty, shall be determined according to the circumstances of the case. The rules notified with respect to GAAR prescribe that these shall not be applicable to FIIs in accordance with the SEBI (Foreign Institutional Investors) Regulations, 1995 subject to the fulfilment of certain conditions. GAAR may have a material adverse tax impact on the Trust, the Sponsor and the Unitholders.

The Investment Manager has not determined the impact of such existing or proposed legislations on our business. Uncertainty in the applicability, interpretation or implementation of any amendment to, or change in, governing law, regulation or policy, including by reason of an absence, or a limited body, of administrative or judicial precedent may be time consuming as well as costly for us to resolve, and may impact the viability of our current business or restrict our ability to grow our business in the future.

73. Unitholders may be subject to Indian taxes arising out of capital gains on sale of Units and on any dividend or interest or any other distributions or payments being made by the Trust to the Unitholders.

Under current Indian income tax laws, units of a business trust held for more than 36 months are considered as long term capital assets. In case of sale of such units through a recognised stock exchange in India and payment of securities transaction tax ("**STT**"), any gain arising in excess of ₹ 0.10 million is subject to long term capital gains tax at a concessional rate of 10% (plus applicable surcharge and cess). However, if the said units are sold in any other manner, the same shall be subject to long term capital gains tax at the rate of 20% with indexation benefit (plus applicable surcharge and cess).

In case the units are held for less than or up to 36 months, the same shall be regarded as short term capital asset. Any gain arising in case of sale of such units through a recognised stock exchange in India and subject to payment of STT, is subject to short term capital gains tax at concessional rate of 15% (plus applicable surcharge and cess). However, if the said units are sold in any other manner, the same shall be subject to short term capital gains tax at applicable tax rates of the holder (plus applicable surcharge and cess).

The aforesaid taxability in India is subject to tax treaty benefits in the case of a non-resident holder. Further, the applicable taxes on the sale of Units and on any dividend or interest component of any returns from the Unit will also be subject to the category of investor holding or selling the Units.

The Finance Act, 2020 amended the IT Act to abolish the dividend distribution tax regime and shift the incidence of taxation of dividend (declared or distributed on or after April 1, 2020) to shareholder. Under the Finance Act, 2020, a distribution made by a business trust, being in nature dividend income received from a special purpose vehicle, will not be subject to tax in the hands of a unitholder, so long as the special purpose vehicle has not opted to pay corporate tax under the beneficial regime introduced under Section 115BAA of the IT Act. Similarly, a business trust (which includes an infrastructure investment trust) will not be required to withhold tax on any distributions which are in the nature of dividend income received from a special purpose vehicle, so long as such special purpose vehicle has not opted to pay corporate tax under the beneficial regime introduced under Section 115BAA of the IT Act. However, where the special purpose vehicle opts to pay tax under Section 115BAA of the IT Act, dividend income distributed by the business trust would be taxed in the hands of a non-resident unitholder at 20% (plus applicable surcharge and cess) or the applicable treaty rate and at the ordinary rate for a resident unitholder. Further, the business trust would be required to withhold tax on such distributions made from dividend received from the special purpose vehicle. Thus, the taxability of dividends distributed by the Trust will depend on the taxation regime opted by the Project SPVs. It may also be noted that in terms of Section 194LBA (1) of the IT Act, any distributable income in the nature of interest income and dividend income (where the Project SPV has opted to pay corporate tax under the beneficial regime introduced under Section 115BAA of the IT Act) in the hands of a resident investor is subject to deduction of tax at the rate of 10%. Similarly, in terms of Section 194LBA (2) of the IT Act, any distributable income in the nature of interest income and dividend income (where the SPV has opted to pay corporate tax under the beneficial regime introduced under Section 115BAA of the IT Act) in the hands of a non-resident is subject to deduction of tax at the rate of 5% (plus applicable surcharge and cess) and 10% (plus applicable surcharge and cess) respectively. The ultimate tax liability in the hands of the Unitholder may depend on various factors/ considerations.

Further, the Finance Act, 2021 has included a definition of "pooled investment vehicle" which comprises business trusts as defined under the IT Act. The IT Act defines business trusts as trusts registered with SEBI as an InvIT. This amendment has come into effect from April 1, 2021. The Finance Act recognises units, debentures and other instruments issued by infrastructure investment trusts as "securities" under the Securities Contracts (Regulation) Act, 1956. This may have further implications under various regulations issued by SEBI, governing securities, including under the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 and the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015. As announced in previous budgets, the dividend distribution tax applicable on InvITs was abolished and replaced with dividend withholding tax. The Finance Act has also exempted payment of tax deducted at source on dividend paid to InvITs, with effect from April 1, 2020.

The Finance Act, 2023, as amended, shall tax the unitholders for such portion of distribution received by them that is not covered under section 10(23FC) or 10(23FCA) of the IT Act and that which is not chargeable to tax under section 115UA(2) of the IT Act. Any distribution not covered under the aforementioned clauses is proposed to be taxed in the hands of the unitholders as 'income' under section 56(2)(xii) of the IT Act, provided the amount received (including similar distributions in earlier years to the same unitholder or any other unitholder) is in excess of the amount at which units were issued by the Trust, as reduced by the amount which would have been taxable as income from other sources in the hands of the Unitholders. The aforementioned amounts received by a unitholder being a specified person covered under section 10(23FE) of the IT Act shall not be subject to taxes upon the fulfilment of certain conditions set out in the IT Act. Further, any such distribution received by a unitholder to the extent not chargeable to tax under section 56(2)(xii) and not covered under sections 10(23FC), 10(23FCA) or 115UA(2) is to be reduced from the cost of units held by such unitholder.

Furthermore, the Trust might not be able to pay or maintain the levels of distributions or ensure that the level of distributions will increase over time, or that future acquisitions will increase the Trust's distributable free cash flow to the Unitholders. Any reduction in, or elimination or taxation of, payments of distributions could materially and adversely affect the market price of the Units

74. The Trust and the Project SPVs may be subject to certain tax related risks under the provisions of the IT Act.

Shortfall in the determination of fair market value of the equity shares at the time of transfer of the Project SPVs to the Trust may be subject to taxation in the hands of the acquirer. The equity shares of the Project SPVs are proposed to be transferred to the Trust. Under the provisions of section 56(2)(x) of the IT Act, where a purchase of shares is undertaken at a value which is lower than the fair market value of the shares, such shortfall in value is subject to be taxed as income from other sources in the hands of the acquirer. The manner of determination of fair market value as provided under the Income Tax Rules, 1962, includes the value determined by net asset method, subject to the prescribed adjustments.

The Trust is under an obligation to distribute to the Unitholders, the surplus of the income earned from receipt of cash flows from the interest and dividend received from the Project SPVs, after the deduction of the various expenses incurred in connection with earning such income and general-purpose expenses. The provisions of the IT Act provide that the Trust should disclose the nature of the amount distributed to the Unitholders, i.e., whether from dividends received from the Project SPVs, interest income earned, etc. However, there is lack of clarity on the method to be adopted by the Trust for the allocation of various expenses incurred towards earning each specific stream of income by the Trust.

Under the provisions of Section 56(2)(x) of the IT Act, where any person receives any property from any person and the difference between the price paid for such property ('Acquisition Price') and the Fair

Market Value ('FMV') calculated in the prescribed manner of the property exceeds ₹ 0.05 million, then such difference shall be deemed to be treated as 'Income from Other Sources' in the hands of such person (acquirer/purchaser) and tax shall be payable on such income based on the tax rate applicable on such person. The term "Property" has been defined to include securities which in turn includes units of a business trust. Wherein in relation to listed units the relevant valuation rules prescribed provide that the FMV of any quoted shares or securities shall be the transaction value as recorded on the stock exchange in case of a transaction on the exchange. In case it is an off the exchange transaction the FMV should be lowest price of units quoted on stock exchange on the valuation date, or on a date immediately preceding the valuation date when units were traded on such stock exchange. The question whether the units of InvIT are quoted on the stock exchange is a matter of specific facts and interpretation of the law. The tax authorities may require the investors to substantiate that the price paid for the issue of units is in compliance with the provisions of section 56(2)(x) of the IT Act.

75. SJEPL enjoys certain benefits under Section 80-IA of the IT Act and any change in these tax benefits applicable to the Trust may adversely affect its results of operations and cash flows.

Under the provisions of section 80-IA of the IT Act, SJEPL is eligible for tax holiday for any 10 consecutive assessment years out of 20 years beginning from the year in which the undertaking or enterprise develops and begins to operate any infrastructure facility. As a result of the tax holiday available to SJEPL, the taxable profits derived from developing, operating and maintaining any infrastructure facility (including toll roads) will not be taxable under the normal provisions of the IT Act during the tax holiday period. Any other taxable income (for example, interest income, profit on sale of mutual funds) from deployment of temporary funds or otherwise would also be taxable under the terms of the IT Act. SJEPL will only be subject to MAT if it has a book profit as required to be computed under section 115JB of the IT Act. Any change in the tax benefits under section 80-IA and/or the provisions of MAT may have an impact on the income tax liability of SJEPL and may consequently affect the amount available for distribution by SJEPL to the Trust. Furthermore, if the relevant conditions under section 80-IA of the IT Act are not met and the manner of computation of profits and gains are not as permitted, SJEPL will not be able to enjoy the benefits of such tax holiday.

76. The income of the Trust in relation to which pass through status is not granted under the IT Act may be chargeable to Indian taxes.

Under the provisions of the IT Act, the total income of the Trust other than capital gain, interest and dividend income from the Project SPVs would be tax chargeable at the maximum marginal rate ("**MMR**"). MMR is defined under the provisions of the IT Act to mean the rate of income-tax (including surcharge on income-tax, if any) applicable in relation to the highest slab of income.

In accordance with section 115UA of the IT Act, the MMR applicable to the Trust, a separately assessable resident entity, is 30.0% (plus applicable surcharge and cess).

As there are two divergent views, there is a possibility that the matter may be litigated if the latter view is taken up by the tax authorities of India.

77. Depreciation may not be claimed on the capitalised cost of a road constructed on a BOT basis and project cost on TOT basis.

SJEPL has regarded the project constructed on a BOT basis as a capital asset and claimed depreciation on the capitalised cost of the project. Under the provisions of the IT Act, the following conditions must be satisfied if depreciation is claimed on any asset:

- the asset is a capital asset;
- the party seeking to claim depreciation on an asset is the owner of the asset; and
- the asset has been used for the purpose of the business.

In respect of BOT projects, the possession of land is handed over to the developer by the GoI without actual transfer of ownership, and such a developer takes the land on lease for construction and operation of the road for a concession period.

Based on various judicial decisions, it may be inferred that depreciation is allowed if a party has dominant control over the asset during the concession period and is entitled to use it in its own right. Accordingly, SJEPL may be considered as the owners of the roads constructed on a BOT basis. Further, there are previous high court or tribunal decisions which have held that road constructed by a taxpayer on a BOT basis is eligible for depreciation even though the taxpayer is not the legal owner of the road.

However, while the provisions of the IT Act specifically provide that a building constructed on leasehold land is regarded as being owned by the lessee and depreciation may be claimed, there is no similar specific provision in respect of the projects constructed on a BOT basis. A decision by the Supreme Court of India has held that ownership is necessary for a party to claim depreciation.

The Central Board of Direct Taxes issued Circular No. 9 of 2014 in response to litigation on claims of tax depreciation in respect of BOT projects (the "**Circular**"). The Circular states that the total project cost incurred on an infrastructure project would be amortised equally across the remaining period of time in which toll collections are received. Consequently, the cost of constructed roads is considered "amortisation" and not "depreciation" for income tax purposes. This has an effect on the future financial position of SJEPL and in turn, the financial position of the Trust.

SJEPL is eligible to claim tax deduction under section 80-IA(4)(i) of the IT Act. Therefore, adjustment on account of depreciation may not have any income tax impact during the tax holiday period. However, if a higher depreciation is allowed during the tax holiday period as compared to the depreciation claimed in the return of income, tax liability in the post-tax holiday period will be higher as against the tax liability.

Additionally, in relation to TOT projects the depreciation may not be claimed on the project cost allocated to such projects.

78. The Ministry of Finance, GoI, has constituted a task force to draft new direct tax legislation, the provisions of which may have an unfavourable implication for us.

The Ministry of Finance, GoI, has set up a panel to review the IT Act and to draft a new direct tax legislation ("**Panel**"). The Panel has been tasked with drafting appropriate direct tax legislation aimed at (i) aligning India's domestic direct tax regime in line with international best practices; and (ii) ensuring and encouraging compliance. The impact of the report by the Panel, including findings and recommendations in their report and the provisions of the proposed direct tax legislation could have an unfavourable implication on us. Since the Panel and its report, including their recommendations and the draft of the new direct tax legislation has not been released yet, the possible impact on us is not clear.

79. Additional tax liability may arise on SJEPL and NCREPE having regard to difference in view adopted with regard to Toll Income.

During the period of construction of the project (i.e. widening of the 4 lanes to 6 lanes), SJEPL was required to maintain and operate the existing highway. Accordingly, SJEPL were also entitled to toll the existing 4 lane highway and collect fee from the users during the period of widening or construction of the highway. Until March 2017, SJEPL has adjusted net internal accruals (toll collections) from intangible assets.

The receipt from toll collection from operation and maintenance of existing 4-lane highway during the construction period has been considered as capital receipt by SJEPL and has not been offered to income tax as revenue income. In this regard, SJEPL has taken a view that the said income will not form part of the taxable income and the same has accordingly been reduced from CWIP following the principle of 'diversion of income by overriding title' and considering the receipts as capital receipts.

In this regard, the tax authorities may contend that collection of toll is part of the contract with the Government and is a business income of SJEPL and accordingly, should be taxable in the year of collection as business income and should not be allowed to be adjusted against the capital cost of the project. This may result into additional tax liability in the hands of SJEPL.

80. GST may be applicable on the concession fee under the Concession Agreements

NCREPE has entered into an NCREPE Concession Agreements with NHAI and has paid the concession fee to NHAI as mentioned therein ("**Concession Fee**"). Recently, GST authorities have started investigation on the taxability of the concession fee paid by the concessionaires to NHAI in TOT model based concessions including the TOT Bundle 7, as to whether the GST is payable on the bid concession fees paid by the concessionaires to NHAI, under the reverse charge mechanism. In this regard, the GST officers have issued summons and sought information from the Investment Manager in relation to the NCREPE Project.

GST laws levy GST on the service provider and in the event the services are provided by the Government then applicable under the reverse charge mechanism and payable by the recipient of services.

During the bidding stage, NHAI has clarified that GST is not applicable on the bid concession fee.Accordingly, NHAI has clarified that the bid concession fee shall not be subject to GST.

The GST authorities are analysing the taxability of these transactions and specifically, if the above transaction is taxable, whether the same is taxable in the hands of NHAI or the concessionaires. NCREPE has also written to the NHAI requesting NHAI to take up this matter internally with the Ministry of Finance or appropriate government authorities. The tax authorities may adopt a position that the Concession fFee payable by NCREPE to NHAI shall be subject to GST and thus, demand GST from NCREPE on the same along with interest and penalty (as applicable). Since GST has been introduced in India since July 2017 the principles of GST are still evolving. The said matter is an interpretation issue and has not yet been tested by courts and would get settled in the due course of time. The tax position adopted by NCREPE is in line with the industry position.

81. GST may be payable on the Toll income

The Project SPVs have entered into Concession agreement with NHAI for construction of roads as well as operation and maintenance of roads. These are in the nature of works contract. GST is payable on works contract.

Under the agreement, NHAI has given a right to the Project SPVs to collect toll income from general public. GST law exempts services by way of access to road or bridge on payment of toll charges. The Project SPVs have claimed the said exemption on the toll income collected from general public.

Exemption provided under GST is with respect to services provided by way of access to road and not in connection with construction of road. The tax authorities may adopt a position that the toll income collected by the Project SPVs is attributable to works contract services (construction of road) and not towards exempt service of access to road and thus, demand GST on the same.

GST has been introduced in India only in July 2017 and thus, the principles of GST are still evolving. The said matter is an interpretation issue and has not yet been tested by courts and would get settled in the due course of time. The tax position adopted by the company is in line with the industry position.

RISKS RELATING TO LISTING OF UNITS OF THE TRUST

82. The regulatory framework for infrastructure investment trusts in India is evolving rapidly and any change in the same may have certain adverse consequences.

Upon listing the Trust will be required to comply with certain additional compliances and requirements applicable to listed InvITs (under the applicable SEBI regulations and from the stock exchanges regulations) such as continuous disclosures to stock exchanges and compliance with the borrowing limits prescribed under Regulation 22 of the InvIT Regulations. There is no assurance that the Trust will continue to satisfy the listing requirements for InvITs and accordingly no guarantee of the continued listing of the Units. Upon Listing, the unitholders may be subject to lock in as per the InvIT Regulations read with the SEBI exemption letter dated February 28, 2023 in this regard.

Additionally, an active market for the Units may not develop or be sustained after the listing of the Units of the Trust. Moreover, the listing and quotation do not guarantee that a trading market for the Units will develop or, if a market does develop, the liquidity of that market for the Units. The price of the Units may be volatile, and investors may be unable to resell the Units at a satisfactory price, or at all. It may be difficult to assess the Trust's performance against domestic benchmarks and movements in domestic and international securities markets, economic conditions, foreign exchange rates and interest rates may affect the market price of and demand for the Units. The trading price of the Units will depend on many factors, including, amongst others, (i) the perceived prospects of our business and the road sector; (ii) differences between our actual financial and operating results and those expected by investors and analysts; (iii) the market value of our assets; (iv) the future size and liquidity of the Indian infrastructure investment trust market; and (v) any future changes to the regulatory system, including the tax system, both generally and specifically in relation to Indian infrastructure investment trusts.

83. The price of the Units may decline after the listing of the Units of the Trust.

The market price of the Units may be highly volatile and could be subject to wide fluctuations post listing of the units of the Trust. If the market price of the Units declines significantly, investors may be unable to sell their Units at or above their purchase price, if at all. There can be no assurance that the market price of the Units will not fluctuate or decline significantly in the future. The market price of the Units will depend on many factors, including, among others:

- the perceived prospects of our business and investments and the market for the road sector and other infrastructure projects;
- differences between our actual financial and operating results and those expected by investors and analysts;
- the perceived prospects of the roads sector and other infrastructure projects that may be added to our portfolio in accordance with our investment mandate;
- changes in research analysts' recommendations or projections;
- changes in general economic or market conditions;
- the market value of our assets;
- the perceived attractiveness of the Units against those of other business trusts, equity or debt securities;
- the balance of buyers and sellers of the Units;
- the size and liquidity of the Indian business trusts market;
- any changes to the regulatory system, including the tax system, both generally and specifically in relation to India business trusts;
- the ability of the Investment Manager to implement successfully its investment and growth strategies;
- foreign exchange rates;
- broad market fluctuations, including increases in interest rates and weakness of the equity and debt markets;
- variations in our quarterly operating results;
- difficulty in assessing our performance against either domestic or international benchmarks, as there are few listed comparables;
- publication of research reports about us, our affiliates, other similar businesses, the roads sector in general or other relevant sectors, or the failure of securities analysts to cover the Units after the Issue;
- additions or departures of key management personnel of the Investment Manager and/or the Trust Group;
- changes in the amounts of our distributions, if any, and changes in the distribution payment policy or failure to execute the existing distribution policy;
- actions by Unitholders;
- changes in market valuations of similar business entities or companies;
- announcements by us or our competitors of significant contracts, acquisitions, disposals, strategic partnerships, joint ventures or capital commitments;
- speculation in the press or investment community; and
- changes or proposed changes in laws or regulations affecting the roads sector and infrastructure development in India or enforcement of these laws and regulations, or announcements relating to these matters.

Further, movements in domestic and international securities markets, economic conditions, foreign exchange rates and interest rates may affect the market price of and demand for the Units. In particular, an increase in market interest rates may have an adverse impact on the market price of the Units if the annual yield on the price paid for the Units gives investors a lower return as compared to other investments.

To the extent that we retain operating cash flow for investment purposes, working capital reserves or other purposes, these retained funds, while increasing the value of our underlying assets, may not correspondingly increase the market price of the Units. Any failure on our part to meet market expectations with regard to future earnings and cash distributions may adversely affect the market price for the Units.

Where new Units are issued at less than the market price of the Units, the value of an investment in the Units may be affected. In addition, Unitholders who do not, or are not able to, participate in the new issuance of Units may experience a dilution of their interest in the Trust. In addition, the Units are not capital-safe products and there is no guarantee that Unitholders can regain the amount invested, in full or in part. If the Trust is terminatedor liquidated, it is possible that investors may lose all or a part of their investment in the Units.

84. ***The InvIT Regulations allow for sponsors of listed InvITs to be declassified from the status of sponsors subject to certain conditions. There can be no assurance that our Sponsor will not exercise their ability to be declassified as the sponsor(s) of the Trust.***

The InvIT Regulations, pursuant to amendments made in June 2020, permit sponsors of listed infrastructure investment trusts to be declassified from the status of sponsors subject to compliance with the following conditions:

- the units of the relevant InvIT should have been listed on the stock exchanges for a period of three years;
- the unitholding of such sponsor and its associates taken together should not exceed 10% of the outstanding units of the relevant InvIT;
- the investment manager of the relevant InvIT is not an entity controlled by such sponsor or its associates; and
- approval of unitholders has been obtained in accordance with the InvIT Regulations.

There can be no assurance that in the future, that our Sponsor, upon fulfilment of the aforementioned conditions or any other conditions that SEBI prescribes for declassifications of sponsors, will not exercise their ability to declassify themselves from the status of our sponsor(s).

85. ***Information and the other rights of Unitholders under Indian law may differ from such rights available to equity shareholders of an Indian company or under the laws of other jurisdictions. Further, the reporting requirements and other obligations of infrastructure investment trusts post-listing are still evolving. Accordingly, the level of ongoing disclosures made to and the protection granted to our Unitholders may be more limited than those made to or available to shareholders of a company that has listed its equity shares upon a recognised stock exchange in India.***

The InvIT Regulations, along with the guidelines and circulars issued by the SEBI from time to time, govern the affairs of infrastructure investment trusts in India. However, as compared to the statutory and regulatory framework governing companies that have listed their equity shares upon a recognized stock exchanges in India, the regulatory framework applicable to infrastructure investment trusts is relatively nascent and thus, still evolving. Pursuant to a circular dated November 29, 2016, the SEBI has prescribed certain continuous disclosure requirements that will be applicable to the InvIT after listing.

Accordingly, the ongoing disclosures made to Unitholders under the InvIT Regulations may differ from those made to the shareholders of a company that has listed its equity shares upon a recognized stock exchange in India. Further, the rights of the Unitholders may not be as extensive as the rights of the shareholders of a company that has listed its equity shares upon a recognized stock exchange in India, and accordingly, the protection available to the Unitholders may be more limited than those available to such shareholders.

The InvIT Regulations were amended on February 14, 2023 to incorporate certain provisions of the SEBI Listing Regulations, along with, *inter-alia*, additional requirements in relation to the governance of InvITs. These governance norms are applicable to all InvITs registered with the SEBI, with effect from April 1, 2023.

Furthermore, the Trust Deed and various provisions of Indian law govern our corporate affairs. Legal principles relating to these matters and the validity of corporate procedures, fiduciary duties and liabilities, and Unitholders' rights may differ from those that would apply to a company in India or a trust in another jurisdiction. Unitholders' rights and disclosure standards under Indian law may also differ from the laws of other countries or jurisdictions. See the section headed "*Rights of Unitholders*" on page 255 of this Information Memorandum.

86. ***The Units have never been listed on the Stock Exchanges and the listing may not result in an active or liquid market for the Units.***

An active market for the Units may not develop or be sustained after the listing of the Units of the Trust on the stock exchange. Moreover, the listing and quotation do not guarantee that a trading market for the Units will develop or, if a market does develop, the liquidity of that market for the Units. There may be a lack of liquidity and a limited market for the Units. The price of the Units may be volatile, and investors may be unable to resell the Units. Although it is currently intended that the Units will remain listed on the stock exchange, there is no guarantee of the continued listing of the Units. There is no assurance that the Trust will continue to satisfy the listing requirements for InvITs. Further, it may be difficult to assess the Trust's performance against domestic benchmarks. Accordingly, prospective Unitholders should view the Units as illiquid and must be prepared to hold their Units for an indefinite length of time.

87. There is no assurance that our Units will remain listed on the stock exchange.

Although it is currently intended that the Units will remain listed on the stock exchange, there is no guarantee of the continued listing of the Units. Among other factors, we may not continue to satisfy the listing requirements of the stock exchange. Accordingly, Unitholders will not be able to sell their Units through trading on the stock exchange if the Units are no longer listed on the stock exchange. While the InvIT Regulations state that we must provide Unitholders with an exit prior to delisting, the specific mechanism of such delisting and related exit offer has not yet been finalised by the SEBI. Further, under the InvIT Regulations, we are required to maintain a minimum of five Unitholders (other than the Sponsor, its related parties and its associates) at all times after the listing of the Units and certain minimum public holding requirements. Failure to maintain such minimum number of Unitholders or public holding may result in action being taken against us by the SEBI and the Stock Exchange, including the compulsory delisting of our Units.

88. The Trust has a limited number of listed peers undertaking similar lines of business for comparison of performance and therefore investors must rely on their own examination of the Trust for the purposes of investment in the Issue.

As of the date of this Information Memorandum, there are a limited number of other infrastructure investment trusts listed on the Indian stock exchanges and, accordingly, the Trust is not in a position to provide a comparative analysis of its performance with many listed InvITs. Investors must rely on their own examination of the Trust for the purposes of investing in the Units.

GENERAL INFORMATION

The Trust

The Trust was set up as an irrevocable trust under the provisions of the Indian Trusts Act, 1882, pursuant to the Initial Indenture. The Trust was registered as an infrastructure investment trust under the InvIT Regulations on February 24, 2020 having registration number IN/InvIT/19-20/0013 and has its principal place of business at Unit No. 699, 6th Floor, "VEGAS" Plot No. 6, Pocket 1, Sector 14, Dwarka, South Delhi, New Delhi 110 075. For information on the background of the Trust and the description of the Project SPVs, please see the sections entitled "*Overview of the Trust*" and "*Business*" on pages 17 and 166, respectively.

Compliance Officer of the Trust

The compliance officer of the Trust is Ankit Dewan. His contact details are as follows:

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Registrar and Unit Transfer Agent

Kfin Technologies Limited
(formerly known as "Kfin Technologies Private Limited")

Address: Selenium, Tower B
Plot No - 31 and 32
Financial District

Nanakramguda, Serilingampally
Hyderabad
Rangareddi 500 032
Telangana, India.
Telephone Number: +91 40 6716 2222
Toll free number: 1800 309 4001
Website: www.kfintech.com
Email: Ihct.ipo@kfintech.com
Investor grievance e-mail: einward.ris@kfintech.com
Contact Person: M Murali Krishna
SEBI Registration No.: INR000000221
CIN: U72400TG2017PTC117649

PARTIES TO THE TRUST

A. The Sponsor – Maple Highways Pte. Ltd

History and Certain Corporate Matters

Maple Highways Pte Ltd is a private limited company incorporated on April 5, 2019 under the Companies Act of Singapore and has its registered office and principal place of business at One Raffles Quay, #39-01 North Tower, Singapore 048583. Maple Highways Pte Ltd, is registered with SEBI as a FVCI under the SEBI FVCI Regulations bearing registration number IN/FVCI/19-20/0478.

Background of the Sponsor

The Sponsor is a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of Caisse de dépôt et de placement du Québec ("**CDPQ**").

CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans. CDPQ invests globally in major financial markets, including public and private equity, fixed income, infrastructure and real estate. CDPQ was established on July 1, 1965, by an act of the provincial legislative body of Québec, Canada (namely, *the Act respecting the Caisse de dépôt et placement du Québec*). CDPQ is a legal person without share capital or shareholders, headquartered at 65, rue Sainte-Anne, Price building, 14th floor, Québec (Québec) G1R 3X5 and with a principal place of business at 1000, place Jean-Paul-Riopelle, Montréal, Québec H2Z 2B3, Canada. As of December 31, 2022, CDPQ held approximately CAD 401.89 billion in net assets. CDPQ has also received a credit rating of 'AAA' from S&P Global Ratings, DBRS Ltd. and Fitch Ratings and 'Aaa' from Moody's Investors Service.

CDPQ is amongst the three largest institutional investors in infrastructure in the world, with nearly 25 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 54.64 billion (net assets as at December 31, 2022) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has infrastructure investments in over 15 countries globally comprising both developed markets as well as targeted growth markets. For further details, please see the section entitled '*Business*' on page 166, of this Information Memorandum.

Further, neither the Sponsor nor any of the promoters or directors of the Sponsor: (i) are debarred from accessing the securities market by SEBI; (ii) are promoters, directors or persons in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) are in the list of wilful defaulters, in accordance with the guidelines on wilful defaulters issued by RBI.

Further, in accordance with the eligibility criteria specified under the InvIT Regulations, the Sponsor has a consolidated net worth of not less than ₹ 1,000 million as on the date of this Information Memorandum.

Board of Directors of the Sponsor

The board of directors of the Sponsor is entrusted with the overall management of the Sponsor. Please see below the details in relation to the board of directors of the Sponsor:

Sr. No.	Name	Designation
1.	Cyril Sébastien Dominique Cabanes	Director
2.	Wai Leng Leong	Director
3.	Olivier Pascal Lai Ong Teung*	Director

*Note: * Olivier Pascal Lai-Ong-Teung is alternate director of Wai Leng Leong and Cabanes Cyril Sebastien Dominique*

B. The Trustee – Axis Trustee Services Limited

Axis Trustee Services Limited is the Trustee of the Trust. The Trustee is a registered intermediary with SEBI under the Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993, as a debenture trustee having registration number IND000000494 and is valid until suspended or cancelled. The Trustee's registered office is situated at Axis House, Bombay Dyeing Mills Compound, Pandurang

Budhkar Marg, Worli, Mumbai 400 025 and its corporate office at The Ruby, 2nd Floor, SW, 29, Senapati Bapat Marg, Dadar West, Mumbai 400 028.

Background of the Trustee

The Trustee is a wholly-owned subsidiary of Axis Bank Limited.

The Trustee's services are aimed at catering to the individual needs of the client and enhancing client satisfaction. As Trustee, it ensures compliance with all statutory requirements and believes in the highest ethical standards and best practices in corporate governance. It aims to provide the best services in the industry with its well trained and professionally qualified staff with a sound legal acumen. The Trustee is involved in varied facets of debenture and bond trusteeships, including, advisory functions and management functions. The Trustee also acts as a security trustee and is involved in providing services in relation to security creation, compliance and holding security on behalf of lenders.

The Trustee is also involved in providing services as (i) a facility agent for complex structured transactions with advice on suitability of the transaction on operational aspects; (ii) an escrow agent; (iii) a trustee to alternative investment funds; (iv) custodian of documents as a safekeeper; and (v) a trustee to real estate investment funds etc.

The Trustee confirms that it has and undertakes to ensure that it will at all times, maintain adequate infrastructure personnel and resources to perform its functions, duties and responsibilities with respect to the Trust, in accordance with the InvIT Regulations, the Indenture of Trust and other applicable law.

The Trustee is not an Associate of the Sponsor or the Investment Manager. Further, neither the Trustee nor any of the promoters or directors of the Trustee (i) are debarred from accessing the securities market by SEBI; (ii) is a promoters, directors or persons in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) are persons who are categorized as wilful defaulters by any bank or financial institution, as defined under the Companies Act, 2013, or consortium thereof, in accordance with the guidelines on wilful defaulters issued by the RBI.

Board of Directors of the Trustee

The Board of Directors of the Trustee is entrusted with the responsibility for the overall management of the Trustee. Please see below the details in relation of the board of directors of the Trustee:

Sr. No.	Name	Designation	DIN
1.	Rajesh Kumar Dahiya	Chairman and Non-Executive Director	07508488
2.	Ganesh Sankaran	Non-Executive Director	07580955
3.	Deepa Rath	Managing Director and Chief Executive Officer	09163254

Brief profiles of the Directors of the Trustee

1. **Rajesh Kumar Dahiya** is a non-executive director on the board of the Trustee and also the Chairman of Axis Trustee Services Limited. He is a general management professional with over three decades of experience across industries and business functions. He was an Executive Director on the Board of Axis Bank Ltd till December 31, 2021, responsible for multiple governance functions under the Corporate Centre of the Bank. Before joining Axis Bank in June 2010, he was associated with Tata Group for 20 years where he handled various responsibilities across functions such as human resources, manufacturing, exports, distribution and institutional sales. Presently, he is the Managing Director and Chief Executive Officer of Good Govern. He also serves on the Board of Max Life Insurance and Calibre Chemicals.

2. **Ganesh Sankaran** is a non-executive director on the board of the Trustee. Mr. Ganesh Sankaran is the Group Executive - Wholesale Banking Coverage Group at Axis Bank Limited. He has nearly 25 years of experience across coverage, credit and risk functions and has handled verticals like corporate credit, financial institutions, business banking, mortgages, commercial transportation, equipment finance & rural lending. Before joining Axis Bank, he was Executive Director at Federal

Bank, responsible for business architecture across the wholesale bank, micro/rural bank, business banking and international operations. Additionally, he had also served as a member of the Board of Directors for Equirus Capital and Fedbank Financial Services. Prior to that he was associated with HDFC Bank where he was Co-Head, Corporate Banking. Mr. Ganesh Sankaran holds a Master's degree in Business Administration from Symbiosis Institute of Business Management, Pune and a graduate degree in engineering from VJTI, Mumbai. Presently, he also serves on the Board of Cauvery Basin Refinery and Petrochemicals.

3. **Deepa Rath** is the Managing Director and Chief Executive Officer on the board of Axis Trustee Services Limited. Ms. Deepa is a senior banker with more than 23 years of experience in corporate banking, fintech, credit, project fin, MSME fin, retail banking, supply chain & trade finance etc. Ms. Deepa is known for her strategic leadership, customer centric approach, superior people & relationship management skills which have helped her set up and scale up new businesses and high impact teams across domains. In the current role, Ms. Deepa is focused on transforming the franchise to be the best in the industry within the fast evolving regulatory & business dynamics. Prior to taking over as Managing Director and Chief Executive Officer of Axis Trustee Services Ltd., Ms. Deepa was part of the founding leadership team & spearheaded TReDS (Trades Receivable Discounting System) platform business at INVOICEMART/A. TREDS LTD (JV of Axis Bank and Mjunction), a pioneering work in the space of digital & transparent financing for MSMEs, financial inclusion & blockchain implementation. Previous to this, she led various business functions across geographies with Axis Bank Corporate Banking department. In the early part of her career, she took several roles with IDBI Bank and ICICI Bank Ltd. within the corporate banking and retail banking franchise. She has been a speaker on various industry forums including finance, fintech and DEI etc. and has been a part of Axis Bank's Senior Business Leadership program initiatives. She is a panel /advisory member on the international consulting/advisory related to supply chain finance, fintech, Go-To-Market strategy & corporate banking practices. She holds a MBA- Finance from IMT Ghaziabad, Master's in Economics and Advanced Diploma in Software Technology & Systems Management from NIIT. Apart from several certifications like Coursera, Wharton Executive education on Leading Organisational Change, Axis Business Leadership Program from ISB Hyderabad, Ms. Deepa has also completed "Advanced Program in Fintech & Financial Blockchain" from IIM Calcutta to continue her strive for knowledge & learning.

Key Terms of the Indenture of Trust

Indenture of Trust

The Trustee has entered into the Indenture of Trust, in terms of the InvIT Regulations, the key terms of which, are provided below and as more particularly set out in the Indenture of Trust:

<u>Powers of the Trustee</u>

General Power

Without prejudice to the scope and generality of the powers and authority conferred upon the Trustee under the Indian Trusts Act, 1882, the Trustee shall, in relation to the Trust, have every and all powers that a person competent to contract and acting as a legal and beneficial owner of such property has, and such powers shall not be restricted by any principle of construction or rule or requirement, but shall operate according to the widest generality of which the foregoing words are capable, notwithstanding that certain powers are more specifically set forth herein.

Power to make investments and divestment decisions

(a) The Trustee is empowered to take all decisions in relation to the management and administration of the Trust Assets and the Trust as may be necessary for or incidental to the advancement or fulfilment of the Investment Objectives in accordance with the Trust Documents (as defined in the Indenture of Trust) ("**Trust Documents**"), the InvIT Regulations and other Applicable Law (as defined in the Indenture of Trust) ("**Applicable Law**"), provided that such power shall be delegated to and exercised by the Investment Manager pursuant to the Investment Management Agreement.

(b) In furtherance of the above, the Trustee, in the name of the Trust, or in its own name on behalf of the Trust, is empowered to, among other things:
    (i) acquire, hold, manage, trade and dispose of shares, stocks, convertibles, debentures,

bonds and other equity or equity-related securities, derivatives, instruments or obligations and any debt or mezzanine securities instruments or obligations of all kinds or any other security, instrument or obligation under Applicable Law, including without limitation, those issued by any Project SPV, Holdco, infrastructure projects in accordance with the InvIT Regulations, other Applicable Law and the investment strategy. For the avoidance of doubt, this shall also include the power to hypothecate, pledge or create encumbrances of any kind on or provide guarantees, undertakings or other contractual comforts in relation to such securities, instruments or obligations held by the Trust in such SPVs, Holdcos or Infrastructure Projects to be used as collateral security for any borrowings by the Trust, Holdcos or SPVs;

(ii) issue, hold, invest, collateralize or sell any loan, debt, derivative, instrument or obligation as permitted under Applicable Law, including without limitation, those issued by the SPVs or Holdcos, as applicable;

(iii) keep the capital and monies of the Trust in deposit with banks or other institutions;

(iv) accept contributions;

(v) avail commercial loans, as may be required;

(vi) collect and receive the profit, interest, repayment of principal of debt or debt-like, equity or equity-like mezzanine securities, dividend, return of capital of any type by the SPVs, Holdcos or Infrastructure Projects and income of the Trust as and when such amounts become due or receivable;

(vii) invest in securities or in units of mutual funds in accordance with InvIT Regulations and other Applicable Law by the InvIT, the holding Companies and the SPVs;

(viii) invest in money market instruments including government securities, treasury bills, certificates of deposit and commercial papers in accordance with Applicable Law by the InvIT, the holding Companies and the SPVs;

(ix) to give, provide and agree to provide to any SPV or Holdco, financial assistance in the form of investment in share capital of any class including ordinary, preference, participating, non-participating, voting, non-voting or other class, and in the form of investment in securities convertible into capital, in accordance with Applicable Law;

(x) to invest, acquire, purchase, hold, divest, sell, hypothecate, pledge or otherwise transfer immovable properties of any kind including rights and interests therein;

(xi) to structure an investment through one or more investment vehicles in order to address tax or regulatory considerations;

(xii) to create, establish and maintain partnerships, trusts, corporations, companies or other entities of any kind, to acquire, hold or dispose of the Trust Assets;

(xiii) to enter into, execute and/or terminate any investment pooling agreements, agreements related to strategic investments, co-investment agreements, and any and all documents and instruments of a similar nature in the name of the Trust; and

(xiv) to make further investments from the disposition proceeds in accordance with the Trust Documents and the InvIT Regulations.

Power to appoint the Investment Manager and the Project Manager

(a) The investment manager of the Trust shall be appointed by the Trust and the Trustee shall have the power to delegate all or any of the powers of the Trustee, as set out in the Indenture of Trust, to the Investment Manager in accordance with the InvIT Regulations. The Trustee shall have the power to execute the Investment Management Agreement or any other agreement or arrangement, from time to time, with the Investment Manager in this regard.

(b) The Trustee, in consultation with the Investment Manager, shall have the power to appoint the Project Manager and shall have the power to delegate such powers of the Trustee, as set out in the Indenture of Trust, to the Project Manager in connection with the execution and implementation of the Projects (as defined in the Indenture of Trust). The Trustee shall have the power to execute the project implementation agreement or any other agreement or arrangement, from time to time, with the Project Manager, the Holdcos or the SPVs, as applicable, in this regard.

Power to issue, accept subscriptions and allot Units etc.

The Trustee (acting on behalf of the Trust) shall have the power to (i) issue and allot Units , and (ii) refund subscription money and pay necessary interest thereon, in accordance with the InvIT Regulations and within such time period as may be prescribed under Applicable Law. The Trustee (acting on behalf of the Trust) shall have the power to accept subscriptions to Units, debt securities (including any non-convertible debentures, bonds or convertible securities) or other securities, obligations or instruments permitted to be issued by the Trust under the InvIT Regulations and issue and allot Units, debt securities (including any non-convertible debentures, bonds or convertible securities) or other securities, obligations or instruments to Unitholders or other security holders, as applicable, and undertake all related activities. The Trustee shall, subject to and only in accordance with the terms of the Trust Documents and Applicable Law, have the power to (i) approve or take on record any transfer of Units or debt securities or other securities or instruments or obligations issued by the Trust, (ii) cause the offering of the Units through any offer document, and (iii) cause any offer document to be provided to the investors. It is hereby clarified that the Trustee shall not approve, ratify or record any transfers made in contravention of the prohibitions contained in this clause. Each of the aforesaid powers shall be delegated to and exercised by the Investment Manager pursuant to the Investment Management Agreement.

Register of holders

The Trustee shall have the power, or cause the Investment Manager, to maintain (or cause depositories to maintain) a register of the Unitholders or other instrument-holders of the Trust.

Power to create reserves

(a) The Trustee shall have the power to make such reserves out of the income or capital of the Trust in accordance with Applicable Law.

(b) Any distribution made from such reserves shall be in accordance with the Trust Documents, the investment strategy and the InvIT Regulations.

Power to employ agents

The Trustee shall have the power to advise the Investment Manager to employ and pay at the expense of the Trust, any agent in any jurisdiction whether attorneys, solicitors, brokers, banks, trust companies or other agents, without being responsible for the default of any agent if employed in good faith to transact any business, including without limitation, the power to appoint agents to raise funds, or do any act required to be transacted or done in the execution of the responsibilities hereof including the receipt and payment of moneys and the execution of documents.

Power to appoint nominees and custodians

The Trustee shall have the power to advise the Investment Manager to appoint any custodian in order to provide custodial services, and permit any property comprised in the Trust to be and remain deposited with a custodian or with any person or persons in India or in any other jurisdiction subject to such deposit being permissible under Applicable Law.

Power to oversee activities of the Investment Manager

The Trustee shall oversee the activities of the Investment Manager in the interest of the Unitholders and ensure that the Investment Manager complies with the InvIT Regulations and other Applicable Law.

Power to pay duties and taxes

In the event of any capital gains tax, income tax, stamp duty or other duties, fees or taxes (and any interest or penalty chargeable thereon) whatsoever becoming payable in any jurisdiction in respect of the Trust or any part thereof or in respect of documents issued or executed in pursuance of the Indenture of Trust or the Investment Management Agreement in any circumstances whatsoever, the Trustee shall have the power and duty to pay all such duties, fees or taxes (and any interest or penalty chargeable thereon) as well as to create any reserves for future potential tax liability (and any such interest or penalty) out of the Trust Assets and the Trustee may pay such duties, fees or taxes (and any such interest or penalty) on behalf of the Trust out of the Trust Assets. For the avoidance of doubt, it is clarified that pursuant to the provisions of the Indenture of Trust no Unitholder will be required to make a contribution as a capital commitment to the Trust (other than the issue price for Units already issued).

Power to allocate and expend on behalf of the Trust

The Trustee shall have the power to incur and pay Trust Expenses, which shall include, without limitation, any expenses made under any contract or Applicable Law, out of the Trust Assets, including any funds held by the Trust, the Project SPVs, the Holdcos or other assets of the Trust, as applicable.

Power to take counsel's opinion

The Trustee shall have the power to take the opinion of legal, tax or other counsel in any jurisdiction concerning any difference arising under the Indenture of Trust or any matter in any way relating to the Indenture of Trust or to its duties in connection with the Indenture of Trust and the fees of such advisors shall be paid from the Trust Assets, including any funds held by the Trust, the SPVs, the Holdcos or other assets of the Trust, as applicable.

Power to conduct activities with trustees of other trusts

Subject to Applicable Law, the Trustee may in execution of the Trust hereof or in exercise of any of the powers hereby or by Applicable Law given to the Trustee sell, rent or buy any property, or borrow property from or carry out any other transaction with the trustees of any other trust or the executors or administrators of any estate notwithstanding that the Trustee is the same person as those trustees, executors or administrators or any of them and where the Trustee is the same person as those trustees, executors or administrators, the transaction shall be binding on all persons then or thereafter interested hereunder though effected and evidenced only by an entry in the books of accounts of the Trustee, provided such power is delegated to the Investment Manager pursuant to the Investment Management Agreement. The Trustee shall ensure that no conflicts of interest shall arise whilst conducting such activities.

Power to effect compromises

The Trustee, subject to Applicable Law, shall have the power on behalf of the Trust, to:

(a) accept any property before the time at which it is transferable or payable;
(b) accept any security (movable or immovable) *in lieu* of any amounts payable to it;
(c) alter the dates for payment of any amounts payable to it; and
(d) subject to such approval as may be required from the Unitholders, compromise, compound, abandon, or otherwise pay and settle any claim or thing whatsoever relating to the Trust or the Indenture of Trust.

Power to borrow and create security

(a) The Trust acting through the Trustee shall have the power to cause the Trust to borrow or incur indebtedness including by way of issuance of debt securities or other securities or instruments permitted under the InvIT Regulations or other Applicable Law for the purpose of the Trust in accordance with the Trust Documents and the InvIT Regulations and the leverage policy of the Trust and to cause the Trust to make necessary amendments, addendums and any other changes to the same in order to enable the Trust to borrow or incur such indebtedness.

(b) The Trust acting through the Trustee shall have the power to secure the payment of any sum of money for and on behalf of the Trust in such manner and upon such terms and conditions in all respects as its deems fit including by mortgage or pledge or charge upon all or any Trust Assets (present or future).

(c) The Trust acting through the Trustee shall subject to Applicable Law, have the power to provide security, guarantee, undertakings, and other contractual comforts in relation to the indebtedness availed by any of the SPVs or Holdcos, as applicable.

(d) The limits in relation to the aggregate consolidated borrowings and deferred payments of the Trust, any Holdcos and the SPVs, net of cash and cash equivalents, shall be subject to the approval of the Unitholders in accordance with the InvIT Regulations and Applicable Law.

(e) Notwithstanding the above, the conditions for borrowings and deferred payments specified in Regulation 20 of the InvIT Regulations shall be applicable to the Trust.

Power to repay debt

Subject to Applicable Law, the Trustee may cause the Trust to pay, prepay or repay any and all debt raised from any person in accordance with the terms therein and to redeem any debt securities or other securities, obligations or instruments in accordance with the terms thereof issued to persons in compliance with the InvIT Regulations and other Applicable Law, if so directed by the Investment Manager.

Power to give loans

Subject to Applicable Law, the Trustee shall, extend loans out of the Trust Assets to SPVs or Holdcos and also subscribe to debt or convertible or exchangeable securities or other securities, obligations or instruments of a similar nature or incur any indebtedness in accordance with and subject to the provisions of the relevant Trust Documents, the InvIT Regulations and other Applicable Law.

Power to re-invest

Subject to the conditions laid down in the relevant Trust Documents and the InvIT Regulations, the Trustee may, retain or recall for reinvestment of the invested capital portion of any proceeds received by the Trust from any SPV or Holdco.

Power to make rules

The Trustee may make rules to give effect to and carry out the Investment Objectives, subject to the terms of the Trust Documents. In particular, and without prejudice to the generality of such power, the Trustee may provide, not inconsistent with the provisions of the Indenture of Trust and the InvIT Regulations, for all or any of the following matters, which may be delegated to the Investment Manager pursuant to the Investment Management Agreement subject to the InvIT Regulations:

(a) manner of maintaining of the records and particulars of the Unitholders and other instrument-holders of the Trust;

(b) norms of investment by the Trust in accordance with the Investment Objectives and the Investment Strategy and in accordance with the powers and authorities of the Trustee as set out herein;

(c) matters relating to entrustment, deposit or handing over of any securities or SPVs or Holdcos of the Trust to custodians and the procedure relating to the holding thereof by the custodian;

(d) such other administrative, procedural or other matters relating to the administration or management of the affairs of the Trust and which matters are not required to be included or provided for in the Indenture of Trust and which matters are not inconsistent with the provisions hereof;

(e) procedure for voting by Unitholders in a meeting, through postal ballot, proxy or otherwise; and

(f) procedure for summoning and conducting meetings of Unitholders.

Power to appoint intermediaries

(a) The Trustee shall consult with the Investment Manager on the appointment of the Valuer, Auditor, registrar and transfer agent, merchant bankers, custodians, credit rating agencies and any other intermediaries or service providers or agents, as may be applicable, with respect to the activities in relation to the Trust in accordance with the provisions of the InvIT Regulations.

(b) The Trustee shall require that the Investment Manager ensures that all activities of the intermediaries, agents or service providers appointed by the Investment Manager are in accordance with the InvIT Regulations and the guidelines and circulars issued thereunder, as applicable.

Power to redeem Units and return capital

The Trustee shall have the power to redeem the Units of the Trust and return capital to the Unitholders pro-rata to their Beneficial Interest, from time to time (such that the Beneficial Interest post such redemption and return of capital is not altered), in accordance with the terms of the Trust Documents, the Distribution Policy of the Trust and Applicable Law including InvIT Regulations.

Power to buy back Units

Subject to Applicable Law, the Trustee shall have the power to buy back Units from the Unitholders pro-rata to their Beneficial Interest on behalf of the Trust.

Power to declare Distributions

The Trustee shall have the power to determine, in accordance with the Trust Documents, the Investment Objectives and the Investment Strategy, Distributions to Unitholders and other rights attached to the Units in compliance with the InvIT Regulations.

Power to review reports

The Trustee shall review the reports required in terms of InvIT Regulations and Applicable Law, as submitted by the Investment Manager and the Project Manager. In the event such reports are not submitted in a timely manner, the Trustee shall promptly follow-up with the Investment Manager and complete the reporting as required under the Applicable Law.

Power to open and operate bank accounts and demat accounts

The Trustee shall have the power to open and operate one or more bank accounts and demat accounts for purposes of the Trust, including change of signatories of the bank accounts or demat accounts.

Power to execute documents

(a) The Trustee shall have the power to enter into all such negotiations and contracts, to appoint (or terminate the appointment of) any person, entity or intermediary, and, to execute and do all such acts, deeds and things for or on behalf of or in the name of the Trust as the Trustee may consider expedient for or in relation to any of the matters or otherwise for the purposes of the Trust.

(b) The Trustee shall have the power to sign, seal, execute, deliver, register and/or terminate, according to Applicable Law all deeds, documents, and assurances in respect of the Trust.

(c) The Trustee shall have the power to negotiate, sign, seal, execute, deliver and/or terminate the Trust Documents, including but not limited to any share purchase agreement, share subscription agreement, services agreement, deed of right of first offer, leave and license agreement, rent agreement, loan documentation, preliminary placement memorandum, placement memorandum, any such similar document or any other deed, agreement or document in connection with the Trust, including any amendments, supplements or modifications thereto.

Other matters authorized by the Unitholders

The Trustee shall have the power to take up with SEBI or with the Stock Exchanges as applicable, any matter which has been approved in any meeting of Unitholders post the initial offer by the Trust, if the matter requires such action.

Power to provide indemnity

The Trustee shall have the power to enter into any indemnification obligation under contract or Applicable Law on behalf of the Trust. The Trustee shall have the power to pay such obligation out of the Trust Assets as a Trust Expense. Such obligation shall be enforceable against the Trust and the Trustee solely in its capacity as the trustee of the Trust.

Other powers

Without prejudice to any other provisions of the Indenture of Trust, the Trustee shall also have the following powers and authorities exercisable upon consultation with the Investment Manager:

(a) initiate, prosecute and/or defend any action or other proceedings in any court of law or through arbitration or in any other manner for recovery of debts or sums of money, right, title or interest, property, claim, matter or thing whatsoever now or hereafter to become due or payable or in any way belonging to the Trust by any means or on any account whatsoever in respect of and relating to the investments made by the Trust or Trustee and to discontinue or settle such actions or proceedings or suits as the Trustee may in its discretion deem fit;

(b) commence, institute, conduct, defend or abandon any action or legal proceedings for the purposes of the Trust and have for such purposes, powers to sign and verify all written statements, petitions, appeals, declarations, revisions and applications and have power to refer any claim to arbitration and to perform, observe and challenge the awards;

(c) appear in and defend or compromise any action or other proceedings now or hereafter to be instituted, commenced or prosecuted against or relating to the Trust in any court of law and if necessary through arbitration and to refuse and resist payment of any sum or sums or money or compliance with or fulfilment of any claim or demand or otherwise as the Trustee shall deem fit;

(d) to make and give receipts, releases and other discharges for moneys payable to or by the Trust and for the claims and demands of or against the Trust;

(e) pay out of the income of the Trust after deducting all expenses, the income and other Distributions in accordance with the InvIT Regulations;

(f) to take into its custody or control the Trust Assets and hold such Trust Assets for the benefit of the Unitholders in accordance with the Indenture of Trust and the InvIT Regulations; and

(g) generally to exercise all such powers as it may be required to exercise under the InvIT Regulations or any other Applicable Law for the time being in force and do all such matters and things as may promote the Investment Objectives or as may be incidental to or consequential upon the discharge of its functions and the exercise and enforcement of all or any of the powers and rights under the Indenture of Trust and the InvIT Regulations or any other Applicable Law.

Power to delegate

Subject to the provisions of the Indenture of Trust, the Trustee may from time to time, in the interests of administrative and operational convenience, delegate to any committee or person (including the Investment Manager), any powers and duties vested in it under the Indenture of Trust, and which has not already been delegated to the Investment Manager under the Indenture of Trust and the Investment Management Agreement provided, however, that the Trustee shall remain responsible and liable for all the acts of commission or omission of such persons. Any action taken by such committee or person in respect of the Trust Assets shall be construed as an act done by the Trustee except in cases of gross negligence, fraud or wilful misconduct by such persons as determined by a court of competent jurisdiction whose decision is final and non-appealable.

Duties of the Trustee

The Trustee shall perform its duties as required under the Indenture of Trust in accordance with the Indian Trusts Act, 1882 and the InvIT Regulations, including but not limited to:

Interests of the Unitholders

The Trustee shall carry on and conduct its business in a proper and efficient manner in the best interest of the Unitholders in accordance with the Trust Documents. The Trustee shall duly perform all its duties, responsibilities and powers as set out in the InvIT Regulations in the interest of the Unitholders and in accordance with the provisions of the Trust Documents.

Appointment of the Investment Manager, the Project Manager and enter into the Investment Management Agreement and the Project Implementation Agreements

The Trustee, on behalf of the Trust, shall within a reasonable time from the date of execution of the Indenture of Trust, appoint the first Investment Manager (in consultation with the Sponsor) and a Project Manager (in consultation with the Investment Manager) and enter into an Investment Management Agreement and the Project Implementation Agreements.

Supervision of the Investment Manager and the Project Manager

(a) The Trustee shall ensure that the Investment Manager complies with reporting and disclosure requirements in accordance with the InvIT Regulations and in case of any delay or discrepancy, the Trustee shall require the Investment Manager to rectify such delay or discrepancy on an urgent basis.

(b) The Trustee shall oversee the activities of the Investment Manager and the Project Manager in the interest of the Unitholders, ensure that the Investment Manager complies with the applicable provisions of the InvIT Regulations and the Project Implementation Agreements, including in relation to reporting and disclosure requirements and shall obtain a compliance certificate from the Investment Manager and the Project Manager on a quarterly basis, or such other time and in the form as may be prescribed under the InvIT Regulations.

(c) The Trustee shall review transactions between the Investment Manager and its Associates and where the Investment Manager has advised that there may be a conflict of interest, obtain a confirmation that such transaction is on an arm's length basis from a practicing chartered account, a valuer or as may be otherwise prescribed under the InvIT Regulations, as applicable.

(d) The Trustee shall ensure that the Investment Manager reviews the valuation reports issued by the Valuer and submitted to the Trustee by the Investment Manager in accordance with the InvIT Regulations.

(e) The Trustee shall require the Investment Manager to set up such systems and procedures and submit such reports to the Trustee, as may be necessary for effective monitoring of the functioning of the Trust.

(f) The Trustee shall ensure that the Investment Manager convenes meetings of the Unitholders in accordance with the InvIT Regulations and oversees voting by the Unitholders and declaration of results (except where the Trustee is required to carry out such functions under the InvIT Regulations). The Trustee shall ensure that the Investment Manager convenes meetings of Unitholders within the period prescribed under the InvIT Regulations and the period between such meetings shall not exceed the period prescribed under the InvIT Regulations.

Providing information to the SEBI and the Stock Exchanges

The Trustee shall ensure that the Investment Manager shall provide to the SEBI, the Stock Exchanges and other Governmental Authorities, as applicable, information as may be requested or required under Applicable Law by the SEBI, the Stock Exchanges or other Governmental Authorities, as applicable, in relation to the activities of the Trust including information regarding any act which is detrimental to the interest of the Unitholders. The Trustee shall comply with the information and intimation requirements under the InvIT Regulations. The Trustee shall ensure that the activity of the Trust is operated in accordance with the provisions of the Indenture of Trust, the InvIT Regulations, other Applicable Law and the Trust Documents.

Documents and information to be provided to Unitholders

The Trustee shall, and shall ensure that the Investment Manager shall, provide documents and information to the Unitholders and the Trustee with respect to the confirmation on the activities carried on by the Trust, as may be required by the SEBI, the Stock Exchanges or other Governmental Agency, as applicable, under Applicable Law.

Change in Control

The Trustee shall obtain approvals from the Unitholders in accordance with the Trust Documents, the InvIT Regulations, other Applicable Law and any concession agreement, for any proposed change in control of the Investment Manager or the Project Manager, as applicable.

Change in Investment Manager or Project Manager

In the event of any proposed change or termination in the Investment Manager or Project Manager, the Trustee shall ensure that all conditions in connection with the removal of such Investment Manager or Project Manager and appointment of a new investment manager or project manager prescribed under the InvIT Regulations, the Trust Documents and other Applicable Law are complied with. The previous Investment Manager or Project Manager shall continue to act as such at the discretion of the Trustee until such time as the new Investment Manager or Project Manager is appointed. The Trustee shall ensure that the new investment manager or project manager shall stand substituted as a party in all the documents (to the extent applicable) to which the earlier Investment Manager or Project Manager was a party. The Trustee shall also ensure that the earlier Investment Manager or Project Manager continues to be liable for all its acts of omissions and commissions for the period during which it served as investment manager or project manager, notwithstanding its change or termination.

Subscription amounts

The Trustee shall and shall ensure that the Investment Manager ensures that subscription amounts in case of any offering by the Trust (including the initial offer) are collected and utilized in accordance with the InvIT Regulations, the relevant Trust Documents and conditions specified by the SEBI, as applicable.

Maintenance of books of accounts and other records

The Trustee shall cause the books of accounts and other records of the Trust to be maintained in accordance with the Indenture of Trust, the Trust Documents and Applicable Law.

Payment of statutory charges, operation of bank accounts etc.

(a) The Trustee shall ensure that the Investment Manager shall make payments of all withholding taxes, duties and any other statutory charges or levies that may be payable by the Trust or on behalf of the Unitholders from the Trust Assets, subject to the provisions of the Trust Documents and Applicable Law. The Trustee shall have the power to file the income-tax returns in its capacity as representative assessee on behalf of Unitholders, if so required for the purposes of this Clause.

(b) The Trustee shall be responsible for opening and operating bank accounts and demat accounts on behalf of the Trust.

Attainment of objects of the Trust

The Trustee shall ensure that all acts, deeds and things are done for the fulfilment of the investment objectives of the Trust in accordance with the InvIT Regulations, the Trust Documents and to secure the best interests of the Unitholders.

Reports to be filed by the Trust

The Trustee shall file such reports as may be required by the SEBI or any other governmental authority or as required under Applicable Law in relation to the activities carried on by the Trust.

Unitholder Complaints

The Trustee shall periodically review the status of Unitholders' complaints and their redressal by the Investment Manager. The Investment Manager shall provide quarterly reports on Unitholders' grievances to the Trustee, as applicable.

Segregation of assets and liabilities

The assets and liabilities of the Trust shall at all times be segregated from the assets and liabilities of the Trustee and the assets and liabilities of other trusts managed by the Trustee. The Trust Assets shall be held for the exclusive benefit of the Unitholders and such assets shall not be subject to the claims of any creditor or any person claiming under any other fund or trust administered or managed by the Trustee or the Investment Manager.

Valuer

(a) The Trustee shall ensure that the Valuer is not an Associate of the Settlor (as defined in the Indenture of Trust), the Investment Manager, the Sponsor or the Trustee.

(b) The Trustee shall ensure that the Investment Manager ensures that a detailed valuation is undertaken of the Trust Assets by the Valuer at such intervals and in the manner specified under the InvIT Regulations and the Trust Documents.

(c) The Trustee shall ensure that the remuneration of the Valuer is not linked to or based on the value of the asset being valued.

Investment by Trustee

The Trustee shall not invest in the Units of the Trust.

Compliance with the InvIT Regulations

The Trustee shall fulfil its obligations under applicable provisions of the InvIT Regulations.

Delegation to the Investment Manager

The Trustee shall exclusively delegate (i) all such powers to the Investment Manager as may be required by the Investment Manager to carry out its obligations under the Investment Management Agreement and Applicable Law and as may be required for the benefit of the Unitholders, and (ii) all its powers and authority to the Investment Manager in relation to the Trust, except to the extent not permitted under the InvIT Regulations.

Rights of the Trustee

Right to receive Trusteeship fees

The Trustee shall have the right to receive trusteeship fees from the Trust Assets for services to be rendered in relation to Trust as set out in the engagement letter entered into with the Trustee as specified in the Indenture of Trust, as amended. Any amendment to trusteeship fees shall require a prior approval of the Investment Manager.

Right to receive advice

(a) The Trustee may, in the discharge of its duties, act upon any instructions received from the Unitholders in a validly conducted Unitholders meeting and if any advice is required from external service providers such as qualified bankers, accountants, brokers, lawyers, professionals, consultants, or other experts, the Trustee shall only engage such service providers as approved by the Unitholders. Any costs paid to such external service providers shall be intimated forthwith to the Unitholders.

(b) The Trustee shall not be bound to supervise or verify advice of the advisors and not be liable for any *bona fide* act or omission or consequence suffered as a result of the reliance upon such advice or information. The Trustee shall also not be responsible for any loss occasioned by so acting, nor for the consequences of any *bona fide* mistake, oversight or error of judgement on the part of such advisors.

Right to reimbursement of expenses

The Trustee shall be entitled to the reimbursement of all reasonable expenses incurred by the Trustee on behalf of the Trust out of the Trust Assets as may be agreed to by the Investment Manager (acting on behalf of the Trust). .

Liabilities of the Trustee

The liabilities of the Trustee in terms of the Indenture of Trust are as follows:

Assets received by the Trustee

(a) The Trustee shall only be chargeable for such monies, stocks, funds, shares, securities, investment or property as the Trustee shall have actually received and shall not be liable or responsible for any banker, broker, custodian, the Investment Manager or other person in whose hands the same may be deposited or placed, nor for the deficiency or insufficiency in the value of the Trust Assets nor otherwise for any involuntary loss.

(b) Any receipt signed by the Trustee for any monies, stocks, funds, shares, securities, investment or property, paid, delivered or transferred to the Trustee by virtue of the Indenture of Trust or in exercise of the duties, functions and powers as Trustee, shall effectively discharge the Trustee or the person paying, delivering or transferring the same provided that the Trustee and such person shall have acted in good faith, without negligence and shall have used their best efforts in connection with such dealings and matters.

Acts or things required to be done by the Trustee under Applicable Law

The Trustee shall not be liable to the Unitholders for an act or omission which by reason of any provision under applicable law, whether in the present or in the future, or of any decree, order or judgment of any court or governmental authority, the Trustee is required to do or omit doing. Subject to Applicable Law in such an event if it becomes impossible or impracticable to carry out any of the provisions of the Indenture of Trust, the Trustee shall not be liable. However, it shall duly inform the Sponsor, the Investment Manager and the Unitholders of such event.

Authenticity of Signature and Seal

The Trustee shall not be responsible to any Unitholder for the authenticity of any signature or of any seal affixed to any endorsement on any certificate or to any transfer or form of application endorsement or other document effecting the title to or transmission of interests in the Trust or of any of the Trust Assets or be in any way liable for any forged or unauthorized signature on or any seal affixed to such endorsement transfer or other document or for acting upon or giving effect to any such forged or unauthorized signature or seal. The Trustee shall be entitled but not bound to require that the signature of any Unitholder to any document required to be signed by such Unitholder under or in connection with these presents shall be verified to the reasonable satisfaction of the Trustee.

Value of the Trust Assets

The Trustee shall not be liable for any act or omission that may result in a loss to a Unitholder by way of depletion in the value of the Trust Assets or otherwise, except in the event that such depletion is a result of gross negligence, fraud or wilful default on the part of the Trustee, or a violation of any Trust

Document , as determined by a court of competent jurisdiction whose decision is final and non-appealable.

Acts done in good faith

The Trustee shall not be under any liability on account of anything done or omitted to be done or suffered by the Trustee in good faith if the Trustee is able to establish that it performed its rights and duties and exercised its powers, as a reasonable person in such a position would have, in compliance with the provisions of the Trust Documents.

Value or price of an investment

The Trustee may accept a certificate from the Valuer as sufficient evidence for the value of any investment or for the cost price or sale price thereof or for any other related aspect.

Bona fide action by the Trustee

The Trustee shall not be liable in respect of any action taken or damage suffered by it as a result of reliance upon any notice, resolution, direction, consent, certificate, affidavit, statement, certificate of stock, plan of reorganization or (without being limited in any way by the foregoing) other paper or document believed to be genuine and to have been passed, sealed or signed by appropriate authorities or entities provided that the foregoing shall not absolve the Trustee of its obligation to perform basic prescribed checks on authenticity of such notice, resolution, direction, consent, certificate, affidavit, statement, certificate of stock, other paper or document prior to such reliance.

Information

In the event that Applicable Law requires the Trustee to provide information relating to the Unitholders, the Trustee shall intimate the Unitholders at least five (5) days prior to providing such information to any Governmental Authority, unless such intimation will amount to a clear breach of Applicable Law. Unless any Unitholder responds with a request to withhold such disclosure to the Governmental Authority due to reasons of accuracy or otherwise, the Trustee shall after the expiry of such period, the Trustee shall comply with such a request in good faith, and shall not be liable to the Unitholders or any of them or to any other party as a result of such compliance or in connection with such compliance.

Validity of decisions made by the Trustee

The exercise of all power and discretion by the Trustee shall be in accordance with the Trust Documents and Applicable Law and any powers that have been delegated by the directors on the board of the Trustee to any officer of the Trustee, if the exercise of such powers is within the parameters of such delegated authority.

Non-exclusivity

The Trustee shall not be prevented from and nothing contained herein shall be construed in a manner so as to prevent the Trustee from acting as a trustee of another infrastructure investment trust, real estate investment trust, security trust, alternative investment fund, mutual fund, private equity fund or other fund or investment vehicle that is separate and distinct from the Trust, and retaining for its own use and benefit all remuneration, profits and advantages which it may derive from such trust, security trust, alternative investment fund, mutual fund, private equity fund or other fund or investment vehicle. Provided that the Trustee shall take measures to ensure that adequate controls are in place for segregation of its activities as the Trustee of the Trust under the Trust Documents and its other activities to ensure that there is no conflict between these activities.

C. The Investment Manager – Maple Infra InvIT Investment Manager Private Limited

History and Certain Corporate Matters

The name of the investment manager was changed to Maple Infra InvIT Investment Manager Private Limited from CLP Power India Private Limited through a fresh certificate of incorporation issued on May 8, 2020. The Investment Manager's registered office is situated at 6th Floor, Chanakya Off Ashram Road, Ahmedabad 380 009 and has its address for correspondence at Wing A, Sahar, Office Unit No. 2, Ground floor, Village Marol, Andheri East, Mumbai - 400 099. The CIN of the Investment Manager is U74110GJ1995PTC042939.

Background of the Investment Manager

The Investment Manager was incorporated on September 26, 1995 to, amongst others, (i) establish, form, promote and manage, including but not limited to InvITs, venture capital funds, infrastructure debt funds, real estate funds etc., or any other portfolio of securities, pool of properties or assets of all kinds including unit trusts, superannuation fund and to manage all sorts of assets and investments of InvIT or to engage any other body corporate, company or person for the attainment of above objects under prevailing laws, rules and guidelines; (ii) undertake and carry on the business and activities as an investment manager/manager, asset management company, settlor or to sponsor the setup of funds including but not limited to InvITs, venture capital funds, infrastructure debt funds, real estate funds etc; (iii) invest, advise or manage in pools of capital or fund or asset or wealth or portfolio management or to buy, sell or deal in securities or other financial assets; and (iv) carry on the business of, amongst others, collecting, storing, devising systems for retrieving, publishing, disseminating and marketing data, information and other inputs relating to financial services of funds including but not limited to InvITs, unit trust, real estate funds, mutual funds, venture capital funds, capital markets, leasing, factoring and other financial services including undertaking the work of credit investigation, market informants, credit ratings sought after by the financial market place and government and non-government agencies and all policy makers in the government or private sectors.

Further, the Investment Manager held 100% stake in Jhajjar Power Limited, which housed a coal fired power plant, from 2008 to 2019. This investment was disposed off prior to the acquisition of the Investment Manager by Maple Highways Pte Ltd in December, 2019. The Investment Manager is approximately 100% owned by Maple Highways Pte Ltd.

Further, neither the Investment Manager nor any of the promoters or directors of the Investment Manager: (i) are debarred from accessing the securities market by SEBI; (ii) are promoters, directors or persons in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) are persons who are categorized as wilful defaulters by any bank or financial institution, as defined under the Companies Act, 2013, or consortium thereof, in accordance with the guidelines on wilful defaulters issued by RBI.

Further, in accordance with the eligibility criteria specified under the InvIT Regulations, the Investment Manager had net worth of not less than ₹ 100 million as on March 31, 2023.

Board of Directors of the Investment Manager

The board of directors of the Investment Manager is entrusted with the responsibility for the overall management of the Investment Manager. Please see below the details in relation of the board of directors of the Investment Manager:

Sr. No.	Name	Designation	DIN
1.	Romesh Sobti	Chairman & Non-Executive Non-independent Director	00031034
2.	Anil Aggarwal	Non-Executive, Independent Director	01385684
3.	Deepak Malhotra	Non-Executive, Non-Independent Director	08625060
4.	Yudhvir Singh Malik	Non-Executive, Independent Director	00000555
5.	Louis M. St-Maurice	Non-Executive, Non-Independent Director	09816547
6.	Seema Gupta	Non-Executive, Independent Director	06636330

Brief Biographies of the Directors of the Investment Manager

Please see below brief biographies of the directors of the Investment Manager:

1. **Romesh Sobti** is the Chairman and director on the board of directors of the Investment Manager. He is the former Managing Director and Chief Executive Officer of IndusInd Bank, with a tenure of over 12 years. He holds a bachelor's degree (honours) in electrical engineering from University of Jabalpur and a diploma in corporate laws and secretarial practice. He is a career banker with vast experience in three sectors of banking, namely, public, foreign, and private. He has been associated with Adani Green Energy Limited and Aditya Birla Capital Limited.

2. **Anil Aggarwal** is an independent director on the board of directors of the Investment Manager. He is a Chartered Accountant and holds a master's degree in business administration from Faculty of Management Studies, University of Delhi, New Delhi. He pursued a career in accounting and finance with several corporates including Gateway Distriparks Limited and Punj Lloyd and has vast experience in finance, accounting, strategy and mergers and acquisitions. He is the founder of VrikshAdvisors and currently also an independent director on the board of directors of Snowman Logistics Limited.

3. **Deepak Malhotra** is a non-executive, non-independent director on the board of directors of the Investment Manager. He has led many infrastructures investment transactions in India and manages a diversified investment portfolio including highways & roads and power generation. Mr. Malhotra has vast experience across all facets of infrastructure. Mr. Malhotra has an MBA in Finance from Vanderbilt University in USA.

4. **Yudhvir Singh Malik** is an independent director on the board of directors of the Investment Manager. He is an I.A.S. from the 1983 batch of the Haryana cadre. He has a master's degree in arts from Punjab University. He holds a master of science in development management (with distinction) from Glasgow Caledonian University, Glasgow, Scotland, UK. He has vast experience and has held various positions in the centre and the state, such as, (i) Chairman, NHAI;and (ii) Secretary, Ministry of Road Transport and Highways, wherein he introduced several systemic initiatives, including quantum rise in road construction, in the highways sector. He is the Chairman and Managing Director of Unitech Limited.

5. **Louis-M. St-Maurice** is a non-executive, non-independent director on the board of directors of the Investment Manager. St-Maurice holds a degree in civil engineering from University of Ottawa, and obtained a master's degree in business administration specialized in project management as well as a graduate diploma in oil company management from HEC Montréal. Over his career, which he has pursued in Canada and the United States, Mr. St-Maurice has acquired vast experience in infrastructure project development and in asset management activities.

6. **Seema Gupta** is an independent director on the board of directors of the Investment Manager. Ms. Gupta holds a Post Graduate Diploma in Management, Institute of Management Technology, Ghaziabad and Bachelor of Engineering, Delhi College of Engineering. She is a leading power transmission expert with vast experience in varied facets of the power sector, from concept to delivery, in premier PSUs such as Power Grid and NTPC. She has worked at Power Grid, retiring as the Director (Operations) in May 2022. She has been a member of CIGRE (the International Council on Large Electric Systems)since 2014, having held the position of Women in Energy Chairperson. She is also the recipient of the STEVIE GOLD Award for Lifetime Achievement in the Business Category in 2020.

Brief profiles of the Key Personnel of the Investment Manager

Please see below brief biographies of the Key Personnel of the Investment Manager:

1. **Anup Vikal** is the CEO of the Investment Manager since September 8, 2022. He was formerly the Chief Financial Officer of Nayara Energy ("**Nayara**"), and has vast of work experience as a business leader in various sectors such as banking and finance, telecom and technology, travel, hospitality and aviation, consumer technology like e-commerce, financial technology and SAS platforms, and oil and gas. He holds a bachelor's degree in mechanical engineering from Sardar Vallabhbhai National Institute of Technology, Surat and a Masters in Business Administration degree from the Veer Narmad South Gujarat University in Surat. At Nayara, he was responsible for the overall strategy, operations and delivery of the Finance function, corporate social responsibility, legal and government affairs at both Delhi and state levels and

in certain other countries. Prior to joining Nayara, he has been associated with several organisations including Aircel and InterGlobe Enterprises.

2. **Varun Mehta** is the Chief Financial Officer of the Investment Manager since June 8, 2023. Prior to this, he was the Vice President (Finance) of the Investment Manager. He is a qualified Chartered Accountant, Chartered Financial Analyst and Financial Risk Manager. He has vast experience, including, more than 11 years of experience in the infrastructure sector.

3. **Ankit Dewan** is the Company Secretary and Compliance Officer of the Investment Manager since October 1, 2020 and November 17, 2020, respectively. He holds a bachelors' degree in commerce from Mumbai University, a bachelors' degree in law from Pune University and a Post Graduate Diploma Course in Securities Laws. He is an Associate Company Secretary. He has over 12 years of experience including, more than 7 years of experience in the infrastructure sector.

Key Terms of the Investment Management Agreement

The Investment Manager has entered into the Investment Management Agreement, in terms of the InvIT Regulations, the key terms of which, are provided below.

Powers of the Investment Manager

The Investment Manager has been provided with various powers under the Investment Management Agreement in accordance with the SEBI InvIT Regulations, including but not limited to:

Management of the Trust

(a) The Investment Manager shall take all decisions in relation to the management and administration of the Trust Assets and the Trust as may be necessary for or incidental to the advancement or fulfilment of the Investment Objectives in accordance with the Trust Documents, the InvIT Regulations and other Applicable Law.

(b) The Investment Manager shall be responsible for generally evolving, formulating and adopting such policies and procedures as may be conducive for the effective administration and management of the Trust and necessary for or incidental to the advancement or fulfilment of the Investment Objectives. The terms, such as, manner or requirement of Unitholders' approval for each of these Policies, applicability, amendment and termination, of the respective policies shall be set out in each of the policies.

Power to make investment and divestment decisions

The Investment Manager shall, subject to such approval as may be required from the Unitholders, have the power to make all investment decisions with respect to the Trust Assets including, without limitation, investigation, selection, development, negotiation, structuring, restructuring, commitment to or monitoring and any further investment or divestment of the underlying assets or Projects of the Trust and in this regard shall also be empowered to do the following acts on behalf of the Trust:

(a) acquire, hold, manage, trade and dispose of shares, stocks, convertibles, debentures, bonds and other equity or equity-related securities, derivatives, instruments or obligations and any debt or mezzanine securities instruments or obligations of all kinds or any other security, instrument or obligation permitted under Applicable Law, including without limitation, those issued by any Project SPV, Holdco, Infrastructure Projects in accordance with the InvIT Regulations, other Applicable Law and the Investment Strategy. For the avoidance of doubt, this shall also include the power to hypothecate, pledge or create encumbrances of any kind on or provide guarantees, undertakings or other contractual comforts in relation to such securities, instruments or obligations held by the Trust in such Project SPVs, Holdcos or infrastructure projects to be used as collateral security for any borrowings by the Trust, Holdcos or Project SPVs;

(b) issue, hold, invest, collateralize or sell any loan, debt, derivative, instrument or obligation as permitted under Applicable Law, including without limitation, those issued by the Project SPVs or Holdcos, as applicable;

(c) keep the capital and monies of the Trust in deposit with banks or other institutions;

(d) accept contributions;

(e) to avail commercial loans, as may be required;

(f) collect and receive the profit, interest, repayment of principal of debt or debt-like, equity or equity-like mezzanine securities, dividend, return of capital of any type by the Project SPVs, Holdcos or Infrastructure Projects and income of the Trust as and when such amounts become due or receivable;

(g) invest in securities or in units of mutual funds in accordance with the InvIT Regulations and other Applicable Law by the InvIT, the Holding Companies and the SPVs;

(h) invest in money market instruments including government securities, treasury bills, certificates of deposit and commercial papers in accordance with Applicable Law by the InvIT, the Holding Companies and the SPVs;

(i) to give, provide and agree to provide to any Project SPV or Holdco, financial assistance in the form of loans and investment in share capital of any class including ordinary, preference, participating, non-participating, voting, non-voting or other class, in the form of investment in equity and debt securities in accordance with Applicable Law;

(j) to invest, acquire, purchase, hold, divest, sell, hypothecate, pledge or otherwise transfer immovable properties of any kind including rights and interests therein;

(k) to structure an investment through one or more investment vehicles in order to address tax or regulatory considerations;

(l) to create, establish and maintain partnerships, trusts, corporations, companies or other entities of any kind, to acquire, hold or dispose of the Trust Assets, subject to Applicable Law;

(m) to enter into, execute and/or terminate any investment pooling agreements, agreements related to strategic investments, co-investment agreements, and any and all documents and instruments of a similar nature in the name of the Trust; and

(n) to make further investments from the disposition proceeds in accordance with the Trust Documents and the InvIT Regulations.

Power to issue, allot Units etc. and accept subscriptions

The Investment Manager shall have the power to (i) issue and allot Units , and (ii) refund subscription money and pay necessary interest thereon, in accordance with the InvIT Regulations and within such time period as maybe prescribed under Applicable Law. The Investment Manager (on behalf of the Trustee) shall have the power to accept subscriptions to Units, debt securities (including any non-convertible debentures, bonds or convertible securities) or other securities, obligations or instruments permitted to be issued by the Trust under the InvIT Regulations and issue and allot Units, debt securities (including any non-convertible debentures, bonds or convertible securities) or other securities, obligations or instruments to Unitholders or other security holders, as applicable, and undertake all related activities. The Investment Manager shall, subject to and only in accordance with the terms of the Trust Documents and Applicable Law, have the power to (i) approve or take on record any transfer of the Units or debt securities or other securities or instruments or obligations issued by the Trust (ii) cause the offering of the Units through any offer document, and (iii) cause any offer document to be provided to the investors. It is hereby clarified that the Investment Manager shall not approve, ratify or record any transfers made in contravention of the prohibitions contained in this clause.

Register of holders

The Investment Manager shall maintain (or cause depositories to maintain) a register of the Unitholders or other instrument-holders of the Trust.

Power to create reserves:

(a) The Investment Manager shall have the power to make such reserves out of the income or capital in accordance with Applicable Law.

(b) Any Distribution made from such reserves shall be in accordance with the Trust Documents, the Investment Strategy and the InvIT Regulations.

Power to appoint external advisors

The Investment Manager shall have the power to use the services of external advisors and rely on the information provided in the due diligence process of assessing investment proposals as it deems necessary.

Power to employ agents

The Investment Manager, in consultation with the Trustee, shall have the power to employ and pay at the expense of the Trust, any agent in any jurisdiction whether attorneys, solicitors, brokers, banks, trust companies or other agents, without being responsible for the default of any agent if employed in good faith to transact any business, including without limitation, the power to appoint agents to raise funds, or do any act required to be transacted or done in the execution of the responsibilities hereof including the receipt and payment of moneys and the execution of documents.

Power to appoint nominees and custodians:

The Investment Manager, in consultation with the Trustee, may appoint any custodian in order to provide custodial services, and permit any property comprised in the Trust to be and remain deposited with a custodian or with any person or persons in India or in any other jurisdiction subject to such deposit as authorized by the Trustee and permissible under Applicable Law.

Power to appoint the Project Manager

The Investment Manager along with the Trustee shall appoint the Project Manager and execute the Project Implementation Agreements or any other agreement or arrangement, from time to time, with the Project Manager, the Holdcos or the SPVs, as applicable, in this regard.

Power to oversee activities of the Project Manager

The Investment Manager shall oversee the activities of the Project Manager and ensure that the Project Manager complies with the InvIT Regulations and the Project Implementation Agreements. The Investment Manager shall obtain a compliance certificate from the Project Manager on a quarterly basis, or such other time and in the form as may be prescribed under the InvIT Regulations.

Power to pay duties and taxes

In the event of any capital gains tax, income tax, stamp duty or other duties, fees or taxes (and any interest or penalty chargeable thereon) whatsoever becoming payable in any jurisdiction in respect of the Trust or any part thereof or in respect of documents issued or executed in pursuance of the Indenture of Trust or the Investment Management Agreement in any circumstances whatsoever, the Investment Manager shall have the power and duty to pay all such duties, fees or taxes (and any interest or penalty chargeable thereon) as well as to create any reserves for future potential tax liability (and any such interest or penalty) out of the Trust's income and the Investment Manager may pay such duties, fees or taxes (and any such interest or penalty) on behalf of the Trust and be reimbursed for such payments out of the Trust Assets. For avoidance of doubt, it is clarified that pursuant to this clause, no Unitholder will be required to make a contribution as a capital commitment to the Trust (other than the issue price for Units already issued). The Investment Manager shall exercise due care and prudence in payment of duties and taxes of the InvIT and shall endeavour to ensure that there are no material outstanding dues in that behalf, except for any claim or demand made by any tax department or authority subsequently, or any amounts disputed in good faith.

Power to allocate and expend on behalf of the Trust

The Investment Manager shall have the power to incur and pay Trust Expenses, which shall include, without limitation, any expenses made under any contract or Applicable Law, out of the Trust Assets, including any funds held by the Trust, the Project SPVs, the Holdcos or other assets of the Trust, as applicable.

Power to exercise rights in respect of the Trust Assets/Project SPVs/Holdcos

The Investment Manager shall have the power to exercise all rights of the Trust in the Trust Assets/Project SPVs/Holdcos, including voting rights, rights to appoint directors, whether pursuant to securities held by it, or otherwise, in such manner as it deems to be in the best interest of the Trust, and in accordance with the InvIT Regulations and other Applicable Law.

Power to take counsel's opinion

The Investment Manager shall have the power to take the opinion of legal, tax or other counsel in any jurisdiction concerning any difference arising under the Investment Management Agreement or any matter in any way relating to the Investment Management Agreement or to its duties in connection with the Investment Management Agreement and the fees of such advisors shall be paid from the Trust Assets, including any funds held by the Trust, the Project SPVs, the Holdcos or other assets of the Trust, as applicable.

Power to effect compromises

The Investment Manager, in consultation with the Trustee, shall have the power, on behalf of the Trust, to:

(a) accept any property before the time at which it is transferable or payable;

(b) accept any security (movable or immovable) *in lieu* of any amounts payable to it;

(c) alter the dates for payment of any amounts payable to it; and

(d) subject to such approval as may be required from the Unitholders, compromise, compound, abandon, or otherwise pay and settle any claim or thing whatsoever relating to the Trust or the Investment Management Agreement.

Power to borrow and create security

(a) The Investment Manager shall have the power to cause the Trust and the Trust Assets to borrow or incur indebtedness including by way of issuance of debt securities or other securities or instruments permitted under the InvIT Regulations or other Applicable Law for the purpose of the Trust in accordance with the Trust Documents, the InvIT Regulations and the leverage policy of the Trust and to cause the Trust to make necessary amendments, addendums and any other changes to the same in order to enable the Trust to borrow or incur such indebtedness.

(b) The Investment Manager shall have the power to secure the payment of any sum of money for and on behalf of the Trust in such manner and upon such terms and conditions in all respects as its deems fit including by mortgage or pledge or charge upon all or any Trust Assets (present or future).

(c) The Investment Manager, shall subject to Applicable Law, have the power to provide security, guarantee, undertakings, and other contractual comforts in relation to the indebtedness availed by any of the Trust, Project SPVs or Holdcos, as applicable.

(d) The limits in relation to the aggregate consolidated borrowings and deferred payments of the Trust, any Holdcos and the Project SPVs, net of cash and cash equivalents, shall be as determined by Unitholders' approval from time to time in accordance with the InvIT Regulations.

(e) Notwithstanding the above, the applicable conditions for borrowings and deferred payments specified in the InvIT Regulations shall be complied with by the Trust.

(f) The Investment Manager shall ensure that the prior written consent of the lenders of the Trust, any Holdcos and the SPVs is obtained, where required under the provisions of Applicable Law and the relevant financing agreements.

Power to repay debt

Subject to Applicable Law, the Investment Manager may cause the Trust to pay, prepay or repay any and all debt raised from any person in accordance with the terms therein and to redeem any debt securities or other securities, obligations or instruments in accordance with the terms thereof issued to persons in compliance with the InvIT Regulations and other Applicable Law.

Power to give loans

Subject to Applicable Law, the Investment Manager may extend loans out of the Trust Assets to SPVs or Holdcos and also subscribe to debt or convertible or exchangeable securities or other securities, obligations or instruments of a similar nature or incur any indebtedness in accordance with and subject to the provisions of the relevant Trust Documents, the InvIT Regulations and other Applicable Law.

Power to re-invest

Subject to the conditions laid down in the relevant Trust Documents and the InvIT Regulations, the Investment Manager may retain or recall for reinvestment of the invested capital portion of any proceeds received by the Trust from any Project SPV or Holdco.

Power to make rules

The Investment Manager may make rules to give effect to and carry out the Investment Objectives, subject to the terms of the Trust Documents and the InvIT Regulations. In particular, and without prejudice to the generality of such power, the Investment Manager may provide, not inconsistent with the provisions of the Indenture of Trust and the InvIT Regulations, for all or any of the following matters:

(a) manner of maintaining of the records and particulars of the Unitholders and other instrument-holders of the Trust;

(b) norms of investment by the Trust in accordance with the Investment Objectives and the Investment Strategy and in accordance with the powers and authorities of the Investment Manager as set out in the Investment Management Agreement;

(c) matters relating to entrustment, deposit or handing over of any securities or Project SPVs or Holdcos of the Trust to custodians and the procedure relating to the holding thereof by the custodian;

(d) such other administrative, procedural or other matters relating to the administration or management of the affairs of the Trust and matters which are not required to be included or provided for in the Indenture of Trust and which matters are not inconsistent with the provisions hereof;

(e) procedure for voting by Unitholders in a meeting, through postal ballot, proxy or otherwise; and

(f) procedure for summoning and conducting meetings of Unitholders.

Power to appoint intermediaries

(a) The Investment Manager shall, in consultation with the Trustee, appoint the Valuer, Auditor, registrar and transfer agent, merchant bankers, custodians, credit rating agencies and any other intermediaries or service providers or agents, as may be applicable, with respect to the activities in relation to the Trust in accordance with the provisions of the InvIT Regulations.

(b) The Investment Manager shall appoint an Auditor from one of the Big 6 Firms for a period of not more than five consecutive years, or such other period as may be specified in the InvIT Regulations, provided that an Auditor who is not an individual may be reappointed subject to and in accordance with the provisions of the InvIT Regulations.

(c) The Investment Manager shall determine the remuneration of the Auditor. In the event the Investment Manager is required to take any approval of the Unitholders for approval of remuneration of the Auditor or appointment of the Auditor, such approval of the Unitholders shall be obtained in accordance with the requirements specified in the InvIT Regulations and the Trust Documents.

(d) The Investment Manager shall have the power to determine the remuneration of the Valuer in consultation with the Trustee and the Trustee shall ensure that the remuneration of the Valuer is not linked to or based on the value of the assets being valued.

(e) The Investment Manager shall ensure that all activities of the intermediaries, agents or service providers appointed by the Investment Manager are in accordance with the InvIT Regulations and the guidelines and circulars issued thereunder, as applicable.

(f) The Investment Manager shall ensure that the Auditor shall be removed only in accordance with the Trust Documents and the InvIT Regulations.

Power to redeem Units and return capital

Subject to Applicable Law, the Investment Manager shall have the power to redeem the Units of the Trust and return capital, to the Unitholders pro-rata to their Beneficial Interest, from time to time, (such that the beneficial interest post such redemption and return of capital is not altered), in accordance with the Distribution Policy of the Trust, Trust Documents and Applicable Law including the InvIT Regulations**.**

Power to buy back Units

Subject to Applicable Law, the Investment Manager, on behalf of the Trust, shall have the power to buy back Units from the Unitholders pro-rata to their beneficial interest.

Power to insure property

The Investment Manager shall have the power to obtain insurance policies for the Trust or the SPVs or Holdcos against any loss or damage from any peril, any assets and property forming part of the Trust Assets for any amount, and to pay the premiums out of the Trust Assets.

Power to open and operate bank accounts and demat accounts

The Investment Manager shall have the power to open and operate one or more bank accounts and demat accounts for purposes of the Trust, including change of signatories of the bank accounts or demat accounts in accordance with the Trust Documents.

Power to execute documents

(a) The Investment Manager shall have the power to enter into all such negotiations and contracts, to appoint (or terminate the appointment of) any person, entity or intermediary, and, to execute and do all such acts, deeds and things for or on behalf of or in the name of the Trust as the Investment Manager may consider expedient for or in relation to any of the matters or otherwise for the purposes of the Trust.

(b) The Investment Manager shall have the power to sign, seal, execute, deliver, register and/or terminate, according to Applicable Law, all deeds, documents, and assurances in respect of the Trust.

(c) The Investment Manager shall have the power to negotiate, sign, seal, execute, deliver and/or terminate the Trust Documents, including but not limited to any share purchase agreement, share subscription agreement, services agreement, deed of right of first offer, leave and license agreement, rent agreement, loan documentation, preliminary placement memorandum, placement memorandum, any such similar document or any other deed, agreement or document in connection with the Trust, including any amendments, supplements or modifications thereto.

Reports to be filed by the Trust

The Investment Manager shall have the power to file such reports as may be required by the SEBI or any other Governmental Authority or as required under Applicable Law in relation to the activities carried on by the Trust.

Other matters authorized by the Unitholders

The Investment Manager shall have the power to take up with SEBI or with the Stock Exchanges as applicable, any matter which has been approved in any meeting of Unitholders post the initial offer by the Trust, if the matter requires such action.

Other powers

Without prejudice to any other provisions of the Investment Management Agreement, the Investment Manager shall also have the following powers and authorities:

(a) initiate, prosecute and/or defend any action or other proceedings in any court of law or through arbitration or in any other manner for recovery of debts or sums of money, right, title or interest, property, claim, matter or thing whatsoever now or hereafter to become due or payable or in any way belonging to the Trust by any means or on any account whatsoever in respect of and relating to the investments made by the Trust or Investment Manager (on behalf of the Trust) or to discontinue or settle such actions or proceedings or suits as the Investment Manager may in its discretion deem fit;

(b) commence, institute, conduct, defend or abandon any action or legal proceedings for the purposes of the Trust and have for such purposes, powers to sign and verify all written statements, petitions, appeals, declarations, revisions and applications and have power to refer any claim to arbitration and to perform, observe and challenge the awards;

(c) appear in and defend or compromise any action or other proceedings now or hereafter to be instituted, commenced or prosecuted against or relating to the Trust in any court of law and if necessary through arbitration and to refuse and resist payment of any sum or sums or money or compliance with or fulfilment of any claim or demand or otherwise as the Investment Manager shall deem fit;

(d) to make and give receipts, releases and other discharges for moneys payable to or by the Trust and for the claims and demands of or against the Trust;

(e) pay out of the income of the Trust after deducting all expenses, the income and other Distributions in accordance with the InvIT Regulations;

(f) to take into its custody or control the Trust Assets and hold such Trust Assets for the benefit of the Unitholders in accordance with the Indenture of Trust, the Investment Management Agreement and the InvIT Regulations; and

(g) generally to exercise all such powers as it may be required to exercise under the InvIT Regulations or any other Applicable Law for the time being in force and do all such matters and things as may promote the Investment Objectives or as may be incidental to or consequential upon the discharge of its functions and the exercise and enforcement of all or any of the powers and rights under the Investment Management Agreement and the InvIT Regulations or any other Applicable Law.

Power to provide indemnity (for and on behalf of the Trust)

The Investment Manager, in consultation with the Trustee, shall have the power to enter into any indemnification obligation under contract or Applicable Law for or on behalf of the Trust in connection with transactions which relate to the Trust. The Investment Manager shall have the power to pay such obligation out of the Trust Assets as a Trust Expense. It is clarified that the Investment Manager shall have the power to take the final decision in this regard.

Power to delegate

The Investment Manager may from time to time, in the interests of administrative and operational convenience, delegate to any duly qualified committee or person, any powers and duties including management of the Trust Assets vested in it under the Investment Management Agreement as may be permitted under Applicable Law, provided, however, that the Investment Manager shall remain responsible and liable for all the acts of commission or omission of such persons. Any action taken by such committee or person in respect of the Trust Assets or the Trust shall be construed as an act done by the Investment Manager.

Power to adopt policies for the Trust

The Investment Manager may adopt such policies , as may be required pursuant to the InvIT Regulations.

Power to restrict right to inspect

Subject to Applicable Law, no Unitholder shall be entitled to inspect or examine the InvIT's premises or properties without the prior permission of the Investment Manager. Further, no Unitholder shall be entitled to require discovery of any information with respect to any detail of the InvIT's activities or any matter which may be related to the conduct of the business of the InvIT and which information may, in the opinion of the Investment Manager, adversely affect the interest of other Unitholders.

Duties of the Investment Manager

Duty to promote the Trust

The Investment Manager shall coordinate with the Trustee, as may be necessary, with respect to the operations of the Trust.

Duty to *ensure valuation*

The Investment Manager shall appoint an eligible Valuer and ensure that the valuation of the Trust Assets is done by the Valuer in accordance with the InvIT Regulations and at the frequency as required under the InvIT Regulations. The Investment Manager shall submit the Valuation Reports to the Trustee as required under the
InvIT Regulations and within the timelines prescribed in the InvIT Regulations.

Insurance

The Investment Manager shall arrange for adequate insurance coverage for the Trust Assets in accordance with the InvIT Regulations.

Accounts, audit and reporting

The Investment Manager shall maintain proper books of accounts, financial statements, documents and records with respect to the Trust, in the manner set out in the Indenture of Trust and in accordance with

Applicable Law. The financial year of the Trust shall begin from the date of the Indenture of Trust and shall end on the immediately succeeding March 31 and on the anniversary thereof in each succeeding year unless otherwise determined. The Investment Manager shall ensure that audit of the accounts of the Trust by the Auditor is undertaken in accordance with the InvIT Regulations.

Distributions

The Investment Manager shall declare Distributions to Unitholders in accordance with the InvIT Regulations, the Trust Documents and the Investment Strategy. Subject to the Trust Documents, Applicable Law and the Investment Strategy, at least such percentage of the net distributable cash flows of the Project SPVs and Holdcos (as applicable) shall be distributed to the InvIT, as prescribed in the InvIT Regulations. The Distributions shall be made not less than once every year or at such other intervals as may be specified in the relevant Trust Documents or applicable under the InvIT Regulations.

Meeting of Unitholders

The Investment Manager shall convene meetings of the Unitholders in accordance with the InvIT Regulations, including at the written request of the Unitholders as specified therein, and maintain records pertaining to the meetings in accordance with the InvIT Regulations. The Investment Manager acknowledges that matters brought to vote at a meeting of the Unitholders shall require approval of such percentage of Unitholders, present and voting, in accordance with the InvIT Regulations.

Change in control

The Investment Manager shall intimate the Trustee prior to any Change in control of the Investment Manager to enable the Trustee to seek prior approval from the Unitholders (and the SEBI or any other Governmental Authority, if applicable) and shall ensure that no such Change in control is given effect to, until the approval of the Unitholders (and the SEBI or any other Governmental Authority, as applicable) has been obtained, or the Investment Management Agreement is terminated and a new investment manager has been appointed in accordance with the terms hereof, or in compliance with any other requirement under the InvIT Regulations, other Applicable Law and the Trust Documents.

Monitoring

The Investment Manager will place before its board of directors, a report on the activity and performance of the Trust in accordance with the InvIT Regulations. The Investment Manager shall designate an appropriately qualified employee or director to act as the compliance officer for monitoring of compliance with the InvIT Regulations and any circulars or guidelines issued thereunder and intimating the SEBI in case of non-compliance.

Maintenance of records

The Investment Manager shall maintain records pertaining to the activity of the Trust in terms of the InvIT Regulations.

Duty in relation to Investment Objectives

The Investment Manager shall manage the Trust in accordance with Applicable Law (including the InvIT Regulations) and the Trust Documents and the Investment Strategy, and shall ensure that the investments made by the Trust are in accordance with the investment conditions specified in the applicable provisions of the InvIT Regulations and in accordance with the Investment Strategy.

Transactions between the Project Manager and its Associates

The Investment Manager shall review the transactions carried out between the Project Manager and its Associates and where the Project Manager has advised that there may be a conflict of interest, to obtain confirmation from a practicing chartered accountant or valuer, as applicable, that such transaction is on an arms' length basis.

Unitholder grievances

The Investment Manager shall ensure adequate and timely redressal of Unitholders' grievances pertaining to the activities of the Trust in accordance with the InvIT Regulations. The Investment Manager shall submit quarterly reports on Unitholders' grievances to the Trustee, as applicable.

Information to Trustee, Unitholders, SEBI and other Governmental Authorities:

(a) The Investment Manager shall provide to the SEBI, the Stock Exchanges and other Governmental Authorities, as applicable, information as may be requested or required under Applicable Law by the SEBI, the Stock Exchanges or other Governmental Authorities, as applicable, in relation to the activities of the Trust. The Investment Manager shall comply with the information and intimation requirements under the applicable provisions of the InvIT Regulations (including disclosure to the Trustee, stock exchange and the Unitholders of any information having a bearing on the operation or performance of the Trust) in accordance with the timelines specified in the InvIT Regulations.

(b) The Investment Manager shall intimate the Trustee and the Unitholders on the occurrence of any event that may have a material impact on the Investment Manager and its ability to perform its obligations under the Trust Documents, including any Change in control of the Investment Manager.

Issue and listing of Units

The Investment Manager shall be responsible for all activities pertaining to the issue and listing of the Units, including filing of any preliminary placement memorandum, placement memorandum or any such similar document with the SEBI, dealing with all matters relating to the allotment of Units to Unitholders, and obtaining in-principle approval and final listing and trading approvals from the Stock Exchanges, as applicable. The Investment Manager shall ensure that disclosures in the placement memorandum or offer document are material, true, correct and adequate and in accordance with the InvIT Regulations. The Trust shall list its Units on one or more Stock Exchanges subject to compliance with the conditions specified under the InvIT Regulations and directions issued by the SEBI or the Stock Exchanges.

Delisting and winding-up of the Trust

In case of occurrence of any event specified in the InvIT Regulations, the Investment Manager shall be responsible for applying for delisting of the Units of the Trust and winding up of the Trust in accordance with the InvIT Regulations.

Compliance with the InvIT Regulations

The Investment Manager shall fulfil its obligations under the applicable provisions of the InvIT Regulations and the Trust Documents.

Submission to the Trustee

The Investment Manager shall submit to the Trustee:

(a) quarterly reports on the activities of the Trust including receipts for all funds received by it and for all payments made, status of compliance with the InvIT Regulations, performance report, status of development of under-construction projects, within time period specified under the InvIT Regulations, whichever is earlier;

(b) valuation reports as required under the InvIT Regulations within the time period specified under the InvIT Regulations;

(c) decision to acquire or sell or develop or bid for any Trust Asset or Project or expand existing completed Trust Assets or Projects along with rationale for the same;

(d) details of any action which requires approval from the Unitholders as may be required under the InvIT Regulations; and

(e) details of any other material fact including change in its directors, change in its shareholding, any legal proceedings that may have a significant bearing on the activity of the Trust, within the time period specified under the InvIT Regulations.

(f) such other information, document and records as pertaining to its activities, obligations, duties and responsibilities under this Agreement, the InvIT Regulations and Applicable Law, as may be reasonably necessary for, and sought by, the Trustee.

In the event of failure of the Investment Manager to submit information or reports as specified above in a timely manner and in terms of the InvIT Regulations, the Trustee shall intimate SEBI.

Submission of annual, half-yearly and quarterly reports

The Investment Manager shall, within the time period prescribed under the InvIT Regulations, submit annual reports, half yearly reports and quarterly reports, as applicable under the InvIT Regulations and applicable law, to the Trustee and all the Unitholders electronically or provide physical copies and, if applicable, to the Stock Exchanges.

Segregation of assets and liabilities

The assets and liabilities of the Trust shall at all times be segregated from the assets and liabilities of the Investment Manager and the assets and liabilities of any other trusts managed by the Investment Manager. The assets held under the Trust shall be held for the exclusive benefit of the Unitholders and such assets shall not be subject to the claims of any creditor or any person claiming under any other fund or trust administered or managed by the Investment Manager.

Administration of claims

The Investment Manager shall be responsible for monitoring, administering and giving effect to all claims and adjustments arising out of the share purchase agreements executed in respect of the acquisition of Trust Assets and any payments required to be made by or to the Trust.

Appointment of the New Project Manager

A new Project Manager may be appointed in accordance with the provisions of the InvIT Regulations. The Investment Manager shall consult with the Trustee and shall ensure that any new Project Manager appointed by the Trustee meets the qualification criteria as specified in the Trust Documents.

Other Duties

Without prejudice to any other provision of the Investment Management Agreement, the Investment Manager shall also have the following duties and obligations:

(a) ensure that computation of the net asset value of the Trust is based on the valuation done by the Valuer in accordance with the InvIT Regulations;

(b) maintain regular interaction with the Trustee on performance of the Trust and providing the Trustee with any information in relation to the operations of the Trust as may be required;

(c) conducting its affairs and the affairs of the Trust in such a manner that Unitholders will not have personal liability with respect to liabilities or obligations of the Trust;

(d) collecting all dividends, fees, property and other payments due and receivable by the Trust in the manner set out in the Indenture of Trust and in terms of the InvIT Regulations;

(e) ensuring that no commission or rebate or any other remuneration, arising out of transaction pertaining to the Trust is collected by the Investment Manager or its Associates, other than as specified in the offer document or any other document as may be specified by SEBI for the purpose of the issue of the units of the Trust;

(f) ensuring that the Trust Assets have proper and legal marketable titles and that all the material contracts entered into or on behalf of the Trust or the Trust Assets or the SPVs, or the Holdcos are legal, valid, binding and enforceable by and on behalf of the Trust or the Trust Assets or the SPVs or the Holdcos, as applicable;

(g) keeping the Unitholders informed and updated on investment activities of the Trust in accordance with the Trust Documents;

(h) to ensure that any possible conflict of interest involving its role as an Investment Manager is reported to the Trustee and the Unitholders;

(i) to ensure that disclosures and reporting to the Unitholders, SEBI, the Trustee and the Stock Exchanges are in accordance with Applicable Law and InvIT Regulations;

(j) to immediately notify the Trustee and the Unitholders of any act which is detrimental to the interest of the Unitholders;

(k) to inform the Trustee and Unitholders in writing about any change in the representations and warranties provided by the Investment Manager under the Investment Management Agreement or any of the Trust Documents;

(l) to provide to the Trustee such assistance as may be required by the Trustee in fulfilling its obligations towards the Trustee and the Unitholders, under Applicable Law, by any Governmental Authority or the under the Trust Documents;

(m) providing to the SEBI, the Trustee and if applicable, the Stock Exchanges, such information as may be sought by the SEBI, the Trustee or the Stock Exchanges in relation to the activities of the Trust;

(n) taking any other actions incidental to any of the foregoing or necessary or convenient in order to fully effect or evidence any action or transaction contemplated under the Investment Management Agreement.

(o) The Investment Manager shall ensure that for all matters which require Unitholders approval, such approval is obtained as per the InvIT Regulations. The Investment Manager shall also perform any other duties specified in the InvIT Regulations and the Trust Documents.

(p) Notwithstanding anything contained in the Investment Management Agreement, nothing contained in the Investment Management Agreement shall be construed to limit or restrict the performance of any of the duties or obligations of the Investment Manager or the Trustee contained in the InvIT Regulations.

Liabilities of Investment Manager

(a) The Investment Manager shall not be liable in respect of any action taken or damage suffered by it as a result of reliance upon any notice, resolution, direction, consent, certificate, affidavit, statement, certificate of stock, plan of reorganization or, without being limited in any way by the foregoing, other paper or document reasonably believed by it to be genuine and to have been passed, sealed or signed by appropriate authorities or entities; provided that the Investment Manager shall not be so exculpated in the event of a Breach of the Standard of Conduct by itself.

(b) The Investment Manager shall not be liable to the Unitholders for doing or omitting to do any act or thing which, by reason of any provision of any present or future Applicable Law, or of any decree, order or judgment of any court, or by reason of any request announcement or similar action (whether of binding legal effect or not) which may be taken or made by any Governmental Authority, it shall be directed or requested to do or perform or to forbear from doing or performing. If for any reason it becomes impossible or impracticable to carry out any of the provisions of the Investment Management Agreement, the Investment Manager shall not be under any liability therefore or thereby. However, it shall duly inform the Trustee and the Unitholders of such event.

(c) If the Investment Manager is required, or reasonably believes that it is required, by the InvIT Regulations, or any other Applicable Law to provide information with respect to the Trust, the Unitholders, the Trust Assets (including any potential investments) and income therefrom, the Investment Manager shall not be liable to the Unitholders or any of them or to any other party as a result of such compliance or in connection with such compliance.

(d) The Investment Manager shall not be liable for doing or (as the case may be) omitting to do any act or thing which may result in a loss to a Unitholder (by reason of any depletion in the value of the Trust Assets or otherwise), except in the event that such loss is a result of fraud or gross negligence or wilful misconduct or a Breach of Standard of Conduct on the part of the Investment Manager as finally determined by a non-appealable order of a court of competent jurisdiction/arbitral award.

(e) The Investment Manager shall not be liable to the Trust or the Trustee or any Unitholder or any third party in respect of any investments made or investment decisions taken in respect of the Trust in the manner set out in the Investment Management Agreement including for the non-recoverability or non-realisability of any of the Trust Assets, other than for fraud, gross negligence or wilful misconduct on part of the Investment Manager as finally determined by a court of competent jurisdiction/arbitral award.

(f) If the Distributions are not made within the period prescribed in the InvIT Regulations, the Investment Manager shall be liable to pay interest to the Unitholders at the rate as may be prescribed in the InvIT Regulations until the Distribution is made and such interest shall not be recovered in the form of fees or any other form payable to the Investment Manager by the Trust.

(g) If the Investment Manager fails to allot, or list the Units, or refund the money within the time prescribed in the InvIT Regulations, as applicable, the Investment Manager shall be liable to pay interest to Unitholders at the rate as may be prescribed under the InvIT Regulations until such time as the allotment/listing/refund and such interest shall not be recovered in the form of fees or any other form payable to the Investment Manager by the Trust.

(h) The Investment Manager shall not be liable to any Unitholder for the authenticity of any signature or of any seal affixed to any endorsement on any certificate or to any transfer or form of application, endorsement or other document affecting the title to or transmission of Units/interests in the Trust or of any investments of the Trust or be in any way liable for any forged or unauthorised signature or seal affixed to such endorsement, transfer or other document or for acting upon or giving effect to any such forged or unauthorised signature or seal. The Investment Manager shall be bound to require that the signature of any Unitholder to any document required to be signed by such Unitholder, under or in connection with these presents shall be verified to its reasonable satisfaction.

(i) The Investment Manager shall not be liable to account to any Unitholder or otherwise for any payment made or suffered by the Investment Manager in good faith to any duly empowered revenue authority for taxes or other charges in any way arising out of or relating to any transactions of whatsoever nature under these presents, notwithstanding that any such payment ought not to be or need not have been made or suffered.

(j) The Investment Manager shall continue to be liable for all of its acts of omission and commission with respect to the activities of the InvIT, notwithstanding surrender of registration of the InvIT to SEBI.

The Project Manager – Maple Highway Project Management Private Limited

History and Certain Corporate Matters

The Project Manager was initially incorporated on January 28, 2010 as CLP Wind Farms (Theni – Project III) Private Limited, a private limited company, under the Companies Act, 1956, at Ahmedabad. Subsequently, the name of the Project Manager was changed from CLP Wind Farms (Theni – Project III) Private Limited to Maple Highway Project Management Private Limited and a fresh certificate of incorporation was issued on May 26, 2020 . The Project Manager's registered office is situated at 6th Floor, Chanakya Off Ashram Road, Ahmedabad 380 009 and having its address for correspondence at Wing A, Sahar, Office Unit No. 2, Ground floor, Village Marol, Andheri East, Mumbai - 400 099. The corporate identity number of the Project Manager is U74110GJ2010PTC059351.

Board of Directors of the Project Manager

Please see below the details in relation of the board of directors of the Project Manager:

Sr. No.	Name	Designation	DIN
1.	Deepak Malhotra	Director	08625060
2.	Nishchal Jain	Director	10198806

Background of the Project Manager

The Project Manager is approximately 100% owned by Maple Highways Pte Ltd. The Project Manager shall (directly or through the appointment of appropriate agents) undertake operations and management of the Trust assets, including making arrangements for the maintenance of such assets. The Project Manager has been appointed as per the terms of the Project Implementation and Management Agreement.

Neither the Project Manager nor any of the promoters or directors of the Project Manager (i) is debarred from accessing the securities market by SEBI; (ii) is a promoter, director or person in control of any other company or a sponsor, investment manager or trustee of any other infrastructure investment trust or an infrastructure investment trust which is debarred from accessing the capital market under any order or direction made by SEBI; or (iii) is a person who is categorized as a wilful defaulter by any bank or financial institution, as defined under the Companies Act, 2013, or consortium thereof, in accordance with the guidelines on wilful defaulters issued by the RBI.

Key terms of the Project Implementation and Management Agreements

A. ***SJEPL Project Implementation and Management Agreement***

The Project Manager has entered into a Project Implementation and Management Agreement dated June 8, 2022 with the Trustee (acting on behalf of the Trust), Investment Manager and SJEPL ("**SPV**"), effective from the date on which the Trust acquired SPV, to provide project implementation, execution and operations and maintenance services in relation to the Project SPVs ("**PIMA**"), the key terms of which are provided below:

<u>*Scope of Services*</u>

1. The Project Manager, shall, either directly or otherwise through sub-contractors, undertake the following works ("**Works**"), amongst others, in accordance with the PIMA:

(a) supervising the engineering, procurement and construction works in relation to the Project *(as defined in the PIMA)* (the "**Project**"), as required under the Project Agreements *(as defined in the PIMA)* (the "**Project Agreements)**";

(b) overseeing the operations and maintenance for the Project as stipulated under the Project Agreements, including tolling ("**O&M Works**"), which shall include handholding the SPV in procuring, operating and maintaining the toll management system at its toll plazas, including employing staff for toll collection, security arrangements at toll plazas and printing of toll tickets and supervising any O&M Works undertaken by the SPV;

(c) advise the Investment Manager about the adequacy of the team undertaking the O&M Works ("**O&M Team**") and competence of each member of the SPV O&M Team in fulfilling the O&M obligations specified under the Concession Agreement. The Project Manager shall promptly report any inadequacies to the Investment Manager and recommend such steps for the SPV to reconstitute the O&M Team, and the SPV shall carry out such reconstitution with the prior consent of the Investment Manager;

(d) promptly report any non-compliance or deficiencies by the O&M Team to the Investment Manager and the SPV in undertaking its activities in compliance with, and fulfilling the obligations of the SPV under, the Concession Agreement and the InvIT Regulations. In the event of any such non-compliance or deficiencies identified by the Project Manager, all requisite corrective actions shall be taken by the Project Manager with the prior consent of the Investment Manager. The SPV shall take all such actions as may be required to implement such corrective actions, including signing of all required documents as may be necessary;

(e) supervise the appointment and performance of any sub-contractors employed by the O&M Team or the SPV for fulfilling the O&M obligations. In the event of any deficiencies in the services of such agents, consultants or contractors, the Project Manager shall take all actions as may be required to remedy such deficiencies, with the prior consent of the Investment Manager, including termination of services / appointment of other agents / consultants / contractors either directly (with any cost of such termination or appointment, as the case may be, to be reimbursed by the SPV) or through the SPV;

(f) undertake periodic inspection visits of the Project and promptly report to the Trustee and the Investment Manager any deficiency, non-compliance or failure in fulfilling the O&M Obligations, or any breach of the applicable law in performance of its duties by the SPV O&M Team;

(g) coordinating any and all activities required to be performed by the SPV pursuant to the Project Agreement or pursuant to any communication from concessioning authorities or any other governmental authority, including in relation to shifting of utilities, associated roads, felling of trees and related works with respect to the Project site or any work to be undertaken pursuant to a change of scope order based on a determination of change of scope by concessioning authorities under the concession agreement;

(h) provide business support services for the following activities to be undertaken by the SPV :administrative services such as software usage support services, information technology support services, support services for legal matters, support services for accounting and tax matters, support services for general administration and investor relations, and support services and payroll and related services, as may be required;

(i) providing assistance wherever sought by the SPV or considered expedient by the Project Manager, in relation to the following:

(i). liaisoning with governmental authorities, in connection with the Project;
(ii). sending appropriate responses to notices from the governmental authorities and coordinating with them to obtain appropriate approvals, if any, for the Project;
(iii). liasioning with the independent engineer in connection with the Project; and
(iv). submitting appropriate reports on interactions with governmental authorities in relation to the Project.

(j) promptly report to the Trustee and the Investment Manager any deficiency in the services of the O&M Team, along with an assessment report including, amongst others, the details of the deficiency in services, suggestions on the remedial measures, a fair estimate of financial impact on the SPV (to the extent quantifiable), and shall undertake all steps to remedy such deficiency as instructed by the Investment Manager, provided that all costs incurred in relation thereto shall be borne by the SPV; and

(k) any activities incidental to the above or as required to be performed by a project manager pursuant to the requirements under the InvIT Regulations. The Project Manager shall be deemed to be the "project manager" of the Trust for purposes of the InvIT Regulations.

2. The Trustee and the Investment Manager hereby delegate their respective powers to the Project Manager in respect of and in connection with the services required to be provided by the Project Manager under the PIMA.

3. The Project Manager has read all Project Agreements and agrees to adhere to them and assume obligations therein. The Project Manager acknowledges and confirms that it has reviewed and covenants to ensure compliance with the Project Agreements (as amended from time to time), including the terms and conditions, representations and warranties of the SPV, as applicable, schedules and specifications, scope of work and site conditions.

4. The Project Manager shall employ/appoint adequate number of employees (directly) or agents with sufficient and appropriate experience to ensure provision of the Works as per good industry practice.

5. The Project Manager may engage duly qualified third-party service providers including but not limited to architects, surveyors and technical consultants for provision of the Works (such service providers, the "**Sub-Contractors**"). The Sub-Contractors may provide the Works to the SPV directly as well. However, the Project Manager shall be responsible for ensuring completion of the Works at all times.

6. The Project Manager assumes full responsibility to ensure that the SPV is in full compliance with the Project Agreements and ensures that no breach or violation of the Project Agreements, the InvIT Regulations, or other applicable law occurs which relates to the Works.

Obligations of the Project Manager

1. The Project Manager agrees to perform the Works, either directly or through Sub-Contractors, as stated in the PIMA with due skill, care and diligence as expected from an experienced and professional project manager in India and in accordance with the Project Agreements, directions of the Investment Manager and Applicable Laws.

2. The Project Manager shall discharge all obligations in respect of timely completion of the Works, wherever applicable, implementation, operation, maintenance and management of such Project in terms of Project Agreements.

3. The Project Manager shall fulfil and perform its roles, responsibilities and obligations as the 'project manager' as defined under the InvIT Regulations in respect of the SPV.

4. The Project Manager may from time to time designate a person as the principal contact for the Board, the Trustee and the Investment Manager in relation to the Project and the Works, and communicate the same to the Trust, the Trustee and the Investment Manager.

5. The Project Manager shall inform the Investment Manager about any transactions between the Project Manager and its associates which may involve a conflict of interest and where there is a conflict of interest it shall obtain a confirmation from a practising chartered accountant or the valuer, as applicable, that such transaction is on an arm's length basis.

6. The Project Manager shall ensure that it provides the Project Manager compliance certificate to the Investment Manager and the Trustee on a quarterly basis or such other intervals as required in accordance with the InvIT Regulations.

7. If the SPV are required to appoint any consultants or agents under the Project Agreements, then the Project Manager shall ensure that it appoints such consultants or agents at the cost of the SPV and shall remain liable for their conduct.

8. The Project Manager shall promptly notify the Investment Manager regarding any deficiency in the services of the SPV O&M Team along with an assessment report covering, amongst others, the details of deficiency in service, remedial measures and financial impact on the SPV.

9. Other than on account of any non-compliance or deficiency, the Project Manager shall promptly notify the Investment Manager regarding any proposed change in the SPV O&M Team along with an assessment report covering, amongst other things, rationale for the change and its assessment of the same and professional competence of the persons proposed to be appointed to the SPV O&M Team. The Project Manager shall not grant consent for any change in the SPV O&M Team without prior consultation with, and approval of, the Investment Manager.

10. The Project Manager shall at all times perform the services, strictly in accordance with the PIMA, and in carrying out the services under the terms of the PIMA and the InvIT Regulations, the Project Manager shall (a) at all times act in good faith; and (b) provide access to the Trustee (acting on behalf of the InvIT) and the Investment Manager to all data and information pertaining to the SPV; and (c) not cause to be done or taken any act in violation of, or infringing, the Trust Documents (to the extent applicable to the SPV) or applicable law.

Duties of the Project Manager

1. The Project Manager shall: (a) undertake operations and management of the Project, including through supervision of the O&M Team; and (b) be liable for making arrangements for fulfilment of the services either directly or through the appointment and supervision of agents, if any, as may be necessary for discharge of its duties under the terms of the PIMA and under applicable law.

2. The Project Manager shall, either directly or through appropriate agents, oversee the progress of development, approval status and other aspects of the Project, or progress of development of any expansion of the Project in accordance with the concession agreement, or, progress of development of any additional works or assets proposed to be executed by the SPV (collectively, the "**SPV Under-construction Projects**"), until their respective completion in accordance with the concession agreement, including the supervision of the agents appointed for such purpose. The Project Manager shall discharge its obligations in respect of achieving timely completion, implementation and development of the SPV Under-construction Projects in accordance with the concession agreement, the PIMA and applicable law.

3. The Project Manager shall provide compliance certificate(s), as may be specified to the Investment Manager and the Trustee in accordance with applicable law, in the form prescribed by SEBI, if any.

4. The Project Manager shall promptly notify the Investment Manager regarding any deficiency in the services of the O&M Team along with an assessment report covering, amongst others, the details of deficiency in service, remedial measures and financial impact on the SPV. Any such deficiency shall be remedied.

5. Other than on account of any non-compliance or deficiency, the Project Manager shall promptly notify the Investment Manager regarding any proposed change in the O&M Team along with an assessment report covering, amongst other things, rationale for the change and its assessment of the same and professional competence of the persons proposed to be appointed to the O&M Team. The Project Manager shall not grant consent for any change in the O&M Team without prior consultation with, and approval of, the Investment Manager.

6. The Project Manager shall provide the Investment Manager details of transactions carried out between itself and its associates and disclose any conflict of interest in such cases to the Investment Manager, in accordance with the InvIT Regulations and applicable law.

7. The Project Manager shall intimate the Trustee prior to any change in control of the Project Manager to enable the Trustee and the SPV, to seek approval from the relevant authority in accordance with the concession agreement or other project documents pertaining to the SPV, if applicable.

8. The Project Manager shall provide to the Trustee and Investment Manager or to such other person as the Trustee and/or the Investment Manager may direct, all information that may be necessary for each of them to maintain the records of the InvIT and as may be required for making submissions to SEBI or other governmental authority, including with respect to relevant approvals, consents and other documents required in relation to the Project and the reporting requirements under the InvIT Regulations, in a proper and timely manner, and in the format prescribed (if any), as required by the Trustee and /or Investment Manager.

9. The Project Manager shall appoint one of its qualified employees acceptable to the Investment Manager and the SPV with adequate and appropriate experience as a principal contact for the board of directors of SPV, the Trustee and the Investment Manager in relation to the Project and the Services. The Project Manager shall have full authority, to receive directions and instructions from the Investment Manager and to take action in relation to and ensure compliance with such directions and instructions and report back to the Trustee and the Investment Manager.

10. The Project Manager shall promptly inform the parties in writing of any act, occurrence or event, which the Project Manager believes is reasonably likely to affect the financial viability, quality or operation of the Project.

11. The Project Manager shall endeavour to ensure relevant provisions in relation to defects liabilities are included in contracts with such third parties in line with industry practices and standards. The Project Manager shall not be liable to make good such defects as well as any damage directly caused by any such defect.

12. The duties of Project Manager shall also include the following:

(a) exercise diligence and vigilance in carrying out its duties and protecting the commercial interests of the SPV;
(b) comply with the InvIT Regulations and take all actions as may be required to be taken in accordance with the InvIT Regulations as applicable to the Project Manager;
(c) keeping the Investment Manager informed on all matters which have or may have a material bearing on the operations of the SPV;
(d) where required, liaising with governmental authorities in respect of its obligations under the PIMA as applicable to the Project Manager;
(e) take all reasonable steps to mitigate the risks which may be encountered by the InvIT in respect of the SPV;
(f) keep proper records for actions taken in respect of the SPV; and
(g) complying with the instructions of the Investment Manager and the Trustee, in accordance with the InvIT Regulations.

13. The Parties may, from time to time, agree to provisions for additional services to be rendered by the Project Manager. If, in the assessment of the Project Manager, additional services are required for the purposes of carrying out its duties and obligations under the PIMA and applicable law, the Project Manager shall notify the parties in writing of such requirement including the fee payable and terms and conditions for such additional services, and obtain prior written approval of the parties in this regard.

14. Notwithstanding anything to the contrary contained in the PIMA, nothing contained in the PIMA shall be construed to limit or restrict the performance of any duties or obligations of the Project Manager, Investment Manager or the Trustee contained in the concession agreement, InvIT Regulations and applicable law.

15. During the term of the PIMA, in the event the representations provided by the Project Manager under the PIMA, become untrue or incorrect or incomplete in any respect, the Project Manager shall, within a reasonable time, inform the Trustee and Investment Manager of such event.

<u>*Term, Suspension and Termination*</u>

1. The PIMA shall terminate upon dissolution of the Trust, unless otherwise terminated in accordance with this clause.

2. The Trustee may terminate the PIMA by giving 30 (thirty) days written notice to the Project Manager, in the event that:

(a) the Project Manager goes into liquidation (except a voluntary liquidation for the purpose of reconstruction or amalgamation) or if a receiver is appointed to all or a substantial portion of the assets of the Project Manager or for any other reason it ceases to be entitled to provide and perform the services herein provided for in accordance with applicable law; or

(b) The Project Manager may be removed at any time upon a final determination by a court of competent jurisdiction that the Project Manager has committed, either: (i) wilful misconduct or (ii) fraud; (iii) material breach of the trust documents; or (iv) a criminal offence. Removal of the Project Manager shall be subject to the approval of 60% of the Unitholders, present and voting.

3. Actions pursuant to Termination:

(a) Upon removal of the Project Manager, the Trustee shall appoint the new project manager within three months from the date of termination of the earlier project implementation agreement/ project management agreement from the date of termination of the PIMA.

(b) Until such appointment is made, the Project Manager shall continue to act as the project manager, at the discretion of the Trustee. The Project Manager shall be paid the management fees (as specified in the PIMA) and all other amounts as if the agreement is not terminated for such period.

(c) Upon removal or replacement of the Project Manager, the Project Manager shall transfer custody of the Project to the Trustee and give the Trustee all correspondence, documents and records relating to the Project which the Project Manager has in its possession.

(d) The Trustee shall ensure that the new project manager shall stand substituted as a party in all the documents (to the extent applicable) to which the Project Manager was a party.

(e) The earlier project manager shall continue to be liable for all its acts of omissions and commissions for the period during which it served as the project manager, notwithstanding such termination.

4. In the event of a change in control of the Project Manager, the Trustee (on behalf of the InvIT), in consultation with the Investment Manager, shall ensure that it has obtained the written consent of the concessioning authority (if applicable), prior to such change in control.

B. *NCREPE Project Implementation and Management Agreement*

The Project Manager has entered into a Project Implementation and Management Agreement dated October 13, 2022 with the Trustee (acting on behalf of the Trust), Investment Manager and NCREPE ("**SPV**"), effective from the date on which the Trust acquired SPV, to provide project implementation, execution and operations and maintenance services in relation to the Project SPVs ("**PIMA**")

The key terms of the NCREPE Project Implementation and Management Agreement are summarized below:

<u>*Scope of Services*</u>

1. The Project Manager, shall, either directly or otherwise through sub-contractors, undertake the following works ("**Works**"), amongst others, in accordance with the PIMA:

(a) supervising the engineering, procurement and construction (if any) works in relation to the Project *(as defined in the PIMA)* (the "**Project**"), as required under the Project Agreements *(as defined in the PIMA)* (the "**Project Agreements)**";

(b) overseeing the operations and maintenance for the Project as stipulated under the Project Agreements, including tolling ("**O&M Works**"), which shall include handholding the SPV in procuring, operating and maintaining the toll management system at its toll plazas, including employing staff for toll collection, security arrangements at toll plazas and printing of toll tickets and supervising any O&M Works undertaken by the SPV;

(c) advise the Investment Manager about the adequacy of the team undertaking the O&M Works ("**O&M Team**") and competence of each member of the O&M Team in fulfilling the O&M obligations specified under the Concession Agreement. The Project Manager shall promptly report any inadequacies to the Investment Manager and recommend such steps for the SPV to reconstitute the O&M Team, and the SPV shall carry out such reconstitution with the prior consent of the Investment Manager;

(d) promptly report any non-compliance or deficiencies by the O&M Team to the Investment Manager and the SPV in undertaking its activities in compliance with, and fulfilling the obligations of the SPV under, the Concession Agreement and the InvIT Regulations. In the event of any such non-compliance or deficiencies identified by the Project Manager, all requisite corrective actions shall be taken by the Project Manager with the prior consent of the Investment Manager. The SPV shall take all such actions as may be required to implement such corrective actions, including signing of all required documents as may be necessary;

(e) supervise the appointment and performance of any sub-contractors employed by the O&M Team or the SPV for fulfilling the O&M obligations. In the event of any deficiencies in the services of such agents, consultants or contractors, the Project Manager shall take all actions as may be required to remedy such deficiencies, with the prior consent of the Investment Manager, including termination of services / appointment of other agents / consultants / contractors either directly (with any cost of such termination or appointment, as the case may be, to be reimbursed by the SPV) or through the SPV;

(f) undertake periodic inspection visits of the Project and promptly report to the Trustee and the Investment Manager any deficiency, non-compliance or failure in fulfilling the O&M Obligations, or any breach of the applicable law in performance of its duties by the O&M Team;

(g) coordinating any and all activities required to be performed by the SPV pursuant to the Project Agreement or pursuant to any communication from concessioning authorities or any other governmental authority, including in relation to shifting of utilities, associated roads, felling of trees and related works with respect to the Project site or any work to be undertaken pursuant to a change of scope order based on a determination of change of scope by concessioning authorities under the concession agreement;

(h) provide business support services for the following activities to be undertaken by the SPV :administrative services such as software usage support services, information technology support services, support services for legal matters, support services for accounting and tax matters, support services for general administration and investor relations, and support services and payroll and related services, as may be required;

(i) providing assistance wherever sought by the SPV or considered expedient by the Project Manager, in relation to the following:

   (v). liaisoning with governmental authorities, in connection with the Project;
   (vi). sending appropriate responses to notices from the governmental authorities and coordinating with them to obtain appropriate approvals, if any, for the Project;
   (vii). liasioning with the independent engineer in connection with the Project; and
   (viii). submitting appropriate reports on interactions with governmental authorities in relation to the Project.

(j) promptly report to the Trustee and the Investment Manager any deficiency in the services of the O&M Team, along with an assessment report including, amongst others, the details of the deficiency in services, suggestions on the remedial measures, a fair estimate of financial impact on the SPV (to the extent quantifiable), and shall undertake all steps to remedy such deficiency as instructed by the Investment Manager, provided that all costs incurred in relation thereto shall be borne by the SPV; and

(k) any activities incidental to the above or as required to be performed by a project manager pursuant to the requirements under the InvIT Regulations. The Project Manager shall be deemed to be the "project manager" of the Trust for purposes of the InvIT Regulations.

2. The Trustee and the Investment Manager hereby delegate their respective powers to the Project Manager in respect of and in connection with the services required to be provided by the Project Manager under the PIMA.

3. The Project Manager has read all Project Agreements and agrees to adhere to them and assume obligations therein. The Project Manager acknowledges and confirms that it has reviewed and covenants to ensure compliance with the Project Agreements (as amended from time to time), including the terms and conditions, representations and warranties of the SPV, as applicable, schedules and specifications, scope of work and site conditions.

4. The Project Manager shall employ/appoint adequate number of employees (directly) or agents with sufficient and appropriate experience to ensure provision of the Works as per good industry practice.

5. The Project Manager may engage duly qualified third-party service providers including but not limited to architects, surveyors and technical consultants for provision of the Works (such service providers, the "**Sub-Contractors**"). The Sub-Contractors may provide the Works to the SPV directly as well. However, the Project Manager shall be responsible for ensuring completion of the Works at all times.

6. The Project Manager assumes full responsibility to ensure that the SPV is in full compliance with the Project Agreements and ensures that no breach or violation of the Project Agreements, the InvIT Regulations, or other applicable law occurs which relates to the Works.

Obligations of the Project Manager

1. The Project Manager agrees to perform the Works, either directly or through Sub-Contractors, as stated in the PIMA with due skill, care and diligence as expected from an experienced and professional project manager in India and in accordance with the Project Agreements, directions of the Investment Manager and Applicable Laws.

2. The Project Manager shall discharge all obligations in respect of timely completion of the Works, wherever applicable, implementation, operation, maintenance and management of such Project in terms of Project Agreements.

3. The Project Manager shall fulfil and perform its roles, responsibilities and obligations as the 'project manager' as defined under the InvIT Regulations in respect of the SPV.

4. The Project Manager may from time to time designate a person as the principal contact for the Board, the Trustee and the Investment Manager in relation to the Project and the Works.

5. The Project Manager shall inform the Investment Manager about any transactions between the Project Manager and its associates which may involve a conflict of interest and where there is a conflict of interest it shall obtain a confirmation from a practising chartered accountant or the valuer, as applicable, that such transaction is on an arms length basis.

6. The Project Manager shall ensure that it provides the Project Manager compliance certificate to the Investment Manager and the Trustee on a quarterly basis or such other intervals as required in accordance with the InvIT Regulations.

7. If the SPV is required to appoint any consultants or agents under the Project Agreements, then the Project Manager shall ensure that the SPV appoints such consultants or agents at the cost of the SPV and such consultant and agent shall remain liable for their conduct.

8. The Project Manager shall promptly notify the Investment Manager regarding any deficiency in the services of the O&M Team along with an assessment report covering, amongst others, the details of deficiency in service, remedial measures and financial impact on the SPV.

9. Other than on account of any non-compliance or deficiency, the Project Manager shall promptly notify the Investment Manager regarding any proposed change in the O&M Team along with an

assessment report covering, amongst other things, rationale for the change and its assessment of the same and professional competence of the persons proposed to be appointed to the O&M Team. The Project Manager shall not grant consent for any change in the O&M Team without prior consultation with, and approval of, the Investment Manager.

10. The Project Manager shall at all times perform the works, strictly in accordance with the PIMA, and in carrying out the works under the terms of the PIMA and the InvIT Regulations, the Project Manager shall (a) at all times act in good faith; and (b) provide access to the Trustee (acting on behalf of the InvIT) and the Investment Manager to all data and information pertaining to the SPV; and (c) not cause to be done or taken any act in violation of, or infringing, the Trust Documents (to the extent applicable to the SPV) or applicable law.

Duties of the Project Manager

1. The Project Manager shall: (a) undertake operations and management of the Project, including through supervision of the O&M Team; and (b) be liable for making arrangements for fulfilment of the services either directly or through the appointment and supervision of agents, if any, as may be necessary for discharge of its duties under the terms of the PIMA and under applicable law.

2. The Project Manager shall, either directly or through appropriate agents, oversee the progress of development, approval status and other aspects of the Project, or progress of development of any expansion of the Project in accordance with the concession agreement, or, progress of development of any additional works of the Project, until its completion in accordance with the concession agreement, including the supervision of the agents appointed for such purpose. The Project Manager shall discharge its obligations in respect of achieving timely completion, implementation and development of the Project in accordance with the concession agreement, the PIMA and applicable law.

3. The Project Manager shall provide compliance certificate(s), as may be specified to the Investment Manager and the Trustee in accordance with applicable law, in the form prescribed by SEBI, if any.

4. The Project Manager shall promptly notify the Investment Manager regarding any deficiency in the services of the O&M Team along with an assessment report covering, amongst others, the details of deficiency in service, remedial measures and financial impact on the SPV. Any such deficiency shall be remedied.

5. Other than on account of any non-compliance or deficiency, the Project Manager shall promptly notify the Investment Manager regarding any proposed change in the O&M Team along with an assessment report covering, amongst other things, rationale for the change and its assessment of the same and professional competence of the persons proposed to be appointed to the O&M Team. The Project Manager shall not grant consent for any change in the O&M Team without prior consultation with, and approval of, the Investment Manager.

6. The Project Manager shall provide the Investment Manager details of transactions carried out between itself and its associates and disclose any conflict of interest in such cases to the Investment Manager, in accordance with the InvIT Regulations and applicable law.

7. The Project Manager shall intimate the Trustee prior to any change in control of the Project Manager to enable the Trustee and the SPV, to seek approval from the relevant authority in accordance with the concession agreement or other project documents pertaining to the SPV, if applicable.

8. The Project Manager shall provide to the Trustee and Investment Manager or to such other person as the Trustee and/or the Investment Manager may direct, all information that may be necessary for each of them to maintain the records of the InvIT and as may be required for making submissions to SEBI or other governmental authority, including with respect to relevant approvals, consents and other documents required in relation to the Project and the reporting requirements under the InvIT Regulations, in a proper and timely manner, and in the format prescribed (if any), as required by the Trustee and /or Investment Manager.

9. The Project Manager shall appoint one of its qualified employees acceptable to the Investment Manager and the SPV with adequate and appropriate experience as a principal contact for the board of directors of SPV, the Trustee and the Investment Manager in relation to the Project and the works.

The Project Manager shall have full authority, to receive directions and instructions from the Investment Manager and to take action in relation to and ensure compliance with such directions and instructions and report back to the Trustee and the Investment Manager.

10. The Project Manager shall promptly inform the parties in writing of any act, occurrence or event, which the Project Manager believes is reasonably likely to affect the financial viability, quality or operation of the Project.

11. The Project Manager shall endeavour to ensure relevant provisions in relation to defects liabilities are included in contracts with such third parties in line with industry practices and standards. The Project Manager shall not be liable to make good such defects as well as any damage directly caused by any such defect.

12. The duties of Project Manager shall also include the following:

(a) exercise diligence and vigilance in carrying out its duties and protecting the commercial interests of the SPV;
(b) comply with the InvIT Regulations and take all actions as may be required to be taken in accordance with the InvIT Regulations as applicable to the Project Manager;
(c) keeping the Investment Manager informed on all matters which have or may have a material bearing on the operations of the SPV;
(d) where required, liaising with governmental authorities in respect of its obligations under the PIMA as applicable to the Project Manager;
(e) take all reasonable steps to mitigate the risks which may be encountered by the InvIT in respect of the SPV;
(f) keep proper records for actions taken in respect of the SPV; and
(g) complying with the instructions of the Investment Manager and the Trustee, in accordance with the InvIT Regulations.

13. The Parties may, from time to time, agree to provisions for additional services to be rendered by the Project Manager. If, in the assessment of the Project Manager, additional services are required for the purposes of carrying out its duties and obligations under the PIMA and applicable law, the Project Manager shall notify the parties in writing of such requirement including the fee payable and terms and conditions for such additional services, and obtain prior written approval of the parties in this regard.

14. Notwithstanding anything to the contrary contained in the PIMA, nothing contained in the PIMA shall be construed to limit or restrict the performance of any duties or obligations of the Project Manager, Investment Manager or the Trustee contained in the concession agreement, InvIT Regulations and applicable law.

15. During the term of the PIMA, in the event the representations provided by the Project Manager under the PIMA, become untrue or incorrect or incomplete in any respect, the Project Manager shall, within a reasonable time, inform the Trustee and Investment Manager of such event.

Term, Suspension and Termination

1. The PIMA shall terminate upon dissolution of the Trust, unless otherwise terminated in accordance with this clause.

2. The Trustee may terminate the PIMA by giving 30 (thirty) days written notice to the Project Manager, in the event that:

(a) the Project Manager goes into liquidation (except a voluntary liquidation for the purpose of reconstruction or amalgamation) or if a receiver is appointed to all or a substantial portion of the assets of the Project Manager or for any other reason it ceases to be entitled to provide and perform the services herein provided for in accordance with applicable law; or

(b) The Project Manager may be removed at any time upon a final determination by a court of competent jurisdiction that the Project Manager has committed, either: (i) wilful misconduct or (ii) fraud; (iii) material breach of the trust documents; or (iv) a criminal offence. Removal of the Project Manager shall be subject to the approval of 60% of the Unitholders, present and voting.

3. Actions pursuant to Termination:

(f) Upon removal of the Project Manager, the Trustee shall appoint the new project manager within three months from the date of termination of the earlier project implementation agreement/ project management agreement from the date of termination of the PIMA.

(g) Until such appointment is made, the Project Manager shall continue to act as the project manager, at the discretion of the Trustee. The Project Manager shall be paid the management fees (as specified in the PIMA) and all other amounts as if the agreement is not terminated for such period.

(h) Upon removal or replacement of the Project Manager, the Project Manager shall transfer custody of the Project to the Trustee and give the Trustee all correspondence, documents and records relating to the Project which the Project Manager has in its possession.

(i) The Trustee shall ensure that the new project manager shall stand substituted as a party in all the documents (to the extent applicable) to which the Project Manager was a party.

(j) The earlier project manager shall continue to be liable for all its acts of omissions and commissions for the period during which it served as the project manager, notwithstanding such termination.

In the event of a change in control of the Project Manager, the Trustee (on behalf of the InvIT), in consultation with the Investment Manager, shall ensure that it has obtained the written consent of the concessioning authority (if applicable), prior to such change in contro

OTHER PARTIES INVOLVED IN THE TRUST

The Auditors

Background and terms of appointment

The Investment Manager, in consultation with the Trustee, has appointed. S R Batliboi & Co. LLP (Firm Registration No. 301003E/E300005, as the auditors of the Trust for a period of five years from the date of appointment, i.e., January 11, 2021 till the conclusion of the annual general meeting of Unitholders of the Trust for the financial year 2024 - 2025, subject to approval of the Unitholders each year. The Auditors have audited the Audited Financial Statements and their report in relation to such Audited Financial Statements have been included in this Information Memorandum.

Rights and Responsibilities of the Auditors

The rights and responsibilities of the Auditors will be in accordance with the InvIT Regulations. Presently, in terms of the InvIT Regulations:

(i). the Auditors shall conduct audit of the accounts of the Trust and draft the audit report based on the accounts examined after taking into account the relevant accounting and auditing standards, as may be specified by SEBI;

(ii). the Auditors shall, to the best of its information and knowledge, ensure that the accounts and financial statements give a true and fair view of the state of the affairs of the Trust, including profit or loss and cash flow for the period and such other matters as may be specified;

(iii). the Auditors shall have a right of access at all times to the books of accounts and vouchers pertaining to activities of the Trust; and

(iv). the Auditors shall have a right to require such information and explanation pertaining to activities of the Trust as it may consider necessary for the performance of their duties as auditors from the employees of Trust or any Holding Company or Parties to the Trust or the Project SPVs, any Holding Company or SPV or any other person in possession of such information.

The Valuer

Background and terms of appointment

The Investment Manager, in consultation with the Trustee, has appointed the Valuer for the purpose of undertaking valuation of the Trust, as the valuer of the Trust. In accordance with the InvIT Regulations, the Valuer has undertaken a full valuation of the Trust, and their report dated May 31, 2023 in relation to such valuation of Trust, SJEPL and NCREPE as on March 31, 2023, has been included in this Information Memorandum.

Functions of the Valuer

The functions, duties and responsibilities of the Valuer will be in accordance with the InvIT Regulations. Presently, in terms of the InvIT Regulations, the Valuer is required to comply with the following conditions at all times:

(i). the Valuer shall ensure that the valuation of the Trust assets is impartial, true and fair and is in accordance with Regulation 21 of the InvIT Regulations;

(ii). the Valuer shall ensure that adequate and robust internal controls to ensure the integrity of its valuation reports;

(iii). the Valuer shall ensure that it has sufficient key personnel with adequate experience and qualification to perform valuations;

(iv). the Valuer shall ensure that it has sufficient financial resources to enable it to conduct its business effectively and meet its liabilities;

(v). the Valuer and any of its employees involved in valuing of the assets of the Trust, shall not, (i) invest in Units or in the assets being valued; and (ii) sell the assets or Units held prior to being appointed as the valuer, until the time the Valuer is designated as the valuer of the Trust and not less than six months after ceasing to be valuer of the Trust;

(vi). the Valuer shall conduct valuation of the Trust's assets with transparency and fairness and shall render, at all times, high standards of service, exercise due diligence, ensure proper care and exercise independent professional judgment;

(vii). the Valuer shall act with independence, objectivity and impartiality in performing the valuation;

(viii). the Valuer shall discharge its duties towards the Trust in an efficient and competent manner, utilizing its knowledge, skills and experience in best possible way to complete given assignment;

(ix). the Valuer shall not accept remuneration, in any form, for performing a valuation of the Trust's assets from any person other than the Trust or its authorized representative;

(x). the Valuer shall before accepting any assignment from any related party of the Trust, disclose to the Trust any direct or indirect consideration which the valuer may have in respect of such assignment;

(xi). the Valuer shall disclose to the Trust any pending business transactions, contracts under negotiation and other arrangements with the investment manager or any other party whom the Trust is contracting with and any other factors that may interfere with the valuer's ability to give an independent and professional valuation of the assets;

(xii). the Valuer shall not make false, misleading or exaggerated claims in order to secure assignments;

(xiii). the Valuer shall not provide misleading valuation, either by providing incorrect information or by withholding relevant information;

(xiv). the Valuer shall not accept an assignment which interferes with its ability to do fair valuation; and

(xv). the Valuer shall, prior to performing a valuation, acquaint itself with all laws or regulations relevant to such valuation.

Policy on Appointment of Auditor and Valuer

The Investment Manager has adopted a policy on the appointment of auditor and valuer of the Trust, details of which are provided below:

1. Appointment of the auditor of the Trust

(i). The Investment Manager in consultation with the trustee of the Trust shall appoint the auditor(s) on behalf of the Trust in a timely manner and in accordance with the InvIT Regulations, applicable laws and the trust documents.

(ii). In this regard, the Investment Manager shall enter into any document or agreement with the auditor, as may be required from time to time.

(iii). For the appointment of the auditor, the Investment Manager shall:

(a) appoint any one of the Big 6 Firms *(as specified in the policy)* as the auditor, who shall hold office from the date of conclusion of the annual meeting in which the auditor is appointed till the date of conclusion of the sixth annual meeting of the unitholders in accordance with the procedure for selection of auditors in accordance with the InvIT Regulations.

(b) determine the fees of the auditor, in accordance with the InvIT Regulations. Further, the Investment Manager shall ensure that the appointment of the auditor and the fees payable to the auditor is approved by the unitholders of the Trust in accordance with the InvIT Regulations.

(c) Ensure that the auditor shall be one who has subjected itself to the peer review process of the ICAI and who holds a valid certificate issued by the peer review board of ICAI.

(d) Appoint an auditor for a period of not more than 5 (five) consecutive years, provided that the auditor may, subject to approval of Unitholders in accordance with the InvIT Regulations, be reappointed for a period of another five consecutive years, who shall hold office from the date of conclusion of the annual meeting in which the Auditor has been appointed till the date of conclusion of the sixth annual meeting of the Unitholders in accordance with the annual meeting procedure for selection of auditors in accordance with the lnvIT Regulations.

(e) The Investment Manager shall not appoint or re-appoint:

i. an individual as the auditor for more than one term of five consecutive years, provided that such individual, upon completion of one term of five consecutive years, shall not be eligible for re-appointment as the auditor in the Trust for a period of five years from the date of completion of the term; and

ii. an audit firm as the auditor for more than two terms of five consecutive years, provided that, upon completion of two terms of five consecutive years, such audit firm shall not be eligible for re-appointment as the auditor in the Trust for a period of five years from the date of completion of its term.

(iv). In respect of the projects, the auditors of the projects shall be appointed by the Board of the projects in consultation with the Investment Manager from the list of auditors empanelled with the relevant concessioning authority, if any, from time to time, in accordance with applicable laws.

(v). Any change in the auditor of the Trust, including any removal or replacement of such auditor, shall require the approval of the Unitholders, in accordance with the Investment Management Agreement and the InvIT Regulations. The Investment Manager, in consultation with the Trustee, shall have the right to take all necessary steps to remove the auditor who ceases to comply with the eligibility criteria prescribed under the InvIT Regulations and applicable law. Further, the Investment Manager shall ensure that if the removal of the Auditor and appointment of another auditor to the Trust is taken up at a meeting of the Unitholders at the request of the Unitholders, such removal of the auditor and appointment of another auditor shall be approved by the Unitholders in accordance with the InvIT Regulations.

(vi). The auditor may be removed or replaced in accordance with the applicable law (including the InvIT Regulations) and trust documents.

(vii). In terms of the policy, the auditor shall comply with the conditions prescribed under the InvIT Regulations, including the following conditions at all times:

(a) the accounts of the Trust shall be subjected to audit by the Auditors and shall be accompanied by a report of the auditors in such manner and at such intervals as may be prescribed under the InvIT Regulations and applicable law;

(b) the auditor shall undertake a limited review of the audit of all the entities or companies whose accounts are to be consolidated with the accounts of the Trust as per the relevant auditing standards under applicable law and in accordance with the InvIT Regulations;

(c) the auditor shall, to the best of his information and knowledge, ensure that the accounts and financial statements give a true and fair view of the state of the affairs of the Trust, including profit or loss and cash flow for the period and such other matters as may be specified by SEBI;

(d) the auditor shall have a right of access at all times to the books of accounts and vouchers pertaining to activities of the Trust; and

(e) the auditor shall have a right to require such information and explanation pertaining to activities of the Trust as he may consider necessary for the performance of his duties as auditor from the employees of the Trust or parties to the Trust or the Projects or any other person in possession of such information.

2. Appointment of the valuer of the Trust

(i). The Investment Manager, in consultation with Trustee, shall appoint the valuer of the Trust ("**Valuer**"), in a timely manner and shall determine the remuneration of such Valuer, in accordance with the InvIT Regulations. A 'Valuer' shall have the meaning prescribed under the InvIT Regulations.

(ii). The remuneration of the Valuer shall not be linked to or based on the value of the assets being valued.

(iii). The Valuer shall not be an associate of the Sponsor or the Investment Manager or the Trustee.

(iv). The Valuer shall have not less than five years of experience in valuation of infrastructure assets.

(v). A Valuer shall not undertake valuation of the same project for more than four years consecutively, provided that the Valuer may be reappointed after a period of not less than two years from the date it ceases to be the Valuer of the Trust.

(vi). The Valuer shall not undertake valuation of any assets in which it has either been involved with the acquisition or disposal within the last twelve months other than such cases where the Valuer was engaged by the Trust for such acquisition or disposal.

(vii). The Investment Manager shall ensure that the valuation of the InvIT assets is done by the valuer in accordance with and in the frequency stipulated in the InvIT Regulations. The Investment Manager shall ensure that the valuation reports received by it shall be submitted, and the computation and declaration of net asset value, as defined in the InvIT Regulations, of the InvIT based on the valuation done by the Valuer shall be disclosed, to the stock exchange(s) within the timelines prescribed under the InvIT Regulations.

(viii). The Valuer shall comply with the following conditions at all times:

(a) the Valuer shall ensure that the valuation of the Trust assets is impartial, true and fair and is in accordance with Regulation 21 of the InvIT Regulations;
(b) the Valuer shall ensure adequate and robust internal controls to ensure the integrity of its valuation reports, and shall maintain strict confidentiality in relation to all non-public information that comes into its possession by virtue of its engagement;
(c) the Valuer shall ensure that it has sufficient key personnel with adequate experience and qualification to perform valuations;
(d) the Valuer shall ensure that it has sufficient financial resources to enable it to conduct its business effectively and meet its liabilities;
(e) the Valuer and any of its employees involved in valuing of the assets of the Trust, shall not:
- invest in units of the Trust or in the assets being valued; and
- sell the assets or units of the Trust held prior to being appointed as the Valuer,

until the time such person is designated as Valuer of the Trust and not less than six months after ceasing to be Valuer of the Trust;
(f) the Valuer shall conduct valuation of the Trust assets with transparency and fairness and shall render, at all times, high standards of service, exercise due diligence, ensure proper care and exercise independent professional judgment;
(g) the Valuer shall act with independence, objectivity and impartiality in performing the valuation;
(h) the Valuer shall discharge its duties towards the Trust in an efficient and competent manner, utilizing its knowledge, skills and experience in best possible way to complete given assignment;
(i) the Valuer shall not accept remuneration, in any form, for performing a valuation of the Trust assets from any person other than the Trust or its authorized representative;
(j) the Valuer shall before accepting any assignment, from any related party of the Trust, disclose to the Trust, by disclosing to the Investment Manager and the Trustee, any direct or indirect consideration which the Valuer may have in respect of such assignment;
(k) the Valuer shall disclose to the Trust, through the Investment Manager, any pending business transactions, contracts under negotiation and other arrangements with the Investment Manager or any other party whom the Trust is contracting with and any other factors that may interfere with the Valuer's ability to give an independent and professional valuation of the assets, and other necessary disclosures required under the InvIT Regulations;
(l) the Valuer shall not make false, misleading or exaggerated claims in order to secure assignments;
(m) the Valuer shall not provide misleading valuation, either by providing incorrect information or by withholding relevant information;
(n) the Valuer shall not accept an assignment which interferes with its ability to do fair valuation; and
(o) the Valuer shall, prior to performing a valuation, acquaint itself with all laws or regulations relevant to such valuation.

The Investment Manager in consultation with the Trustee shall have the right to take all necessary steps to remove the Valuer who ceases to comply with the eligibility criteria prescribed under the InvIT Regulations and applicable law.

CORPORATE GOVERNANCE

The section below is a summary of the corporate governance framework in relation to the Trust, implemented by or to be implemented by the Investment Manager and the Project SPVs, as applicable and as specified in this section.

I. Investment Manager

Board of Directors

Composition of the Board of Directors of the Investment Manager

In addition to the applicable provisions of the InvIT Regulations and the Companies Act, the board of directors of the Investment Manager ("**Board**") has adhered to the following:

(a). As on the date of the Information Memorandum, the Board comprises six directors;

(b). Not less than 50% (fifty per cent) of the board of directors comprise independent directors, determined in accordance with the InvIT Regulations. The Board has not less than one woman independent director. Such directors are not directors or members of the governing board of the investment manager of another infrastructure investment trust registered under the InvIT Regulations. The remaining directors shall be appointed in accordance with the provisions of the Companies Act;

(c). The independence of directors shall be determined in accordance with the InvIT Regulations and other applicable law; and such other requirements as may be specified in the articles of association of the Investment Manager;

(d). the chairman of the board of directors is a non-executive director;

For details of the current composition of the board of directors of the Investment Manager, please see the section entitled "*Parties to the Trust – Investment Manager – Maple Infra InvIT Investment Manager Private Limited – Board of Directors of the Investment Manager*" on page 103.

Quorum

The quorum shall be one-third of the total strength of the board of directors or two directors, whichever is higher, including at least one independent director.

Frequency of meetings

The board of directors of the Investment Manager shall meet at least four times every year, with a maximum gap of 120 days between any two successive meetings. Additionally, the board of directors of the Investment Manager shall meet prior to any meeting of the Unitholders and approve the agenda for Unitholders' meetings.

Sitting fee

The independent directors of the Investment Manager may receive sitting fee for attending board meetings and meetings of the committees, in accordance with the Companies Act and other applicable law.

Committees of the board of directors

Name of the committee	Composition	Present Members	Quorum	Frequency of meetings
Nomination and Remuneration Committee	The nomination and remuneration committee shall consist of at least three directors. All members of the committee shall be independent directors. The chairperson of the committee should be an independent director provided that, the chairperson of the Investment Manager, if applicable, whether non-independent or independent, may be	Anil Agarwal (Chairman), Yudhvir Singh Malik (Member), Seema Gupta (Member), Deepak Malhotra (Observer)	The quorum shall be either two members or one third of the members of the committee, whichever is greater, including at	The nomination and remuneration committee shall meet at least once in a year.

Name of the committee	Composition	Present Members	Quorum	Frequency of meetings
	appointed as a member of the committee but shall not chair such committee. The chairperson of the committee could be present at the annual general meeting and unitholders' meetings, to answer queries.		least one independent director in attendance.	
Audit Committee	The audit committee shall consist of at least three directors and at least two-thirds of the members of audit committee shall be independent directors. All members of the audit committee should be financially literate and at least one member should have accounting or related financial management expertise, in accordance with the LODR Regulations. The Compliance Officer shall act as the secretary to the audit committee. The chairperson of the audit committee shall be an independent director and he [/she] shall be present at annual general meeting and annual unitholders' meetings to answer queries The audit committee at its discretion shall invite the finance director or head of the finance function, head of internal audit and a representative of the statutory auditor and any other such executives to be present at the meetings of the committee. Provided that occasionally the audit committee may meet without the presence of any executives of the Investment Manager of InvIT.	Anil Agarwal (Chairman), Seema Gupta (Member), Deepak Malhotra (Member)	The quorum shall either be two members or one third of the members of the audit committee, whichever is greater, including at least two independent directors and one non-independent director in attendance.	The audit committee should meet at least four times every year, with a maximum gap of 120 days between any two successive meetings. The audit committee shall have powers to investigate any activity within its terms of reference, seek information from any employee, obtain outside legal or other professional advice and secure attendance of outsiders with relevant expertise, if it considers necessary.
Stakeholders' Relationship Committee	The stakeholders' relationship committee shall consist of at least three directors and at least one member of the committee shall be an independent director. The chairperson of the stakeholders' relationship committee shall be an independent director. The chairperson of the committee shall be present at the annual general meetings and unitholder meetings to answer queries of the security holders.	Yudhvir Singh Malik (Chairman), Seema Gupta (Member), Deepak Malhotra (Member)	The quorum shall either be two members or one third of the members of the committee, whichever is greater, including at least one independent director and one non-independent director in attendance.	The stakeholders' relationship committee shall meet at least once in a year.
Risk Management Committee	The risk management committee shall consist of at least three members. At least one member of the	Romesh Sobti (Chairman),	The quorum shall either be two members	The risk management committee should

Name of the committee	Composition	Present Members	Quorum	Frequency of meetings
	committee shall be an independent director. A majority of the members of the committee shall be members of the Board The chairperson of the committee shall be a member of the Board. The senior executives of the Investment Manager may be members of the committee.	Louis M St. Maurice (Member), Seema Gupta (Member)	or one third of the members of the committee, whichever is greater, including at least one member of the Board in attendance.	meet at least twice every year, with a maximum gap of 180 days between any two successive meetings.

For details of the scope of each committee, please see below:

Nomination and Remuneration Committee

Terms of reference of the Nomination and Remuneration Committee

The key terms of reference of the Nomination and Remuneration Committee include the following:

(a). formulation of the criteria for determining qualifications, positive attributes and independence of a director and recommend to the board of directors of the Company ("**Board**") a policy relating to, the remuneration of the directors, key managerial personnel, Senior Management and other employees;

(b). for every appointment of an independent director, evaluation of the balance of skills, knowledge and experience on the Board and on the basis of such evaluation, prepare a description of the role and capabilities required of an independent director. The person recommended to the Board for appointment as an independent director shall have the capabilities identified in such description. For the purpose of identifying suitable candidates, the committee may:

- use the services of external agencies, if required;
- consider candidates from a wide range of backgrounds, having due regard to diversity; and
- consider the time commitments of the candidates.

(c). formulation of criteria for evaluation of performance of independent directors and the Board;

(d). devising a policy on diversity of Board;

(e). identifying persons who are qualified to become directors and who may be appointed in senior management in accordance with the criteria laid down, and recommend to the Board their appointment and removal;

(f). recommend to the Board appointment or replacement or removal of directors on the board of directors of the SPVs of InvIT and Holding Companies;

(g). recommend whether to extend or continue the term of appointment of the independent director, on the basis of the report of performance evaluation of independent directors;

(h). recommend to the Board, all remuneration, in whatever form, payable to senior management.

(i). Carry out any other function as is mandated by the Board from time to time and / or enforced by any statutory notification, amendment or modification as may be applicable.

Audit Committee

Terms of reference of the Audit Committee

The key terms of reference of the Audit Committee include the following:

(a). oversight of the Trust's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible;

(b). giving recommendations to the board of directors regarding appointment, re-appointment and replacement, remuneration and terms of appointment of the statutory auditor of the Trust and the audit fee, subject to the approval of the unitholders;

(c). approval of payment to statutory auditors for any other services rendered by the statutory auditors;

(d). reviewing, with the management, the annual financial statements and auditor's report thereon before submission to the Board for approval, with particular reference to:

- changes, if any, in accounting policies and practices and reasons for the same;
- major accounting entries involving estimates based on the exercise of judgment by management;
- significant adjustments made in the financial statements arising out of audit findings;
- compliance with listing and other legal requirements relating to financial statements;
- disclosure of any related party transactions;
- modified opinion(s) and qualifications in the draft audit report;
- matters required to be included in the director's responsibility statement to be included in the board's report in terms of clause (c) of sub -section (3) of Section 134 of the Companies Act, 2013;

(e). reviewing, with the management, all periodic financial statements, including but not limited to quarterly, half-yearly and annual financial statements of the Trust, whether standalone or consolidated or in any other form as may be required under applicable law, before submission to the Board for approval;

(f). reviewing, with the management, the statement of uses/application of funds raised through an issue of units by the Trust (including but not limited to public issue, rights issue, preferential issue, private placement etc.) and any issue of debt securities and the statement of funds utilised for purposes other than those stated in the offer documents/ notice, and making appropriate recommendations to the Board for follow-up action;

(g). reviewing and monitoring the auditor's independence and performance, and effectiveness of audit process;

(h). approval or any subsequent modification of transactions of the Trust with related parties;

(i). scrutiny of loans including inter-corporate loans and investments of the Trust;

(j). reviewing all valuation reports required to be prepared under applicable law, periodically, and as required, under applicable law;

(k). evaluation of internal financial controls and risk management systems of the Trust;

(l). reviewing, with the management, performance of statutory auditors and internal auditors of the Trust, adequacy of the internal control systems, as necessary;

(m). reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit;

(n). discussion with internal auditors of any significant findings and follow up there on;

(o). reviewing the findings of any internal investigations in relation to the Trust, into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board;

(p). reviewing the procedures put in place by the Investment Manager for managing any conflict that may arise between the interests of the unitholders, the parties to the Trust and the interests of the Investment Manager, including related party transactions, the indemnification of expenses or liabilities incurred by the Investment Manager, and the setting of fees or charges payable out of the Trust's assets;

(q). discussing with statutory auditors and valuers prior to commencement of the audit or valuation, respectively, about the nature and scope, as well as post-audit/ valuation discussion to ascertain any area of concern;

(r). reviewing and monitoring the independence and performance of the valuer of the Trust;

(s). to look into the reasons for substantial defaults in the payment to the depositors, debenture holders and creditors;

(t). evaluating any defaults or delay in payment of distributions to the unitholders or dividends by the SPVs to Indian Highway Concessions Trust and payments to any creditors of the Trust or the Holding Companies or the SPVs, and recommending remedial measures;

(u). to review the functioning of the whistle blower mechanism;

(v). approval of appointment of chief financial officer after assessing the qualifications, experience and background, etc. of the candidate;

(w). reviewing the utilization of loans and/ or advances from/investment by the holding company/ Trust in the SPV exceeding rupees 100 crore or 10% of the asset size of the SPV, whichever is lower;

(x). reviewing any interim financial statements to be submitted by the Trust to any unitholder or regulatory or statutory authority;

(y). considering and commenting on the rationale, cost-benefits and impact of schemes involving merger, demerger, amalgamation etc., on the Trust and its unitholders;

(z). examination of the financial statements and auditors' report thereon.

The audit committee shall mandatorily review the following information:

(a). management discussion and analysis of financial condition and results of operations;
(b). management letters / letters of internal control weaknesses issued by the statutory auditors;
(c). internal audit reports relating to internal control weaknesses;
(d). the appointment, removal and terms of remuneration of the chief internal auditor, if appointed, shall be subject to review by the audit committee; and
(e). statement of deviations:

- quarterly statement of deviation(s) including report of monitoring agency, if applicable, submitted to stock exchange(s) in terms of Regulation 32(1) of the LODR Regulations, if applicable.
- annual statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice in terms of Regulation 32(7) of the LODR Regulations, if applicable.

(f). Such other matters as mentioned in the terms of reference or as may be carried out by the Audit Committee pursuant to amendments under the applicable law, from time to time.

<u>Stakeholders' Relationship Committee</u>

Terms of reference of the Stakeholders' Relationship Committee

The terms of reference of the Stakeholders' Relationship Committee include the following:

(a). consider and resolve grievances of the unitholders, including complaints related to the transfer of units, non-receipt of annual report, general meetings and non-receipt of declared distributions;

(b). review of measures taken for effective exercise of voting rights by unitholders;

(c). review of adherence to the service standards adopted by the Trust in respect of various services being rendered by the registrar and transfer agent;

(d). review of the various measures and initiatives taken by the Trust for ensuring timely receipt of distributions /annual reports/statutory notices by the unitholders;

(e). review of any litigation related to unitholders' grievances and reporting specific material litigation related to unitholders' grievances to the Board;

(f). review report on investor grievances to be submitted to the Trustee; and

(g). Such other matters as mentioned in the terms of reference or as may be carried out by the Committee pursuant to amendments under the applicable law, from time to time.

Risk Management Committee

Terms of reference of the Risk Management Committee

The terms of reference of the Risk Management Committee include the following:

(a). to formulate a detailed risk management policy which shall include:

- a framework for identification of internal and external risks specifically faced by the Trust, in particular including financial, operational, sectoral, sustainability (particularly, ESG related risks), information, cyber security risks or any other risk as may be determined by the committee.
- measures for risk mitigation including systems and processes for internal control of identified risks.
- a business continuity plan.

(b). to ensure that appropriate methodology, processes and systems are in place to monitor and evaluate risks associated with the business of the Trust;

(c). to monitor and oversee implementation of the risk management policy, including evaluating the adequacy of risk management systems;

(d). to periodically review the risk management policy, at least once in two years, including by considering the changing industry dynamics and evolving complexity;

(e). to keep the Board informed about the nature and content of its discussions, recommendations and actions to be taken;

(f). the appointment, removal and terms of remuneration of the Chief Risk Officer (if any) shall be subject to review by the Committee; and

(g). the Committee shall coordinate its activities with other committees, in instances where there is any overlap with activities of such committees, as per the framework laid down by the Board.

(h). The Committee shall have powers to seek information from any employee of the Investment Manager in connection with performance of its role, obtain outside legal or other professional advice and secure attendance of outsiders with relevant expertise if considered necessary.

(i). Such other matters as mentioned in the terms of reference or as may be carried out by the Committee pursuant to amendments under the applicable law, from time to time.

The Board of the Investment Manager has also constituted the following Committees:

(i). Corporate Social Repsonsibility Committee, with Louis M St. Maurice as the Chairman, and Deepak Malhotra and Yudhvir Singh Malik as Members; and

(ii). InvIT Committee with Deepak Malhotra as the Chairman, and Louis M St. Maurice and Anil

Aggarwal as Members.

The terms of reference of the Corporate Social Repsonsibility Committee and the InvIT Committee is in the process of getting finalised.

Policies of the Board of Directors of the Investment Manager in relation to the Trust

The Investment Manager has adopted the following policies, in relation to the Trust and all assets of the Trust:

1. Distribution Policy

The Investment Manager adopted the Distribution Policy pursuant to a resolution of the Board dated January 19, 2022, as amended pursuant to resolutions of the Board dated June 7, 2022, September 16, 2022 and May 13, 2023, respectively. Further, the Distribution Policy was ratified by the unit holders of the Trust on June 7, 2023. For details of the Distribution Policy, please see the section entitled "*Distribution*" on page 192.

2. Code of Conduct (the "Code")

The Investment Manager has adopted the Code pursuant to a resolution of the Board dated January 20, 2022, in relation to the Trust. The Code shall be complied with at all times, in accordance with the InvIT Regulations.

The key principles of the Code are set out below:

(i). the Trust and the Parties to the Trust shall conduct all the affairs of the Trust in the interest of all the Unitholders;

(ii). the Trust and the Parties to the Trust shall make adequate, accurate, explicit and timely disclosure of relevant material information to all Unitholders, exchanges and the SEBI in accordance with the InvIT Regulations and as may be specified by the stock exchanges from time to time;

(iii). the Trust and the Parties to the Trust shall try to avoid conflicts of interest, as far as possible, in managing the affairs of the Trust and keep the interest of all Unitholders paramount in all matters. In case such events cannot be avoided, it shall be ensured that appropriate disclosures are made to the Unitholders and they are fairly treated;

(iv). the Trust and the Parties to the Trust shall ensure that fees charged by them with respect to activities of the Trust shall be fair and reasonable;

(v). the Investment Manager shall carry out the business of the Trust and invest in accordance with the investment objectives (as disclosed in the Preliminary Placement Memorandum and the Placement Memorandum) and take investment decisions solely in the interest of Unitholders;

(vi). the Trust, the Parties to the Trust and any third party appointed by the Investment Manager shall not use any unethical means to sell, market or induce any person to buy units of the Trust and where a third party appointed by the Investment Manager fails to comply with this condition, the Investment Manager shall be held liable for the same;

(vii). the Trust and the Parties to the Trust shall maintain high standards of integrity and fairness in all their dealings and in the conduct of their business;

(viii). the Trust and the Parties to the Trust shall render at all times high standards of service, exercise due diligence, ensure proper care and exercise independent professional judgment; and

(ix). the Trust and the Parties to the Trust shall not make any exaggerated statement, whether oral or written, either about their qualifications or capabilities or experience.

3. Leverage Policy of the Trust (the "Leverage Policy")

The Investment Manager is required to ensure that all funds borrowed in relation to the Trust are in compliance with the InvIT Regulations. Accordingly, the Investment Manager, has adopted the Leverage Policy pursuant to a resolution of the Board dated January 20, 2022, as amended pursuant to a resolution of the Board dated May 13, 2023. Further, the Leverage Policy was ratified by the unit holders of the Trust on June 7, 2023. Under terms of the Leverage Policy, the Investment Manager has resolved that:

(i). In accordance with applicable law and the trust documents, and the conditions mentioned in the Leverage Policy, the Investment Manager shall be entitled to borrow funds for the Trust through any permitted means, by any instrument, in Indian or foreign currency, as permitted by applicable law.

(ii). Further, debt may be availed (along with provision of security for such debt) by the Trust or the Trust assets, subject to the following conditions:

(a) The Investment Manager shall ensure that the aggregate consolidated borrowings and deferred payments (net of cash and cash equivalents) of the Trust, holding companies and the SPVs do not exceed any thresholds prescribed under the InvIT Regulations in this regard, and any further borrowings by the Trust shall be availed in accordance with the requirements prescribed under the InvIT Regulations including any guidance/approval/exemptions received from SEBI from time to time. If the thresholds prescribed under the InvIT Regulations are breached on account of market movements of the price of the underlying assets or securities, the Investment Manager shall inform the same to the Trustee and ensure that the conditions prescribed under the InvIT Regulations are satisfied within the timelines prescribed under the InvIT Regulations for curing such breach.

(b) the debt is availed at commercially reasonable terms as may be determined by the board of directors of the Investment Manager (either by itself or through a committee designated for such purpose) ("**Board**"), in accordance with the InvIT Regulations.

(c) The Investment Manager shall cause the Trust, the Holding Company(ies) and the SPVs to borrow or incur financial indebtedness for the purpose of its business operations subject to requisite approval of the Board or such committee of the Board as may be constituted in this regard, board of directors or committees of the Holding Company(ies) and the SPVs (in respect of financial indebtedness of the Holding Company(ies) and the SPVs) and the Unitholders, where required, in accordance with the InvIT Regulations and the Indenture of Trust;

(d) All actions as required under the InvIT Regulations (if any) shall be complied with for such borrowing.

Refinancing of debt

(i). At least once every 3 years, the chief financial officer or the VP-Finance (until such time the chief financial officer is appointed) of the Investment Manager shall explore the possibility of, and present a report to the Board or such committee of the Board as may be constituted in this regard, plan on refinancing whole or a part of the existing debt of the Trust and/or the Trust Assets.

(ii). If the Board (either by itself or through a committee designated for such purpose) determines that the overall expected gains or better terms till the end of the concession period exceed the costs of such refinancing and thereby approves the debt refinancing proposal (including with modifications), then such refinancing proposal shall be implemented, subject to approvals and requirements as prescribed under the InvIT Regulations.

(iii). For undertaking such refinancing, the CFO or the VP-Finance (until such time the chief financial officer is appointed) or the CEO (as the case may be), or such other person authorized by the Board in this regard, shall take all actions necessary to obtain relevant approvals from any governmental agency or existing lenders within the desired timelines.

Other Conditions:

(i). The Trust also has the power to create, mortgage, pledge or secure any of its Assets including shares / interest in Holding Company(ies) or SPVs or provide guarantees or other collateral in order to borrow funds, subject to the terms of the Indenture of Trust.

(ii). In case a foreign currency loan is availed, appropriate hedging mechanism must be undertaken by the relevant borrower.

(iii). In addition to the above, any borrowing by the SPVs will be in accordance with the conditions prescribed under applicable law.

Disclosure and Reporting

(i). Any additional borrowing at the level of SPVs or the Trust, exceeding any threshold that may be prescribed by the SEBI, in relation to disclosure of additional borrowing, shall be disclosed to the Unitholders and designated stock exchanges in accordance with the InvIT Regulations.

(ii). Details of changes during the year pertaining to borrowings or repayment of borrowings (standalone and consolidated) shall be disclosed as per the requirements prescribed under the InvIT Regulations.

(iii). Details of outstanding borrowings and deferred payments of InvIT including any credit rating(s), debt maturity profile, gearing ratios of the Trust on a consolidated and standalone basis shall be disclosed as per the requirements prescribed under the InvIT Regulations.

4. Policy for determining materiality of Information for Periodic Disclosures of the Trust (the "Disclosure of Information Policy")

The Investment Manager has adopted the Disclosure of Information Policy pursuant to a resolution of the Board dated January 20, 2022 as amended pursuant to a resolution of the Board dated May 13, 2023. Further, the Disclosure of Information Policy was ratified by the unit holders of the Trust on June 7, 2023. The aim of the Disclosure of Information Policy is to outline the process and procedures for determining materiality of information in relation to periodic disclosures required to be made on the website of the Trust, to the stock exchanges, to the Trustee and to the Unitholders, in relation to the Trust. The purpose of the Disclosure of Information Policy is also to ensure that the Trust complies with the disclosure requirements under the InvIT Regulations and the listing agreements to be entered into with the stock exchanges. The key terms of the Disclosure of Information Policy are set out below:

In accordance with the InvIT Regulations, the Investment Manager is required to disclose to the stock exchange and on its website 'any information having bearing on the operation or performance of the Trust as well as price sensitive information' which shall include:

(a) Mandatory disclosures as required under the InvIT Regulations
(b) Events or information deemed material by the Trust acting through the Investment Manager; and
(c) Events or information which are to be disclosed upon application of materiality criteria

Mandatory Disclosures under the InvIT Regulations

The following events and information relating to the Trust shall be disclosed to the stock exchange:

- acquisition or disposal by the Trust of any projects, directly or through any holding company or special purpose vehicle, value of which exceeds 5% (five per cent) of value of the Trust assets;
- additional borrowings, at the Trust, holding company or special purpose vehicle ("**SPV**") exceeding 15% of the value of the Trust.
- additional issue of Units by the Trust i.e. any further issuance of units, rights issue, institutional placement or bonus issue, etc.;
- details of any credit rating obtained by the Trust and any change in such rating;
- any issue which requires approval of the Unitholders of the Trust;
- any legal proceedings which may have a significant bearing on the functioning of the Trust;
- notices and results of meetings of Unitholders; and
- any instance of non-compliance with the InvIT Regulations including any breach of limits specified under the InvIT Regulations.

Deemed Material Information

(i). The following events and information relating to the Trust shall be deemed to be material information ("**Deemed Material Information**"):

(a) Notices from Governmental authorities (including show cause notices) or legal proceedings or prosecution, in each case, alleging a material breach of applicable laws by the Trust, and in case of notices against the Trust from tax authorities and related proceedings, if the notice/proceeding involve an amount exceeding 5% (five percent) or more of enterprise value of the Trust as per the latest valuation report;
(b) financial results of the Trust for each quarter, if required, half-year or financial year, as the case may be, within such time as may be prescribed SEBI or under any Applicable Law
(c) declaration or recommendation of annual distributions by the Trust;
(d) proposal for buy back of units by the Trust;
(e) proposal for listing of units of the Trust or delisting from the stock exchange(s);
(f) proposal for winding up of the Trust;
(g) changes in the sponsor, trustee, investment manager, project manager, auditors, valuer or compliance officer of the Trust;
(h) in case of resignation of the Trust's auditor, disclosure of reasons for resignation of the auditor, as given by the said auditor;
(i) in case of resignation of an independent director of the investment manager, disclosure of reasons for the resignation as given by the said director;
(j) any material amendment to the Indenture of Trust or Investment Management Agreement;
(k) entering into any agreements by the Trust (such as shareholder agreements, joint venture agreements, to the extent that such agreements impacts management and control of the InvIT);
(l) fraud or material defaults by the Trust or the Project SPVs;
(m) any material change in investment strategy of the Trust from the last disclosed investment strategy along with the reasons for the same.
(n) related party transactions entered into by the Trust periodically in accordance with the listing agreement and the InvIT Regulations but atleast on a half-yearly basis, and details of any fees or commissions received or to be received by such related party(ies);
(o) change in the board or key managerial personnel of the Investment Manager;
(p) statement of investor complaints;
(q) any amendment to the Investment Management Agreement to increase the management fee of the Trust along with the reasons for the same;
(r) pattern of unitholding, periodically, as required under the InvIT Regulations;
(s) Valuation reports as required by the InvIT Regulations;
(t) Annual report of the Trust electronically or by physical copies as required under the InvIT Regulations;
(u) Half-yearly report of the Trust as required under the InvIT Regulations; and
(v) quarterly reports of the Trust as required under the InvIT Regulations, in case the Trust meets the thresholds specified under the InvIT Regulations.

The Trust shall also provide disclosures or reports specific to sector or sub-sector in which the Trust has invested or proposes to invest in the manner specified by SEBI.

Material Information

(i). Under the InvIT Regulations, the Trust is also required to disclose any material issue that, in the opinion of the Investment Manager or Trustee, needs to be disclosed to the stock exchange. The Trust shall consider following criteria for determination of materiality of events or information other than for the Deemed Material Information provided above:

(a) the omission of an event or information, which is likely to result in discontinuity or alteration of event or information disclosed by the Investment Manager under the Disclosure of Information Policy; or
(b) any event or information relating to the Trust if it has a bearing of five per cent. of the enterprise value of the Trust as per the latest valuation report, only such event of information which is quantifiable shall be considered for disclosure;
(c) any other event or information relating to the Trust which, in the opinion of the Compliance Officer in consultation with the CEO and VP-Finance, is considered material.

5. Policy on appointment of the auditor and valuer of the Trust (the "Appointment Policy")

The Investment Manager has adopted the Appointment Policy pursuant to the resolution of the Board dated January 20, 2022, as amended pursuant to a resolution of the Board dated May 13, 2023. Further, the

Appointment Policy was ratified by the unit holders of the Trust on June 7, 2023. For details of the Appointment Policy, please see the section entitled "*Other Parties Involved in the Trust -Policy on Appointment of Auditor and Valuer* "on page 129.

6. Future Assets Acquisition Policy (the "Future Acquisition Policy")

The Future Acquisition Policy shall be applicable in respect of acquisition of future projects and any funding proposed to be availed by the Trust on a consolidated basis to finance such acquisition. The Investment Manager has adopted the Future Acquisition Policy pursuant to a resolution of the Board dated January 20, 2022, as amended pursuant to a resolution of the Board dated May 13, 2023. Further, the Future Acquisition Policy was ratified by the unit holders of the Trust on June 7, 2023. The key terms of the Future Acquisition Policy, include the following:

(i). The Investment Manager shall identify potential new eligible infrastructure projects ("**Future Projects**") for acquisition by the Trust in accordance with the InvIT Regulations.

(ii). Process for acquisition by the Trust: The Investment Manager shall follow the process below for the acquisition of the assets by the Trust:

(a) *Non-Binding offer by the Investment Manager:* The board of directors of the Investment Manager (either by itself or through a committee designated for such purpose), may authorize the Investment Manager to submit a non-binding offer ("**NBO**") to the seller(s) or make a non-binding bid to a concessioning authority in respect of a Future Project, following the approval of the Investment Manager's legal department.

(b) *Appointment of Advisors:* To evaluate the Future Projects, the board of the directors of Investment Manager (either by itself or through a committee designated for such purpose) may appoint external advisors including investment banker, legal counsel, and diligence consultants and any other consultants, to help the Investment Manager evaluate the Future Project. The board of the directors of Investment Manager (either by itself or through a committee designated for such purpose) shall approve the requisite diligence budget for evaluation of Future Projects. In case an NBO is accepted by the seller(s), or a non-binding bid is accepted by a concessioning authority, subject to the approval of a requisite diligence budget by the Board of the Investment Manager or a committee thereof, the Investment Manager may commission additional due diligence studies including:

- An independent traffic study (for a toll project) from a reputed consultant to forecast through the concession end the traffic and revenue of the project.
- An independent technical study from a reputed consultant to forecast through the concession end the operation and maintenance costs (both routine and periodic) and cost to be incurred for any balance/pending construction work or one-time repair work in the project, to the extent possible with upside and downside cases.
- Legal diligence to ascertain all potential liabilities including relating to ongoing or proposed claims, counter-claims, litigations or any related issue that could impact cash flows of the project or otherwise likely result in any legal, regulatory or reputational risk.
- ESG and reputational due diligence, in case deemed necessary by the board of directors of the Investment Manager.
- Finance and Tax diligence to ascertain the potential liabilities that could impact cash flows of the project
- Any other diligence as the Investment Manager may deem fit.

(c) *Binding offer by the Trust*: Any binding offer/bid made to seller(s)/concessioning authority or binding transaction documents executed, made by the Investment Manager on behalf of the Trust to the seller(s) for acquiring a Future Project, shall be authorised by the Investment Manager Board, following the approval of the Investment Manager's legal and tax departments.

(d) *Unitholders Approval:* Approval of the Unitholders shall be obtained for investment in Future Projects, if (i) such an approval is required under the InvIT Regulations, or (ii) if the Future Projects do not meet the criteria laid down below (Criteria for Future Projects).

Unitholders' approval shall be obtained in accordance with the requirements prescribed under the InvIT Regulations. Additionally, in case of TOT projects, if a unitholder approval is required under (i) and (ii) above, the same shall be taken prior to execution of the concession agreement or as may be specified under applicable law.

(e) *Notice to Unitholders for acquisition*: For approval of the Unitholders for acquisition of a Future Project a notice shall be delivered to the Unitholders, at least 21 days or such other period prescribed under the InvIT Regulations ahead of the meeting in which a Unitholder vote is proposed to be conducted to decide on the acquisition of such Future Project.

(iii). Funding for acquisition of Future Project: The Trust may acquire equity shares and debt of such Future Projects through (i) issuance of units; (ii) raising additional debt; or (iii) through internal accruals or a combination thereof, in accordance with applicable law and the policies adopted by the Investment Manager on behalf of the Trust.

(iv). The Investment Manager shall ensure that all regulatory approvals required for the acquisition of a Future Project, within or outside India (if relevant), are duly obtained by the Trust.

Criteria for Future Projects

The Future Project shall necessarily have:

(i). The Future Project is a road concession granted by a relevant Indian authority;

(ii). Trust is able to acquire 100% of the issued equity share capital (on a fully diluted basis) of the entity holding the Future Project, excluding the stake, if any, required to be held mandatorily by any other person in accordance with any applicable law or directions of the GoI or any regulatory/ statutory or governmental authority;

(iii). Such asset is an eligible infrastructure project as defined under the InvIT Regulations;

(iv). Equity IRR that is in line with the market based on the risk profile of the asset. Such assessment shall be based on an independent traffic study and technical study commissioned by the Investment Manager;

(v). Minimum enterprise valuation of INR 200,00,00,000 (Rupees two hundred crores only) at the portfolio level or asset level whichever is applicable; and

(vi). Remaining concession life of not less than 4 (four) years as on the estimated date of investment by the Trust at the portfolio level or asset level, whichever is applicable.

Provided that, any decisions including investment or disinvestment by Trust shall be based on the recommendation of the Investment Manager, Trust Documents (as defined in the Future Acquisition Policy) and applicable law.

7. Remuneration Policy (the "RC Policy")

The RC Policy sets out the guidelines regarding the nomination andremuneration of directors, key managerial personnel, and other employees of the Investment Manager The Investment Manager has adopted the RC Policy pursuant to the resolution of the Board dated January 20, 2022, as amended pursuant to a resolution of the Board dated , 2023. Further, the RC Policy was ratified by the unit holders of the Trust on June 7, 2023. The key terms of the RC Policy, includes the following:

Remuneration of Non-executive and Independent Directors

(i). Non-Executive Directors, if any and Independent Directors ("**NEDs**") may be paid remuneration by way of sitting fees and commission. The remuneration/commission/compensation to the NEDs will be determined by the Nomination and Remuneration Committee ("**NRC**") and recommended to the Board for its approval.

(ii). The commission to be paid annually will be restricted to a fixed sum, as recommended by the NRC to the Board, on the basis of their tenor in office during the financial year.

(iii). The payment of the commission to the NEDs will be placed before the Board every year for its consideration and approval. The sitting fee payable to the NEDs for attending the Board and committee meetings will be fixed, subject to the statutory ceiling. The fee will be reviewed periodically and aligned to comparable best in class companies.

(iv). Sitting fees and commissions paid for NED include fees and commissions related their participation in any committee constituted by the Board.

(v). Keeping with evolving trends in industries and considering the time and efforts spent by specific NEDs, the practice of paying differential commission will be considered by the Board.

(vi). NEDs are entitled to be paid all reasonable travelling and other expenses they incur for attending to the Investment Manager's and Trust's affairs, including attending meetings of the Investment Manager.

(vii). The remuneration payable by the Investment Manager to NEDs shall be subject to the conditions specified in the SEBI InvIT Regulations and the Companies Act, 2013, if applicable.

Remuneration of Executive Director

(i). The compensation paid to the Executive Directors (including managing director) will be within the scale approved by the shareholders of the Investment Manager.

(ii). The elements of compensation of the executive director include the elements as described in the paragraph below.

(iii). The RC will set annua objectives for NED prior to the beginning of a new financial year.

(iv). The RC will determine the annual variable pay compensation in the form of annual incentive and annual increment for the executive director based on the Investment Manager's, Trust's and individual's performance as against the pre-agreed objectives for the year, and submit to the Board for approval.

(v). Executive directors will not be paid sitting fees for any Board / committee meetings attended by them.

(vi). The remuneration payable by the Investment Manager to the executive directors shall be subject to the conditions specified in the SEBI Listing Regulations including in terms of monetary limits, approval requirements and disclosure requirements.

Remuneration to Key Managerial Personnel/other employees

(i). The remuneration payable to key managerial personnel and other employees will be recommended by the RC to the Board for its approval.

(ii). The Investment Manager's total compensation for Key Managerial Personnel if any, / other employees may consist of:

- fixed compensation
- variable compensation
- benefits
- work related facilities and perquisites

(iii). Fixed compensation will be determined on the basis of size and scope of the job typically as reflected by the level or grade of the job, trends in the market value of the job and the skills, experience and performance of the employee. Fixed compensation will include basic salary and other allowances in line with the salary structure (and may include housing allowance, leave travel allowance).

(iv). The variable pay of executives will be linked to individual performance and the performance of the Trust and shall be determined as per their employment contract and variable pay policy of the Investment Manager

(v). Based on the grade and seniority of employees, benefits for employees may include insurances

(vi). Employees will also be eligible for work related facilities and perquisites as may be determined through human resources policies issued from time to time based on the grade of the employee.

(vii). A formal annual performance management process will be applicable to all employees, including senior executives. Annual increases in fixed and variable compensation of individual executives will be directly linked to the performance ratings of individual employee:

- Overall compensation shall be subject to periodic reviews which takes into account data from compensation surveys conducted by specialist firms, as well as factors such as affordability based on the Investment Manager's performance and the economic environment.
- Employees may be eligible for severance payments in accordance with the termination clause in their employment agreement subject to applicable regulatory requirements.

Committee Members Interest

(i). A member of the RC is not entitled to participate in the discussions when his/her own remuneration is discussed at a meeting or when his/her performance is being evaluated.

(ii). The RC may invite such individuals, as it considers appropriate, to be present at the meetings of the RC.

8. Policy on Code of Conduct for Board of Directors and Senior Management Personnel (the "CoC")

The Investment Manager has adopted the CoC pursuant to a resolution of the Board dated March 31, 2023, for all members of board of directors and senior management personnel of the Investment Manager. The senior management personnel of the Investment Manager shall include officers and personnel of the Investment Manager who are members of its core management team, excluding the Board, and shall also comprise all members of management, one level below the chief executive officer or managing director or whole time director or manager (including chief executive officer or manager, in case they are not part of the Board) and shall specifically include the compliance officer and chief financial officer, as applicable ("**Senior Management Personnel**").

The key terms of the CoC are set out below:

(i). The CoC enables the Investment Manager to publicly state to the external stakeholders of the Trust (suppliers, customers, consumers, Unitholders, etc.), the way in which they intend to carry out their business and their business in relation to the Trust.

(ii). In accordance with the CoC, the Board and Senior Management Personnel should:

(a). demonstrate the highest standards of integrity, business ethics, and corporate governance;
(b). perform their roles with competence, diligence, in good faith and in the best interests of the Trust and the Unitholders of the Trust;
(c). provide expertise and experience in their areas of specialization and share learnings at the meetings of the Board with best interests of the Trust and its stakeholders along with the Unitholders in mind. They should point the Investment Manager's management towards the Company's best interest based on their experience and judgement;
(d). give careful and independent consideration to the affairs of the Investment Manager and the Trust and all documents placed before them to satisfy themselves with the soundness of key decisions taken by the management. They should call for additional information, where necessary, for making such judgements;
(e). not engage in any business, relationship or any activity which detrimentally conflicts with the interest of the Trust or bring discredit to the Investment Manager or the Trust. Any situation that creates a conflict of interest between personal interests and the Trust or its Unitholders' interest

must be avoided at all costs. If the Board and Senior Management Personnel find themselves in a real, potential or apparent conflict of interest, they must immediately report the same in the manner prescribed under the Company's Code of Ethics and Professional Conduct;

(f). follow all applicable laws, the guidelines put forth in the policy for prevention of insider trading, and any other applicable laws against market manipulation;

(g). not disclose any confidential / privileged information of the Investment Manager or the Trust and respect all rules pertaining to the protection of confidential information as stated in the Maple Code and direct any media queries and approaches to the appropriate spokesperson within the Investment Manager; and

(h). not achieve or attempt to achieve any undue gain or advantage either to herself/himself or to her/his relatives, partners, or associates.

(iii). The CoC also sets out the duties of the independent directors on the Board, including, amongst others, (a) undertaking appropriate induction and regularly update and refresh their skills, knowledge and familiarity with the Investment Manager and the Trust; (b) seeking appropriate clarification or amplification of information and, where necessary, take and follow appropriate professional advice and opinion of outside experts at the expense of the Trust; and (c) striving to attend all meetings of the Board and of the committees of the Board, which the independent director(s) is a member of.

(iv). All members of the Board and Senior Management Personnel shall affirm compliance with the CoC on an annual basis.

9. Policy for Familiarization Programmes for Independent Directors

The Investment Manager has adopted the Policy for Familiarization Programmes for Independent Directors pursuant to a resolution of the Board dated March 31, 2023. In order to enable the independent directors to fulfil their responsibilities efficiently and effectively, a familiarisation programme ("**Programme**") has been put in place by the Investment Manager to assist them understand details about the Investment Manager and the Trust, their roles, rights, responsibilities in the Investment Manager in relation to the Investment Manager and the Trust, nature of the industry in which the Trust operates, business model of the Trust etc. The key terms of the policy are set out below:

(i). *Familiarization Process:*

a. The Investment Manager shall conduct orientation programmes / presentations / training sessions, periodically at regular intervals, to familiarize the independent directors with the strategy, operations and functions of the Trust.
b. Such orientation programmes / presentations / training sessions will provide an opportunity to the independent directors to interact with the senior leadership team of the Investment Manager and help them to understand the Investment Manager's and Trust's strategy, business model, structure, operations, service offerings, markets, organization structure, finance, human resources, technology, quality, facilities, risk management strategy, governance policies, designated channels for flow of information and such other areas as deemed necessary.
c. The programmes / presentations shall also familiarize the independent directors with their roles, rights and responsibilities. The Investment Manager may include such other details and information, as required, during the introductory familiarization programme / presentation, when a new independent director comes on the board of directors of the Investment Manager.
d. Each director may plan to visit at least one asset per financial year.

(ii). The Investment Manager may periodically review this Programme and make suitable revisions, as may be deemed necessary, from time to time.

(iii). The Programme will be conducted on an "as needed" basis during the year.

10. Risk Management Policy in relation to the Trust ("RM Policy")

The Investment Manager has adopted the RM Policy pursuant to a resolution of the Board dated March 31, 2023. The RM Policy aims to provide a framework for management of risks associated with the business of the Trust. The key terms of the RM Policy are set out below:

(i). *Principles of risk management:* The risk management committee shall provide reasonable assurance in protection of business value of the Trust from uncertainties and consequent losses.

(ii). *General:* Risk management process includes four activities:

(a). Risk identification;
(b). Risk assessment;
(c). Risk mitigation and monitoring; and
(d). Reporting.

(iii). *Risk identification:* The purpose of risk identification is to identify internal and external risks specifically faced by the Trust, in particular including financial, operational, sectoral, legal, regulatory, sustainability (particularly, environment, social and governance related risks), information, cyber security risks or any other risk as may be determined by the Board/Risk Management Committee and identify all other events that can have an adverse impact on the achievement of the business objectives. All risks identified are documented in the form of a Risk Register. The Risk Register incorporates risk description, category, classification, mitigation plan, responsible function / department.

(iv). *Risk assessment:* Assessment involves quantification of the impact of Risks to determine potential severity and probability of occurrence. Each identified risk is assessed on two factors which determine the risk exposure: a. Impact if the event occurs and b. Likelihood of event occurrence.

(v). Risk Categories: It is necessary that risks are assessed after taking into account the existing controls, so as to ascertain the current level of risk. Based on the above assessments, each of the risks can be categorized as – low, medium and high.

(vi). *Risk mitigation:* All identified risks should be mitigated using any of the following risk mitigation plans:

a. Risk avoidance: by not performing an activity that could carry any risk. Avoidance may seem the answer to all Risks but avoiding Risks also means losing out on the potential gain that accepting (retaining) the risk may have allowed;
b. Risk transfer: mitigation by having another party to accept the risk, either partial or total, typically by contract or by hedging / insurance;
c. Risk reduction: Employing methods/solutions that reduce the severity of the loss; and
d. Risk retention: Accepting the loss when it occurs. Risk retention is a viable strategy for small risks where the cost of insuring against the risk would be greater than the total losses sustained. All Risks that are not avoided or transferred are retained by default.

Monitoring and reviewing risks: The risk management committee shall formulate the policies for effective identification, monitoring, mitigation of the risks. The secretary of the Risk Management Committee shall maintain the Risk Register. The audit committee reviews the Risk Register at least once a year and adds any new material Risk identified to the existing list. These will be taken up with respective functional head for its mitigation. Existing process of Risk Assessment of identified Risks and its mitigation plan will be appraised by the Risk Management Committee to the Board on an annual basis.

11. Policy on Succession Planning for the Board and Senior Management ("Succession Planning Policy")

The Investment Manager has adopted the Succession Planning Policy pursuant to a resolution of the Board dated March 31, 2023, applicable to all members of the Board and Senior Management, in order to ensure that interests of unitholders of the Trust does not suffer on account of sudden or unplanned gaps in board and management of the Investment Manager. The senior management shall mean officers and personnel of the investment manager who are members of its core management team, excluding the Board of Directors, and shall also comprise all members of the management, one level below the Chief Executive Officer or Managing Director or Whole Time Director or manager (including Chief Executive Officer and manager, in case they are not part of the Board of Directors) and shall specifically include the Compliance Officer and Chief Financial Officer ("**Senior Management**").

The key terms of the Succession Planning Policy are set out below:

(i). *Objectives:*

a. To identify and nominate suitable candidates for the Board's approval to fill vacancies which may arise in the Board from time to time;

b. To identify the competency requirements of critical and key positions, assess potential candidates and develop required competency through planned development and learning initiatives;

c. To identify the key job incumbents in senior management positions and recommend whether the concerned individual be granted an extension in term/service or be replaced with an identified internal or external candidate or recruit other suitable candidate(s); and

d. To ensure the systematic and long-term development of individuals in the senior management level to replace as and when the need arises due to deaths, disabilities, retirements, and other unexpected occurrence.

(ii). The Nomination and Remuneration Committee of the Board (the "**NRC**") shall review the leadership and management needs of the Investment Manager from time to time and shall make appropriate recommendations to the Board. The NRC shall assess the suitability of a person who is being considered for appointment as a director of the Investment Manager, based on his / her educational qualification, experience, expertise and track record and shall recommend to the Board, the terms and conditions of his/her appointment, including remuneration.

(iii). The NRC may, at its discretion, recommend to the Board, appointment of suitable candidate(s) in senior management level with a view to ensure a continuous availability of managerial talent at senior levels to meet the organizational needs.

(iv). The recommendations of the NRC shall be placed before the Board for approval. The senior management team shall always strive to develop in-house capabilities by enriching work exposure.

12. Vigil Mechanism and Whistle Blower Policy ("Whistleblower Policy")

The Investment Manager has adopted the Whistleblower Policy pursuant to a resolution of the Board dated June 15, 2023, to (i) formulate a vigil mechanism for directors and employees to report genuine concerns, and (ii) provide adequate safeguards against victimization of directors or employees or any other person who avail such mechanism. The key terms of the Whistleblower Policy are set out below:

Protected Disclosure

(i). Any communication made in good faith that discloses or demonstrates information that may evidence unethical or improper activity ("**Protected Disclosure**") should be made by any person and includes director and/ or employee of the Investment Manager, Sponsor, Trustee, Project Manager or any of the special purpose vehicles held by the Trust ("**Whistleblower**") to the Compliance Officer or on a whistleblowing hotline managed by an independent service provider as and when such a hotline is put in place with the approval of the Board of Directors. The details of such hotline shall be published on the Investment Manager's website.

(ii). Protected Disclosure can be in writing so as to ensure a clear understanding of the issues raised and should be either typed or written in legible writing in English, Hindi or a regional language. If the Protected Discloser is made in Hindi or regional language, it should be accompanied by an English translation The protective disclosure or reporting can also be made by electronic mail. To ensure effective management of the Protected Disclosure, it is preferable to forward it with a cover letter which shall bear the identity of the Whistleblower along with an identity proof.

(iii). Protected Disclosure should be factual and not speculative and should contain as much specific information as possible in order to allow proper investigation.

Responsibilities of the Compliance Officer

(i). All Protected Disclosure shall be handled promptly and shall be coordinated by the Compliance Officer.

(ii). The Compliance Officer shall ensure that all relevant records documents and other evidence is being immediately taken into custody and being protected from being tampered with, destroyed or removed by suspected perpetrators or by any other official under the influence of such perpetrators. The Compliance Officer shall also maintain a record of all the complaints received, timelines, and actions.

(iii). A committee comprising of the Compliance Officer and the general counsel ("Standing Committee") shall preliminarily examine the Protected Disclosure to ensure that the Protected Disclosure is factual and not baseless and contains as much specific information as possible to allow the Board of Directors to take an appropriate action in relation to the Protected Disclosure.

(iv). If requested by any person making the Protected Disclosure, the Compliance Officer shall also facilitate direct access by such person to the chairperson of the audit committee in appropriate or exceptional cases.

(v). The Standing Committeewill review the Protected Disclosure and determine whether the allegations, if they were to be true, would constitute an unethical or improper activity. the allegations are unclear, the Whistleblower shall be notified of this and given the opportunity to provide the required clarifications. The Standing Committee, on finding the Protected Disclosure to represents potential unethical or improper behavior,shall forward the details of the Protected Disclosure to the Board of Directors. If the allegations, taken as true, would not constitute an unethical or improper behavior, or if the complaint/disclosure that is manifestly unfounded, trivial or vexatious, the Compliance Officer shall reject the complaint, with a report in this regard to the Board of Directors. In the event the Protected Disclosure is anonymous, and the Standing Committee determines it to be frivolous or trivial, it shall be rejected with a report in this regard to the Board of Directors.

(vi). The Compliance Officer shall report to the Board of Directors under Clause (iv) and (v) above, as the case may be, within 15 days of receipt of the Protected Disclosure.

Board of Directors

(i). The Board of Directors may handle the investigation related to the Protected Disclosure or establish an ad hoc committee of relevant members as well as, when circumstances require it, external counsel(s) to examine specific issues or facilitate the proper functioning of the investigation, and may define its mandate ("Ad hoc Committee"). The Ad hoc Committee may have function heads and the Compliance Officer as decided by the Board of Directors.

(ii). However, it must be ensured that the members of the Board of Directors or, as the case may be, the members of the Ad hoc Committee should not consist of, members against whom, the Subject or any employee of the department of the relevant members, disclosure/complaint is made.

Investigation by the Committee

(i). Upon receipt of a report from the Standing Committee, the Board of Directors shall constitute the Ad hoc Committee and the Ad hoc Committee shall commence the investigation within 15 days from the date of receipt of the report from the Standing Committee. Its purpose is to determine whether the allegations are founded and, if so, an unethical or improper activity has taken place. All complaints/disclosures will be treated fairly and with due diligence. Anonymous Protected Disclosures facts of which cannot be verified by the Committee shall be rejected.

(ii). The Board of Directors or, as the case may be, the Ad hoc Committee may delegate the investigation to an external counsel.

(iii). The Committee shall ensure that the person against whom or in relation to whom a Protected Disclosure is made ("Subject") shall not influence or interfere with the investigation.

(iv). The Committee shall:

  a. Examine the complaint/disclosure;
  b. Confer with the Whistleblower and the Subject in person by videoconference or by telephone;
  c. Obtain the names of any witnesses and confer with them in person, by videoconference or by telephone;
  d. Obtain written, signed statements from the Whistleblower, the Subject and the witnesses;
  e. Determine whether the allegations are founded;
  f. Prepare an investigation report containing a summary of the allegations and the evidence obtained;
  g. Analyze the evidence and determine whether the complaint is, in whole or in part, founded, unfounded or vexatious.

(v). The Committee meets the Whistleblower and the Subject individually to assess the seriousness and scale of the alleged behavior.

(vi). The Whistleblower and the Subject are treated impartially and kept up to date on the progress of the file and of any decision relative to management of the issue. The Committee shall notify them of the findings of the investigation as soon as possible after completing their investigation report.

(vii). The Committee may categorize the Protected Disclosure as follows:

a. *Genuine:* The allegations shall be genuine in the event it is substantially proven against the Subject. The Committee shall initiate or recommend, as the case maybe, appropriate actions against the Subject in case of genuine complaints.
b. *Could not be proven:* The allegations that could not be proven due, for example, to lack of evidence or incomplete information. The Committee shall not take any action in case of complaints which could not be proven. However, if the allegations could not have been proven but the Investigation revealed misconduct, the Board of Directors may take appropriate action if deemed necessary.

In case the Committee is an Ad hoc Committee, it shall report to the Board of Directors on the above and shall make recommendations for the Board's consideration.

(viii). The Board of Directors shall close the complaints in the following manner:

a. The complaints that are categorized as 'could not be proven' shall be considered as closed immediately on conclusion of the investigation.
b. The complaints that are categorized as 'genuine' shall be considered as closed upon the initiation of one of the following actions:
    - Disciplinary actions against the Subject;
    - Initiation of recovery of the losses suffered to the Whistleblower or any other relevant person; and
    - Any other action as may be deemed appropriate by the Board of Directors.

(ix). The decision taken by the Board of Directors on the Protected Disclosure along with its justification shall be put up to Parties to the Trust in a timely manner.

(x). At every stage from receipt of the disclosure or complaint, as the case may be, to the outcome of the investigation, utmost effort shall be made to protect the identity of the complainant or Whistleblower. It will be kept confidential except where disclosure is:
c. necessary for the investigation;
d. necessary for the application of corrective measures or for protecting employees; or
e. otherwise required by law.

(xi). The Committee shall perform its role in an independent and unbiased manner; Investigators have a duty of fairness, objectivity, thoroughness, ethical behaviours and observance of professional standards.

(xii). The Compliance Officer in consultation with the Ad hoc Committee shall report to the Board of Directors the status of each Protected Disclosure received on a quarterly basis.

Safeguards

(i). In case the Protected Disclosure relates to the Compliance Officer, the same shall be reported directly to the Reporting Officer of the Investment Manager.

(ii). Regardless of the outcome of a good-faith complaint/disclosure, the Investment Manager shall ensure that no Whistleblower who has made any Protected Disclosure and any person who provides information as required by an Investigation are subjected to victimization by initiation of any proceedings or otherwise merely on the grounds that such Whistleblower had made any Protected Disclosure or rendered assistance in any inquiry. They will be protected from any form of reprisal. Any threat of reprisal and any form of reprisal against a Whistleblower will be severely punished.

(iii). If any Whistleblower is being victimized or likely to be victimized on the ground of making any Protected Disclosure, filing a complaint or rendering assistance in any inquiry pursuant to the Protected Disclosure made by such Whistleblower, such Whistleblower may file an application to the chairman, managing director or the chairperson of the audit committee of the Investment Manager, seeking redress in the matter and such authority shall take such action as it deems fit and may give suitable directions to protect the Whistleblower being victimized and avoid any further victimization.

(iv). Every effort will be made to protect Whistleblowers' identity and under no circumstances shall such identity be discussed with any unauthorized person. Utmost care should be taken by the Compliance Officer that the Protected Disclosure made by any Whistleblower is kept confidential and identity of the Whistleblower is not revealed. In case any such information is disclosed, necessary action shall be taken against the concerned employee making such disclosure.

The Investment Manager may engage an independent service provider for providing or operating the vigil mechanism. The audit committee of the Investment Manager shall review the functioning of the vigil mechanism, in accordance with this Policy.

13. Policy to Promote Diversity of the Board of Directors ("Diversity Policy")

In accordance with the InvIT Regulations, the Nomination and Remuneration committee ("**NRC**") of the Board of the Investment Manager has devised a policy on diversity of board of directors. The Investment Manager has adopted the Diversity Policy pursuant to a resolution of the Board dated June 15, 2023.

The NRC shall make appropriate recommendation to the Board to ensure that the Board has an optimum combination of non-independent, independent and woman Directors in accordance with requirements of the InvIT Regulations, SEBI Listing Regulations and other statutory and regulatory obligations of the Investment Manager and the Trust. The Board shall consist of not less than 1 woman independent director.

The NRC and the Investment Manager recognises the benefits of having a diverse Board and sees increasing diversity at Board level as an essential element in maintaining a competitive advantage. The Investment Manager believes that a truly diverse Board will leverage differences in thought, perspective, knowledge, skill, regional and industry experience, cultural and geographical background, age, race and gender, which will ensure that the Trust, retains its competitive advantage. The Investment Manager further believes that a diverse Board will contribute towards driving business results, make corporate governance more effective, enhance quality and responsible decision-making capability, ensure sustainable development and enhance the reputation of the Trust.

The NRC shall review the profile of the prospective candidates for appointment as Director on the Board taking in consideration knowledge, experience, financial literacy / expertise, global market awareness and other relevant factors as may be considered appropriate and the Board shall be so formulated with mix of members to maintain high level of ethical standards. The NRC shall also take into consideration the provisions of the InvIT Regulations, SEBI Listing Regulations and other statutory and regulatory obligations of the Investment Manager.

14. Policy for Evaluation of the Performance of the Board

The Investment Manager has adopted a Policy for Evaluation of Performance of the Board ("**Evaluation Policy**") pursuant to a resolution of the NRC dated June 15, 2023 and will be subsequently adopted by the Board. the Policy provides guidance on the evaluation of the performance, on an annual basis, of: (i) individual Directors (including the Chairperson and independent directors of the Company ("**Independent Directors**")); (ii) the Board as a whole; and (iii) various committees of the Board ("**Board Committees**"). The key terms of the Evaluation Policy are set out below:

<u>Performance Evaluation Board</u>

The criteria to evaluate encompasses three broad factors namely i) contribution ii) counseling and iii) controlling. The Board performance evaluation shall:

(i). Review the role of the Board and the individual Directors;
(ii). Assess the Board effectiveness – both the Board as a whole and Individual Director's contribution to general discussions, business proposals and governance practices;
(iii). Evaluate the quality of the discussions at Board meetings, the adequacy of the reports and information they receive, the level of interpersonal cohesion amongst the Board members;
(iv). Evaluate its effectiveness in use of time, opportunity to adequately assess the management performance including the Key managerial Personnel such as Chief Executive Officer, Chief Operating Officer, Managing Director, Company Secretary & Chief Financial Officer, keeping abreast of developments in the business and regulatory environment, frequency and duration of the meetings;
(v). Factor the suggestions received from Directors for change/improvisation;
(vi). Assess the duties are discharged in accordance with provisions of the Act.

<u>Chairman</u>

The performance of the Chairman be evaluated, amongst other things, on the basis of leadership qualities, strategic thinking, decision making, business acumen, contribution to the resolution of divergent views, time commitment, interaction with management, relationships and communications with the Stakeholders.

Managing Director and Executive Directors/ Whole Time Director

The performance of Managing Director/Executive Director/Whole Time Director, if any, shall be first reviewed by the Chairman and a recommendation be made to the Nomination and Remuneration Committee/ Board of Directors. Some of the parameters for evaluation that can be considered are:

(i). To assess the overall contribution to the performance of the Company in terms of the tasks handled.
(ii). Leadership qualities
(iii). Conduct of Meetings, in the absence of the Chairman, if the need arises
(iv). Contribution to strategic Plans
(v). Decision-making abilities, relationship with stakeholders.
(vi). Development of policies, and strategic plans aligned with the vision and mission of the company and which harmoniously balance the needs of shareholders, clients, employees, and other stakeholders;
(vii). Establishment of an effective organization structure to ensure that there is management focus on key functions necessary for the organization to align with its mission;
(viii). Managing relationships with the Board, management team, regulators, bankers, industry representatives and other stakeholders; and
(ix). Demonstrate high ethical standards and integrity, attendance at meeting, commitment to organization.
(x). Global presence, rational, broader thinking, vision on corporate social responsibility and contribution to enhance overall brand image of the Company and the Trust

Non-Executive Directors

The performance of Non-Executive Director be evaluated, amongst other things, on the basis of strategic thinking, business acumen, teamwork, contribution to the resolution of divergent views, proactive participation, and time commitment. The broad parameters for reviewing the performance of non-executive directors are:

(i). Participation at the Board / Committee meetings;
(ii). Commitment (including guidance provided to senior management outside of Board/ Committee meetings);
(iii). Effective deployment of knowledge and expertise;
(iv). Effective management of relationship with stakeholders;
(v). Integrity and maintaining of confidentiality;
(vi). Independence of behaviour and judgment; and
(vii). Impact and influence.

Independent Directors

The performance evaluation of Non-Executive Independent Directors shall be done by the entire Board of Directors, excluding the Director being evaluated.

Independent Directors have key roles to perform namely in the areas of governance, guiding in strategy formulation, ensuring statutory compliances and such other key matters which could be of importance to the Company. Some of the performance indicators on which the Independent Directors may be evaluated are:-

(i). Contributing and monitoring of Corporate Governance practices.
(ii). Attendance at and participation in Board, Committee Meetings, etc.
(iii). Making aware of best practices for improvement.
(iv). Active participation in strategic planning.
(v). Commitment to the fulfilment of duties and fiduciary responsibilities as enshrined in various statutes and charter of Committees.
(vi). Not allowing any extraneous considerations that will vitiate his exercise of objective independent judgment in the paramount interest of the company as a whole, while concurring in or dissenting from the collective judgment of the Board in its decision making.
(vii). Refraining from any action that would lead to loss of his independence.
(viii). Maintain confidentiality of information provided, unless such disclosure is expressly required by law.
(ix). Maintenance of independence from the management, fulfilment of independence criteria as specified in the InvIT Regulations and Listing Regulations, and no conflict of interest.
(x). Exercise of objective independent judgment in the best interest of the company;
(xi). Ability to contribute to and monitor corporate governance practice; and
(xii). Adherence to the code of conduct for independent directors.

Evaluation of the Board as a Whole

The performance of the Board as a whole may be evaluated either from the reviews/ feedback of the directors themselves or by some external source. The Independent Directors at their separate meeting shall also assess the quality, quantity and timeliness of flow of information between the company management and the Board that is necessary for the Board to effectively and reasonably perform their duties. The evaluation of the performance of the Boards is essentially an assessment of how the Board has performed on following parameters which determines the effectiveness of boards.

(i). Structure of the Board: its composition, constitution and diversity and that of its Committees, competencies and experience of the members, transparent appointment process, Board and Committee charters, frequency of meetings, procedures;
(ii). Dynamics and Functioning of the Board: annual Board calendar, information availability, interactions and communication with CEO and senior executives, Board agenda, cohesiveness and the quality of participation in Board meetings;
(iii). Business Strategy Governance: Board's role in company strategy;
(iv). Financial Reporting Process, Internal Audit and Internal Controls: The integrity and the robustness of the financial and other controls regarding abusive related party transactions, vigil mechanism and risk management;
(v). Achievement of annual targets, successfully executed business expansions and diversifications, number and success rate of mergers and acquisitions
(vi). Monitoring Role: Monitoring of policies, strategy implementation and systems;
(vii). Supporting and Advisory Role; and
(viii). The Chairperson's Role.

Committees of the Board

The Evaluation Policy is to ensure that the Committees, if any constituted by the Board of Directors, to whom the Board has delegated responsibilities, are performing efficiently and effectively in accordance with the terms of reference set out in their charter. This encompasses the necessity of establishing any Committee and reviewing the Charter of the Committee from time to time. The Board is responsible for the evaluation of the performance its Committees. The performance of the committees may be evaluated by the Directors, on the basis of the terms of reference of the committee being evaluated. The evaluation may also be externally facilitated. The broad parameters of reviewing the performance of the Committees, inter alia, are:

(i). Discharge of its functions and duties as per its terms of reference;
(ii). Process and procedures followed for discharging its functions;
(iii). Effectiveness of suggestions and recommendations received;
(iv). Size, structure and expertise of the committee; and
(v). Conduct of its meetings and procedures followed in this regard.

Feedback

Based on the evaluation received from the Individual Directors, the Chairman or any person suitably appointed by the Board shall give written assessment/ oral feedback for:

(i). each Director separately;
(ii). the entire Board; and
(iii). each Board Committee.

Provided in case the members are not comfortable with an open individual assessment, provision for confidentiality may be made where possible.

Action Plan

Once responses from all the Directors have been received, a summary of results of the Board evaluation will be placed before the Board of Directors till a Nomination and Remuneration Committee is formed. Based on the feedback from each member, an average rating for each question will be obtained. All questions with an average rating of less than 90% have been identified as areas for reflection and action planning. These are not necessarily the problem areas but definitely, the areas where processes/ practices can be improved to meet the best governance standards and the Board may devise a plan to address such identified areas ("**Action Plan**"). While identifying the areas for reflections, proposed actions should be suggested for consideration of the evaluation panel. In some areas, suggestions from the evaluation panel are required to be provided.

The Action Plan should carry in detail the following:

(i). the nature of actions, including training and skill-building, are required to be undertaken to address the identified areas.

(ii). timeline within which the actions detailed in the Action Plan shall be completed.

(iii). persons responsible for the implementation of the Action Plan.

(iv). resources required to achieve the objectives set out in the Action Plan.

The Board must review the actions set out in the Action Plan within a specific time period agreed by the Board.

15. Document Archival Policy

The Investment Manager has adopted a Document Archival Policy pursuant to a resolution of the Board dated June 15, 2023. The Document Archival Policy aims to provide a comprehensive policy on the preservation and conservation of the records and documents of the Trust. It provides guidance on the preservation and management of documents to help ensure the authenticity, reliability and accessibility of such documents. The policy aims at identifying, classifying, storing, securing, retrieving, tracking and destroying or permanently preserving records. It stipulates the duration and manner in and place at which records and documents of the InvIT shall be preserved.

16. Policy on Unpublished Price Sensitive Information and dealing in Units by the parties to the Indian Highway Concessions Trust ("UPSI Policy")

The Investment Manager has adopted a UPSI policy pursuant to a resolution of the Board dated June 15, 2023. The purpose of the policy is, *inter alia*, to ensure that the Trust and the Investment Manager comply with the applicable law, including the InvIT Regulations and the SEBI Insider Trading Regulations.

The key principles of the UPSI Policy are set out below:

(a). The Investment Manager shall promptly disclose to the relevant stock exchanges UPSI that would impact price discovery no sooner than credible and concrete information comes into being in order to make such information generally available;

(b). The Investment Manager shall follow uniform and universal dissemination of UPSI to avoid selective disclosure. The Investment Manager shall also make prompt dissemination of UPSI that gets disclosed selectively, inadvertently or otherwise to make such information generally available;

(c). The CIRO shall be responsible for deciding whether a public announcement is necessary for verifying or denying rumours and then making the disclosure, as required under Applicable Law;

(d). The CIRO shall make an appropriate and fair response to the queries on news reports and requests for verification of market rumours by regulatory authorities. Further, no employee or representative of the Investment Manager who is in receipt of any inquiries relating to the Trust, including from any investors, shall respond to such inquiries. Such employee or representative of the Investment Manager shall refer the inquirer to the CIRO or any person authorized by the Board to deal with inquiries;

(e). While dealing with analysts or research persons, the Investment Manager shall provide only public information. Alternatively, the information given to analysts or research persons shall be simultaneously made public at the earliest. The Investment Manager shall develop best practices to make transcripts or records of proceedings of meetings with analysts and other investor relations conferences on the official website to ensure official confirmation and documentation of disclosures made; and

(f). The Investment Manager shall handle all UPSI on a "need to know" basis, provided that UPSI may be disclosed to persons who need such information for furtherance of legitimate purposes, performance of duties or discharge of legal obligations in relation to the Trust.

II. Project SPVs

Representatives on the Board of Directors of the Project SPVs

The Investment Manager, in consultation with the Trustee, has appointed majority of the board of directors of the Project SPVs, in accordance with the InvIT Regulations.

INDUSTRY OVERVIEW

The information in this section is derived from various publicly available sources, government publications and other industry sources, including the CRISIL Report. The industry and third party related information in this section has not been independently verified by us, or our legal, financial or other advisors, and no representation is made as to the accuracy of this information. Industry sources and publications generally state that the information contained therein has been obtained from sources generally believed to be reliable, but their accuracy, completeness and underlying assumptions are not guaranteed and their reliability cannot be assured, and accordingly, investment decisions should not be based on such information. Industry publications are also prepared based on information as of specific dates and may no longer be current or reflect current trends.

Industry sources and publications may also base their information on estimates, projections, forecasts and assumptions that may prove to be incorrect. Accordingly, investors must rely on their independent examination of, and should not place undue reliance on, or base their investment decision solely on this information. The recipient should not construe any of the contents in this section as advice relating to business, financial, legal, taxation or investment matters and are advised to consult their own business, financial, legal, taxation, and other advisors concerning the Listing and the Units.

References to "we", "us" and "our" are to the Trust and the Project SPVs, on a consolidated basis.

Overview of the Indian economy

In 2015, the Ministry of Statistics and Programme Implementation (MoSPI) changed the base year for calculating India's gross domestic product (GDP) to fiscal 2012 from fiscal 2005.

Based on the change, India's GDP clocked a compound annual growth rate (CAGR) of 5.6% to Rs 159.7 trillion in fiscal 2023 from Rs 87.4 trillion in fiscal 2012.

This was despite the stress inflicted by the pandemic that saw the GDP — which was already experiencing a slowdown and had grown 3.7% in fiscal 2020 — contract 5.7% in real terms in fiscal 2021 to Rs 137 trillion.

The economy bounced back as the pandemic-related shocks subsided, resulting in growth of 9.1% on-year in real GDP to Rs 149 trillion in fiscal 2022.

After contracting in the first half of fiscal 2021 because of Covid-19, the economy rebounded in the second half, growing 0.5% and 1.6% on-year in the third and fourth quarters, respectively. While the economy shrank in fiscal 2021 as a whole, agriculture and allied activities, and electricity, gas, water supply and other utility services were the outliers, logging growth. On the other hand, contact-intensive trade, hotel and transport, and services related to broadcasting were hit the most and contracted in all the quarters. Construction — a labour-intensive sector — was also severely hit in the first half but rebounded in the second half.

Per capita net national income (NNI) at constant prices

India's per capita income, a broad indicator of living standards, rose from Rs 63,462 in fiscal 2012 to Rs 94,270 in fiscal 2020, at 5.1% CAGR. This growth was led by better job opportunities, propped up by overall GDP growth. Moreover, population growth remained stable at ~1% CAGR. However, per capita income declined 9.7% on-year in fiscal 2021 owing to the economic impact of Covid-19. The per capita income rose 7.5% on-year in the next fiscal, but is yet to recover to pre-pandemic levels in absolute terms.

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19RE	FY20RE	FY21 2nd RE	FY22RE	FY23 SAE
Per-capita net national income (Rs)	63,462	65,538	68,572	72,805	77,659	83,003	87,586	92,133	94,270	127,065	148,524	172,000
On-year growth (%)		3.3%	4.6%	6.2%	6.7%	6.9%	5.5%	5.2%	2.3%	34.8%	16.89%	15.81%

Revised estimates PE: Provisional estimates; P: Projected by CRISIL MI&A Consulting; RE: Revised estimates AE: Advanced estimate SAE: Second Advanced estimate

Source: Advanced estimates of national income 2020-21, 2022-23, CSO, MoSPI, CRISIL MI&A Consulting

Road network in India

India has the second-largest road network in the world, spanning 6.331 million km as of fiscal 2023. Road transportation, the most frequently used mode of transportation in India, accounted for ~86% of passenger traffic and close to ~64% of freight traffic as of fiscal 2022. Although national highways span nearly 144,955 km, constituting just 2% of road length, they accounted for about 40% of total road traffic in fiscal 2022. Secondary road system comprises state roads and major district roads, which accounted for the remaining 60% of traffic and 98% of road length.

Road network in India in FY23

Road network	Length ('000 km)	Percentage of total length	Percentage of total traffic	Connectivity to
National highways	145.0	~2%	40%	Union capital, state capitals, major ports, foreign highways
State highways	167.1	~3%	60%	Major centres within the states, national highways
Other roads	6,019.8	~95%		Major and other district roads, rural roads - production centres, markets, highways, railway stations

Source: MoRTH Annual Report 2021-22 & 2022-23, CRISIL MI&A Consulting

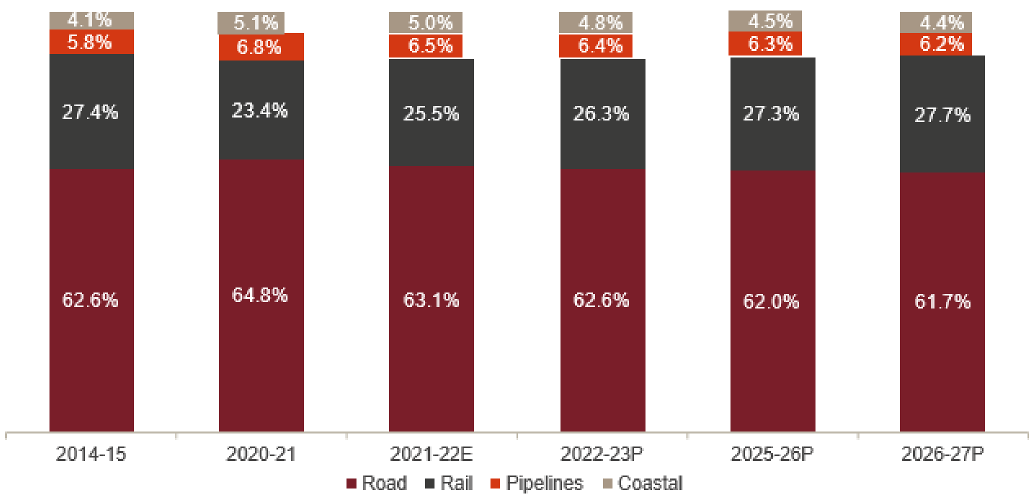
Break-up of road length across different regions (in km)

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
National highways	97,991	101,011	114,158	126,350	132,500	132,995	136,440	140,995	144,955
State highways	167,109	176,166	175,036	186,908	186,528	194,900	176,818	171,039	167,079
Other roads	5,207,044	5,326,116	5,608,477	5,902,539	6,067,269	6,165,660	5,902,539	6,059,813	6,019,757
Total	5,472,144	5,603,293	5,897,671	6,215,797	6,386,297	6,493,555	6,215,797	6,371,847	6,331,791

Source: MoRTH Annual Report 2021-22 & 2022-23, CRISIL MI&A Consulting

Roads sector is estimated to have a share of ~63 % in overall freight movement compared with the ~23% of rail mode as of fiscal 2023. We expect road freight traffic to increase at a CAGR of 5-7% in BTKM terms between fiscals 2022 and 2027. During the period, railways is expected to grow at a CAGR of 7-9%, growing faster than roads.

Share of roads in total freight movement (in terms of BTKM)



E: Estimated; P: Projected
Source: CRISIL MI&A Consulting

Overview of PPP framework and models in operations

PPP is an arrangement between a government/statutory entity/government-owned entity and a private sector entity for the provision of public assets and/or public services through investments made and/or management undertaken by the private sector entity for a specified period of time. In this arrangement, allocation of risk between the private sector and the public entity is defined well. The private entity receives performance-linked payments that conform with (or are benchmarked to) specified and pre-determined performance standards, measurable by the public entity or its representative.

Types of PPP models

Type of project	Description	Development risk	Financing risk	Traffic risk and accrual of toll fee collection	Net cash outflow for the government	Revenue for private party	Concession period	Award criteria
BOT-toll	Private party builds the road, undertakes O&M and collects toll	Concessionaire	Concessionaire	Concessionaire	Yes (in the form of grant/equity support)	Toll	20-30 years for the NHAI** and other authorities	Highest revenue sharing bid/highest premium/ lowest equity support
BOT-annuity	Private party builds the road, undertakes O&M* and collects annuity from the granting authority	Concessionaire	Concessionaire	Authority	Yes, net payment to be made is the difference between the toll collection and the annuity payable	Annuity payment	15-20 years for the NHAI and other authorities	Lowest annuity
BOT-HAM	Private party builds the road, undertakes O&M. Gets 40% of payment during construction and 60% as annuity along with interest	Concessionaire	Concessionaire	Authority	40% during construction and 60% as semi-annual annuity along with interest, net of toll collected	Construction grant plus annuity payments, interest on annuities, inflation-indexed O&M payments	Around 15 years of operations plus additional construction period	Lowest project cost plus O&M cost
EPC	Private party builds the road, based on the cost incurred by the government	Concessionaire	Authority	Authority	Yes	Contract amount	Not required	Lowest contract price requested
OMT	Private party collects toll, and undertakes O&M and major maintenance	No development risk except minimal risk in case of paved shoulders	Concessionaire	Concessionaire	No	Toll	Up to nine years for NHAI projects	Highest % of toll revenue share or highest premium per year
Tolling	Private party pays the estimated toll upfront to the authority and collects it during the concession	No development	Concessionaire	Concessionaire	No	Toll	One year for NHAI projects	Highest revenue-sharing bid

	period							
TOT	Private party pays an upfront bid concession fee (summation of NPV of free cash flow based on concessionaire estimates) to the authority, undertakes O&M plus certain capex and collects the toll during concession period	Authority (in case upgradation of lanes is taken up during the concession period)	Concessionaire	Concessionaire	No	Toll	15, 20, 30 years#	Highest upfront payment

Note: Development risk refers to construction risk in developing a road project
**Operations and maintenance*
*** National Highways Authority of India*
#As per TOT bundles of NHAI in 2021-22
Source: CRISIL MI&A Consulting, NHAI

Key transactions in road sector

Recent private equity transactions

Date	Target	Investor	Transaction	Target company details
April-2022	KKR & Co's road platform in India	Ontario Teachers	Committed Rs 13.33 billion ($175 million)	Ontario Teachers' Pension Plan Board committed an investment to boost alternative investment company KKR & Co's road platform in India.
Feb-2021	Sadbhav Infrastructure Projects Ltd	Allianz Global Investors joined by AMP Capital	To raise Rs 7 billion ($96 million) through non-convertible debenture	The company is a developer and operator of highways, roads and related projects. Capital raising is part of a larger funding exercise to help the company repay debt and fund ongoing hybridannuity road assets.
Jan-2021	Debt-ridden Chennai Elevated Tollway Ltd	JC Flowers Asset Reconstruction Company	Acquire over half of the debt of a stressed road developer at a discount of over 80%	The debt was picked up from State Bank of India (SBI), Central Bank of India, Bank of Baroda, and Bank of Maharashtra.
Dec-2020	Chenani Nashri Tunnelway Ltd Asset, a road tunnel, from Infrastructure Leasing & Financial Services Ltd	Cube Highways and Infrastructure Pvt. Ltd.	Rs 39.0 billion ($528 million)	
Oct-2020	Road assets	NIIF		NIIF made progress towards integrating its road and highway portfolio. It acquired Essel Devanahalli Tollway and Essel Dichpally Tollway through the NIIF Master Fund. These road infra projects will be supported by Athaang Infrastructure, NIIF's proprietary road network.
Sep-2020	Road assets - Farakka-Raiganj Highways Ltd (operating toll road in West Bengal	Cube Highways and Infrastructure Pte	Rs 15.08 billion (USD 205 million).	Cube Highways completed a transaction to acquire a road project from a unit of Hindustan Construction Company Ltd

Source: CRISIL MI&A Consulting

Recent key asset sales

Date	Target	Buyer	Seller	Deal value (Rs mn)	% sought
Apr-2023	Kundapur-Surathkal section (90.1 km road project in Karnataka, comprising 74.8 km Kundapur-Surathkal section and 15.3 km Mangaluru-Kerala border section	KKR & Co	Navayuga Udupi Tollways	9240	NA
Apr-2023	Baharampore-Farakka Highways Ltd	Cube Highways and Infrastructure Pte Ltd	HCC Group	13,230	NA
Mar-2023	Aurang Tollway (section of NH 6 between Aurang in Chhattisgarh and Odisha border)	Macquarie Group	BSCPL	16,000	NA
Feb-2023	5 completed HAM assets (Welspun Delhi Meerut Expressway Pvt Ltd, Welspun Road Infra Pvt Ltd, MBL (CGRG) Road Ltd, MBL (GSY) Road Ltd, Chikhali Tarsod Highways Pvt Ltd) and one operating BOT toll asset (Welspun Infrafacility Pvt Ltd)	Actis and Welspun Enterprises	5 completed HAM assets (Welspun Delhi Meerut Expressway Pvt Ltd, Welspun Road Infra Pvt Ltd, MBL (CGRG) Road Ltd, MBL (GSY) Road Ltd, Chikhali Tarsod Highways Pvt Ltd), and Welspun Infrafacility Pvt Ltd	NA	NA
Nov-2022	Eastern Peripheral Expressway	CDPQ-backed Maple Highways	NHAI	62,670	NA
Oct-2022	InvIT (across 7 states: Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, Telangana)	CPPIB and Ontario Teachers' Pension Plan Board	National Highways Infra Trust	NA	NA
Sep-2022	Andhra Pradesh and Gujarat assets (Tada Nellore)	Adani Group	Macquarie Group	31,100	NA
Aug-2022	SP Jammu-Udhampur Highway Ltd	NIIF	Shapoorji Pallonji Group	22,800	100%
Jul-2022	Navayuga Quazigund Expressway Pvt. Ltd	NIIF	Navayuga Quazigund Expressway Pvt Ltd	30,350	NA
Jun-2022	Six operating highway toll projects	Actis' Long Life Infrastructure Fund	Welspun Enterprises Ltd	60,000	100%
Jun-2022	Five operational road projects	IndInfravit Trust, an InvIT led by Canada Pension Plan Investment Board	Brookfield	93,750	100%
Jul-2021	One highway concession	KKR Asian Fund III LP	Global Infrastructure Partners	-	39%
Jan-2021	Shree Jagannath Expressways Pvt. Ltd	Indian Highway Concessions Trust	Bharat Road Network	7,300	74%
Dec-2020	Jorabat Shillong Expressway Ltd	Sekura Roads Ltd	IL&FS Transportation Networks Ltd	9,300	100%
Dec-2020	Chenani Nashri Tunnelway Ltd.	Cube Highways and Transport Assets Advisors Private Limited	IL&FS Transportation Networks Ltd	39,000	100%

Jun-2021	Navayuga Road Projects Pvt. Ltd. - two road projects	Sekura Roads Ltd	Navayuga Road Projects Pvt Ltd	-	100%
Jan-2020	KNR Walayar Tollways Pvt Ltd	Cube Highways and Transport Assets Advisors Private Limited	KNR Construction Ltd	6,200	100%
Aug-2019	Five under construction HAM projects - Dilip Buildcon Ltd	Cube Highways and Transport Assets Advisors Private Limited	Dilip Buildcon Ltd	7,300	100%
Aug-2019	KNR Shankarampet Projects Pvt Ltd	Cube Highways and Transport Assets Advisors Private Limited	KNR Construction Ltd	1,000	100%
Feb-2019	Two road projects - KNR Construction Ltd	Cube Highways and Transport Assets Advisors Private Limited	KNR Construction Ltd	2,000	100%

Source: Industry, CRISIL MI&A Consulting

Factors impacting toll growth

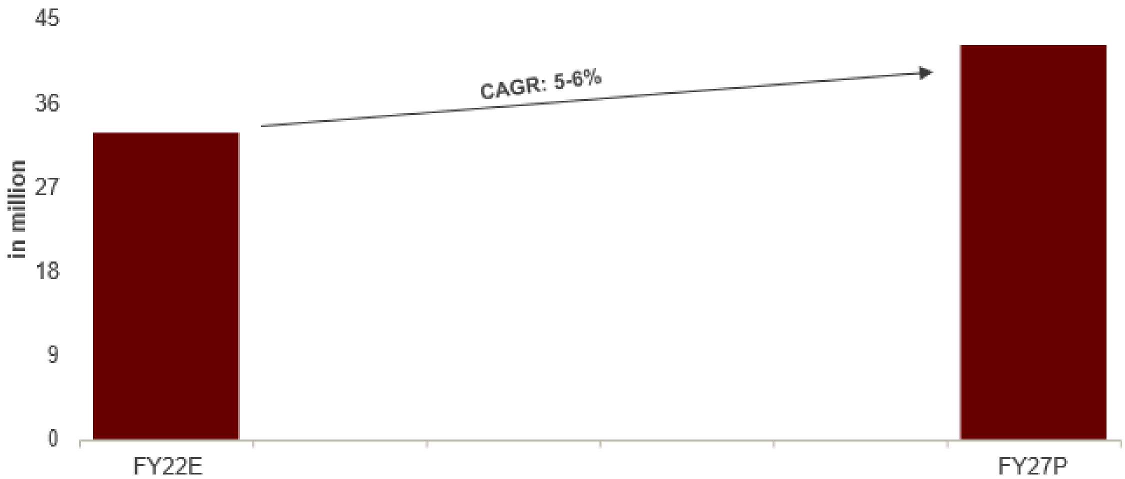
Covid-19 a short term issue; long term toll collection growth factors intact

Toll collections in first two months of fiscal 2021 were impacted due to suspension of toll collection till April 19, 2021 by NHAI and the nationwide lockdown announced by the government. Subsequently, traffic rebounded sharply supported by both, sharp resumption in economic activity and increased use of personal mobility to travel instead of public transport. We expect the long-term trend in toll collection to be intact supported by factors such as strong macroeconomic growth outlook, robust growth in PV and CV population, strong execution of construction of national highways, and better compliance management with ETC.

Market for PVs underpenetrated, offer huge potential in the long run

India’s car market is extremely underpenetrated compared with most developed economies and some developing nations. As of fiscal 2021, India had ~24 passenger vehicles per 1,000 people. This number is expected to increase to 27 by fiscal 2026, which is significantly lower than that of developed nations and even Brazil, Russia, and China (all three, along with India, being part of the BRICS block) based on per capita GDP. Thus, India offers tremendous growth potential for automobile manufacturers. Even while comparing the penetration of cars and UVs across countries based on per capita GDP, India lags most others. We expect this gap to reduce gradually in the long run.

Outlook on passenger vehicles population



E: Estimated, P: Projected
Source: CRISIL MI&A Consulting

CV industry recovered sequentially post decline in the first quarter of fiscal 2021

The pandemic-led nationwide lockdowns hampered economic activity in the first quarter of fiscal 2021. Supply chain constraints and labour availability issues hampered OEMs' attempts to build up inventory at the dealer end. OEMs also refrained from pushing inventory in a low demand scenario, resulting in ~85% on-year decline in the CV segment.

LCVs, which largely cater to movement of agricultural produce, e-retail, pharmaceuticals and consumer staples, showed some resilience in the second quarter as it witnessed a lower ~3% on-year decline vis-a-vis ~43% decline in MHCVs. In the same quarter, MHCVs continued to be impacted by lower freight demand and overcapacity due to revised axle norms. Buses, too, suffered, owing to the need for social distancing and sales fell ~78% on-year. But overall CV sales recovered sequentially in the third and fourth quarters of fiscal 2021.

Demand for MHCVs carrying goods to lead in the next five years

MHCV sales are likely to rise at ~14-16% CAGR between fiscals 2022 and 2027, as compared with a negative CAGR of 2% between fiscals 2017 and 2022. Moreover, tonnage addition is expected to improve in line with a better product mix (higher growth in MAV and T-Trailer demand despite a shift to lower tonnage vehicles due to axle norms). Factors driving long-term MHCV sales will be improving industrial activity, steady agricultural output, and the government's focus on infrastructure. However, volume growth will be limited by efficiencies achieved from GST, better road infrastructure, and commissioning of the DFC.

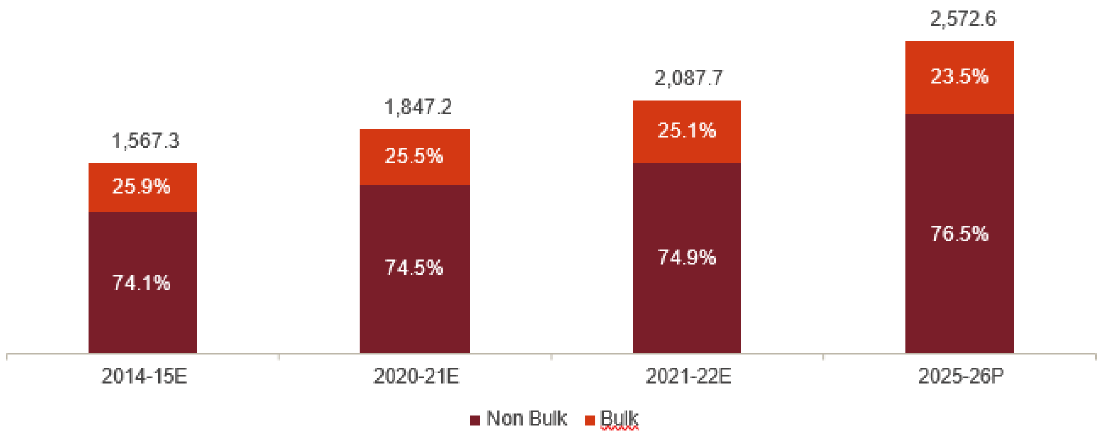
Roads remain the preferred mode for non-bulk transportation

Roads generally account for a significant share in non-bulk commodity transportation, as:

- Rail does not cater to piecemeal freight transportation. Entire rakes are provided for transportation and not just single wagons (although Indian Railways is looking into multi-point loading, it would still not attract small-sized cargo)
- Road transport has better service quality and is more reliable
- Road transporters operate on a much smaller scale. Also, given the large number of road-transport operators, customers have better bargaining power. These transporters also add a personal touch to their service, which is important, as these commodities are typically expensive and fragile
- Roads provide end-to-end connectivity and safer handling, which is an important factor while transporting low-volume, but high-value commodities

Consequently, CRISIL expects the share of non-bulk commodities in the total road primary btkm to increase to 76.5% by fiscal 2026 from 74.9% in fiscal 2022

Roads predominantly transfer non-bulk freight (in terms of BTKM)



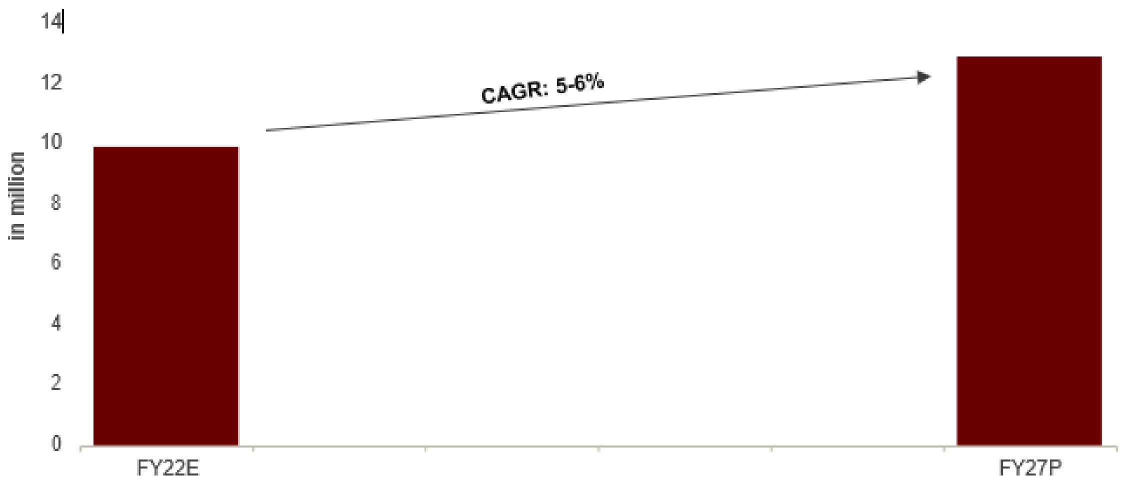
E: Estimated; P: Projected
Source: CRISIL MI&A Consulting

Efficiency gains, lower utilisation levels and recovery in manufacturing to impact CV population growth in next five years

Manufacturing and construction sectors are the prime factors driving CV demand. Both sectors are expected to perform positively with revival in the overall macroeconomic scenario. The transportation industry enjoyed an increase in available capacity due to axle load norms published in 2018, but this acted as a negative for the CV industry as sales declined due to increased capacity and lower utilisation. Also, post implementation of GST, checkposts across state borders have been removed, which has resulted in increase in efficiency of existing fleet on the road.

Improvement in road infrastructure is expected to increase the average speed of trucks, leading to efficiency gain of ~10%. Hence, fewer trucks will be required to move the same quantity of goods, lowering truck demand. On the other hand, increased running of trucks will help improve the competitiveness of the road transportation industry, helping attract more freight. Considering the above mentioned factors and their future impact CRISIL MI&A Consulting expects CV population to log 5-6% CAGR over the next five fiscals. The commercial traffic growth is expected to grow at a faster pace than the CV population due to a higher number of trip possible per vehicle owing to increased efficiency.

Outlook on freight vehicles population growth



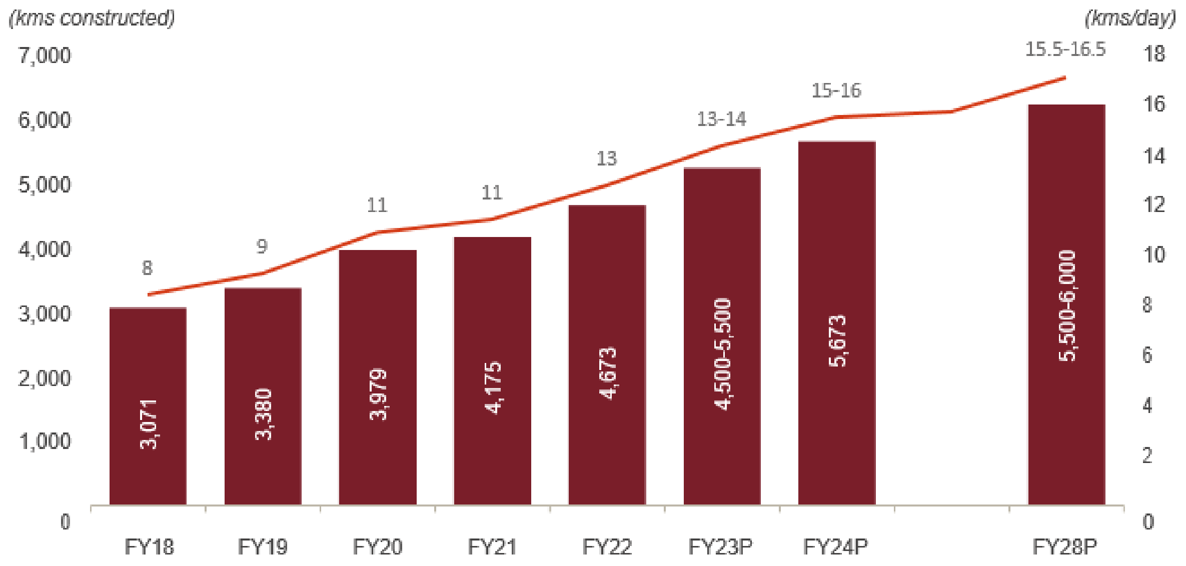
E: Expected; P: Projected
Source: CRISIL MI&A Consulting

National Highway construction gains steady pace with focus on swifter execution

Despite the lockdowns and labour-related issues in fiscal 2021, developers made up for lost time and construction by NHAI rose 5% on-year to 4,175 kms in fiscal 2021. Acceleration in project awards, sharper focus on resolving land acquisition issues, and the Atmanirbhar Bharat initiatives to ease liquidity (monthly milestone payments, release of rentention money, reduction in performance security and extension of three-six months in milestones and SCODs) for EPC road players augured well for the construction sector. In fiscal 2022, the NHAI's focus on swifter execution of projects boosted road construction by 12% on-year to 4,673 km.

CRISIL expects in fiscal 2023 the NHAI’s construction to have been in the 5,000-5,500 km range on the back of higher awarding witnessed in the previous fiscal. Construction has faced significant roadblocks thus far in the current fiscal as rising prices of key input materials, such as cement, steel, bitumen etc, have prompted developers to delay the procurement of these materials. This has had a direct impact on construction activities as the pace of construction has slowed down. However, given the prices of these key commodities have already shown signs of cooling off, it is expected that the pace of construction would pick up after the monsoon. Over the medium term, the pace of construction is expected to rise steadily to reach ~16 km per day by fiscal 2027.

NHAI's pace of construction rising steadily with continued focus on swifter execution



Source: NHAI, CRISIL MI&A Consulting

Outlook on toll collection and remittance on national highways

Toll collection is expected to log 9.5-10.5% CAGR between fiscals 2022 and 2027 on a like-to-like basis and grow at 18-19% considering new road additions and subsequent tolling on them. CRISIL estimates total toll collection to have reached Rs 430 billion in fiscal 2022, owing to improvement in economic activity, efficiency gains due to removal of check posts post implementation of GST, growth in vehicle population in both PV and CV segments, strong execution pipeline, better compliance, and blocking of leakages due to implementation of ETC.

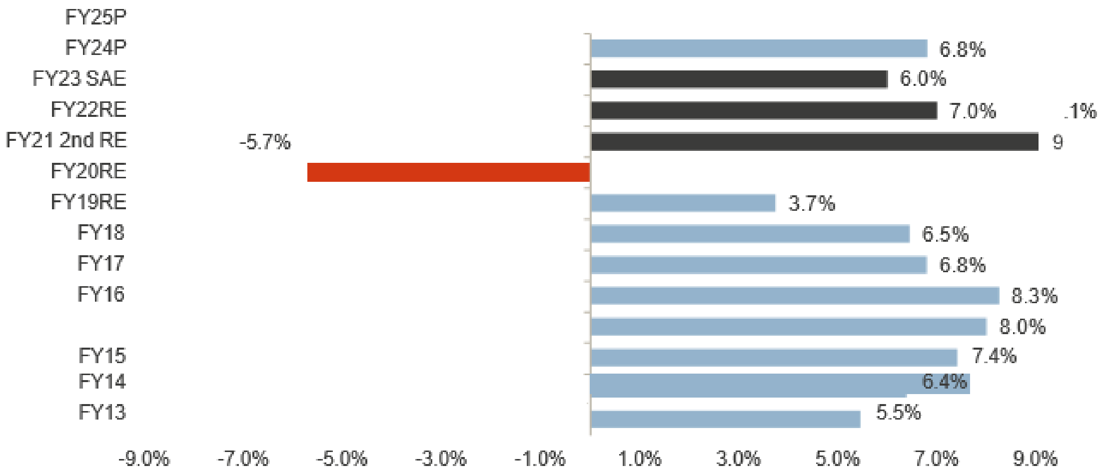
CRISIL expects India's GDP to grow 6.0% this fiscal with downside risk

India's growth outlook for this fiscal is fettered by multiple risks. CRISIL expects the country's GDP growth to touch 6% this fiscal, compared with 7% estimated by the NSO for last fiscal. A complex interplay of geopolitical events, stubbornly high inflation — and sharp rate hikes to counter that — have turned the global environment gloomier. On the domestic front, the peak impact of the rate hikes — 250 basis points (bps) since May 2022, which has pushed interest rates above pre-Covid-19 levels — will play out this fiscal. Consumer inflation is expected to moderate to 5.0% on average this fiscal from 6.8% last fiscal, owing to a high-base effect and some softening of crude and commodity prices. A good rabi harvest would help cool food inflation, while the slowing economy should moderate core inflation.

The risks to inflation are tilted upward, given the ongoing heat wave and the World Meteorological Organization's prediction that an El Niño warming event is likely over the next couple of months. Capital investments, at a higher scale by the government and expected fresh ones by the private sector, will drive medium-term growth, while digitalisation and efficiency-enhancing reforms will raise the contribution of productivity. We expect the economy to continue reaping efficiency gains from structural reforms such as the goods and services tax (GST) and the Insolvency and Bankruptcy Code.

Better physical infrastructure will improve connectivity and lower logistics costs for industries, while digital infrastructure will bring efficiency gains by serving as a platform for innovation and efficient payments systems. As for India Inc, revenue growth is expected to touch double digits this fiscal despite a global slowdown and interest rate hikes, an analysis of 748 listed companies from fiscal 2011 onwards (excluding those from the oil and gas, and banking, financial services and insurance sectors) shows.

Real GDP growth (% on-year)



P: Projected, SAE: Second advance estimate, RE: Revised estimate
Source: Advance estimates of national income 2020-21 and 2022-23, CSO, MoSPI, CRISIL MI&A Consulting

Outlook on roads sector

NHAI awarding to moderate, *Bharatmala Phase 1 stretches on*

National Highways Authority of India (NHAI) awarding has witnessed a sequential rise from merely 2,222 km in fiscal 2019 to 6,306 km in fiscal 2022. Fiscal 2021 was a pivotal year, which saw healthy growth in awarding despite the pandemic-induced disruptions. The NHAI awarded 4,818 km in fiscal 2021; a 3-year high then. Of these, 54% were awarded HAM, 3% under BOT, and the rest under the EPC mode. Additionally, favourable changes in the BOT and HAM agreements, and relaxation of bidder eligibility criteria not only indicated a clear policy shift to improve private sector participation but also aided the spurt in the HAM awards. In fiscal 2022, the awarding momentum continued unabated with the NHAI awarding 6,306 km. The share of HAM and EPC in the awarding increased marginally to 55% and 44%, respectively, while projects under BOT accounted for only a paltry 1%.

In fiscal 2023, as per CRISIL MI&A Consulting estimates, NHAI awarding is estimated to have slowed to ~5,000 km, while the respective shares of HAM, EPC and BOT in the total awarding are likely to have remained at similar levels vis-à-vis fiscal 2022. A limited rise in budgetary support coupled with higher capex for 70% of high-value expressways currently under construction, could defer NHAI awards under Bharatmala Phase 1 beyond fiscal 2024, when construction was originally scheduled to be completed. Over the medium term, it is expected that the NHAI would continue to award 5,000-5,500 km per year, on average, between fiscals 2024 and 2027. Furthermore, the shares of HAM, EPC and BOT in the awarding are expected to remain largely stable without any significant deviations.

Outlook of toll collection and remittance on national highways

Toll collection is expected to log 9.5-10.5% CAGR between fiscals 2022 and 2027 on a like-to-like basis and grow at 18-19% considering new road additions and subsequent tolling on them. CRISIL estimates total toll collection to have reached Rs 430 billion in fiscal 2022, owing to improvement in economic activity, efficiency gains due to removal of check posts post implementation of GST, growth in vehicle population in both PV and CV segments, strong execution pipeline, better compliance, and blocking of leakages due to implementation of ETC

BUSINESS

This section should be read in conjunction with the sections entitled "Risk Factors", "Audited Financial Statements" and "Discussion and Analysis by the directors of the Investment Manager of the financial condition, results of operations and cash flows of the Projects SPVs of the Trust" on pages 47, 261 and 195, respectively, and the Technical Reports and Traffic Reports included as well as all other information contained in this Information Memorandum.

Unless stated otherwise or unless context requires otherwise, the financial information in this Information Memorandum in relation to the Trust or the Project SPVs is derived from the Consolidated Financial Statements or the Standalone Financial Statements, as the case may be
References to "we", "us" and "our" are to the Trust, the Project SPVs, on a consolidated basis.

Overview

Indian Highway Concessions Trust is an Indian infrastructure investment trust sponsored by Maple Highways Pte Ltd, a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of Caisse de dépôt et de placement du Québec ("**CDPQ**").

CDPQ was established on July 1, 1965, by an act of the provincial legislature of Québec, Canada (namely, *the Act respecting the Caisse de dépôt et placement du Québec*). CDPQ is a legal person without share capital or shareholders, headquartered at 65, rue Sainte-Anne, Price building, 14th floor, Québec (Québec) G1R 3X5 and with a principal place of business at 1000, place Jean-Paul-Riopelle, Montréal, Québec H2Z 2B3, Canada. CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans. CDPQ invests globally in major financial markets, including public and private equity, fixed income, infrastructure and real estate. As of December 31, 2022, CDPQ held approximately CAD 401.89 billion in net assets. CDPQ has also received a credit rating of "AAA" from S&P Global Ratings, DBRS Ltd. and Fitch Ratings and "Aaa" from Moody's Investors Service.

CDPQ is amongst the three largest institutional investors in infrastructure in the world, with nearly 25 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 54.64 billion (net assets as at December 31, 2022) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has infrastructure investments in over 15 countries globally comprising both developed markets as well as targeted growth markets. Through its subsidiary CDPQ Infra, CDPQ also acts as a developer in certain infrastructure projects by providing integrated management of the planning, financing, construction and operating phases.

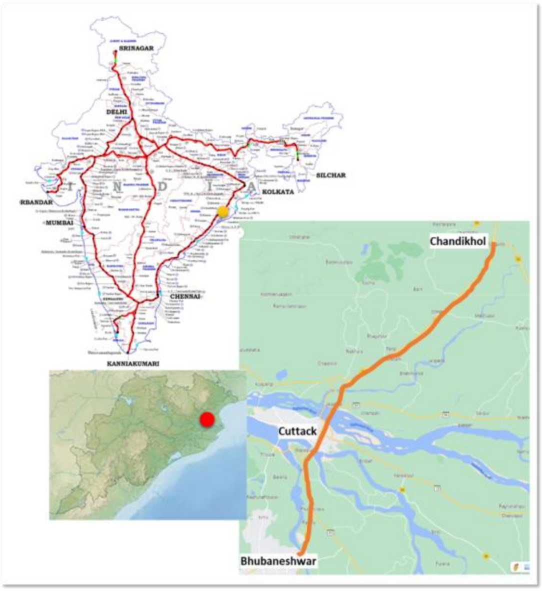
CDPQ has extensive global experience of investing in the transportation sector in developed markets and targeted developing markets, including the REM - public transit project in Montréal, Canada, the Conmex toll road in Mexico, Indiana Toll Road in the United States of America, WestConnex tollroad in Australia and a Multisectoral (including toll roads) Infrastructure Platform with CKD IM in Mexico.

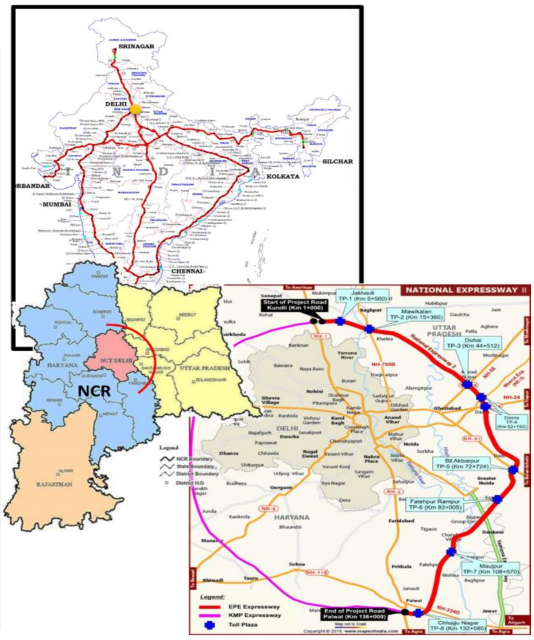
India is one of the key growth markets of focus for CDPQ. CDPQ typically works in partnership with local firms to create institutional platforms for the long term.

SJEPL has undertaken the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha, on a design, build, finance, operate and transfer basis, under the SJEPL Concession Agreement. NCREPE has undertaken the Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on tolling, operation, maintenance and transfer basis, under the NCREPE Concession Agreement.

The map* below illustrates the location of the SJEPL Project and the NCREPE Project:

SJEPL **NCREPE**





The Investment Manager will also have the flexibility to acquire new projects through acquisitions from the Sponsor or from third parties or acquisitions by way of bidding or develop greenfield projects.

Maple Infra InvIT Investment Manager Private Limited is the Investment Manager for the Trust. Prior to acquisition by the Maple Highways Pte Ltd, it was engaged in the business of generation, accumulations, distribution and supply of electricity. Maple Highway Project Management Private Limited, is the Project Manager and was originally incorporated on January 28, 2010 and is approximately 100% owned by the Maple Highways Pte Ltd.

For further details of the Sponsor, the Project Manager and the Investment Manager, please see the section entitled "*Parties to the Trust*" on page 91.

Axis Trustee Services Limited is the Trustee of the Trust. The Trustee is a registered intermediary with SEBI under the Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993, as a debenture trustee.

Strengths

The Investment Manager believes the following to be the key strengths of the Trust:

1. *Strategically located Projects*

   The Projects are located in corridors that have a mix of high commercial and passenger vehicular traffic, located in a parts of India with high gross state domestic product growth. The principal features of the Projects are as follows:

The SJEPL Project forms a part of the National Highway 16 which is called as the 'Golden Quadrilateral' that connects the four major citis of India being Delhi, Mumbai, Chennai and Kolkata. It is a key connector of Chennai to Kolkata corridor. At the same time, the east-west highway of NH55 connects to the SJEPL Project just south of the toll plaza. Therefore, the traffic moving between Mumbai and Kolkata is also captured on the SJEPL Project. The SJEPL Project passes through the urban settlements of Bhubaneswar and Cuttack, which are two of the largest economic activity centers in Odisha, Bhubaneswar also being the capital of the state. The city of Puri and Konark, are historical and religious centers and attract a lot of tourists from within Odisha as well as other states. Almost 50% of the national production of iron ore, 75% of the national production of Bauxite and nearly the entire national production of Chromite comes from the state of Odisha, where the SJEPL Project is located. Steel plants by major steel conglomerates like Essar steel, Tata steel, Bhushan steel and Jindal steel plants, are located in the immediate catchment area of the SJEPL Project. The SJEPL Project is part of the NH16 corridor which is in proximity to the major mining and mineral processing sections around Talcher-Angul area, Joda Barbil area, Balasore, Chandikhol and Keonjhar. Its connections with three operational ports, namely, Paradip port, Dharma port and Gopalpur port also make it an asset of strategic importance. These ports are at a distance of about 340 kms from the iron ore mining clusters of Joda-Koira. *(Source: Traffic Report)*. For further details, please see the "*Traffic Reports*" at Annexure C.

The NCREPE Project connects Kundli to Palwal via Ghaziabad. The NCREPE Project is a solar powered, greenfield expressway which not only decongests the roads in Delhi along with being green, safe and afficient route for a number of commuters travelling from and towards the National Capital Region ("**NCR**"). The NCREPE Project offers connectivity between Delhi/NCR, Haryana and Uttar Pradesh. NCREPE Project is surrounded by industries engaged in IT/ITES, Electronics, Agro, cement and ceramic, etc. situated along the eastern side and industries engaged in textiles, automobiles and ancillary manufacturing, agro-processing, electronics, pharmaceuticals and dairy processing on the western side. In addition, the proposed Noida International Airport and the Defense Industrial Corridor may result in establishment of smaller ancillary industries in close vicinity resulting in attracting traffic to the NCREPE Project.

The Investment Manager believes that the Projects cater to growth sectors and population densities that will utilise these Projects on an increasing basis, thereby contributing to expected growth in the Trust's toll revenues.

2. *Long operational track record and long-term income generating assets with high traffic volume or annuity assets*

SJEPL started collecting tolls in December 2011. From Fiscal 2020 to Fiscal 2021, toll collections by SJEPL increased by 1.8% , from ₹ 1,751 million to ₹ 1,782 million and from ₹1,782 million in Fiscal 2021 to ₹ 1,736 million in Fiscal 2022. Further, SJEPL collected ₹ 1,950 million toll for as of March 31, 2023. The NCREPE Project started collecting tolls from November 11, 2022 and has collected ₹1,699 million as of March 31, 2023. According to the Traffic Reports, it is expected that toll collections will continue to increase for the same reason and other factors for such increase include construction or upgradation activities on routes, implementation of FASTag etc. For further details, please see the section entitled "*Discussion and analysis by the Directors of the Investment Manager of the financial condition, results of operations and cash flows of the Project SPVs of the Trust*" on page 195 and the *"Traffic Report"* at Annexure C.

3. *Strong support from the Sponsor, Project Manager and Investment Manager*

Indian Highway Concessions Trust is an Indian infrastructure investment trust sponsored by Maple Highways Pte Ltd, a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of CDPQ. CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans. CDPQ invests globally in major financial markets, including public and private equity, fixed income, infrastructure and real estate. CDPQ is amongst the three largest institutional investors in infrastructure in the world, with nearly 25 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 54.64 billion (net assets as at December 31, 2022) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has infrastructure investments in over 15 countries globally comprising both developed markets as well as targeted growth markets. Through its subsidiary CDPQ Infra, CDPQ also acts as a developer in certain infrastructure projects by providing integrated management of the planning, financing, construction and operating phases. We believe that such experience of CDPQ, will help us grow our portfolio in respect of acquisition of future projects.

Maple Infra InvIT Investment Manager Private Limited is the Investment Manager for the Trust. The Investment Manager was originally incorporated as a public limited company on September 26, 1995 and was engaged in the business of generation, accumulations, distribution and supply of electricity. Maple Highway Project Management Private Limited, is the Project Manager and was originally incorporated on January 28, 2010 and is approximately 100% owned by the Maple Highways Pte Ltd.

For more details, please see the section entitled "*Parties to the Trust*" on page 91.

The Trust will benefit from the experienced management team at the Investment Manager and the Project Manager which comprises seasoned professionals with extensive management and/or operational experience in the roads sector.

4. *Attractive industry sector with favourable government policies*

Further development of the infrastructure sector, in particular road infrastructure, is a priority for the GoI and has been the subject of enhanced investment from the public sector through traditional means of public investment and new channels such as PPPs. The number of vehicles on Indian roads has increased by approximately 9.2% per year in recent years, and road transport has emerged as the dominant segment in India's transport sector. With initiatives such as the NHDP, the Special Accelerated Road Development Programme and the National Highways Interconnectivity Improvement Project, the GoI had set funding targets of US$ 14.85 billion for Fiscal 2021, with US$ 7.87 billion earmarked for national highways and the remainder for rural roads. *(Source: indiabudget.gov.in)* Through the PPP model, among others, the Investment Manager believes that the Trust will capture through acquisitions, a reasonable share in the PPP format of the road infrastructure sector.

For further details on the market opportunity for the road infrastructure industry in India, please see the section entitled *"Industry Overview"* on page 156.

5. *Skilled and experienced management team of the Investment Manager and Project Manager with relevant industry experience*

The Trust is being managed by qualified personnel of the Investment Manager who have management and operational experience in the roads, infrastructure and highways sector with vast experience. The directors and Key Personnel of the Investment Manager also have experience in various other fields, including, banking, finance, accounting, business administration and corporate strategy. For further details, see "*Parties to the Trust – The Investment Manager – Maple Infra InvIT Investment Manager Private Limited*" on page 103. We believe that the experience and leadership of these teams will contribute to our growth and success and will position the Project SPVs to be operated and managed in an efficient manner.

Business Strategies

The Investment Manager believes the following to be the key strategies of the Trust:

1. *Institute and maintain prudent capital and risk management policies*

The Investment Manager has implemented appropriate policies and diversified its sources of financing with the objective of minimizing our overall cost of capital to retain enough flexibility to make acquisitions in the future while also maximising distributions to Unitholders.

2. *Efficient and active asset management*

The Trust intends to continue to manage its road assets through the services of the Project Manager. The Project Manager will be responsible for supervising O&M activities of the Project SPVs pursuant to the provisions of the Project Implementation and Management Agreements. For further details in respect of the Project Implementation and Management Agreements, please see the section entitled "– *Parties to the Trust – Key terms of the Project Implementation and Management Agreements*" on page 118.

3. *Expand the portfolio of road assets*

The Investment Manager will carry out the activities of Trust and make investments pursuant to the terms of the InvIT Regulations and the Indenture of Trust. The Investment Manager also hopes to actively source and acquire quality assets from third parties or by way of bidding on a case-by-case basis, on behalf of the Trust, in accordance with the Indenture of Trust. The Investment Manager believes that it will be able to leverage CDPQ's established network of relationships and experience in the roads sector in India to source high quality projects in line with the investment strategy of the Trust.

Structure of the Trust

The Maple Highways Pte Ltd set up the Trust pursuant to the Initial Indenture, as an irrevocable trust under the provisions of the Indian Trusts Act, 1882. The Trust was registered as an infrastructure investment trust under the InvIT Regulations on February 24, 2020 having registration number IN/InvIT/19-20/0013. The Trust's principal investment objectives to carry on the activity of an infrastructure investment trust under the InvIT Regulations. Investment by the Trust shall only be in Holdcos, SPVs, Infrastructure Projects, securities in India or other permitted investments in accordance with the InvIT Regulations, the Investment Strategy and the Trust Documents.

The Trust has acquired SJEPL in June 2022, and incorporated NCREPE in April 2022 for undertaking the tolling, operation, maintenance and transfer of Eastern Peripheral Expressway ("**EPE Asset**") (from km 1+000 to km 136+000) of NE-II in the National Capital Region on tolling, operation, maintenance and transfer basis, under the NCREPE Concession Agreement. NCREPE acquired and took handover of the EPE Asset on November 11, 2022, being, the appointment date under the NCREPE Concession Agreement. Please see the section entitled "*Overview of the Trust*" on page 17, for a graphical representation of the structure of the Trust.

Brief description of the Projects

SJEPL and NCREPE are toll-based road infrastructure assets. In a toll-based project, after achieving the provisional certificate/ appointed date (as the case may be) for the project, the concessionaire is granted the right to collect user fees that are fixed by the concessioning authority in accordance with applicable law over the concession period. The SJEPL Project and the NCREPE Project is currently generating revenue and collecting tolls since the appointed date specified in the table below.

Project SPV	Kilometers	No. of lanes	State	Authority	Appointed Date	End of Concession Period	Residual Concession Period (in years) (As of March 31, 2023)	Toll Revenue for Fiscal 2023 (in million)
SJEPL	67	6	Odisha	NHAI	December 2011	December 2037	14 years 4 months	1,950
NCREPE	135	6	UP and Haryana	NHAI	November 11, 2022	November 2042	19 years 7 months	1.699

Note: *The toll revenue for NCREPE for Fiscal 2023 is calculated from November 11, 2022 to March 31, 2023.*

The Projects

SJEPL

SJEPL Concession agreement

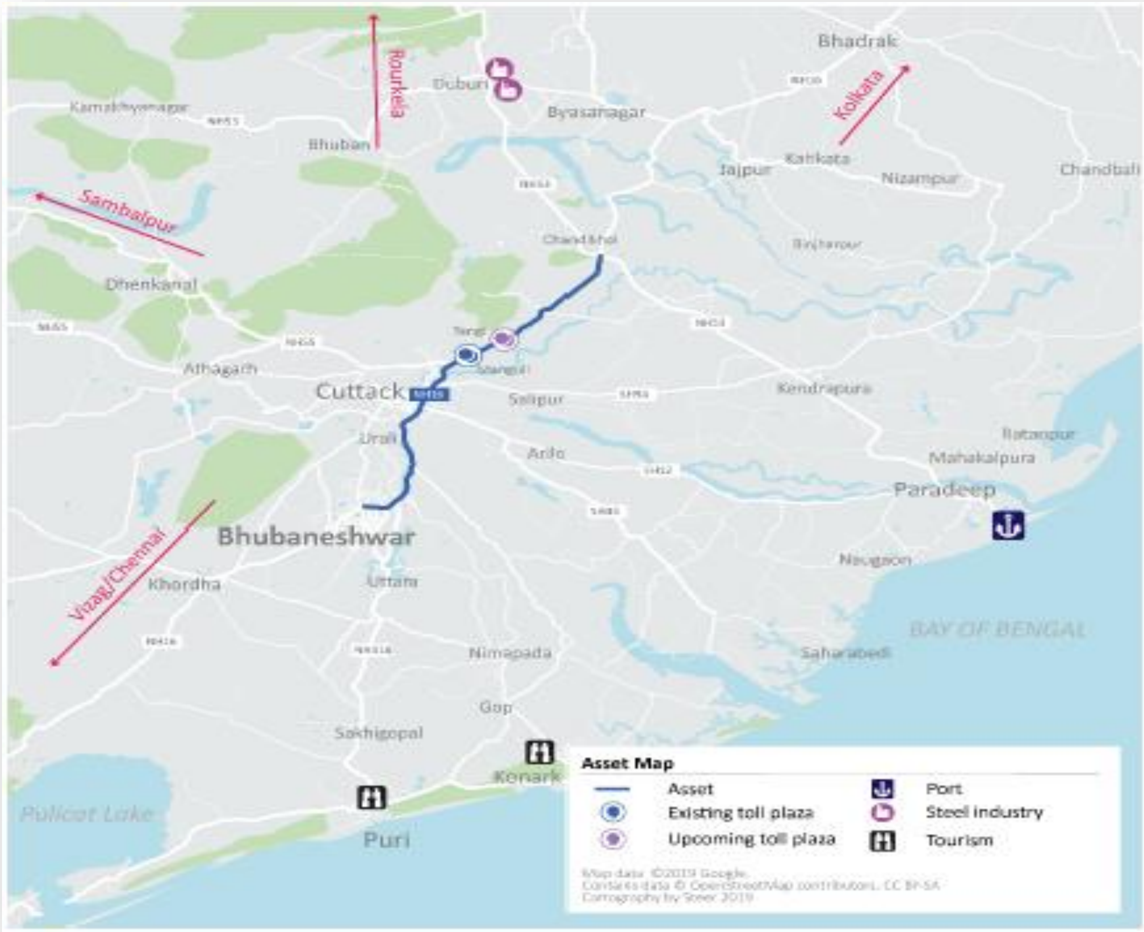
On August 6, 2010, the NHAI and SJEPL entered into the concession agreement and supplementary agreements dated November 27, 2014, November 26, 2015, November 11, 2016 and November 14, 2018 (the "**SJEPL Concession Agreement**"). SJEPL is engaged, on a design, build, finance, operate and transfer basis, under the SJEPL Concession Agreement for the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha.

The SJEPL Project commenced collection of tolls in December 2011. The SJEPL Concession Agreement was granted for 26 years. As consideration, SJEPL has the sole and exclusive right to demand, collect and appropriate tolls payable by vehicles using the SJEPL Project in accordance with the SJEPL Concession Agreement and at the rates set out in the National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended. SJEPL pays the NHAI Re. 1.00 per year, as the concession fees, during the term of the concession agreement. For further details on the SJEPL Concession Agreement, please see the section entitled "*Summary of the Concession Agreements*" on page 175.

Corridor description

The SJEPL Project is a part of National Highway 16 which is called as the 'Golden Quadrilateral'. The SJEPL Project is a key connector of Chennai to Kolkata corridor.

The map below illustrates the location of the SJEPL Project and the corridor it covers:



According to the Traffic Reports, the factors that contribute to traffic growth on the SJEPL Project include, among other things, steel industry, iron ore industry, port traffic and tourist traffic due to historical and religious centers .

The operating revenue of SJEPL for Fiscals 2023, 2022 and 2021 was ₹ 1,950 million, ₹ 1,736 million, and ₹ 1,782 million respectively.

Traffic volume

The table below sets forth the AADT by category of vehicles for the Fiscals 2023, 2022 and 2021:

	Fiscal		
	2023	**2022**	**2021**
Car	12,747	11,121	10,424
LCV	573	533	677
Two-axle trucks /Bus	3,100	2,574	2,430
Three-axle trucks/ MAV	4,864	5,026	6,039
AADT	21,285	19,255	19,571

Operation and maintenance

For details, please see the section entitled "*Summary of the Concession Agreements*" on page 175 and the "*Traffic Reports*" enclosed as Annexure C.

Capital structure

As of March 31, 2023, the equity invested (including unsecured loan) in SJEPL was ₹ 4,113 million and debt outstanding to lenders was ₹ 9,964 million.

NCREPE

NCREPE Concession agreement

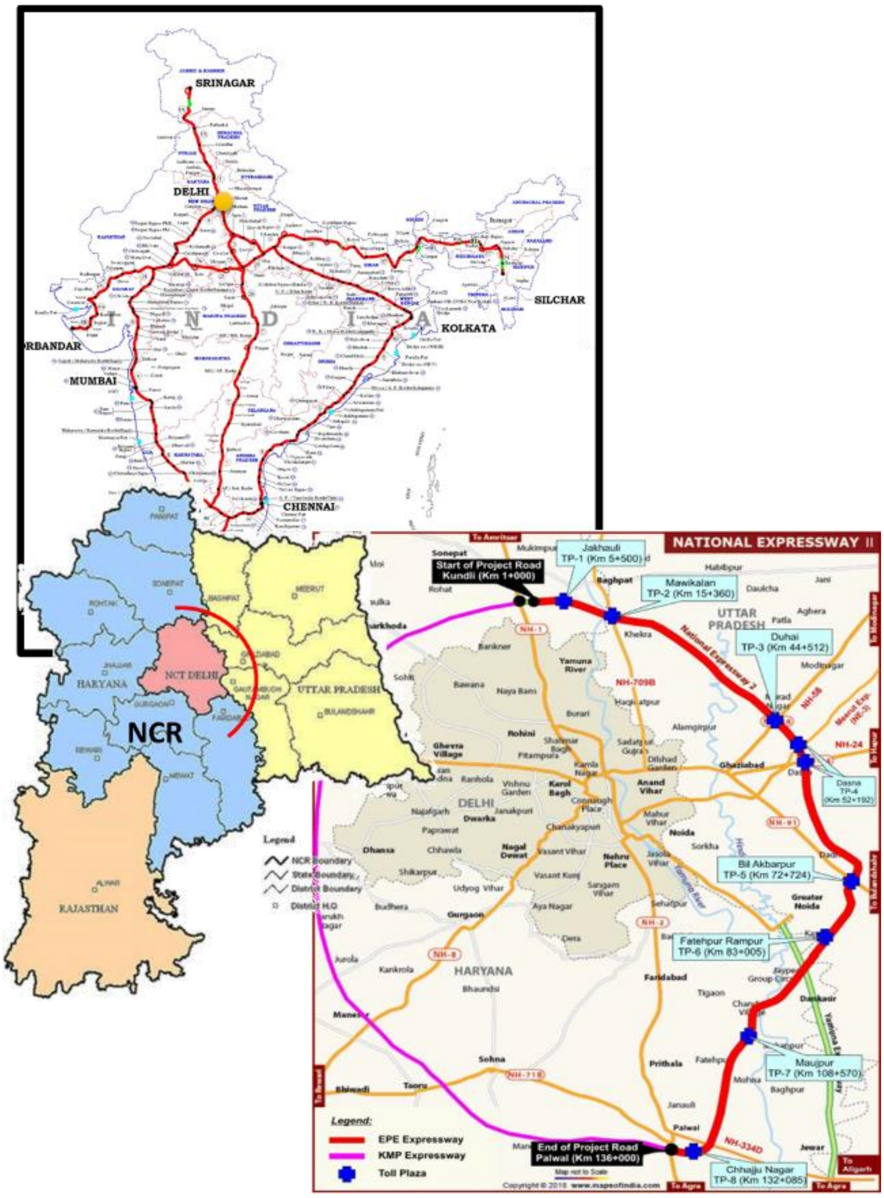
On May 6, 2022, the NHAI and NCREPE entered into the concession agreement (the "**NCREPE Concession Agreement**") for the tolling, operation, maintenance and transfer of Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on toll, operate and transfer model ("**NCREPE Project**").

In accordance with the Concession Agreement, NCREPE has paid NHAI an amount of ₹ 62.67 billion, as the concession fee on November 10, 2022, pursuant to which NCREPE has received tolling rights on the NCREPE Project for a concession period of 20 years from the appointed date, i.e., November 11, 2022. For further details on the NCREPE Concession Agreement, please see the section entitled "*Summary of the Concession Agreements*" on page 175.

Corridor Description

The NCREPE Project is a fully access controlled six lane divided highways stretch. The region consisting of the expressway has major manufacturing industries, economical and industrial centers along with agricultural, mining and construction commodities.

The map below illustrates the location of the NCREPE Project and the corridor it covers:



According to the Traffic Reports, the factors that contribute to traffic growth on the TOT Bundle 7 Project include, among other things, region consisting of industrial townships, logistics parks, automobile manufacturers, manufacturers of consumer electronics etc.

The operating revenue of NCREPE Project for the period from November 11, 2022 till March 31, 2023 was ₹ 1,699 million.

Traffic volume

Considering the appointed date was November 11, 2022, sufficient data for the historical period is not available in relation to AADT.

Operation and maintenance

For details, please see the section entitled "*Summary of the Concession Agreements*" on page 175 and the "*Traffic Report*" enclosed as Annexure C.

Capital structure

As of March 31, 2023, the equity invested (including unsecured loan) in NCREPE was ₹ 25,983 million and debt outstanding to lenders was ₹ 38,579 million.

Environment, health and safety

The Project SPVs are required to meet certain health, safety and environmental specifications and standards in the operation and maintenance of the Projects and are subject to a number of laws and regulations relating to health, safety and environmental protection. The Project SPVs are also required to adhere to various labour and workplace related laws and regulations in India. The Project SPVs have policies and procedures in place to ensure that the operation and maintenance of the Projects conform to existing health, safety and environmental regulatory standards, group medical insurance and personal accident insurance policies and group term life policies are maintained.

Competition

The Trust faces competition from other road operators, financial investors, private equity funds and from other InvITs, in acquiring lucrative concessions for existing and future projects. While service quality, technological capacity and performance, health and safety records and personnel, as well as reputation and experience, are important considerations in client decisions, price is a major factor in most tender awards or acquisitions.

Insurance

SJEPL and NCREPE maintain project-specific insurance coverage with leading insurers in India. Some of the major risks covered in their all-risk policies for their assets are against risk of fire and natural calamities, such as earthquakes. Some of the project-specific insurance policies also generally cover SJEPL and NCREPE against material damage, and debris removal.

Employees

As of March 31, 2023, the Project SPVs have 73 employees on a payroll basis.

Properties

Under the terms of the concession agreements, title to the roads and related infrastructure such as toll plazas and monitoring posts remains with the concessioning authority for the duration of the concession period. During the concession period, the Project SPVs are licensed to use the roads and the related infrastructure which constitute the concession assets and the Project SPVs are entitled to an income from the collection of tolls. Upon the expiration of a concession period, each Project SPV is required to transfer possession of its concession assets to the NHAI.

SUMMARY OF THE CONCESSION AGREEMENTS

The following are summaries of the Concession Agreements. The descriptions and summaries of the Concession Agreements below are indicative, and they are not, nor do they purport to be, full, complete or exhaustive descriptions and summaries. Certain terms used in this section have the meaning assigned to them in the relevant Concession Agreements.

The Project SPVs, being, SJEPL and NCREPE hold projects which are based on the toll, operation, maintenance and transfer model and accordingly, have entered into concession agreements with NHAI. The concession agreements for the Project SPVs include the following:

1. The SJEPL Concession Agreement

SJEPL and NHAI entered into a concession agreement dated August 6, 2010. Further, this concession agreement was amended by supplementary agreements entered into between SJEPL and NHAI dated November 27, 2014, November 26, 2015, November 11, 2016 and November 14, 2018, respectively.

Purpose: Six laning of Chandikhole-Jagatpur-Bhubaneshwar Section of NH-5 from km 413.00 to km 418.00 and km 0.00 to km 62.00 (Length – approximately 67.00 km) in the State of Orissa under NHDP Phase V as BOT (Toll) on DBFO pattern (the "**Project**" or "**Project Highway**").

Concession Period: The concession period is 26 years from the appointed date.

Grant: NHAI agrees to provide SJEPL cash support by way of an outright grant equal to ₹ 2,050 million in accordance with the SJEPL Concession Agreement.

User Fee: On and from the commercial operation date till the transfer date, SJEPL shall have the sole and exclusive right to demand, collect and appropriate Fee from Users, each as defined in the SJEPL Concession Agreement, or a part thereof ("**Fee**") from the users subject to and in accordance with the SJEPL Concession Agreement and the fee notification set forth therein.

Concession fee: In consideration of the grant of concession under the SJEPL Concession Agreement, the concession fee payable by SJEPL to NHAI shall be ₹ 1.00 per annum.

Performance security: SJEPL shall, for the performance of its obligations under the SJEPL Concession Agreement, during the Construction Period, as defined in the SJEPL Concession Agreement, provide to NHAI no later than 180 days from the date of the SJEPL Concession Agreement, an irrevocable and unconditional guarantee for a sum equivalent to ₹ 728 million in the form set forth in the SJEPL Concession Agreement.

Change of scope: NHAI may require the provision of additional works and services which are not included in the scope of the project as contemplated by the SJEPL Concession Agreement (the "**Change of Scope**"). NHAI shall make an advance payment to SJEPL in a sum equal to 20% of the cost of Change of Scope, and in the event of a dispute, 20% of the cost assessed by the Independent Engineer, as defined in the SJEPL Concession Agreement. NHAI shall disburse to SJEPL such amounts as are certified by the Independent Engineer, as reasonable and after making a proportionate deduction for the advance payment made. All costs arising out of any Change of Scope order issued during the Construction Period, as defined in the SJEPL Concession Agreement, shall be borne by SJEPL, subject to an aggregate ceiling of 0.25% of the total project cost. Any costs in excess of the ceiling shall be reimbursed by NHAI.

O&M: SJEPL shall operate and maintain the Project Highway, as defined in the SJEPL Concession Agreement, in accordance with the SJEPL Concession Agreement either by itself, or through the O&M Contractor, as defined in the SJEPL Concession Agreement, and if required, modify, repair or otherwise make improvements to the Project Highway, and conform to specifications, standards and good industry practice. The obligations of SJEPL, among other things, shall include:

- permitting safe, smooth and uninterrupted flow of traffic on the Project Highway during normal operating conditions;
- collecting and appropriating the Fee;
- carrying out periodic preventive maintenance of the Project Highway;
- undertaking routine maintenance including prompt repairs of potholes, cracks, joints, drains, embankments, structures, pavement markings, lighting, road signs and other traffic control devices;
- undertaking major maintenance such as resurfacing of pavements, repairs to structures, and repairs and

refurbishment of tolling system and other equipment;
- protection of the environment and provision of equipment and materials therefor; and
- operation and maintenance of all communication, control and administrative systems necessary for the efficient operation of the Project Highway.

Maintenance manual: SJEPL shall, in consultation with the Independent Engineer, evolve a repair and maintenance manual (the "**Maintenance Manual**") for the regular and preventive maintenance of the Project Highway in conformity with the specifications, standards, maintenance requirements, safety requirements and good industry practice. The Maintenance Manual shall be revised and updated once every three years.

Maintenance programme: SJEPL shall provide to NHAI and the Independent Engineer its proposed annual programme of preventive, urgent and other scheduled maintenance (the "**Maintenance Programme**") to comply with the maintenance requirements, maintenance manual and safety requirements. Such Maintenance Programme shall include the following:

- preventive maintenance schedule;
- arrangements and procedures for carrying out urgent repairs;
- criteria to be adopted for deciding maintenance needs;
- intervals and procedures for carrying out inspection of all elements of the Project Highway;
- intervals at which SJEPL shall carry out periodic maintenance;
- arrangements and procedures for carrying out safety related measures; and
- intervals for major maintenance works and the scope thereof.

Restrictions on construction of additional tollway: In accordance with the provisions of the SJEPL Concession Agreement, NHAI shall not construct, and shall procure that no Government Instrumentality, as defined in the SJEPL Concession Agreement, shall construct or cause to be constructed, any expressway or other toll road between, *inter alia* Km 413.00 and Km 418.00 and Km 00 and Km 62.00, being approximately 67 kms of NH-5,(collectively the "**Additional Tollway**") for use by traffic at any time before the twelfth anniversary of the Appointed Date, as defined in the SJEPL Concession Agreement. Additional Tollway does not include any expressway or other toll road connecting, *inter alia*, Km 413.00 and Km 418.00 and Km 00 and Km 62.00, being approximately 67 kms of NH-5 if the length of such expressway or toll road exceeds the length of the existing route comprising the Project Highway by 20%. If NHAI shall be in breach of this provision, SJEPL shall, without prejudice to its other rights and remedies under the SJEPL Concession Agreement, be entitled to receive compensation from NHAI.

Target traffic: In accordance with the SJEPL Concession Agreement, the traffic as on April 1, 2020 (the "**Target Date**") was estimated to be 56,937 PCUs per day (the "**Target Traffic**"). Further, as specified under the SJEPL Concession Agreement, for determining the modifications to the concession period, the actual traffic on the Target Date shall be derived by computing the average of the traffic as determined by traffic sampling on the date that falls one year prior to the Target Date, on the Target Date and on the first anniversary of the Target Date (the "**Actual Average Traffic**"). Such traffic sampling is undertaken for a continuous period of 7 days during anytime within 15 days prior to the date specified above and the average thereof is deemed to be the actual traffic. If the project highway has two or more toll plazas, the average traffic thereof is computed for determining the Actual Average Traffic.

Obligations relating to competing roads: NHAI shall procure that during the subsistence of the SJEPL Concession Agreement, neither NHAI nor any Government Instrumentality shall, at any time before the tenth anniversary of the appointed date, construct or cause to be constructed any competing road, as defined in the SJEPL Concession *Agreement*; provided that this restriction shall not apply if the average traffic on the Project Highway in any year exceeds 90% of its designed capacity specified in the SJEPL Concession Agreement. Upon breach of its obligations hereunder, NHAI shall be liable to payment of compensation to SJEPL in accordance with the SJEPL Concession Agreement, and such compensation shall be the sole remedy of SJEPL.

Obligations relating to change in ownership: SJEPL shall not undertake or permit any change in ownership, except with the prior written approval of NHAI. Notwithstanding anything to the contrary contained in the SJEPL Concession Agreement, SJEPL agrees and acknowledges that:

- all acquisitions of equity by an acquirer, either by himself or with any person acting in concert, directly or indirectly, including by transfer of the direct or indirect legal or beneficial ownership or control of any equity, in aggregate of not less than 15% of the total equity of SJEPL; or
- acquisition of any control directly or indirectly of the board of directors of SJEPL by any person either by himself or together with any person or persons acting in concert with him, shall constitute a change

in ownership requiring prior approval of NHAI from national security and public interest perspective, the decision of NHAI in this behalf being final, conclusive and binding on SJEPL, and undertakes that it shall not give effect to any such acquisition of equity or control of the board of directors of SJEPL without such prior approval of NHAI. It has been expressly agreed that approval of NHAI hereunder shall be limited to national security and public interest perspective, and NHAI shall endeavour to convey its decision thereon expeditiously. It has also been agreed that NHAI shall not be liable in any manner on account of grant or otherwise of such approval and that such approval or denial thereof shall not in any manner absolve SJEPL from any liability or obligation under the SJEPL Concession Agreement.

Escrow Account: As per the escrow agreement entered into between NHAI, the Lenders' Representative & the escrow bank (the "**SJEPL Escrow Agreement**") all funds including the funds constituting the Financial Package, as set out in the SJEPL Concession Agreement, Project related Fees & revenues, payments by NHAI etc is to be deposited into the escrow account opened with escrow bank. The SJEPL Escrow Agreement prescribes an order/priority of payments from the escrow account, both during the concession period and after the termination of the SJEPL Concession Agreement.

- <u>During concession period</u>: (i) all taxes due and payable by SJEPL for and in respect of the Project; (ii) all payments relating to construction of the Project; (iii) O&M Expenses; (iv) O&M Expenses and other costs and expenses incurred by NHAI; (v) Concession Fee payable to NHAI; (vi) monthly proportionate provision of Debt Service due in an Accounting Year; (vii) all payments and damages payable to NHAI under the Concession Agreement; (viii) monthly proportionate provision of Debt Service in respect of Subordinated Debt; (ix) any reserve requirements set forth in the financing agreements; and (x) balance, if any, in accordance with the instructions of SJEPL.

- <u>On termination</u>: (i) all taxes due and payable by SJEPL for and in respect of the Project; (ii) 90% of the Debt Due (excluding Subordinate Debt); (iii) Outstanding Concession Fee; (iv) all payments and damages payable to NHAI under the Concession Agreement; (v) retention monies and payments (on account of liabilities for defects and deficiencies); (vi) outstanding Debt Service (including balance of Debt Due); (vii) outstanding Subordinate Debt; (viii) incurred or accrued O&M Expenses; (ix); other payments under the Concession Agreement; and (x) balance, if any, in accordance with the instructions of SJEPL.

Indemnities:

- SJEPL shall indemnify, defend, save and hold harmless NHAI and its officers, servants, agents, Government Instrumentalities, as defined in the SJEPL Concession Agreement, and Government owned and/or controlled entities/enterprises, (the "**NHAI Indemnified Persons**") against any and all suits, proceedings, actions, demands and claims from third parties for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by SJEPL of any of its obligations under the SJEPL Concession Agreement or any related agreement or on account of any defect or deficiency in the provision of services by SJEPL to any user or from any negligence of SJEPL under contract or tort or on any other ground whatsoever, except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, or breach or default of the SJEPL Concession Agreement on the part of NHAI Indemnified Persons;
- SJEPL shall fully indemnify, hold harmless and defend NHAI and NHAI Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:
    - failure of SJEPL to comply with applicable laws and applicable permits;
    - payment of taxes required to be made by SJEPL in respect of the income or other taxes of SJEPL's contractors, suppliers and representatives; or
    - non-payment of amounts due as a result of materials or services furnished to SJEPL or any of its contractors which are payable by SJEPL or any of its contractors.

- SJEPL shall fully indemnify, hold harmless and defend NHAI Indemnified Persons from and against any and all suits, proceedings, actions, claims, demands, liabilities and damages which NHAI Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to any materials, information, design or process used by SJEPL or by SJEPL's contractors in performing the obligations of SJEPL or in any way incorporated in or related to the project. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, SJEPL shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Project Highway, or any part thereof or comprised therein, is held to constitute an infringement and its use is permanently enjoined, SJEPL shall promptly make every reasonable effort to secure for NHAI a licence, at no cost to NHAI, authorising continued use of the infringing work. If SJEPL is unable to secure such licence within a reasonable time, SJEPL shall, at its own expense, and without impairing the specifications and standards, either replace the affected work, or part, or process thereof with non-infringing work or part or process, or modify the same so that it becomes non-infringing.

Suspension of SJEPL's rights: Upon occurrence of a SJEPL Default, as defined under the SJEPL Concession Agreement, NHAI shall be entitled, without prejudice to its other rights and remedies under the SJEPL Concession Agreement including its rights of termination thereunder, to (i) suspend all rights of SJEPL under the SJEPL Concession Agreement, including SJEPL's right to collect fee, and other revenues pursuant hereto, and (ii) exercise such rights itself and perform the obligations hereunder or authorise any other person to exercise or perform the same on its behalf during such suspension ("**Suspension**"). Suspension hereunder shall be effective forthwith upon issue of notice by NHAI to SJEPL and may extend up to a period not exceeding 180 days from the date of issue of such notice; provided that upon written request from SJEPL and the Lenders' Representative, as defined in the SJEPL Concession Agreement, NHAI shall extend the aforesaid period of 180 days by a further period not exceeding 90 days. At any time during the period of Suspension, the Lenders' Representative, on behalf of Senior Lenders, each term as defined in the SJEPL Concession Agreement, shall be entitled to substitute SJEPL under and in accordance with the Substitution Agreement, as defined in the SJEPL Concession Agreement, and upon receipt of notice thereunder from the Lenders' Representative, NHAI shall withhold termination for a period not exceeding 180 days from the date of Suspension, and any extension thereof, for enabling the Lenders' Representative to exercise its rights of substitution on behalf of Senior Lenders.

Effect of force majeure event on the Concession:

- Upon the occurrence of any Force Majeure Event, as defined in the SJEPL Concession Agreement, prior to the Financial Close, as defined in the SJEPL Concession Agreement, the period for achieving financial close shall be extended by a period equal in length to the duration of the Force Majeure Event.
- At any time after the Appointed Date, if any Force Majeure Event occurs, whereupon SJEPL is unable to collect Fee despite making best efforts or it is directed by NHAI to suspend the collection thereof during the subsistence of such Force Majeure Event, the concession period shall be extended by a period, equal in length to the period during which SJEPL was prevented from collection of Fee on account thereof; provided that in the event of partial collection of Fee where the daily collection is less than 90% of the average daily Fee, NHAI shall extend the concession period in proportion to the loss of Fee on a daily basis. Loss of 25% in collection of Fee as compared to the average daily Fee for four days shall entitle SJEPL to extension of one day in the concession period.

Allocation of costs arising out of Force Majeure:

- Upon occurrence of any Force Majeure Event prior to the Appointed Date, the parties to the SJEPL Concession Agreement shall bear their respective costs and no party shall be required to pay to the other party any costs thereof.
- Upon occurrence of a Force Majeure Event after the Appointed Date, the costs incurred and attributable to such event and directly relating to the project ("**Force Majeure Costs**") shall be allocated and paid as follows:

  - upon occurrence of a Non-Political Event, as defined in the SJEPL Concession Agreement, the parties shall bear their respective Force Majeure Costs and neither party shall be required to pay to the other party any costs thereof;
  - upon occurrence of an Indirect Political Event, as defined in the SJEPL Concession Agreement, all Force Majeure Costs attributable to such Indirect Political Event, and not exceeding the insurance cover for such Indirect Political Event, shall be borne by SJEPL, and to the extent Force Majeure Costs exceed such insurance cover, one half of such excess amount shall be reimbursed by NHAI to SJEPL; and
  - upon occurrence of a Political Event, as defined in the SJEPL Concession Agreement, all Force Majeure Costs attributable to such Political Event shall be reimbursed by NHAI to SJEPL.

Force Majeure Costs may include interest payments on debt, O&M expenses, any increase in the cost of construction works on account of inflation and all other costs directly attributable to the Force Majeure Event, but shall not *include* loss of Fee revenues or debt repayment obligations, and for determining such costs, information contained in the Financial Package, as defined in the SJEPL Concession Agreement, may be relied upon to the extent that such information is relevant.

Termination for SJEPL Default: Subject to the provisions of the SJEPL Concession Agreement, in the event that any of the defaults specified below shall have occurred, and SJEPL fails to cure the default within the mentioned cure periods, or where no cure period is specified, then within a cure period of 60 days, SJEPL shall be deemed to be in default of the SJEPL Concession Agreement (the "**SJEPL Default**"), unless the default has occurred solely as a result of any breach of the SJEPL Concession Agreement by NHAI or due to force majeure. The defaults referred to shall include, among other things, the following:

- the Performance Security has been encashed and appropriated in accordance with the SJEPL Concession Agreement and SJEPL fails to replenish or provide fresh Performance Security within a cure period of 30 days;
- subsequent to the replenishment or furnishing of fresh Performance Security in accordance with the SJEPL Concession Agreement, SJEPL fails to cure, within a cure period of 90 days, the SJEPL Default for which whole or part of the Performance Security was appropriated;
- SJEPL does not achieve the latest outstanding project milestone due in accordance with the provisions of the SJEPL Concession Agreement and continues to be in default for 120 days;
- upon occurrence of a Financial Default, the Lenders' Representative, each term as defined in the SJEPL Concession Agreement, has by notice required NHAI to undertake suspension or termination, as the case may be, in accordance with the Substitution Agreement, as defined in the SJEPL Concession Agreement, and SJEPL fails to cure the default within the cure period specified;
- SJEPL abandons or manifests intention to abandon the construction or operation of the Project Highway without the prior written consent of NHAI;
- SJEPL is in breach of the maintenance requirements or the safety requirements, as the case may be;
- SJEPL has failed to make any payment to NHAI within the period specified in the SJEPL Concession Agreement; and
- a change in ownership has occurred in breach of the provisions of the SJEPL Concession Agreement.

Upon occurrence of a SJEPL Default, NHAI shall be entitled to terminate the SJEPL Concession Agreement by issuing a termination notice to SJEPL; provided that before issuing the termination notice, NHAI shall by a notice inform SJEPL of its intention to issue such termination notice and grant 15 days to SJEPL to make a representation, and may, after the expiry of such 15 days, whether or not it is in receipt of such representation, issue the termination notice.

Termination Payments for SJEPL Default: Upon termination on account of SJEPL Default, NHAI will pay an amount equal to 90.00% of the debt due, less insurance claims, provided that if any insurance claims forming part of the insurance cover are not admitted and paid, then 80% of such unpaid claims shall be included in the computation of the debt due.

Termination for NHAI Default: SJEPL may terminate the SJEPL Concession Agreement on account of occurrence of a default by the NHAI which is not rectified within cure periods (the "**NHAI Default**") and includes, amongst other things, (i) material default in complying with the provisions of the SJEPL Concession Agreement which causes a material adverse effect on SJEPL; (ii) the failure to make any payment due to SJEPL within the specified periods; and (iii) repudiation of the SJEPL Concession Agreement.

Termination Payment for NHAI Default: Upon termination on account of NHAI Default, NHAI will pay SJEPL an amount equal to (i) the debt due; and (ii) 150% of the adjusted equity.

Defects liability after termination: SJEPL shall be responsible for all defects and deficiencies in the Project Highway for a period of 120 days after termination, as defined in the SJEPL Concession Agreement, and it shall have the obligation to repair or rectify, at its own cost, all defects and deficiencies observed by the Independent Engineer in the Project Highway during this period. In the event that SJEPL fails to repair or rectify such defect or deficiency within a period of 15 days from the date of notice issued by NHAI, NHAI shall be entitled to get the same repaired or rectified at the risk and cost of SJEPL so as to make the Project Highway conform to the maintenance requirements. All costs incurred by NHAI in this regard shall be reimbursed by SJEPL to NHAI within 15 days of receipt of demand thereof, and in the event of default in reimbursing such costs, NHAI shall be entitled to recover the same in accordance with the provisions of the SJEPL Concession Agreement.

2. NCREPE Concession Agreement

NCREPE and NHAI entered into a concession agreement dated May 6, 2022.

The key terms of the NCREPE Concession Agreement are substantially similar to the terms of the SJEPL Concession Agreement, except as set out below:

Purpose: Tolling, operation, maintenance and transfer of Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on a toll, operate and transfer basis.

Concession Period: The concession period is 20 years from the appointed date.

Concession fee: In consideration of the grant of concession under the NCREPE Concession Agreement, the concession fee payable by NCREPE to NHAI shall be a lump sum upfront amount equivalent to ₹ 62,671 million.

Performance security: NCREPE shall, for the performance of its obligations under the NCREPE Concession Agreement, provide to NHAI no later than 45 days from the date of the NCREPE Concession Agreement, an irrevocable and unconditional guarantee for a sum equivalent to ₹ 281.1 million in the form set forth in the NCREPE Concession Agreement.

Restrictions on construction of additional tollway: In accordance with the provisions of the NCREPE Concession Agreement, NHAI shall not construct, and shall procure that no Government Instrumentality, as defined in the NCREPE Concession Agreement, shall construct or cause to be constructed, any expressway or other toll road between, *inter alia* Eastern Peripheral Expressway (from km 1+000 to km 136+000), (collectively the "**Additional Tollway**") for use by traffic at any time before the Concession Period, as defined in the NCREPE Concession Agreement. Additional Tollway does not include any expressway or other toll road connecting, *inter alia*, Eastern Peripheral Expressway (from km 1+000 to km 136+000) if the length of such expressway or toll road exceeds the length of the existing route comprising the Project Highway by 20%. If NHAI shall be in breach of this provision, NCREPE shall, without prejudice to its other rights and remedies under the NCREPE Concession Agreement, be entitled to receive compensation from NHAI.

Target traffic: In accordance with the NCREPE Concession Agreement, the target traffic is to be determined 60 (sixty) days before the bid due date. Further, as specified under the NCREPE Concession Agreement, in the event at any time during the Concession period the average daily traffic increased beyond the target traffic, NHAI may decide to cause preparation of a detailed project report.

Suspension of NCREPE's rights: Upon occurrence of a NCREPE Default, as defined under the NCREPE Concession Agreement, NHAI shall be entitled, without prejudice to its other rights and remedies under the SJEPL Concession Agreement including its rights of termination thereunder, to (i) suspend all rights of NCREPE under the NCREPE Concession Agreement, including NCREPE's right to collect fee, and other revenues pursuant hereto, and (ii) exercise such rights itself and perform the obligations hereunder or authorise any other person to exercise or perform the same on its behalf during such suspension ("**Suspension**"). Suspension hereunder shall be effective forthwith upon issue of notice by NHAI to NCREPE and may extend up to a period not exceeding 120 days from the date of issue of such notice; provided that upon written request from NCREPE and the Lenders' Representative, as defined in the NCREPE Concession Agreement, NHAI shall extend the aforesaid period of 120days by a further period not exceeding 90 days. At any time during the period of Suspension, the Lenders' Representative, on behalf of Senior Lenders, each term as defined in the NCREPE Concession Agreement, shall be entitled to substitute NCREPE under and in accordance with the Substitution Agreement, as defined in the NCREPE Concession Agreement, and upon receipt of notice thereunder from the Lenders' Representative, NHAI shall withhold termination for a period not exceeding 120 days from the date of Suspension, and any extension thereof, for enabling the Lenders' Representative to exercise its rights of substitution on behalf of Senior Lenders.

Termination Payments for NCREPE Default: Upon termination on account of NCREPE Default, the performance security will be forfeited and NCREPE would be liable towards any antecedent liability, all obligations accrued before the effective date of the termination and also for other obligations. If NHAI terminates the Agreement on account of Concessionaire Default and in addition to forfeiting the performance security, as defined in the NCREPE Concession Agreement, NHAI shall pay to NCREPE 70% of the unexpired cash flow.

Defects liability after termination: NCREPE shall be responsible for all defects and deficiencies in the Project Highway for a period of 60 days after termination, as defined in the NCREPE Concession Agreement, and it shall have the obligation to repair or rectify, at its own cost, all defects and deficiencies observed by the Independent Engineer in the Project Highway during this period. In the event that NCREPE fails to repair or rectify such defect or deficiency within a period of 15 days from the date of notice issued by NHAI, NHAI shall be entitled to get the same repaired or rectified at the risk and cost of NCREPE so as to make the Project Highway conform to the maintenance requirements. All costs incurred by NHAI in this regard shall be reimbursed by NCREPE to NHAI within 15 days of receipt of demand thereof, and in the event of default in reimbursing such costs, NHAI shall be entitled to recover the same in accordance with the provisions of the NCREPE Concession Agreement.

INFORMATION CONCERNING THE UNITS

Unit holding pattern of the Trust as on the date of the Information Memorandum is as follows:

All the Units held are in dematerialised form.

Category	Category of Unitholders/ Particulars	Total Number of Units held	As a percentage of total outstanding Units (%)	Number of units pledged or otherwise encumbered
Investor	CDPQ INFRASTRUCTURES ASIA III INC.	21,13,02,000	60.00	Nil
Sponsor	MAPLE HIGHWAYS PTE. LTD.	5,28,25,500	15.00	Nil
Investor	IIFL SPECIAL OPPORTUNITIES FUND - SERIES 11	1,56,81,915	4.45	Nil
Investor	IIFL PRIVATE EQUITY FUND - SERIES 2	12,95,000	0.37	Nil
Investor	360 ONE LARGE VALUE FUND - SERIES 2	19,53,500	0.55	Nil
Investor	360 ONE LARGE VALUE FUND - SERIES 3	10,00,000	0.28	Nil
Investor	IIFL LARGE VALUE FUND - SERIES 6	14,10,000	0.40	Nil
Investor	360 ONE INCOME OPPORTUNITIES FUND - SERIES 4	3,25,32,275	9.24	Nil
Investor	360 ONE LARGE VALUE FUND -SERIES 9	32,15,600	0.91	Nil
Investor	360 ONE LARGE VALUE FUND- SERIES 11	7,81,250	0.22	Nil
Investor	360 ONE LARGE VALUE FUND- SERIES 12	49,60,700	1.41	Nil
Investor	IIFL LARGE VALUE FUND - SERIES 15	11,13,173	0.32	Nil
Investor	KOMAF FINANCIAL SERVICES PRIVATE LIMITED	20,00,000	0.57	Nil
Investor	CREATIVE PROPLAST LIMITED	25,00,000	0.71	Nil
Investor	FAMY STERI PVT LIMITED	1,10,00,000	3.12	Nil
Investor	QRG INVESTMENTS AND HOLDINGS LIMITED	52,98,800	1.50	Nil
Investor	IIFL WEALTH PRIME LIMITED	5,60,287	0.16	Nil
Investor	KAIROS VENTURES LLP	25,00,000	0.71	Nil
Investor	FUNDCAP LLP	1,15,000	0.03	Nil
Investor	BAGLA INDUSTRIES PRIVATE LIMITED	1,25,000	0.04	Nil
Total Units Outstanding		**35,21,70,000**	**100**	

Unit holding of the Trust

Particulars	Number of Units
Units issued and outstanding prior to Listing	35,21,70,000
Units issued and outstanding after Listing	35,21,70,000

Note 1: *The units held by the Sponsor prior the listing and post the listing remain the same as no funds are proposed to be raised.*

Unitholders holding more than 5% of the Units

Sr. No.	Name of Unit Holders	As on the Listing Date	
		Number of Units	Percentage of holding (%)
1.	CDPQ INFRASTRUCTURES ASIA III INC.	21,13,02,000	60.00
2.	MAPLE HIGHWAYS PTE. LTD.	5,28,25,500	15.00
3.	360 ONE INCOME OPPORTUNITIES FUND - SERIES 4	325,32,275	9.24

Note 2: 360 One/ IIFL collectively holds 18.32% of Total outstanding units.

Unitholding of the Sponsor, Investment Manager, Project Manager and Trustee

As on the date of the Information Memorandum, Maple Highways Pte. Ltd., being the Sponsor, holds 15% of the Units.

The Trustee, Investment Manager and Project Manager do not hold any Units.

Unitholding of the directors of the Investment Manager

As on the date of this Information Memorandum, none of the directors of the Investment Manager hold any Units or propose to hold any Units in the Trust.

Lock-in

In terms of the InvIT Regulations read with the SEBI exemption letter dated February 28, 2023, the Units allotted to the Sponsor being 13,650,000 Units (i.e. units allotted to the Sponsor in the initial offer of units) and 39,175,500 Units (i.e. units allotted to the Sponsor in the rights issue), of the Units of the Trust, shall be locked-in for a period of three years from the date of the original holding date (i.e. from the date of allotment of such Units in the initial offer being June 23, 2022 and the date of allotment of such Units in the rights issue being November 3, 2022, respectively).

In terms of the InvIT Regulations read with the SEBI exemption letter dated February 28, 2023, the Units allotted to the Unitholders (other than the Sponsor) being 7,73,50,000 Units (i.e. units allotted in the initial offer) and 22,19,94,500 Units, (i.e. units allotted the rights issue), of the Units of the Trust, shall be locked-in for a period of one year from the date of the original holding date (i.e. from the date of allotment of such Units in the initial offer being June 28, 2022, and the date of allotment of such Units in the rights issue being November 3, 2022, respectively) to the Unitholders (other than the Sponsor).

FINANCIAL INDEBTEDNESS

The details of indebtedness of the Trust as on March 31, 2023, together with a brief description of certain material covenants of the relevant financing agreements, are provided below:

(Amounts in ₹ million)

Category of borrowing	Amount Outstanding
Trust	
Secured	Nil
Unsecured*	Nil
Total Borrowings	Nil
SJEPL	
Secured	9,963.83
Unsecured	Nil
Total Borrowings	9,963.83
NCREPE	
Secured	38,579.42
Unsecured	Nil
Total Borrowings	38,579.42
Total	**48,543.25**

**IHCT has availed a bank guarantee facility of Rs. 750 million.*

Principal terms of the borrowings availed by the Trust and the Project SPVs:

<u>SJEPL</u>

a. *Security:* The loan availed by SJEPL, is secured by, amongst others a first pari passu charge over:-

1. all the SJEPL's immovable properties, if any, together with all buildings, structures and appurtenances thereon (present and future) except the project assets;

2. all the SJEPL's tangible movable assets (current and non-current assets) including movable plant and machinery, machinery spares, tools and accessories, furniture, fixtures, vehicles, and all other movable assets (present and future) related to the project;

3. all the intangible assets of SJEPL, including but not limited to, goodwill, rights, undertakings, revenue, receivables, and uncalled capital (present and future);

4. all the rights, title, interest, benefits, claims and demands whatsoever of SJEPL a) under the concession agreement and all other project documents; b) in any letters of credit, guarantees including contractor guarantees and liquidated damages and performance bonds provided by any party to the project documents; and (c) under all insurance contracts and proceeds thereto procured by SJEPL or any of the contractors in favour of SJEPL in relation to the project;

5. all accounts of SJEPL (other than the SJEPL distribution account), and all funds, monies and amounts, from time to time deposited therein, all receivables/revenues, operating cash flows of whatsoever nature from the project or otherwise, and all permitted investments or other securities (present and future), except the project assets;

6. pledge of 51% (fifty one percent) of each of the paid-up Shares (together with equivalent voting rights) and 51% (fifty one percent) of each of the other instruments issued or subsisting by the Borrower;

7. non-disposal undertaking by the sponsor over 25% (twenty five percent) of each of the paid-up shares (together with equivalent voting rights) and 25% (twenty five percent) of each of the other instruments issued or subsisting by SJEPL.

b. *Pre-payment:* SJEPL may prepay the loan availed by it in full or in part without the payment of any prepayment penalty, subject to certain conditions such as (i) the prepayment being made within 90 days of any interest reset date, spread reset date, or the anniversary date after giving a prior written notice of 30 days to the lenders; (ii) to prepay the outstandings, in full or in part, out of the proceeds of insurance/liquidated damages; (iii) the prepayment being made from the internal accruals or from the fresh equity infusion; (iv) the prepayment being made due to exercise of put option by the lenders, (v) the prepayment being made at the request of the lenders, (vi) to prepay, in full or in part, in the event of debt facility being availed by the sponsor for the purposes of refinancing of the facility, (vii) to prepay, in full or in part, in the event lenders do not communicate approval to dispose/sale/transfer its interest in the project assets or any other assets or do not communicate approval for change in the shareholding or (vii) right to prepay the facility if the amendment terms due to change in applicable law is not acceptable to SJEPL. SJEPL may also be required to mandatorily prepay the loans availed by them in full or in part, immediately upon, amongst others, (i) receipt of certain amounts by SJEPL as set out in the financing arrangements such as liquidated damages or penalties received under the project documents and any insurance proceeds received, and (ii) occurrence of a cash sweep by the lenders.

c. *Restrictive Covenants:* The borrowing arrangements entered into by SJEPL, contain standard restrictive covenants affecting SJEPL, which prevent it from undertaking certain actions, including:

(i) incurring any indebtedness without prior approval of the lenders, other than indebtedness incurred or to be incurred pursuant to the documents executed in connection with the facility from the lenders or creating any charge on its assets;

(ii) making any investments other than investments in certain permissible instruments;

(iii) effecting changes in the shareholding below 51% without prior approval of the lenders;

(iv) making any 'restricted payments' which include amongst other things, payment of dividends, distributions, returns on equity shares, investments in an entity, without complying with the certain conditions and certain exceptions;

(v) amend its constitutional documents without the prior consent;

(vi) implement and scheme of expansion or acquire fixed assets, except as required in the normal course of business without the prior consent of certain lenders;

(vii) taking any action towards amalgamation, reconstruction, merger, consolidation or re organisation without the prior consent of certain lenders;

(viii) subscription to or purchase of shares or debentures or for any speculative purpose; enter into any merger or amalgamation or do a buy- back; and

(ix) wind up or liquidate or dissolve its affairs or take any steps for its voluntary winding up or liquidation or dissolution.

d. *Events of Default*: SJEPL arrangements entered into by SJEPL contain standard events of default affecting the Borrower, including, amongst others:

(i) failure to pay any sum under the financing agreement;

(ii) non-compliance with the provisions of the facility agreement or any misrepresentations thereunder;

(iii) a default by SJEPL under any of its other financing documents;

(iv) the security interest provided to the lenders being in jeopardy or cease to be in full force and effect;

(v) initiation of insolvency or other analogous proceedings against SJEPL;

(vi) cessation of business of SJEPL; and

(vii) breach under project document or a financing document.

e. *Consequences of default*: In terms of the borrowing arrangements entered into by SJEPL, the following, amongst others, are the consequences of default:

(i) cancellation of undrawn amounts of the facility;

(ii) acceleration of repayment obligations and declaration of amounts outstanding to be forthwith due and payable;

(iii) enforcement of security interests; and

(iv) exercise of other remedies as permitted or available under the financing documents;

TRUST

1. *Security Undertaking:* - The facility availed by the Trust have given following undertakings:

   (i). a counter indemnity for the bank guarantee facility amounting ₹ 75,00,00,000 availed by the Trust;

   (ii). an undertaking-cum-declaration-indemnity by the Trust for the bank guarantee facility amounting ₹ 75,00,00,000; and

   (iii). a counter indemnity for the bank guarantee facility amounting ₹ 30,00,00,000 availed by SJEPL.

2. *Pre-payment:* Prepayment charges shall be payable as per the sanctioned terms (if any)

3. *Restrictive Covenants:* The borrowing arrangements entered into by the Trust contain standard restrictive covenants affecting the Trust and SJEPL, which prevent it from undertaking certain actions, including:

   (i). Inducting on its board any person whose name appears in the list of wilful defaulters issued by RBI/CIC in any caution list ; and

   (ii). Assigning directly or indirectly the rights/obligations under the security undertaking documents to any person.

4. *Events of Default:* Borrowing arrangements entered into by the Trust and SJEPL for the facility contain standard events of default, including, amongst others:

   (i). failure to repay the principal and interest outstanding under the facility; and

   (ii). a default under any other financing documents.

5. *Consequences of default*: In terms of the borrowing arrangements entered into by the Trust, the following, amongst others, are the consequences of default:

   (i). realization of margin money (if any);

   (ii). adjustment/ Set-off of deposits. (if any);

   (iii). disclosure/publication of default and defaulter's name, its directors through such medium as the lender/RBI may deem fit; and

   (iv). exercise of other remedies as permitted or available under the borrowing arrangements.

NCREPE

1. *Security:* The loans availed by NCREPE, are secured by, amongst others, a first ranking pari passu charge over:

   (i). all immovable assets of NCREPE (present and future) except the project assets;

   (ii). all tangible movable assets (current and non-current assets), present and future, related to the project;

   (iii). all intangible assets of NCREPE (both present and future). The charge over the receivables shall be enforceable for the purposes of securing repayment of the facilities availed from the lender, for the purpose of financing the debt contributions towards meeting the payment obligation of upfront concession fee;

(iv). accounts of NCREPE, including escrow accounts, debt service reserve account, NEPEPL major maintenance reserve account and sub-accounts maintained in accordance with the facility agreement, escrow agreement or any other project documents, and all its receivables;

(v). all the rights, title, interest, benefits, claims and demands: (A) under the project agreements and concession agreement, (B) any letter of credit, guarantees (including contractor guarantees), liquidation damages and performance bonds provided by an party to the project agreement, and (D) insurance contracts;

(vi). pledge of a certain specified percentage of the equity shares of NCREPE;

(vii). Non-disposal undertaking by Indian Highway Concessions Trust over a certain specified percentage of the equity shares and other instruments of NCREPE; and

(viii). Floating charge over the movable properties with a book value of less than INR 5,00,00,000 per annum.

2. *Pre-payment:* NCREPE may prepay the loans availed by them in full or in part without the payment of any prepayment penalty, subject to certain conditions such as (i) the prepayment being made within 90 days of any spread reset date, after giving a prior written notice within 30 days from the spread reset date to the lender; (iii) the prepayment being made from the proceeds of insurance/liquidated damages; (iv) the prepayment being made from any fresh equity infusion in NCREPE, (v) the prepayment being made at the request of the lenders, (vi) the prepayment made due to exercise of put option by the lender a prior notice being provided to the lender, (vii) the prepayment being made within 120 days from the date of proposition of any amendment to the existing terms of the financing documents which are not acceptable to NCREPE or (viii) if the lender do not communicate their approval/disapproval within 60 days of receiving a request (a) for change in aggregate shareholding in NCREPE or (b) for sale/dispose/transfer the interest in the project assets or any other assets (except for assets with a book value of less than INR 5,00,00,000), then NCREPE shall, subject to a prior written notice of 15 days, have the right to prepay the facility within 90 days from the expiry of the aforesaid period of 60 days.

3. *Restrictive Covenants:* The borrowing arrangements entered into by NCREPE contain standard restrictive covenants affecting NCREPE, which prevent it from undertaking certain actions, including, amongst others:

(i). incurring any indebtedness without prior approval of the lenders, other than indebtedness incurred pursuant to the documents executed in connection with the facility from the lenders or creating any charge on its assets;

(ii). effecting changes in its ownership without prior approval of the lenders;

(iii). making any ‘restricted payments’, subject to certain conditions such as, (a) prepayment of any financial indebtedness and interest thereon, (b) making restricted payment which are permitted by Applicable Law, (c) no event of default shall have occurred due to making of such Restricted Payment, (d) all financial covenants have been met; (e) no event have any material adverse effect on the project assets and (f) NCREPE is in compliance with its obligations in relation to cash sweep in terms of the facility agreement;

(iv). carry on any business or activity which is not permitted in terms of the concession agreement;

(v). amend its constitutional documents without the prior consent;

(vi). implement and scheme of expansion or acquire fixed assets, except as required in the normal course of business without the prior consent of certain lenders;

(vii). taking any action towards amalgamation, reconstruction, merger, consolidation or re-organisation without the prior consent of certain lenders;

(viii). lend money or credit or make investments or grant loan to or guarantee on behalf of any person or purchase or acquire any stock or share capital, or make any capital contribution to, or acquire all or substantially all of the assets of, any other person, accept any deposits from the public or engage in any trading activity; and (ix). wind up or liquidate or dissolve its affairs or take any steps for its voluntary winding up or liquidation or dissolution.

4. *Events of Default:* Borrowing arrangements entered into by NCREPE contain standard events of default affecting NCREPE, including, amongst others:

(i). failure to pay any sum under the financing agreement;

(ii). Upon occurrence of a cross default;

(iii). non-compliance with the provisions of the facility agreement or any misrepresentations thereunder;

(iv). Change in ownership (shareholding of Indian Highway Concessions Trust in NCREPE falls below 51%);

(v). the security interest provided to the lenders being in jeopardy, in the opinion of the lenders;

(vi). initiation of insolvency or other analogous proceedings against NCREPE;

(vii). declared as a willful defaulter as per the RBI guidelines; and

(viii). breach of obligations under project agreements or financing agreements.

5. *Consequences of default*: In terms of the borrowing arrangements entered into by NCREPE, the following, amongst others, are the consequences of default:

(i) cancellation or suspension of the available commitments;

(ii) acceleration of repayment obligations and declaration of amounts outstanding to be forthwith due and payable;

(iii) restrict NCREPE to withdraw any cash out of its account in any form;

(iv) utilize any amount in the accounts to service and repay the facility in accordance with the escrow agreement and the supplementary escrow agreement; and

(v) exercise of other remedies as permitted or available under the borrowing arrangements.

This is an indicative list of the terms of the borrowings availed by the Trust, SJEPL and NCREPE and there may be additional terms, conditions and requirements under the various borrowing arrangements entered into by the Trust, NCREPE and SJEPL.

Given the nature of these borrowings and the terms of prepayment, the aggregate outstanding borrowing amounts may vary from time to time. In addition to the above, SJEPL may, from time to time, enter into re-financing arrangements and draw down funds thereunder, prior to the filing of this Information Memorandum.

Leverage

In accordance with the InvIT Regulations and the provisions of the Indenture of Trust, the aggregate consolidated borrowings and deferred payments of the Trust may be up to 70% of the aggregate of the Trust Assets for a period of 3 years from the date of listing subject to compliance with the conditions on credit rating and unitholders approval as set out in SEBI response letter dated April 6, 2023 bearing reference number SEBI/HO/DDHS-RACPOD2/P/OW/2023/14186/2 to the Investment Manager.

Status of lender consents

As on the date of this Information Memorandum, there are no lender consents required for Listing.

Leverage Policy

The Investment Manager shall ensure that all funds borrowed in relation to the Trust are in compliance with the InvIT Regulations. Accordingly, the Investment Manager has formulated a leverage policy to outline the process for borrowing monies in relation to the Trust. For further details, please see the section entitled "*Corporate Governance – Investment Manager – Policies of the Board of Directors of the Investment Manager in relation to the Trust – Leverage Policy*" on page 138.

Principal terms of the borrowings to be availed by SJEPL from the Trust

Upon the allotment of the units at the initial offer stage, a certain amount of the initial issue proceeds were utilized by the Trust to provide loans to SJEPL, through a facility agreement, entered into between the Trust (acting through the Trustee and represented by the Investment Manager), and SJEPL, including the first amendment agreement dated June 24, 2022 ("**SJEPL Shareholder Loan Agreement**").

The key terms of the SJEPL Shareholder Loan Agreement include:

Loan Amount: In accordance with the SJEPL Shareholder Loan Agreement, SJEPL wishes to borrow an amount of ₹ 7,000 million ("**Initial Loan Amount**") from the Trust. At anytime after the date of execution of the SJEPL Shareholder Loan Agreement but at least 7 days prior to the Completion Date (as defined in the SJEPL Shareholder Loan Agreement), the parties to the SJEPL Shareholder Loan Agreement may, by mutual agreement in writing, modify the Initial Loan Amount in the manner agreed between the Trust and SJEPL.

(i). Subject to the terms of the SJEPL Shareholder Loan Agreement, the Trust shall lend to SJEPL, upon receipt of a utilization request from SJEPL, in the format specified in the SJEPL Shareholder Loan Agreement and on such dates as may be specified in the utilization request submitted by SJEPL and as agreed upon by the Trust (each such date, a "**Drawdown Date**"), the relevant loan amount, by depositing it into the account of SJEPL as specified in such utilization request.

(ii). If the entire loan amount has not been drawn down on the Drawdown Date, SJEPL may make drawdown requests in writing to the Investment Manager ("**Subsequent Drawdown**") up to the available limit of the Initial Loan Amount. However, the Subsequent Drawdown shall not be a binding obligation of the Trust and shall be at the sole discretion of the Investment Manager (on behalf of the Trust), in accordance with the provisions of the SJEPL Shareholder Loan Agreement.

Interest: The Trust Loan shall carry an interest rate of 14% per annum payable quarterly, and the rate of interest applicable to all tranches or any tranche of the Trust Loan may be reset on the date falling at the end of twelve months from the first drawdown date and subsequently each date falling at the end of twelve months thereafter or such other period as may be mutually agreed in writing between SJEPL and the Trust by giving a notice.

Repayment: The Trust may, at its sole discretion, by a notice in writing to SJEPL, require SJEPL to repay all or part of the Trust Loan, whether in one or more tranches, at any time during the Concession Period, without any prepayment penalty; and upon the Trust requiring SJEPL to repay the Trust Loan, SJEPL shall immediately and no later than 15 days from the receipt of the relevant notice, repay the entire Trust Loan or part thereof together with all other loans outstanding payable by SJEPL as at that date, as required by and in accordance with the relevant repayment notice (as defined in the SJEPL Shareholder Loan Agreement), subject to any restricted payment conditions and any other conditions as may be mutually agreed between the Trust and SJEPL in writing. Notwithstanding anything, all the payments will be made post scheduled payment due and payable towards Senior Debt (as defined in the SJEPL Shareholder Loan Agreement) as required under the Senior Debt Financing Documents (as defined in the SJEPL Shareholder Loan Agreement).

Security: The borrowing pursuant to the SJEPL Shareholder Loan Agreement shall be unsecured. The trust loan amount under such agreement shall be subordinate (in terms of security) to external debt of SJEPL and shall be subject to the terms specified in the SJEPL Shareholder Loan Agreement.

Mandatory prepayment: If, at any time: (a) it is or will become unlawful for the Trust to perform any of its obligations as contemplated under the SJEPL Shareholder Loan Agreement or to fund or perform any of its obligations or enjoy any of its rights pursuant to the SJEPL Shareholder Loan Agreement or any other document that may be executed in relation to the Trust Loan ("**Shareholder Loan Financing Documents**"), the Trust shall promptly notify SJEPL upon becoming aware of such event, or (b) the SJEPL Concession Agreement is terminated for any reason whatsoever; an amount equal to the outstanding amount of the Trust Loan shall immediately fall due (the "**Termination Amount**"), and SJEPL shall pay the Termination Amount, on or before the date specified by the Trust in the notice delivered to SJEPL (being no earlier than the last day of any applicable grace period permitted by law). If, at any time it is or becomes unlawful for SJEPL to perform its obligations under the Shareholder Loan Financing Documents, or the Shareholder Loan Financing Documents ceases to be legal, valid, binding or enforceable or in full force and effect, SJEPL shall promptly notify the Trust in writing upon becoming aware of such event and the undrawn portion of the Loan Amount will stand immediately cancelled and subject to the provisions of the SJEPL Concession Agreement, the Termination Amount shall immediately fall due, and SJEPL shall pay the Termination Amount, on or before the date specified by SJEPL in the notice delivered to the Trust (being no earlier than the last day of any applicable grace period permitted by law).

Purpose: The Trust Loan was utilised by SJEPL towards repaying (in full or in part): (a) existing indebtedness of SJEPL which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by SJEPL; (b) liabilities of SJEPL, as specified in the relevant utilisation request submitted by SJEPL; (c) any other purpose as may be agreed mutually in writing between the Trust and SJEPL, subject to applicable laws and in accordance with the SJEPL Shareholder Loan Agreement. Additionally, the tenure of the Trust Loan shall be from the date of drawdown of the Trust Loan until the expiry of the concession period or after repayment of the Senior Debt (as defined in the SJEPL Shareholder Loan Agreement).

Principal terms of the borrowings to be availed by NCREPE from the Trust

A certain amount was to be utilised by the Trust to provide loans to NCREPE, through a facility agreement, entered into between the Trust (acting through the Trustee and represented by the Investment Manager), and NCREPE ("**NCREPE Shareholder Loan Agreement**").

The key terms of the NCREPE Shareholder Loan Agreement include:
Loan Amount: In accordance with the NCREPE Shareholder Loan Agreement, NCREPE wishes to borrow an amount of ₹ 40,000 million ("**Loan Amount**") from the Trust. At anytime after the Final Settlement Date (as defined in the NCREPE Shareholder Loan Agreement) or at anytime after obtaining an approval from the Term Loan Lenders (as defined in the NCREPE Shareholder Loan Agreement), the parties to the NCREPE Shareholder Loan Agreement may, by mutual agreement, modify the terms of the NCREPE Shareholder Loan Agreement.

(i). Subject to the terms of the NCREPE Shareholder Loan Agreement, the Trust shall lend to NCREPE, upon receipt of a utilization request from NCREPE, in the format specified in the NCREPE Shareholder Loan Agreement and on such dates as may be specified in the utilization request submitted by NCREPE and as agreed upon by the Trust (each such date, a "**Drawdown Date**"), the relevant loan amount, by depositing it into the account of NCREPE as specified in such utilization request.

(ii). If the entire loan amount has not been drawn down on the Drawdown Date, NCREPE may make drawdown requests in writing to the Investment Manager ("**Subsequent Drawdown**") up to the available limit of the Loan Amount. However, the Subsequent Drawdown shall not be a binding obligation of the Trust and shall be at the sole discretion of the Investment Manager (on behalf of the Trust). Further, any Subsequent Drawdown shall be on the terms and conditions as prescribed in the NCREPE Shareholder Loan Agreement, unless mutually agreed otherwise, in writing.

Interest: The Trust Loan shall carry an interest rate of 16% per annum payable quarterly, and the rate of interest applicable to all tranches or any tranche of the Trust Loan may be reset on the date falling at the end of twelve months from the first drawdown date and subsequently each date falling at the end of twelve months thereafter or such other period as may be mutually agreed in writing between NCREPE and the Trust by giving a notice.
Repayment: The Trust may, at its sole discretion, by a notice in writing to NCREPE, require NCREPE to repay all or part of the Trust Loan, whether in one or more tranches, at any time during the Concession Period, without any prepayment penalty; and upon the Trust requiring NCREPE to repay the Trust Loan, NCREPE shall immediately and no later than 15 days from the receipt of the relevant notice, repay the entire Trust Loan or part thereof together with all other loans outstanding payable by NCREPE as at that date, as required by and in accordance with the relevant repayment notice (as defined in the NCREPE Shareholder Loan Agreement), subject to the compliance of restricted payment conditions (applicable in terms of the Term Loan Financing Documents) and any other conditions as may be mutually agreed between the Trust and NCREPE in writing. Notwithstanding anything to the contrary under any Shareholder Loan Financing Document (as defined in the NCREPE Shareholder Loan Agreement) and subject to the provisions of the Term Loan Financing Documents (as defined in the NCREPE Shareholder Loan Agreement), the entire Loan Outstanding (including for the avoidance of doubt, the outstanding Loan Amount and any accrued and unpaid interest) shall be paid or repaid (as applicable) by NCREPE to the Trust as bullet payment in full prior to the expiry of the Concession Period (as defined in the NCREPE Shareholder Loan Agreement).

Security: The borrowings of NCREPE pursuant to the NCREPE Shareholder Loan Agreement shall be unsecured and the trust loan amount under such agreement shall be subordinated (including in terms of tenor, repayment, security and rights relating to acceleration) to the obligations of NCREPE in respect of the Term Loan (as defined in the NCREPE Shareholder Loan Agreement) in terms of the Term Loan Financing Documents. Accordingly, the payment/ repayment by NCREPE to the Trust of the trust loan amount and other amounts payable in relation thereto, shall be subject to the terms specified in the Term Loan Financing Documents.

Mandatory prepayment: If, at any time: (a) it is or will become unlawful for the Trust to perform any of its obligations as contemplated under the NCREPE Shareholder Loan Agreement or to fund or perform any of its obligations or enjoy any of its rights pursuant to the NCREPE Shareholder Loan Agreement or any other document that may be executed in relation to the Trust Loan ("**Shareholder Loan Financing Documents**"), the Trust shall promptly notify NCREPE upon becoming aware of such event, or (b) the NCREPE Concession Agreement is terminated for any reason whatsoever; an amount equal to the outstanding amount of the Trust Loan shall immediately fall due (the "**Termination Amount**"), and subject to the provisions of the Term Loan Financing Documents, NCREPE shall pay the Termination Amount, on or before the date specified by the Trust in the notice delivered to NCREPE (being no earlier than the last day of any applicable grace period permitted by law). If, at any time it is or becomes unlawful for NCREPE to perform its obligations under the Shareholder Loan Financing Documents, or the Shareholder Loan Financing Documents ceases to be legal, valid, binding or enforceable or in full force and effect, NCREPE shall promptly notify the Trust in writing upon becoming aware of such event and the undrawn portion of the Loan Amount will stand immediately cancelled and subject to the provisions of the NCREPE Concession Agreement, the Termination Amount shall immediately fall due, and NCREPE shall pay the Termination Amount, on or before the date specified by NCREPE in the notice delivered to the Trust (being no earlier than the last day of any applicable grace period permitted by law).

Purpose: The Trust Loan shall be utilised by NCREPE towards: (a) part finance of 'Concession Fee'; (b) other transactional expenses of the Project; (c) to fund debt service reserve account, upfront capital expenditure and processing fees payable to the Term Loan Lenders as per the Term Loan Financing Documents; and (d) any other purpose as may be agreed mutually in writing between the Trust and NCREPE, subject to applicable laws.

DISTRIBUTION

Statements contained in this section entitled "Distribution" that are not historical facts are forward-looking statements. Such statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those that may be projected. Under no circumstances should the inclusion of such information herein be regarded as a representation, warranty or prediction with respect to the accuracy of the underlying assumptions by the Trust, the Trustee, the Sponsor, the Investment Manager or any other person. Investors are cautioned not to place undue reliance on these forward-looking statements that are stated only as at the date of this Information Memorandum. For details in relation to such forward-looking statements, please see the section entitled "Forward-Looking Statements" on page 11.

The net distributable cash flows of the Trust (the "**Distributable Income**") are based on the cash flows generated from the underlying operations undertaken by the Project SPVs. For details of the business and operations presently undertaken by the Project SPVs, please see the section entitled "*Business*" on page 166. Presently, cash flows receivable by the Trust may be in the form of dividend, interest income or principal repayment received from the Project SPVs in relation to any debt provided by the Trust, or a combination of all three.

In terms of the InvIT Regulations, not less than 90% of the net distributable cash flows of the Project SPVs, shall be distributed to the Trust, in the proportion of its holding in the Project SPVs, subject to applicable provisions in the Companies Act, 2013 and not less than 90% of the net distributable cash flows of the Trust shall be distributed to the Unitholders.

The Trust shall declare and distribute at least 90% of the Distributable Income to the Unitholders every financial year either in form of interest, dividend and/or repayment of capital, subject to InvIT Regulations and any statutory deductions specified under law. Provided however that, up to 10% of such income may be set aside as reserve for any purpose that the Investment Manager may deem fit, including for the purpose of acquisition of future SPV, subject to InvIT Regulations. Such distribution shall be declared and made such that the time period between any two declarations of distribution shall not exceed one year. However, if any infrastructure asset is sold by the Trust or the Project SPVs, or if the equity shares or interest in the Project SPVs are sold by the Trust and if the Trust proposes to re-invest the sale proceeds into another infrastructure asset within one year, it shall not be required to distribute any sales proceeds to the Trust or to the Unitholders. Further, if the Trust proposes not to invest the sale proceeds into any other infrastructure asset within one year, it shall be required to distribute the same in the manner specified above. In accordance with the InvIT Regulations, distributions by the Trust shall be made no later than 15 days from the date of such declarations. The distribution, when made, shall be made in Indian Rupees. For details on the risks relating to distribution, please see the section entitled "*Risk Factors*" on page 47.

Distribution made in the last three financial years

As on the date of the Information Memorandum, there have been no distributions made by the Trust.

Distribution Policy

Method of calculation of Distributable Income

The Distributable Income of the Trust shall be calculated in accordance with the InvIT Regulations, any circular, notification or guidance issued thereunder, the Trust Documents and applicable law. Presently, the Trust proposes to calculate distributable income in the manner provided below:

(i) Calculation of net distributable cash flows at the SPV level:

Description
Profit after tax as per Statement of profit and loss/income and expenditure (standalone) (A)
Add: Depreciation and amortisation as per statement of profit and loss/income and expenditure
Add: Any amount received from tolls or annuities not recognised as income for the purposes of working out the profit after tax
Less: Any amount payable to concession granting authority as revenue share or premium if such amount has not already been considered for the determination of profit after tax
Add/Less: Decrease/(increase) in working capital
Add: Interest accrued on loans (if any) from Trust;
Add: Amount invested by the Trust in the Project SPV for service of debt or interest, through internal accruals to the extent allowed under the SEBI InvIT Regulations.
Less: Any amount to be kept aside for DSRA, MMRA, any other reserve requirements as required by

lenders, or any other amounts required to be set aside until restricted payment conditions are met;
Add: Proceeds from • sale of fixed assets (including investments) • repayment of any loans provided to any other party, to the extent the same are not already considered in calculation of Profit After Tax
Add: net amount (i.e. after deducting the amount paid to third party) received from settlement of claim from NHAI or from any engineering, procurement and construction contractors to the extent not already considered in profit after tax
Add: amount released from DSRA/MMRA or any other reserve in lieu of providing bank guarantee
Add/less: Any other item of non-cash expense / non-cash income (net of actual cash flows for these items) or any other income/expense not considered for the calculation of profit after tax, if deemed necessary by the Investment Manager, after the InvIT Closing Date.
Less: Repayment of external debt (principal) / redeemable preference shares / debentures, etc., if deemed necessary by the Investment Manager, net of any debt raised by refinancing of existing debt or/and any new debt raised
Less: Payment toward • Capital Expenditure incurred on the projects (if any) including payment to contractors for their claims • payment of any existing claims by the Project SPV (only to the extent such amounts are not already covered in the Capital Expenditure item mentioned above).
Less: Any provision or reserve deemed necessary by the IM for expenses which may be due in the next quarter but for which there may not be commensurate amounts available by the date such expenses become due.
Less: Any other adjustment to be undertaken by the IM Board to ensure that there is no double counting of the same item for the above calculations
Total Adjustments (B)
Net Distributable Cash Flows (C)=(A+B)

(ii) Calculation of net distributable cash flows at the consolidated Trust level:

Description
Cash flows received from the SPV’s
Add: Proceeds from sale of the Project SPV not distributed pursuant to an earlier plan to re-invest, or if such proceeds are not intended to be invested within one year from the date of such sale.
Less: Costs/retention associated with sale of the Project SPV: (a) related debts settled or due to be settled from sale proceeds of SPV; (b) transaction costs paid on sale of the Project SPV; and (c) capital gains taxes on sale of the Project SPV, or other investments of the Trust.
Add: Any other income accruing at the Trust level and not captured above, including but not limited to interest/return on surplus cash, if any, invested by the Trust.
Less: Any claims/deferred consideration/other amounts payable under the transaction documents with the Seller(s) of the SPVs
Less: Any fees, interest and expense incurred at the Trust level, including but not limited to the fees of the Investment Manager and the Trustee
Less: Any expenditure reimbursed to Investment Manager or Sponsor which the Investment Manager incurred on behalf of Trust
Less: Proceeds reinvested or planned to be reinvested in accordance with SEBI InvIT Regulations and Future Assets Acquisition Policy
Less: Repayment of external debt at the Trust level (net of any new debt raised or refinancing of existing debt)
Less: Any amount to be kept aside for DSRA, MMRA, any other reserve requirements as required by lenders of the Trust or any Project SPV(s), or any amount required to be invested or lent to any of the Project SPVs;
Less: Income tax (if applicable) at the standalone Trust level and payment of other statutory dues

Less: Amount invested in or lent to any of the Project SPVs funded through internal accruals of the Trust, to the extent allowed under the SEBI InvIT Regulations. Such amount shall be decided by the IM Board.
Less: Payment of all amounts to the Sponsor pursuant to, and in accordance with, the Sale and Transfer Agreement, and Preliminary Placement Memorandum or Placement Memorandum
Less: Any provision or reserve deemed necessary by the IM Board for expenses which may be due in the next quarter but for which there may not be commensurate amounts available by the date such expenses become due.
Less: Any other reserve deemed necessary by the IM Board for infusing funds into the SPVs to discharge their liabilities.
Less: Any other adjustment to be undertaken by the IM Board to ensure that there is no double counting of the same item for the above calculations
Total cash outflows / retention at the Trust level (E)
Distributable Income (F) = (D+E)

In terms of the InvIT Regulations, if the distribution is not made within 15 days from the date of declaration, the Investment Manager shall be liable to pay interest to the Unitholders at the rate of 15% per annum until the distribution is made. Such interest shall not be recovered by the Investment Manager in the form of fee or any other form payable to the Investment Manager by the Trust.

DISCUSSION AND ANALYSIS BY THE DIRECTORS OF THE INVESTMENT MANAGER OF THE FINANCIAL CONDITION, RESULTS OF OPERATIONS AND CASH FLOWS OF THE PROJECT SPVS OF THE TRUST

There is limited financial information available in respect of the Trust and the Project SPVs which can be presented in this Information Memorandum and should be read in conjunction with audited standalone financial information of the Trust for the periods ended March 31, 2023, March 31, 2022 and March 31, 2021 and audited consolidated financial statements of the Trust and its subsidiaries (i.e. the Project SPVs) for the period ended March 31, 2023.

The Trust was registered as an InvIT on February 24, 2020. Further, the initial offer of the units of the Trust took place in June 2022 and the rights issue of units took place in October 2022, the Project SPVs were accordingly transferred to the Trust only post the above mentioned periods and therefore there was no business at the Trust level prior to such periods expect for certain ordinary course expenses. Accordingly, there is limited financial information available for the Trust and the Project SPVs and the lack of financial information in this Information Memorandum may make it difficult to assess our financial position or future prospects or results of operations or cash flows.

The Audited Financial Statements and the notes thereto included elsewhere in this Information Memorandum have been prepared in accordance with the requirements of the InvIT Regulations, Ind AS as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with the InvIT Regulations., which differs in certain material respects from Indian GAAP, IFRS and U.S. GAAP. Accordingly, the degree to which our Audited Financial Statements will provide meaningful information to a prospective investor is dependent on the reader's level of familiarity with Ind AS.

This discussion contains forward-looking statements and reflects our current views with respect to future events and financial performance. Actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors such as those set forth in the section titled "Risk Factors" on page 47 *in this Information Memorandum.*

The Trust's financial year ends on March 31 of each year. Accordingly, references to a particular financial year or a "Fiscal" are to the twelve-month period ended March 31 of that year. The Audited Financial Statements included in this Information Memorandum present the Trust's financial condition as of March 31, 2023 (on a consolidated basis) and as of March 31, 2023, March 31, 2022 and March 31, 2021 (on a standalone basis) References to the "Trust Group", "we", "us" and "our" are to the Trust, Project SPVs, on a consolidated basis. References to subsidiaries shall mean the "Project SPVs".

Overview

Indian Highway Concessions Trust is an Indian infrastructure investment trust sponsored by Maple Highways Pte Ltd, a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of Caisse de dépôt et de placement du Québec ("**CDPQ**").

CDPQ was established on July 1, 1965, by an act of the provincial legislature of Québec, Canada (namely, *the Act respecting the Caisse de dépôt et placement du Québec*). CDPQ is a legal person without share capital or shareholders, headquartered at 65, rue Sainte-Anne, Price building, 14th floor, Québec (Québec) G1R 3X5 and with a principal place of business at 1000, place Jean-Paul-Riopelle, Montréal, Québec H2Z 2B3, Canada. CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans. CDPQ invests globally in major financial markets, including public and private equity, fixed income, infrastructure and real estate. As of December 31, 2022, CDPQ held approximately CAD 401.89 billion in net assets. CDPQ has also received a credit rating of "AAA" from S&P Global Ratings, DBRS Ltd. and Fitch Ratings and "Aaa" from Moody's Investors Service.

CDPQ is amongst the three largest institutional investors in infrastructure in the world, with nearly 25 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 54.64 billion (net assets as at December 31, 2022) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has infrastructure investments in over 15 countries globally comprising both developed markets as well as targeted growth markets. Through its subsidiary CDPQ Infra, CDPQ also acts as a developer in certain infrastructure projects by providing integrated management of the planning, financing, construction and operating phases.

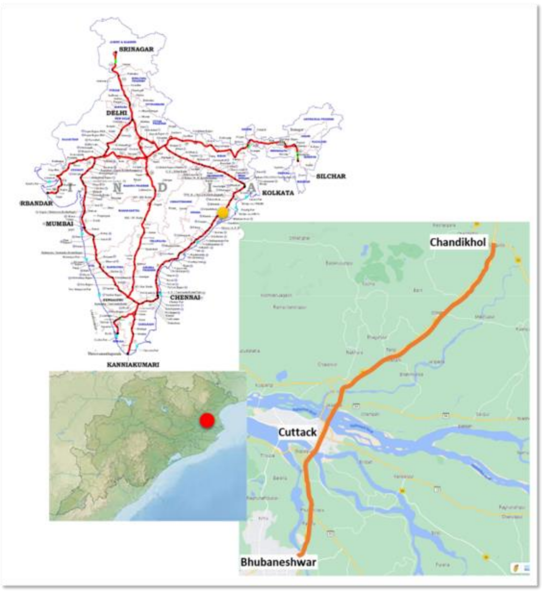
CDPQ has extensive global experience of investing in the transportation sector in developed markets and targeted developing markets, including the REM - public transit project in Montréal, Canada, the Conmex toll road in Mexico, Indiana Toll Road in the United States of America, WestConnex tollroad in Australia and a Multisectoral (including toll roads) Infrastructure Platform with CKD IM in Mexico.

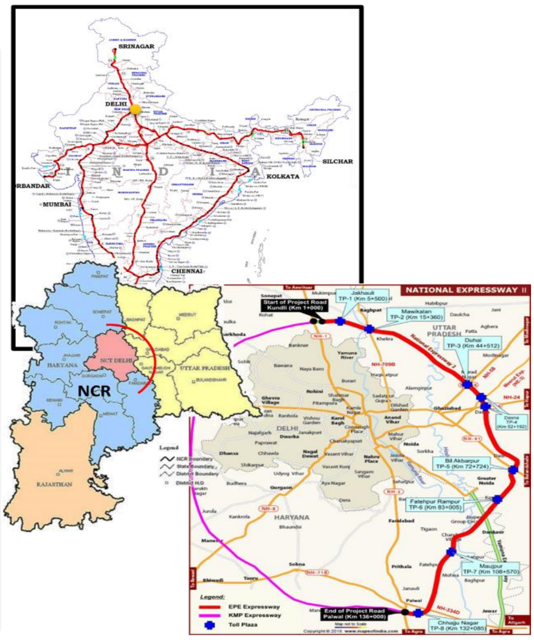
India is one of the key growth markets of focus for CDPQ. CDPQ typically works in partnership with local firms to create institutional platforms for the long term.

SJEPL has undertaken the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha, on a design, build, finance, operate and transfer basis, under the SJEPL Concession Agreement. NCREPE has undertaken the Eastern Peripheral Expressway (from km 1+000 to km 136+000) of NE-II in the National Capital Region on tolling, operation, maintenance and transfer basis, under the NCREPE Concession Agreement.

The map* below illustrates the location of the SJEPL Project and the NCREPE Project:

SJEPL **NCREPE**





The Investment Manager will also have the flexibility to acquire new projects through acquisitions from the Sponsor or from third parties or acquisitions by way of bidding or develop greenfield projects.

Maple Infra InvIT Investment Manager Private Limited is the Investment Manager for the Trust. Prior to acquisition by the Maple Highways Pte Ltd, it was engaged in the business of generation, accumulations, distribution and supply of electricity. Maple Highway Project Management Private Limited, is the Project Manager and was originally incorporated on January 28, 2010 and is approximately 100% owned by the Maple Highways Pte Ltd.

For further details of the Sponsor, the Project Manager and the Investment Manager, please see the section entitled "*Parties to the Trust*" on page 91.

Axis Trustee Services Limited is the Trustee of the Trust. The Trustee is a registered intermediary with SEBI under the Securities and Exchange Board of India (Debenture Trustees) Regulations, 1993, as a debenture trustee.

Factors Affecting Results of Operations

The Project SPVs' business, prospects, results of operations and financial condition are affected by a number of factors, including the following key factors:

Lower than expected returns on our investment in our Project

In our toll-based Projects or Projects with a toll component, our toll revenue depends on, and will depend on, the tolling rates set by the concessioning authority in accordance with the SJEPL Concession Agreement and the

NCREPE Concession Agreement ("**Concession Agreements**") and the actual traffic volume using our roads. Such tolling rates may be revised by the concessioning authority annually in accordance with the provision of the Concession Agreements and applicable law. Our decision to undertake road projects is largely based on our estimate of our expected toll revenue, which in turn is partly based on our estimate of the traffic volume using our roads.

Traffic volume may be affected by a number of factors beyond our control, including general economic conditions, alternate routes, alternate means of transportation, location of toll plazas, weather conditions, demographic changes, fuel prices, reduction in commercial or industrial activities in the regions served by the roads and natural disasters. Thus, the actual traffic volume may be lower than our estimate. Decreases in traffic volume, could result in a significant loss of our toll revenue. In addition, our Concession Agreements typically limit and regulate increases in tolling rates. Usually, the NHAI sets the applicable tolling rates and we may not be able to increase tolling rates to cover increases in our operational costs.

There are no provisions in the Concession Agreements protecting us against increases in interest rates or cost of raw materials. Our lenders may have the right to periodically adjust our interest rates and our applicable interest rates may increase based on their review of our credit profile and perceived risks in our operations. Our operational costs may also increase substantially during the operation of our project due to shortage of raw materials or substantial increases in prices of raw materials required for operation and maintenance beyond the permitted scope of adjustment due to occurrence of certain events under the relevant provisions of the Concession Agreements. Many factors causing such adverse changes are beyond our control and we are usually not able to demand matching increases in our tolling rates over and above fixed increase, as provided for in the Concession Agreements. Even if we invoke the inflation adjustment clauses in our Concession Agreements, the increase may not be adequate to offset the negative impact of increases in interest rates or cost of raw materials.

As our Projects often requires significant capital investment with potential returns spread over a long period of time, inadequate toll revenues collected from our Projects may result in a low return or even loss on our investment, which may adversely affect our liquidity, business, financial condition and results of operation.

The revenues from tolls are subject to significant fluctuations due to amongst others, force majeure events, changes in traffic volumes and the mix of traffic and a decline in traffic volumes could adversely affect its business prospects, financial condition, results of operations and its ability to make distributions.

The Projects comprise exclusively of toll payments. Toll revenues depend on toll receipts and are affected by changes in traffic volumes and the mix of traffic. Traffic volumes are directly or indirectly affected by a number of factors, many of which are outside the Project SPVs' control, including toll rates, fuel prices, the affordability of automobiles, the quality, convenience and travel time on alternate routes and the availability of alternate means of transportation, including rail networks and air transport. Moreover, the Project SPVs' cash flows are affected by seasonal factors, which may adversely affect traffic volumes. India experiences monsoon rains during the period from June or July until September or October each year, which can affect the volume of traffic on the Projects. During such periods of curtailed activity, the Project SPVs may continue to incur operating expenses but receive reduced toll revenues. Such fluctuations may adversely affect the Project SPVs' business, financial condition or results of operations.

The toll revenues of the Project SPVs may also be affected by various regulatory and statutory conditions and restrictions. On May 26, 2021, the NHAI issues guidelines to ensure service time of not more than 10 seconds per vehicle even at peak hours at the toll plazas on the National Highways. In accordance with these guidelines, queues of vehicles at toll plazas must not exceed 100 meters, and in the event of queues longer than 100 meters the vehicles will be allowed to pass without paying toll till the queue comes within 100 meters from the toll booth. Such conditions on the payment of toll may adversely affect the Project SPVs' business, financial condition or results of operations.

Traffic volumes are also influenced by the convenience and extent of a toll road's connections with other parts of the state and national highway and toll road network, as well as the cost, convenience and availability of other means of transportation and alternative routes. There can be no assurance that future changes affecting the road network in India, through road additions and closures or through other traffic diversions or redirections, or the development of other means of transportation, such as air or rail transport, will not adversely affect traffic volume on toll roads.

The toll-linked Projects may experience high traffic levels and congestion at certain times of the day or on certain days of the week. Although the Project SPVs may consider possible solutions and take appropriate steps in order to ease traffic flow and reduce congestion, there can be no assurance that the saturation problems will be resolved under conditions that are economically satisfactory to the Project SPVs. This could also lead to user dissatisfaction and could potentially reduce traffic volume.

Inflation risks.

Inflation rates in India have been volatile in recent years, and such volatility may continue. Increasing inflation in India could cause a rise in the price of transportation, wages, raw materials and other expenses. There can be no assurance that increased toll charges will sufficiently offset our increased costs due to inflation which could have a material adverse effect on our business, prospects, financial condition, results of operations and cash flows. Inflation may also have an impact on interest rates, which can affect our profitability.

The road sector in India

We derive and expect to continue to derive in the foreseeable future, most of our revenues and operating profits from India. Changes in macroeconomic conditions generally impact the road industry and could negatively impact our business. Accordingly, our business is highly dependent on the state of development of the Indian economy and the macroeconomic environment prevailing in India. Since the use of our Project, our expansion plans and future projects depend or will depend on macroeconomic factors that may negatively impact demand, the development of road infrastructure projects in India, or the timely commencement of their operations could in turn have a material adverse effect on our growth prospects, business and cash flows. In addition, access to financing may be more expensive or not available on commercially acceptable terms during economic downturns.

General economic conditions in India

Our performance and the growth are dependent on the performance of the Indian economy, which, in turn, depends on various factors. The Indian economy has been affected by the recent global economic uncertainties, volatility in interest rates, currency exchange rates, commodity and electricity prices, adverse conditions affecting agriculture and various other macroeconomic factors.

Conditions outside India, such as a slowdown or recession in the economic growth of other major countries and regions, especially in U.S., Europe and China, have an impact on the growth of the Indian economy, and GoI policy may change in response to such conditions. While recent Indian governments have been focused on encouraging private participation in the industrial sector, any adverse change in policy could result in a further slowdown of the Indian economy. The rate of economic liberalisation could decrease, and specific laws and policies affecting foreign investment, currency exchange rates and other matters affecting investment in India could change as well. In the road sector, there can be no assurance that the GoI's engagement with and outreach to private sector operators, including the Trust, will continue in the future. A significant change in India's economic liberalisation and deregulation policies, in particular, those relating to the road sector, could disrupt business and economic conditions in India generally and our business in particular. In addition, adverse developments in the Indian economy could also impact companies and banks that provide services to us. For example, on March 5, 2020 and November 17, 2020, respectively, the GoI, in consultation with RBI placed Yes Bank Limited and Lakshmi Vilas Bank under moratorium, imposed limitations on their operations as well as on withdrawals by depositors and payments to creditors over certain specified amounts for a limited period of time from the date of such moratorium coming into effect. The limitations on operations and the moratorium were subsequently lifted in both cases. The occurrence of any such development in the future may impact our banking channels, and we may or may not be able to recover our deposits, in part or in full. This could result in potential write-offs on our books of accounts, and materially and adversely affect the business, prospects, financial condition, results of operations and cash flows.

Additionally, an increase in trade deficit or a decline in India's foreign exchange reserves could negatively impact interest rates and liquidity, which could adversely impact the Indian economy and our business. Any downturn in the macroeconomic environment in India could materially and adversely affect the business, prospects, financial condition, results of operations and cash flows.

Dependence on support from governmental entities

The operations of the Projects and any future projects that the Trust may acquire, are and will be significantly dependent on various central and state government entities, in terms of policies, incentives, budgetary allocations and other resources provided by these entities for the surface transportation industry, as well as the terms of the contractual arrangements, concessions and other incentives available from these government entities for the projects. Sustained increases in budgetary allocations by the GoI and various state governments for investments in the infrastructure sector, the development of structured and comprehensive infrastructure policies that encourage greater private sector participation and increased funding by international and multilateral development financial institutions in infrastructure projects in India have resulted in, and are expected to continue to result in, an increase in the amount of transportation infrastructure projects undertaken in India. Any adverse change in the focus or policy framework regarding infrastructure development or the surface transportation industry, of or change in the Trust's relationships with the GoI or various government entities in India, could adversely affect the project, the opportunities for the Trust to secure new projects and the business, financial condition and results of operations of the Trust.

In addition, the projects in which government entities participate may be subject to delays, extensive internal processes, policy changes, changes due to local, national and internal political pressures and changes in governmental or external budgetary allocation and insufficiency of funds. Since government entities are responsible for awarding concessions and are parties to the development and operations of projects, projects are directly and significantly dependent on their support. Any withdrawal of support or adverse changes in their policies may lead to the agreements being renegotiated and could also adversely affect the financing, capital expenditure, revenues, development or operations relating to the Projects.

Tax benefits for road infrastructure sector in India

SJEPL is entitled to certain benefits under Section 80-IA of the Income Tax Act, 1961, as amended, if certain conditions are satisfied. However, the benefits to SJEPL may expire at various points of time. Any expiry, termination or Government of India withdrawal of these tax benefits could result in an increase in the Trust's tax expenses, thereby adversely affecting the Trust's, or the Project SPVs' results of operations and cash flows.

Competition

The Trust faces competition from other road operators, financial investors and other InvITs in acquiring profitable concessions for future projects. The competition for road projects varies depending on the size, nature and complexity of the project and on the geographical region in which the project is to be executed. Some competitors may have greater financial resources, economies of scale and operating efficiencies than the Trust.

Significant Accounting Policies as per the Consolidated Financial Statements

2.1 **<u>Basis of Preparation and presentation</u>**

The consolidated financial statements are the financial statements of the Trust and comprise of Consolidated Balance Sheet as at March 31, 2023, the Consolidated Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Consolidated Cash Flow, the Consolidated Statement of Changes in Unitholders' Equity for the year then ended, the Statement of Net Assets at fair value as at March 31, 2023, the Statement of Total Returns at Fair Value, the Statement of Net Distributable Cash Flows ('NDCFs') for the year ended March 31, 2023 and a summary of significant accounting policies and other explanatory notes in accordance with Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended), prescribed under Section 133 of the Companies Act, 2013 ('Ind AS') read with SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and the circulars issued thereunder ('InvIT Regulations') and other accounting principles generally accepted in India.

The consolidated financial statements are presented in India Rupees (Rs.) which is also the functional currency of the Group. All values are rounded to the nearest lakhs, unless otherwise indicated. Certain amounts that are required to be disclosed and do not appear due to rounding-off are expressed as 0.0.

The preparation of consolidated financial statements is in conformity with the generally accepted accounting principles in India and it requires the Investment Manager to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the consolidated financial statements and the results of operations during the reporting year. Although these estimates are based upon the Investment Manager's best knowledge of current events and actions, the actual results could differ from these estimates. Estimates and underlying assumptions are reviewed on a periodic basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

These consolidated financial statements correspond to classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. These consolidated financial statements have been prepared on an accrual basis and historical cost convention except for certain financial assets and liabilities (refer accounting policy regarding financial instruments) which have been measured at fair value.

The Group has prepared the financial statements on the basis that it will continue to operate as a going concern.

2.2 Basis of Consolidation

The consolidated financial statements comprise the financial statements of the Trust and its subsidiaries as at March 31, 2023. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee),
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights result in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee,
- Rights arising from other contractual arrangements,
- The Group's voting rights and potential voting rights, and
- The size of the Group's holding of voting rights relative to the size and dispersion of the holdings of the other voting rights holders.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

The consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances. If a member of the group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to that group member's financial statements in preparing the consolidated financial statements to ensure conformity with the group's accounting policies.

The financial statements of all entities used for the purpose of consolidation are drawn up to the same reporting date as that of the parent, i.e., the year ended on March 31, 2023.

Consolidation procedure:

a. Combine like items of assets, liabilities, equity, income, expenses and cash flows of the parent with those of its subsidiaries. For this purpose, income and expenses of the subsidiary are based on the amounts of the assets and liabilities recognised in the consolidated financial statements at the acquisition date.
b. Offset (eliminate) the carrying amount of the parent's investment in each subsidiary and the parent's portion of equity of each subsidiary. Business combinations policy explains how to account for any related goodwill.
c. Eliminate in full, intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the group (profits or losses resulting from intragroup transactions that are recognised in assets, such as inventory and fixed assets, are eliminated in full). Intragroup losses may indicate an impairment that requires recognition in the consolidated financial statements. Ind AS 12 Income Taxes applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the unitholders of the Trust and to the noncontrolling interests (if any), even if this results in the non-controlling interests having a deficit balance. Non-controlling interest represents that part of the total comprehensive income and net assets of subsidiaries attributable to interests which are not owned, directly or indirectly, by the Trust and are excluded in the consolidated financial statements from the total comprehensive income and net assets. As at 31 March 2023, there is no non-controlling interest.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting

policies in line with the Group's accounting policies. The consolidated financial statements have been presented to the extent possible, in the same manner as the Trust's standalone financial statements. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.
A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:

- Derecognises the assets (including goodwill) and liabilities of the subsidiary at their carrying amounts,
- Derecognises the carrying amount of any non-controlling interests,
- Derecognises the cumulative translation differences recorded in equity,
- Recognises the fair value of the consideration received,
- Recognises the fair value of any investment retained,
- Recognises any surplus or deficit in profit or loss,
- Reclassifies the parent's share of components previously recognised in OCI to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

2.3 Summary of significant accounting policies

a. Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred measured at acquisition date fair value and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets include an input and a substantive process that together significantly contribute to the ability to create outputs. The acquired process is considered substantive if it is critical to the ability to continue producing outputs, and the inputs acquired include an organised workforce with the necessary skills, knowledge, or experience to perform that process or it significantly contributes to the ability to continue producing outputs and is considered unique or scarce or cannot be replaced without significant cost, effort, or delay in the ability to continue producing outputs.

At the acquisition date, the identifiable assets acquired, and the liabilities assumed are recognised at their acquisition date fair values. For this purpose, the liabilities assumed include contingent liabilities representing present obligation and they are measured at their acquisition fair values irrespective of the fact that outflow of resources embodying economic benefits is not probable. However, the following assets and liabilities acquired in a business combination are measured at the basis indicated below:

- Deferred tax assets or liabilities, and the liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with Ind AS 12 *Income Taxes* and Ind AS 19 *Employee Benefits* respectively.

- Potential tax effects of temporary differences and carry forwards of an acquiree that exist at the acquisition date or arise as a result of the acquisition are accounted in accordance with Ind AS 12 *Income Taxes*.

- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share – based payments arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with Ind AS 102 *Share-based Payment* at the acquisition date.

- Assets (or disposal groups) that are classified as held for sale in accordance with Ind AS 105 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that Standard.

- Reacquired rights are measured at a value determined on the basis of the remaining contractual term of the related contract. Such valuation does not consider potential renewal of the reacquired right.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss or OCI, as appropriate.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of Ind AS 109 *Financial Instruments*, is measured at fair value with changes in fair value recognised in profit or loss in accordance with Ind AS 109 *Financial Instruments*. If the contingent consideration is not within the scope of Ind AS 109 *Financial Instruments*, it is measured in accordance with the appropriate Ind AS and is recognised in profit and loss. Contingent consideration that is classified as equity is not re-measured at subsequent reporting dates and subsequently its settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in OCI and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the entity recognises the gain directly in equity as capital reserve, without routing the same through OCI.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units. In the event of cessation of operations of a subsidiary, the unimpaired goodwill is written off fully.

A cash generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognised in profit or loss. An impairment loss recognised for goodwill is not reversed in subsequent periods.

Where goodwill has been allocated to a cash generating unit and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed of in these circumstances is measured based on the relative values of the disposed of operation and the portion of the cash-generating unit retained.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed one year from the acquisition date.

Asset Acquisition

If the acquisition of an asset or a group of assets does not constitute a business, the Group identifies and recognizes the individual identifiable assets acquired including those assets that meet the definition of, and recognition criteria for, intangible assets in Ind AS 38, Intangible Assets and liabilities assumed. The cost of the group is allocated to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase and no goodwill is recognized.

Allocation of the cost of the group is done as follows:

For any identifiable asset or liability initially measured at an amount other than cost, Group initially measures that asset or liability at the amount specified in the applicable Ind AS Standard. The Group deducts from the transaction price of the group the amounts allocated to the assets and liabilities initially measured at an amount other than cost, and then allocates the residual transaction price to the remaining identifiable assets and liabilities based on their relative fair values at the date of the acquisition.

b. Current and non-current assets

An asset is classified as 'current' when it satisfies any of the following criteria:

i) Expected to be realised or intended to be sold or consumed in normal operating cycle; or
ii) Held primarily for the purpose of trading; or
iii) Expected to be realised within twelve months after the reporting period; or
iv) Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as 'non-current'.

Deferred tax assets are classified as 'non-current asset'.

c. Current and non-current liabilities

A liability is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be settled in the Trust's normal operating cycles; or
ii) it is held primarily for the purpose of being traded; or
iii) it is due to be settled within twelve months after the reporting date; or
iv) the Trust does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

All other liabilities are classified as 'non-current'.

Deferred tax liabilities are classified as 'non-current liabilities'.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The normal operating cycle of the Trust is considered as 12 months.

d. Property, plant and equipment

Property, plant and equipment are stated at cost net of tax/duty credit availed, less accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced at intervals, the Group derecognizes the replaced part, and recognises the new part with its own associated useful life and it is depreciated accordingly. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Property, plant and equipment are derecognised, either on disposal or when retired from active use or when no future economic benefits are expected from its use. Any gain or loss arising on de-recognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of profit and loss when the asset is derecognised. Depreciation charge for impaired assets is adjusted in future periods in such a manner that the revised carrying amount of the asset is allocated over its remaining useful life.

The Group reviews the estimated residual values and expected useful lives of assets at least annually. In particular, the Group considers the impact of health, safety and environmental legislation in its assessment of expected useful lives and estimated residual values.

Freehold land is measured at cost less impairment losses, if any.

The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year end and adjusted prospectively, if appropriate.

Depreciation on assets (other than freehold land and assets under construction which are not depreciated) has been provided on a straight-line basis at the useful lives specified in the Schedule II of the Companies Act, 2013. Depreciation on additions/ deductions is calculated pro-rata from/ to the period of additions/ deductions. The useful life as prescribed under Schedule II of Companies Act 2013 is as below:

Category	**Life**
Leasehold improvement	As per lease period
Furniture & Fixtures	10 years
Vehicles	8 years
Office Equipment	5 years
Electrical Installations	10 years
Computer & Peripherals	3 years
Toll Booths	5 years

e. Intangible assets

Intangible assets under Service Concession Arrangements (Appendix D to Ind AS 115 – Revenue from contracts with customers) – ‘Toll Collection Rights’

Under Appendix D to Ind AS 115 - ‘Service Concession Arrangement’ these arrangements are accounted for based on the nature of the consideration. The intangible asset model is used to the extent the Group receives a right to charge users of the toll road. The financial asset model is used when the Group has an unconditional right to receive cash for the construction services. Intangible assets arising from a service concession arrangement are recognized when the Group has a right to charge for usage of the concession infrastructure. Toll collection rights are capitalized as intangible assets upon completion of the project at the cumulative construction costs plus obligation towards negative grants and additional concession fee payable to National Highways Authority of India (‘NHAI’), if any. Till the completion of the project, the same is recognised as intangible assets under development. Extension of concession period by the authority in compensation for claims made by the Group are capitalised as part of toll collection rights on acceptance of the claim. An intangible asset received as consideration for providing construction or upgrade services in a service concession arrangement is measured at fair value on initial recognition by references to the fair value of the services provided.

The Group constructs or upgrades infrastructure (construction services) used to provide a public service and operates and maintains that infrastructure (operation services) for a specified time as per the concession arrangement.

The concession arrangement sets out rights and obligations related to the infrastructure and the service to be provided. The right to receive consideration gives rise to an intangible asset (i.e., right to charge users of the toll road) accordingly, the intangible asset model is applied.
Grant received including but not limited to equity support from NHAI, is considered as a part of total outlay of the construction project and it is simultaneously reduced from the cost of acquisition of the intangible asset.

The estimated useful lives of the intangible asset in a service concession arrangement are the period from when the SPV is able to charge the public for the use of the infrastructure till the end of the concession period.

Amortization of toll collection rights

Toll collection rights in respect of road projects are amortized over the period of concession using the weighted average of expected future tollable traffic during the balance concession period to reflect the pattern in which the asset's economic benefits will be consumed. At each balance sheet date, the projected traffic for the balance toll period is reviewed by the management. If there is any change in the projected traffic from previous estimates, the amortisation of toll collection rights is changed prospectively to reflect any changes in the estimates.

Other intangible assets

Intangible assets acquired separately are measured at cost on initial recognition. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit and loss in the period in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Intangible assets with indefinite useful lives are not amortised, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.
An intangible asset is derecognised upon disposal (i.e., at the date the recipient obtains control) or when no future economic benefits are expected from its use or disposal. Any gain or loss arising upon derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit and loss when the asset is derecognised.

The useful life for the intangible assets is as under:

Category	Life
Toll collection rights	As per concession period
Computer software	3 years

f. Intangible assets under development

Intangible assets under development includes direct and indirect expenditure incurred for the construction and upgradation of Highway Project (toll road assets) and costs incidental and related thereto.

All expenses which are capital in nature and directly relatable to development of highway project incurred up to the project completion/commencement of commercial operations/confirmation of project completion by Independent Engineer ('IE') or NHAI are included under intangible assets under development. These expenses are transferred to intangible assets upon completion and confirmation of completion of project highway from IE/NHAI ('COD').

The net collection from tolling operations during the construction period after deduction of allocable costs is adjusted from the total cost incurred on intangible asset under development.

The transaction price of an intangible asset received as consideration for providing construction services in a service concession arrangement is estimated by reference to the transaction price of the construction services. The transaction price is calculated as the estimated cost of construction. The Group does not recognize any margin on construction services. When the Group receives an intangible asset and a financial asset as a consideration for providing services in a service concession arrangement, the Group estimates the transaction price of the intangible asset as the difference between the cost of construction services provided less transaction price of the asset received.

g. Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(i) Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial assets contractual cash flow characteristics and the Trust's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under Ind AS 115. Refer to the accounting policies in section (h) Revenue recognition.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'Solely Payments of Principal and Interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at fair value through OCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement financial assets are classified in four broad categories:

- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through other comprehensive income (FVTOCI) with recycling of cumulative gains and losses (debt instruments)

- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortised cost (debt instruments)

A ‘financial asset’ is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are ‘Solely Payments of Principal and Interest (SPPI)’ on the principal amount outstanding.
This category is the most relevant to the Group. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the profit or loss. The losses arising from impairment are recognised in the profit or loss. The Group’s financial assets at amortised cost includes trade receivables and other financial assets.

Financial assets at fair value through OCI (FVTOCI) (debt instruments)

A ‘financial asset’ is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset’s contractual cash flows represent SPPI.

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. For debt instruments, at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value changes recognised in OCI is reclassified from the equity to profit or loss.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under Ind AS 32 Financial Instruments: Presentation. The classification is determined on an instrument-by-instrument basis.

Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS103 applies are classified as at FVTPL.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit and loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the balance sheet at fair value with net changes in fair value recognised in the statement of profit and loss.

This category includes derivative instruments and listed equity investments which the Trust had not irrevocably elected to classify at fair value through OCI. Dividends on listed equity investments are recognised in the statement of profit and loss when the right of payment has been established.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Trust 's balance sheet) when:

• The rights to receive cash flows from the asset have expired, or
• The Trust has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement and either;
  (a) the Trust has transferred substantially all the risks and rewards of the asset, or
  (b) the Trust has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

Expected credit losses (ECLs) are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Trust does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

(ii) **Financial liabilities**

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings.

Subsequent measurement

For purposes of subsequent measurement, financial liabilities are classified in two categories:
• Financial liabilities at fair value through profit or loss
• Financial liabilities at amortised cost (loans and borrowings)

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Trust that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109.

Gains or losses on liabilities held for trading are recognised in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ losses are not subsequently transferred to P&L. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit and loss. The Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (loans and borrowings)

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.

This category generally applies to borrowings.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit and loss.

Reclassification of financial assets

The Group determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those assets. Changes to the business model are expected to be infrequent. The Group's management determines change in the business model as a result of external or internal changes which are significant to the Group's operations. Such changes are evident to external parties. A change in the business model occurs when the trust group either begins or ceases to perform an activity that is significant to its operations. If the Group reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The Group does not restate any previously recognised gains, losses (including impairment gains or losses) or interest.

The following table shows various reclassification and how they are accounted for:

Original classification	Revised classification	Accounting treatment
Amortised cost	FVTPL	Fair value is measured at reclassification date. Difference between previous amortized cost and fair value is recognised in profit or loss.
FVTPL	Amortised Cost	Fair value at reclassification date becomes its new gross carrying amount. EIR is calculated based on the new gross carrying amount.
Amortised cost	FVTOCI	Fair value is measured at reclassification date. Difference between previous amortised cost and fair value is recognised in OCI. No change in EIR due to reclassification.
FVTOCI	Amortised cost	Fair value at reclassification date becomes its new amortised cost carrying amount. However, cumulative gain or loss in OCI is adjusted against fair value. Consequently, the asset is measured as if it had always been measured at amortised cost.
FVTPL	FVTOCI	Fair value at reclassification date becomes its new carrying amount. No other adjustment is required.
FVTOCI	FVTPL	Assets continue to be measured at fair value. Cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss the reclassification date.

Offsetting of financial instruments

Financial assets and financial liabilities are off set, and the net amount is reported in the consolidated balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

h. Revenue recognition

Construction services

Revenue related to construction or upgrade services under a service concession arrangement (refer note 39) is recognised based on the stage of completion of the work performed, consistent with the Group's accounting policy on recognising revenue on construction contracts. Operation or service revenue is recognised in the period in which the services are provided by the Group.

Contract revenue for fixed price contracts is recognised only to the extent of cost incurred that it is probable will be recoverable till such time the outcome of the job cannot be ascertained reliably. When the outcome of the contract is ascertained reliably, contract revenue is recognised at cost of work performed on the contract plus proportionate margin, using the percentage of completion method. Percentage of completion is the proportion of cost of work performed to-date, to the total estimated contract costs.

Fee collection

Fee collection from the users of the carriageway is recognised on actual collection of toll revenue as per the concession agreement. Revenue from electronic toll collection is recognised on accrual basis. Revenue from sale of smart card is recognised as and when the cards are issued to the users.

Change of scope services, utility shifting services (including supervision) and other claims

Change of scope services includes services performed for NHAI other than mentioned in a service concession arrangement. Revenue related to change of scope services, utility shifting services, its supervision and other claims (covid relief etc.) are accounted for when there is certainty of realization and can be measured reliably.

Interest income

For all financial instruments measured at amortized cost, interest income is recorded using effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instruments or a shorter period, where appropriate, to the net carrying amount of the financial asset. Interest income is included in other income in the statement of profit and loss.

Other income

Other income includes interest on term deposits with banks, gain on sale of investments, insurance proceeds and other miscellaneous income. Other income is recognised when right to receive is established.

Contract balances

a. Trade receivables

A receivable is recognised if an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).Refer to accounting policies of financial assets in section (g) Financial instruments – initial recognition and subsequent measurement.

b. Contract liabilities

A contract liability is recognised if a payment is received, or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

i. Employee benefits

Employee benefits include provident fund, gratuity, compensated absences, etc.

(i) Short term employee benefits

All employee benefits falling due wholly within twelve months of rendering the service are classified as short term employee benefits. The benefits like salaries, wages, short term compensated absences etc. and the expected cost of bonus, ex-gratia are recognized in the period in which the employee renders the related service.

(ii) Post-employment benefits

a) Defined contribution plans: The obligation to employee's provident fund is a defined contribution plan. The contribution paid/payable is recognized in the period in which the employee renders the related service. The Group has defined contribution plans where the Group pays pre-defined amounts and does not have any legal or constructive obligation to pay additional sums for post-employment benefits.

b) Defined benefit plans: The obligation towards gratuity is a defined benefit plan. The present value of the obligation under such defined benefit plans is determined based on actuarial valuation using the Projected Unit Credit Method, which recognizes each period of service as giving rise to additional unit of employee benefit entitlement and measures each unit separately to build up the final obligation as per Ind AS 19 'Employee Benefits'.

   The obligation is measured at the present value of the estimated future cash flows. The discount rates used for determining the present value of the obligation under defined benefit plans, is based on the market yields on Government securities as at the Balance sheet date, having maturity periods approximating to the terms of related obligations.

   Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through other comprehensive income in the period in which they occur. Remeasurements are not reclassified to the statement of profit and loss in subsequent periods.

Past service costs are recognised in profit or loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Group recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognises the following changes in the net defined benefit obligation as an expense in the Consolidated statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements; and
- Net interest expense or income.

(iii) Long term employee benefits

The obligation for long term employee benefits such as long-term compensated absences is recognized in the same manner as in the case of defined benefit plans as mentioned in (ii) (b) above.

j. Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies single recognition and measurement approach is applied for all leases, except for short-term leases and leases of low-value assets. The Group applies the lease of low-value asset recognition exemption to leases that are considered to be low value. Lease payments on leases of low-value asset are recognised as expense on a straight-line basis over the lease term.

Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. Refer to the accounting policies in section (l) impairment of non-financial assets.

Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset is classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

k. Accounting for taxes on income

Current income tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date. Current income tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in equity). The Investment Manager periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the balance sheet approach on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax asset is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

In assessing the recoverability of deferred tax assets, the Group relies on the same forecast assumptions used elsewhere in the financial statements and in other management reports, which, among other things, reflect the potential impact of climate-related development on the business, such as increased cost of production as a result of measures to reduce carbon emission.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognised subsequently if new information about facts and circumstances change. Acquired deferred tax benefits recognised within the measurement period reduce goodwill related to that acquisition if they result from new information obtained about facts and circumstances existing at the acquisition date. If the carrying amount of goodwill is zero, any remaining deferred tax benefits are recognised in OCI/ capital reserve depending on the principle explained for bargain purchase gains. All other acquired tax benefits realised are recognised in profit or loss.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

l. Impairment of non-financial assets

The Group assesses as at each balance sheet date, whether there is an indication that an asset may be impaired and also whether there is an indication of reversal of impairment loss recognised in the previous periods. If any indication exists, or when annual impairment testing for an asset is required, if any, the Group determines the recoverable amount and impairment loss is recognised when the carrying amount of an asset exceeds its recoverable amount.

Recoverable amount is determined:

- In the case of an individual asset, at the higher of the fair value less cost to sell and the value in use; and
- In the case of cash generating unit (a pool of assets that generates identified, independent cash flows), at the higher of the cash generating unit's fair value less cost to sell and the value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations, including impairment on inventories, are recognised in profit and loss section of the statement of profit and loss.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit and loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

m. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

n. Provisions, contingent liabilities and contingent assets

(a) Provisions are recognized for liabilities that can be measured only by using a substantial degree of estimation, if

i. the Group has a present obligation as a result of a past event.
ii. a probable outflow of resources embodying economic benefits is expected to settle the obligation, and
iii. the amount of the obligation can be reliably estimated.

When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of profit and loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

(b) Reimbursement expected in respect of expenditure required to settle a provision is recognized only when it is virtually certain that the reimbursement will be received.

(c) Contingent Liability is disclosed in the case of:

(i) a present obligation arising from past events, when it is not probable that an outflow of resources will be required to settle the obligation,
(ii) a present obligation when no reliable estimate is possible, and
(iii) a possible obligation arising from past events where the probability of outflow of resources is not remote.
(d) Provisions, contingent liabilities and contingent assets are reviewed at each balance sheet date.

(e) Onerous contracts

If the Group has a contract that is onerous, the present obligation under the contract is recognised and measured as a provision. However, before a separate provision for an onerous contract is established, the Group recognises any impairment loss that has occurred on assets dedicated to that contract.

An onerous contract is a contract under which the unavoidable costs (i.e., the costs that the Group cannot avoid because it has the contract) of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract (i.e., both incremental costs and an allocation of costs directly related to contract activities).

(f) Major maintenance expenses

As per the concession agreements, the Group is obligated to carry out major maintenance of the roads under concession. The Group estimates the likely provision required towards the same and accrues the cost on a straight-line basis over the period at the end of which maintenance would be required, in the consolidated statement of profit and loss.

o. Claims

Claims against the Group consists of claims from EPC contractor in which escalations are accounted for as and when accepted and claims with NHAI are accounted for as and when the claim is settled by the authority.

p. Earnings per unit (EPU)

Basic earnings per unit is calculated by dividing the net profit or loss for the period attributable to unitholders of the Group (after deducting preference dividends and attributable taxes if any) by the weighted average number of units outstanding during the year.

For the purpose of calculating diluted earnings per unit, the net profit or loss for the period attributable to unitholders and the weighted average number of units outstanding during the period are adjusted for the effects of all dilutive potential units.

q. Contributed equity

Units are classified as equity. Incremental costs attributable to the issue of units are directly recorded in equity, net of tax.

r. Distribution to unitholders

The Group recognises a liability to make cash distributions to unitholders when the distribution is authorized, and a legal obligation has been created. As per the SEBI InvIT Regulations, a distribution is authorised when it is approved by the Board of Directors of the Investment Manager. A corresponding amount is recognised directly in equity.

s. Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Group's cash management.

t. Cash flow

Cash flows are reported using the indirect method, whereby net profit before tax is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Group are segregated and presented accordingly.

u. Segment reporting

Operating results are regularly reviewed by the Group's Chief Operating Decision Maker ('CODM') (Investment Manager) who makes decisions about resources to be allocated to the segment and assesses its performance.

Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property and equipment and intangible assets other than goodwill.

v. Fair value measurement

The Group measures financial instruments, such as, derivatives at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

In the principal market for the asset or liability, or

In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

w. Use of judgement, estimates and assumptions

The preparation of financial statements in conformity with Ind AS requires that management of the Group makes estimates, judgements and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses of the period and the disclosures relating to contingent liabilities and contingent assets as of the date of the financial statements. Application of accounting policies involving complex and subjective judgements and the use of the assumptions in these consolidated financial statements have been disclosed. Accounting estimates could change from period to period. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revision in accounting estimates are recognised in the period in which the estimates are revised and if material, their effects are disclosed in the notes to the consolidated financial statements.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below. The Group has based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond control of the management.

(i)Defined benefit plan

The cost of the defined benefit plan and other post-employment benefits and the present value of such obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in future. These include the determination of the discount rate, future salary increases, mortality rates and attrition rate. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

(ii)Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the Discounted Cash Flow model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

(iii)Taxes

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

The Group has a history of losses, which may not be used to offset taxable income elsewhere in the Group. The Group neither have any taxable temporary difference nor any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets.

On this basis, the Group has determined that it cannot recognise deferred tax assets on the tax losses carried forward.

(iv) Provision for major maintenance obligations

The operating and maintenance cost include routine, periodic/major maintenance, manpower costs and operational expenses, including, but not limited to, road and site work expenses, employee benefit expenses and other operating and maintenance costs. The provision for potential periodic / major maintenance cost is created based on the estimates provided by the management and the same is adjusted for actual expenditures in the year of occurrence.

x. Recent pronouncements

A. New and amended standards

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after April 1, 2022.

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standard) Amendment Rules 2022 dated March 23, 2022, to amend the following Ind AS which are effective from April 1, 2022.

Onerous contracts – costs of fulfilling a contract – amendments to Ind AS 37

An onerous contract is a contract under which the unavoidable costs of meeting the obligations under the contract costs (i.e., the costs that the Group cannot avoid because it has the contract) exceed the economic benefits expected to be received under it.

The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

The Group applied the amendments to the contracts for which it had not fulfilled all of its obligations at the beginning of the reporting period.

Prior to the application of the amendments, the Group had not identified any contracts as being onerous as the unavoidable costs under the contracts, which were the costs of fulfilling them, comprised only incremental costs directly related to the contracts. As a result of the amendments, the Group assessed whether certain other directly related costs are required to be included by the Group in determining the costs of fulfilling the contracts.

In accordance with the transitional provisions, the Group applies the amendments to contracts for which it has not yet fulfilled all of its obligations, at the beginning of the annual reporting period in which it first applies the amendments (the date of initial application) and has not restated its comparative information.

These amendments had no impact on the consolidated financial statements of the Group

i. Reference to the conceptual framework – amendments to Ind AS 103

The amendments replaced the reference to the ICAI's '*Framework for the Preparation and Presentation of Financial Statements under Indian Accounting Standards*' with the reference to the '*Conceptual Framework for Financial Reporting under Indian Accounting Standard*' without significantly changing its requirements.

The amendments also added an exception to the recognition principle of Ind AS 103 *Business Combinations* to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of Ind AS 37 *Provisions, Contingent Liabilities and Contingent Assets* or Appendix C, *Levies,* of Ind AS 37, if incurred separately. The exception requires entities to apply the criteria in Ind AS 37 or Appendix C, *Levies,* of Ind AS 37, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date.

The amendments also add a new paragraph to IFRS 3 to clarify that contingent assets do not qualify for recognition at the acquisition date.

In accordance with the transitional provisions, the Group applies the amendments prospectively, i.e., to business combinations occurring after the beginning of the annual reporting period in which it first applies the amendments (the date of initial application).

These amendments had no impact on the consolidated financial statements of the Group as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

ii. Property, plant and equipment- proceeds before intended use – amendments to Ind AS 16

The amendments modified paragraph 17(e) of Ind AS 16 to clarify that excess of net sale proceeds of items produced over the cost of testing, if any, shall not be recognised in the profit or loss but deducted from the directly attributable costs considered as part of cost of an item of property, plant, and equipment.

The amendments are effective for annual reporting periods beginning on or after April 1, 2022. These amendments had no impact on the consolidated financial statements of the Group as there were no sales of such items produced by property, plant and equipment made available for use on or after the beginning of the earliest period presented.

iii. Ind AS 109 Financial Instruments – fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf.

In accordance with the transitional provisions, the Group applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no modifications of the Group's financial instruments during the period.

B. Standards notified but not yet effective

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standards) Amendment Rules, 2023 dated March 31, 2023 to amend the following Ind AS which are effective from April 1, 2023.

i. Definition of accounting estimates - amendments to Ind AS 8

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. It has also been clarified how entities use measurement techniques and inputs to develop accounting estimates.

The amendments are effective for annual reporting periods beginning on or after April 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. The amendments are not expected to have a material impact on the Group's financial statements.

ii. Disclosure of accounting policies - amendments to Ind AS 1

The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.
The amendments to Ind AS 1 are applicable for annual periods beginning on or after April 1, 2023. Consequential amendments have been made in Ind AS 107.

The Group is currently revisiting their accounting policy information disclosures to ensure consistency with the amended requirements.

iii. Deferred tax related to assets and liabilities arising from a single transaction - amendments to Ind AS 12

The amendments narrow the scope of the initial recognition exception under Ind AS 12, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences.

The amendments should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period presented, a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability should also be recognised for all deductible and taxable temporary differences associated with leases and decommissioning obligations. Consequential amendments have been made in Ind AS 101. The amendments to Ind AS 12 are applicable for annual periods beginning on or after April 1, 2023.

The Group is currently assessing the impact of the amendments.

Principal Components of Consolidated Statement of Profit and Loss

Income

Our total income consists of revenue from operations and other income.

Revenue from operations

Revenue from operations primarily comprises revenue from toll operations, construction services, utility shifting services, change in scope services, supervision of utility services and supervision of change in scope services.

- ***Revenue from Toll Operations***: Revenue from toll operations represents toll revenue collected by Project SPV as per the respective concession agreements in respect of different categories of vehicles using the Project Asset.

- ***Construction services***: Revenue from construction services is the revenue from EPC work carried out by the EPC contractors in relation to the development of the Projects in accordance with the terms of the concession agreement.

Other income

Other income primarily consists of interest income, which comprises interest on fixed deposits, interest on security deposits and interest on income tax refund, gain on sale of investments in mutual fund, insurance claim, sundry balances written back and others.

Expenses

Our expenses consist of, amongst others, EPC cost, employee benefits expense, finance costs, depreciation and amortization expense, provision for major maintenance obligation and other expenses.

- ***EPC cost:*** It is the cost in relation to the EPC work carried out by the EPC contractors for the development of the Projects in accordance with the terms of the concession agreement.

- ***Employee benefits expense***: Employee benefits expenses primarily comprise salaries and wages, contribution towards provident fund and staff welfare expense.

- ***Finance costs***: Finance costs primarily comprise interest on borrowings, interest on other financial liability, unwinding cost on provision for major maintenance obligations, unwinding cost of retention money and other borrowing costs.

- ***Depreciation and amortization expenses***: Depreciation and amortization expenses include depreciation on property, plant and equipment and amortization of intangible assets.

- ***Provision for major maintenance obligation***: Provision for major maintenance obligation includes accruals for expenses which will be incurred for periodic maintenance in future periods based on the concession agreement.

- ***Other expenses***: Other expenses primarily comprise utility shifting expenses, change of scope expenses, highway maintenance expense, power and fuel expense, legal and professional charges, insurance cost and other expenses.

Result of Operations

The following table sets forth certain information with respect to the results of operations of the Trust and its subsidiaries (i.e. the Project SPVs) for the financial year ended March 31, 2023 (on a consolidated basis):

(all amounts in ₹ lakhs unless otherwise stated)

Particulars	For the Year ended March 31, 2023 (on a consolidated basis)	Percentage of Total Income
INCOME		
Revenue from operations	31897.18	94.01%
Other income	2030.60	5.99%
Total income	**33927.78**	**100.00%**
EXPENSES		
Valuation expenses	24.19	0.07%
Investment management fees	1896.74	5.59%
Project management fees	666.42	1.96%
Trustee fees	8.85	0.03%
Operating expenses	3786.80	11.16%
Payment to auditors	204.66	0.60%
Insurance and security expenses	397.04	1.17%
Engineering, procurement and construction cost ("EPC")	152.08	0.45%
Employee benefits expense	358.71	1.06%
Finance costs	20,966.09	61.80%
Depreciation and amortization expense	11859.73	34.96%
Provision for major maintenance obligations	5064.29	14.93%
Other expenses	3463.57	10.21%
Total expenses	**48849.17**	143.98%
Loss before tax	**(14921.39)**	**(43.98)**%
Tax expense		
i) Current tax	**414.40**	**1.22**%
ii) Deferred tax	-	-
Total tax expense	**414.40**	**1.22**%
(Loss after tax	**(15335.79)**	**(45.20)** %
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Re-measurement losses on defined benefit obligations	8.33	0.02%
Income tax relating to these items	-	-
Total comprehensive income/ (loss) for the year	**(15327.46)**	**(45.18)** %
Profit/(loss) for the year	**(15335.79)**	**(45.20)** %
Attributable to: Unitholders	(15335.79)	**(45.20)** %

Particulars	For the Year ended March 31, 2023 (on a consolidated basis)	Percentage of Total Income
Other comprehensive income/ (loss) for the year	**8.33**	**(0.02)** %
Attributable to: Unitholders	8.33	(0.02) %
Total comprehensive income/ (loss) for the year	**(15327.46)**	**(45.18)** %
Attributable to: Unitholders	(15327.46)	**(45.18)** %
Earnings/(loss) per unit (Face value per unit is Rs. 100)		
Basic and Diluted (in Rs.)	**(8.68)**	**(0.03)** %

The following table sets forth certain information with respect to the results of operations of the Trust for the financial years ended March 31, 2023, March 31, 2022 and March 31, 2021 (on a standalone basis):

(all amounts in ₹ lakhs unless otherwise stated)

Particulars	**For the Year ended March 31, 2023 (on a standalone basis)**	**Percentage of Total Income**	**For the Year ended March 31, 2022 (on a standalone basis)**	**Percentage of Total Income**	**For the Year ended March 31, 2021 (on a standalone basis)**	**Percentage of Total Income**
INCOME						
Revenue from operations	14884.69	93.89%	-	NA	-	NA
Other income	969.48	6.11%	-	NA	-	NA
Total Income	**15854.17**	**100.00**%	**-**	NA	**-**	NA
EXPENSES						
Finance costs	88.52	0.56%	14.79	NA	-	NA
Investment management fees	1896.74	11.96%	-	NA	-	NA
Valuation expenses	24.19	0.15%	2.50	NA	-	NA
Trustee fees	8.85	0.06%	7.50	NA	-	NA
Payment to Auditors	204.66	1.29%	54.96	NA	**8.11**	NA
Other expenses	1975.95	12.46%	96.48	NA	165.81	NA
Total expenses	**4198.91**	26.48%	**176.23**	NA	**173.92**	NA
Profit/(loss) before tax	**11655.26**	**73.52**%	**(176.23)**	NA	**(173.92)**	NA
Tax expense						
i) Current tax	414.40	2.61%	-	NA	-	NA
ii) Deferred tax	-		-	NA	-	NA
Total tax expense	**414.40**	**2.61**%	**-**	NA	**-**	NA
Profit/(loss) for the year	**11240.86**	**70.90**%	**(176.23)**	NA	**(173.92)**	NA
Other comprehensive income, net of tax	-	-	-	NA	-	NA
Total comprehensive income/ (loss) for the year	**11240.86**	**70.90**%	**(176.23)**	NA	**(173.92)**	NA
Earnings per unit (Face value per unit is Rs. 100)		-	-	NA	-	NA
Basic and Diluted (in Rs.)	**6.36**	**-**	**-**	NA	**-**	NA

Financial Year ended March 31, 2023 (on a consolidated basis)

Total Income

Total income was ₹ 33,927.78 lakhs for the financial year ended March 31, 2023, which principally comprised, revenue from operations of ₹ 31,897.18 lakhs and other income of ₹ 2,030.60 lakhs.

Revenue from operations

Revenue from operations was ₹ 31,897.18 lakhs for the financial year ended March 31, 2023, primarily due to revenue from toll operations and from construction services.

Revenue from toll operations

Revenue from toll operations was ₹ 31,745.10 lakhs for the financial year ended March 31, 2023 primarily due to toll collection at SJEPL and NCREPE. Toll collection from SJEPL has been included with effect from June 29, 2022 and from NCREPE with effect from November 11, 2022. Income arising out of toll collection represented 93.57% of our total income for the financial year ended March 31, 2023.

Construction services

Revenue from construction services was ₹ 152.08 lakhs for the financial year ended March 31, 2023 which was principally attributable to the EPC work carried out by EPC contractors in SJEPL. Revenue from construction services represented 0.45% of our total income for the for the financial year ended March 31, 2023.

Other income

Other income was ₹ 2,030.60 lakhs for the financial year ended March 31, 2023, primarily on account of interest on bank deposits, security deposits and income tax refunds and gain on change in fair value of investments in mutual fund, insurance claims, sundry balances written back, gain on disposal of property, plant and equipment and miscellaneous income. Other income represented 5.99 % of our total income for the financial year ended March 31, 2023.

Interest income on bank deposits

Interest income on bank deposits for the financial year ended March 31, 2023 was ₹ 1,718.29 lakhs which was primarily attributable to creation of bank deposits against various reserves as per the financing document such as debt service reserve account (the "**DSRA**") etc. Interest income on bank deposits represented 5.06 % of our total income for the financial year ended March 31, 2023.

Others

(i) Interest income on security deposits and income tax refund was collectively ₹ 1.93 lakhs and represented 0.01% of our total income for the financial year ended March 31, 2023, (ii) gain on change in fair value of investment in mutual funds was ₹ 152.20 lakhs which is a notional gain and represented 0.45 % of our total income for the financial year ended March 31, 2023, (iii) insurance claim were ₹ 151.52 lakhs pertains to various claims received in the subsidiaries and represented 0.45% of our total income for the financial year ended March 31, 2023, (iv) sundry balances written back was ₹ 2.05 lakhs and represented 0.01% of our total income for the financial year ended March 31, 2023, (v) gain on disposal of property, plant and equipment was ₹ 0.03 lakhs and represented negligible % of our total income for the financial year ended March 31, 2023, and (vi) miscellaneous income was ₹ 4.58 lakhs and represented 0.01% of our total income for the financial year ended March 31, 2023.

Total expenses

Total expenses were ₹ 48,849.17 lakhs for the financial year ended March 31, 2023, primarily on account of expenses on finance costs, provision for major maintenance obligations, expenses on depreciation and amortization, engineering, procurement and construction costs and other expenses. Total expenses represented 143.98% of our total income for the financial year ended March 31, 2023.

Valuation expenses

The valuation expense was ₹ 24.19 lakhs for the financial year ended March 31, 2023, which was on account of services availed for valuation carried out as required in InvIT Regulations. The valuation expense represented 0.07% of our total income for the financial year ended March 31, 2023.

Investment management fees

The Investment Management fees was ₹ 1,896.74 lakhs for the financial year ended March 31, 2023, which was on account of fee paid to the Investment Manager pursuant to the Investment Management Agreement. The Investment Management fee represented 5.59% of our total income for the financial year ended March 31, 2023.

Project management fees

The Project Management fees was ₹ 666.42 lakhs for the financial year ended March 31, 2023 which was on account of fee paid to the Project Manager pursuant to the Project Management Agreements. The Project Management fee represented 1.96% of our total income for the financial year ended March 31, 2023.

Trustee fees

The Trustee fees was ₹ 8.85 lakhs for the financial year ended March 31, 2023 which was on account of fee paid to the Trustee pursuant to the engagement letter with the Trustee. The Trustee fee represented 0.03% of our total income for the financial year ended March 31, 2023.

Operating expenses

The operating expenses were ₹ 3,786.80 lakhs for the financial year ended March 31, 2023, which was on account of costs incurred towards operation and maintenance of project roads, route patrolling and incident management and health, safety and environment expenses. The operating expenses represented 11.16% of our total income for the financial year ended March 31, 2023.

Payment to auditors

The audit fees was ₹ 204.66 lakhs for the financial year ended March 31, 2023 on account of the fee paid to the Statutory Auditors of the Trust. The audit fees represented 0.60% of our total income for the financial year ended March 31, 2023.

Insurance and security expenses

The insurance and security expenses was ₹ 397.04 lakhs for the financial year ended March 31, 2023, which was primarily on account of insurance coverage taken of the project road as per the requirement of the respective concession agreements. The insurance and security expenses represented of 1.17% of our total income for the financial year ended March 31, 2023.

Engineering, procurement and construction cost ("EPC")

EPC cost of construction was ₹ 152.08 lakhs for the financial year ended March 31, 2023, in relation to the work carried out by the EPC contractors for the development in SJEPL in accordance with the terms of the SJEPL Concession Agreement. EPC cost represented 0.45 % of our total income for the financial year ended March 31, 2023.

Employee benefits expense

Employee benefits expense was ₹ 358.71 lakhs for the financial year ended March 31, 2023, primarily due to payment of salaries and wages. Employee benefits expense represented 1.06% of our total income for the financial year ended March 31, 2023.

Finance costs

Finance costs was ₹ 20,966.09 lakhs for the financial year ended March 31, 2023, primarily attributable to the interest on term loans from banks and related parties and other charges. Finance costs represented 61.80% of our total income for the financial year ended March 31, 2023.

Depreciation and amortization expense

Depreciation and amortization expense was ₹ 11,859.73 lakhs for the financial year ended March 31, 2023 which is primarily attributable to depreciation of property, plantand equipment and amortization of intangible assets and is in the normal course of business and operations. Depreciation and amortisation represented 34.96% of our total income for the financial year ended March 31, 2023.

Provision for major maintenance obligations

The provision for major maintenance obligations was ₹ 5,064.29 lakhs for the financial year ended March 31, 2023 mainly on account of planned spend on period maintenance as per the Concession Agreements and represented 14.93% of our total income for the financial year ended March 31, 2023.

Other expenses

Other expenses were ₹ 3,463.57 lakhs for the financial year ended March 31, 2023, and is mainly on account of due diligence fees, costs on power and fuel, legal and professional fees, rates and taxes, etc. Other expenses represented 10.21% of our total income for the financial year ended March 31, 2023.

Loss before tax

As a result of the factors outlined above, our loss before tax was ₹ 14.921.39 lakhs for the financial year ended March 31, 2023.

Loss after tax

As a result of the factors outlined above and current tax of ₹ 414.40 lakhs, our loss after tax was ₹ 15,335.79 lakhs for the financial year ended March 31, 2023.

Total comprehensive loss

As a result of the factors outlined above, our total comprehensive loss was ₹ 15,327.46 lakhs for the financial year ended March 31, 2023.

Financial year ended March 31, 2023 (on a standalone basis)

Total income

Total income was ₹ 15,854.17 lakhs for the financial year ended March 31, 2023 (on a standalone basis), which principally comprised, revenue from operations of ₹ 14,884.69 lakhs and other income of ₹ 969.48 lakhs.

Revenue from operations

Revenue from operations was ₹ 14,884.69 lakhs for the financial year ended March 31, 2023 (on a standalone basis), primarily due to interest income on loans given to subsidiary companies.

Interest income on loans given to subsidiaries

The interest income on loans given to subsidiaries were ₹ 14,884.69 lakhs for the financial year ended March 31, 2023 (on a standalone basis). Income arising out of loans given to subsidiaries represented 93.89% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Other income

Other income was ₹ 969.48 lakhs for the financial year ended March 31, 2023 (on a standalone basis), on account of interest income on fixed deposits. Other income represented 6.11% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Interest income from bank deposits

Interest income from bank deposits for the financial year ended March 31, 2023 was ₹ 969.48 lakhs which was primarily attributable to creation of bank deposits. Interest income from bank deposits represented 6.11 % of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Total expenses

Total expenses were ₹ 4,198.91 lakhs for the financial year ended March 31, 2023 (on a standalone basis), primarily on account of expenses on finance costs, fees to the investment manager, trustee, valuer, auditor and other expenses. Total expenses represented 26.48% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Finance costs

The finance costs was ₹ 88.52 lakhs for the financial year ended March 31, 2023 (on a standalone basis), primarily attributable to the interest on intercorporate deposit from related parties and income tax, bank guarantee commission charges and other bank charges. Finance costs represented 0.56% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Investment management fees

The Investment Management fees was ₹ 1,896.74 lakhs for the financial year ended March 31, 2023 which was on account of fee paid to the Investment Manager pursuant to the Investment Management Agreement. The Investment Management fee represented 11.96% of our total income for the financial year ended March 31, 2023.

Valuation expenses

The valuation expense was ₹ 24.19 lakhs for the financial year ended March 31, 2023 (on a standalone basis), which was on account of services availed for valuation carried out as required in InvIT Regulations. The valuation expense represented 0.15% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Trustee fees

The Trustee fees was ₹ 8.85 lakhs for the financial year ended March 31, 2023 (on a standalone basis) which was on account of fee paid to the Trustee pursuant to the engagement letter with the Trustee. The Trustee fee represented 0.06% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Payment to auditors

The audit fees was ₹ 204.66 lakhs for the financial year ended March 31, 2023 (on a standalone basis), which was on account of fee paid to the Statutory Auditors of the Trust. The audit fees represented of 1.29% of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Other expenses

Other expenses were ₹ 1,975.95 lakhs for the financial year ended March 31, 2023 (on a standalone basis), and is mainly on account of due diligence fees, legal and professional fees, rates and taxes, etc. Other expenses represented 12.46 % of our total income for the financial year ended March 31, 2023 (on a standalone basis).

Profit before tax

As a result of the factors outlined above, our profit before tax was ₹ 11,655.26 lakhs for the financial year ended March 31, 2023 (on a standalone basis).

Profit after tax

As a result of the factors outlined above and current tax of ₹ 414.40 lakhs, our profit after tax was ₹ 11,240.86 lakhs for the financial year ended March 31, 2023 (on a standalone basis).

Total comprehensive income

As a result of the factors outlined above, our total comprehensive income was ₹ 11,240.86 lakhs for the financial year ended March 31, 2023 (on a standalone basis).

Financial year ended March 31, 2022 (on a standalone basis)

Total expenses

The total expenses were ₹ 176.23 lakhs for the financial year ended March 31, 2022 (on a standalone basis), primarily on account of expenses on finance costs, trustee fees, payment to auditors and other expenses.

Finance costs

The finance costs was ₹ 14.79 lakhs for the financial year ended March 31, 2022 (on a standalone basis), primarily attributable to bank guarantee charges.

Valuation expenses

The Valuer fees was ₹ 2.50 lakhs for the financial year ended March 31, 2022 (on a standalone basis), which was on account of services availed for valuation carried out as required in InvIT Regulations.

Trustee fee

The Trustee fees was ₹ 7.50 lakhs for the financial year ended March 31, 2022 (on a standalone basis), which was on account of fee paid to the Trustee pursuant to the Indenture of Trust.

Payment to auditors

The fee paid to the auditors was ₹ 54.96 lakhs for the financial year ended March 31, 2022 (on a standalone basis), which was on account of fee paid to the Statutory Auditors of the Trust.

Other expenses

The other expenses was ₹ 96.48 lakhs for the financial year ended March 31, 2022 (on a standalone basis), primarily on account of legal and professional expenses and impairment of current assets.

Financial year ended March 31, 2021 (on a standalone basis)

The total expenses were ₹ 173.92 lakhs for the financial year ended March 31, 2021 (on a standalone basis), primarily on account of legal and professional expenses.

Cash Flows

The following table sets forth certain infor?mation relating to the cash flows of the Trust and the Project SPVs on a consolidated basis for the period ended March 31, 2023:

(*all amounts in ₹ lakhs unless otherwise stated*)

Particulars	Year ended March 31, 2023 (on a consolidated basis)
Net cash flow generated from/ (used in) operating activities	18,355.40
Net cash flow used in investing activities	(6,65,771.12)
Net cash flow generated from financing activities	6,85,785.07

Net cash from generated from/ (used in) operating activities

Net cash flow generated from/ (used in) operating activities for the financial year ended March 31, 2023 was ₹ 18,355.40 lakhs, primarily arising out of tolling operations.

Net cash flow used in investing activities

Net cash flow used in investing activities for the financial year ended March 31, 2023 was ₹ 6,65,771.12 lakhs, primarily due to acquisition of intangible assets, payment for acquisition of subsidiary and investment in bank deposits and mutual funds.

Net cash flow from financing activities

Net cash flow generated from financing activities for the financial year ended March 31, 2023 was ₹ 6,85,785.07 lakhs, primarily due to proceeds from issue of unitsfrom unitholders and proceeds from long term borrowings.

Capital Expenditure (on a consolidated basis)

During the financial year ended March 31, 2023, the capital expenditure relates to the acquisition of intangible assets amounting to ₹ 6,24,593.79 lakhs.

Borrowings

The following table provides the types and amounts of the Trust and the subsidiaries outstanding borrowings as at March 31, 2023 (on a consolidated basis):

(all amounts in ₹ lakhs unless otherwise stated)

Particulars	As at March 31, 2023 (on a consolidated basis)
Non-current	
Secured (carried at amortized cost)	
Term Loans*	
Secured term loans from banks	4,81,903.35
Less- Current maturities of long-term debt	(4,830.25)
	4,77,073.10
Current	
Secured (carried at amortized cost)	
Current maturities of long term borrowings from banks	4,830.25
Unsecured (carried at amortized cost)	
Inter corporate deposit from related party	-
	4,830.25

**Secured term loans from banks.*

As at March 31, 2023, the consolidated total borrowings comprise of secured loans of ₹ 4,81,903.35 lakhs. Most of the subsidiaries financing arrangements are secured by their movable and immovable assets, including charges on their, property plant and equipment and intangible assets relating to toll collection rights and current and non current assets relating to their respective projects.

Sufficiency of Working Capital

The Investment Manager has confirmed that the Trust has the ability to meets its working capital requirements for at least 12 months from the date of listing of the Units.

Related Party Transactions

We have in the past engaged, and in the future may engage, in related party transactions. For a description of our related party transactions, see the section entitled "*Related Party Transactions*" on page 234.

Seasonality

Our business model is predominantly toll based and is subject to seasonality of traffic and toll revenue. Traffic volumes tend to increase at the beginning and end of holiday seasons but decrease during the monsoon season and on the day of a holiday. The monsoon season may also restrict our ability to carry on activities related to our operation and maintenance of the Project SPVs. Such events may result in delays in periodic maintenance and reduce productivity, thereby materially and adversely affecting our business, financial condition and results of operations.

Unusual or Infrequent Events or Transactions

Except as described in this Information Memorandum, there have been no events or transactions to our knowledge which may be described as "unusual" or "infrequent".

Total Turnover of each Major Industry Segment in which we operate

We have one primary business segment, namely the road sector. For further information, please see the sections entitled "*Industry Overview*" and "*Business*" on pages 156 and 166, respectively.

Known Trends or Uncertainties

Other than as described in the section entitled "*Risk Factors*" on page 47 and this section entitled "*Discussion and Analysis by the Directors of the Investment Manager of the financial condition, results of operations and cash flows of the Project SPVs of the Trust*" on page 195, to our knowledge there are no known trends or uncertainties that have or had or are expected to have a material adverse impact on our revenues or income from continuing operations.

Quantitative and Qualitative Disclosure about Market Risks

The Project SPVs' activities expose it to a variety of financial risks, including market risk, credit risk and liquidity risk. The Project SPVs' primary risk management focus is to minimize potential adverse effects of market risk on its financial performance. The Project SPVs' risk management assessment and policies and processes are established to identify and analyses the risks faced by the Project SPVs, to set appropriate risk limits and controls, and to monitor such risks and compliance with the same. Risk assessment and management policies and the Project SPVs' board of directors have overall responsibility for the establishment and oversight of the Project SPVs' risk management framework. This note presents information about the risks associated with its financial instruments, the Project SPVs' objectives, policies and processes for measuring and managing risk, and the Project SPVs' management of capital.

Credit Risk

The Trusts' exposure to credit risk primarily relates to investments, accounts receivable and cash and cash equivalents. The Trust monitors and limits its exposure to credit risk on a continuous basis.

Liquidity risk

The Trust is exposed to liquidity risk related to its ability to fund its obligations as they become due. The Trust monitors and manages its liquidity risk to ensure access to sufficient funds to meet operational and financial requirements. The Trust has access to credit facilities. In relation to the Trust's liquidity risk, the Trust's policy is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions as they fall due while minimizing finance costs, without incurring unacceptable losses or risking damage to the Trusts' reputation.

Emphasis of Matter

Our Auditors have drawn our attention to certain emphasis of matter relating to the Consolidated Financial Statements, which are summarised as follows:

(i) Attention is drawn to the Consolidated Financial Statement which states that there are delays in completion of 67 Kms of toll project road on Chandikhole-Bhubaneshwar section ('Project Highway') and non-receipt of completion certificate in respect of intangible assets of the trust group as on date and the consequential uncertainty of potential penalties and/or termination of Concession Agreement and impairment of these assets.

(ii) Attention is drawn to the Consolidated Financial Statements, which describes the presentation of "unit capital" as "equity" to comply with InvIT Regulations and not as compound financial instrument as would be required under Ind AS.

Comparison of actual performance vis-à-vis the projections included in the placement memorandum dated June 23, 2022, submitted at the time of initial offer of unlisted units of the Trust on private placement basis.

(all amounts in ₹ lakhs unless otherwise stated)

SJEPL	Particulars	Year ended March 31, 2023 (Projections)*	Year ended March 31, 2023 (Actual)	Variance	Variance (in %)
	Revenue	23,497.82	19,496.33	4,001.49	(17.03)%

** Projections as mentioned in the placement memorandum dated June 23, 2022 for issuance of unlisted units*

(i) Reasons for difference in actual revenue from projected revenue for the same are as follows:

(ii) Revenue of Bus/Truck, 3-Axle and Multi-Axle Vehicles have declined by 18.34%, 32.85% and 12.74% respectively, due to a slower first half (up to November 2022) of the year.

(iii) The heavy commercial traffic, including 3Axle and MAV trucks, recorded a decline in the period of FY21-FY23. This was triggered by several events which caused a slowdown in the iron/steel industry in the region of the project stretch.

(iv) The first half of the year saw Iron Ore Export orders drop on the back of COVID-19 measures in China. This directly affected Bus/ Trucks, 3Axle and MAV traffic on the project stretch.

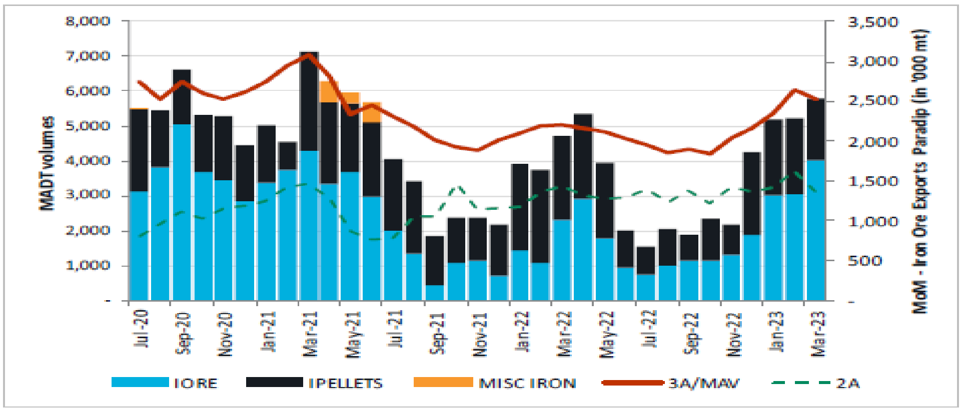
(v) During May to November 2022, export duty was hiked as below vide notification no. 28/2022-Customs dated May 21, 2022 and notification no. 29/2022-Customs dated May 21, 2022 resulted in export order drop and reduction in Bus/ Truck, 3-axle and MAV traffic count;

(a) Duty for Iron ores and concentrates increased to 50% from 30%
(b) Duty for Pellets increased to 45% from nil

(vi) The imposition of export duties and China's domestic market closure had a significant impact on the total iron ore movement, resulting in a decline. With the withdrawal of export duties and the reopening of China's domestic market, the total iron ore movement is gradually recovering. In December 2022, total exports increased by seven times on a month-on-month basis, and this trend continued to rise in February. Exports in February saw a 172% increase compared to the same month last year, and these levels of export activity and corresponding traffic performance is to continue in the forecast years as well. The Q4 of FY23 witnessed iron ore movement volumes like the peak levels seen between March 2022 and April 2022, indicating a significant recovery in the transportation of iron ore through these ports.

(vii) The chart below offers insight into the correlation between the iron ore movement on ports in proximity to NH16 and the 3A/MAV traffic. The total iron ore movement on these ports has a direct correlation with the traffic volume on these highways, such as NH16 and 3A/MAV. The recovery of iron ore movement has also had a direct impact on the 3A/MAV traffic, which has followed a directly proportional trajectory. The 3A/MAV traffic has increased along with the increase in the iron ore movement, highlighting the elastic relationship between the two:

Figure 3.3: Comparison of monthly variation in 2A, 3A+MAV traffic and iron ore exports



Source: Steer analysis of client data and data sourced from Paradip port trust data

(viii) The Q3/Q4 average shows a 14% increase as compared to FY22 and is expected to sustain and grow from these levels depending on how iron ore commodity and policies around the same play out in the future.

Other than the above, there is a decline in revenue of CJV vehicles by 12.93%.

Positive rate variance on account of actual WPI of 16.23% vs 5.83% as considered in the projection resulted in higher toll rates in FY 2022-2023

Significant Developments since March 31, 2023

As on the date of the Information Memorandum, there are no significant developments since March 31, 2023.

Month wise revenue for the Project SPVs

The month-wise revenue for the Project SPV from the date of the latest financial statements included in this Information Memorandum until the completed month before the filing of this Information Memorandum has been provided below.

(Rs. in millions)

Sr. No.	Project SPV	April 2023	May 2023
1.	SJEPL	195.71	197.27
2.	NCREPE	338.97	351.25

RELATED PARTY TRANSACTIONS

In terms of Regulation 2(1)(zv) of the InvIT Regulations, related party shall be as defined as under the Companies Act, 2013 or under the applicable accounting standards and shall also include: (i) Parties to the Trust; and (ii) promoters, directors, and partners of the Parties to the Trust. Further, related parties also include such persons and entities as defined in terms of the applicable accounting standards, being Ind AS 24 on "*Related Party Disclosures*" ("**Related Parties**") in relation to related party transactions. For further details in relation to related party transactions, for the years ended March 31, 2021, 2022 and 2023 as per Ind AS 24 read with InvIT regulations, please see the section entitled "*Audited Financial Statements* " on page 261. The Parties to the Trust, may, from time to time, enter into related party transactions, in accordance with applicable law.

Procedure for dealing with Related Party Transactions and Potential Conflicts of Interest

The board of directors of the Investment Manager adopted the Conflict of Interest Policy pursuant to its resolution dated January 20, 2022 to establish certain procedures to deal with conflict of interest issues. Thereafter, the policy was amended pursuant to the resolution dated May 13, 2023.

The key terms of the Conflict of Interest Policy are provided below:

Identification of Related Parties

(i). The board of directors of the Investment Manager ("**Board**") or the audit committee of the Investment Manager (as formed by the board of directors of the Investment Manager) shall identify the persons that would qualify as 'related parties' from time to time.

(ii). The Board or audit committee of the Investment Manager (as formed by the board of directors of the Investment Manager and referred to as the "**Audit Committee**") shall also identify transactions undertaken or proposed to be undertaken by the Trust that would qualify as 'related party transactions' on a regular basis, as deemed fit by it.

Related Party Transactions

(i). All related party transactions shall be undertaken on an arms-length basis in accordance with relevant accounting standards, in the best interest of the Unitholders, consistent with the strategy and investment objectives of the Trust, and shall be in accordance with applicable law (including the InvIT Regulations) and the trust documents.

(ii). In case of situations or transactions entered into, or to be entered into, by the Trust including any perceived conflict of interest situations involving the Trust, the Board shall consider the terms of the transaction to satisfy itself that the transactions are conducted on an arms-length basis and in accordance with relevant accounting standards, applicable law and the trust documents. All resolutions in writing of the Board in relation to matters concerning related party transactions of the Trust must be approved by a majority of the Directors

(iii). An internal control system will be established so as to ensure that all future related party transactions are compliant with the InvIT Regulations and applicable accounting standards. The Investment Manager shall also ensure compliance with any additional guidelines issued in this regard by SEBI and other relevant regulatory, statutory or governmental authorities from time to time. The Investment Manager will maintain a register to record all related party transactions entered into by the Trust and the basis on which they are entered into.

(iv). The Investment Manager will also incorporate into its internal audit plan, if any, a review of all related party transactions entered into by the Trust during each financial year. The Board shall review at least quarterly in each financial year the related party transactions entered into during such quarter to ascertain that the guidelines and procedures established to monitor the related party transactions have been complied with.

(v). Subject to applicable law, all related party transactions entered in the future shall be reviewed and recommended by the audit committee (once such audit committee has been constituted) and on the recommendation of the Audit Committee be approved by the Board. In addition to any other requirement that may be prescribed in terms of the InvIT Regulations or other applicable laws, all Related Party Transactions to be entered into in the future will be decided by a majority vote of the Board and as a general rule, the Investment Manager must demonstrate to the Board that future related party transactions satisfy the criteria set out in the policy, at the time of recommending the same for the approval of the Board.

(vi). The Audit Committee/Board may provide omnibus approval for related party transactions, subject to the following:

(a) The Audit Committee/Board shall lay down the criteria for granting the omnibus approval in line with the Policy and such approval shall be applicable in respect of repetitive transactions;
(b) The Audit Committee/Board shall satisfy itself the need for such omnibus approval and that such approval is in the interest of the Trust;
(c) The omnibus approval shall provide details of (i) the name/s of the related party, nature of transaction, period of transaction, maximum amount of transaction that can be entered into, (ii) the indicative base price / current contracted price and the formula for variation in the price if any and (iii) such other conditions as the Audit Committee/Board may deem fit.
(d) The Audit Committee/Board shall review, at least on a quarterly basis, the details of related party transactions entered into by the company pursuant to each of the omnibus approval given;
(e) Such omnibus approval shall be valid for 1 year and shall require a fresh approval after expiry of such financial year;
(f) Transaction of following nature will not be subject to the omnibus approval of the Audit Committee/ Board:
- related party transactions which are not at arm's length;
- transactions which are not repetitive in nature;
- transactions in respect of selling or disposing of the undertakings of the Trust;
- financial transactions exceeding 5% of total consolidated borrowings of the Trust such as loan to related parties, inter-corporate deposits, subscriptions to bond, debenture or preference shares issued by the related parties, corporate guarantee given/received from related parties;
- any other transaction the Audit Committee/Board may deem not fit for omnibus approval.

(vii). While considering a related party transaction, any director on the board who has a potential interest in any related party transaction will recuse himself or herself and abstain from discussion, review and voting on the related party transaction.

(viii). Unitholder approval: all related party transactions which require the approval of the Unitholders under the InvIT Regulations shall be undertaken only once the Unitholders approve such related party transaction, as required under the InvIT Regulations. Meetings of the Unitholders shall be convened in accordance with Regulation 22 of the InvIT Regulations, and records pertaining to such meetings shall be maintained in the manner prescribed.

(ix). Subject to the provisions of applicable law, any Unitholder and its associates, being a related party in a transaction, shall not be entitled to vote on such a related party transaction and shall not have any right to be involved in the decision making on such a related party transaction.

(x). The Investment Manager shall submit to the Trustee, reports on the activities of Trust, including the status of compliance with the requirements specified under applicable laws in relation to related party transactions, within such time as may be prescribed under the InvIT Regulations.

(xi). In accordance with the InvIT Regulations, specified related party transactions shall be disclosed to Unitholders and the stock exchange (in case applicable) at regular intervals, as may be prescribed under applicable laws (including the InvIT Regulations). The details of any fees or commissions received or to be received by such related party(ies) shall also be adequately disclosed to the Unitholders.

(xii). In accordance with the InvIT Regulations, the annual report to be submitted by the Investment Manager to all Unitholders, Stock Exchange (if applicable) shall be submitted (a) within such time period as may be prescribed under the InvIT Regulations, and (b) shall contain, *inter alia*, details of all related party transactions as required to be disclosed under the InvIT Regulations.

(xiii). To the extent the requirements of applicable laws (including the InvIT Regulations) are more stringent than the provisions of this Conflict of Interest Policy, the terms of applicable laws shall prevail.

Related Party Transactions

Present and On-going Related Party Transactions

Related Party Transactions of the Trust in relation to the setting up of the Trust

A number of present and on-going transactions with certain Related Parties have been, or will be, entered into in relation to the setting up and operations of the Trust. The Trustee and the Investment Manager confirm that the following related party transactions have been, or shall be, entered into, on an arm's length basis in accordance with the relevant accounting standards, in the best interest of the Unitholders:

(A) Indenture of Trust

Please see the section entitled "*Parties to the Trust – Key Terms of the Indenture of Trust*" on page 93 for a description of the terms of the Indenture of Trust.

(B) Investment Management Agreement

Please see the section entitled "*Parties to the Trust - Key Terms of the Investment Management Agreement*" on page 106 for a description of the terms of the Investment Management Agreement.

(C) Project Implementation and Management Agreements

Please see the section entitled "*Parties to the Trust – Key terms of the Project Implementation and Management Agreements*" on page 118 for a description of the terms of the Project Implementation and Management Agreements.

(D) Shareholder Loan Agreements

Please see the section entitled "*Financial Indebtedness*" on page 184 for a description of the terms of the Shareholder Loan Agreements.

Borrowings from Related Parties

Borrowings in the form of inter-corporate deposits and other short term and sub-ordinated loans were provided by associates of the Sponsor to the Trust.

REGULATIONS AND POLICIES

The following description is a summary of certain sector specific laws currently in force in India, which are applicable to the business of the Project SPVs in the road infrastructure sector. The information detailed in this section has been obtained from publications available in the public domain. The description below may not be exhaustive, and is only intended to provide general information to Investors, and is neither designed as, nor intended to substitute, professional legal advice. Judicial and administrative interpretations are subject to modification or clarification by subsequent legislative, judicial or administrative decisions. For information regarding regulatory approvals obtained by the Project SPVs, please see the section entitled "Regulatory Approvals" on page 245.

Provided below are certain significant legislations, regulations and policies that generally govern the road infrastructure sector in which the Project SPVs operates.

Regulatory Framework on Road Infrastructure

The regulatory framework in India in the highways sector, implemented on a public-private partnership ("**PPP**") basis, mainly derives its source from the primary legislations of National Highways Authority of India Act, 1988 (the "**NHAI Act**") and the National Highways Act, 1956 (the "**NH Act**") enacted by the Indian parliament, each as amended or supplemented.

The National Highways Act, 1956

The policy of the MoRTH, in implementing the NH Act, is to vest the MoRTH with the power to declare a national highway and for acquisition of land for this purpose. The GoI, by notification, can declare the intention to acquire any land for a 'public purpose' as envisaged by the law and such land can be used for the purposes of building, maintenance and operation of the declared national highways throughout the country. The NH Act prescribes the procedure for such land acquisition. The procedure includes, *inter alia*, a declaration of an intention to acquire, entering and inspecting such land, hearing of objections, a declaration of the acquisition and the power to take possession. The NH Act also provides for payment of compensation to owners and any other person whose right of enjoyment or ownership in the land has been affected. The NH Act vests MoRTH with the power to appoint a competent authority for the effective implementation of the NH Act and its policies. The said appointed authority retains the right and power to (a) survey, make any inspection, valuation or enquiry; (b) take levels; (c) dig or bore into sub-soil; (d) set out boundaries and intended lines of work; (e) mark such levels, boundaries and lines placing marks and cutting trenches; or (f) do such other acts or things as may be laid down by rules made in this behalf by that government.

All the notified national highways shall vest in the name of the Union and for the purposes, shall include all lands appurtenant thereto and all the bridges, culverts, tunnels and other enlisted constructions under the said NH Act. The Central Government shall assume the responsibility of maintaining and construction of national highways in proper condition in accordance to the law. The Central Government also retains the right to levy fee over the services and benefits rendered in relation to the use of such national highways.

The GoI is responsible for the development and maintenance of national highways. However, it may direct that such functions may also be exercised by the government of a state in which the highway is located or by any officer or authority subordinate to the GoI or to the state government. Further, the GoI has the power to enter into an agreement with any person for the development and maintenance of a part or whole of the highway. Such person would have the right to collect and retain fees at such rates as may be notified by the GoI and will also have the powers to regulate and control the traffic, for proper management of the highway, in accordance with the provisions of the Motor Vehicles Act, 1988, as amended. The GoI also has the power to make rules for carrying out the purposes of the NH Act.

The National Highways (Amendment) Act, 2017, entails the competent authority to issue reports to the Central Government in respect of any land (either acquired or proposed to be acquired) which is, either under incorrect revenue record or which is not required due to change in geometry or alignment of the construction, to issue order for the de-notification of such land from the acquisition for development and maintenance of the national highway. In pursuance of the foregoing amendment to the statute, the National Highways Rules, 1957, have been amended to ensure the exercise of the power under the NH Act. These rules provide for periodic regulatory compliance and reporting standards to be followed by the competent authority in reporting to the Central Government.

The National Highways Authority of India Act, 1988

The NHAI Act was enacted in pursuance of the powers of the Central Government for appointing a competent authority under the NH Act and provides for the constitution of an authority for the development, maintenance and management of national highways and for matters connected therewith or incidental thereto. In accordance with the NHAI Act, the GoI carries out development and maintenance of the national highways through NHAI. Subject to the provisions of the NHAI

Act, the NHAI has the power to enter into and perform any contract necessary for the discharge of its functions. The NHAI has the power to acquire any land to discharge its functions, and such acquired land will be deemed to be land needed for a 'public purpose'. The NHAI Act prescribes a limit in relation to the value of the contracts that may be entered into by NHAI. However, the NHAI may enter into contracts exceeding the specified value, on obtaining prior approval of the GoI. The NHAI Act provides that the contracts for acquisition, sale, or lease of immovable property on behalf of the NHAI cannot exceed a term of 30 years unless previously approved by the GoI.

NHAI's objective is to ensure that all contract awards and procurements conform to the best industry practices with regard to transparency of process, adoption of bid criteria to ensure healthy competition in award of contracts. The implementation of projects conforms to best quality requirements and the highway system is maintained to ensure best user comfort and convenience. NHAI has a three-tier structure. The headquarters (HQ), the regional offices (ROs) and the project implementation units (PIUs). The PIUs, headed by project directors, are responsible for implementation of projects assigned to them and ROs, headed by a Chief General Manager ("**CGM**") level officer, have been set-up in various parts of the country for decentralizing and strengthening the field level operations in NHAI. The HQ is responsible for overall supervision of the works assigned to NHAI.

In view of the challenging task of construction, development, and management of national highways being undertaken by NHAI, the Committee on Public Undertakings selected the subject "National Highways Authority of India (NHAI)" for comprehensive examination and report. The National Highways Authority of India (Amendment) Act, 2013, received the assent of the President of India on September 10, 2013, and aimed at increasing the institutional capacity of NHAI to help execute the powers delegated to it. National Highways Development Project ("**NHDP**") was launched in 1998 with the objective of developing roads of international standards which facilitate smooth flow of traffic. The NHDP envisages creation of roads with enhanced safety features, better riding surface, grade separator and other salient features.

As per the NHAI Works Manual, 2006, NHAI's mandate is the time and cost bound implementation of the NHDP. The sources of finance available to the NHAI include fund assistance from external funding agencies like the International Bank of Reconstruction and Development and the Asian Development Bank. NHAI's role encompasses involving the private sector in provision, maintenance, and operation of the national highways.

Financing of the NHDP

The GoI, under the Central Road and Infrastructure Fund Act, 2000 created a fund which is required to be utilized for the development and maintenance of national highways (the "**Central Road Fund**"). Section 18 of the NHAI Act also provides for the creation of a separate NHAI Fund. Any capital grant or aid received, loan taken, borrowing made, or any other sum received by the NHAI is credited to the NHAI Fund. Certain sources for financing of the NHDP are through dedicated accruals under the Central Road Fund by levy of cess on fuel as well as involving the private sector and encouraging public private partnerships. The NHDP is also financed through long-term external loans from the International Bank of Reconstruction and Development, the Asian Development Bank and the Japan Bank for International Cooperation as well as through tolling of roads for different projects undertaken by the NHAI.

Private Participation in NHDP

In an effort to attract private sector participation in the NHDP, the NHAI has formulated model concession agreements ("**MCAs**") where a private entity, being the concessionaire, is, through an international competitive bidding ("**ICB**") process, awarded a concession (in form of a bundle of licenses) to build, operate and collect toll on a road for a specified period of time.

The bidding for the projects takes place in two stages as per the process provided below:

1. in the pre-qualification (RFQ) stage, the NHAI selects certain applicants on the basis of technical and financial expertise, prior experience in implementing similar projects and previous track record; and
2. in the bidding (RFP) stage, the NHAI invites financial bids from the pre-qualified applicants at the RFQ-stage on the basis of which the right to develop the project is awarded.

In accordance with the MCAs for projects above ₹1,000 million, the concessionaire meets the upfront cost and expenditure on annual maintenance and recovers the entire cost along with the interest from toll collections during the concession period. As per the 'Guidelines for Investment in Road Sector' issued by MoRTH in 2009, in order to increase the viability of projects, a capital grant of up to 40% of the project cost is provided by the NHAI or the GoI. The quantum of grant is determined on a case to case basis and typically constitutes the bid parameter in Build, Operate, Transfer ("**BOT**") projects which are generally not viable based on toll revenue alone. For certain projects with high traffic volumes, concessionaire also offers a negative grant (i.e., premium) to the NHAI. The concessionaire at the end of the concession period transfers the road back to the Government (free of charge and clear of all encumbrances). The concessionaire's investment in the road is recovered directly through user fees collected by way of tolls. As per the MCAs for annuity based projects, the concessionaire is required to meet the entire upfront cost (no grant is paid by the NHAI or the GoI) and the expenditure on annual maintenance for annuity based projects. The concessionaire recovers the entire investment through pre-determined annuity payments to be made by the NHAI or the GoI. Furthermore, MoRTH approved certain amendments to the model concession agreement, inter-alia, in relation to deferment of premium payments.

Exit Policy

The CCEA in May 2015 approved a comprehensive exit policy framework with the objective to mobilize funds in the market. In pursuance thereto, NHAI, vide Circular No. NHAI/1103/CGM(FA)/4/2015 dated June 09, 2015 permitted divestment of 100% equity by concessionaires/developers after two years of completion of construction to facilitate unlocking of funds for new infrastructure projects. The equity divested is required to be invested by promoters in their new projects. This comprehensive exit policy framework is expected to harmonize certain conditions across all concessions signed prior to 2009 with the policy framework for post 2009 contracts which permit divestment of equity up to 100%, two years after completion of construction. In line with the spirit of quoted circular, the NHAI issued another circular dated September 9, 2015 followed by the circular dated November 19, 2015, on the same subject, allowing the promoter to use the proceeds from the sale of divested equity of the concessionaire in one or more of the following: (i)in incomplete NHAI projects; (ii) any other highway projects; (iii) any other power sector projects; or (iv) to retire their debt to financial institutions in any other infrastructure projects.

Rationalized Compensation

The CCEA in November 2015 approved a policy for rationalized compensation to concessionaires for languishing national highway projects in BOT mode for delays that are not attributable to the concessionaires. Under the policy, the NHAI is authorized to allow an extension of the concession period for BOT (Toll) projects while keeping the original operation period unchanged. The NHAI has also been authorised to pay compensatory annuities to the concessionaire corresponding to the actual period of delay that is not attributable to the concessionaire upon successful completion of the project. In these cases, the construction period will be enhanced but the tenure of the concession will remain unchanged.

One Time Fund Infusion

The CCEA in October 2015 gave its approval to the NHAI for a one-time infusion of funds with the purpose of reviving and physically completing stalled projects in the advanced stages of completion. As per the policy, the amount of funds required in each case shall be approved by NHAI on a case to case basis.

Bidder Information

MoRTH has developed the Bidder Information Management System ("**BIMS**") to streamline the process of pre-qualification of bidders for EPC mode of contracts for all national highway works, with enhanced transparency and objectivity. BIMS works as a data base of bidder information that covers basic details, civil works experience, cash accruals and network, and annual turnover so that bidders' pre-qualification can be assessed based on evaluation parameters like threshold capacity and bid capacity from already stored data and the technical evaluation can be carried out in a faster manner.

Land Acquisition

While land is acquired for national highway projects under the NH Act, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (the "**Land Acquisition Act**") must also be complied with. MoRTH has issued comprehensive guidelines on land acquisition for national highways taking into account the applicability of the Land Acquisition Act.

Arbitral Awards

CCEA on August 31, 2016 approved various measures to revive the construction sector. An office memorandum dated September 5, 2016 was issued by the National Institute for Transforming India with certain proposals. On November 20, 2019, the CCEA approved certain proposals in relation to the arbitrations by or against government entities, for the effective implementation of the CCEA's decision on August 31, 2016 on its initiatives to revive the construction sector. Initially, the CCEA had approved the proposal that government agencies will be required to pay 75% of the arbitral award to the concessionaire against a bank guarantee, in cases where the award already announced is challenged. However, pursuant to a press release dated November 20, 2019, the CCEA approved, inter-alia, that where a government entity has challenged an arbitral award, resultant of which the amount of the arbitral award has not been paid, 75% of such award will be paid by the government entity to the contractor or the concessionaire against a bank guarantee only for the said 75% and not for its interest component. In relation to interest payable to the government entity, if a subsequent court order required the refund of 75% of the amount, the payment of such amounts will be required to be made as per the court orders.

Applicable Rules

As per the NH Act and the NHAI Act, the Central Government is empowered to make rules in order to further the objects of NH Act and NHAI Act. In exercise of such power, the Central Government has framed certain rules which are as follows:

- The National Highways Rules, 1957;
- National Highways Authority of India (Budget, Accounts Audit, Investment of Funds and Powers to enter Premises) Rules, 1990, as amended;
- National Highways (Manner of depositing the amount by the Central Government; making requisite funds available to the competent authority for acquisition of land) Rules, 2019
- The National Highways Tribunal (Procedure for Appointment as Presiding Officer of the Tribunal) Rules, 2003;
- The National Highways Tribunal (Procedure) Rules 2003;
- National Highways Authority of India (The Term of Office and Other Conditions of Service of Members) Rules, 2003, as amended;
- The Central Road Fund (State Roads) Rules, 2007;
- The National Highways Tribunal (Financial and Administrative Powers) Rules, 2004;
- The National Highways Tribunal (Procedure for Investigation of Misbehaviour or Incapacity of Presiding Officer) Rules, 2003;
- The National Highways Fee (Determination of Rates and Collection) Rules, 2008, as amended; and
- The Highway Administration Rules, 2004.

Environmental Compliances and Regulations

Infrastructure projects must also ensure compliance with environmental legislations such as the Water (Prevention and Control of Pollution) Act, 1974 ("**Water Pollution Act**"), the Air (Prevention and Control of Pollution) Act, 1981 ("**Air Pollution Act**") and the Environment Protection Act, 1986 ("**Environment Act**", together with the Water Pollution Act and the Air Pollution Act, the "**Environment Protection Acts**"). The Water Pollution Act aims to prevent and control water pollution. This legislation provides for the constitution of a central pollution control board ("**Central Pollution Control Board**" or "**CPCB**") at the Central level and state pollution control boards ("**State Pollution Control Boards**" or "**SPCBs**", together with the Central Pollution Control Board, the "**PCBs**") at the State levels. The functions of the CPCB includes, among other things, coordination of activities of the SPCBs, collecting data relating to water pollution and the measures devised for the prevention and control of water pollution and prescription of standards for streams or wells. The SPCBs are responsible for, among other things, the planning for programmes for prevention and control of pollution of streams and wells, collecting and disseminating information relating to water pollution and its prevention and control, inspection of sewage or trade effluents, works and plants for their treatment and to review the specifications and data relating to plants set up for treatment and purification of water, laying down or annulling the effluent standards for trade effluents and for the quality of the receiving waters, and laying down standards for treatment of trade effluents to be discharged. These authorities issue consent to establish and consent to operate which are to be required to be renewed periodically. These authorities also have the power of search, seizure and investigation if the authorities are aware of or suspect violation of such regulations. This legislation prohibits any person from establishing any industry, operation or process or any treatment and disposal system, which is likely to discharge trade effluent into a stream, well or sewer, or bring into use any new or altered outlet for discharge of sewage, or begin to make any new discharge of sewage without taking prior consent of the SPCBs.

In context of the environmental compliances and regulations, the National Green Tribunal Act, 2010 (the "**NGT Act**") is an important legislation which provides for the establishment of a National Green Tribunal ("**NGT**") for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.

In accordance with the Forest (Conservation) Act, 1980, state governments are not permitted to make any order directing the use of forest land for a non-forest purpose, or assignment of any forest land through lease or otherwise to any private person or corporation without the approval of the GoI. The Ministry of Environment, Forest and Climate Change ("**MoEF**") mandates the Environment Impact Assessment ("**EIA**") must be conducted for specified projects. In the process, the MoEF receives proposals or the setting up of projects and assesses their impact on the environment before granting clearances to the projects.

The EIA Notification S.O. 1533, issued on September 14, 2006 (the "**EIA Notification**") and amended from time to time, under the provisions of the Environment Protection Act, prescribes that new construction of specified projects require prior environmental clearance from the MoEF. The environment clearance must be obtained from MoEF according to the procedure specified in the EIA Notification. No construction work or preparation of land by the project management except for securing the land, relating to the setting up of a specified project can be undertaken until such clearance is obtained. Under the EIA Notification, the environmental clearance process for new projects consists of four stages – screening, scoping, public consultation and appraisal. After completion of public consultation, the applicant is required to make appropriate changes in the draft 'EIA Report' and the 'Environment Management Plan.' The final EIA Report has to be submitted to the concerned regulatory authority for appraisal. The regulatory authority is required to give its decision within 105 days of the receipt of the final EIA Report. The EIA Guidance Manual for Highways, 2010 explains the four stages of the environmental clearance process and the contents of the EIA Report required to be submitted by highway projects.

Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, impose an obligation and duty on the owners and operators of any facility or industry with a capability to create hazardous materials to safely dispose of such material in transport and other means of collecting and storing. Each occupier and operator of any facility generating hazardous waste is required to obtain an approval from the relevant state pollution control board for collecting, storing and treating the hazardous waste.

Green Highways (Plantation, Transplantation, Beautification and Maintenance) Policy, 2015

In September 2015, MoRTH has launched Green Highways (Plantation, Transplantation, Beautification and Maintenance) Policy, 2015, which will require road developers to earmark 1% of a project's total cost for planting of trees and shrubs along the national highways. Under this policy, the maintenance of such plantations will be outsourced through a bidding process to plantation agencies. MoRTH/NHAI will appoint the authorized agency for empanelment of such plantation agencies.

Public Liability Insurance Act, 1991

The Public Liability Insurance Act, 1991 (the "**Public Liability Act**"), imposes liability on the owner or controller of hazardous substances for any damage arising out of an accident involving such hazardous substances. A list of 'hazardous substances' covered by the legislation has been enumerated by the GoI by way of a notification. The owner or handler is also required to take out an insurance policy insuring against liability under the legislation. The rules made under the Public Liability Act mandate that the employer has to contribute towards the Environment Relief Fund, a sum equal to the premium paid on the insurance policies. This amount is payable to the insurer.

Labour Laws and Other Regulations

The laws and regulations to employment that may be applicable to the Trust, the Investment Manager, the Sponsor, and the Project SPVs include the following:

- Contract Labour (Regulation and Abolition) Act, 1970;
- Payment of Bonus Act, 1965;
- Payment of Wages Act, 1936;
- Equal Remuneration Act, 1976;
- Employees' State Insurance Act, 1948;
- Employees' Provident Funds and Miscellaneous Provisions Act, 1952;
- Payment of Gratuity Act, 1972;
- Shops and Commercial Establishments Acts, where applicable;
- Minimum Wages Act 1948;
- Industrial Disputes Act, 1947;
- Employee's Compensation Act, 1923;
- Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013;
- Child Labour (Prohibition and Regulation) Act, 1986; and
- The Maternity Benefit Act, 1961.
- Building and other construction workers' Ac, 1996

Further, the Code on Wages, 2019, the Code on Social Security, 2020, the Occupational Safety, Health and Working Conditions Code, 2020 and the Industrial Relations Code, 2020 have been published in the official gazette by the Government of India. These will come into effect on dates as notified by the Government of India in the official gazette.

In addition to the above, various state shops and commercial establishments acts are also applicable to the Trust.

Other applicable law

The Motor Vehicles Act, 1988

The development, maintenance and management as well as control of the National Highways are regulated by the NH Act and the NHAI Act. Under the Motor Vehicles Act, 1988, some powers have been delegated to the Transport Department of the State Governments.

Section 138 of the Motor Vehicles Act, 1988 further empowers the State Governments to make rules for the control of traffic, including for the purpose of the removal and the safe custody of vehicles including their loads which have broken down or which have been left standing or have been abandoned on roads; the installation and use of weighing devices; the maintenance and management of wayside amenities complexes; the exemption from all or any of the provisions of relating to fire brigade vehicles, ambulances and other special classes or descriptions of vehicle, subject to such conditions as may be prescribed; the maintenance and management of parking places and stands and the fee, if any, which may be charged for their use; prohibiting the taking hold of or mounting of a motor vehicle in motion; prohibiting the use of foot-paths or pavements by motor vehicles, generally, the prevention of danger, injury or annoyance to the public or any person, or of danger or injury to property or of obstruction to traffic.

Motor Vehicles (Amendment) Act, 2019

The Motor Vehicles (Amendment) Act, 2019 is targeted towards bringing changes in the transport sector to encourage safer driving practices among Indian motor vehicle drivers. The draft for the amendment was put forward in the lower house of the Parliament, with a proposal to impose strict fines on the violators of traffic rules. The Act proposes to create a National Road Safety Board to be created by the Central Government through a notification. The Board will advise the Central and State governments on all aspects of road safety and traffic management.

Control of National Highways (Land and Traffic) Act, 2002

The Control of National Highways (Land and Traffic) Act, 2002 (the "**Control of NH Act**") provides for control of land within national highways, right of way and traffic moving on national highways and also for removal of unauthorised occupation thereon.

In accordance with the provisions of the Control of NH Act, the Central Government has established Highway Administrations. Under the Control of NH Act, all land that forms part of a highway which vests in the Central Government, or that which does not already vest in the Central Government but has been acquired for the purpose of highways shall be deemed to be the property of the Central Government. The Control of NH Act prohibits any person from occupying any highway land or discharging any material through on such land without the permission of the Highway Administration or any officer authorised by such administration. The Control of NH Act permits the grant of lease and license for use of highway land for temporary use.

Indian Tolls Act, 1851

In accordance with the Indian Tolls Act, 1851 (the "**Tolls Act**"), the state governments have been vested with the power to levy tolls at such rates as they deem fit, to be levied upon any road or bridge, made or repaired at the expense of the Central or any state government. The tolls levied under the Tolls Act, are deemed to be 'public revenue' and the collection of tolls can be placed under any person the State governments' deem fit. Such persons are enjoined with the same responsibilities as if they were employed in the collection of land revenue. Further, all police officers are bound to assist the toll collectors when required in the implementation of the Tolls Act. The Tolls Act further gives power for recovery of toll and exempts certain category of people from payment of toll.

National Highways Fee (Determination of Rates and Collection) Rules, 2008

The National Highways Fee (Determination of Rates and Collection) Rules, 2008 (the "**NH Fee Rules**"), regulates the collection of fee for the use of national highways. In accordance with the NH Fee Rules, the GoI may, by a notification, levy fee for use of any section of a national highway, permanent bridge, bypass or tunnel forming part of a national highway, as the case may be. However, the GoI may, by notification, exempt any section of a national highway, permanent bridge, bypass or tunnel constructed through a public funded project from levy of such fee.

The NH Fee Rules supersede the National Highways (Temporary Bridges) Rules, 1964, the National Highways (Collection of Fees by any Person for the Use of Section of National Highways/ Permanent Bridge/ Temporary Bridge on National Highways) Rules, 1997, the National Highways (Fees for the use of National Highways Section and Permanent Bridges Public Funded Project) Rules, 1997 and the National Highways (Rate of Fees) Rules, 1997 other than in respect of things done or omitted to be done under such rules prior to supersession. The NH Fee Rules do not apply to agreements and contracts executed or bids invited prior to the publication of such rules i.e. prior to December 5, 2008.

The collection of fee in case of a public funded project shall commence within 45 days from the date of completion of the project. The NH Fee Rules further provide for the base rate of fee applicable for the use of a section of the national highway for different categories of vehicles and the fees collected by the executing authority shall be remitted to the GoI. However, the GoI may, by notification, allow any or all of the executing authorities to appropriate the whole, or part of such fees for purposes as may be specified.

FASTag lanes on fee plazas is a policy initiative of the GoI in which there is an exclusive lane in the fee plaza for movement of vehicles fitted with FASTag. The FASTag is a device which is fitted on the front windscreen of vehicles to indicate online toll payment. The amended NH Fee Rules impose a penalty equivalent to two times the fee applicable if a vehicle not fitted with FASTag enters the exclusive FASTag lane. However, in case a user is unable to pay, due to malfunctioning electronic toll collection infrastructure, the user will be permitted to pass the fee plaza without payment.

The NH Fee rules were also amended to provide that the driver or owner of a mechanical vehicle which is loaded in excess of permissible load specified for its category, (i) shall not be permitted to use the national highway or cross the fee plaza until the excess load has been removed, and (ii) shall be liable to pay a fee to the toll collection agency equal to ten times of the fee applicable to such category of mechanical vehicle. However, in case no weighbridge has been installed at the toll plaza, no fee for overloading shall be levied.

The National Highways Rules, 1957 (the "NH Rules")

The NH Rules provide that in situations where the estimate cost of the execution of any original work on a national highway exceeds ₹ 1,000,000, a detailed estimated of the cost is to be forwarded to the GoI. An application for allotment of funds for meeting expenditure on an original work on a national highway must also be made to the GoI. The executing agency of the highway is required to furnish monthly progress reports and a completion report on the conclusion of the work. The NH Rules also give the consulting engineer of the GoI the right to inspect the work while it is in progress or after completion.

Provisions under the Constitution of India and other legislations in relation to collection of toll

Entry 59, List II of Schedule VII read with Article 246 of the Constitution of India vests state governments with the power to levy tolls. Further, in accordance with the Tolls Act, state governments have been vested with the power to levy tolls at such rates as they deem fit.

Foreign Investment Regulations

Foreign investment in Indian securities is governed by the provisions of the FEMA, read with the applicable FEMA Rules, the FEMA (Mode of payment and Reporting of Non-Debt Instruments) Regulations, 2019 and the Consolidated FDI Policy issued by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government. Foreign investment is permitted (except in the prohibited sectors) either through the automatic route or the approval route, depending upon the sector in which foreign investment is sought to be made. Under the FEMA Rules and the current Consolidated FDI Policy, effective from October 15, 2020, an infrastructure investment trust registered and regulated by the SEBI under the InvIT Regulations, being an 'investment vehicle', is permitted to receive foreign investment from a person resident outside India (subject to Press Note 3 (2020 series)), including an FPI or an NRI subject to the terms and conditions specified in the FEMA Rules.

Downstream investment by an infrastructure investment trust shall be regarded as indirect foreign investment if either the sponsor or the investment manager of such an infrastructure investment trust is not Indian 'owned and controlled' as defined in FEMA Rules.

Downstream investment by an 'investment vehicle' shall have to conform to the sectoral caps and conditions/restrictions, if any, as applicable to the company in which the downstream investment is made as per the Consolidated FDI Policy. Foreign investment of up to 100% through the automatic route is permitted in the infrastructure sector in India. An infrastructure investment trust that receives foreign investment shall be required to make such report and in such format to the RBI or to the SEBI as may be prescribed by them from time to time.

The payment for the units of an infrastructure investment trust acquired by a person resident or registered/ incorporated outside India shall be made by an inward remittance from abroad through banking channels or by way of swap of shares of an SPV, or out of funds held in a Non-resident External ("**NRE**") or Foreign Currency Non-resident Bank ("**FCNR(B)**") account maintained in accordance with the Foreign Exchange Management (Deposit) Regulations, 2016.

Further, any person who is a non-resident and holds units of an infrastructure investment trust in accordance with the FEMA Rules may pledge such units (i) in favour of a bank in India to secure the credit facilities being extended to the Indian company for bona fide purposes; (ii) in favour of an overseas bank to secure the credit facilities being extended to the person, or a person resident outside India who is the promoter of the Indian company or the overseas group company of the Indian company; (iii) in favour of a Non-Banking Financial Company registered with the RBI to secure credit facilities being extended to the Indian company for bona fide purposes; and (iv) subject to the authorized dealer bank satisfying itself of the compliance of the conditions stipulated by the RBI in this regard.

REGULATORY APPROVALS

Provided below are the material consents, permissions, registrations and approvals from the Government, various governmental agencies and other statutory or regulatory authorities required to be obtained by the Trust or the Project SPVs for carrying out their present businesses. Unless otherwise stated, these approvals are valid as of the date of this Information Memorandum. In the event that any of the approvals and licenses that are required for the Project SPVs business operations expire in the ordinary course of business, the Project SPVs will apply for such renewal from time to time. Further, provided below are the material approvals in relation to the Listing and in relation to the Trust.

A. Approvals in relation to Listing

- Exemption application dated November 23, 2022 issued by the Investment Manager to SEBI seeking certain relaxations and exemptions from the provisions of InvIT Regulations and circulars issued thereunder in relation to the listing of the Units of the Trust;

- SEBI response letter dated February 28, 2023 bearing reference number SEBI/HO/DDHS-RACPOD2/P/OW/2023/08512/1 to the Investmnet Manager providing point wise reply to the exemption / clarifications sought by the Investment Manager;

- Exemption application dated March 22, 2023 issued by the Investment Manager to SEBI seeking an extension for listing of the Units of the Trust and certain other clarifications; and

- SEBI response letter dated April 6, 2023 bearing reference number SEBI/HO/DDHS-RACPOD2/P/OW/2023/14186/2 to the Investment Manager providing an extension for listing of the Units of the Trust.

- Unitholders' resolution dated June 7, 2023 approving the listing of the units of the Trust and the aggregate consolidated borrowings and deferred payments of the Trust upto 70% of the value of InvIT Assets, amongst others;

- Resolution passed by the Board of directors of the Investment Manager dated June 8, 2023 approving the listing of the units of the Trust, amongst others.

B. Approvals in relation to the Trust

- Certificate of registration dated on February 24, 2020 bearing registration number IN/InvIT/19-20/0013 issued by SEBI to the Trust under Regulation 3 of the InvIT Regulations, for registration of the Trust as an infrastructure investment trust.

- In-principal approved received from NHAI dated July 23, 2021 in relation to transfer of 100% shareholding of SJEPL from Simplex Infra Development Private Limited, Galfar Engineering and Bharat Road Network Limited to the Trust.

- Final approval received from NHAI dated October 21, 2021 in relation to transfer of 100% shareholding of SJEPL from Simplex Infra Development Private Limited, Galfar Engineering and Bharat Road Network Limited to the Trust.

C. Material Business Approvals in relation to SJEPL

- A provisional certificate dated January 12, 2017 issued by the independent engineer declaring 56.878 kms (out of 67 kms) of NH-5 from Km 413.00 to Km 418.00 and Km 0.00 to Km 62.00 (approx. 67.00 Km) to SJEPL.
- Certificate of registration for employer issued by the Office of the Registering Officer under Rule 24(1) of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998 dated February 19, 2021, to SJEPL.

D. Material Business Approvals in relation to NCREPE

- Registration as a commercial establishment dated April 25, 2022 granted by Department of Labour, Government of NCT of Delhi.
- Registration with Employees' Provident Fund Organisation dated April 25, 2022 issued by RoC CRC for and on behalf of jurisdictional RoC.

E. Approvals applied for, but not yet received

As on the date of this Information Memorandum, there are no approvals required to be obtained by the Trust and the Project SPVs, for which applications have been made, but approvals have not been received.

F. Approvals for which applications are yet to be made

As on the date of this Information Memorandum, there are no approvals required to be obtained by the Trust and the Project SPVs, for which applications are yet to be made, except the following:

- NCREPE's contractor license under the Contract Labour (Regulation and Abolition) Act, 1970.

LEGAL AND OTHER INFORMATION

Except as stated in this section, there are no material litigation or actions by regulatory authorities, in each case against the Trust, the Sponsor, the Investment Manager, the Project Manager, or any of their Associates and the Trustee, that are currently pending. Further, for the purposes of this section, unless otherwise specified, the associates of the Sponsor have been limited to Caisse de dépôt et placement du Québec and its subsidiaries, excluding the portfolio or investee companies of CDPQ other than to the extent any litigation against such portfolio or investee companies has a material adverse impact on CDPQ.

For the purpose of this section, details of all regulatory actions that are currently pending against the Trust, the Sponsor, the Investment Manager, the Project Manager and their respective Associates, the Project SPVs and the Trustee have been disclosed. Further, any matter that is currently pending involving an amount equivalent to, or more than, the amount as disclosed below, in respect of the Trust, the Sponsor, the Investment Manager, the Project Manager each of their respective Associates, the Trustee and the Project SPVs have been disclosed.

In respect of the Sponsor and its Associates (Caisse de dépôt et placement du Québec and its subsidiaries, excluding the portfolio or investee companies of CDPQ other than to the extent any litigation against such portfolio or investee companies has a material adverse impact on CDPQ), all outstanding cases which involve an amount equivalent to or exceeding CAD 4.01 billion (being 1% of the net assets of CDPQ as of December 31, 2022) have been considered material. All cases where the amount is not ascertainable but considered to have a material adverse impact on CDPQ have also been disclosed.

In respect of the Investment Manager and its Associates, all outstanding cases which involve an amount equivalent to or exceeding ₹ 4,915.5 million (being 5% of the enterprise value of the Trust as on March 31, 2023), have been considered material. All cases where the amount is not ascertainable, but considered to have a material adverse impact on the Investment Manager, have also been disclosed.

In respect of the Project Manager and its Associates, all outstanding cases which involve an amount equivalent to or exceeding ₹ 4,915.5 million (being 5% of the enterprise value of the Trust as on March 31, 2023), have been considered material. All cases where the amount is not ascertainable, but considered to have a material adverse impact on the Project Manager, have also been disclosed.

Where the Associates of the Investment Manager and the Project Manager are also considered Associates of the Sponsor, the materiality threshold and scope of 'associate' as specified for the Sponsor and its Associates has been considered.

In relation to the Trustee, all litigation involving an amount equivalent to or exceeding ₹ 12.32 million (being 5 % of the profit after tax as on March 31, 2023 based on the audited standalone financial statements of the Trustee for the Fiscal 2023, have been considered material. All cases where the amount is not ascertainable, but considered material, have also been disclosed.

In relation to the Trust and the Project SPVs, the outstanding cases involving an amount equivalent to or exceeding ₹ 4,915.5 million (being 5% of the enterprise value of the Trust as on March 31, 2023) have been disclosed. All outstanding cases where the amount is not ascertainable, but considered material, have also been disclosed. Further, except as stated in this section, there is no material litigation involving the Project SPVs.

I. Litigation involving the Trust

There are no material litigations and regulatory actions involving the Trust as on the date of this Information Memorandum.

II. Litigation involving the Project SPVs

SJEPL

Litigation against SJEPL

1. Keonjhar Nava Nirman Parishad and Badri Narayana Mohapatara (the "**Petitioners**") filed a writ petition bearing number, by way of a public interest litigation (the "**Main Petition**"), along with a miscellaneous petition bearing number 19249/2011 (the "**Miscellaneous Petition**"), against the Union of India, SJEPL and others, before the High Court of Odisha (the "**High Court**") challenging the notification dated October 19, 2011 issued by the Union of India (the "**UOI Fee Notification**") and the notification dated November 24, 2011 issued by NHAI (the "**NHAI Fee Notification**", along with the UOI Fee Notification, referred to as the "**Revised Fee Notification**") in relation to collection of revised toll at Manguli toll plaza. The UOI Fee Notification specified to collect the toll fees in accordance with the provisions of the concession agreement and the relevant fee rules from the date of

commencement of operation or publication in the official gazette, whichever is later. NHAI, by way of its letter dated November 30, 2011 requested the Chief Secretary of the Government of Odisha to render co-operation to SJEPL for implementation of six-laning of its project and commencement of toll collection from December 14, 2011 (the "**NHAI Letter**"). The Petitioners have prayed for the High Court to, amongst others: (i) issue a writ of mandamus/certiorari quashing the Revised Fee Notification and the NHAI Letter; (ii) direct SJEPL to not collect toll fees for six-laning of the project highway as per the Revised Fee Notification; and (iii) direct SJEPL to take necessary steps to plant 69,500 trees on both sides of the project highway within a specified time.

The High Court, by way of its order dated May 9, 2012, disposed of the Miscellaneous Petition in favour of the Petitioners and directed NHAI and SJEPL to not collect the enhanced toll until the disposal of the Main Petition (the "**High Court Order**"). Thereafter, SJEPL filed a special leave petition before the Supreme Court of India against the High Court Order. The Supreme Court by way of its order dated May 24, 2012 held that the High Court Order be kept in abeyance. Subsequently, the Main Petition was disposed off for non-prosecution. The special leave petition is pending.

2. Dhaneshwar Rath Institute of Engineering and Medical Sciences (the "**Petitioner**") filed a writ petition bearing number 624 of 2012 ("**Petition**") against, amongst others, the Union of India and SJEPL (the "**Respondents**"), before the High Court of Odisha ("**High Court**"), alleging amongst others, that (i) the fee notification issued by the Government of India (Department of Transport and Highways) dated October 19, 2011 ("**UOI Fee Notification**") and the letter dated November 24, 2011 issued by the NHAI (the "**NHAI Fee Notification**" and together with the UOI Fee Notification, the "**Fee Notifications**") are illegal, in contravention of the Concession Agreement and are liable to be quashed due to the location of the Manguli toll plaza ("**Toll Plaza**") being in violation of the National Highways Fee (Determination of Rates and Collection) Rules, 2008 ("**Fee Rules**"); (ii) the NHAI Fee Notification illegally revises the UOI Fee Notification; (iii) the toll collection from the buses plied by the Petitioner at the Toll Plaza by SJEPL is discriminatory in comparison with other toll plazas operated by NHAI; and (iv) the toll collection by SJEPL at the Toll Plaza is in violation of the UOI Fee Notification. The Petitioner has prayed for the High Court to, amongst others: (i) issue an order quashing the Fee Notifications; and (ii) permit the Petitioner to ply its buses through the Toll Plaza at a concessional rate of ₹ 1,000 per month per bus in conformity with fee notification dated August 5, 2002 and toll notification dated March 29, 2005 ("**Earlier Notifications**").

The Petitioner also filed an interim application together with the Petition wherein it prayed that the High Court direct SJEPL and NHAI to collect toll at a concessional rate in accordance with the Earlier Notifications. The High Court passed an interim order dated May 11, 2012 restricting SJEPL from charging higher toll as per the Fee Notifications, pending consideration of the Petition. The aforesaid interim orders were subsequently challenged by SJEPL and NHAI in special leave petitions filed with the Supreme Court. The Supreme Court by its order dated May 24, 2012, kept the High Court interim orders in abeyance until the final disposal of the petitions by the High Court. Further, by way of its order dated July 27, 2015, the Supreme Court ordered the High Court to dispose of the writ petition(s) pending before it as expeditiously as possible.

Subsequently, the High Court passed an order on November 29, 2022, disposing of the writ petition but noting that owing to the change in factual scenario, the issue of toll fees will have to be re-visited and that the interim order passed by the High Court staying collection of toll fees from the Petitioner as per the Fee Notifications will continue till such time wherein the NHAI undertakes a fresh exercise of re-determining the toll fees in terms of Rule 9(3) of the National Highways Fee (Determination of Rates and Collection) Rules, 2008, by following a proper procedure including inviting objections to the proposed draft proposal from all concerned (including the Petitioner) by giving them sufficient time and a hearing before finalizing fresh revised toll fee rates. The matter is currently pending.

3. Tetrahedron Higher Secondary School (the "**Petitioner**") filed a writ petition bearing number 8929 of 2019 ("**Petition**") against, amongst others, the Union of India and SJEPL (the "**Respondents**"), before the High Court of Odisha ("**High Court**"), alleging amongst others, that (i) the fee notification issued by the Government of India (Department of Transport and Highways) dated October 19, 2011 ("**UOI Fee Notification**") and the letter dated November 24, 2011 issued by the NHAI (the "**NHAI Fee Notification**" and together with the UOI Fee Notification, the "**Fee Notifications**") violate the fee notification dated August 5, 2002 and toll notification dated March 29, 2005 ("**Earlier Notifications**") and the Concession Agreement; and (ii) the NHAI Fee Notification illegally revises the UOI Fee Notification. The Petitioner has prayed for the High Court to, amongst others, direct SJEPL to show cause as to why the Fee Notifications should not be quashed and the petitioner shall not be permitted to ply buses and other vehicles to pay user fee at concessional rates pursuant to Earlier Notifications. It further prayed that if SJEPL fails to show cause, then the High Court should quash the impugned Fee Notifications and permit the petitioner to ply its buses at a concessional rate of ₹ 1,000 per month in accordance with the Earlier Notifications.

The Petitioner also filed an interim application together with the Petition wherein it prayed that the High Court direct SJEPL and NHAI to collect toll at a concessional rate in accordance with the Earlier Notifications. The High Court passed an interim order dated June 18, 2019 directing SJEPL to collect toll fee in accordance with the Fee Notifications, subject to the condition that, in the event the Petition is decided in favor of the Petitioner, the toll claimed to be in excess by the Petitioner from the date of the interim order, must be refunded to the Petitioner. The matter is currently pending adjudication.

4. Dibyalochan Sahu (the "**Petitioner**") filed a writ petition bearing number 564 of 2018 ("**Petition**") against, amongst others, NHAI and SJEPL (the "**Respondents**"), before the High Court of Odisha ("**High Court**"), alleging amongst others, that (i) the fee notification issued by the Government of India (Department of Transport and Highways) dated October 19, 2011 and the letter dated November 24, 2011 issued by the NHAI violate the fee notification dated August 5, 2002 and toll notification dated March 29, 2005 and the Concession Agreement; (ii) SJEPL, by collecting toll tax at Hasanpur toll plaza and Khantaghar toll plaza prior to completion of construction works at certain areas of the Project, is acting in violation of National Highways Fee (Determination of Rates and Collection) Rules, 2008; and (iii) the collection of toll at certain toll plazas by SJEPL is illegal, arbitrary in nature and in contravention of the circular dated September 29, 2009 issued by NHAI. The Petitioner has prayed for the High Court to, amongst others, issue a writ of mandamus directing that the collection of toll at the toll plazas set out in the Petition is not sustainable in the eye of law and further direct SJEPL to not collect toll from the said toll plazas. The Petition is currently pending admission and the interim application is pending adjudication.

5. SJEPL received notices from the Labour Enforcement Officer, Bhubaneswar, alleging certain breaches under the Contract Labour (Regulation and Abolition) Act, 1970, the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 read with the rules issued thereunder and the Payment of Bonus Act, 1965 read with the rules issued thereunder. SJEPL has submitted a compliance report in this regard to the Regional Labour Commissioner on April 8, 2022.

Litigation by SJEPL

1. SJEPL filed a case against All Orissa Bus Owners' Association ("**AOBOA**") before the Civil Judge, Cuttack in relation to non-payment of certain toll fees, pursuant to the revised fee notification issued by NHAI on November 24, 2011, revising the rate of toll fees to be collected at Km 34.624 i.e. Manguli toll plaza ("**Existing Toll Plaza**"). SJEPL by way of this case sought permanent injunction against AOBOA to prevent AOBOA members from: (i) crossing the Existing Toll Plaza in their buses without paying the requisite toll fee, and (ii) resorting to illegal activities causing damage to men and machinery and from conducting illegal strikes, 'gheraos' and 'dharnas' in and around 500 meter radius of Existing Toll Plaza ("**Injunction**"). The Judge by way of its interim order dated December 13, 2012 ruled in favour of SJEPL in relation to the Injunction sought ("**Interim Order**"). Aggrieved by the Interim Order, AOBOA filed an appeal in the court of 2nd additional district judge, Cuttack ("**District Judge**"). The District Judge, by way of its order dated April 26, 2013, confirmed the Interim Order. The matter is currently pending.

2. SJEPL has filed 49 FIRs before, IIC Sadar PS, Cuttack, IIC Bayree PS, Jaipur, IIC Mancheswar, BBSR, OIC-Pahal Out Post, IIC Sahidnagar PS, Bhubaneswar, IIC Tangi PS, Cuttack, IIC Badachana PS, Jaipur, against various parties, in relation to information regarding accidents, damage, missing items and theft of, amongst others: light poles, MBCBs, wire ropes, cabinet boxes, toll equipment, ECB Solar panels, MS Rallings, height barriers, blinkers, along with complaints regarding manhandling of employees, opening medians and forceful occupation of highways. These matters are currently pending.

3. An arbitral tribunal passed an award dated September 29, 2017 ("**Arbitral Award**") in relation to a dispute between SJEPL and the NHAI pertaining to the interpretation of the fee notification issued by the Government of India (Department of Transport and Highways) dated October 19, 2011. Such dispute arose when SJEPL completed the six-laning of the new Mahanadi bridge and thereafter, attempted to collect toll from vehicles using the Mahanadi bridge, which was not allowed by NHAI until February 2017. By way of the Arbitral Award, the arbitral tribunal held, amongst others, that: (i) SJEPL was entitled to collect toll on the Mahanadi bridge from the date of the Mahanadi bridge's six laning; and (ii) the NHAI was liable to pay the amount claimed by SJEPL up to June 2016 together with a rate of interest at the prevailing bank rate plus 5% up to the date of Arbitral Award, and thereafter at the prevailing market rate plus 2% percent till the date of payment. Aggrieved by the Arbitral Award, the NHAI (the "**Applicant**") filed an application dated December 28, 2017 under the Arbitration and Conciliation Act, 1996 ("**Arbitration Act**") before the High Court of Delhi ("**High Court**") challenging the Arbitral Award. The Applicant also filed an application dated December 28, 2017 before the High Court under the Arbitration Act for stay of operations of the Arbitral Award till the decision under the application is pronounced.

   By way of its order dated February 12, 2018, the High Court directed NHAI to release 75% of the awarded amount along with interest to SJEPL within 2 weeks from the date of the order, subject to SJEPL furnishing an unconditional bank guarantee of the equivalent amount in favour of the High Court. This was partially modified by the High Court by way of its order dated April 12, 2018, whereby it directed NHAI to release 75% of the awarded amount along with interest to SJEPL, within 2 weeks from the date of the order, subject to SJEPL furnishing an unconditional bank guarantee of the equivalent amount in favour of NHAI within 1 week from the date of the order. SJEPL applied to the High Court for permission to furnish security other than a bank guarantee for release of 75%

of the awarded amount. However, the High Court rejected this application of SJEPL by way of an order dated May 19, 2020. The estimated amount involved in this matter is approximately ₹ 2,261.08 million.

The High Court by way of its order dated March 7, 2022 set aside the Arbitral Award. SJEPL filed an appeal on April 23, 2022 in relation to the order passed by the High Court. NHAI filed their reply and cross objections on July 7, 2022, pursuant to which SJEPL filed its rejoinder and the reply to the cross objections of NHAI on September 15, 2022. The matter is currently pending.

Claims involving SJEPL

<u>*Claims against SJEPL*</u>

1. The independent engineer ("**IE**") in relation to the SJEPL project, intimated NHAI, by way of its letters dated May 13, 2017 and June 14, 2017, stating that SJEPL had not completed the balance works as required pursuant to the provisional certificate ("**Punch List Items**") within the stipulated time frame and accordingly shall be liable to pay certain damages with effect from April 12, 2017 up to a period of 120 days on account of delay until all the Punch List Items are completed. Subsequently, NHAI by way of its letter dated October 16, 2017 issued the 'cure period notice' to SJEPL in accordance with the SJEPL Concession Agreement, alleging several failures on part of SJEPL, to comply with the obligations of the SJEPL Concession Agreement, including (a) non-completion of the Punch List Items within the specified time period, (b) failure to maintain the existing highway in traffic worthy conditions and to comply with safety and maintenance requirement as specified in the SJEPL Concession Agreement, (c) breach of the provisions in relation to escrow account, (d) failure to comply with obligations in relation to shifting of utilities, (e) non-submission of design and drawings of the Project Highway in accordance with the SJEPL Concession Agreement, and (f) failure to comply with obligation with respect to submitting video recording.

   Thereafter, SJEPL requested NHAI to reject the IE's proposal for imposition of damages, stating that the Punch List was erroneous, that encumbrance free land was still not made available, unilateral stoppage of equity support by NHAI was severely affecting project cash flows, and NHAI failed to fulfil its reciprocal obligations. NHAI has issued a letter dated June 20, 2018 questioning the IE as to the reasons why action should not be taken against it for submitting misleading data regarding availability of land in respect of Punch List Items. The estimated amount involved in this matter is approximately ₹ 1,033.76 million calculated upto May 31, 2021. This matter is pending settlement through conciliation with NHAI.

2. NHAI by way of its letter dated February 23, 2017 to SJEPL, has claimed that SJEPL has failed to carry out the maintenance obligation in respect of the project highway including certain O&M activities of roads. Based on the recommendations of the independent engineer appointed ("**IE**"), NHAI issued a letter dated March 22, 2017 to SJEPL, stating the cost of damages to be paid by SJEPL on account of breach of maintenance obligations as per the SJEPL Concession Agreement and other deficiencies observed by the IE during site visit. Post inspection, NHAI found that there were various potholes along the project highway including service roads and that signboards, crash barriers, anti-glare boards had been damaged. Thereafter, NHAI ordered SJEPL to conduct routine maintenance of bridges at various locations along the project highway and stated that the failure to complete such routine maintenance works by SJEPL would force NHAI to initiate necessary action for breach of maintenance obligations of SJEPL. SJEPL has disputed such claims made by NHAI by way of its letter dated February 29, 2020 and has furnished details of maintenance works undertaken by SJEPL. The estimated amount involved in this matter is approximately ₹ 7.97 million. This matter is currently pending settlement through conciliation with NHAI.

3. NHAI issued a letter dated January 30, 2020 to the independent engineer appointed ("**IE**"), in relation to pending compliance with some observations by SJEPL, which were raised by the officer of the Chief Technical Examiner's Organization, during the inspection held between January 8, 2015 and January 16, 2015. Such observations included, amongst others, (a) non-tallying of toll collection amount as shown by SJEPL in its book of accounts with the sum amount of electronic toll monitoring system and point of sale collection, and (b) short deposition of toll collection amount. The IE by way of its letter dated September 16, 2020 requested SJEPL to submit ledger account copies and escrow bank statement copies for the period between December 14, 2011 and January 8, 2015. SJEPL has submitted the required documents to the IE and the IE has forwarded the same to NHAI for closure of the aforesaid observations. NHAI has issued a subsequent letter dated January 19, 2023 to the IE requesting additional information and clarification.This matter is currently pending closure.

4. SJEPL also has certain claims pending against it, in relation to, amongst others, (i) non-payment of labour cess at the rate of 1% of the relevant construction cost i.e ₹ 87.67 million, (ii) damages caused due to providing deficient pavement crust, involving an amount of ₹ 949.10 million; and (iii) descoping of additional work or services which are not included in the scope of the Project as per the Concession Agreement, involving an amount of ₹ 360.16 million. These claims are currently pending and have been taken up for conciliation (except the claim in relation to deficient pavement crust, labour cess claim. The claims against NHAI are taken up for settlement through conciliation. In relation to the deficient pavement crust issue, as per latest FWD report, there have been no issues

in pavement thickness. However, rectification has been taken up as per IE recommendation vide letter dated January 25, 2022. SJEPL vide letter dated June 21, 2022, had proposed that in case it undertakes overlay of the project stretch, then the claim be withdrawn. However, NHAI did not respond to SJEPL and vide letter dated July 7, 2022, requested the IE to examine SJEPL's claims. Further to this, the relevant rectification work in relation to the matter on deficient pavement crust has been taken by SJEPL and is currently on-going.

5. NHAI by way of its letter dated March 16, 2018 had proposed to sanction the construction of three vehicular underpasses at Balikuda, Badachana and Shikharpur and a flyover at Hansapal ("**Locations**") to SJEPL under a change of scope arrangement, within provisions of Article 16.5 of the SJEPL Concession Agreement. NHAI, using its powers under Article 16.5 of the SJEPL Concession Agreement, awarded the work to a third party engineering, procurement and construction contractors ("**EPC Contractors**"), noting SJEPL's non willingness to undertake the work. NHAI vide letter dated August 16, 2022 has alleged that SJEPL has stopped carrying out maintenance work on the Locations and along with letters dated July 7, 2022, and September 7, 2022 insisted that SJEPL carry out maintenance work at the Locations. SJEPL has denied this request vide letter dated September 21, 2022, stating that as per clause 16.5 of the SJEPL Concession Agreement, the mandate for the maintenance of the Locations falls under the purview of the EPC Contractors and accordingly, SJEPL shall only conduct maintenance works after the sections are handed over to SJEPL in their original conditions. Subsequently, NHAI vide letter dated January 2, 2023 alleged that SJEPL had been saving on energy bills and maintenance costs while collecting user toll fee from the particular sections at the Locations and demanded SJEPL deposit the excess toll fee collected for a cumulative length of 3.58 km for the period between June 2021 till date of the letter for non-maintenance of 3.58/67km or 5.34% of toll fee, being, ₹ 323.4 million of which 80% amounting to Rs. ₹ 258.7 million shall be deposited. SJEPL responded to NHAI vide letter dated January 13, 2023 stating that the maintenance of the services roads at the Locations is to be undertaken by the EPC Contractors during the construction period in accordance with the EPC agreement entered into between the EPC Contractors and NHAI. Further, NHAI vide letter dated January 18, 2023 instructed the Independent Engineer ("**IE**") to review SJEPL's submissions. The IE vide letter dated March 18, 2023 has responded to NHAI with the recommendation that the penalty imposed on SJEPL be withdrawn and SJEPL may be asked to deposit the maintenance costs saved amounting to 80% of ₹ 96.4 million i.e., ₹ 77.2 million as per Clause 16.6 of the SJEPL Concession Agreement. The IE has also recommended that the EPC Contractors for the Locations be asked to undertake maintenance activities suitably in order to restore the condition of the service roads or have the same executed at their risk and cost. The matter is currently pending settlement.

6. M/s MSV International Inc. (in association with High Brid India Consultants Private Limited) ("**Independent Engineer**" or "**IE**") vide its letter dated July 2, 2022 has issued a notice to SJEPL under sub-clause 17.8 and 17.9 of the SJEPL Concession Agreement alleging non-fulfilment of operations and maintenance obligations of SJEPL in relation to the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha ("**Project**"). In the letter, the IE has requested SJEPL to, inter alia, commence overlay works and remedial measures and submit a plan of such remedial measures undertaken within 7 days and commence the same within 15 days from the date of receipt of the letter, post which SJEPL is required to complete the same within 60 days. SJEPL vide letter dated July 9, 2022 had agreed to proceed with the overlay works as per the scope agreed with the IE and to submit a construction program for the same. However, the IE vide letter dated January 2, 2023 alleged that SJEPL had failed to repair the defects and accordingly NHAI was entitled to recover damages from SJEPL which were calculated from April 1, 2022 to December 31, 2022 amounting to ₹ 6.59 million. SJEPL vide letter dated January 25, 2023, has responded to the IE disputing the allegation and damages along with details in relation to the maintenance works and the status of the same being carried out by SJEPL in relation to the works undertaken by SJEPL. The matter is currently pending.

Claims by SJEPL

1. SJEPL has made various claims in relation to the provision of additional work or services which are not included in the scope of the Project as per the Concession Agreement ("**Change of Scope**") as proposed by SJEPL or NHAI, including claims for the Change of Scope pursuant to, amongst others, (i) orders of the High Court of Orissa dated December 7, 2011 and February 27, 2012 in public interest litigation bearing miscellaneous case no. 315 and 316 of 2011, to which SJEPLwas not a party; (ii) the construction of a new vehicular underpass at 19.100 km near Balikuda Junction and the construction of the Puri Junction flyover; (iii) the implementation of Electronic Toll Collection ("**ETC**") lane at the existing toll plazas and implementation of the hybrid ETC system at all lanes of the Manguli toll plaza; (iv) the repair and rehabilitation of certain structures including bridges, beyond the provisions of the Concession Agreement; (v) the extension of time for construction of an administrative building for the new toll plaza at Bandalo; (vi) the carrying out the work of pavement design; (vii) the design modifications as required to be made for the proposed Khapuria Flyover; (viii) a delay in procurement of 2 ambulances caused due to non-approval of a previous Change of Scope claim; (ix) the dismantling of certain acquired buildings; (x) the fixing of median railing at Palasuni as per directions of High Level Committee on Traffic Co-ordination; (xi) the installation of oxygen plants and additional fencing; and (xii) cost towards utility shifting. The amount involved in these claims aggregates to approximately ₹ 2,099.52 million. These matters are pending for settlement through conciliation.

2. SJEPL, RKD Construction Private Limited and SIL have made claims for the additional financial burden incurred due to change in law, including due to, amongst others, excise duty, value added tax, goods and services tax and an introduction of a new tax on diesel. The amount involved in these claims aggregates to approximately ₹ 241.24 million. These matters are currently pending for settlement through conciliation.

3. SJEPL has raised a claim with NHAI in relation to interim order passed by the High Court in the writ petition (W.P.(C) No. 624 of 2012) filed by Dhaneshwar Rath Institute of Engineering and Medical Sciences against Union of India and others (collectively, the "**HC Order**"). By way of the HC Order, High Court adjudicated that SJEPL must stop collecting toll at the revised rate under the NHAI Revised Fee Notification. Subsequent to the HC Order, the Supreme Court passed an order dated May 24, 2012 ("**SC Order**") which stayed the HC Order till the final disposal of the writ petition(s). SJEPL has (i) claimed a cumulative compensation for the loss suffered due to the loss of toll during the period between the HC Orders and the SC Order; (ii) claimed the HC Orders are a non-political event as per the provisions of the Concession Agreement; (iii) raised a claim with the NHAI due to losses suffered on account of members of local bus and truck owners associations refusing to pay user fees and demanding adherence to the previous tolling rates instead of revised rates; and (iv) alleged that NHAI has suppressed certain between the NHAI and Government of Odisha and did not intimate which is tantamount to 'breach of trust' under the Concession Agreement. Accordingly, SJEPL has sought conciliation of dispute in this regard. The amount involved is approximately ₹ 1,268.87 million. The matter is subject to conciliation.

4. SJEPL has raised a claim with NHAI in relation to (i) demonetization, (ii) the letters dated November 9, 2016 and November 11, 2016 issued by the Ministry of Road Transport and Highways which directed NHAI to suspend collection of tolls and suitably compensate the toll operators, and (iii) the office orders issued by NHAI dated November 9, 2016 and December 6, 2016, which clarified the provisions for addressal of loss due to non-collection of tolls from November 9, 2016 to the midnight of December 23, 2016. The amount pending in this claim aggregates to approximately ₹ 14.45 million. This matter is currently pending for settlement through conciliation.

5. SJEPL has raised a claim with the NHAI in relation to delay of provision of the right of way to at least 80% of the length of the land comprising the Project (free from all encumbrances and occupations) by the NHAI to SJEPL in accordance with the Concession Agreement. Further, SJEPL has requested NHAI for, amongst others, the de-scoping the balance work on the stretch where the work cannot be taken up on piece-meal basis due to non-availability of land on continuous stretch, which is resulting in delay and consequent cost overruns to SJEPL and the issuance of Completion Certificate by de-scoping the balance work on "as is basis". The NHAI has disputed such claims and stated, amongst other things, that NHAI has fulfilled its obligation to provide encumbrance free land to SJEPL and any hindrances in the form of structures, trees, pipelines are to be removed by SJEPL as per its contractual obligations under the Concession Agreement, which SJEPL has failed to perform. The amount pending in this claim aggregates to approximately ₹ 6,996.40 million. This matter is currently pending for settlement through conciliation.

6. SJEPL has requested for compensation from NHAI, by way of claims, in relation to loss of revenue due to non-payment of user fee by various classes of vehicles, including tankers and containers containing liquid medical oxygen. The amount pending in this claim aggregates to approximately ₹1.02 million. This matter is currently pending for settlement through conciliation.

7. SJEPL has made certain claims against NHAI in relation to (i) the disruption caused by COVID – 19 and the consequent loss caused to it in relation to collection of toll, (ii) extension of the concession period by 5.2 years, and (iii) certain outstanding grants receivable by SJEPL and a few change in scope items. These claims are currently pending settlement through conciliation.

<u>NCREPE</u>

<u>Claims against NCREPE</u>

1. NHAI issued a show cause by way of notice dated December 29, 2022 to NCREPE alleging non-rectification of the defects and deficiencies in operation and management noted by NHAI upon site inspection and notified to NCREPE during a site inspection on December 19, 2022, and directed NCREPE to show cause in relation to the alleged deficiencies and defects within 7 days from the issuance of the notice. NCREPE vide its response in letter no. Maple/NHAI PIU/TOT7/NCREPE/Takeover/16, stated that, amongst other thing, the defects highlighted by NHAI in relation to the tolling systems were unteneable. Further, NCREPE also highlighted that neither did NCREPE receive any defect instructions nor was NCREPE in breach of any maintenance programs, amongst others and requested NHAI to withdraw the show cause notice and resolve the issues amicably. Subsequently, M/s MSV International Inc. being the Independent Engineer ("**IE"**), vide their letter dated March 17, 2023 recommended that NCREPE's response to NHAI's show cause notice was not in compliance with the NCREPE Concession Agreement and the pace of operations and maintenance work undertaken by NCREPE did not

conform to the requirements under the NCREPE Concession Agreement. Accordingly, the IE stated that NCREPE was obliged to plan and undertake the rectification of the project and assets within 7 days from receipt of IE's observations failing which the IE would be constrained to recommend action under the provisions of the NCREPE Concession Agreement to NHAI. Pursuant to receipt of the letter from the IE, NCREPE vide response dated March 21, 2023 listed its disagreements with the show cause notice and IE's recommendation and stated that the IE had only considered selective clarification and had not considered the associates documents along with the NCREPE Concession Agreement to form its recommendation and requested reconsideration. The matter is still pending.

2. M/s MSV International Inc. (in association with Vaishnavi Infratech Services Pvt. Ltd) ("**Independent Engineer**" or "**IE**") vide its letter dated May 22, 2023 had issued a notice to NCREPE alleging failure of compliance with operations and maintenance obligatins under the NCREPE Concession Agreement in relation to the Eastern Peripherial Expressway (6-lane from Km 1.000 to Km 136.000) of NE-II in the National Capital Region ("**Project**") observed during site visits, including non-action for initiation of bituminous concrete marking, pot holes rectification, among others. The IE recommended the National Highway Authority of India ("**NHAI**") through the letter to take up remedial measures at the risk and cost of the Concessionaire in case of non-compliance with the requirements. Accordingly, NHAI through its letters dated May 23, 2023 reiterated the recommendation, and imposed damages instructing NCREPE to deposit an amount of INR 2.81 million for the non-fulfilment of obligations upto May 22, 2023. NCREPE through letter dated May 24, 2023 and May 29, 2023 stated that the recommendations of the IE were incorrect and unjustified since all rectificatins and improvements were required to be carried out by the existing EPC being initial defects however due to a change of scope the damages have formed a part of the proposal for repair which has been kept in abeyance and is causing delays to rectification. The matter is still pending.

III. Litigation involving the Sponsor

There are no material litigations and regulatory actions pending against the Sponsor as on the date of this Information Memorandum.

IV. Litigation involving the Investment Manager

There are no material litigations and regulatory actions pending against the Investment Manager as on the date of this Information Memorandum.

V. Litigation involving the Project Manager

There are no material litigations and regulatory actions pending against the Project Manager as on the date of this Information Memorandum.

VI. Litigation involving the Associates of the Sponsor, the Investment Manager and the Project Manager (other than the Project SPVs)

There are no material litigations and regulatory actions pending against the Associates of the Sponsor, the Investment Manager and the Project Manager as on the date of this Information Memorandum.

VII. Litigation involving the Trustee

There are no material litigations and regulatory actions pending against the Trustee as on the date of this Information Memorandum.

VIII. Tax Proceedings

Details of all direct tax and indirect tax matters against the Trust, Associates of Trust, Parties to the Trust and their Associates, as on the date of this Information Memorandum, are as follows:

Sr. No.	Nature of Case	Number of cases	Amount involved (in ₹ million, unless otherwise specified)
Trust and Associates of Trust			
Project SPVs			
SJEPL			
1.	Direct Tax	Nil	Nil
2.	Indirect Tax	Nil	Nil

Sr. No.	Nature of Case	Number of cases	Amount involved (in ₹ million, unless otherwise specified)
NCREPE			
3.	Direct Tax	Nil	Nil
4.	Indirect Tax	Nil	Nil
Project Manager			
5.	Direct Tax	Nil	Nil
6.	Indirect Tax	Nil	Nil
Investment Manager			
7.	Direct Tax	Nil	Nil
8.	Indirect Tax	Nil	Nil
Sponsor			
9.	Direct Tax	4	6.5 million CAD

RIGHTS OF UNITHOLDERS

The rights and interests of Unitholders as provided under the InvIT Regulations are summarised in this Information Memorandum. Under the Amended and Restated Indenture of Trust and the Amended and Restated Investment Management Agreement, these rights and interests are safeguarded by the Trustee and the Investment Manager, respectively. Any rights and interests of Unitholders as specified in this Information Memorandum would be deemed to be amended to the extent of any amendment to the InvIT Regulations.

Beneficial Interest

Each Unit represents an undivided beneficial interest in the Trust. A Unitholder has no equitable or proprietary interest in the Project SPVs of the Trust and is not entitled to transfer of the Project SPVs (or any part thereof) or any interest in the Project SPVs (or any part thereof) of the Trust. A Unitholder's right is limited to the right to require due administration of the Trust in accordance with the provisions of the Indenture of Trust and the Investment Management Agreement.

Ranking

No Unitholder of the Trust shall enjoy superior voting or any other rights over another Unitholder. Further, the Units shall not have multiple classes, except any subordinate Units that may be issued only to the Sponsor and its Associates, where such subordinate units carry only inferior voting or any other rights compared to other Units in the future in accordance with Regulation 4(2)(h) of the InvIT Regulations.

Redressal of grievances

The Trustee shall periodically review the status of Unitholders' complaints and their redressal undertaken by the Investment Manager. The Investment Manager shall monitor the status of complaints and their redressal, from time to time, in accordance with applicable law. For details, please see the section entitled "*Corporate Governance*" on page 132.

Distribution

The Unitholders shall have the right to receive distribution in accordance with the InvIT Regulations and in the manner provided in this Information Memorandum. For details, please see the section entitled "*Distribution*" on page 192.

Meeting of Unitholders

Meetings of Unitholders will be conducted in accordance with the InvIT Regulations.

Passing of resolutions

1. With respect to any matter requiring approval of the Unitholders:

    (i) a resolution shall be considered as passed when the votes cast by Unitholders, so entitled and voting, in favour of the resolution exceed a certain percentage as specified in the InvIT Regulations, of votes cast against;

    (ii) the voting may be done by postal ballot or electronic mode;

    (iii) a notice of not less than 21 days shall be provided to the Unitholders;

    (iv) voting by any Unitholder (including, the Sponsor in its capacity as a Unitholder), who is a related party in such transaction, as well as associates of such Unitholder(s) shall not be considered on the specific issue; and

    (v) the Investment Manager shall be responsible for all the activities pertaining to conducting of meeting of the Unitholder, subject to oversight by the Trustee.

    However, for issues pertaining to the Investment Manager, including a change in Investment Manager, removal of Investment Manager or change in control of Investment Manager; the Trustee shall convene and handle all activities pertaining to conduct of the meetings. Additionally, for issues pertaining to the Trustee, including change in Trustee, the Trustee shall not be involved in any manner in the conduct of the meeting.

2. For the Trust:

(i) an annual meeting of all Unitholders shall be held not less than once a year within 120 days from the end of each financial year and the time between two meetings shall not exceed 15 months;

(ii) with respect to the annual meeting of Unitholders,

(a) any information that is required to be disclosed to the Unitholders and any issue that, in the ordinary course of business, may require approval of the Unitholders may be taken up in the meeting including:

- latest annual accounts and performance of the Trust;
- approval of auditors and fee of such auditors, as may be required;
- latest valuation reports;
- appointment of valuer, as may be required; and
- any other issue; and

(b) for any issue taken up in such meetings which require approval from the Unitholders other than as specified in Regulation 22(6) of the InvIT Regulations, votes cast in favour of the resolution shall be more than the votes cast against the resolution.

3. In case of the following, approval from the Unitholders shall be required where the votes cast in favour of the resolution shall be more than the votes cast against the resolution:

(i) any approval from the Unitholders required in terms of Regulation 18 (*Investment conditions and dividend policy)*, Regulation 19 (*Related Party Transactions*) and Regulation 21 *(Valuation of assets*) of the InvIT Regulations;

(ii) any transaction, other than any borrowing, the value of which is equal to or greater than 25% of the InvIT Assets;

(iii) increasing period for compliance with investment conditions to one year in accordance with Regulation 18(5)(c) of the InvIT Regulations;

(iv) any issue, in the ordinary course of business, which in the opinion of the Sponsor or the Trustee or the Investment Manager, is material and requires approval of the Unitholders, if any; and

(v) any issue for which SEBI requires approval.

4. In case of the following, approval from the Unitholders shall be required where the votes cast in favour of the resolution shall not be less than one and a half times the votes cast against the resolution:

(i) any issue, not in the ordinary course of business, which in the opinion of the Sponsor or Investment Manager or Trustee requires approval of the Unitholders, provided that if such approval is not obtained, an exit option shall be provided to the Unitholders;

(ii) any material change in the Investment Strategy or any change in the management fee of the Trust;

(iii) any issue for which SEBI require approval; and

(iv) any issue taken up on request of the Unitholders including:

(a). removal of the Investment Manager and appointment of another investment manager to the Trust;

(b). removal of the auditors and appointment of another auditors to the Trust;

(c). removal of the valuer and appointment of another valuer to the Trust;

(d). any issue which the Unitholders have sufficient reason to believe that is detrimental to the interest of the Unitholders; and

(e). change in the Trustee, if Unitholders have sufficient reason to believe that acts of the Trustee are detrimental to the interest of Unitholders.

With respect to the rights of the Unitholders under clause 4(iv) above:

(i) not less than 25% of the Unitholders by value, other than any party related to the transactions and its associates, shall apply, in writing, to the Trustee for the purpose;

(ii) on receipt of such application, the Trustee shall require, with the Investment Manager to place the issue for voting in the manner as specified in the InvIT Regulations; and

(iii) with respect to clause 4(iv)(e) above, not less than 60% of the Unitholders by value shall apply, in writing, to the Trustee for the purpose.

Information rights

The Investment Manager, on behalf of the Trust, shall also submit such information to the Unitholders and the Stock Exchange, on a periodical basis as may be required under the InvIT Regulations. The Investment Manager (on behalf of the Trust) shall disclose to the Unitholders and SEBI, all such information and in such manner as specified under the InvIT Regulations and such other requirements as may be specified by SEBI. The Investment Manager, on behalf of the Trust, shall also provide disclosures or reports specific to the sector or sub-sector in which the Trust has invested or proposes to invest, in the manner as may be specified by SEBI.

Buyback of Units

Any buyback of Units shall be in accordance with the Indenture of Trust and the InvIT Regulations.

Listing of Units

The listing of Units shall be in accordance with the InvIT Regulations and the Circular no. SEBI/HO/DDHS/DDHS_Div3/P/CIP/2022/16 dated February 9, 2022 titled *“Conversion of Private unlisted InvIT into Private Listed InvIT*. The Units shall be listed on BSE.

LISTING INFORMATION

The Listing has been authorsied by a resolution of the board of directors of the Investment Manager dated June 8, 2023 and the Unitholders on June 7, 2023.

The Trust has been granted an exemption from making a private placement of units through a fresh issue and/or an offer for sale for the purposes of conversion of the Trust from a private unlisted InvIT to a private listed InvIT by way of the SEBI letter dated February 28, 2023 ("**SEBI Letter**"). Accordingly, the Units are proposed to be listed on BSE.

Pursuant to the SEBI Letter, the Trust has also been granted the following exemptions and clarifications:

(i). the period of lock in of units for the Sponsor shall be considered from the date of original holding of units by the Sponsor instead of the date of listing;
(ii). the period of lock in of units held prior to Listing, by persons other than the Sponsor, shall be locked in for a period of one year from the date of original holding of the units by such persons instead of the date of listing;
(iii). exemption from the requirement of minimum investment from investors and minimum number of investors for the purpose of listing. This is subject to the units of the Trust being listed without raising any funds, either through a fresh offer of units or through an offer for sale;
(iv). the Trust has also received clarification that the Unitholders may continue to hold units of value less than the trading lot, however, the trading of units of the Trust on the stock exchange platform can only be done on the basis of the trading lot;
(v). exemption from disclosure of operating cash flows and financial statements for NCREPE prior to acquisition by the Trust; and
(vi). exemption from the requirement of having a mandatory credit rating of 'AAA' and track record of six distributions to raise debt above 49% and upto 70% of the value of Trust assets, subject to obtaining:

    (a) a credit rating from a credit rating agency registered with SEBI and disclosing the same on the stock exchange; and
    (b) a one time Unitholder approval for consolidated borrowings above 49% and upto 70% of the value of the Trust assets.

Further, the Trust was advised by SEBI to list its Units on or before March 31, 2023. However, the Investment Manager (acting on behalf of the Trust) sought an extension from SEBI to list the units of the Trust on March 22, 2023. Thereafter, SEBI, by way of its letter dated April 6, 2023 provided an extension for a period of three months for the purposes of listing of the units of the Trust. Accordingly the Trust was advised to list its Units on or before June 30, 2023.

For details in relation to the unitholding pattern of the Trust, please see the section entitled "*Information Concerning the units*" on page 182.

LEGAL MATTERS

Cyril Amarchand Mangaldas does not make, or purport to make, any statement in this Information Memorandum and is not aware of any statement in this Information Memorandum which purports to be based on a statement made by any of them, and it makes no representation, express or implied, regarding, and to the extent permitted by law takes no responsibility for, any statement in or omission from this Information Memorandum.

INDEPENDENT ACCOUNTANTS

The Audited Financial Statements have been prepared in accordance with the requirements of the InvIT Regulations, Ind AS as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with the InvIT Regulations. The Audited Financial Statements included in this Information Memorandum have been audited by S R Batliboi & Co. LLP, the statutory auditors of the Trust, as stated in their audit report dated June 8, 2023 included in this Information Memorandum.

AUDITED FINANCIAL STATEMENTS

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INDEPENDENT AUDITOR'S REPORT

To the Unit holders of Indian Highway Concessions Trust

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying consolidated financial statements of Indian Highway Concessions Trust ("the Trust"), its subsidiaries (together referred to as "the Group") comprising of the consolidated Balance sheet as at March 31, 2023, the consolidated Statement of Profit and Loss, including Other Comprehensive Income, the consolidated Statement of Cash Flows and the consolidated Statement of Changes in Unit holders' equity for the year then ended, the consolidated Statement of Net Assets at fair value as at March 31, 2023, the consolidated statement of Total Return at fair value, the statement of Net Distributable Cash Flows ('NDCFs') of the Trust and each of its subsidiaries for the year/period then ended and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information (hereafter referred to as "consolidated financial statements").

In our opinion and to the best of our information and according to the explanations given to us and based on the consideration of reports of other auditors on separate audited financial statements and on the other financial information of the subsidiaries, the aforesaid consolidated financial statements give the information required by the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 as amended from time to time ('SEBI Regulations') including SEBI circular CIR/IMD/DF/127/2016 dated November 29, 2016 ('SEBI circular') in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations, of the state of affairs of the Group as at March 31, 2023, its consolidated Loss including Other Comprehensive Income, its consolidated Cash Flows and consolidated Statement of Changes in Unit holders' equity for the year ended on that date, its consolidated Net Assets at fair value as at March 31, 2023, its consolidated Total Return at fair value and the Net Distributable Cash Flows of the Trust and each of its subsidiaries for the year/period ended March 31, 2023.

Basis for Opinion

We conducted our audit of the consolidated financial statements in accordance with the Standards on Auditing (SAs) and other pronouncements issued by the Institute of Chartered Accountants of India (ICAI). Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Consolidated Financial Statements' section of our report. We are independent of the Trust in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India and we have fulfilled our other ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements.

Emphasis of Matters

a. We draw attention to note 44 of the consolidated financial statement which states that there are delays in completion of 67 Kms of toll project road on Chandikhole-Bhubaneshwar section ('Project Highway') and non-receipt of Completion Certificate in respect of Intangible Assets of the Trust Group as on date and the consequential uncertainty of potential penalties and/or termination of Concession Agreement and impairment of these assets.
b. We draw attention to Note 15(A)(V) of the consolidated financial statements, which describes the presentation of "Unit capital" as "Equity" to comply with InvIT Regulations and not as Compound Financial Instrument as would be required under Ind AS.

Our opinion is not modified in respect of above matters.

Other Information

The Management of Maple Infra InvIT Investment Manager Private Limited (the “Investment Manager”) is responsible for the other information. The other information comprises the information included in the Annual Report but does not include the consolidated financial statements and our auditor’s report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether such other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

The Annual report is not made available to us as at the date of this auditor's report. We have nothing to report in this regard.

Responsibility of Management for the Consolidated Financial Statements

The Management of the Investment Manager (‘the Management’) is responsible for the preparation of these consolidated financial statements that give a true and fair view of the consolidated financial position as at March 31, 2023, consolidated financial performance including other comprehensive income, consolidated cash flows and the consolidated movement of the unit holders’ equity for the year ended March 31, 2023, the consolidated net assets at fair value as at March 31, 2023, the consolidated total return at fair value and the net distributable cash flows of the Trust and each of its subsidiaries for the year ended March 31, 2023 in accordance with the requirements of the SEBI regulations, Indian Accounting Standards (Ind AS) as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations. The respective Board of Directors of the companies included in the Group are responsible for maintenance of adequate accounting records of safeguarding of the assets of the Group and preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate controls for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the consolidated financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated financial statements by the management, as aforesaid.

In preparing the consolidated financial statements, the Board of Director of the Investment Manager and the respective Board of Directors of the Companies included in the Group are responsible for assessing the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Management and respective Board of Director of the companies included in the Group are also responsible for overseeing the financial reporting process of the Group.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs and other pronouncements issued by ICAI will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal financial control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the Trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Group to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group of which we are the independent auditors and whose financial information we have audited, to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the consolidated financial statements of which we are the independent auditors. For the other entities included in the consolidated financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.

We communicate with those charged with governance of the Trust and such other entities included in the consolidated financial statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

We have performed procedures in accordance with the Regulation 13 (2) sub clause (e) of the InvIT Regulations, to the extent applicable.

Other Matter

We did not audit the financial statements and other financial information, in respect of two subsidiaries whose financial statements include total assets of Rs. 7,75,991.17 lakhs as at March 31, 2023, and total revenues of Rs. 32,958.30 lakhs and net cash outflows of Rs. 3,675.43 lakhs for the year ended on that date. These financial statement and other financial information have been audited by other auditors, which financial statements, other financial information and auditor's reports have been furnished to us by the management. Our opinion on the consolidated financial statements, in so far as it relates to the amounts and disclosures included in respect of these subsidiaries and our report in so far as it relates to the aforesaid subsidiaries is based solely on the reports of such other auditors.

Our opinion above on the consolidated financial statements, and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors.

Report on Other Legal and Regulatory Requirements

Based on our audit and on the consideration of report of the other auditors on separate financial statements and the other financial information of the subsidiaries as noted in the ‘other matter’ paragraph, we report that:

(a) We/the other auditors whose report we have relied upon have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

(b) The consolidated Balance Sheet and the consolidated Statement of Profit and Loss are in agreement with the books of account;

(c) In our opinion, the aforesaid consolidated financial statements comply with the Accounting Standards (Ind AS) and/or any addendum thereto as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended, to the extent not inconsistent with SEBI Regulations.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership Number: 501396
UDIN: 23501396BGYBPW6060

Place of Signature: Gurugram
Date: June 08, 2023

Indian Highway Concessions Trust

Audited consolidated financial statements for the year ended March 31, 2023

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	Note	March 31, 2023	March 31, 2022
ASSETS			
Non-current assets			
Property, plant and equipment	3	136.48	-
Intangible assets	4	7,61,687.51	-
Right of use asset	6(a)	105.84	-
Intangible assets under development	5	107.10	-
Financial assets			
(i) Other financial assets	8	39.26	-
Non-current tax assets	9	88.81	-
Other non-current assets	10	81.17	-
Total non-current assets (A)		**7,62,246.17**	**-**
Current assets			
Financial assets			
(i) Investments	7	3,430.72	-
(ii) Trade receivables	11	216.99	-
(iii) Cash & cash equivalents	12A	38,373.36	4.01
(iv) Other bank balances	13	32,184.49	-
(v) Other financial assets	8	1,006.85	-
Other current assets	14	2,111.65	8.00
Total current assets (B)		**77,324.06**	**12.01**
TOTAL ASSETS (A+B)		**8,39,570.23**	**12.01**
EQUITY AND LIABILITIES			
Equity			
Unit capital	15A	3,51,786.87	-
Other equity	15B	(15,677.61)	(350.15)
Total unitholders' equity (C)		**3,36,109.26**	**(350.15)**
LIABLITIES			
Non-current liabilities			
Financial liabilities			
(i) Borrowings	16	4,77,073.10	-
(ii) Lease liabilities	6(b)	93.38	-
Provisions	18	1,135.41	-
Total non-current liabilities (D)		**4,78,301.89**	**-**
Current liabilities			
Financial liabilities			
(i) Borrowings	16	4,830.25	30.00
(ii) Lease liabilities	6(b)	10.94	-
(iii) Trade payables	19		
a) Total outstanding dues of micro enterprises and small enterprises;		38.02	-

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	Note	March 31, 2023	March 31, 2022
b) Total outstanding dues of creditors other than micro enterprises and small enterprises		4,538.12	329.75
(iv) Other financial liabilities	17	4,632.34	0.70
Provisions	18	10,879.45	-
Other current liabilities	20	225.83	1.71
Current tax liabilities (net)	21	4.13	-
Total current liabilities (E)		**25,159.08**	**362.16**
Total Liabilities (F=D+E)		**5,03,460.97**	**362.16**
TOTAL EQUITY AND LIABILITIES (C+D+E)		**8,39,570.23**	**12.01**

Refer to note 2.3 for a summary of significant accounting policies.

The accompanying notes form an integral part of these consolidated financial statements.

As per our report of even date attached.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No.: 501396

Place: Gurugram
Date: June 8, 2023

Romesh Sobti
Chairman and Director
DIN:00031034
Place: London
Date: June 8, 2023

Anup Vikal
Chief Executive Officer
Place: Mumbai
Date: June 8, 2023

Ankit Dewan
Company Secretary and Compliance Officer
M. No.: A31131
Place: Mumbai
Date: June 8, 2023

Varun Mehta
Chief Financial Officer
Place: Mumbai
Date: June 8, 2023

All amounts in Rs. lakhs, unless otherwise stated)

Particulars	Note	March 31, 2023	March 31, 2022
INCOME			
Revenue from operations	22	31,897.18	-
Other income	23	2,030.60	-
Total income		**33,927.78**	-
EXPENSES			
Valuation expenses		24.19	2.50
Investment management fees	50	1,896.74	-
Project management fees	50	666.42	-
Trustee fees		8.85	7.50
Operating expenses	24	3,786.80	-
Payment to auditors	28B	204.66	54.96
Insurance and security expenses		397.04	-
Engineering, procurement, and construction cost ('EPC')		152.08	-
Employee benefits expense	25	358.71	-
Finance costs	26	20,966.09	14.79
Depreciation and amortization expense	27	11,859.73	-
Provision for major maintenance obligations	47	5,064.29	-
Other expenses	28A	3,463.57	96.48
Total expenses		**48,849.17**	**176.23**
Loss before tax		**(14,921.39)**	**(176.23)**
Tax expense	29		
i) Current tax		414.40	-
ii) Deferred tax		-	-
Total tax expense		**414.40**	-
Loss after tax		**(15,335.79)**	**(176.23)**
Other comprehensive income, net of tax			
Items that will not be reclassified to profit or loss			
Re-measurement losses on defined benefit obligations	30	8.33	-
Income tax relating to these items		-	-
Total comprehensive income/(loss) for the year		**(15,327.46)**	**(176.23)**
Profit/(loss) for the year		**(15,335.79)**	**(176.23)**
Attributable to:			
Unitholders		(15,335.79)	(176.23)
Other comprehensive income/(loss) for the year		**8.33**	-
Attributable to:			
Unitholders		8.33	-
Total comprehensive income/(loss) for the year		**(15,327.46)**	**(176.23)**
Attributable to:			
Unitholders		(15,327.46)	(176.23)
Earnings/(loss) per unit (Face value per unit is Rs. 100)			
Basic and Diluted (in Rs.)	31	**(8.68)**	-

All amounts in Rs. lakhs, unless otherwise stated)

Refer to note 2.3 for a summary of significant accounting policies.

The accompanying notes form an integral part of these consolidated financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of

Maple Infra InvIT Investment Manager Private Limited

(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta** Partner M. No.: 501396	**Romesh Sobti** Chairman and Director DIN:00031034	**Anup Vikal** Chief Executive Officer	**Ankit Dewan** Company Secretary and Compliance Officer M. No.: A31131	**Varun Mehta** Chief Financial Officer
Place: Gurugram	Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 8, 2023	Date: June 8,2023	Date: June 8,2023	Date: June 8,2023	Date: June 8,2023

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31, 2022
A. CASH FLOW FROM OPERATING ACTIVITIES		
Net loss before tax	**(14,921.39)**	**(176.23)**
Adjustments for:		
Depreciation and amortisation expense	11,859.73	-
Gain on change in fair value of investment in mutual funds	(152.20)	-
Sundry balances written back	(2.05)	-
Interest income on bank deposits	(1,718.29)	-
Receivables written-off	10.00	-
Provision for doubtful debts	9.63	-
Provision for major maintenance obligations	5,064.29	-
Finance costs	20,966.09	0.78
Operating profit/(loss) before changes	**21,115.81**	**(175.45)**
Adjustments for changes in working capital		
Increase/(Decrease) in trade payables	301.13	155.98
Increase/(Decrease) in other financial liabilities	46.90	-
Increase/(Decrease) in other current liabilities	(492.74)	1.48
Increase/(Decrease) in provisions	(1,400.17)	-
(Increase)/Decrease in trade receivables	289.59	-
(Increase)/Decrease in other current assets	(581.67)	(8.00)
(Increase)/Decrease in other non-current assets	53.50	-
(Increase)/Decrease in financial assets	(542.73)	-
Cash generated from operations	**18,789.62**	**(25.99)**
Income tax paid (net of refund)	(434.22)	-
Net cash flow generated from/(used in) operating activities	**18,355.40**	**(25.99)**
B. CASH FLOW FROM INVESTING ACTIVITIES		
Acquisition of property, plant and equipment	(46.49)	-
Proceeds from disposal of property, plant and equipment	0.09	-
Interest received on bank deposits	1,344.62	-
Payment for acquisition of subsidiary (net of cash acquired)	(21,279.21)	-
Investment in bank deposits (net)	(21,187.13)	-
Acquisition of intangible assets	(6,24,593.79)	-
Acquisition of right to use	(3.79)	-
Acquisition of intangible assets under development	(5.42)	-
Net cash flow used in investing activities	**(6,65,771.12)**	-
C. CASH FLOW FROM FINANCING ACTIVITIES		
Proceeds from issue of units	3,52,170.00	-
Unit issue expenses paid	(383.13)	-
Proceeds from long-term borrowings	4,86,636.00	-
Repayment on account of refinancing of loan	(1,01,148.00)	-
Repayment for subordinate loans (refer note 34)	(25,105.61)	-
Proceed from inter corporate deposit from related party	165.00	30.00
Repayment of inter corporate deposit from related party	(195.00)	-
Repayment of long-term borrowings	(5,738.06)	-
Repayment of lease liabilities	(4.87)	-

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31, 2022
Interest paid on inter corporate deposit from related party	(2.27)	-
Interest on bank borrowings paid	(18,844.44)	-
Other finance cost and processing charges paid	(1,764.55)	-
Net cash flow generated from financing activities	**6,85,785.07**	**30.00**
Net increase in cash and cash equivalents (A+B+C)	**38,369.35**	**4.01**
Cash and cash equivalents at the beginning of the year	4.01	-
Cash and cash equivalents at the end of the year (refer note 12A)	**38,373.36**	**4.01**

Notes-

1) Consolidated cash flow statement has been prepared under the 'Indirect Method' as set out in the Ind AS 7 'Statement of Cash Flows' as specified in the Companies (Indian Accounting Standards) Rules.
2) Cash and cash equivalents represent cash and bank balances.
3) Refer to note 12B for changes in liabilities arising from financing activities.
4) The Group did not have any cash flow changes arising from non-cash transactions from investing and financing activities.

Refer to note 2.3 for a summary of significant accounting policies.

The accompanying notes form an integral part of these consolidated financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
M. No.: 501396

Place: Gurugram
Date: June 8,2023

For and on behalf of the Board of Directors of

Maple Infra InvIT Investment Manager Private Limited

(as investment manager to Indian Highway Concessions Trust)

Romesh Sobti Chairman and Director DIN:00031034	**Anup Vikal** Chief Executive Officer	**Ankit Dewan** Company Secretary and Compliance Officer M. No.: A31131	**Varun Mehta** Chief Financial Officer
Place: London Date: June 8,2023	Place: Mumbai Date: June 8,2023	Place: Mumbai Date: June 8,2023	Place: Mumbai Date: June 8,2023

A Unit capital [refer note 15A]

Particulars	Number in lakhs	Amount
Balance as at April 01, 2021	-	-
Units issued during the year	-	-
Unit issue expenses	-	-
Balance as at March 31, 2022	-	-
Units issued during the year	3,521.70	3,52,170.00
Unit issue expenses	-	(383.13)
Balance as at March 31, 2023	**3,521.70**	**3,51,786.87**

B Other equity [refer note 15B]

Particulars	Retained Earnings	Total
Balance as at April 01, 2021	(173.92)	(173.92)
Loss for the year	(176.23)	(176.23)
Other comprehensive income/(loss) for the year	-	-
Less: Distribution during the year*	-	-
Balance as at March 31, 2022	**(350.15)**	**(350.15)**
Less: Loss for the year	(15,335.79)	(15,335.79)
Other Comprehensive income/(loss) for the year	8.33	8.33
Less: Distribution during the year*	-	-
Balance as at March 31, 2023	**(15,677.61)**	**(15,677.61)**

* The Trust has not made any distribution during the current year and the previous year.

Refer to note 2.3 for a summary of significant accounting policies.

The accompanying notes form an integral part of these consolidated financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of

Maple Infra InvIT Investment Manager Private Limited

(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No.: 501396

Place: Gurugram
Date: June 8, 2023

Romesh Sobti
Chairman and Director
DIN:00031034

Place: London
Date: June 8,2023

Anup Vikal
Chief Executive Officer

Place: Mumbai
Date: June 8,2023

Ankit Dewan
Company Secretary and Compliance Officer
M. No.: A31131

Place: Mumbai
Date: June 8,2023

Varun Mehta
Chief Financial Officer

Place: Mumbai
Date: June 8,2023

(All amounts in Rs. lakhs, unless otherwise stated)

Disclosures pursuant to SEBI Circulars
(SEBI Circular no. CIR/IMD/DF/114/2016 dated October 20,2016 and No. CIR/IMD/DF/127/2016 dated November 29, 2016 issued under the SEBI InvIT Regulations)

A) Statement of Net Distributable Cash Flows (NDCFs)

i. Indian Highway Concessions Trust (InvIT)

	Particulars	Year Ended March 31, 2023	Year Ended March 31, 2022
	Cash flows received from the SPV's	-	-
Add:	Proceeds from sale of the Project SPV not distributed pursuant to an earlier plan to re-invest, or if such proceeds are not intended to be invested within one year from the date of such sale.	-	-
Add:	Any other income accruing at the Trust level and not captured above, including but not limited to interest/return on surplus cash, if any, invested by the Trust.	969.48	-
	Total cash inflow at the Trust level (A)	**969.48**	-
Less:	Costs/retention associated with sale of the Project SPV: (a) related debts settled or due to be settled from sale proceeds of SPV; (b) transaction costs paid on sale of the Project SPV; and (c) capital gains taxes on sale of the Project SPV, or other investments of the Trust.	-	-
Less:	Any claims/deferred consideration/other amounts payable under the transaction documents with the Seller(s) of the SPVs	-	-
Less:	Any fees, interest and expense incurred at the Trust level, including but not limited to the fees of the Investment Manager (IM) and the Trustee	(4,149.61)	-
Less:	Any expenditure reimbursed to Investment Manager or Sponsor which the Investment Manager incurred on behalf of Trust	(367.23)	-
Less:	Proceeds reinvested or planned to be reinvested in accordance with SEBI InvIT Regulations and Future Assets Acquisition Policy	-	-
Less:	Repayment of external debt at the Trust level (net of any new debt raised or refinancing of existing debt)	(195.00)	-
Less:	Any amount to be kept aside for DSRA, MMRA or any other reserve requirements as required by lenders;	-	-
Less:	Income tax (if applicable) at the standalone Trust level and payment of other statutory dues	(414.40)	-
Less:	Amount invested in or lent to any of the Project SPVs funded through internal accruals of the Trust, to the extent allowed under the SEBI InvIT Regulations. Such amount shall be decided by the IM Board.	-	-
Less:	Payment of all amounts to the Sponsor pursuant to, and in accordance with, the Sale and Transfer Agreement, and Preliminary Placement Memorandum or Placement Memorandum	-	-
Less:	Any provision or reserve deemed necessary by the IM Board for expenses which may be due in the next quarter but for which there may not be commensurate amounts available by the date such expenses become due.	-	-
Less:	Any other reserve deemed necessary by the IM Board for infusing funds into the SPVs to discharge their liabilities.	-	-
Less:	Any other adjustment to be undertaken by the IM Board to ensure that there is no double counting of the same item for the above calculations	-	-
	Total cash outflows / retention at the Trust level (B)	**(5,126.24)**	-
	Net Distributable Cash Flows (C) = (A+B)	**(4,156.76)**	-

(All amounts in Rs. lakhs, unless otherwise stated)

ii. Shree Jagannath Expressway Private Limited (SJEPL)

	Particulars	Period from June 29, 2022 to March 31, 2023
	Loss after tax as per Statement of profit and loss (standalone) **(A)**	(7,155.73)
Add:	Depreciation and amortisation as per statement of profit and loss	4,010.85
Add:	Any amount received from tolls or annuities not recognised as income for the purposes of working out the profit after tax	-
Less:	Any amount payable to concession granting authority as revenue share or premium if such amount has not already been considered for the determination of profit after tax	-
Add:	Add/Less: Decrease/(increase) in working capital	1,772.75
Add:	Interest accrued on loans (if any) from Trust;	2,865.05
Add:	Amount invested by the Trust in the Project SPV for service of debt or interest, through internal accruals to the extent allowed under the SEBI InvIT Regulations.	-
Less:	Any amount to be kept aside for DSRA, MMRA or any other reserve requirements as required by lenders;	(2,131.23)
Add:	Proceeds from • sale of fixed assets (including investments) • repayment of any loans provided to any other party, to the extent the same are not already considered in calculation of Profit After Tax ‘	-
Add:	net amount (i.e. after deducting the amount paid to third party) received from settlement of claim from NHAI or from any engineering, procurement and construction contractors to the extent not already considered in profit after tax	-
Add:	amount released from DSRA/MMRA or any other reserve in lieu of providing bank guarantee	-
Add/Less:	Any other item of non-cash expense / non-cash income (net of actual cash flows for these items) or any other income/expense not considered for the calculation of profit after tax, if deemed necessary by the Investment Manager, after the InvIT Closing Date.	-
Less:	Repayment of external debt (principal) / redeemable preference shares / debentures, etc., if deemed necessary by the Investment Manager, net of any debt raised by refinancing of existing debt or/and any new debt raised	(3,306.62)
Less:	Payment toward • Capital Expenditure incurred on the projects (if any) including payment to contractors for their claims • payment of any existing claims by the Project SPV (only to the extent such amounts are not already covered in the Capital Expenditure item mentioned above).’	(175.30)
Less:	Any provision or reserve deemed necessary by the IM for expenses which may be due in the next quarter but for which there may not be commensurate amounts available by the date such expenses become due.	-
Add/ (less):	Any other adjustment to be undertaken by the IM Board to ensure that there is no double counting of the same item for the above calculations	249.90
	Total Adjustments (B)	**3,285.40**
	Net Distributable Cash Flows (C)=(A+B)	**(3,870.33)**

(All amounts in Rs. lakhs, unless otherwise stated)

iii. NCR Eastern Peripheral Expressway Private Limited (NCREPE)

	Particulars	Period from April 25, 2022 to March 31, 2023
	Loss after tax as per Statement of profit and loss (standalone) **(A)**	(18,634.66)
Add:	Depreciation and amortisation as per statement of profit and loss	7,062.62
Add:	Any amount received from tolls or annuities not recognised as income for the purposes of working out the profit after tax	-
Less:	Any amount payable to concession granting authority as revenue share or premium if such amount has not already been considered for the determination of profit after tax	-
Add:	Add/Less: Decrease/(increase) in working capital	1,198.35
Add:	Interest accrued on loans (if any) from Trust;	12,008.36
Add:	Amount invested by the Trust in the Project SPV for service of debt or interest, through internal accruals to the extent allowed under the SEBI InvIT Regulations.	-
Less:	Any amount to be kept aside for DSRA, MMRA or any other reserve requirements as required by lenders;	(8,302.00)
Add:	Proceeds from • sale of fixed assets (including investments) • repayment of any loans provided to any other party, to the extent the same are not already considered in calculation of Profit After Tax ‘	-
Add	net amount (i.e., after deducting the amount paid to third party) received from settlement of claim from NHAI or from any engineering, procurement and construction contractors to the extent not already considered in profit after tax	-
Add:	amount released from DSRA/MMRA or any other reserve in lieu of providing bank guarantee	-
Add/ Less:	Any other item of non-cash expense / non-cash income (net of actual cash flows for these items) or any other income/expense not considered for the calculation of profit after tax, if deemed necessary by the Investment Manager, after the InvIT Closing Date.	-
Less:	Repayment of external debt (principal) / redeemable preference shares / debentures, etc., if deemed necessary by the Investment Manager, net of any debt raised by refinancing of existing debt or/and any new debt raised	(193.00)
Less:	Payment toward • Capital Expenditure incurred on the projects (if any) including payment to contractors for their claims • payment of any existing claims by the Project SPV (only to the extent such amounts are not already covered in the Capital Expenditure item mentioned above).	(32.48)
Less:	Any provision or reserve deemed necessary by the IM for expenses which may be due in the next quarter but for which there may not be commensurate amounts available by the date such expenses become due.	-
Less:	Any other adjustment to be undertaken by the IM Board to ensure that there is no double counting of the same item for the above calculations	(2,666.71)
	Total Adjustments (B)	**9,075.14**
	Net Distributable Cash Flows (C)=(A+B)	**(9,559.52)**

Note- The NDCFs appearing in (ii) and (iii) above have been extracted from audited financial statements of respective subsidiary companies, which have been audited by a firm of Chartered Accountants other than S.R. Batliboi & Co LLP.

(B) Statement of Net Assets at Fair Value

Particulars	As on March 31, 2023		As on March 31, 2022	
	Book value	Fair value	Book value	Fair value
(A) Assets	8,39,570.23	10,67,854.68	12.01	12.01
(B) Liabilities	5,03,460.97	5,03,460.97	362.16	362.16
(C) Net Assets (A-B)	**3,36,109.26**	**5,64,393.71**	**(350.15)**	**(350.15)**
(D) Number of units (in lakhs)	3,521.70	3,521.70	-	-
(E) Net Asset Value (C/D)	95.44	160.26	-	-

Notes-

1) As the units have been issued during the year ended March 31, 2023, disclosures in respect of number of units and NAV per unit have not been presented in comparative period for the year ended March 31, 2022.
2) Fair values of assets as disclosed above are based solely on the valuation report of the independent valuer appointed under InvIT regulations and has been relied upon by the auditors.
3) Fair values of assets have been arrived at by the valuer after adding the cash and cash equivalents, investments, etc in the enterprise value.

Project wise breakup of fair value of total assets

Particulars	As on March 31, 2023	As on March 31, 2022
Shree Jagannath Expressways Private Limited ('SJEPL')	2,67,706.96	-
NCR Eastern Peripheral Expressway Private Limited ('NCREPE')	7,59,961.97	-

(C) Statement of total return at fair value

Particulars	For the year ended March 31, 2023	For the year ended March 31, 2022
Total comprehensive income (as per the statement of profit and loss)	(15,327.46)	(176.23)
Add/Less:		
Other changes in fair value (e.g., in investment property, property, plant & equipment (if cost model is followed) not recognised in total comprehensive income)	-	-
Total return	**(15,327.46)**	(176.23)

As both the subsidiaries have been acquired in the current year and previous year assets included only current assets, there is no change in the fair value from the previous year which has been reported above.

In the above statement, other changes in fair value for the year ended March 31, 2023 has been computed based on the difference in fair values of total assets as at March 31, 2023 and as at March 31, 2022 which are based solely on the valuation report of the independent valuer appointed under InvIT Regulations and has been relied upon by the auditors.
The accompanying notes form an integral part of these consolidated financial statements.
As per our report of even date attached.

For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of

Maple Infra InvIT Investment Manager Private Limited

(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No.: 501396

Place: Gurugram
Date: June 8,2023

Romesh Sobti
Chairman and Director
DIN:00031034
Place: London
Date: June 8,2023

Anup Vikal
Chief Executive Officer
Place: Mumbai
Date: June 8,2023

Ankit Dewan
Company Secretary and Compliance Officer
M.No.: A31131
Place: Mumbai
Date: June 8,2023

Varun Mehta
Chief Financial Officer
Place: Mumbai
Date: June 8,2023

1. Group information and nature of operations

The consolidated financial statements comprise financial statements of Indian Highway Concessions Trust ('the Trust') and its subsidiaries (collectively, the 'Group') for the year ended March 31, 2023. The Trust was setup as an irrevocable trust under the Indian Trust Act, 1882 pursuant to an Indenture of Trust dated November 06, 2019 which was subsequently amended by First Amended and Restated Indenture of Trust' dated December 19, 2019 and further amended on October 4, 2021. The Trust was registered as an Infrastructure Investment Trust ('InvIT') with Securities Exchange Board of India ('SEBI') under the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 vide Certificate of Registration (IN/InvIT/19-20/0013) dated February 24, 2020.

Maple Highways Pte. Ltd. (the 'Sponsor') is the sponsor of the Trust. The Trust has been settled for an initial sum of Rs. 0.10 lakhs. The trustee to the Trust is Axis Trustee Services Limited (the 'Trustee') and The investment manager for the Trust is Maple Infra InvIT Investment Manager Private Limited (the 'Investment Manager') and the project manager to the SPVs is Maple Highway Project Management Private Limited (the 'Project Manager').

The Trust has been formed to invest in infrastructure assets primarily in the road sector in India through special purpose vehicles with the objective of producing stable and sustainable distributions to unitholders.

As at March 31, 2023, Group has the following project entities ('Special Purpose Vehicles' or 'SPVs') which have road infrastructure projects:

S.No.	Name of Entity	Country of Incorporation	Percentage holding	Date of acquisition/ incorporation
1	Shree Jagannath Expressways Private Limited ('SJEPL')	India	100 %	June 28, 2022
2	NCR Eastern Peripheral Expressway Private Limited ('NCREPE')	India	100 %	April 25, 2022

The registered office of the Investment Manager is 6th Floor, Chanakya, off. Ashram Road, Ahmedabad- 380009, Gujarat.
The financial statements for the year ended March 31,2023 were approved for issue by the Board of Directors of the Investment Manager on June 8, 2023.

2. Significant accounting policies

2.1 Basis of preparation and presentation

These consolidated financial statements are the financial statements of the Trust and comprise of Consolidated Balance Sheet as at March 31, 2023, the Consolidated Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Consolidated Cash Flow, the Consolidated Statement of Changes in Unitholders' Equity for the year then ended, the Statement of Net Assets at fair value as at March 31, 2023, the Statement of Total Returns at Fair Value, the Statement of Net Distributable Cash Flows ('NDCFs') for the year ended March 31, 2023 and a summary of significant accounting policies and other explanatory notes in accordance with Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended), prescribed under Section 133 of the Companies Act, 2013 ('Ind AS') read with SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and the circulars issued thereunder ('InvIT Regulations') and other accounting principles generally accepted in India.

The consolidated financial statements are presented in India Rupees (Rs.) which is also the functional currency of the Group. All values are rounded to the nearest lakhs, unless otherwise indicated. Certain amounts that are required to be disclosed and do not appear due to rounding-off are expressed as 0.0.

The preparation of consolidated financial statements is in conformity with the generally accepted accounting principles in India and it requires the Investment Manager to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the consolidated financial statements and the results of operations during the reporting year. Although these estimates are based upon the Investment Manager's best knowledge of current events and actions, the actual results could differ from these estimates. Estimates and underlying assumptions are reviewed on a periodic basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

These consolidated financial statements correspond to classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. These consolidated financial statements have been prepared on an accrual basis and historical cost convention except for certain financial assets and liabilities (refer accounting policy regarding financial instruments) which have been measured at fair value.

The Group has prepared the financial statements on the basis that it will continue to operate as a going concern.

2.2 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Trust and its subsidiaries as at March 31, 2023. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee),
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights result in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee,
- Rights arising from other contractual arrangements,
- The Group's voting rights and potential voting rights, and
- The size of the Group's holding of voting rights relative to the size and dispersion of the holdings of the other voting rights holders.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

The consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances. If a member of the group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to that group member's financial statements in preparing the consolidated financial statements to ensure conformity with the group's accounting policies.

The financial statements of all entities used for the purpose of consolidation are drawn up to the same reporting date as that of the parent, i.e., the year ended on March 31, 2023.

Consolidation procedure:

a. Combine like items of assets, liabilities, equity, income, expenses and cash flows of the parent with those of its subsidiaries. For this purpose, income and expenses of the subsidiary are based on the amounts of the assets and liabilities recognised in the consolidated financial statements at the acquisition date.
b. Offset (eliminate) the carrying amount of the parent's investment in each subsidiary and the parent's portion of equity of each subsidiary. Business combinations policy explains how to account for any related goodwill.
c. Eliminate in full, intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the group (profits or losses resulting from intragroup transactions that are recognised in assets, such as inventory and fixed assets, are eliminated in full). Intragroup losses may indicate an impairment that requires recognition in the consolidated financial statements. Ind AS 12 Income Taxes applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the unitholders of the Trust and to the noncontrolling interests (if any), even if this results in the non-controlling interests having a deficit balance. Non-controlling interest represents that part of the total comprehensive income and net assets of subsidiaries attributable to interests which are not owned, directly or indirectly, by the Trust and are excluded in the consolidated financial statements from the total comprehensive income and net assets. As at 31 March 2023, there is no non-controlling interest.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies. The consolidated financial statements have been presented to the extent possible, in the same manner as the Trust's standalone financial statements. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:

- Derecognises the assets (including goodwill) and liabilities of the subsidiary at their carrying amounts,
- Derecognises the carrying amount of any non-controlling interests,
- Derecognises the cumulative translation differences recorded in equity,
- Recognises the fair value of the consideration received,
- Recognises the fair value of any investment retained,
- Recognises any surplus or deficit in profit or loss,
- Reclassifies the parent's share of components previously recognised in OCI to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

2.3 Summary of significant accounting policies

a. Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred measured at acquisition date fair value and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets include an input and a substantive process that together significantly contribute to the ability to create outputs. The acquired process is considered substantive if it is critical to the ability to continue producing outputs, and the inputs acquired include an organised workforce with the necessary skills, knowledge, or experience to perform that process or it significantly contributes to the ability to continue producing outputs and is considered unique or scarce or cannot be replaced without significant cost, effort, or delay in the ability to continue producing outputs.

At the acquisition date, the identifiable assets acquired, and the liabilities assumed are recognised at their acquisition date fair values. For this purpose, the liabilities assumed include contingent liabilities representing present obligation and they are measured at their acquisition fair values irrespective of the fact that outflow of resources embodying economic benefits is not probable. However, the following assets and liabilities acquired in a business combination are measured at the basis indicated below:

- Deferred tax assets or liabilities, and the liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with Ind AS 12 *Income Taxes* and Ind AS 19 *Employee Benefits* respectively.
- Potential tax effects of temporary differences and carry forwards of an acquiree that exist at the acquisition date or arise as a result of the acquisition are accounted in accordance with Ind AS 12 *Income Taxes*.
- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share – based payments arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with Ind AS 102 *Share-based Payment* at the acquisition date.
- Assets (or disposal groups) that are classified as held for sale in accordance with Ind AS 105 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that Standard.
- Reacquired rights are measured at a value determined on the basis of the remaining contractual term of the related contract. Such valuation does not consider potential renewal of the reacquired right.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss or OCI, as appropriate.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of Ind AS 109 *Financial Instruments*, is measured at fair value with changes in fair value recognised in profit or loss in accordance with Ind AS 109 *Financial Instruments*. If the contingent consideration is not within the scope of Ind AS 109 *Financial Instruments*, it is measured in accordance with the appropriate Ind AS and is recognised in profit and loss. Contingent consideration that is classified as equity is not re-measured at subsequent reporting dates and subsequently its settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in OCI and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the entity recognises the gain directly in equity as capital reserve, without routing the same through OCI.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units. In the event of cessation of operations of a subsidiary, the unimpaired goodwill is written off fully.

A cash generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognised in profit or loss. An impairment loss recognised for goodwill is not reversed in subsequent periods.

Where goodwill has been allocated to a cash generating unit and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed of in these circumstances is measured based on the relative values of the disposed of operation and the portion of the cash-generating unit retained.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed one year from the acquisition date.

Asset Acquisition

If the acquisition of an asset or a group of assets does not constitute a business, the Group identifies and recognizes the individual identifiable assets acquired including those assets that meet the definition of, and recognition criteria for, intangible assets in Ind AS 38, Intangible Assets and liabilities assumed. The cost of the group is allocated to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase and no goodwill is recognized.

Allocation of the cost of the group is done as follows:

For any identifiable asset or liability initially measured at an amount other than cost, Group initially measures that asset or liability at the amount specified in the applicable Ind AS Standard. The Group deducts from the transaction price of the group the amounts allocated to the assets and liabilities initially measured at an amount other than cost, and then allocates the residual transaction price to the remaining identifiable assets and liabilities based on their relative fair values at the date of the acquisition.

b. Current and non-current assets

An asset is classified as 'current' when it satisfies any of the following criteria:

i) Expected to be realised or intended to be sold or consumed in normal operating cycle; or
ii) Held primarily for the purpose of trading; or
iii) Expected to be realised within twelve months after the reporting period; or
iv) Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as 'non-current'.

Deferred tax assets are classified as 'non-current asset'.

c. Current and non-current liabilities

A liability is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be settled in the Trust's normal operating cycles; or
ii) it is held primarily for the purpose of being traded; or
iii) it is due to be settled within twelve months after the reporting date; or
iv) the Trust does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

All other liabilities are classified as 'non-current'.

Deferred tax liabilities are classified as 'non-current liabilities'.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The normal operating cycle of the Trust is considered as 12 months.

d. Property, plant and equipment

Property, plant and equipment are stated at cost net of tax/duty credit availed, less accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced at intervals, the Group derecognizes the replaced part, and recognises the new part with its own associated useful life and it is depreciated accordingly. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Property, plant and equipment are derecognised, either on disposal or when retired from active use or when no future economic benefits are expected from its use. Any gain or loss arising on de-recognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of profit and loss when the asset is derecognised. Depreciation charge for impaired assets is adjusted in future periods in such a manner that the revised carrying amount of the asset is allocated over its remaining useful life.

The Group reviews the estimated residual values and expected useful lives of assets at least annually. In particular, the Group considers the impact of health, safety and environmental legislation in its assessment of expected useful lives and estimated residual values.

Freehold land is measured at cost less impairment losses, if any.

The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year end and adjusted prospectively, if appropriate.

Depreciation on assets (other than freehold land and assets under construction which are not depreciated) has been provided on a straight-line basis at the useful lives specified in the Schedule II of the Companies Act, 2013. Depreciation on additions/ deductions is calculated pro-rata from/ to the period of additions/ deductions. The useful life as prescribed under Schedule II of Companies Act 2013 is as below:

Category	Life
Leasehold improvement	As per lease period
Furniture & Fixtures	10 years
Vehicles	8 years
Office Equipment	5 years
Electrical Installations	10 years
Computer & Peripherals	3 years
Toll Booths	5 years

e. Intangible assets

Intangible assets under Service Concession Arrangements (Appendix D to Ind AS 115 – Revenue from contracts with customers) – 'Toll Collection Rights'

Under Appendix D to Ind AS 115 - 'Service Concession Arrangement' these arrangements are accounted for based on the nature of the consideration. The intangible asset model is used to the extent the Group receives a right to charge users of the toll road. The financial asset model is used when the Group has an unconditional right to receive cash for the construction services. Intangible assets arising from a service concession arrangement are recognized when the Group has a right to charge for usage of the concession infrastructure. Toll collection rights are capitalized as intangible assets upon completion of the project at the cumulative construction costs plus obligation towards negative grants and additional concession fee payable to National Highways Authority of India ('NHAI'), if any. Till the completion of the project, the same is recognised as intangible assets under development. Extension of concession period by the authority in compensation for claims made by the Group are capitalised as part of toll collection rights on acceptance of the claim. An intangible asset received as consideration for providing construction or upgrade services in a service concession arrangement is measured at fair value on initial recognition by references to the fair value of the services provided.

The Group constructs or upgrades infrastructure (construction services) used to provide a public service and operates and maintains that infrastructure (operation services) for a specified time as per the concession arrangement.

The concession arrangement sets out rights and obligations related to the infrastructure and the service to be provided. The right to receive consideration gives rise to an intangible asset (i.e., right to charge users of the toll road) accordingly, the intangible asset model is applied. Grant received including but not limited to equity support from NHAI, is considered as a part of total outlay of the construction project and it is simultaneously reduced from the cost of acquisition of the intangible asset.
The estimated useful lives of the intangible asset in a service concession arrangement are the period from when the SPV is able to charge the public for the use of the infrastructure till the end of the concession period.

Amortization of toll collection rights

Toll collection rights in respect of road projects are amortized over the period of concession using the weighted average of expected future tollable traffic during the balance concession period to reflect the pattern in which the asset's economic benefits will be consumed. At each balance sheet date, the projected traffic for the balance toll period is reviewed by the management. If there is any change in the projected traffic from previous estimates, the amortisation of toll collection rights is changed prospectively to reflect any changes in the estimates.

Other intangible assets

Intangible assets acquired separately are measured at cost on initial recognition. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit and loss in the period in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Intangible assets with indefinite useful lives are not amortised, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.
An intangible asset is derecognised upon disposal (i.e., at the date the recipient obtains control) or when no future economic benefits are expected from its use or disposal. Any gain or loss arising upon derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit and loss when the asset is derecognised.

The useful life for the intangible assets is as under:

Category	Life
Toll collection rights	As per concession period
Computer software	3 years

f. Intangible assets under development

Intangible assets under development includes direct and indirect expenditure incurred for the construction and upgradation of Highway Project (toll road assets) and costs incidental and related thereto.

All expenses which are capital in nature and directly relatable to development of highway project incurred up to the project completion/commencement of commercial operations/confirmation of project completion by Independent Engineer ('IE') or NHAI are included under intangible assets under development. These expenses are transferred to intangible assets upon completion and confirmation of completion of project highway from IE/NHAI ('COD').

The net collection from tolling operations during the construction period after deduction of allocable costs is adjusted from the total cost incurred on intangible asset under development.

The transaction price of an intangible asset received as consideration for providing construction services in a service concession arrangement is estimated by reference to the transaction price of the construction services. The transaction price is calculated as the estimated cost of construction. The Group does not recognize any margin on construction services. When the Group receives an intangible asset and a financial asset as a consideration for providing services in a service concession arrangement, the Group estimates the transaction price of the intangible asset as the difference between the cost of construction services provided less transaction price of the asset received.

g. Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(i) Financial assets

<u>Initial recognition and measurement</u>

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial assets contractual cash flow characteristics and the Trust's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under Ind AS 115. Refer to the accounting policies in section (h) Revenue recognition.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'Solely Payments of Principal and Interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at fair value through OCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement financial assets are classified in four broad categories:

- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through other comprehensive income (FVTOCI) with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortised cost (debt instruments)

A ‘financial asset’ is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are ‘Solely Payments of Principal and Interest (SPPI)’ on the principal amount outstanding.
This category is the most relevant to the Group. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the profit or loss. The losses arising from impairment are recognised in the profit or loss. The Group’s financial assets at amortised cost includes trade receivables and other financial assets.

Financial assets at fair value through OCI (FVTOCI) (debt instruments)

A ‘financial asset’ is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset’s contractual cash flows represent SPPI.

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. For debt instruments, at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value changes recognised in OCI is reclassified from the equity to profit or loss.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under Ind AS 32 Financial Instruments: Presentation. The classification is determined on an instrument-by-instrument basis.

Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS103 applies are classified as at FVTPL.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit and loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the balance sheet at fair value with net changes in fair value recognised in the statement of profit and loss.

This category includes derivative instruments and listed equity investments which the Trust had not irrevocably elected to classify at fair value through OCI. Dividends on listed equity investments are recognised in the statement of profit and loss when the right of payment has been established.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Trust 's balance sheet) when:

- The rights to receive cash flows from the asset have expired, or
- The Trust has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement and either;
  (a) the Trust has transferred substantially all the risks and rewards of the asset, or
  (b) the Trust has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group’s continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

Expected credit losses (ECLs) are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Trust does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

(ii) Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group’s financial liabilities include trade and other payables, loans and borrowings.

Subsequent measurement

For purposes of subsequent measurement, financial liabilities are classified in two categories:
- Financial liabilities at fair value through profit or loss
- Financial liabilities at amortised cost (loans and borrowings)

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Trust that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109.

Gains or losses on liabilities held for trading are recognised in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ losses are not subsequently transferred to P&L. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit and loss. The Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (loans and borrowings)

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.

This category generally applies to borrowings.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit and loss.

Reclassification of financial assets

The Group determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those assets. Changes to the business model are expected to be infrequent. The Group's management determines change in the business model as a result of external or internal changes which are significant to the Group's operations. Such changes are evident to external parties. A change in the business model occurs when the trust group either begins or ceases to perform an activity that is significant to its operations. If the Group reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The Group does not restate any previously recognised gains, losses (including impairment gains or losses) or interest.

The following table shows various reclassification and how they are accounted for:

Original classification	Revised classification	Accounting treatment
Amortised cost	FVTPL	Fair value is measured at reclassification date. Difference between previous amortized cost and fair value is recognised in profit or loss.
FVTPL	Amortised Cost	Fair value at reclassification date becomes its new gross carrying amount. EIR is calculated based on the new gross carrying amount.
Amortised cost	FVTOCI	Fair value is measured at reclassification date. Difference between previous amortised cost and fair value is recognised in OCI. No change in EIR due to reclassification.
FVTOCI	Amortised cost	Fair value at reclassification date becomes its new amortised cost carrying amount. However, cumulative gain or loss in OCI is adjusted against fair value. Consequently, the asset is measured as if it had always been measured at amortised cost.
FVTPL	FVTOCI	Fair value at reclassification date becomes its new carrying amount. No other adjustment is required.
FVTOCI	FVTPL	Assets continue to be measured at fair value. Cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss the reclassification date.

Offsetting of financial instruments

Financial assets and financial liabilities are off set, and the net amount is reported in the consolidated balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

h. Revenue recognition

Construction services
Revenue related to construction or upgrade services under a service concession arrangement (refer note 39) is recognised based on the stage of completion of the work performed, consistent with the Group's accounting policy on recognising revenue on construction contracts. Operation or service revenue is recognised in the period in which the services are provided by the Group.

Contract revenue for fixed price contracts is recognised only to the extent of cost incurred that it is probable will be recoverable till such time the outcome of the job cannot be ascertained reliably. When the outcome of the contract is ascertained reliably, contract revenue is recognised at cost of work performed on the contract plus proportionate margin, using the percentage of completion method. Percentage of completion is the proportion of cost of work performed to-date, to the total estimated contract costs.

Fee collection
Fee collection from the users of the carriageway is recognised on actual collection of toll revenue as per the concession agreement. Revenue from electronic toll collection is recognised on accrual basis. Revenue from sale of smart card is recognised as and when the cards are issued to the users.

Change of scope services, utility shifting services (including supervision) and other claims
Change of scope services includes services performed for NHAI other than mentioned in a service concession arrangement. Revenue related to change of scope services, utility shifting services, its supervision and other claims (covid relief etc.) are accounted for when there is certainty of realization and can be measured reliably.

Interest income
For all financial instruments measured at amortized cost, interest income is recorded using effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instruments or a shorter period, where appropriate, to the net carrying amount of the financial asset. Interest income is included in other income in the statement of profit and loss.

Other income

Other income includes interest on term deposits with banks, gain on sale of investments, insurance proceeds and other miscellaneous income. Other income is recognised when right to receive is established.

Contract balances

a. Trade receivables

A receivable is recognised if an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).Refer to accounting policies of financial assets in section (g) Financial instruments – initial recognition and subsequent measurement.

b. Contract liabilities

A contract liability is recognised if a payment is received, or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

i. Employee benefits

Employee benefits include provident fund, gratuity, compensated absences, etc..

(i) Short term employee benefits

All employee benefits falling due wholly within twelve months of rendering the service are classified as short term employee benefits. The benefits like salaries, wages, short term compensated absences etc. and the expected cost of bonus, ex-gratia are recognized in the period in which the employee renders the related service.

(ii) Post-employment benefits

a) Defined contribution plans: The obligation to employee's provident fund is a defined contribution plan. The contribution paid/payable is recognized in the period in which the employee renders the related service. The Group has defined contribution plans where the Group pays pre-defined amounts and does not have any legal or constructive obligation to pay additional sums for post-employment benefits.

b) Defined benefit plans: The obligation towards gratuity is a defined benefit plan. The present value of the obligation under such defined benefit plans is determined based on actuarial valuation using the Projected Unit Credit Method, which recognizes each period of service as giving rise to additional unit of employee benefit entitlement and measures each unit separately to build up the final obligation as per Ind AS 19 'Employee Benefits'.

   The obligation is measured at the present value of the estimated future cash flows. The discount rates used for determining the present value of the obligation under defined benefit plans, is based on the market yields on Government securities as at the Balance sheet date, having maturity periods approximating to the terms of related obligations.

   Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the balance sheet with a corresponding debit or credit to retained earnings through other comprehensive income in the period in which they occur. Remeasurements are not reclassified to the statement of profit and loss in subsequent periods.

   Past service costs are recognised in profit or loss on the earlier of:

   - The date of the plan amendment or curtailment, and
   - The date that the Group recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognises the following changes in the net defined benefit obligation as an expense in the Consolidated statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements; and
- Net interest expense or income.

(iii) Long term employee benefits

The obligation for long term employee benefits such as long-term compensated absences is recognized in the same manner as in the case of defined benefit plans as mentioned in (ii) (b) above.

j. Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies single recognition and measurement approach is applied for all leases, except for short-term leases and leases of low-value assets. The Group applies the lease of low-value asset recognition exemption to leases that are considered to be low value. Lease payments on leases of low-value asset are recognised as expense on a straight-line basis over the lease term.

Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. Refer to the accounting policies in section (l) impairment of non-financial assets.

Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset is classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

k. Accounting for taxes on income

Current income tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date. Current income tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in equity). The Investment Manager periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the balance sheet approach on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax asset is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

In assessing the recoverability of deferred tax assets, the Group relies on the same forecast assumptions used elsewhere in the financial statements and in other management reports, which, among other things, reflect the potential impact of climate-related development on the business, such as increased cost of production as a result of measures to reduce carbon emission.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognised subsequently if new information about facts and circumstances change. Acquired deferred tax benefits recognised within the measurement period reduce goodwill related to that acquisition if they result from new information obtained about facts and circumstances existing at the acquisition date. If the carrying amount of goodwill is zero, any remaining deferred tax benefits are recognised in OCI/ capital reserve depending on the principle explained for bargain purchase gains. All other acquired tax benefits realised are recognised in profit or loss.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

l. Impairment of non-financial assets

The Group assesses as at each balance sheet date, whether there is an indication that an asset may be impaired and also whether there is an indication of reversal of impairment loss recognised in the previous periods. If any indication exists, or when annual impairment testing for an asset is required, if any, the Group determines the recoverable amount and impairment loss is recognised when the carrying amount of an asset exceeds its recoverable amount.

Recoverable amount is determined:

- In the case of an individual asset, at the higher of the fair value less cost to sell and the value in use; and
- In the case of cash generating unit (a pool of assets that generates identified, independent cash flows), at the higher of the cash generating unit's fair value less cost to sell and the value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations, including impairment on inventories, are recognised in profit and loss section of the statement of profit and loss.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset’s or CGU’s recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset’s recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit and loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

m. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

n. Provisions, contingent liabilities and contingent assets

(a) Provisions are recognized for liabilities that can be measured only by using a substantial degree of estimation, if

i. the Group has a present obligation as a result of a past event.
ii. a probable outflow of resources embodying economic benefits is expected to settle the obligation, and
iii. the amount of the obligation can be reliably estimated.

When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognised as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of profit and loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

(b) Reimbursement expected in respect of expenditure required to settle a provision is recognized only when it is virtually certain that the reimbursement will be received.

(c) Contingent Liability is disclosed in the case of:

(i) a present obligation arising from past events, when it is not probable that an outflow of resources will be required to settle the obligation,
(ii) a present obligation when no reliable estimate is possible, and
(iii) a possible obligation arising from past events where the probability of outflow of resources is not remote.
(d) Provisions, contingent liabilities and contingent assets are reviewed at each balance sheet date.

(e) Onerous contracts

If the Group has a contract that is onerous, the present obligation under the contract is recognised and measured as a provision. However, before a separate provision for an onerous contract is established, the Group recognises any impairment loss that has occurred on assets dedicated to that contract.

An onerous contract is a contract under which the unavoidable costs (i.e., the costs that the Group cannot avoid because it has the contract) of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract (i.e., both incremental costs and an allocation of costs directly related to contract activities).

(f) Major maintenance expenses

As per the concession agreements, the Group is obligated to carry out major maintenance of the roads under concession. The Group estimates the likely provision required towards the same and accrues the cost on a straight-line basis over the period at the end of which maintenance would be required, in the consolidated statement of profit and loss.

o. Claims

Claims against the Group consists of claims from EPC contractor in which escalations are accounted for as and when accepted and claims with NHAI are accounted for as and when the claim is settled by the authority.

p. Earnings per unit (EPU)

Basic earnings per unit is calculated by dividing the net profit or loss for the period attributable to unitholders of the Group (after deducting preference dividends and attributable taxes if any) by the weighted average number of units outstanding during the year.

For the purpose of calculating diluted earnings per unit, the net profit or loss for the period attributable to unitholders and the weighted average number of units outstanding during the period are adjusted for the effects of all dilutive potential units.

q. Contributed equity

Units are classified as equity. Incremental costs attributable to the issue of units are directly recorded in equity, net of tax.

r. Distribution to unitholders

The Group recognises a liability to make cash distributions to unitholders when the distribution is authorized, and a legal obligation has been created. As per the SEBI InvIT Regulations, a distribution is authorised when it is approved by the Board of Directors of the Investment Manager. A corresponding amount is recognised directly in equity.

s. Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Group's cash management.

t. Cash flow

Cash flows are reported using the indirect method, whereby net profit before tax is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Group are segregated and presented accordingly.

u. Segment reporting

Operating results are regularly reviewed by the Group's Chief Operating Decision Maker ('CODM') (Investment Manager) who makes decisions about resources to be allocated to the segment and assesses its performance.

Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property and equipment and intangible assets other than goodwill.

v. Fair value measurement

The Group measures financial instruments, such as, derivatives at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

In the principal market for the asset or liability, or

In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

w. Use of judgement, estimates and assumptions

The preparation of financial statements in conformity with Ind AS requires that management of the Group makes estimates, judgements and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses of the period and the disclosures relating to contingent liabilities and contingent assets as of the date of the financial statements. Application of accounting policies involving complex and subjective judgements and the use of the assumptions in these consolidated financial statements have been disclosed. Accounting estimates could change from period to period. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revision in accounting estimates are recognised in the period in which the estimates are revised and if material, their effects are disclosed in the notes to the consolidated financial statements.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below. The Group has based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond control of the management.

(i)Defined benefit plan (note 40)
The cost of the defined benefit plan and other post-employment benefits and the present value of such obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in future. These include the determination of the discount rate, future salary increases, mortality rates and attrition rate. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

(ii)Fair value measurement of financial instruments (note 41)
When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the Discounted Cash Flow model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

(iii)Taxes (note 29)
Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

The Group has a history of losses, which may not be used to offset taxable income elsewhere in the Group. The Group neither have any taxable temporary difference nor any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets.

On this basis, the Group has determined that it cannot recognise deferred tax assets on the tax losses carried forward.

(iv) Provision for major maintenance obligations (note 47)
The operating and maintenance cost include routine, periodic/major maintenance, manpower costs and operational expenses, including, but not limited to, road and site work expenses, employee benefit expenses and other operating and maintenance costs. The provision for potential periodic / major maintenance cost is created based on the estimates provided by the management and the same is adjusted for actual expenditures in the year of occurrence.

x. Recent pronouncements

A. New and amended standards

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after April 1, 2022.

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standard) Amendment Rules 2022 dated March 23, 2022, to amend the following Ind AS which are effective from April 1, 2022.

i. Onerous contracts – costs of fulfilling a contract – amendments to Ind AS 37

An onerous contract is a contract under which the unavoidable costs of meeting the obligations under the contract costs (i.e., the costs that the Group cannot avoid because it has the contract) exceed the economic benefits expected to be received under it.

The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

The Group applied the amendments to the contracts for which it had not fulfilled all of its obligations at the beginning of the reporting period.

Prior to the application of the amendments, the Group had not identified any contracts as being onerous as the unavoidable costs under the contracts, which were the costs of fulfilling them, comprised only incremental costs directly related to the contracts. As a result of the amendments, the Group assessed whether certain other directly related costs are required to be included by the Group in determining the costs of fulfilling the contracts.

In accordance with the transitional provisions, the Group applies the amendments to contracts for which it has not yet fulfilled all of its obligations, at the beginning of the annual reporting period in which it first applies the amendments (the date of initial application) and has not restated its comparative information.

These amendments had no impact on the consolidated financial statements of the Group

ii. Reference to the conceptual framework – amendments to Ind AS 103

The amendments replaced the reference to the ICAI's '*Framework for the Preparation and Presentation of Financial Statements under Indian Accounting Standards*' with the reference to the '*Conceptual Framework for Financial Reporting under Indian Accounting Standard*' without significantly changing its requirements.

The amendments also added an exception to the recognition principle of Ind AS 103 *Business Combinations* to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of Ind AS 37 *Provisions, Contingent Liabilities and Contingent Assets* or Appendix C, *Levies,* of Ind AS 37, if incurred separately. The exception requires entities to apply the criteria in Ind AS 37 or Appendix C, *Levies,* of Ind AS 37, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date.

The amendments also add a new paragraph to IFRS 3 to clarify that contingent assets do not qualify for recognition at the acquisition date.

In accordance with the transitional provisions, the Group applies the amendments prospectively, i.e., to business combinations occurring after the beginning of the annual reporting period in which it first applies the amendments (the date of initial application).

These amendments had no impact on the consolidated financial statements of the Group as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

iii. Property, plant and equipment- proceeds before intended use – amendments to Ind AS 16

The amendments modified paragraph 17(e) of Ind AS 16 to clarify that excess of net sale proceeds of items produced over the cost of testing, if any, shall not be recognised in the profit or loss but deducted from the directly attributable costs considered as part of cost of an item of property, plant, and equipment.

The amendments are effective for annual reporting periods beginning on or after April 1, 2022. These amendments had no impact on the consolidated financial statements of the Group as there were no sales of such items produced by property, plant and equipment made available for use on or after the beginning of the earliest period presented.

iv. Ind AS 109 Financial Instruments – fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf.

In accordance with the transitional provisions, the Group applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no modifications of the Group's financial instruments during the period.

B. Standards notified but not yet effective

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standards) Amendment Rules, 2023 dated March 31, 2023 to amend the following Ind AS which are effective from April 1, 2023.

i. Definition of accounting estimates - amendments to Ind AS 8

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. It has also been clarified how entities use measurement techniques and inputs to develop accounting estimates.
The amendments are effective for annual reporting periods beginning on or after April 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period.
The amendments are not expected to have a material impact on the Group's financial statements.

ii. Disclosure of accounting policies - amendments to Ind AS 1

The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.
The amendments to Ind AS 1 are applicable for annual periods beginning on or after April 1, 2023. Consequential amendments have been made in Ind AS 107.

The Group is currently revisiting their accounting policy information disclosures to ensure consistency with the amended requirements.

iii. Deferred tax related to assets and liabilities arising from a single transaction - amendments to Ind AS 12

The amendments narrow the scope of the initial recognition exception under Ind AS 12, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences.

The amendments should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period presented, a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability should also be recognised for all deductible and taxable temporary differences associated with leases and decommissioning obligations. Consequential amendments have been made in Ind AS 101. The amendments to Ind AS 12 are applicable for annual periods beginning on or after April 1, 2023.

The Group is currently assessing the impact of the amendments.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 3: Property, plant and equipment

Description	Freehold land	Leasehold improvements	Furniture & fixtures	Vehicles	Office equipment	Electrical installations	Computer & peripherals	Toll booths	Total
Gross block									
Balance as at April 01, 2021	-	-	-	-	-	-	-	-	-
Additions during the year	-	-	-	-	-	-	-	-	-
Disposals/deductions during the year	-	-	-	-	-	-	-	-	-
Balance as at March 31, 2022	-	-	-	-	-	-	-	-	-
Addition on account of acquisition (refer note 34)	9.69	1.16	5.75	13.34	33.71	47.99	5.25	0.89	117.78
Additions during the year (net of accumulated depreciation)	-	-	2.14	-	10.99	-	33.36	-	46.49
Disposals/deductions during the year	-	-	-	-	-	-	(0.99)	-	(0.99)
Balance as at March 31, 2023	**9.69**	**1.16**	**7.89**	**13.34**	**44.70**	**47.99**	**37.62**	**0.89**	**163.28**
Accumulated depreciation									
Balance as at April 01, 2021	-	-	-	-	-	-	-	-	-
Charged during the year	-	-	-	-	-	-	-	-	-
Depreciation on Disposals/deductions during the year	-	-	-	-	-	-	-	-	-
Balance as at March 31, 2022	-	-	-	-	-	-	-	-	-
Charged during the year	-	-	0.82	3.05	10.49	5.88	7.19	0.27	27.70
Depreciation on disposals/deductions during the year	-	-	-	-	-	-	(0.90)	-	(0.90)
Balance as at March 31, 2023	-	-	**0.82**	**3.05**	**10.49**	**5.88**	**6.29**	**0.27**	**26.80**
Net book value									
Net block as at March 31, 2022	-	-	-	-	-	-	-	-	-
Net block as at March 31, 2023	**9.69**	**1.16**	**7.07**	**10.29**	**34.21**	**42.11**	**31.33**	**0.62**	**136.48**

Notes-

(i) The Group does not have any contractual commitments for the acquisition of property, plant and equipment.

(ii) Borrowing cost has not been capitalized during the year ended March 31, 2023 and March 31, 2022.

(iii) No depreciation has been charged on leasehold improvements as the net block has been fully depreciated as at March 31, 2023 and March 31, 2022 and the balance pertains to 5% residual value.

(iv) Property, plant and equipment have been pledged to secure borrowings of the Group. Refer note 16 for details of security pledged for each class of borrowings.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 4: Intangible assets

Description	Computer software	Toll collection rights	Total
Gross block			
Balance as at April 01, 2021	-	-	-
Additions during the year	-	-	-
Disposals/deductions during the year	-	-	-
Balance as at March 31, 2022	-	-	-
Addition on account of acquisition (net of accumulated amortization) (refer note 34)	-	1,46,658.68	1,46,658.68
Additions during the year (refer note 34)	10.20	6,26,846.54	6,26,856.74
Disposals/deductions during the year	-	-	-
Balance as at March 31, 2023	**10.20**	**7,73,505.22**	**7,73,515.42**

Description	Computer software	Toll collection rights	Total
Accumulated amortization			
Balance as at March 31, 2021	-	-	-
Amortisation during the year	-	-	-
Disposals/Deductions during the year	-	-	-
Balance as at March 31, 2022	-	-	-
Amortisation during the year	1.55	11,826.36	11,827.91
Disposals/Deductions during the year	-	-	-
Balance as at March 31, 2023	**1.55**	**11,826.36**	**11,827.91**

Net Block as at March 31, 2022	-	-	-
Net Block as at March 31, 2023	**8.65**	**7,61,678.86**	**7,61,687.51**

Notes-

(i)Intangible asset have been pledged to secure borrowings of the Group. Refer note 16 for details of security pledged for each class of borrowings.

(ii)Amortisation for the year has been included in line item 'Depreciation and amortisation expense' in consolidated statement of profit and loss.

(iii)Contractual Obligations: Refer note 33, for disclosure of capital and other commitments for the acquisition of intangible assets.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 5: Intangible assets under development

Description	Toll collection rights	Total
Balance as at April 01, 2021	-	-
Additions during the year	-	-
Capitalised during the year	-	-
Balance as at March 31, 2022	-	-
Addition on account of acquisition (refer note 34)	101.68	101.68
Additions during the year	141.96	141.96
Capitalised during the year	(136.54)	(136.54)
Balance as at March 31, 2023	**107.10**	**107.10**

As per the terms of concession agreement, the 'construction period' is defined as the period from the 'Appointed Date' and ending on 'Project Completion Date' (where 'Project Completion Date' means the date on which either the Completion Certificate or Provisional Completion Certificate is received). One of the subsidiary companies, SJEPL received Provisional Completion Certificate dated January 12, 2017 for 56.88 km, whereas for the balance 10.12 km, the same is still waited. SJEPL has substantially completed all its obligations towards construction work of the project road, and, the balance punch list items, as stated by the Independent Engineer, are either pending due to extraneous factors or descoping activities which are pending with NHAI. The Provisional Completion Certificate/ Completion Certificate for the balance 10.12 km/entire length is expected to be received once all the final approvals including the settlements of all claims with NHAI are complete (also, refer note 44).

Intangible asset under development (IAUD) ageing schedule

As at March 31, 2023

Particulars	IAUD for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	49.43	57.67	-	-	107.10
Projects temporarily suspended	-	-	-	-	-
Total	**49.43**	**57.67**	-	-	**107.10**

As at March 31, 2022

Particulars	IAUD for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Projects in progress	-	-	-	-	-
Projects temporarily suspended	-	-	-	-	-
Total	-	-	-	-	-

As on March 31, 2023 and March 31, 2022, there is no project classified as intangible asset under development whose completion is overdue or has exceeded the cost, based on original approved plan.

Note 6: Lease

The Group has lease contracts for guest house and office. Leases of guest house have lease term of 3 years, while office have lease term of 9 years. The Group's obligations under its leases are secured by the lessor's title to the leased assets.
The Group also has certain leases of office and guest house with lease terms of 12 months or less.

a) Right-of-use assets (non-current):

Particulars	March 31, 2023	March 31, 2022
Opening balances	-	-
Additions	109.96	-
Deletions	-	-
Depreciation	(4.12)	-
Closing balances	**105.84**	-

b) Lease Liabilities

Particulars	March 31, 2023	March 31, 2022
Opening balances	-	-
Additions	106.68	-
Deletions	-	-
Add: Finance cost	2.51	-
Less: Payments	(4.87)	-
Closing balance	**104.32**	-
Current Lease Liabilities	10.94	-
Non - Current Lease Liabilities	93.38	-

The effective interest rate for lease liabilities is 8.05%.

The following amounts are recognised in the consolidated statement of profit and loss:

Particulars	March 31, 2023	March 31, 2022
Depreciation	4.12	-
Finance cost	2.51	-
Rent (relating to short-term leases included in other expenses)	10.18	-
Total amount recognised in the statement of profit and loss	**16.81**	-

(A) Contractual maturities of lease liabilities

The table below analyse the Company's lease liability into relevant maturity analysis based on their contractual maturities. The amounts disclosed in the table are the contractual undiscounted cash flows.

Particulars	Less than 3 months	3 months to 12 months	1-5 years	More than 5 Years	Total
As at March 31, 2023					
Lease Liabilities	3.14	15.70	80.44	43.20	**142.48**
As at March 31, 2022					
Lease liabilities	-	-	-	-	-

(B) The total cash outflow for leases amounts to Rs. 15.05 lakhs (March 31,2022: nil).

(All amounts in Rs. lakhs, unless otherwise stated)

Note 7: Investments

Particulars	March 31, 2023	March 31, 2022
Current		
Investment in mutual funds (carried at fair value through profit or loss)		
ICICI Liquid Fund-D P Growth – 10,36,039 units (as on March 31, 2022: Nil units)	3,430.72	-
	3,430.72	**-**
Aggregate amount of quoted investments and market value thereof;	3,430.72	-
Aggregate amount of unquoted investments	-	-
Aggregate amount of impairment in value of investments	-	-

Note 8: Other financial assets

Particulars	March 31, 2023	March 31, 2022
i) Non-current		
Unsecured, considered good		
Security deposits (carried at amortized cost)	39.26	-
	39.26	**-**
ii) Current (carried at amortized cost)		
Unsecured, considered good		
Interest receivable on bank deposits	467.91	-
Receivable from ex-shareholders against claims (refer note 32(d))	456.66	-
Other receivables	82.28	-
	1,006.85	**-**

Note 9: Non-current tax asset

Particulars	March 31, 2023	March 31, 2022
Non-current		
Tax deducted at source	84.53	-
Tax collected at source	4.28	-
	88.81	**-**

Note 10: Other non-current assets

Particulars	March 31, 2023	March 31, 2022
Labour cess recoverable from NHAI	49.81	-
Capital advances	31.36	-
	81.17	**-**

(All amounts in Rs. lakhs, unless otherwise stated)

Note 11: Trade receivables

Particulars	March 31, 2023	March 31, 2022
Current		
Unsecured (carried at amortized cost)		
Considered good	216.99	-
Credit impaired	73.12	-
Total trade receivables	**290.11**	-
Less: Impaired trade receivables	(73.12)	-
	216.99	-

Trade receivable ageing schedule for the year ended March 31, 2023

Particulars	Not due	Outstanding for following periods from invoice date					
		Less than 6 Months	6 months – 1 year	1-2 years	2-3 years	More than 3 years	Total
Undisputed trade receivables – considered good	-	216.99	-	-	-	-	216.99
Undisputed trade receivables – which have significant increase in credit risk	-	-	-	-	-	-	-
Undisputed trade receivable – credit impaired	-	2.73	14.13	50.08	-	6.18	73.12
Disputed trade receivables - considered good	-	-	-	-	-	-	-
Disputed trade receivables – which have significant increase in credit risk	-	-	-	-	-	-	-
Disputed trade receivables – credit impaired	-	-	-	-	-	-	-
Total	**-**	**219.72**	**14.13**	**50.08**	**-**	**6.18**	**290.11**

Trade receivable ageing schedule for the year ended March 31, 2022

Particulars	Not due	Outstanding for following periods from invoice date					
		Less than 6 Months	6 months – 1 year	1-2 years	2-3 years	More than 3 years	Total
Undisputed trade receivables – considered good	-	-	-	-	-	-	-
Undisputed trade receivables – which have significant increase in credit risk	-	-	-	-	-	-	-
Undisputed trade receivable – credit impaired	-	-	-	-	-	-	-
Disputed Trade receivables - considered good	-	-	-	-	-	-	-
Disputed trade receivables – which have significant increase in credit risk	-	-	-	-	-	-	-
Disputed trade receivables – credit impaired	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

(All amounts in Rs. lakhs, unless otherwise stated)

Note 12A: Cash and cash equivalents

Particulars	March 31, 2023	March 31, 2022
Current		
Balances with banks		
- In current accounts	9,838.03	4.01
- Deposits with original maturity less than 3 months	28,515.81	-
Cash on hand	13.54	-
Demand drafts in hand	5.98	-
	38,373.36	**4.01**
For the purpose of the cash flow statement, cash and cash equivalents comprise of:		
Balances with banks		
- In current accounts	9,838.03	4.01
- Deposits with original maturity less than 3 months	28,515.81	-
Cash on hand	13.54	-
Demand drafts in hand	5.98	-
	38,373.36	**4.01**

Refer note 13 for other bank balances which are under restriction.

Note 12B: Changes in liabilities arising from financing activities

Particulars	For the year ended March 31,2022	Impact on account of acquisition	Cash flows (net of payment and proceeds)	Addition in leases	Interest expense	Other non - cash changes	For the year ended March 31,2023
Long term borrowings from banks and financial institution	-	1,01,715.54	3,60,905.51	-	20,365.75	(1,083.45)	4,81,903.35
Short term borrowings from related party	30.00	-	(30.00)	-	-	-	-
Lease liabilities	-	-	(4.87)	106.68	2.51	-	104.32
Total liabilities from financing activities	**30.00**	**1,01,715.54**	**3,60,870.64**	**106.68**	**20,368.26**	**(1,083.45)**	**4,82,007.67**

Particulars	For the year ended March 31,2021	Impact on account of acquisition	Cash flows (net of payment and proceeds)	Addition in leases	Interest expense	Other non - cash changes	For the year ended March 31,2022
Long term borrowings from banks and financial institution	-	-	-	-	-	-	-
Short term borrowings from related party	-	-	30.00	-	-	-	30.00
Lease liabilities	-	-	-	-	-	-	-
Total liabilities from financing activities	-	-	**30.00**	-	-	-	**30.00**

Note 13: Other bank balances

Particulars	March 31, 2023	March 31, 2022
Deposit with original maturity of more than 3 months but less than 12 months	32,184.49	-
	32,184.49	-

Bank deposits as above are made by the subsidiaries to fulfil the requirement of term loan financing provided by banks. Bank deposits amounting to Rs. 19,968.32 lakhs are kept as earmarked for Debt Service Reserve Account and for Major Maintenance Reserve Account as on March 31,2023 (March 31, 2022: Rs. Nil).

Note 14: Other current assets

Particulars	March 31, 2023	March 31, 2022
Current		
Advances		
(i) Advance to others	102.21	-
(ii) Advance to Employees	1.42	-
(iii) Recoverable from EPC contractors (refer note 37)	1,455.11	-
Others		
(i) Prepaid expenses	551.69	8.00
(ii) Balance with government authorities	-	28.55
Less: Impairment of current assets (refer note 51)	-	(28.55)
(iii) Other receivable	1.22	-
	2,111.65	**8.00**

Note 15. Equity

(A) Unit capital

Particulars	March 31, 2023	March 31, 2022
Unit capital		
Issued 35,21,70,000 (March 31,2022: Nil) units (Issue price: Rs. 100)	3,51,786.87	-
	3,51,786.87	-

Notes-

a) The Trust issued initial issue of 910,00,000 units Indian Highway Concessions Trust ('Trust' and such units, the 'units') for cash at a price of Rs. 100.00 per unit (the 'issue price'), aggregating to Rs. 91,000.00 lakhs to the eligible investors including the sponsor through Final Placement Memorandum filed with Securities Exchange Board of India ('SEBI') in accordance with the Securities and Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 including the rules, circulars and guidelines issued thereunder, including the SEBI Rights Issue Guidelines (the 'InvIT Regulations').

b) The Trust offered rights issue of up to 26,11,70,000 units of the Trust (the 'units'), for cash at a price of Rs. 100.00 per unit (the 'issue price'), aggregating to Rs. 2,61,170.00 lakhs to the eligible unitholders (as defined in the Letter of Offer) on a rights basis in the ratio of 287 units for every 100 units held by them on the record date, being October 7, 2022 (the 'Issue') in accordance with the InvIT Regulations. The Board of Directors of Investment Manager considered and approved allotment of 26,11,70,000 rights units to the eligible unitholders of IHCT on November 3, 2022.

c) Issue expenses of Rs. 383.13 lakhs incurred in connection with issue of units have been reduced from the Unitholders capital in accordance with Ind AS 32 Financial Instruments: Presentation.

I. Terms/rights attached to units

The Trust has only one class of units. Each unit represents an undivided beneficial interest in the Trust. Each holder of unit is entitled to one vote per unit. The Unitholders have the right to receive at least 90% of the Net Distributable Cash Flows of the Trust at least once in each financial year in accordance with the InvIT Regulations. The Investment Manager approves distributions. The distribution will be in proportion to the number of units held by the unitholders. The Trust declares and pays distribution in Indian rupees.

A unitholder has no equitable or proprietary interest in the projects of the Trust and is not entitled to any share in the transfer of the projects (or any part thereof) or any interest in the projects (or any part thereof) of the Trust. A unitholders' right is limited to the right to require due administration of the Trust in accordance with the provisions of the Trust Deed and the Investment Management Agreement.

II. Unitholders holding more than 5 % units in the Trust

Particulars	March 31, 2023		March 31, 2022	
	Number of units (in lakhs)	% holding	Number of units (in lakhs)	% holding
CDPQ Infrastructure Asia III Inc.	2,113.02	60.00%	-	-
Maple Highways Pte Limited	528.26	15.00%	-	-
IIFL Income Opportunities fund series 4	301.83	8.57%	-	-

III. Reconciliation of the number of units outstanding at the beginning and at the end of the reporting period are as given below:

Particulars	March 31, 2023		March 31, 2022	
	Number of units (in lakhs)	Amount	Number of units (in lakhs)	Amount
Unit capital of Rs. 100 each fully paid up				
Balance at the beginning of the year	-	-	-	-
Add: Units issued during the year	3,521.70	3,52,170.00	-	-
Less: Unit issue expense	-	(383.13)	-	-
Balance at the end of the year	**3,521.70**	**3,51,786.87**	-	-

IV. The Trust has not allotted any fully paid-up units by way of bonus unit nor has it bought back any class of units from the date of incorporation till the balance sheet date. Further the Trust has not issued any units for consideration other than cash from the date of incorporation till the balance sheet date.

V. Under the provisions of the InvIT Regulations, the Trust is required to distribute to unitholders not less than 90% of the net distributable cash flows of the Trust for each financial year. Accordingly, a portion of the unit capital contains a contractual obligation of the Trust to pay to its unitholders cash distributions. Hence, the unit capital is a compound financial instrument which contains equity and liability components in accordance with Ind AS 32 - Financial Instruments: Presentation. However, in accordance with SEBI Circulars (No. CIR/ IMD/DF/114/2016 dated October 20,2016 and No. CIR/IMD/DF/127/2016 dated November 29, 2016) issued under the InvIT Regulations, the Unitholders' funds have been presented as 'Equity' in order to comply with the requirements of Section H of Annexure A to the SEBI Circular dated October 20,2016 dealing with the minimum presentation and disclosure requirements for key financial statements. Consistent with Unit Capital being classified as equity, the distribution to unitholders is also presented in Statement of Changes in Unitholders' Equity when the distributions are approved by the Board of Directors of Investment Manager.

(B) Other equity

Particulars	March 31, 2023	March 31, 2022
Retained Earnings		
Balance at the beginning of the year	(350.15)	(173.92)
Add: Profit/(loss) during the year	(15,335.79)	(176.23)
Add: Other comprehensive income/(loss) for the year	8.33	-
Less: Distribution to unitholders	-	-
Balance at the end of the year	**(15,677.61)**	**(350.15)**

Nature and purpose of reserve

Retained earnings are the profits/(loss) that the Group has earned/incurred till date, less any transfers to general reserve, dividends or other distributions to unitholders. It also includes re-measurement loss / (gain) on defined benefit plans, net of taxes that will not be reclassified to Statement of Profit and Loss.

Note 16: Borrowings

Particulars	March 31, 2023	March 31, 2022
Non-current		
Secured (carried at amortized cost)		
Term loans*		
Secured term loans from banks	4,81,903.35	-
Less: Current maturities of long-term debt	(4,830.25)	-
	4,77,073.10	-
Current		
Secured (carried at amortized cost)		
Current maturities of long-term borrowings from banks	4,830.25	-
Unsecured (carried at amortized cost)		
Inter corporate deposit from related party (refer note 48)	-	30.00
	4,830.25	**30.00**

***Secured term loans from banks**

Repayment terms and security disclosure for the outstanding long term borrowings as on March 31, 2023 :

a. **Term loan facility of Rs. 98,765.31 lakhs (non-current: Rs. 95,403.52 lakhs and current: Rs. 3,361.79 lakhs) (March 31, 2022: Rs. Nil lakhs), which carries an interest rate of 8.30% p.a. (March 31, 2022: nil) (based on the benchmark rate of respective lender specified in facility agreement) amount is repayable in 45 quarterly unequal instalments commencing from December 31, 2022.**

The Facility together with all the monies payable to the Lenders as stipulated under the Financing Documents are secured by a first pari passu charge on: -

1) All the Borrower's immovable properties, if any, together with all buildings, structures and appurtenances thereon, both present and future, save and except the Project Assets;

2) All the Borrower's tangible movable assets (current and non-current assets) including movable plant and machinery, machinery spares, tools and accessories, furniture, fixtures, vehicles, and all other movable assets, present and future, related to the Project;

3) All the intangible assets of the Borrower, including but not limited to, goodwill, rights, undertakings, revenue, receivables, and uncalled capital, both present and future.

4) All the rights, title, interest, benefits, claims and demands whatsoever of the Borrower a) under the Concession Agreement and all other Project Documents; b) in any letters of credit, guarantees including contractor guarantees and liquidated damages and performance bonds provided by any party to the Project Documents; and (c) under all Insurance Contracts and proceeds thereto procured by the Borrower or any of the contractors in favour of the Borrower in relation to the Project;

5) All accounts of the Borrower (other than the Distribution Account), including and without limitation that may be opened in accordance with this Financing Documents or any of the other Project Documents (including any bank guarantees and/or letters of credit/comfort issued to supplement any of such accounts or sub-accounts or in lieu thereof), and all funds, monies and amounts, from time to time deposited therein, all receivables/revenues, operating cash flows of whatsoever nature from the Project or otherwise, and all Permitted Investments or other securities, both present and future, save and except the Project Assets.

6) Pledge of 51% (fifty one percent) of each of the paid-up Shares (together with equivalent voting rights) and 51% (fifty one percent) of each of the other instruments issued or subsisting by the Borrower,

7) Non-disposal undertaking by the Sponsor over 25% (twenty five percent) of each of the paid-up shares (together with equivalent voting rights) and 25% (twenty five percent) of each of the other instruments issued or subsisting by the Borrower.

b. **Term loan facility of Rs. 3,83,138.04 lakhs (non-current: Rs. 3,81,669.58 lakhs and current: Rs. 1,468.46 lakhs) (March 31, 2022: Rs. Nil lakhs) which carries an interest rate of 8.05% p.a. (March 31, 2022: nil) (based on the benchmark rate of respective lender specified in facility agreement) amount is repayable in 68 quarterly unequal instalments commencing from February 28, 2023.**

The Facility together with all the monies payable to the Lenders as stipulated under the Financing Documents are secured by a first pari passu charge on: -

1) All the Borrower's immovable properties, if any, together with all buildings, structures and appurtenances thereon, both present and future, save and except the Project Assets;

2) All the Borrower's tangible movable assets (current and non-current assets) including movable plant and machinery, machinery spares, tools and accessories, furniture, fixtures, vehicles, and all other movable assets, present and future, related to the Project;'

3) All the intangible assets of the Borrower, including but not limited to, goodwill, rights, undertakings, revenue, receivables, and uncalled capital, both present and future.

4) All the rights, title, interest, benefits, claims and demands whatsoever of the Borrower a) under the Concession Agreement and all other Project Documents; b) in any letters of credit, guarantees including contractor guarantees and liquidated damages and performance bonds provided by any party to the Project Documents; and (c) under all Insurance Contracts and proceeds thereto procured by the Borrower or any of the contractors in favour of the Borrower in relation to the Project;

5) All accounts of the Borrower (other than the Distribution Account), including and without limitation that may be opened in accordance with this Financing Documents or any of the other Project Documents (including any bank guarantees and/or letters of credit/comfort issued to supplement any of such accounts or sub-accounts or in lieu thereof), and all funds, monies and amounts, from time to time deposited therein, all receivables/revenues, operating cash flows of whatsoever nature from the Project or otherwise, and all Permitted Investments or other securities, both present and future, save and except the Project Assets.

6) Pledge of 51% (fifty one percent) of each of the paid-up Shares (together with equivalent voting rights) and 51% (fifty one percent) of each of the other instruments issued or subsisting by the Borrower,

7) Non-disposal undertaking by the Sponsor over 25% (twenty five percent) of each of the paid-up Shares (together with equivalent voting rights) and 25% (twenty five percent) of each of the other instruments issued or subsisting by the Borrower.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 17: Other financial liabilities

Particulars	March 31, 2023	March 31, 2022
Current (carried at amortized cost)		
Interest accrued and not due on unsecured loan	-	0.70
Capital creditors	4,402.15	-
Others (carried at amortized cost)		
Retention money payable	200.22	-
Toll fee receipts refundable	1.24	-
Toll fee penalty payable to NHAI	12.70	-
Other payable	16.03	-
	4,632.34	**0.70**

Note 18: Provisions

Particulars	March 31, 2023	March 31, 2022
Non-current		
Provision for employee benefits (refer note 40)		
Provision for gratuity	9.08	-
Provision for compensated absences	4.47	-
Other provision		
Provision for major maintenance obligations (refer note 47)	1,121.86	-
	1,135.41	-
Current		
Provision for employee benefits (refer note 40)		
Provision for gratuity	0.63	-
Provision for compensated absences	0.43	-
Other provision		
Provision for major maintenance obligations (refer note 47)	10,878.39	-
	10,879.45	-

Note 19: Trade payable

Particulars	March 31, 2023	March 31, 2022
Current		
Total outstanding dues of micro enterprises and small enterprises (refer note 36)	38.02	-
Total outstanding dues of creditors other than micro enterprises and small enterprises	4,538.12	329.75
	4,576.14	**329.75**

(All amounts in Rs. lakhs, unless otherwise stated)

Trade payable ageing schedule for the year ended as on March 31, 2023

Particulars	Outstanding for following periods from invoice date					
	Not Due	Less than 1 year	1-2 years	2-3 years	More than 3 years	Total
Undisputed dues of micro enterprises and small enterprises	38.02	-	-	-	-	38.02
Undisputed dues of creditors other than micro enterprises and small enterprises	1,560.21	2,973.50	-	0.41	4.00	4,538.12
Disputed dues of micro enterprises and small enterprises	-	-	-	-	-	-
Disputed dues of creditors other than micro enterprises and small enterprises	-	-	-	-	-	-
Total	**1,598.23**	**2,973.50**	**-**	**0.41**	**4.00**	**4,576.14**

Trade payable ageing schedule for the year ended as on March 31, 2022

Particulars	Outstanding for following periods from invoice date					
	Not Due	Less than 1 year	1-2 years	2-3 years	More than 3 years	Total
Undisputed dues of micro enterprises and small enterprises	-	-	-	-	-	-
Undisputed dues of creditors other than micro enterprises and small enterprises	2.50	153.48	173.77	-	-	329.75
Disputed dues of micro enterprises and small enterprises	-	-	-	-	-	-
Disputed dues of creditors other than micro enterprises and small enterprises	-	-	-	-	-	-
Total	**2.50**	**153.48**	**173.77**	**-**	**-**	**329.75**

Note 20: Other current liabilities

Particulars	March 31, 2023	March 31, 2022
Current		
Statutory dues	225.83	1.71
	225.83	**1.71**

Note 21: Current tax liabilities

Particulars	March 31, 2023	March 31, 2022
Provision for income tax (net of tax deducted at source and advance tax paid)	4.13	-
	4.13	-

Note 22: Revenue from operations

Particulars	March 31, 2023	March 31, 2022
Revenue from toll operations	31,745.10	-
Construction services	152.08	-
	31,897.18	-

(All amounts in Rs. lakhs, unless otherwise stated)

a) Disaggregated revenue information

Revenue recognised mainly comprises of revenue from toll collections and construction services. Set out below is the disaggregation of the Group's revenue:

Particulars	March 31, 2023	March 31, 2022
India	31,897.18	-
Outside India	-	-
Total revenue	**31,897.18**	-

Particulars	March 31, 2023	March 31, 2022
Segment		
Toll operations and construction services	31,897.18	-
Total revenue	**31,897.18**	-

The table below presents disaggregated revenues from contracts with customers based on nature, amount and timing for the year ended March 31,2023 and March 31, 2022:

Particulars	March 31, 2023	March 31, 2022
Timing of revenue recognition		
Services provided at point in time	31,745.10	-
Services transferred over time	152.08	-
Total revenue	**31,897.18**	-

Refer note 39 for disclosure in accordance with Appendix D: Service Concession Arrangements Disclosures of Ind AS 115: Revenue from Contracts with Customers.

Note 23: Other income

Particulars	March 31, 2023	March 31, 2022
Interest Income on		
- Bank deposits	1,718.29	-
- Security deposits	0.12	-
- Income tax refund	1.81	-
Gain on change in fair value of investment in mutual funds	152.20	-
Insurance claim	151.52	-
Sundry balances written back	2.05	-
Miscellaneous income	4.58	-
Gain on disposal of property, plant and equipment	0.03	-
	2,030.60	-

Note 24: Operating expenses

Particulars	March 31, 2023	March 31, 2022
Operation and maintenance	3,408.68	-
Route Patrolling and incident management expense	277.91	-
Health, Safety and Environment Expenses	100.21	-
	3,786.80	-

(All amounts in Rs. lakhs, unless otherwise stated)

Note 25: Employee benefits expense

Particulars	March 31, 2023	March 31, 2022
Salaries and wages	275.51	-
Contribution to provident and other funds	14.99	-
Gratuity and compensated absences	28.77	-
Staff welfare expenses	39.64	-
	358.91	-

Note 26: Finance costs

Particulars	March 31, 2023	March 31, 2022
Interest on		
- Term loan from banks	20,365.75	-
- Lease liabilities	2.51	-
- Inter corporate deposit from related party	1.57	0.78
- Income tax	16.03	-
Bank guarantee commission charges	57.21	13.71
Prepayment charges on bank loans	252.25	-
Processing fees on bank loan	204.97	-
Other bank charges	65.80	0.30
	20,966.09	**14.79**

Note 27: Depreciation and amortization expense

Particulars	March 31, 2023	March 31, 2022
Depreciation on property, plant and equipment	27.70	-
Depreciation on right of use asset	4.12	-
Amortization of intangible asset	11,827.91	-
	11,859.73	-

Note 28A: Other expenses

Particulars	March 31, 2023	March 31, 2022
Due diligence fees	1,732.26	-
Legal and professional fees	753.39	64.25
Power & fuel	344.95	-
Rates & taxes	297.08	-
NHAI/ RBI compounding fees	198.82	-
Travelling and conveyance expenses	45.23	-
Rent	10.18	-
Membership fees	10.00	-
Provision for doubtful debts	9.63	-
Communication costs	7.06	-
Tender fees	6.09	5.01
Miscellaneous expenses	38.88	0.54
Receivables written-off	10.00	-
Impairment of current assets	-	26.68
	3,463.57	**96.48**

Note 28B: Payment to auditors

Particulars	March 31, 2023	March 31, 2022
Statutory audit fees	40.00	2.50
Limited review fees	20.00	-
Audit of combined/special purpose financial statements	88.40	47.00
Certification fees and others	18.42	5.00
Reimbursement of expenses	6.62	0.46
Goods & service tax on above	31.22	-
	204.66	**54.96**

Note 29: Tax expenses

Particulars	March 31, 2023	March 31, 2022
Current tax	414.40	-
Deferred tax	-	-
	414.40	-

Reconciliation of tax expense and the accounting profit

Particulars	March 31, 2023	March 31, 2022
Profit/(loss) before income tax	(14,921.39)	(176.23)
Income tax applicable rate to the Group	42.74%	42.74%
Expected tax expense	**(6,378.00)**	**(75.33)**
Adjustments in respect of:		
Effects of non-deductible expenses	1,794.78	75.33
Deferred tax asset not recognised due to absence of certainty of realisability	4,997.62	-
	6,792.40	**75.33**
Current tax expense	**414.40**	-

Deferred tax reflects the impact of current year timing differences between taxable income and accounting income for the year and reversal of timing differences of earlier years in accordance with Ind AS 12. Deferred tax is measured based on the tax rates and the tax laws enacted or substantively enacted at the balance sheet date. The carry forward of unabsorbed depreciation & business loss and specific Ind AS related adjustments resulted into net deferred tax assets. The deferred tax asset is not recognized by the Group since there is no probable certainty that the same will be utilised in future against the taxable profit.

The Group has an unabsorbed tax depreciation amounting to Rs. 1,62,545.71 lakhs as at March 31, 2023 (March 31, 2022: Rs. Nil) that are available for offsetting against future taxable profits for indefinite years.

Note 30: Other comprehensive income

Particulars	March 31, 2023	March 31, 2022
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Remeasurements gain of the defined benefit plans	8.33	-
	8.33	-

Note 31: Disclosure pursuant to Ind AS 33 'Earnings Per Share'

Basic earnings per unit are calculated by dividing the net profit for the year attributable to unitholders by the weighted average number of units outstanding during the year. For the purpose of calculating diluted earnings per unit, the weighted average numbers of units outstanding during the year are adjusted for the effect of all diluted potential units.

During the current year, 9,10,00,000 units issued through private placement on June 24,2022 and 26,11,70,000 units issued through right issue by the Trust on November 3,2022 each at a par value of Rs. 100.

Basic and Diluted Earnings/(loss) per Unit ('EPU') computed in accordance with Ind AS 33 'Earnings per Share'.

Particulars	March 31, 2023	March 31, 2022
Basic and diluted		
Profit/ (loss) attributable to unitholders of the fund (Rs. in lakhs) (A)	(15,335.79)	(176.23)
No of units outstanding at year end (No. in lakhs) *	3,521.70	-
Weighted average number of units (No. in lakhs) (B)	1,766.72	-
Basic/diluted earnings/(loss) per unit (Rs. / unit) ** (A/B)	**(8.68)**	-
Face value per unit (Rs. / unit)	100.00	-

* No units were issued till March 31, 2022.

** The Trust does not have any outstanding dilutive potential instruments.

Note 32: Contingent liabilities and contingencies

(a) Claims by EPC contractors

Construction related claims from EPC contractors of one of the subsidiaries of Rs. 89,298.79 lakhs, to be settled and paid on receipt of cost compensation claims filed by said subsidiary with NHAI, which is currently pending with CCIE.

(b) Litigations

4 writ petitions were filed against the Union of India, NHAI and the subsidiary company challenging notification dated October 19, 2011 and November 24, 2011 issued by NHAI for toll collection at enhanced rates by the subsidiary company citing it to be illegal and outside the purview of NHAI Act and Rules.

For 2 of the petitions, High Court of Odisha decided in favour of the petitioners and directed subsidiary company not to collect toll at such enhanced rates. Against the said order, subsidiary filed a SLP before Supreme Court, who directed to stay the order issued by High Court. Further, Supreme Court converted the SLP into Civil Appeal and directed High Court to dispose off the writ petitions expeditiously. The interim order passed by the High Court as affirmed by the Supreme Court will continue and the matter is pending for disposal.

In respect of a petition, High Court has directed subsidiary company to collect at enhanced rates, subject to condition of refund in case the petition is decided in favour of petitioner.

One other petition is currently pending admission and adjudication.

Investment Manager, based on its internal assessment supported by legal inputs, believes that subsidiary has reasonable ground to succeed and thus, no liability in this regard shall devolve upon the Group and no adjustment is considered necessary in these consolidated financial statements.

Further, as per SPA, erstwhile shareholders of subsidiary have undertaken to indemnify the Group against all possible losses incurred or suffered by the Group arising out of above litigations.

Also, as per the terms of Concession Agreement with NHAI, in case of any termination on account of any default attributable to NHAI, subsidiary shall be eligible for termination payment equivalent to 100% of debt Due and 150% of Adjusted Equity, thus, chances of liability on account of such contingency devolving upon the Group is remote.

(c) Recoveries/damages imposed by NHAI

(I) NHAI, while granting in-principle approval for change in 100% shareholding, imposed following dues and recoveries of Rs. 24,437.44 lakhs on one of the subsidiaries, in accordance with the Concession Agreement:

Non-payment of Labour cess at the rate of 1% of the Construction cost = Rs. 876.71 lakhs; Default in meeting maintenance obligation = Rs. 79.66 lakhs; Delay in completion of Punch List -1 items = Rs. 10,337.60 lakhs up to May 31,2021 and per day penalty for continued default; Recoveries on account of negative change in scope = Rs.3,652.01 lakhs (net) and Recovery of damages for deficient pavement crust = Rs. 9,491.46 lakhs (incl. interest of Rs. 3,400.46 lakhs till May 31, 2021)

NHAI, in the said letter, also mentioned claims lodged by SJEPL totalling Rs. 94,070.08 lakhs. In November 2021, Trust executed a Tripartite Agreement between NHAI, SJEPL and the Trust, whereby subsidiary and Trust agreed to undertake to clear all dues and claims as and when finalised by CCIE. No settlement has yet been arrived at.

As per SPA, the Trust is indemnified by the erstwhile shareholders of SJEPL for any such claim if imposed by the NHAI on SJEPL and thus, the Investment Manager believes that no liability shall devolve upon the Group in this regard.

(II) As one of the subsidiaries expressed its inability to undertake construction of 3 underpass and 1 Flyover on toll road, NHAI directly tendered construction thereof and demanded an amount of toll collected of Rs. 3,234.32 lakhs from the subsidiary for non-maintenance of service roads at these underpass/flyovers from July 2019 and asked the subsidiary to deposit 80% of the said amount of Rs. 2,587.46 lakhs to NHAI.

The subsidiary has replied that since the construction was tendered to other EPC contractors directly by NHAI, the maintenance of such stretches of road does not come under the purview of subsidiary, till the time construction of such stretch is completed and handed over to subsidiary. Also, no clause under the concession agreement has been quoted by NHAI for determination of this penalty. Accordingly, such levy is not tenable under Concession Agreement.

Further, also received NHAI demand of Rs. 65.90 lakhs alleging non-fulfilment of operations and maintenance obligations from April 1, 2022 to December 31, 2022.

The Management of the Trust, based on an expert legal input, believes that no liability shall devolve on the Group in this regard and the subsidiary company shall also take up the maintenance activity post completion of the construction of said stretches by the EPC contractor.

(d) Claims under Claim Benefit Assignment Agreement

SJEPL has entered into Claim Benefit Assignment Agreement (‘CBAA’) in June 2022 with three of its erstwhile shareholders for sale of all of its NHAI claims and counterclaims for a consideration of Rs 387.00 lakhs (exclusive of GST) based on the fair valuation report from SEBI Registered Category-I Merchant Banker, as the Group was not desirous of continuing these claims and counterclaims and erstwhile shareholders had greater background of these claims.

Further, SJEPL also agreed to pay the erstwhile shareholders (or to NHAI on their behalf) a sum upto Rs 22,197.00 lakhs, if SJEPL gets the Final Completion Certificate for six-laning of Project Highway and Extension in Concession Agreement for 5.2 years from NHAI, which are currently pending under conciliation process with CCIE and is to be decided along with other ongoing claims/ counter-claim.

The Board of Directors of the Investment Manager of the Trust, based on comprehensive assessment of CBAA supported by a legal opinion, are of the view that liability of payment of Rs. 22,197.00 lakhs under the CBAA is solely conditional on SJEPL receiving the final completion certificate and extension of concession period by 5.2 years from NHAI and the amount payable may get adjusted in case extension for lesser concession period is received, accordingly the said liability cannot be reasonably measured and estimated as of date and the said amount of Rs. 22,197.00 lakhs have been disclosed as a contingent liability in these consolidated financial statements.

(e) Guarantee

Particulars	March 31, 2023	March 31, 2022
Bank guarantee given for biding purposes (refer (i) and (ii) below)	-	2,440.00
Performance bank guarantee given for NCREPE (refer (iii) below)	2,811.00	-

(i) In the previous year, per the terms of bidding document for Tolling, Operation, Maintenance and Transfer of Stretches of project bundle - 6 comprising 2 Stretches in the States of Uttar Pradesh and Madhya Pradesh, the Trust had given bid security in the form of bank guarantee amounting to Rs. 1,090.00 lakhs to National Highways Authority of India (‘NHAI’) which has been released by NHAI in the current year.

(ii) In the previous year, per the terms of bidding document for Tolling, Operation, Maintenance and Transfer of Eastern Peripheral Expressway (from Km 1+000 to Km 136+000) of NE-2 in the National Capital Region (NCR) (TOT Bundle 7), the Trust had given bid security in the form of bank guarantee amounting to Rs. 1,350.00 lakhs to NHAI which has been released by NHAI in the current year.

(iii) In the current year, as per the terms of Concession Agreement (‘CA’) entered between National Highway Authority of India (‘NHAI’) and one of the subsidiaries ‘NCR Eastern Peripheral Expressway Private Limited ('NCREPE'), the Trust has given performance bank guarantee amounting to Rs. 2,811.00 lakhs to NHAI. NHAI has a right to encash this performance bank guarantee in case the NCREPE breach the conditions as specified in CA or non-observance of tolling obligations as specified in the CA which is valid till June 15, 2023.

Note 33: Capital and other commitments

Particulars	March 31, 2023	March 31, 2022
Estimated amount of contracts remaining pending to be executed on capital account	54.44	-

Note 34: Acquisitions during the year

During the current year, the Trust has acquired/ incorporated two subsidiaries as below:

(a) On June 28, 2022, the Trust acquired 100% shares in Shree Jagannath Expressways Private Limited ('SJEPL') from its erstwhile shareholders for a consideration of Rs 23,526.33 lakhs and further the Trust has also advanced an interest-bearing loan of Rs 25,105.61 lakhs to SJEPL to repay the sub-ordinate loans availed by SJEPL. Post completion of acquisition, the Trust has obtained control on the SJEPL and has consolidated its revenue and expenditure from the said date in the consolidated financial statements. The Trust has accounted the above acquisition as an 'Asset Acquisition' in these consolidated financial statements.

The management applied the optional concentration test, under Ind AS 103, and concluded that the acquired set of activities and assets is not a business because substantially all of the fair value of the gross assets acquired is concentrated in intangible assets, with similar risk characteristics. Accordingly, this transaction has been accounted for as an asset acquisition.

The management identified and recognized the individual identifiable assets acquired and liabilities assumed; and allocated the purchase consideration to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of acquisition.

The allocated value of the identifiable assets and liabilities of SJEPL based on report from external expert at the date of acquisition were:

Particulars	Fair value recognised on acquisition (Rs. in lakhs)
Assets	
Property, plant & equipment	117.78
Intangible asset	1,46,658.68
Intangible asset under development	101.68
Financial assets	17,159.70
Other current assets	1,692.82
Total identified assets at fair value (A)	**1,65,730.66**
Liabilities	
Financial liabilities	1,41,421.74
Other current liabilities	716.86
Provisions- current and non-current	65.73
Total identified liabilities at fair value (B)	**1,42,204.33**
Net assets (A-B)	**23,526.33**

(b) The Trust had submitted the bid for Toll, Operation, Maintenance and Transfer of Eastern Peripheral Expressway (from Km 1.000 to Km 136.000) of NE-2 in National Capital Region ('NCR') ('TOT bundle 7'), pursuant to which, the Trust was declared as the highest bidder at a consideration of Rs. 6,26,710.00 lakhs and accordingly, Letter of Award was issued to the Trust by NHAI for which Trust has incorporated the SPV named NCR Eastern Peripheral Expressway Private Limited ('NCREPE') on April 25,2022 and has enter into Concession Agreement with NHAI on May 6, 2022. The Trust has raised additional sum of Rs. 2,61,170.00 lakhs from its unitholders through rights issue of its units and completed the acquisition on November 11, 2022.The Trust has accounted the above acquisition as asset acquisition in these consolidated financial statements. The entire consideration paid is towards the acquisition of intangible asset.

Note 35: Segment information

The Group is engaged in setting up, operating, and managing of toll road assets in India. Based on the guiding principles given in Ind AS 108 'Operating Segment', all the activities of the Group fall within a single operating segment. Further, the entire operations of the Trust are only in India and hence, disclosure of secondary/geographical segment information does not arise. Accordingly, giving disclosures under Ind AS 108 does not arise.

Note 36: Micro enterprises and small enterprises

The Ministry of Micro, Small and Medium Enterprises has issued an office memorandum dated August 26,2008 which recommends that the micro and small enterprises should mention in their correspondence with its customers the Entrepreneurs Memorandum Number as allocated after filing of the Memorandum. Accordingly, the disclosure in respect of the amount payable to such enterprises as at March 31,2023 and March 31,2022 has been made in the financial statements based on information received and available with the Group. Further in view of the Investment Manager, the impact of interest, if any, that may be payable in accordance with the provisions of the Micro, Small and Medium Enterprises Development Act, 2006 ('The MSMED Act') is not expected to be material. The Group has not received any claim for interest from any supplier, which has been relied upon by the auditors.

The disclosure pursuant to the said Act is as under:

Particulars	March 31, 2023	March 31, 2022
The amount remaining unpaid to micro and small suppliers as at end of the year		
- Principal amount due to micro and small enterprises	38.02	-
- Interest due on above	-	-
The amount of interest paid by the buyer in terms of section 16 of the MSMED Act 2006 along with the amounts of the payment made to the supplier beyond the appointed day during each accounting year	-	-
The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the interest specified under the MSMED Act 2006.	-	-
The amount of interest accrued and remaining unpaid at the end of each accounting year	-	-
The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprise for the purpose of disallowance as a deductible expenditure under section 23 of the MSMED Act 2006	-	-

Note 37: In March 2018, SJEPL, paid an advance amounting to Rs. 1,455.11 lakhs to its EPC contractor, its then related party against Change of scope work assigned by the NHAI. Post completion of work by the EPC contractor, NHAI has not released payment for the said Change of scope work to SJEPL. SJEPL has filed a claim against the NHAI for the recovery of the said amount. However, considering that the said Change of Scope has not yet been approved by the NHAI or by its Independent Engineer and pending settlement of these recoverable amount, the same has disclosed these as 'recoverable from EPC contractors' in these consolidated financial statements.

The Investment Manager believes that it will be settled and received from NHAI during the final adjustments and settlement of all claims of/ by NHAI during the issuance of final completion certificate of the Project Highway which is currently pending disposal with the CCIE.

Note 38: Inter corporate deposit obtained by the Trust from the Investment Manager

During the year ended March 31, 2022, the Trust had availed intercorporate loan from Maple Infra InvIT Investment Manager Private Limited, Investment Manager amounting to Rs. 30.00 lakhs. As per the terms of the loan, rate of interest shall be bank rate plus 5.75% per annum. The said loan was repayable on demand. Out of the said loan, amount of Rs. 0.05 lakhs were used for Investment in equity shares of NCREPE by the Trust.

During the year, the Trust received a letter dated September 9,2022 from SEBI stating that the Trust has borrowed money prior to initial offer of units by the Trust (i.e., without approval by unitholders) which is not in compliance with SEBI (Infrastructure Investment Trusts) Regulations, 2014 and advised the Trust to improve compliance standards to avoid recurrence of such instances.

The Investment Manager has discussed the matter with its legal counsels and is of the view that the said intercorporate loan of Rs. 30.00 lakhs taken during the year ended March 31, 2022, though was not in compliance with SEBI InvIT Regulations, however, the same was adequately reported to SEBI. Further, the Trust has repaid the entire amount of inter-corporate loan during the year, post issuance of unit capital in June 2022 and hence, there is no default as on date. The Investment Manager is of the view that this was only a precautionary warning by SEBI and thus, no action is expected to be taken against the Trust and no adjustments is required in these consolidated financial statements in this regard.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 39: Disclosure pursuant to Appendix D: Service Concession Arrangements disclosures of Ind AS 115: Revenue from Contracts with Customers.

Name of project: 6 lane highway on Chandikole to Bhubaneshwar Section of NH5 for 67 Kms
Nature of project: Design Build Finance Operate and Transfer (DBFOT)
Concession period: 26 years from appointed date
Start date of concession period: December 14, 2011 (appointed date)
End date of concession period: December 13, 2037
Period of concession since appointed date as on March 31, 2023: 11 years and 4 months
Remaining concession period as on March 31, 2023: 14 years and 8 months
Construction completion date: Provision completion certificate received on January 12,2017 for 56.88 kms; Provisional completion certificate/ Completion certificate for the balance 10.12 Km is awaited (refer note 44)
SJEPL, has in accordance with Article 29 of the Concession Agreement has applied for an extension of concession period vide letter dated July 28,2021 which is expected to be received.

Name of project: Eastern Peripheral Expressway of NE-2 in the National Capital Region (NCR) (TOT Bundle 7) for 136 Kms
Nature of project: Toll Operate and Transfer (TOT)
Concession period: 20 years from appointed date
Start date of concession period: November 11, 2022 (appointed date)
End Date of Concession period: November 10, 2042
Period of concession since appointed date as on March 31, 2023: 5 months
Remaining amortisation period as on as on March 31, 2023: 19 years and 7 months.

Note 40: Employee benefits

1. **Defined contribution plan**

The Group has calculated the various benefits provided to employees as per Indian Accounting Standard (Ind AS) 19 'Employees Benefits' as under:
i) Provident fund
ii) Employee state insurance

The Group has recognised the following amounts in the statement of profit and loss account:

Particulars	March 31, 2023	March 31, 2022
Employer's contribution to provident fund	14.47	-
Employer's contribution to employee state insurance	0.52	-

2. **Defined benefit plan**

a) The Group has a defined benefit plan for gratuity and compensated absences. The following tables summarize the components of net benefit expense recognized in the account and the funded status and amounts recognized in the balance sheet for the respective plans as per actuarial valuation using the projected unit credit method as on each balance sheet date.

b) The results of the actuarial study for the obligation for employee benefits as computed by the actuary are shown below:

Actuarial study analysis	Gratuity	
	March 31, 2023	March 31, 2022
Principal actuarial assumptions		
Discount rate	7.20%-7.50%	-
Range of compensation increase	3.00%-5.00%	-
Withdrawal rate	5.00%	-
Expected rate of return on plan assets	-	-
Retirement age	60yrs	-
Plan duration	8yrs-23yrs	-
Components of statement of income statement charge		
Current service cost	2.59	-
Interest cost	1.24	-

(All amounts in Rs. lakhs, unless otherwise stated)

Recognition of past service cost	-	-
Settlement/curtailment/termination loss	19.56	-
Immediate recognition of (gains)/losses under OCI transferred to P/L	(8.33)	-
Total charged to consolidated statement of profit and loss	**15.06**	**-**
Movements in net liability/(asset)		
Net liability at the beginning of the year	-	-
Additions on account of acquisition	40.82	-
Employer contributions	-	-
Total expense recognised in the consolidated statement of profit and loss	23.40	-
Total amount recognised in OCI	(8.33)	-
Benefits paid	(46.18)	-
Net liability at the end of the year	**9.71**	**-**
Re-measurements of defined benefit plans		
Actuarial gain/(loss) due to changes in financial assumptions	0.12	-
Actuarial gain/(loss) due to changes in demographic assumptions	-	-
Actuarial gain/(loss) on account of experience adjustments	8.21	-
Immediate recognition of (gains)/losses under OCI transferred to P/L	-	-
Total actuarial gain/(loss) recognised in OCI	**8.33**	
Change in fair value of plan assets		
Fair value of plan assets at the beginning of the year	-	-
Interest on plan assets	-	-
Contributions made	-	-
Benefits paid	-	-
Actuarial (loss)/gain on plan assets	-	-
Fair value of plan assets at the end of the year	**-**	**-**

Actuarial study analysis	**Compensated absences**	
	March 31, 2023	**March 31, 2022**
Principal actuarial assumptions		
Discount rate	7.20%-7.50%	-
Range of compensation increase	3.00%-5.00%	-
Withdrawal rate	5.00%	-
Expected rate of return on plan assets	-	-
Retirement age	60yrs	-
Plan duration	8yrs-23yrs	-
Components of statement of income statement charge		
Current service cost	2.38	-
Interest cost	0.20	-
Recognition of past service cost	(2.58)	-
Settlement/curtailment/termination loss	-	-
Immediate recognition of (gains)/losses	5.38	-
Total charged to consolidated statement of profit and loss	**5.38**	**-**
Movements in net liability/(asset)		
Net liability at the beginning of the year	-	-
Addition on account of acquisition	6.18	
Employer contributions	-	-

Benefits paid directly by the Group	(6.66)	-
Total expense recognised in the consolidated statement of profit and loss	-	-
Actuarial loss	5.38	-
Net liability at the end of the year	**4.90**	-
Re-measurements of defined benefit plans		
Actuarial gain/(loss) due to changes in financial assumptions	-	-
Actuarial gain/(loss) due to changes in demographic assumptions	-	-
Actuarial gain/(loss) on account of experience adjustments	-	-
Total actuarial gain/(loss) recognised in OCI	-	-
Change in fair value of plan assets		
Fair value of plan assets at the beginning of the year	-	-
Interest on plan assets	-	-
Contributions made	-	-
Benefits paid	-	-
Actuarial (loss)/gain on plan assets	-	-
Fair value of plan assets at the end of the year	-	-

c) Sensitivity analysis of significant assumptions

Particulars	**Gratuity**	
	March 31, 2023	**March 31, 2022**
Discount rate		
+ 1% discount rate	(1.94)	-
-1% discount rate	2.35	-
Salary increase		
+1% salary growth	2.38	-
-1% salary growth	(1.97)	-

Particulars	**Compensated absences**	
	March 31, 2023	**March 31, 2022**
Discount rate		
+ 1% discount rate	(2.17)	-
-1% discount rate	2.68	-
Salary increase		
+1% salary growth	2.69	-
-1% salary growth	(2.17)	-

d) Maturity profile of defined benefit obligations is as follows

Particulars	**Gratuity**	
	March 31, 2023	**March 31, 2022**
Up to 1 year	0.64	-
2-5 years	3.30	-
More than 5 years	52.98	-

Particulars	**Compensated absences**	
	March 31, 2023	**March 31, 2022**
Up to 1 year	0.44	-
2-5 years	2.01	-
More than 5 years	4.10	-

(All amounts in Rs. lakhs, unless otherwise stated)

The average duration of the defined benefit plan obligation at the end of the reporting period is 8-23 years (31 March 2022: nil). The estimate of future salary increases considered in actuarial valuation takes into account inflation, seniority, promotion and other relevant factors.

Note 41: Fair value measurement

A. Accounting classification and fair values of financial instruments

Set out below, is a comparison by class of the carrying amounts and fair value of the Group's financial instruments:

	Carrying value		Fair value	
	March 31, 2023	March 31, 2022	March 31, 2023	March 31, 2022
Financial assets				
Current investments	3,430.72	-	3,430.72	-
	3,430.72	-	**3,430.72**	-
Financial liabilities				
Borrowings	4,81,903.35	30.00	4,81,903.35	30.00
	4,81,903.35	**30.00**	**4,81,903.35**	**30.00**

The management assessed that cash and cash equivalents, trade receivables, other financial assets, trade payables, short-term borrowings and other current liabilities approximate their carrying amounts largely due to the short-term maturities of these instruments.

B. Fair value hierarchy

	Carrying amount				Fair value			
March 31,2023	FVTPL	FVTOCI	Amortized Cost*	Total	Level 1	Level 2	Level 3	Total
Financial assets								
Current investments	3,430.72	-	-	3,430.72	3,430.72	-	-	3,430.72
	3,430.72	-	-	**3,430.72**	**3,430.72**	-	-	**3,430.72**
Financial liabilities								
Borrowings	-	-	4,81,903.35	4,81,903.35	-	-	4,81,903.35	4,81,903.35
	-	-	**4,81,903.35**	**4,81,903.35**	-	-	**4,81,903.35**	**4,81,903.35**

	Carrying amount				Fair value			
March 31, 2022	FVTPL	FVTOCI	Amortized Cost*	Total	Level 1	Level 2	Level 3	Total
Financial liabilities								
Borrowings	-	-	30.00	30.00	-	-	30.00	30.00
	-	-	**30.00**	**30.00**	-	-	**30.00**	**30.00**

* The carrying amount of financial instruments carried at amortized cost are a reasonable approximation of fair value since the Group does not anticipate that the carrying amounts would be significantly different from the value that would eventually be received or settled. The carrying value of cash and cash equivalent and other bank balances are equivalent to fair value.

C. Transfers between Level 1, Level 2 and Level 3

There were no transfers between Level 1, Level 2 or Level 3 during the year ended March 31, 2023 and year ended March 31, 2022.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 42: Financial risk management objective and policies

The Group's activities may be exposed to credit risk, liquidity risk and market risk. The Group's risk management policies and processes are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor such risks and compliance with the same. Risk management policies and processes are reviewed regularly to reflect changes in market conditions and the Group's activities.

The Board of Directors of the Investment Manager and management of the SPVs shall have overall responsibility for the establishment and oversight of the Trust and SPVs' risk management framework respectively. This note presents information about the risks associated with its financial instruments, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital.

(I)Credit risk
The Group is exposed to credit risk as a result of the risk of counterparties defaulting on their obligations. The Group's exposure to credit risk primarily relates to investments, trade receivables, other financial assets and cash and cash equivalents. The Group monitors and limits its exposure to credit risk on a continuous basis.
As on the reporting date, there is no significant concentration of credit risk. Cash at bank and bank deposits are placed with financial institutions which are regulated and have low risk.

(a)Trade receivables
The Group has limited exposure to trade receivables since majorly toll collection are in cash basis except toll collection by card/ transactions which is credited to bank account in a few days and is not exposed to credit risk connected with trade receivables.

(b) Cash and cash equivalents
Cash and cash equivalents comprise cash on hand and deposits with original maturity of less than three months, which are readily convertible to cash. These are subject to insignificant risk of change in value or credit risk.

(II)Liquidity risk
The Group is exposed to liquidity risk related to its ability to fund its obligations as they become due. The Group monitors and manages its liquidity risk to ensure access to sufficient funds to meet operational and financial requirements. The Group has access to credit facilities and debt capital markets and monitors cash balances daily. In relation to the Group's liquidity risk, the Group's policy is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions as they fall due while minimizing finance costs, without incurring unacceptable losses or risking damage to the Group's reputation.

Financing arrangements
The Group has access to following undrawn borrowing facilities at the end of the reporting period:

Particulars	March 31, 2023	March 31, 2022
Variable rate borrowings	1,845.58	-

Maturities of financial liabilities
The following are the Group's remaining contractual maturities of financial liabilities as at the reporting date. The Group believes that the working capital is sufficient to meet its current requirement, accordingly no liquidity risk is perceived:

As at March 31, 2023

Particulars	On demand	Less than 3 months	3-12 months	1-5 years	more than 5 years	Total
Borrowings including current maturities	-	1,061.49	4,052.97	70,808.81	4,09,525.45	4,85,448.72
Trade payables	-	4,576.14	-	-	-	4,576.14
Lease liabilities	-	3.14	15.50	80.44	43.20	142.28
Other financial liabilities	-	230.19	4,402.15	-	-	4,632.34
	-	**5,870.96**	**8,470.62**	**70,889.25**	**4,09,568.65**	**4,94,799.48**

(All amounts in Rs. lakhs, unless otherwise stated)

As at March 31, 2022

Particulars	On demand	Less than 3 months	3-12 months	1-5 years	more than 5 years	Total
Borrowings including current maturities	30.00	-	-	-	-	30.00
Trade payables	-	329.75	-	-	-	329.75
Other financial liabilities	-	0.70	-			0.70
	30.00	**330.45**	-	-	-	**360.45**

(III)Market risk

The market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: interest rate risk, foreign currency risk and other price risk.

(i)Interest rate risk

Interest rate risk is the risk that an upward movement in the interest rate would adversely affect the borrowing cost of the Group. The Group is exposed to long term and short-term borrowings. The Group manages interest rate risk by monitoring its mix of fixed and floating rate instruments and taking action as necessary to maintain an appropriate balance.

The exposure of the Group's borrowings to interest rate changes at the end of the reporting period are as follows:

a) Interest rate risk exposure

Particulars	March 31, 2023	March 31, 2022
Variable rate borrowings	4,81,903.35	30.00

b) Sensitivity analysis

A reasonably possible change of 0.50% (50 basis points) in interest rates at the reporting date would have increased / (decreased) profit or loss by the amounts shown below. This analysis assumes that all other variables remain constant.

Particulars	Impact on profit before tax	
	March 31, 2023	March 31, 2022
Interest rates - increase by 50 basis points	2,409.52	-
Interest rates - decrease by 50 basis points	(2,409.52)	-

(ii)Foreign currency risk

The Group is not exposed to foreign currency risk as it has no borrowings or payables or any other significant transactions in foreign currency.

(iii)Price risk

Investment

The Group`s investments in mutual funds are susceptible to market price risk arising from uncertainties about future values of the investment securities. The Group manages the price risk through diversification and by placing limits on individual and total investments.

Toll rates

NHAI issues a circular prior to the financial year defining the toll rates to be charged from the customers. The Trust Group is exposed to movement in toll rate as set by NHAI.

Note 43: Capital management

The Investment Manager and the management of the SPVs shall have the primary responsibility to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

For the purpose of Group's capital management, capital includes issued capital and all other equity reserves. The Group manages its capital structure in light of changes in the economic and regulatory environment and the requirements of the financial covenants. To maintain or adjust the capital structure, the Group may adjust the distribution to unitholders (subject to the provisions of InvIT regulations which require distribution of at least 90% of the net distributable cash flows of the Trust to unit holders), return capital to unitholders or issue new units.

The Group manages its capital on the basis of gearing ratio, which is net debt (total borrowings net of cash and cash equivalents) divided by total capital plus net debt.

Particulars	March 31, 2023	March 31, 2022
Secured term loans from banks	4,81,903.35	30.00
Less: Cash and cash equivalents	(38,373.36)	(4.01)
Less: Other bank balances	(32,184.49)	-
Net debt (A)	**4,11,345.50**	**25.99**
Total equity (B)*	3,36,109.26	(350.15)
Total equity and net debt (C=(A)+(B))	**7,47,454.76**	**(324.16)**
Gearing ratio (A)/(C)	**55.03%**	**(8.02%)**

* The Trust had not issued any unit capital as on March 31, 2022 and there is an accumulated loss of Rs. 350.15 lakhs till March 31, 2022 resulting into a negative equity of Rs. 350.15 lakhs.

Note 44: Extension of scheduled completion and current status of the project

One of the subsidiary companies, SJEPL entered into a Concession Agreement (‘CA’) on August 6, 2010 with NHAI for augmentation and expansion of the then existing 4 lane highway to 6 lane highway on a section of NH 5 in Odisha for 67 Kms of toll project road (‘Project Highway’) on DBFOT model for a period of 26 years starting from December 14, 2011 being the Appointed Date. SJEPL was also granted right to collect toll on existing 4 lane highway from the Appointed Date.

As per the CA, SJEPL was obligated to complete the above-mentioned work within a period of 910 days from Appointed Date i.e., by Jun 11, 2014. However, due to delays in handover of land by NHAI and other operational delays, the work was delayed and NHAI vide supplementary agreement dated November 11,2016 extended the scheduled completion date to March 31, 2017. SJEPL was granted Provisional Completion Certificate (‘PCC’) by the Independent Engineer (‘IE’) on January 12,2017 for 56.878 Kms of the total 67 Kms of Project Highway and, it is still awaited for the balance distance (kms).

Further, SJEPL has completed a majority of the punch list items as specified in the PCC dated January 12,2017 and that the balance punch list items were either pending due to extraneous factors or as SJEPL had applied to NHAI for de-scoping of the same.

Though the IE had recommended for an extension of time for completion of the project till June 30, 2021, no formal approval from NHAI has been received by SJEPL post 31 March 2017. As per the CA, if the above-mentioned delay is not approved by the NHAI, it may result in termination of the CA and consequent penalty and liability may devolve upon SJEPL, which was also imposed by NHAI while granting the in-principal approval for change in shareholding by SJEPL as more detailed in Note 32(c) above.

The management of Investment Manager believes that delay in completion is not on any grounds attributable to SJEPL- and that obtaining the final completion certificate from the NHAI is only procedural in nature and since recommendations of the IE for extension of time has been received from time to time, no liability in this regard shall devolve upon SJEPL and the Group. Further, delays in construction, including the penalties and extension of Concession Agreement has been referred to Conciliation Committee of Independent Experts (‘CCIE’) by erstwhile shareholders of SJEPL and NHAI, which is currently pending disposal with CCIE. Also, as per the SPA, Group is indemnified by the selling shareholders for any liability or all possible losses which may devolve upon the Trust in this regard.

Note 45: The recoverable amount of the toll collection rights recognized as an intangible asset has been computed by external independent valuation experts based on value in use calculation for the underlying projects (based on discounted cash flow model). On a periodic basis, according to the recoverable amounts of individual portfolio assets computed by external valuation experts, the Trust tests impairment on the amounts invested in the respective subsidiary companies. The valuation exercise so carried out considers various factors including cash flow projections (including traffic projections), changes in interest rates, discount rates, risk premium for market conditions etc. Based on the valuation exercise so carried out, there is no impairment of intangible assets for the year ended March 31, 2023.

Note 46: During the year ended March 31, 2023, the Group has incurred loss of Rs. 15,327.46 lakhs and has accumulated loss of Rs. 15,677.61 lakhs as at year end. Considering the recent acquisitions, fair value of projects assessed by external valuation experts and significant contribution from the shareholders, these consolidated financial statements are prepared on going concern basis.

Note 47: Provision for major maintenance obligations

Particulars	Amount
As at March 31, 2021	-
Add: Created during the year	-
Less: Expenses incurred during the year	-
As at March 31, 2022	-
Additions on account of acquisition (refer note 34)	8,284.80
Add: Created during the year	5,064.29
Less: Expenses incurred during the year	(1,348.84)
As at March 31, 2023	**12,000.25**

The Investment Manager, based on inputs arising from technical reports for the respective subsidiary companies had considered provision of major maintenance expenses due to be incurred in the consolidated financial statements.

Note 48: Related party disclosures

I. List of related parties as per the requirements of Ind AS 24- 'Related party disclosures' and Regulation 2(1) (zv) of the SEBI InvIT Regulations

Following are the related parties and transactions entered with related parties for the year ended March 31,2023 and March 31, 2022.

A. Parties to the Trust

i. Maple Highways Pte Limited, Singapore (Sponsor of Trust and Holding Company of Investment Manager and Project Manager)
ii. Maple Infra InvIT Investment Manager Private Limited (Investment Manager)
iii. Maple Highway Project Management Private Limited (Project Manager)
iv. Axis Trustee Services Limited (Trustee of the Trust)

B. Directors of the parties to the Trust specified in I(A) above

Particulars	Maple Highways Pte Limited (Sponsor)	Maple Infra InvIT Investment Manager Private Limited (Investment Manager)	Maple Highway Project Management Private Limited (Project Manager)	Axis Trustee Services Limited (Trustee)
Directors	Mr. Cyril Sébastien Dominique Cabanes* Ms. Wai Leng Leong *	Mr. Romesh Sobti Mr. Saurabh Agarwal Mr. Yudhvir Singh Malik Mr. Anil Aggarwal Mr. Louis- St. Maurice (w.e.f. March 31, 2023) Mrs. Seema Gupta (w.e.f. March 31, 2023)	Mr. Saurabh Agarwal Mr. Deepak Malhotra	Mr. Rajesh Kumar Dahiya Mr. Ganesh Sankaran Ms. Deepa Rath

* Mr. Olivier Pascal Lai-Ong-Teung is an alternate director w.e.f. April 19, 2022 of Ms. Wai Leng Leong and Mr. Cyril Sébastien Dominique Cabanes

(All amounts in Rs. lakhs, unless otherwise stated)

C. Key Managerial Personnel

i. Mr. Anup Vikal, Chief Executive Officer of Investment Manager (w.e.f. September 8, 2022)
ii. Mr. Ankit Dewan, Company Secretary and Compliance Officer of the Trust.
iii. Mr. Varun Mehta, Chief Financial Officer of Investment Manager (w.e.f. June 8, 2023)

D. Other related parties

i. CDPQ Infrastructures Asia III Inc., Canada ('Associate Company of the Sponsor' and 'Unitholder holding majority units')

II. Transactions with the related parties during the year:

Name of related party	Relationship	March 31, 2023	March 31, 2022
Reimbursement of expenses by Investment Manager on behalf of the Trust			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	49.30	146.00
Maple Infra InvIT Investment Manager Private Limited		25.20	-
Intercorporate deposit taken			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	165.00	30.00
Interest expense on intercorporate deposit			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	1.57	0.78
Repayment of intercorporate deposit			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	195.00	-
Trustee fees			
Axis Trustee Services Limited	Trustee	8.85	7.50
Issue of unit capital			
Maple Highways Pte Limited, Singapore	Sponsor	52,825.50	-
CDPQ Infrastructures Asia III Inc., Canada	Associate company of sponsor	2,11,302.00	-
Issue of share capital (as nominee of Trust)			
Maple Infra Invit Investment Manager Private Ltd (SJEPL)	Investment Manager	0.00	-
Maple Infra Invit Investment Manager Private Ltd (NCR EPE)	Investment Manager	0.00	-
Investment management fees			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	1,896.74	-
Project management fees			
Maple Highway Project Management Private Limited (SJEPL)	Project Manager	454.19	-
Maple Highway Project Management Private Limited (NCR EPE)	Project Manager	212.23	-

(All amounts in Rs. lakhs, unless otherwise stated)

III. Net outstanding amount- payable/receivable as at the end of the year

Name of the related party	Relationship	As at March 31, 2023	As at March 31, 2022
Trade payable (net of tax deducted at source)			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	1,736.00	317.93
Maple Highway Project Management Private Limited (SJEPL)	Project Manager	18.50	-
Maple Highway Project Management Private Limited (NCR EPE)	Project Manager	49.77	-
Intercorporate deposit taken			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	-	30.00
Interest accrued and not due on unsecured loan			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	-	0.70

Note 49: Additional information to consolidated financial statements as at March 31, 2023 and March 31, 2022:

As at 31 March 2023:

Name of the entity	Net assets (Total assets minus total liabilities)		Share in profit or (loss)		Share in other comprehensive income		Share in total other comprehensive income	
	Amount	As a % of consolidated net assets	Amount	As a % of consolidated net assets	Amount	As a % of consolidated net assets	Amount	As a % of consolidated net assets
Parent Company								
Indian Highway Concessions Trust	61,501.95	18.30%	(4,430.09)	28.89%	-	0.00%	(4,430.09)	28.90%
Subsidiary								
SJEPL	21,403.74	6.37%	(4,290.67)	27.98%	8.33	100.00%	(4,282.34)	27.94%
NCREPE	2,53,203.57	75.33%	(6,615.03)	43.13%	-	0.00%	(6,615.03)	43.16%
Total	**3,36,109.26**	**100.00%**	**(15,335.79)**	**100.00%**	**8.33**	**100.00%**	**(15,327.46)**	**100.00%**

As at 31 March 2022:

Name of the entity	Net Assets (Total assets minus total liabilities)		Share in profit or (loss)		Share in other comprehensive income		Share in total other comprehensive income	
	Amount	As a % of onsolidated et assets	Amount	As a % of onsolidated net assets	Amount	As a % of onsolidated net assets	Amount	As a % of onsolidated net assets
Parent Company								
Indian Highway Concessions Trust	(350.15)	100.00%	(176.23)	100.00%	-	-	(176.23)	100.00%
Subsidiary								
SJEPL	-	-	-	-	-	-	-	-
NCREPE	-	-	-	-	-	-	-	-
Total	**(350.15)**	**100.00%**	**(176.23)**	**100.00%**	**-**	**-**	**(176.23)**	**100.00%**

Note 50: Project Management and Investment Management fees

(i) Project management fees

The Project Manager shall be paid fees (inclusive of all taxes) for the services provided by the Project Manager in accordance with the Project Implementation and Management Agreement (‘PIMA’). The fees payable to the Project Manager shall be higher of (A) Rs. 650.00 lakhs for the financial year ending on March 31,2021 escalated by 7% (seven per cent) per annum payable by each of the SPVs in the ratio of the net asset value of such SPV; and (B) 0.26% of the net asset value of the SPV for the immediately preceding financial year, as determined in accordance with the InvIT Regulations. The fees may be revised for every financial year as specified in the PIMA. However, it is clarified that the approval of the unitholders shall not be required in relation to the annual escalation in fees contemplated above.

Pursuant to the PIMA, the project manager is entitled to fees of Rs 666.42 lakhs (inclusive of GST) for performance of Operation and Management services, which is included in these consolidated financial statements.

(ii) Investment management fees

The Investment Manager shall be paid fees for the services provided by the Investment Manager under the Investment Management Agreement (‘IMA’) in accordance with the Distribution Policy (‘Management fees’). The Management Fees shall be the higher of (A) Rs. 1,850.00 lakhs for the financial year ending March 31,2021 escalated by 7% per annum; and (B) 0.74% of the net asset value of the Trust for the immediately preceding financial year. The Management fees may be revised for every financial year by the approval of the unitholders. However, the approval of the unitholders shall not be required in relation to the annual escalation in Management fees contemplated above.

Pursuant to the IMA, the Investment Manager is entitled to fees of Rs 1,896.74 lakhs (inclusive of GST), which is included in these consolidated financial statements.

Note 51: In the previous year ended March 31, 2022, the Trust availed input tax credit of Rs. 26.68 lakhs, on certain services. However, considering there was no output services for which input tax credit can be utilised, the Trust has made an impairment loss for the input tax credit availed amounting to Rs. 28.55 lakhs (including balance of March 31, 2021: Rs. 1.87 lakhs) in the financial statements for the year ended March 31, 2022. In the current year, the Trust has not availed any input credit on the services availed in its books and has recognized GST input as an expense along with the relevant expenses head.

Note 52: In the earlier years, the Trust had entered into an arrangement with Investment Manager to discharge payments on behalf of the Trust for the expense and other liabilities incurred by the Trust till the time the Trust has issued any unit capital. Accordingly, as at March 31, 2022 the Trust had incurred expenses of Rs. 317.93 lakhs on account of professional fees and other regular operational expenses which were paid by the Investment Manager and were shown as payable to the Investment Manager under the head Trade payables for the year ended March 31, 2022. Further, tax deducted at source deducted on such expenses was also deposited by the Investment Manager on behalf of the Trust. In the current year, the payments made by the Investment Manager have been reimbursed by the Trust and there is no outstanding dues to the Investment Manager in this respect as on March 31 2023.

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(All amounts in Rs. lakhs, unless otherwise stated)

Note 53: Events after the reporting period

There are no events identified subsequent to the balance sheet date till date of reporting which requires adjustment in these consolidated financial statements.

As per our report of even date attached

For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of

Maple Infra InvIT Investment Manager Private Limited

(as investment manager to Indian Highway Concessions Trust)

Per **Amit Gupta**	**Romesh Sobti**	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Partner	Chairman and Director	Chief Executive Officer	Company Secretary and Compliance officer	Chief Financial Officer
M. No.: 501396	DIN- 00031034		M. No.: A31131	
Place: Gurugram	Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 8, 2023	Date: June 8,2023	Date: June 8,2023	Date: June 8,2023	Date: June 8,2023

INDEPENDENT AUDITOR'S REPORT

To the Unit holders of Indian Highway Concessions Trust

Report on the Audit of the Standalone Financial Statements

Opinion

We have audited the accompanying standalone financial statements of Indian Highway Concessions Trust ("the Trust"), which comprise the Balance sheet as at March 31, 2023, the Statement of Profit and Loss, including the Statement of Other Comprehensive Income, the Statement of Cash Flows and the Statement of Changes in Unit holders' equity for the year then ended, the Statement of Net Assets at fair value as at March 31, 2023, the statement of Total Return at fair value, the statement of Net Distributable Cash Flows ('NDCFs') of the Trust for the year then ended and notes to the standalone financial statements, including a summary of significant accounting policies and other explanatory information (hereafter referred to as "standalone financial statements").

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone financial statements give the information required by the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 as amended from time to time ('SEBI Regulations') including SEBI circular CIR/IMD/DF/127/2016 dated November 29, 2016 ('SEBI circular') in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations, of the state of affairs of the InvIT as at March 31, 2023, its Profit including Other Comprehensive Income, its Cash Flows and Statement of Changes in Unit holders' equity for the year ended on that date, its Net Assets at fair value as at March 31, 2023, its Total Return at fair value and the Net Distributable Cash Flows of the Trust for the year ended on that date.

Basis for Opinion

We conducted our audit of the standalone financial statements in accordance with the Standards on Auditing (SAs) and other pronouncements issued by the Institute of Chartered Accountants of India (ICAI). Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Standalone Financial Statements' section of our report. We are independent of the Trust in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India and we have fulfilled our other ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the standalone financial statements.

Emphasis of Matters

a. We draw attention to note 36 of the standalone financial statements where in respect to an investment in one of the subsidiary, there are delays in completion of 67 Kms of toll project road on Chandikhole-Bhubaneshwar section ('Project Highway') and non-receipt of Completion Certificate by the subsidiary company as on date and the consequential uncertainty of potential penalties and/or termination of Concession Agreement and recoverability of investment made.
b. We draw attention to note 9(D) of the standalone financial statements, which describes the presentation of "Unit capital" as "Equity" to comply with InvIT Regulations and not as compound financial instrument as would be required under Ind AS.

Our opinion is not modified in respect of above matters.

Other Information

The Management of Maple Infra InvIT Investment Manager Private Limited (the "Investment Manager") is responsible for the other information. The other information comprises the information included in the Annual Report but does not include the standalone financial statements and our auditor's report thereon.

Our opinion on the standalone financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the standalone financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether such other information is materially inconsistent with the standalone financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

The annual report is not made available to us as at the date of this auditor's report. We have nothing to report in this regard.

Responsibility of Management for the Standalone Financial Statements

The Management of the Investment Manager ('the Management') is responsible for the preparation of these standalone financial statements that give a true and fair view of the financial position as at March 31, 2023, financial performance including other comprehensive income, cash flows and the movement of the unit holders' equity for the year ended March 31, 2023, the net assets at fair value as at March 31, 2023, the total return at fair value and the net distributable cash flows of the Trust for the year ended March 31, 2023 in accordance with the requirements of the SEBI regulations, Indian Accounting Standards (Ind AS) as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations. This responsibility also includes the design, implementation and maintenance of adequate controls for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the standalone financial statements, management is responsible for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Trust or to cease operations, or has no realistic alternative but to do so.

The Management is also responsible for overseeing the Trust's financial reporting process.

Auditor's Responsibilities for the Audit of the Standalone Financial Statements

Our objectives are to obtain reasonable assurance about whether the standalone financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs and other pronouncements issued by ICAI will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the standalone financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal financial control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the Trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the standalone financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the standalone financial statements, including the disclosures, and whether the standalone financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Report on Other Legal and Regulatory Requirements

Based on our audit and as required by SEBI Regulations, we report that:

(a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

(b) The Balance Sheet and the Statement of Profit and Loss are in agreement with the books of account of Trust;

(c) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards (Ind AS) and/or any addendum thereto as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended, to the extent not inconsistent with SEBI Regulations.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership Number: 501396
UDIN: 23501396BGYBPX8693

Place of Signature: Gurugram
Date: June 08, 2023

Indian Highway Concessions Trust

Audited standalone financial statements for the year ended March 31, 2023

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	Note	March 31, 2023	March 31, 2022
ASSETS			
Non-current assets			
Financial assets			
i) Investments	3	1,00,983.68	-
ii) Loans	4	2,08,711.85	-
Total non-current assets		**3,09,695.53**	**-**
Current assets			
Financial assets			
i) Cash and cash equivalents	5A	32,450.81	4.01
ii) Other bank balances	6	7,627.36	-
iii) Other financial assets	7	14,969.34	-
Other current assets	8	11.65	8.00
Total current assets		**55,059.16**	**12.01**
TOTAL ASSETS		**3,64,754.69**	**12.01**
EQUITY AND LIABILITIES			
EQUITY			
Unit capital	9	3,51,786.87	-
Other equity	10	10,890.71	(350.15)
Total unitholders' equity		**3,62,677.58**	**(350.15)**
LIABILITIES			
Current liabilities			
Financial liabilities			
i) Borrowings	11	-	30.00
ii) Trade payables	12		
-Total outstanding dues of micro enterprises and small enterprises		-	-
-Total outstanding dues of creditors other than micro enterprises and small enterprises		1,933.92	329.75
iii) Other financial liabilities	13	16.03	0.70
Other current liabilities	14	123.03	1.71
Current tax liability (net)	15	4.13	-
Total current liabilities		**2,077.11**	**362.16**
TOTAL EQUITY AND LIABILITIES		**3,64,754.69**	**12.01**

Refer to note 2.2 for a summary of significant accounting policies.

The accompanying notes form an integral part of these standalone financial statements.

(All amounts in Rs. lakhs, unless otherwise stated)

As per our report of even date attached.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No: 501396

Place: Gurugram
Date: June 8, 2023

Romesh Sobti	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Chairman and Director	Chief Executive Officer	Company Secretary and Compliance Officer	Chief Financial Officer
DIN: 00031034		M. No.: A31131	
Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	Note	March 31, 2023	March 31, 2022
INCOME			
Revenue from operations	16	14,884.69	-
Other income	17	969.48	-
Total income		**15,854.17**	-
EXPENSES			
Finance cost	18	88.52	14.79
Investment management fees	33	1,896.74	-
Valuation expenses		24.19	2.50
Trustee fees		8.85	7.50
Payment to auditors	19	204.66	54.96
Other expenses	20	1,975.95	96.48
Total expenses		**4,198.91**	**176.23**
Profit / (loss) before tax		**11,655.26**	**(176.23)**
Tax expense	21		
i) Current tax		414.40	-
ii) Deferred tax		-	-
Total tax expense		**414.40**	-
Profit / (loss) for the year		**11,240.86**	**(176.23)**
Other comprehensive income, net of tax		**-**	-
Total comprehensive income/ (loss) for the year		**11,240.86**	**(176.23)**
Earnings per unit (Face value per unit is Rs. 100)			
Basic and diluted (in Rs.)	22	**6.36**	-

Refer to note 2.2 for a summary of significant accounting policies.

The accompanying notes form an integral part of these standalone financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No : 501396

Place: Gurugram
Date: June 8, 2023

Romesh Sobti
Chairman and Director
DIN: 00031034

Place: London
Date: June 8, 2023

Anup Vikal
Chief Executive Officer

Place: Mumbai
Date: June 8, 2023

Ankit Dewan
Company Secretary and Compliance Officer
M. No. : A31131

Place: Mumbai
Date: June 8, 2023

Varun Mehta
Chief Financial Officer

Place: Mumbai
Date: June 8, 2023

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31, 2022
A) Cash flows from operating activities		
Net profit/(loss) before tax	11,655.26	(176.23)
Interest expense on intercorporate deposit from related party	1.57	0.78
Interest income on loans given to subsidiaries	(14,884.69)	-
Interest income on bank deposits	(969.48)	-
Impairment of current asset	-	26.68
Operating profit/(loss) before working capital changes	**(4,197.34)**	**(148.77)**
Adjustments for:		
Increase in trade payables	1,604.17	155.98
Increase in other current liabilities	121.33	1.48
Increase in other financial liabilities	16.03	-
Increase in other current assets	(3.65)	(34.68)
Total of changes in working capital	**1,737.88**	**122.78**
Cash used in operations	(2,459.46)	(25.99)
Income tax paid	(410.27)	-
Net cash used in operating activities (A)	**(2,869.73)**	**(25.99)**
B) Cash flows from investing activities		
Equity investment in subsidiaries	(1,00,983.68)	-
Loan given to subsidiaries	(2,10,151.11)	-
Loan repaid by subsidiaries	1,439.25	-
Interest received on loan given to subsidiaries	11.28	-
Investment in bank deposits (Net of proceeds)	(7,627.36)	-
Interest received on bank deposits	873.55	-
Net cash generated/ (used) in investing activities (B)	**(3,16,438.07)**	-
C) Cash flows from financing activities		
Proceeds from issue of unit capital	3,52,170.00	-
Units issue expenses	(383.13)	-
Proceeds from intercorporate deposit from related party	165.00	30.00
Repayment of intercorporate deposit taken from related party	(195.00)	-
Interest paid on related party intercorporate deposit	(2.27)	-
Net cash generated from financing activities (C)	**3,51,754.60**	**30.00**
Net increase in cash & cash equivalents (A+B+C)	32,446.80	4.01
Cash and cash equivalents at the beginning of the year	4.01	-
Cash and cash equivalents at the end of the year (refer note 5A)	**32,450.81**	**4.01**

Notes:

1. The above standalone statement of cash flows has been prepared under the 'Indirect Method' as set out in the Indian Accounting Standard (Ind AS-7) 'statement of cash flows'.
2. Refer to note 5B for changes in liabilities arising from financing activities.
3. The Trust did not have any cash flow changes arising from non-cash transactions from investing and financing activities.

(All amounts in Rs. lakhs, unless otherwise stated)

Refer to note 2.2 for a summary of significant accounting policies.

The accompanying notes form an integral part of these standalone financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP	**For and on behalf of the Board of Directors of**
Chartered Accountants	**Maple Infra InvIT Investment Manager Private Limited**
ICAI Firm Registration Number: 301003E/E300005	(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**	**Romesh Sobti**	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Partner	Chairman and Director	Chief Executive Officer	Company Secretary and Compliance Officer	Chief Financial Officer
M. No : 501396	DIN : 00031034		M. No. : A31131	
Place: Gurugram	Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023

Indian Highway Concessions Trust
Standalone Statement of Changes in Unitholders' Equity for the year ended March 31, 2023
(All amounts in Rs. lakhs, unless otherwise stated)

(A) Unit capital (refer note 9)

Particulars	Number of unit (in lakhs)	Amount
Balance as at April 1, 2021	**-**	**-**
Units issued during the year	-	-
Issue expenses	-	-
Balance as at March 31, 2022	-	-
Units issued during the year	3,521.70	3,52,170.00
Issue expenses	-	(383.13)
Balance as at March 31, 2023	**3,521.70**	**3,51,786.87**

(B) Other equity (refer note 10)

Particulars	Retained earnings	Total
Balance as at April 1, 2021	**(173.92)**	**(173.92)**
Profit/ (loss) for the year	(176.23)	(176.23)
Other comprehensive income for the year	-	-
Less: Distribution during the year*	-	-
Balance as at March 31, 2022	**(350.15)**	**(350.15)**
Profit/ (loss) for the year	11,240.86	11,240.86
Other comprehensive income for the year	-	-
Less: Distribution during the year*	-	-
Balance as at March 31, 2023	**10,890.71**	**10,890.71**

* The Trust has not made any distribution during the current year and the previous year.

Refer to note 2.2 for a summary of significant accounting policies.

The accompanying notes form an integral part of these standalone financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No : 501396

Place: Gurugram
Date: June 8, 2023

Romesh Sobti
Chairman and Director
DIN : 00031034
Place: London
Date: June 8, 2023

Anup Vikal
Chief Executive Officer
Place: Mumbai
Date: June 8, 2023

Ankit Dewan
Company Secretary and Compliance Officer
M. No. : A31131
Place: Mumbai
Date: June 8, 2023

Varun Mehta
Chief Financial Officer
Place: Mumbai
Date: June 8, 2023

(All amounts in Rs. lakhs, unless otherwise stated)

Disclosures pursuant to SEBI Circulars
(SEBI Circular no. CIR/IMD/DF/114/2016 dated October 20, 2016 and No. CIR/IMD/DF/127/2016 dated November 29, 2016 issued under the SEBI InvIT Regulations)

A. Statement of Net Distributable Cash Flows (NDCFs)

	Particulars	Year ended March 31, 2023	Year ended March 31, 2022
	Cash flows received from the SPV's	-	-
Add:	Proceeds from sale of the Project SPV not distributed pursuant to an earlier plan to re-invest, or if such proceeds are not intended to be invested within one year from the date of such sale.	-	-
Add:	Any other income accruing at the Trust level and not captured above, including but not limited to interest/return on surplus cash, if any, invested by the Trust.	969.48	-
	Total cash inflow at the Trust level (A)	**969.48**	-
Less:	Costs/retention associated with sale of the Project SPV: (a) related debts settled or due to be settled from sale proceeds of SPV; (b) transaction costs paid on sale of the Project SPV; and (c) capital gains taxes on sale of the Project SPV, or other investments of the Trust.	-	-
Less:	Any claims/deferred consideration/other amounts payable under the transaction documents with the Seller(s) of the SPVs	-	-
Less:	Any fees, interest and expense incurred at the Trust level, including but not limited to the fees of the Investment Manager ('IM') and the Trustee	(4,149.61)	-
Less:	Any expenditure reimbursed to Investment Manager or Sponsor which the Investment Manager incurred on behalf of Trust	(367.23)	-
Less:	Proceeds reinvested or planned to be reinvested in accordance with SEBI InvIT Regulations and Future Assets Acquisition Policy	-	-
Less:	Repayment of external debt at the Trust level (net of any new debt raised or refinancing of existing debt)	(195.00)	-
Less:	Any amount to be kept aside for DSRA, MMRA or any other reserve requirements as required by lenders;	-	-
Less:	Income tax (if applicable) at the standalone Trust level and payment of other statutory dues	(414.40)	-
Less:	Amount invested in or lent to any of the Project SPVs funded through internal accruals of the Trust, to the extent allowed under the SEBI InvIT Regulations. Such amount shall be decided by the IM Board.	-	-
Less:	Payment of all amounts to the Sponsor pursuant to, and in accordance with, the Sale and Transfer Agreement, and Preliminary Placement Memorandum or Placement Memorandum	-	-
Less:	Any provision or reserve deemed necessary by the IM Board for expenses which may be due in the next quarter but for which there may not be commensurate amounts available by the date such expenses become due.	-	-
Less:	Any other reserve deemed necessary by the IM Board for infusing funds into the SPVs to discharge their liabilities.	-	-
Less:	Any other adjustment to be undertaken by the IM Board to ensure that there is no double counting of the same item for the above calculations	-	-
	Total cash outflows / retention at the Trust level (B)	**(5,126.24)**	-
	Net Distributable Cash Flows (C) = (A+B)	**(4,156.76)**	-

(All amounts in Rs. lakhs, unless otherwise stated)

B. Statement of Net Assets at fair value

Particulars	As on March 31, 2023		As on March 31, 2022	
	Book value	Fair value	Book value	Fair value
(A) Assets	3,64,754.69	5,66,470.82	12.01	12.01
(B) Liabilities	2,077.11	2,077.11	362.16	362.16
(C) Net assets (A-B)	**3,62,677.58**	**5,64,393.71**	**(350.15)**	**(350.15)**
(D) Number of units	3,521.70	3,521.70	-	-
(E) Net Asset Value (C/D)	102.98	160.26	-	-

Notes:

1) As the units have been issued during the year ended March 31, 2023, disclosure in respect of number of units and NAV per unit were not presented in comparative period for the year ended March 31, 2022.
2) Fair values of assets as disclosed above are based solely on the valuation report of the independent valuer appointed under InvIT regulations and has been relied upon by the auditors.
3) Fair values of assets have been arrived at by the valuer after adding the cash and cash equivalent, investments, etc in the enterprise value.

C. Statement of Total Return at fair value

Particulars	Year ended March 31, 2023	Year ended March 31, 2022
Total comprehensive income (as per the statement of profit and loss)	11,240.86	(176.23)
Add/less:		
Other changes in fair value (e.g., in investment property, property, plant & equipment (if cost model is followed) not recognised in total comprehensive income	-	-
Total Return	**11,240.86**	**(176.23)**

As both the subsidiaries have been acquired in the current year and previous year assets included only current assets, there is no change in the fair value from the previous year which has been reported above.

In the above statement, other changes in fair value for the year ended March 31, 2023 has been computed based on the difference in fair values of total assets as at March 31, 2023 and as at March 31, 2022 which are based solely on the valuation report of the independent valuer appointed under InvIT Regulations and has been relied upon by the auditors

The accompanying notes form an integral part of these standalone financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
M. No.: 501396

Place: Gurugram
Date: June 8, 2023

For and on behalf of the Board of Directors of

Maple Infra InvIT Investment Manager Private Limited

(as investment manager to Indian Highway Concessions Trust)

Romesh Sobti
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DIN: 00031034
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M. No.: A31131
Place: Mumbai
Date: June 8, 2023

Varun Mehta
Chief Financial Officer
Place: Mumbai
Date: June 8, 2023

1. Trust information

Indian Highway Concessions Trust (the 'Trust') was setup as an irrevocable trust under the provision of the Indian Trust Act, 1882 pursuant to an Indenture of Trust dated November 06, 2019, New Delhi and which was subsequently amended by 'First Amended and Restated Indenture of Trust' dated December 19, 2019 and further amended on October 4, 2021. The Trust is registered as an Infrastructure Investment Trust ('InvIT') with Securities Exchange Board of India ('SEBI') under the under the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 vide Certificate of Registration (IN/InvIT/19-20/0013) dated February 24, 2020.

Maple Highways Pte. Ltd. (the 'Sponsor') is the sponsor of the Trust. The Trust has been settled for an initial sum of Rs. 0.10 lakhs. The Trustee to the Trust is Axis Trustee Services Limited (the 'Trustee'). The investment manager for the Trust is Maple Infra InvIT Investment Manager Private Limited (the 'Investment Manager') and the project manager to the Trust is Maple Highway Project Management Private Limited (the 'Project Manager').

The Trust has been formed to invest in infrastructure assets primarily in the roads sector in India and will implement and hold road projects through special purpose vehicles (the 'Project SPVs').

S.No	Project SPV	Country of Incorporation	Percentage holding	Date of acquisition/ incorporation
1	Shree Jagannath Expressways Private Limited ('SJEPL')	India	100%	June 28, 2022
2	NCR Eastern Peripheral Expressway Private Limited ('NCREPE')	India	100%	April 25, 2022

The registered office of the Investment manager is 6th Floor, Chanakya, off. Asharam Road, Ahmedabad- 380009, Gujarat.

The standalone financial statements for the year ended March 31, 2023 were approved for issue by the Board of Directors of the Investment Manager on June 8, 2023.

2. Significant accounting policies

2.1 Basis of preparation and presentation

These standalone financial statements are the separate financial statements of the Trust and comprise the Standalone Balance Sheet as at March 31, 2023, the Standalone Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Standalone Statement of Cash Flow, the Standalone Statement of Changes in unitholders' Equity for the year then ended, the Statement of Net Assets at fair value as at March 31, 2023, the Statement of Total Returns at fair value, the Statement of Net Distributable Cash Flows ('NDCFs') for the year then ended and a summary of significant accounting policies and other explanatory notes in accordance with Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended), prescribed under Section 133 of the Companies Act, 2013 ('Ind AS') read with SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and the circulars issued thereunder ('InvIT Regulations') and other accounting principles generally accepted in India.

The financial statements are presented in India Rupees (Rs.) which is also the functional currency of the Trust. All values are rounded to the nearest lakhs, unless otherwise indicated. Certain amounts that are required to be disclosed and do not appear due to rounding-off are expressed as 0.0.

The preparation of standalone financial statements is in conformity with the generally accepted accounting principles in India and it requires the Investment Manager to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the standalone financial statements and the results of operations during the reporting year end. Although these estimates are based upon the Investment Manager's best knowledge of current events and actions, the actual results could differ from these estimates. Estimates and underlying assumptions are reviewed on a periodic basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

These standalone financial statements correspond to classification provisions contained in Ind AS 1 'Presentation of financial statements'. These standalone financial statements have been prepared on an accrual basis and historical cost convention except for certain financial assets and liabilities (refer accounting policy regarding financial instruments) which have been measured at fair value.

2.2 Summary of significant accounting policies

a. Current and non-current assets

An asset is classified as 'current' when it satisfies any of the following criteria-

i) it is expected to be realised in, or is intended for sale or consumption in, the Trust's normal operating cycle; or
ii) it is expected to be realised within twelve months after the reporting date; or
iii) it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.

All other assets are classified as 'non-current'

Deferred tax assets are classified as 'non-current assets'.

b. Current and non-current liabilities

A liability is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be settled in the Trust's normal operating cycle; or
ii) it is held primarily for the purpose of being traded; or
iii) it is due to be settled within twelve months after the reporting date; or
iv) the Trust does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

All other liabilities are classified as 'non-current'.

Deferred tax liabilities are classified as 'non-current liabilities'.

The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The normal operating cycle of the Trust is considered as 12 months.

c. **Financial instruments:** A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(i) Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Trust's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Trust has applied the practical expedient, the Trust initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'Solely Payments of Principal and Interest' (SPPI) on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Trust's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at fair value through OCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognised on the trade date, i.e., the date that the Trust commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement financial assets are classified in four broad categories:

- Financial assets at amortised cost (debt instruments).
- Financial assets at fair value through other comprehensive income (FVTOCI) with recycling of cumulative gains and losses (debt instruments).
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments).
- Financial assets at fair value through profit or loss.

Financial assets at amortised cost (debt instruments)

A 'financial asset' is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are 'Solely Payments of Principal and Interest' (SPPI) on the principal amount outstanding.

This category is the most relevant to the Trust. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the statement of profit and loss. The losses arising from impairment are recognised in the statement of profit and loss. The Trust's financial assets at amortised cost includes trade receivables, and other financial assets.

Financial assets at fair value through OCI (FVTOCI)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. For debt instruments, at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value changes recognised in OCI is reclassified from the equity to profit or loss.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Trust can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under Ind AS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS103 applies are classified as at FVTPL.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit and loss when the right of payment has been established, except when the Trust benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the balance sheet at fair value with net changes in fair value recognised in the statement of profit and loss.

This category includes derivative instruments and listed equity investments which the Trust had not irrevocably elected to classify at fair value through OCI. Dividends on listed equity investments are recognised in the statement of profit and loss when the right of payment has been established.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Trust 's balance sheet) when:

- The rights to receive cash flows from the asset have expired, or
- The Trust has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement and either;

(a) the Trust has transferred substantially all the risks and rewards of the asset, or
(b) the Trust has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

Expected credit losses (ECLs) are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Trust applies a simplified approach in calculating ECLs. Therefore, the Trust does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

(ii) Financial liabilities

Initial recognition and measurement
Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

Subsequent measurement
For purposes of subsequent measurement, financial liabilities are classified in two categories:
- Financial liabilities at fair value through profit or loss
- Financial liabilities at amortised cost (loans and borrowings)

Financial liabilities at fair value through profit or loss
Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Trust that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109.
Gains or losses on liabilities held for trading are recognised in the statement of the profit and loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ losses are not subsequently transferred to the statement of profit and loss. However, the Trust may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit and loss. The Trust has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (loans and borrowings)
After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the statement of profit and loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.
This category generally applies to borrowings.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit and loss.

Reclassification of financial assets

The Trust determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those assets. Changes to the business model are expected to be infrequent. The Investment Manager of the Trust determines change in the business model as a result of external or internal changes which are significant to the Trust's operations. Such changes are evident to external parties. A change in the business model occurs when the Trust either begins or ceases to perform an activity that is significant to its operations. If the Trust reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The Trust does not restate any previously recognised gains, losses (including impairment gains or losses) or interest.

The following table shows various reclassification and how they are accounted for:

Original classification	Revised classification	Accounting treatment
Amortised cost	FVTPL	Fair value is measured at reclassification date. Difference between previous amortized cost and fair value is recognised in the statement of profit and loss.
FVTPL	Amortised cost	Fair value at reclassification date becomes its new gross carrying amount. EIR is calculated based on the new gross carrying amount.
Amortised cost	FVTOCI	Fair value is measured at reclassification date. Difference between previous amortised cost and fair value is recognised in OCI. No change in EIR due to reclassification.
FVTOCI	Amortised cost	Fair value at reclassification date becomes its new amortised cost carrying amount. However, cumulative gain or loss in OCI is adjusted against fair value. Consequently, the asset is measured as if it had always been measured at amortised cost.
FVTPL	FVTOCI	Fair value at reclassification date becomes its new carrying amount. No other adjustment is required.
FVTOCI	FVTPL	Assets continue to be measured at fair value. Cumulative gain or loss previously recognized in OCI is reclassified from equity to the statement of profit and loss at the reclassification date.

d. Investment in subsidiaries

Investments (equity instruments) in subsidiaries are carried at cost less accumulated impairment losses, if any. Where an indication of impairment exists, the carrying amount of the investment is assessed and written down immediately to its recoverable amount. On disposal of investments in subsidiaries, the difference between net disposal proceeds and carrying amounts are recognised in the statement of profit and loss.

e. Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Trust and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the transaction price of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. The specific recognition criteria described below must also be met before revenue is recognised:

(i) Interest income:

For all financial instruments measured at amortized cost, interest income is recorded using effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instruments or a shorter period, where appropriate, to the net carrying amount of the financial asset. Interest income is included in other income in the statement of profit and loss.

(ii) Dividend income:

Income from dividend on investment is accrued in the year in which it is declared, whereby the Trust's right to receive is established.

(iii) Other income:

Other incomes are accounted for when there is certainty of realization and can be measured reliably.

f. Accounting for taxes on income

(i) Current income tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date. Current income tax relating to items recognised outside the statement of profit or loss is recognised outside the statement of profit or loss (either in other comprehensive income or in equity). The Investment Manager periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(ii) Deferred tax

Deferred tax is provided using the balance sheet approach on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognised only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax asset is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

In assessing the recoverability of deferred tax assets, the Trust relies on the same forecast assumptions used elsewhere in the financial statements and in other management reports, which, among other things, reflect the potential impact of climate-related development on the business, such as increased cost of production as a result of measures to reduce carbon emission.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or in equity). Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognised subsequently if new information about facts and circumstances change. Acquired deferred tax benefits recognised within the measurement period reduce goodwill related to that acquisition if they result from new information obtained about facts and circumstances existing at the acquisition date. If the carrying amount of goodwill is zero, any remaining deferred tax benefits are recognised in OCI/ capital reserve depending on the principle explained for bargain purchase gains. All other acquired tax benefits realised are recognised in the statement of profit and loss.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

g. Impairment of assets (Other than financial assets measured at fair value)

As at each balance sheet date, the Trust assesses whether there is an indication that an asset may be impaired and also whether there is an indication of reversal of impairment loss recognised in the previous periods . If any indication exists, or when annual impairment testing for an asset is required, if any, the Trust determines the recoverable amount and impairment loss is recognised when the carrying amount of an asset exceeds its recoverable amount.

Recoverable amount is determined:

• In the case of an individual asset, at the higher of the fair value less cost to sell and the value in use; and

• In the case of cash generating unit (a Trust of assets that generates identified, independent cash flows), at the higher of the cash generating unit's fair value less cost to sell and the value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Trust bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Trust's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations are recognised in profit and loss section of the statement of profit and loss.

h. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

i. Provisions, contingent liabilities and contingent assets

(i) Provisions

Provisions are recognized for liabilities that can be measured only by using a substantial degree of estimation, if

(i) the Trust has a present obligation as a result of a past event,

(ii) a probable outflow of resources embodying economic benefits is expected to settle the obligation, and

(iii) the amount of the obligation can be reliably estimated.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

Reimbursement expected in respect of expenditure required to settle a provision is recognized only when it is virtually certain that the reimbursement will be received.

(ii) Contingent liabilities

Contingent Liability is disclosed in the case of

(i) a present obligation arising from past events, when it is not probable that an outflow of resources will be required to settle the obligation,

(ii) a present obligation when no reliable estimate is possible, and

(iii) a possible obligation arising from past events where the probability of outflow of resources is not remote.

Provisions, contingent liabilities and contingent assets are reviewed at each Balance Sheet date.

j. Onerous contracts:

If the Trust has a contract that is onerous, the present obligation under the contract is recognised and measured as a provision. However, before a separate provision for an onerous contract is established, the Trust recognises any impairment loss that has occurred on assets dedicated to that contract.

An onerous contract is a contract under which the unavoidable costs (i.e., the costs that the Trust cannot avoid because it has the contract) of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract (i.e., both incremental costs and an allocation of costs directly related to contract activities).

k. Earnings per unit (EPU)

Basic Earnings Per Unit is calculated by dividing the net profit or loss for the period attributable to unitholders of the Trust (after deducting preference dividends and attributable taxes if any) by the weighted average number of units outstanding during the year.

For the purpose of calculating Diluted Earnings Per Unit, the net profit or loss for the period attributable to unitholders and the weighted average number of units outstanding during the period are adjusted for the effects of all dilutive potential units.

l. Cash flow

Cash flows are reported using the indirect method, whereby net profit before tax is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Trust are segregated and presented accordingly.

m. Segment reporting

Operating results are regularly reviewed by the Trust's Chief Operating Decision Maker ('CODM') (Investment Manager) who makes decisions about resources to be allocated to the segment and assesses its performance.

Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property and equipment and intangible assets other than goodwill.

n. Fair value measurement

The Trust measures financial instruments, such as, derivatives at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

In the principal market for the asset or liability, or

In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Trust.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Trust uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the standalone financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities.

Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.

Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For the purpose of fair value disclosures, the Trust has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

o. Use of judgement, estimates and assumptions

The preparation of financial statements in conformity with Ind AS requires that management of the Trust makes estimates, judgements and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses of the period and the disclosures relating to contingent liabilities and contingent assets as on the date of the financial statements. Application of accounting policies involves complex and subjective judgements and the use of the assumptions in these standalone financial statements have been disclosed. Accounting estimates could change from period to period and actual results could differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions in accounting estimates are recognised in the period in which the estimates are revised and if material, their effects are disclosed in the notes to the financial statements.

The Trust has based its assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond control of the management.

p. Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, that are readily convertible to a known amount of cash and subject to an insignificant risk of change in value.

q. Contributed equity

Units are classified as equity. Incremental costs attributable to the issue of units are directly recorded in equity, net of Tax.

r. Distribution to unitholders

The Trust recognises a liability to make cash distributions to unitholders when the distribution is authorised and a legal obligation has been created. As per the SEBI InvIT Regulations, a distribution is authorised when it is approved by the Board of Directors of the Investment Manager. A corresponding amount is recognised directly in equity.

s. Recent pronouncements

A. New and amended standards

The Trust applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after April 01, 2022.

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standard) Amendment Rules 2022 dated March 23, 2022, to amend the following Ind AS which are effective from April 01, 2022.

i. Onerous contracts – costs of fulfilling a contract – amendments to Ind AS 37

An onerous contract is a contract under which the unavoidable costs of meeting the obligations under the contract (i.e., the costs that the Trust cannot avoid because it has the contract) exceed the economic benefits expected to be received under it.

The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

The Trust applied the amendments to the contracts for which it had not fulfilled all of its obligations at the beginning of the reporting period.

Prior to the application of the amendments, the Trust had not identified any contracts as being onerous as the unavoidable costs under the contracts, which were the costs of fulfilling them, comprised only incremental costs directly related to the contracts. As a result of the amendments, the Trust assessed whether certain other directly related costs are required to be included by the Trust in determining the costs of fulfilling the contracts.

These amendments had no impact on the standalone financial statements of the Trust.

ii. Reference to the conceptual framework – amendments to Ind AS 103

The amendments replaced the reference to the ICAI's '*Framework for the Preparation and Presentation of Financial Statements under Indian Accounting Standards*' with the reference to the '*Conceptual Framework for Financial Reporting under Indian Accounting Standard*' without significantly changing its requirements.

The amendments also added an exception to the recognition principle of Ind AS 103 *Business Combinations* to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of Ind AS 37 *Provisions, Contingent Liabilities and Contingent Assets* or Appendix C, *Levies,* of Ind AS 37, if incurred separately. The exception requires entities to apply the criteria in Ind AS 37 or Appendix C, *Levies,* of Ind AS 37, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date.

The amendments also add a new paragraph to IFRS 3 to clarify that contingent assets do not qualify for recognition at the acquisition date.

In accordance with the transitional provisions, the Trust applies the amendments prospectively, i.e., to business combinations occurring after the beginning of the annual reporting period in which it first applies the amendments (the date of initial application).

These amendments had no impact on the standalone financial statements of the Trust as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

iii. Property, plant and equipment: Proceeds before intended use – amendments to Ind AS 16

The amendments modified paragraph 17(e) of Ind AS 16 to clarify that excess of net sale proceeds of items produced over the cost of testing, if any, shall not be recognised in the profit or loss but deducted from the directly attributable costs considered as part of cost of an item of property, plant, and equipment.

The amendments are effective for annual reporting periods beginning on or after April 1, 2022. These amendments had no impact on the standalone financial statements of the Trust as there were no sales of such items produced by property, plant and equipment made available for use on or after the beginning of the earliest period presented.

iv. Ind AS 109 *Financial Instruments* – Fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf.

In accordance with the transitional provisions, the Trust applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment (the date of initial application). These amendments had no impact on the standalone financial statements of the Trust as there were no modifications of the Trust's financial instruments during the period.

B. Standards notified but not yet effective

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standards) Amendment Rules, 2023 dated March 31, 2023 to amend the following Ind AS which are effective from April 1, 2023.

i. Definition of accounting estimates - amendments to Ind AS 8

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. It has also been clarified how entities use measurement techniques and inputs to develop accounting estimates.
The amendments are effective for annual reporting periods beginning on or after April 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period.

The amendments are not expected to have a material impact on the Trust's financial statements.

ii. Disclosure of accounting policies - amendments to Ind AS 1

The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.

The amendments to Ind AS 1 are applicable for annual periods beginning on or after April 1, 2023. Consequential amendments have been made in Ind AS 107.

The Trust is currently revisiting their accounting policy information disclosures to ensure consistency with the amended requirements.

iii. Deferred tax related to assets and liabilities arising from a single transaction - amendments to Ind AS 12

The amendments narrow the scope of the initial recognition exception under Ind AS 12, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences.

The amendments should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period presented, a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability should also be recognised for all deductible and taxable temporary differences associated with leases and decommissioning obligations. Consequential amendments have been made in Ind AS 101. The amendments to Ind AS 12 are applicable for annual periods beginning on or after April 1, 2023.

The Trust is currently assessing the impact of the amendments.

(All amounts in Rs. lakhs, unless otherwise stated)

Note 3: Investments

Particulars	March 31, 2023		March 31, 2022	
	No. of shares*	Amount	No. of shares*	Amount
Investments in unquoted equity shares of subsidiaries, at cost				
- Shree Jagannath Expressways Private Limited (face value of Rs. 10 per share)	14,78,70,000	23,526.33	-	-
- NCR Eastern Peripheral Expressway Private Limited (face value of Rs. 10 per share)	77,45,73,500	77,457.35	-	-
	92,24,43,500	**1,00,983.68**	**-**	**-**

*The above number of shares include nominee shares held by Investment Manager of subsidiaries on behalf of the Trust.

Note:

(a) Details of shares pledged with lenders who have provided the loan facility to the respective subsidiaries are as follows:

Name of the Company	No of shares pledged	
	March 31, 2023	March 31, 2022
Shree Jagannath Expressways Private Limited	7,54,13,700	-
NCR Eastern Peripheral Expressway Private Limited	39,50,32,485	-
	47,04,46,185	**-**

Note 4: Loans

Particulars	March 31, 2023	March 31, 2022
Non-current		
Unsecured, considered good		
Loans to subsidiaries* (at amortised cost) (refer note 26)	2,08,711.85	-
	2,08,711.85	**-**

*The above loans have been given by the Trust to its wholly owned subsidiaries which are repayable on demand from the date of initial disbursement and carry coupon rate ranging from 14% p.a. to 16% p.a. which is based on external experts benchmarking for arm's length rate of interest.

Note 5A: Cash and cash equivalents

Particulars	March 31, 2023	March 31, 2022
Current assets		
Balances with bank:		
- On current accounts	8,832.00	4.01
- Bank deposits with original maturity of less than three months	23,618.81	-
	32,450.81	**4.01**

Note 5B: Changes in liabilities arising from financing activities

Particulars	For the year ended March 31,2022	Cash flows (net of payment and proceeds)	Interest expense	Other non - cash changes	For the year ended March 31,2023
Short term borrowings from related party	30.00	(30.00)	-	-	-
Total liabilities from financing activities	**30.00**	**(30.00)**	-	-	-

Particulars	For the year ended March 31,2022	Cash flows (net of payment and proceeds)	Interest expense	Other non - cash changes	For the year ended March 31,2023
Short term borrowings from related party	-	30.00	-	-	30.00
Total liabilities from financing activities	-	**30.00**	-	-	**30.00**

Note 6: Other bank balances

Particulars	March 31, 2023	March 31, 2022
Current		
Bank deposits with maturity of more than three months but less than twelve months	7,627.36	-
	7,627.36	-

Note 7: Other financial assets

Particulars	March 31, 2023	March 31, 2022
Current		
Interest receivable from subsidiaries (unsecured)	14,873.41	-
Interest receivable on bank deposit	95.93	-
	14,969.34	-

Note 8: Other current assets

Particulars	March 31, 2023	March 31, 2022
Current		
Unsecured, considered good		
Prepaid expenses	8.31	8.00
Balance with government authorities	-	28.55
Less: Impairment of current assets (refer note 31)	-	(28.55)
Advance to supplier	3.34	-
	11.65	**8.00**

Note 9: Unit capital

Particulars	March 31, 2023	March 31, 2022
Issued 35,21,70,000 units (March 31,2022: Nil) (Issue price: Rs. 100)	3,51,786.87	-
	3,51,786.87	-

Reconciliation of the units outstanding at the beginning and at the end of the reporting period

Particulars	Number of units (in lakhs)	Amount
As at April 01, 2021	-	-
Units issued during the year	-	-
As at March 31, 2022	-	-
Units issued during the year (refer note (a) and (b) below)	3,521.70	3,52,170.00
Issue expenses (refer note (c) below)	-	(383.13)
As at March 31, 2023	**3521.70**	**3,51,786.87**

Note:

a) The Trust issued initial issue of 910,00,000 units at Rs. 100.00 per unit (the 'issue price'), aggregating to Rs. 91,000.00 lakhs to eligible investors including the sponsor through the Final Placement Memorandum filed with the Securities Exchange Board of India ('SEBI') in accordance with the Securities and Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 including the rules, circulars and guidelines issued thereunder, including the SEBI Rights Issue Guidelines (the 'InvIT Regulations').

b) The Trust offered rights issue of up to 26,11,70,000 units of the Trust (the 'units'), for cash at a price of Rs. 100.00 per unit (the 'issue price'), aggregating to Rs. 2,61,170.00 lakhs to the eligible unitholders (as defined in the Letter of Offer) on a rights basis in the ratio of 287 units for every 100 units held by them on the record date, being October 07, 2022 (the 'Issue') in accordance with the InvIT Regulations. The Board of Directors of Maple Infra InvIT Investment Manager Private Limited ('Investment Manager'), considered and approved allotment of 26,11,70,000 rights units to the eligible unitholders of IHCT on November 03, 2022.

c) Issue expenses of Rs. 383.13 lakhs incurred in connection with issue of units have been reduced from the unitholders capital in accordance with Ind AS 32 Financial Instruments: Presentation.

A. Terms/rights attached to units

The Trust has only one class of units. Each unit represents an undivided beneficial interest in the Trust. Each holder of unit is entitled to one vote per unit. The unitholders have the right to receive at least 90% of the Net Distributable Cash Flows of the Trust at least once in each financial year in accordance with the InvIT Regulations. The Investment Manager approves distributions. The distribution will be in proportion to the number of units held by the unitholders. The Trust declares and pays distribution in Indian rupees.

A unitholder has no equitable or proprietary interest in the projects of the Trust and is not entitled to any share in the transfer of the projects (or any part thereof) or any interest in the projects (or any part thereof) of the Trust. A unitholders' right is limited to the right to require due administration of the Trust in accordance with the provisions of the Trust Deed and the Investment Management Agreement.

B. Unitholders holding more than 5 % units in the Trust

Particulars	March 31, 2023		March 31, 2022	
	(Nos. in lakhs)	% holding	(Nos. in lakhs)	% holding
CDPQ Infrastructure Asia III Inc.	2,113.02	60.00%	-	-
Maple Highways Pte Limited	528.26	15.00%	-	-
IIFL Income Opportunities Fund Series 4	301.83	8.57%	-	-

C. The Trust has not allotted any fully paid-up units by way of bonus units nor has it bought back any class of units from the date of incorporation till the balance sheet date. Further the Trust has not issued any units for consideration other than cash from the date of incorporation till the balance sheet date.

D. Under the provisions of the InvIT Regulations, Trust is required to distribute to unitholders not less than 90% of the net distributable cash flows of the Trust for each financial year. Accordingly, a portion of the unit capital contains a contractual obligation of the Trust to pay to its unitholders cash distributions. Hence, the unit capital is a compound financial instrument which contains equity and liability components in accordance with Ind AS 32 - Financial Instruments: Presentation. However, in accordance with SEBI Circulars (No. CIR/IMD/DF/114/2016 dated October 20, 2016 and No. CIR/IMD/DF/127/2016 dated November 29, 2016) issued under the InvIT Regulations, the unitholders' funds have been presented as 'Equity' in order to comply with the requirements of Section H of Annexure A to the SEBI Circular dated October 20, 2016 dealing with the minimum presentation and disclosure requirements for key financial statements. Consistent with Unit Capital being classified as equity, the distributions to unitholders is also presented in Statement of changes in unitholders' equity when the distributions are approved by the Board of Directors of Investment Manager.

Note 10: Other equity

Particulars	March 31, 2023	March 31, 2022
Retained earnings		
Balance at the beginning of the year	(350.15)	(173.92)
Add: Profit / (loss) for the year	11,240.86	(176.23)
Less: Distribution to unitholders	-	-
Balance at the end of the year	**10,890.71**	**(350.15)**

Nature and purpose of reserve

Retained earnings are the profits/losses earned or incurred by the Trust till date, less distribution to unitholders.

Note 11: Borrowings

Particulars	March 31, 2023	March 31, 2022
Current Liabilities		
Intercorporate deposit from related party*(unsecured)	-	30.00
	-	**30.00**

* The Trust has availed an intercorporate loan from the Investment Manager amounting to Rs. 165.00 lakhs during the year ended March 31, 2023 (March 31, 2022: Rs. 30.00 lakhs). As per the terms of the loan, rate of interest shall be bank rate plus 5.75% per annum. The said loan is repayable on demand. The said intercorporate deposit has been paid off during the year and there is no outstanding amount payable as on March 31, 2023.

Note 12: Trade payables

Particulars	March 31, 2023	March 31, 2022
Trade payables		
- Total outstanding dues of micro enterprises and small enterprises*	-	-
- Total outstanding dues of creditors other than micro enterprises and small enterprises	1,933.92	329.75
	1,933.92	**329.75**

Trade payables ageing schedule for the year ended March 31, 2023:

Particulars	Outstanding for following periods from invoice date					Total
	Not Due	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Total outstanding dues of micro enterprises and small enterprises*	-	-	-	-	-	-
Total outstanding dues of creditors other than micro enterprises and small enterprises	761.96	1,171.96	-	-	-	1,933.92
Total	**761.96**	**1,171.96**	**-**	**-**	**-**	**1,933.92**

Trade payables ageing schedule for the year ended March 31, 2022:

Particulars	Outstanding for following periods from invoice date					Total
	Not Due	Less than 1 year	1-2 years	2-3 years	More than 3 years	
Total outstanding dues of micro enterprises and small enterprises*	-	-	-	-	-	-
Total outstanding dues of creditors other than micro enterprises and small enterprises	2.50	153.48	173.77	-	-	329.75
Total	**2.50**	**153.48**	**173.77**	**-**	**-**	**329.75**

***Total outstanding dues of micro enterprises and small enterprises**

The Ministry of Micro, Small and Medium Enterprises has issued an office memorandum dated August 26, 2008 which recommends that the micro and small enterprises should mention in their correspondence with its customers the Entrepreneurs Memorandum Number as allocated after filing of the Memorandum. Accordingly, the disclosure in respect of the amount payable to such enterprises as at 31 March 2023 and March 31, 2022 has been made in the financial statements based on information received and available with the Trust. Further in view of the Investment Manager, the impact of interest, if any, that may be payable in accordance with the provisions of the Micro, Small and Medium Enterprises Development Act, 2006 ('The MSMED Act') is not expected to be material. The Trust has not received any claim for interest from any supplier, which has been relied upon by the auditors.

(All amounts in Rs. lakhs, unless otherwise stated)

Particulars	March 31, 2023	March 31, 2022
The amounts remaining unpaid to micro and small supplies as at end of the year		
- Principal	-	-
- Interest	-	-
The amount of interest paid by the buyer in terms of Section 16 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), along with the amount of the payment made to the supplier beyond the appointed day during each accounting year;	-	-
The amount of interest due and payable for the period of delay in making payment (which has been paid but beyond the appointed day during the year) but without adding the interest specified under the MSMED Act.	-	-
The amount of interest accrued and remaining unpaid at the end of each accounting year; and	-	-
The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprises for the purpose of disallowance as a deductible expenditure under Section 23 of the MSMED Act.	-	-

Note 13: Other financial liabilities

Particulars	March 31, 2023	March 31, 2022
Current		
Interest accrued on intercorporate deposits from related party	-	0.70
Other payable	16.03	-
	16.03	**0.70**

Note 14: Other current liabilities

Particulars	March 31, 2023	March 31, 2022
Current		
Statutory dues payable	123.03	1.71
	123.03	**1.71**

Note 15: Current tax liabilities (net)

Particulars	March 31, 2023	March 31, 2022
Current		
Income tax payable (net of tax deducted at source and advance tax paid)	4.13	-
	4.13	-

Note 16: Revenue from operations

Particulars	March 31, 2023	March 31, 2022
Interest income on loans given to subsidiaries (refer note 26)	14,884.69	-
	14,884.69	-

Note 17: Other income

Particulars	March 31, 2023	March 31, 2022
Interest income from bank deposits	969.48	-
	969.48	-

(All amounts in Rs. lakhs, unless otherwise stated)

Note 18: Finance cost

Particulars	March 31, 2023	March 31, 2022
Interest expense on		
- Related party intercorporate deposit (refer note 26)	1.57	0.78
- Income tax	16.03	-
Bank guarantee commission charges/ processing fees	57.21	13.71
Other bank charges	13.71	0.30
	88.52	**14.79**

Note 19: Payment to auditors

Particulars	March 31, 2023	March 31, 2022
Statutory audit fees	40.00	2.50
Limited review fees	20.00	-
Audit of combined/special purpose financial statements	88.40	47.00
Certification fees and others	18.42	5.00
Reimbursement of expenses	6.62	0.46
Goods & service tax on above	31.22	-
	204.66	**54.96**

Note 20: Other expenses

Particulars	March 31, 2023	March 31, 2022
Due diligence fee	1,732.26	-
Legal and professional fees	195.14	64.25
Rates & taxes	17.85	-
Membership fees	10.00	-
Tender fees	6.09	5.01
RBI compounding fees	5.88	-
Miscellaneous expenses	8.73	0.54
Impairment of current assets	-	26.68
	1,975.95	**96.48**

Note 21: Tax expense

Particulars	March 31, 2023	March 31, 2022
Current tax	414.40	-
Deferred tax	-	-
	414.40	-

In accordance with Section 10(23FC) of the Income tax Act, 1961, the income of business trust in the form of interest earned or dividend earned is exempt from tax. However, for all other incomes earned by the Trust, it will be required to provide for current tax liability.

Reconciliation of tax expense and the accounting profit

Particulars	March 31, 2023	March 31, 2022
Profit/(loss) before tax	11,655.26	(176.23)
Income tax applicable rate to the Trust	42.74%	42.74%
Expected tax expense	4,981.93	(75.33)
Effects of non-deductible expenses	1,794.78	75.33
Effect of exempt income	(6,362.31)	-
Current tax expense	**414.40**	-

Note 22: Earnings per unit

Basic earnings per unit are calculated by dividing the net profit for the year attributable to unitholders by the weighted average number of units outstanding during the year. For the purpose of calculating diluted earnings per unit, the weighted average numbers of units outstanding during the year are adjusted for the effect of all diluted potential units.

During the current year, 9,10,00,000 units were issued through private placement on June 24, 2022 and 26,11,70,000 units were issued through rights issue by the Trust on November 03, 2022 each at a par value of Rs. 100.

Particulars	March 31, 2023	March 31, 2022
Profit / (Loss) attributable to unitholders for basic and diluted earnings (Rs. in Lakhs)	11,240.86	(176.23)
Weighted average number of units in calculating basic and diluted EPU (Nos. in lakhs)**	1,766.72	-
Basic earning per unit (Rs./unit)	6.36	-
Diluted earning per unit (Rs./unit)*	6.36	-
Face value per unit (in Rs.)	100.00	-

* The Trust does not have any outstanding dilutive potential instruments.

** No units were issued till March 31, 2022.

23. Capital and other commitments

There are no capital commitments as at March 31, 2023 and March 31, 2022

24. Contingent liabilities

Particulars	March 31, 2023	March 31, 2022
Bank guarantee given for bidding purposes (refer (i) and (ii) below)	-	2,440.00
Performance bank guarantee given for NCREPE (refer (iii) below)	2,811.00	-

(i) The Trust had given bid security in the form of bank guarantee amounting to Rs. 1,090.00 lakhs during the previous year to National Highways Authority of India ('NHAI') as per the terms of the bidding document for Tolling, Operation, Maintenance and Transfer of Stretches of project bundle - 6 comprising 2 Stretches in the States of Uttar Pradesh and Madhya Pradesh which has been released by NHAI in the current year.

(ii) The Trust had given bid security in the form of bank guarantee amounting to Rs. 1,350.00 lakhs during the previous year to NHAI as per the terms of bidding document for Tolling, Operation, Maintenance and Transfer of Eastern Peripheral Expressway (from Km 1+000 to Km 136+000) of NE-2 in the National Capital Region (NCR) (TOT Bundle 7) which has been released by NHAI in the current year.

(iii) The Trust has given performance bank guarantee amounting to Rs. 2,811.00 lakhs during the current year to NHAI as per the terms of the Concession Agreement ('CA') entered between NHAI and the subsidiary, NCR Eastern Peripheral Expressway Private Limited ('NCREPE'). NHAI has a right to encash this performance bank guarantee in case NCREPE breaches the conditions as specified in the CA or on non-observance of tolling obligations as specified in the CA which is valid till June 15, 2023.

25. Segment Information

The Trust comprise of owning and investing in infrastructure SPVs to generate cash flow for the distribution to the beneficiaries. Based on the guiding principles given in Ind AS 108 'Operating Segment', this activity falls within a single operating segment and accordingly the disclosures of the Ind AS 108 have not separately been provided.

26. Related party disclosures

I. List of related parties as per the requirements of Ind AS 24- 'Related party disclosures' and Regulation 2(1) (zv) of the SEBI InvIT Regulations

A. Parties to the Trust

i. Maple Highways Pte Limited, Singapore (Sponsor)

ii. Maple Infra InvIT Investment Manager Private Limited (Investment Manager)

iii. Maple Highway Project Management Private Limited (Project Manager)

iv. Axis Trustee Services Limited (Trustee of the Trust)

v. Shree Jagannath Expressways Private Limited (Subsidiary) (w.e.f. June 28, 2022)

vi. NCR Eastern Peripheral Expressway Private Limited (Subsidiary) (w.e.f. April 25, 2022)

(All amounts in Rs. lakhs, unless otherwise stated)

B. Directors of the parties to the Trust specified in I(A) above

Particulars	Maple Highways Pte Limited (Sponsor)	Maple Infra InvIT Investment Manager Private Limited (Investment Manager)	Maple Highway Project Management Private Limited (Project Manager)	Axis Trustee Services Limited (Trustee)
Directors	Mr. Cyril Sébastien Dominique Cabanes* Ms. Wai Leng Leong *	Mr. Romesh Sobti Mr. Saurabh Agarwal Mr. Yudhvir Singh Malik Mr. Anil Aggarwal Mr. Louis- St. Maurice (w.e.f. March 31, 2023) Mrs. Seema Gupta (w.e.f. March 31, 2023)	Mr. Saurabh Agarwal Mr. Deepak Malhotra	Mr. Rajesh Kumar Dahiya Mr. Ganesh Sankaran Ms. Deepa Rath

* Mr. Olivier Pascal Lai-Ong-Teung is an alternate director w.e.f. April 19, 2022 of Ms. Wai Leng Leong and Mr. Cyril Sébastien Dominique Cabanes

Particulars	Shree Jagannath Expressways Private Limited (Subsidiary)	NCR Eastern Peripheral Expressway Private Limited (Subsidiary)
Directors	Mr. Anup Vikal (w.e.f. November 26, 2022) Mr. Varun Mehta (w.e.f June 28, 2022) Mr. Muraleemohan Mohanakumar (w.e.f June 28, 2022)	Mr. Anup Vikal (w.e.f. November 11, 2022) Mr. Varun Mehta (w.e.f. April 25, 2022) Mr. Muraleemohan Mohanakumar (w.e.f. April 25, 2022)

C. Key Managerial Personnel

i. Mr. Anup Vikal, Chief Executive Officer of the Investment Manager (w.e.f. September 08, 2022)
ii. Mr. Ankit Dewan, Company Secretary and Compliance Officer of the Trust
iii. Mr. Varun Mehta, Chief Financial Officer of the Investment Manager (w.e.f. June 08, 2023)

D. Other related parties

i. CDPQ Infrastructure Asia III Inc., Canada ('Associate company of the 'Sponsor' and 'Unitholder holding majority units')

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(All amounts in Rs. lakhs, unless otherwise stated)

II. Related party transactions during the year

Particulars	Relationship	March 31, 2023	March 31, 2022
Investment management fees			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	1,896.74	-
Reimbursement of expenses to Investment Manager incurred on behalf of the Trust			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	49.30	146.00
Intercorporate deposit taken			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	165.00	30.00
Interest expense on intercorporate deposit			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	1.57	0.78
Repayment of intercorporate deposit			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	195.00	-
Investment made in subsidiaries			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	77,457.35	-
Unsecured loan given			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	1,83,811.80	-
Shree Jagannath Expressways Private Limited	Subsidiary	26,339.30	-
Repayment of loan			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	1,439.25	-
Interest income on loan given			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	12,019.64	-
Shree Jagannath Expressways Private Limited	Subsidiary	2,865.06	-
Trustee fees			
Axis Trustee Services Limited	Trustee of the Trust	8.85	7.50
Issue of unit capital			
Maple Highways Pte Limited, Singapore	Sponsor	52,825.50	-
CDPQ Infrastructures Asia III Inc., Canada	Associate company of Sponsor	2,11,302.00	-
Guarantee given			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	2,811.00	-

(This space is intentionally left blank)

(All amounts in Rs. lakhs, unless otherwise stated)

III. Related party outstanding balances

Particulars	Relationship	March 31, 2023	March 31, 2022
Trade payable (net of tax deducted at source)			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	1,736.00	317.93
Intercorporate deposit			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	-	30.00
Interest expense accrued on intercorporate deposits			
Maple Infra InvIT Investment Manager Private Limited	Investment Manager	-	0.70
Unsecured loans			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	1,82,372.55	-
Shree Jagannath Expressways Private Limited	Subsidiary	26,339.30	-
Interest receivable on unsecured loans			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	12,008.35	-
Shree Jagannath Expressways Private Limited	Subsidiary	2,865.06	-
Guarantee given			
NCR Eastern Peripheral Expressway Private Limited	Subsidiary	2,811.00	-

27. Fair value measurements

a) The carrying value and fair value of financial instruments:
Set out below, is a comparison by class of the carrying amounts and fair value of the Trust's financial instruments:

Particulars	Carrying value	
	March 31, 2023	March 31, 2022
Financial Assets		
Amortised cost		
Loans	2,08,711.85	-
Cash and cash equivalents	32,450.81	4.01
Other bank balances	7,627.36	-
Other financial assets	14,969.34	-
Total	**2,63,759.36**	**4.01**
Cost		
Investments in subsidiaries	1,00,983.68	-
Total	**1,00,983.68**	**-**
Financial liabilities		
Borrowings	-	30.00
Trade payables	1,933.92	329.75
Other financial liabilities	16.03	0.70
Total	**1,949.95**	**360.45**

The carrying amount of financial assets (except investments in subsidiaries) and financial liabilities measured at amortized cost in the financial statements are a reasonable approximation of their fair value since the Trust does not anticipate that the carrying amounts would be significantly different from the value that would eventually be received or settled.

b) Transfers between Level 1, Level 2 and Level 3

There were no transfers between Level 1, Level 2 or Level 3 during the year ended 31 March 2023 and year ended 31 March 2022.

28. Financial risk management objective and policies
The Trust has exposure to the following risks arising from financial instruments:
- Credit risk
- Liquidity risk, &
- Market risk

(All amounts in Rs. lakhs, unless otherwise stated)

Risk management framework

The Trust's risk management policies are established to identify and analyse the risks faced by the Trust, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Trust's activities.

The Investment Manager has overall responsibility for the establishment and oversight of the Trust's risk management framework.

In performing its operating, investing and financing activities, the Trust is exposed to the credit risk, liquidity risk and market risk.

i) Credit risk -
Credit risk is the risk that a counter party will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Trust is exposed to credit risk from its investing activities including loans to subsidiaries, deposits with banks and other financial instruments.
As on the reporting date, there is no significant concentration of credit risk. Cash at bank and bank deposits are placed with financial institutions which are regulated and have low risk. The maximum exposure to credit risk is equivalent to the carrying amount of financial assets.

ii) Liquidity risk -
Prudent liquidity risk management implies maintaining sufficient cash and making available an adequate amount of committed credit facilities with staggered maturities to reduce refinancing risk in any year and to fund working capital, debt servicing, distribution payments, new investments and close out market positions if required. The Trust maintains significant flexibility to respond to opportunities and events to meet future funding requirements. The Trust's liquidity management policy involves close monitoring of liquidity position by monitoring cash collection and level of liquid assets necessary to meet cash outflow obligation, monitoring balance sheet liquidity ratios against external regulatory requirements and maintaining debt financing plans.

Maturity profile of financial liabilities
The following are the Trust's remaining contractual maturities of financial liabilities as at the reporting date. The Trust believes that the working capital is sufficient to meet its current requirement, accordingly no liquidity risk is perceived

As at March 31, 2023

Particulars	Carrying amount	On demand	Not later than 3 months	Between 3 and 12 months	Between 1 and 5 years	Later than 5 years	Total
Non-derivative financial liabilities							
Trade payables	1,933.92	-	1,933.92	-	-	-	1,933.92
Other financial liabilities	16.03	-	16.03	-	-	-	16.03
Total	**1,949.95**	-	**1,949.95**	-	-	-	**1,949.95**

As at March 31, 2022

Particulars	Carrying amount	On demand	Not later than 3 months	Between 3 and 12 months	Between 1 and 5 years	Later than 5 years	Total
Non-derivative financial liabilities							
Short term borrowings from related party	30.00	30.00	-	-	-	-	30.00
Trade payables	329.75	-	329.75	-	-	-	329.75
Other financial liabilities	0.70	-	0.70	-	-	-	0.70
Total	**360.45**	**30.00**	**330.45**	-	-	-	**360.45**

iii) Market risk
Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risks: interest rate risk, foreign currency risk and other price risk.

- **Interest rate risk-**
Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Since the Trust has no interest bearing borrowings or any other significant transactions dependent on interest rates, the exposure to risk of changes in market interest rates is minimal.

- **Foreign currency risk-**
Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate due to changes in foreign exchange rates. The Trust is not exposed to foreign currency risk as it has no borrowings or payables or any other significant transactions in foreign currency.

- **Other price risk-**

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or foreign currency risk). The Trust is not exposed to price risk as it has no such investments or any other financial assets.

29. Capital management

For the purpose of the Trust's capital management, capital includes issued unit capital and all other reserves attributable to the unitholders of the Trust. The primary objective of the Trust's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximise unitholder value.

As at March 31, 2023, the Trust has no borrowings and hence gearing ratio is zero. Consequent to such capital structure, there are no externally imposed capital requirements.

Particulars	March 31, 2023	March 31, 2022*
Borrowings	-	30.00
Less: Cash & cash equivalents	(32,450.81)	(4.01)
Less: Other bank balances	(7,627.36)	-
Net debt (A)**	-	**25.99**
Total equity (B)*	3,51,786.87	(350.15)
Total equity and net debt (C=(A)+(B))	**3,51,786.87**	**(324.16)**
Gearing ratio (A)/(C)	**0%**	**(8.02%)**

* The Trust had not issued any unit capital as on March 31, 2022 and there is an accumulated loss of Rs. 350.15 lakhs till March 31, 2022 resulting into a negative equity of Rs. 350.15 lakhs.

** In current year, cash & cash equivalents and other bank balances is greater than borrowings, hence Net Debt is considered as nil.

30. Acquisitions during the year

During the current period, the Trust has acquired/ incorporated two subsidiaries as below:
(a) On June 28, 2022, the Trust acquired 100% shares in Shree Jagannath Expressways Private Limited ('SJEPL') from its erstwhile shareholders for a consideration of Rs 23,526.33 lakhs and further the Trust has also advanced an interest-bearing loan of Rs 25,105.61 lakhs to SJEPL to repay the sub-ordinate loans availed by SJEPL. Post completion of acquisition, the Trust has obtained control on the SJEPL and has consolidated its revenue and expenditure from the said date in consolidated financial statement.

(b) The Trust had submitted the bid for Toll, Operation, Maintenance and Transfer of Eastern Peripheral Expressway (from Km 1.000 to Km 136.000) of NE-2 in National Capital Region ('NCR') ('TOT bundle 7'), pursuant to which, the Trust was declared as the highest bidder at a consideration of Rs. 6,26,710.00 lakhs and accordingly, Letter of Award was issued to the Trust by NHAI for which Trust has incorporated SPV named NCR Eastern Peripheral Expressway Private Limited ('NCREPE') on April 25, 2022 and has entered into Concession Agreement with NHAI on May 6, 2022. The Trust has raised additional sum of Rs. 2,61,170.00 lakhs from its unitholders through rights issue of its units and completed the acquisition of the asset on November 11, 2022.

31. In the previous year ended March 31, 2022, the Trust availed input tax credit of Rs. 26.68 lakhs, on certain services. However, considering there was no output services for which input tax credit can be utilised, the Trust has made an impairment loss for the input tax credit availed amounting to Rs. 28.55 lakhs (including balance of March 31, 2021: Rs. 1.87 lakhs) in the financial statements for the year ended March 31, 2022. In the current year, the Trust has not availed any input credit on the services availed in its books and has recognized GST input as an expense along with the relevant expenses head.

32. In the earlier years, the Trust had entered into an arrangement with Investment Manager to discharge payments on behalf of the Trust for the expense and other liabilities incurred by the Trust till the time the Trust has issued any unit capital. Accordingly, as at March 31, 2022 the Trust had incurred expenses of Rs. 317.93 lakhs con account of professional fees and other regular operational expenses which were paid by the Investment Manager and were shown as payable to the Investment Manager under the head Trade payables for the year ended March 31, 2022. Further, TDS deducted on such expenses was also deposited by the Investment Manager on behalf of the Trust. In the current year, the payments made by the Investment Manager have been reimbursed by the Trust and there is no outstanding dues to the Investment Manager in this respect as on March 31 2023.

33. Investment management fees

The Investment Manager shall be paid fees for the services provided by the Investment Manager under the Investment Management Agreement ('IMA') in accordance with the Distribution Policy ('Management fees'). The management fees shall be the higher of (A) Rs. 1,850.00 lakhs for the financial year ending March 31, 2021 escalated by 7% per annum; and (B) 0.74% of the net asset value of the Trust for the immediately preceding financial year. The management fees may be revised for every financial year by the approval of the unitholders. However, the approval of the unitholders shall not be required in relation to the annual escalation in management fees contemplated above.
Pursuant to the IMA, the Investment Manager is entitled to fees of Rs 1,896.74 lakhs (inclusive of GST), which is included in these standalone financial statements.

34. The recoverable amount of the investments in subsidiaries has been computed by external independent valuation experts based on value in use calculation for the underlying projects (based on discounted cash flow model). On a periodic basis, according to the recoverable amounts of individual portfolio assets computed by the valuation experts, the Trust tests impairment on the amounts invested in the respective subsidiary companies. The valuation exercise so carried out considers various factors including cash flow projections (including traffic and tariff projections), changes in interest rates, discount rates, risk premium for market conditions etc. Based on the valuation exercise so carried out, there is no impairment of investments for the year ended March 31, 2023.

35. Intercorporate deposit obtained by the Trust from the Investment Manager

During the year ended March 31, 2022, the Trust has availed intercorporate loan from Maple Infra InvIT Investment Manager Private Limited, Investment Manager amounting to Rs. 30.00 lakhs. As per the terms of the loan, rate of interest shall be bank rate plus 5.75% per annum. The said loan was repayable on demand. Out of the said loan, amount of Rs. 0.05 lakhs was used for Investment in equity shares of NCREPE by the Trust.

During the year, the Trust received a letter dated September 09, 2022 from SEBI stating that the Trust has borrowed money prior to initial offer of units by the Trust (i.e. without approval by unitholders) which is not in compliance with SEBI (Infrastructure Investment Trusts) Regulations, 2014 and advised the Trust to improve compliance standards to avoid recurrence of such instances.

The Investment Manager has discussed the matter with its legal counsels and is of the view that the said intercorporate loan of Rs. 30.00 lakhs taken during the year ended March 31, 2022, though was not in compliance with SEBI InvIT Regulations, however, the same was adequately reported to SEBI. Further, the Trust has subsequently repaid the entire amount of inter-corporate loan, post issuance of unit capital in June 2022 and accordingly, there is no default as on date. The Investment Manager is of the view that this was only a precautionary warning by SEBI and thus, no action is expected to be taken against the Trust and no further adjustments is required in the standalone financial statements of the Trust in this regard.

36. Extension of Scheduled completion and current status of the project

One of the subsidiary companies, SJEPL entered into a Concession Agreement ('CA') on August 6, 2010 with NHAI for augmentation and expansion of the then existing 4 lane highway to 6 lane highway on a section of NH 5 in Odisha for 67 Kms of toll project road ('Project Highway') on Design, Build, Finance, Operate, Transfer ('DBFOT') model for a period of 26 years starting from December 14, 2011 being the Appointed Date. SJEPL was also granted right to collect toll on existing 4 lane highway from the Appointed Date.

As per the CA, SJEPL was obligated to complete the above-mentioned work within a period of 910 days from Appointed Date i.e by June 11, 2014. However, due to delays in handover of land by NHAI and other operational delays, the work was delayed and NHAI vide supplementary agreement dated November 11, 2016 extended the scheduled completion date to March 31, 2017. SJEPL was granted Provisional Completion Certificate ('PCC') by the Independent Engineer ('IE') on January 12, 2017 for 56.878 Kms of the total 67 Kms of Project Highway and it is still awaited for the balance distance (kms).

Further, SJEPL has completed a majority of the punch list items as specified in the PCC dated January 12, 2017 and that the balance punch list items were either pending due to extraneous factors or as SJEPL had applied to NHAI for de-scoping of the same.

Though the IE had recommended an extension of time for completion of the project till June 30, 2021, no formal approval from NHAI has been received by SJEPL post 31 March 2017. As per the CA, if the above-mentioned delay is not approved by the NHAI, it may result in termination of the CA and consequent penalty and liability may devolve upon SJEPL, which was also imposed by NHAI while granting the in-principle approval for change in shareholding by SJEPL.

The management believes that delay in completion is not on any grounds attributable to SJEPL and that obtaining the final completion certificate from the NHAI is only procedural in nature and since recommendations of the IE for extension of time has been received from time to time, no liability in this regard shall devolve upon SJEPL and the Trust Group. Further, delays in construction, including the penalties and extension of Concession Agreement has been referred to Conciliation Committee of Independent Experts ('CCIE') by erstwhile shareholders of SJEPL and NHAI, which is currently pending disposal with CCIE. Also, as per the SPA, the Trust is indemnified by the selling shareholders for any liability or all possible losses which may devolve upon the Trust in this regard.

(All amounts in Rs. lakhs, unless otherwise stated)

37. There are no events identified subsequent to the balance sheet date till date of reporting which requires adjustment in these standalone financial statements.

38. Figures of the previous year have been regrouped/reclassified wherever necessary to make them comparable with that of the current year.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(as investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
M. No : 501396

Place: Gurugram
Date: June 8, 2023

Romesh Sobti	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Chairman and Director	Chief Executive Officer	Company Secretary and Compliance Officer	Chief Financial Officer
DIN: 00031034		M. No. : A31131	
Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023	Date: June 8, 2023

INDEPENDENT AUDITOR'S REPORT

To the Unit holders of Indian Highway Concessions Trust

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying Financial Statements of Indian Highway Concessions Trust ("the Trust"), which comprise the Balance sheet as at March 31, 2022, the Statement of Profit and Loss, including the Statement of Other Comprehensive Income, the Statement of Cash Flows and the Statement of Changes in Unit holders' equity as at and for the year then ended, the Statement of Net Asset at fair value as at March 31, 2022, the statement of total return at fair value, the statement of Net Distributable Cash Flows ('NDCFs') of the Trust for the year then ended and notes to the financial statements, including a summary of significant accounting policies and other explanatory information (hereafter referred to as "financial statements").

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 as amended from time to time ('SEBI Regulations') including SEBI circular CIR/IMD/DF/127/2016 dated November 29, 2016 ('SEBI circular') in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations, of the state of affairs of the InvIT as at March 31, 2022, its loss including other comprehensive income, its cash flows and Statement of changes of the unit holders' equity for the year ended March 31, 2022, its net assets at fair value as at March 31, 2022, its total return at fair value and the net distributable cash flows of the Trust for the year ended March 31, 2022.

Basis for Opinion

We conducted our audit of the Financial Statements in accordance with the Standards on Auditing (SAs) and other pronouncements issued by the Institute of Chartered Accountants of India (ICAI). Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of our report. We are independent of the Trust in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India and we have fulfilled our other ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Other Information

The Management of Maple Infra InvIT Investment Manager Private Limited (the "Investment Manager") is responsible for the other information. The other information comprises the information included in the Annual Report but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.
In connection with our audit of the financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. When we read the Annual Report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibility of Management for the Financial Statements

The Management of the Investment Manager ('the Management') is responsible for the preparation of these financial statements that give a true and fair view of the financial position as at March 31, 2022, financial performance including other comprehensive income, cash flows and the movement of the unit holders' equity for the year ended March 31, 2022, the net assets at fair value as at March 31, 2022, the total return at fair value and the net distributable cash flows of the Trust for the year ended March 31, 2022 in accordance with the requirements of the SEBI regulations, Indian Accounting Standards (Ind AS) as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations. This responsibility also includes the design, implementation and maintenance of adequate controls for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, management is responsible for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Trust or to cease operations, or has no realistic alternative but to do so.

The management is also responsible for overseeing the Trust's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs and other pronouncements issued by ICAI will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal financial control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the Trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Other Matter

The financial statements of the Trust for the year ended March 31, 2021 included as comparative financial information in the accompanying financial statements, have been certified by the Investment Manger's Board of Directors, but have not been subjected to audit under SEBI Regulations.

Report on Other Legal and Regulatory Requirements

Based on our audit and as required by SEBI Regulations, we report that:

(a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

(b) The Balance Sheet and the Statement of Profit and Loss are in agreement with the books of account of Trust;

(c) In our opinion, the aforesaid financial statements comply with the Accounting Standards (Ind AS) and/or any addendum thereto as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended, to the extent not inconsistent with SEBI Regulations.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership Number: 501396
UDIN: 22501396ASQYNL5781

Place of Signature: Gurugram
Date: September 16, 2022

Indian Highway Concessions Trust
Balance Sheet as at March 31, 2022
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note No.	As at March 31, 2022	As at March 31, 2021
ASSETS			
Current assets			
Financial assets			
Cash and cash equivalents	4	**4.01**	-
Other current assets	3	**8.00**	-
Total current assets		**12.01**	-
TOTAL ASSETS		**12.01**	-
EQUITY AND LIABILITIES			
Equity			
Unit capital	5	-	-
Other equity	6	**(350.15)**	**(173.92)**
Total Unit Holder's Equity		**(350.15)**	**(173.92)**
LIABILITIES			
Non Current Liabilities			
Current liabilities			
Financial liabilities			
i) Borrowings	7	**30.00**	-
ii) Trade payables			
-Dues to micro, small and medium enterprises	8	-	-
-Dues to other than micro, small and medium enterprises	8	**329.75**	**173.77**
iii) Other financial liabilities	9	**0.70**	-
Other current liabilities	10	**1.71**	**0.15**
Total current liabilities		**362.16**	**173.92**
TOTAL EQUITY AND LIABILITIES		**12.01**	-

Summary of significant accounting polices	2
The accompanying notes are an integral part of these financial statements.	3-30

As per our report of even date attached.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
Membership No : 501396

Romesh Sobti
Chairman and Director
DIN : 00031034
Place: Dehradun
Date: September 16, 2022

Saurabh Agarwal
Director
DIN : 06518876
Place: Delhi
Date: September 16, 2022

Anup Vikal
Chief Executive Officer
Place: Mumbai
Date: September 16, 2022

Ankit Dewan
Company Secretary & Compliance Officer
Place: Mumbai
Date: September 16, 2022

Place: Gurugram
Date: September 16, 2022

Indian Highway Concessions Trust
Statement of Profit and Loss for the year ended March 31, 2022
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note No.	Year ended March 31, 2022	Year ended March 31, 2021
Income			
Other income		-	-
Total income		-	-
Expenses			
Finance Cost	11	14.79	-
Other expenses	12	161.44	173.92
Total expenses		176.23	173.92
Loss before tax		(176.23)	(173.92)
Tax expense	13		
Current tax		-	-
Deferred tax		-	-
Total tax expense		-	-
Loss for the year		(176.23)	(173.92)
Other comprehensive income, net of tax		-	-
Total comprehensive income for the year		(176.23)	(173.92)
Earnings per unit	14		

Summary of significant accounting polices 2
The accompanying notes are an integral part of these financial statements. 3-30

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership No : 501396

Place: Gurugram
Date: September 16, 2022

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Ankit Dewan
Company Secretary & Compliance Officer
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Date: September 16, 2022

Indian Highway Concessions Trust
Statement of Cash Flows for the year ended March 31, 2022
(All amounts in ₹ lacs, unless otherwise stated)

	Particulars	Year ended March 31, 2022	Year ended March 31, 2021
(A)	**Cash flow from operating activities :**		
	Loss before tax	(176.23)	(173.92)
	Interest on intercorporate deposit from Related Party	0.78	-
	Operating loss before working capital changes	(175.45)	(173.92)
	Adjustments for:		
	Increase in trade payables	155.98	173.77
	Increase in other current liabilities	1.48	0.15
	Increase in other current assets	(8.00)	-
	Net Cash from operating activities (A)	(25.99)	-
(B)	**Cash flows from investing activities**		
	Net Cash from investing activities (B)	-	-
(B)	**Cash flows from financing activities**		
	Short Term Borrowings from related party	30.00	-
	Net Cash from financing activities (C)	30.00	-
	Net Increase / (Decrease) in Cash & cash equivalents (A+B+C)	4.01	-
	Cash and cash equivalents as at the beginning of the year	-	-
	Cash and Cash equivalents as at the end of the year	4.01	-

Reconciliation of cash & cash equivalent as per the statement of cash flows:

Cash and Cash Equivalents as per above comprise the following:

Particulars	Year ended March 31, 2022	Year ended March 31, 2021
Bank balances		
In current accounts		
Fixed deposits (less than 3 months maturity)	-	-
Cash and cash equivalents	4.01	-
Balance as per statement of cash flows	4.01	-

1 Figures in bracket indicate cash outflow.
2 The above Cash Flow Statement has been prepared under the "Indirect Method " as set out in the Indian Accounting Standard (Ind AS-7) Statement of Cash flows notified under section 133 of the Companies Act, 2013 read with Rule 3 of the Companies (Indian Accounting Standard) Rules, 2015.
3 The Trust did not have any cash flow changes arising from non-cash transactions from financing activities.

Summary of significant accounting polices	2
The accompanying notes are an integral part of these financial statements.	3-30

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
Membership No : 501396

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Date: September 16, 2022

Place: Gurugram
Date: September 16, 2022

Ankit Dewan
Company Secretary & Compliance Officer
Place: Mumbai
Date: September 16, 2022

Indian Highway Concessions Trust
Statement of Changes in unit holders' equity for the year ended March 31, 2022
(All amounts in ₹ lacs, unless otherwise stated)

A **Unit capital** (Refer note 2.1)

Particulars	**As at the March 31, 2020**	**Changes in unit capital during the year**	**As at the March 31, 2021**	**Changes in unit capital during the year**	**As at the March 31, 2022**
Unit capital	-	-	-	-	-

B **Other Equity**

Particulars	**Retained earnings**	**Total**
As at March 31, 2020	**-**	**-**
Loss for the year	(173.92)	(173.92)
Other comprehensive income for the year	-	-
As at March 31, 2021	**(173.92)**	**(173.92)**
Loss for the year	(176.23)	(176.23)
Other comprehensive income for the year	-	-
As at March 31, 2022	**(350.15)**	**(350.15)**

The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership No : 501396

Place: Gurugram
Date: September 16, 2022

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

Romesh Sobti
Chairman and Director
DIN : 00031034
Place: Dehradun
Date: September 16, 2022

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Date: September 16, 2022

Anup Vikal
Chief Executive Officer
Place: Mumbai
Date: September 16, 2022

Ankit Dewan
Company Secretary & Compliance Officer
Place: Mumbai
Date: September 16, 2022

1. Trust Information

Indian Highway Concessions Trust (the "Trust") was setup as an irrevocable trust under the Indian Trust Act, 1882 pursuant to an Indenture of Trust dated November 06, 2019 which was duly registered on November 13, 2019 in the office of the Sub-Registrar -V(1), New Delhi and was subsequently amended by First Amended and Restate Indenture of Trust" dated December 19, 2019. The Trust was registered as an Infrastructure Investment Trust ('InvIT') with Securities Exchange Board of India ('SEBI') under the under the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 vide Certificate of Registration (IN/InvIT/19-20/0013) dated February 24, 2020.

Maple Highways Pte. Ltd. (the "Sponsor"), is the sponsor of the Trust. The Trust has been settled for an initial sum of ₹ 10,000. The Trustee to the Trust is Axis Trustee Services Limited (the "Trustee") and Investment manager for the Trust is Maple Infra InvIT Investment Manager Private Limited (the "Investment Manager") and Maple Highway Project Management Private Limited (the "Project Manager") has been designated as Project Manager to the Trust.

The Trust has been formed to invest in infrastructure assets primarily in road sector and will implement and hold road projects through special purpose vehicles.

The financial statements for the year ended March 31, 2022 were authorized and approved for issue by the Board of Directors of the Investment Manager on September 16, 2022.

2. Significant Accounting Policies

2.1 Basis of Preparation and presentation

The Financial Statements of the Trust have been prepared in accordance with the Indian Accounting Standards (Ind AS) as defined in Rule 2 (1) (a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended, prescribed under Section 133 of the Companies Act, 2013 and SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and the circulars issued thereunder ("SEBI InvIT Regulations").

As no units have been issued as at March 31, 2022, certain disclosures as applicable under the SEBI InvIT Regulations and as required by the Ind AS has been accordingly presented (also refer note 28), including but not limited to

a) Statement of Net Assets at Fair Value
b) Statement of Total Returns at Fair Value
c) Statement of Net Distributable Cash Flows (NDCFs)
d) Investment Manager and Project Manager Fees
e) Statement of Earnings per Unit

The Financial Statements are presented in Indian Rupees (₹) which is also the functional currency of the Trust. All values are rounded to the nearest lacs, unless otherwise indicated. Certain amounts that are required to be disclosed and do not appear due to rounding-off are expressed as 0.0.

These Financial Statements correspond to classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. These financial statements have been prepared on an accrual basis and historical cost convention except for certain financial assets and liabilities (refer accounting policy regarding financial instruments) which have been measured at fair value.

2.2 Summary of significant accounting policy

a. Current and Non-Current Asset

An asset is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be realised in, or is intended for sale or consumption in, the Trust's normal operating cycle; or
ii) it is held primarily for the purpose of being traded; or
iii) it is expected to be realised within twelve months after the reporting date; or
iv) it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.

All other assets are classified as 'non-current'.

b. Current and Non-Current Liability

A liability is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be settled in the Trust's normal operating cycles; or
ii) it is held primarily for the purpose of being traded; or
iii) it is due to be settled within twelve months after the reporting date; or
iv) the Trust does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

All other liabilities are classified as 'non-current'.
The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The normal operating cycle of the Trust is considered as 12 months period.

c. Financial instruments:

(i) Financial Assets

<u>Initial recognition and measurement</u>

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Trust's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Trust has applied the practical expedient, the Trust initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Trust's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at fair value through OCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

<u>Subsequent measurement</u>
For purposes of subsequent measurement financial assets are classified in four broad categories:

- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through other comprehensive income (FVTOCI) with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortised cost (debt instruments)

A 'financial asset' is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

This category is the most relevant to the Trust. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the profit or loss. The losses arising from impairment are recognised in the profit or loss. The Trust's financial assets at amortised cost includes trade receivables, and other financial assets.

Financial assets at fair value through OCI (FVTOCI) (debt instruments)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. For debt instruments, at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value changes recognised in OCI is reclassified from the equity to profit or loss.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Trust can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under Ind AS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS103 applies are classified as at FVTPL.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit and loss when the right of payment has been established, except when the Trust benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the balance sheet at fair value with net changes in fair value recognised in the statement of profit and loss.

This category includes derivative instruments and listed equity investments which the Trust had not irrevocably elected to classify at fair value through OCI. Dividends on listed equity investments are recognised in the statement of profit and loss when the right of payment has been established.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Trust 's balance sheet) when:

- The rights to receive cash flows from the asset have expired, or
- The Trust has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement and either;
  (a) the Trust has transferred substantially all the risks and rewards of the asset, or
  (b) the Trust has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

Expected credit losses (ECLs) are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Trust applies a simplified approach in calculating ECLs. Therefore, the Trust does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

(ii) Financial Liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

Subsequent measurement

For purposes of subsequent measurement, financial liabilities are classified in two categories:

• Financial liabilities at fair value through profit or loss
• Financial liabilities at amortised cost (loans and borrowings)

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Trust that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109.

Gains or losses on liabilities held for trading are recognised in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ losses are not subsequently transferred to P&L. However, the Trust may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit and loss. The Trust has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.
This category generally applies to borrowings.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit and loss.

d. Revenue Recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Fund and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. The specific recognition criteria described below must also be met before revenue is recognised:

Interest Income
For all financial instruments measured at amortized cost, interest income is recorded using effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instruments or a shorter period, where appropriate, to the net carrying amount of the financial asset. Interest income is included in other income in the statement of profit and loss.

Other Income
Other incomes are accounted for, when there is certainty of realization and can be measured reliably.

e. Accounting for Taxes on Income

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date. Current income tax relating to items recognised outside the statement of profit or loss is recognised outside the statement of profit or loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. The Investment Manager periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax is provided using the balance sheet approach on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

The carrying amount of deferred tax asset is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss. Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

f. Impairment of Assets (Other than financial assets measured at fair value)

As at each balance sheet date, the Trust assesses whether there is an indication that an asset may be impaired and also whether there is an indication of reversal of impairment loss recognised in the previous periods. If any indication exists, or when annual impairment testing for an asset is required, if any, the Trust determines the recoverable amount and impairment loss is recognised when the carrying amount of an asset exceeds its recoverable amount.

Recoverable amount is determined:
• In the case of an individual asset, at the higher of the fair value less cost to sell and the value in use; and
• In the case of cash generating unit (a group of assets that generates identified, independent cash flows), at the higher of the cash generating unit's fair value less cost to sell and the value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Trust bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Trust's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.
Impairment losses of continuing operations, including impairment on inventories, are recognised in profit and loss section of the statement of profit and loss.

g. Provisions, Contingent Liabilities and Contingent Assets

(a) Provisions are recognized for liabilities that can be measured only by using a substantial degree of estimation, if
- (i) the Trust has a present obligation as a result of a past event.
- (ii) a probable outflow of resources is expected to settle the obligation, and
- (iii) the amount of the obligation can be reliably estimated.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

(b) Reimbursement expected in respect of expenditure required to settle a provision is recognized only when it is virtually certain that the reimbursement will be received.

(c) Contingent Liability is disclosed in the case of
- (i) a present obligation arising from past events, when it is not probable that an outflow of resources will be required to settle the obligation.
- (ii) a present obligation when no reliable estimate is possible, and
- (iii) a possible obligation arising from past events where the probability of outflow of resources is not remote.

(d) Contingent Asset is disclosed, where an inflow of economic benefits is probable.
(e) Provisions, Contingent Liabilities and Contingent Assets are reviewed at each Balance Sheet date.

(f) Onerous contracts:

If the Trust has a contract that is onerous, the present obligation under the contract is recognised and measured as a provision. However, before a separate provision for an onerous contract is established, the Trust recognises any impairment loss that has occurred on assets dedicated to that contract.

An onerous contract is a contract under which the unavoidable costs (i.e., the costs that the Trust cannot avoid because it has the contract) of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract (i.e., both incremental costs and an allocation of costs directly related to contract activities).

h. Earnings Per Unit (EPU)

Basic Earnings Per Unit is calculated by dividing the net profit or loss for the year attributable to unit holders of the Trust (after deducting preference dividends and attributable taxes if any) by the weighted average number of units outstanding during the year.

For the purpose of calculating Diluted Earnings Per Unit, the net profit or loss for the period attributable to unit holders and the weighted average number of units outstanding during the year are adjusted for the effects of all dilutive potential units.

i. Cash Flow

Cash flows are reported using the indirect method, whereby net profit before tax is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Trust are segregated and presented accordingly.

j. Segment reporting

Operating results are regularly reviewed by the Trust's Chief Operating Decision Maker ('CODM') who makes decisions about resources to be allocated to the segment and assesses its performance.

Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property and equipment and intangible assets other than goodwill.

k. Fair Value measurement

The Trust measures financial instruments, such as, derivatives at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

In the principal market for the asset or liability, or
In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Trust.
The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest."

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.
The Trust uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the Financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For the purpose of fair value disclosures, the Trust has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

l. Use of Judgement, Estimates and Assumptions

The preparation of financial statements in conformity with Ind AS requires that management of the Trust makes estimates, judgements and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses of the period and the disclosures relating to contingent liabilities and contingent assets as of the date of the financial statements. Application of accounting policies involves complex and subjective judgements and the use of the assumptions in these financial statements have been disclosed. Accounting estimates could change from period to period. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed ongoing basis. Revision in accounting estimates are recognised in the period in which the estimates are revised and if material, their effects are disclosed in the notes to the Financial statements.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below. The Trust has based its assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond control of the management.

Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the DCF model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

Taxes

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.
The Trust has a history of losses, which may not be used to offset taxable income elsewhere in the Trust. The Trust neither have any taxable temporary difference nor any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets.

On this basis, the Trust has determined that it cannot recognise deferred tax assets on the tax losses carried forward.

2.3 New and amended standards

There are no new standards that are notified, but not yet effective, upto the date of issuance of the Trust's Financial statements.

Further, several amendments apply for the first time for the year ended March 31, 2022, but do not have an impact on the financial statements of the Trust.

3 Other current assets

	As at March 31, 2022	As at March 31, 2021
Unsecured, considered good		
Prepaid expenses	8.00	-
Balance with government authorities	28.55	1.87
Less: Impairment of current assets (Refer note 22)	(28.55)	(1.87)
	8.00	**-**

4 Financial assets

Cash and cash equivalents		
Balances with Bank :		
- On current accounts	4.01	-
	4.01	**-**

5 Unit capital

	As at March 31, 2022	As at March 31, 2021
a) Initial settlement amount	-	-
	-	-
b) Unit capital at the beginning of the year and at the end of the year (Refer Note 26)		
	-	-
	-	-

6 Other Equity

	As at March 31, 2022	As at March 31, 2021
Retained earnings		
Balance at the beginning of the year	(173.92)	-
Loss for the year	(176.23)	(173.92)
Balance at the end of the year	**(350.15)**	**(173.92)**

7 Current Liabiliites

	As at March 31, 2022	As at March 31, 2021
Financial Liabilities		
Borrowings		
Intercorporate deposits from Related Party*	30.00	-
Balance at the end of the year/period	**30.00**	**-**
Non Current	-	-
Current	30.00	-

*** Terms and conditions of intercorporate loans**
During the current year, the Trust has availed intercorporate loan from Maple Infra InvIT Investment Manager Private Limited, the investment manager amounting to Rs. 30.00 lacs. As per the terms of the loan, the rate of interest shall be the bank rate plus 5.75% per annum. The said loan is repayable on demand.

(All amounts in ₹ lacs, unless otherwise stated)

8 Trade payables	**As at March 31, 2022**	**As at March 31, 2021**
- total outstanding dues of micro enterprises and small enterprises* (Refer note 25)	-	-
- total outstanding dues of creditors other than micro enterprises and small enterprises (Refer note 25)	329.75	173.77
Total	**329.75**	**173.77**

Trade payables ageing schedule for the year ended as on March 31, 2022:

Particulars	**Outstanding for following periods from invoice date**					**Total**
	Not Due	**Less than 1 year**	**1-2 years**	**2-3 years**	**> 3 years**	
Outstanding dues to micro enterprises and small enterprises*	-	-	-	-	-	-
Others	2.50	153.48	173.77	-	-	329.75
Total	**2.50**	**153.48**	**173.77**	**-**	**-**	**329.75**

Trade payables ageing schedule for the year ended as on March 31, 2021:

Particulars	Outstanding for following periods from invoice date					Total
	Not Due	Less than 1 year	1-2 years	2-3 years	> 3 years	
Outstanding dues to micro enterprises and small enterprises*	-	-	-	-	-	-
Others	173.77	-	-	-	-	173.77
Total	173.77	-	-	-	-	173.77

* **Due to Micro and Small Enterprises**
The Ministry of Micro, Small and Medium Enterprises has issued an office memorandum dated 26 August 2008 which recommends that the Micro and Small Enterprises should mention in their correspondence with its customers the Entrepreneurs Memorandum Number as allocated after filing of the Memorandum. Accordingly, the disclosure in respect of the amount payable to such enterprises as at 31 March 2022 has been made in the financial statements based on information received and available with the Trust. Further in view of the Management, the impact of interest, if any, that may be payable in accordance with the provisions of the Micro, Small and Medium Enterprises Development Act, 2006 ("The MSMED Act') is not expected to be material. The Trust has not received any claim for interest from any supplier.

Particulars	**As at March 31, 2022**	**As at March 31, 2021**
The amounts remaining unpaid to micro and small supplies as at end of the year		
- Principal	-	-
- Interest	-	-
The amount of interest paid by the buyer in terms of Section 16 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), along with the amount of the payment made to the supplier beyond the appointed day during each accounting year;	-	-
The amount of interest due and payable for the period of delay in making payment (which has been paid but beyond the appointed day during the year) but without adding the interest specified under the MSMED Act;	-	-
The amount of interest accrued and remaining unpaid at the end of each accounting year; and	-	-
The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprises for the purpose of disallowance as a deductible expenditure under Section 23 of the MSMED Act.	-	-

Based on the information available with the Trust, there are no amounts due to Micro, Small and Medium Enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 as at March 31, 2022. No interest has been paid/ is payable by the Trust during the year ended March 31, 2022 in terms of Section 16 of the Micro, Small and Medium Enterprises Development Act, 2006.

9 Other financial liabilities	**As at March 31, 2022**	**As at March 31, 2021**
Interest accrued on intercorporate deposits	0.70	-
Total	**0.70**	-

10 Other current liabilities	**As at March 31, 2022**	**As at March 31, 2021**
Statutory dues	1.71	0.15
Total	**1.71**	**0.15**

(All amounts in ₹ lacs, unless otherwise stated)

11 Finance Cost	**Year ended March 31, 2022**	**Year ended March 31, 2021**
Interest on intercorporate deposits from Related Party	0.78	-
Bank Guarantee commission charges/Processing fees	13.71	-
Other bank charges	0.30	-
Total	**14.79**	**-**

12 Other expenses	**Year ended March 31, 2022**	**Year ended March 31, 2021**
Legal and professional fees	66.75	161.94
Trustee fee	7.50	-
Payment to auditor (Refer note 12.1 below)	54.96	8.11
Tender fees	5.01	1.60
Impairment of current assets (Refer note 22)	26.68	1.87
Office expenses	-	0.01
Miscellaneous expenses	0.54	0.39
Total	**161.44**	**173.92**

12.1 Payment to Auditor*	**Year ended March 31, 2022**	**Year ended March 31, 2021**
Statutory audit fees	2.50	-
Audit of Combined/Special purpose financial statements	47.00	2.00
Certification fee	5.00	6.00
Reimbursement of expenses	0.46	0.11
	54.96	**8.11**

*excluding applicable taxes

13 Income Tax Expenses

In accordance with Section 10(23FC) of the Income tax Act, 1961, the income of business trust in the form of interest earned or dividend earned is exempt from tax. However, for all other incomes earned by the Trust, it will be required to provide for current tax liability

	Year ended March 31, 2022	Year ended March 31, 2021
Current tax	-	-
Deferred tax	-	-

Reconciliation of tax expense and the accounting profit

Particulars	Year ended March 31, 2022	Year ended March 31, 2021
Loss before tax	(176.23)	(173.92)
Income tax rate applicable to the Trust*	42.74%	42.74%
Expected tax expense **(A)**	(75.33)	(74.34)
Adjustments in respect of :		
Deferred tax asset not recognised due to absence of certainty of future taxable profit	75.33	74.34
Total adjustments **(B)**	75.33	74.34
Net Tax Expense **(A+B)**	-	-
*Income tax rate applicable to the Trust has been computed as follows		
Base tax rate	30.00%	30.00%
Surcharges (% of base tax rate)	37.00%	37.00%
Cess (% of base tax rate)	4.00%	4.00%
Applicable income tax rate	42.74%	42.74%

14 Earnings per unit

There are no units issued by the Trust as on March 31, 2022. Hence the disclosures in respect of Earnings per Unit have not been given. (Also refer note 2.1)

15 Capital and other commitments

Total commitments as at March 31, 2022 - Nil (March 31, 2021- Nil)

16 Contingent liabilities

Guarantees

(i) Per the terms of bidding document for Tolling, Operation, Maintenance and Transfer of Stretches of project bundle - 6 comprising 2 Stretches in the States of Uttar Pradesh and Madhya Pradesh, the Trust had given bid security in the form of bank guarantee amounting to Rs. 1,090.00 lacs to National Highways Authority of India ("NHAI") which has been released by NHAI subsequent to year end and hence it is not outstanding as of date.

(ii) Per the terms of bidding document for Tolling, Operation, Maintenance and Transfer of Eastern Peripheral Expressway (from Km 1+000 to Km 136+000) of NE-2 in the National Capital Region (NCR) (TOT Bundle 7), the Trust had given bid security in the form of bank guarantee amounting to Rs. 1,350.00 lacs to NHAI which has been released by NHAI subsequent to year end and hence it is not outstanding as of date.

17 Segment information

The primary business of the Trust mainly include investing in infrastructure assets primarily in the SPVs operating in the road sector to generate cash flows for distribution to unit holders. Based on the guiding principles given in Ind AS - 108 “Operating Segments”, this activity falls within a single operating segment. Further, the entire operations of the Trust is only in India and hence, disclosure of secondary/geographical segment information does not arise. The Trust has not earned any revenues during the year.

(All amounts in ₹ lacs, unless otherwise stated)

18 Related party disclosures

Information required to be disclosed under Ind AS 24- "Related Party Disclosures"

I. List of related parties as per the requirements of Ind AS 24- "Related party disclosures" and Regulation 2(1) (zv) of the SEBI InvIT Regulations

A. Parties to the Trust

i. Maple Highways Pte Limited (Sponsor)
ii. Maple Infra InvIT Investment Manager Private Limited (Investment Manager)
iii. Maple Highway Project Management Private Limited (to be Project Manager)
iv. Axis Trustee Services Limited (Trustee of the Trust)

B. Directors of the parties to the Trust specified in I(A) above

Particulars	Maple Highways Pte Limited	Maple Infra InvIT Investment Manager Private Limited	Maple Highway Project Management Private Limited	Axis Trustee Services Limited
Directors	Mr. Cyril Sébastien Dominique Cabanes Mr. Leong Wai Leng	Mr. Romesh Sobti Mr. Saurabh Agarwal Mr. Yudhvir Singh Malik Mr. Anil Aggarwal	Mr. Saurabh Agarwal Mr. Deepak Malhotra	Mr. Rajesh Kumar Dahiya Mr. Ganesh Sankaran Mr. Sanjay Sinha

II. Related party transactions during the year	**Year ended March 31, 2022**	**Year ended March 31, 2021**
Maple Infra InvIT Investment Manager Private Limited		
Payment by Investment Manager on behalf of the Trust	**146.00**	**171.93**
Intercorporate deposits taken	**30.00**	**-**
Interest accrued on intercorporate deposits taken	**0.78**	**-**
	176.78	**171.93**

III. Related party outstanding balance	**As at March 31, 2022**	**As at March 31, 2021**
Maple Infra InvIT Investment Manager Private Limited		
Trade payable (refer note 25)	**317.93**	**171.93**
Intercorporate deposits payable	**30.00**	**-**
Interest accrued on intercorporate deposits payable (Net of TDS)	**0.70**	**-**
	348.63	**171.93**

19 Financial asset and liabilties at amortized cost

Particulars	Note No.	As at March 31, 2022	As at March 31, 2021
Financial Assets			
Cash and cash equivalents		4.01	-
Total Financial Assets		**4.01**	**-**
Financial liability			
Inter Corporate Deposit from Related Party	7	30.00	-
Trade Payables	8	329.75	173.77
Other financial liabilities	9	0.70	-
Total Financial Liabilities		**360.45**	**173.77**

The carrying amount of financial assets and financial liabilities measured at amortized cost in the financial statements are a resonable approximation of their fair value since the Trust does not anticipate that the carrying amounts would be significantly different from the value that would eventually be received or settled.

(All amounts in ₹ lacs, unless otherwise stated)

20 Financial risk management

The Trust has exposure to the following risks arising from financial instruments:
▪ Credit risk ;
▪ Liquidity risk ; and
▪ Market risk

Risk management framework

The Trust's risk management policies are established to identify and analyse the risks faced by the Trust, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Trust's activities.

The Board of Directors of Investment Manager has overall responsibility for the establishment and oversight of the Trust's risk management framework.
In performing its operating, investing and financing activities, the Trust is exposed to the Credit risk, Liquidity risk and Market risk.

i Credit risk

Credit risk is the risk that a counter party will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Trust is exposed to credit risk from its investing activities including loans to subsidiaries, deposits with banks and other financial instruments.

ii Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and making available an adequate amount of committed credit facilities with staggered maturities to reduce refinancing risk in any year and to fund working capital, debt servicing, dividend payments, new investments and close out market positions if required. The trust maintains significant flexibility to respond to opportunities and events by ensuring that committed credit lines are available to meet future funding requirements. The Trust's liquidity management policy involves close monitoring of liquidity position by monitoring cash collection and level of liquid assets necessary to meet cash outflow obligation, monitoring balance sheet liquidity ratios against external regulatory requirements and maintaining debt financing plans.

Maturity profile of financial liabilities
The table below provides details regarding the remaining contractual maturities of financial liabilities at the reporting date based on contractual undiscounted payments.

March 31, 2022	Carrying amount	Not later than 1 year	Between 1 and 2 years	Between 2 and 5 years	Later than 5 years	Total
Non-derivative financial liabilities						
Short Term Borrowings from Related Party	30.00	30.00	-	-	-	30.00
Trade payables	329.75	329.75	-	-	-	329.75
Other financial liabilities	0.70	0.70	-	-	-	0.70
Total	**360.45**	**360.45**	**-**	**-**	**-**	**360.45**

March 31, 2021	Carrying amount	Not later than 1 year	Between 1 and 2 years	Between 2 and 5 years	Later than 5 years	Total
Non-derivative financial liabilities						
Trade payables	173.77	173.77	-	-	-	173.77
Total	**173.77**	**173.77**	**-**	**-**	**-**	**173.77**

iii Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risks: interest rate risk, foreign currency risk and other price risk.

a) Interest rate risk
Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Since the Trust has no significant interest bearing borrowings or any other significant transactions dependent on interest rates, the exposure to risk of changes in market interest rates is minimal.

b) Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate due to changes in foreign exchange rates. The Trust is not exposed to foreign currency risk as it has no borrowings or payables or any other significant transactions in foreign currency.

c) Other price risk

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or foreign currency risk). The Trust is not exposed to price risk as it has no investments or any other financial assets.

21 Capital Management
For the purpose of the Trust's capital management, capital includes issued unit capital and all other reserves attributable to the unit holders of the Trust. The primary objective of the Trust's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximise unit holder value.

As at March 31, 2022 and March 31, 2021, the Trust has not issued any units. Consequent to such capital structure, there are no externally imposed capital requirements.

22 The Trust has availed input tax credit of ₹ 26.68 lacs (Mar 31, 2021 - ₹ 1.87 lacs), on services availed by the Trust. However, considering there is no output services for which input tax credit can be utilised, the Trust has made a impairment loss for the input tax credit availed amounting to ₹ 26.68 lacs (Mar 31, 2021 - ₹ 1.87 lacs) in these financial statements.

23 As at March 31, 2022, the Trust proposes to acquire 100% equity shares of Shree Jagannath Expressways Private Limited (the "Project SPV") and has accordingly entered into a Securities Purchase Agreement (‘SPA’) dated January 20, 2021 with the Project SPV and its shareholders. The Project SPV has entered into a Concession agreement with National Highways Authority of India (‘NHAI’) to Design, Build, Finance, Operate and Transfer (DBFOT) existing 4 lane highway to 6 lane highway on the Chandikole- Bhubaneshwar Section of NH5 in Odisha.

Subsequent to the year ended March 31, 2022, the Trust completed the acquisition of 100% equity stake in Shree Jagannath Expressways Private Limited on June 28, 2022. Accordingly, for the purpose of acquisition of such stake, the Trust issued unlisted units to the various unit holders including to the Sponsor. Further, the Trust has also advanced a sum of Rs. 25,605.62 lacs as a loan to the Project SPV to repay loans and other liabilities from erstwhile shareholders and their affiliates. No further changes is considered necessary in these financial statements in this regard.

The Trust is in the process of getting the Purchase Price Allocation of the consideration paid and shall accordingly account the acquisition in the consolidated financial statements. Being a non-adjusting subsequent event, no further changes is considered necessary in these financial statements in this regard.

24 The financial information for the period April 01, 2020 to March 31, 2021 and as at March 31, 2021, as reported in these financial statements have been certified by the Investment Manager of the Trust and not been subjected to audit or review. However, management has exercised necessary due diligence to ensure that the unaudited financial statements for year ended March 31, 2021 provide a true and fair view of the Trust's affairs.

25 The Trustee vide agreement dated December 23, 2019 has appointed Maple Infra InvIT Investment Manager Private Limited as the Investment Manager of the Trust. Further, vide letter dated January 5, 2021, the Trust has entered into an arrangement with Investment Manager to discharge payments on behalf of the Trust for the expense and other liabilities incurred by the Trust till the time the Trust has issued any unit capital. The payments made by the Investment Manager shall be reimbursed by the Trust as and when unit capital is issued by the Trust. Accordingly, as on March 31, 2022 the Trust has incurred expenses of ₹ 317.93 lacs (during the year amounting to ₹ 146.00 lacs) on account of professional fees and other regular operational expenses which has been paid by the Investment Manager and has been shown as payable to the Investment Manager under the head Trade payables. Further, TDS deducted on such expenses has also been deposited by the Investment Manager on behalf of the Trust. Subsequent to the year end, the Trust has repaid all such outstanding dues to the Investment Manager.

26 Refer note 23 above, subsequent to the year end, the Trust has issued units to its unit holders and has acquired the Project SPV. Accordingly, financial statements of the Trust has been prepared on the going concern assumption basis.

27 The Trust had submitted the bid for Tolling, Operation, Maintenance and Transfer of Eastern Peripheral Expressway (from Km 1+000 to Km 136+000) of NE-2 in the National Capital Region (NCR) (TOT Bundle 7) on January 27, 2022. Pursuant to which, the Trust was declared as the highest bidder and accordingly letter of award was issued to the Trust by NHAI on March 31, 2022. Subsequent to the year end, the Trust incorporated an SPV named NCR Eastern Peripherial Expressway Private Limited ("NCREPE") on April 25, 2022 and has signed the concession agreement with NHAI on May 6, 2022. The Trust is planning to raise additional funds from unit holders for funding the Project SPV.

28 Disclosures pursuant to SEBI Circulars

(SEBI Circular No. CIR/IMD/DF/114/2016 dated October 20, 2016 and No. CIR/IMD/DF/127/2016 dated November 29, 2016 issued under the SEBI InvIT Regulations)

As the Trust has not aquired any Road assets/Project and has not issued any units to its unit holders as at March 31, 2022, the below disclosures are not applicable to the Trust for the year ended March 31, 2022 and March 31, 2021 and have presented accordingly.

A. Statement of Net Assets at Fair Value as at

Particulars	March 31, 2022		March 31, 2021	
	Book Value	Fair Value	Book Value	Fair Value
A. Assets	-	-	-	-
B. Liabilities (at book value)	-	-	-	-
C. Net Assets (A-B)	-	-	-	-
D. Number of units	-	-	-	-
E. Net Asset Vaue (C/D)	-	-	-	-

B. Statement of Total Returns at Fair Value

Particulars	March 31, 2022	March 31, 2021
Total Return	-	-

C. Statement of Net Distributable Cash Flows (NDCFs) of Indian Highway Concessions Trust

Description	Year ended March 31, 2022	Year ended March 31, 2021
Net Distributable Cash Flows	-	-

(All amounts in ₹ lacs, unless otherwise stated)

29 The Trust proposes to acquire 100% equity shares of Durg Shivnath Expressways Private Limited (the "Project SPV") and has accordingly entered into a Securities Purchase Agreement ('SPA') dated September 20, 2021 with the Project SPV and its shareholders. The Project SPV had entered into a Concession agreement with National Highways Authority of India dated November 05, 1997. The Trust is planning to raise additional funds from unit holders for acquisition of the same.

30 Figures of the previous year have been regrouped/reclassified where ever considered necessary to make them comparable with that of the current year.

The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership No : 501396

Place: Gurugram
Date: September 16, 2022

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

Romesh Sobti	**Saurabh Agarwal**	**Anup Vikal**
Chairman and Director	Director	Chief Executive Officer
DIN : 00031034	DIN : 06518876	
Place: Dehradun	Place: Delhi	Place: Mumbai
Date: September 16, 2022	Date: September 16, 2022	Date: September 16, 2022

Ankit Dewan
Company Secretary & Compliance Officer
Place: Mumbai
Date: September 16, 2022

INDEPENDENT AUDITOR'S REPORT

To the Unit holders of Indian Highway Concessions Trust

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying Financial Statements of Indian Highway Concessions Trust ("the Trust"), which comprise the Balance sheet as at March 31, 2021, the Statement of Profit and Loss, including the Statement of Other Comprehensive Income, the Statement of Cash Flows and the Statement of Changes in Unit holders' equity as at and for the year then ended, the Statement of Net Asset at fair value as at March 31, 2021, the statement of total return at fair value, the statement of Net Distributable Cash Flows ('NDCFs') of the Trust for the year then ended March 31, 2021 and notes to the financial statements, including a summary of significant accounting policies and other explanatory information (hereafter referred to as "financial statements").

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give the information required by the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 as amended from time to time ('SEBI Regulations') including SEBI circular CIR/IMD/DF/127/2016 dated November 29, 2016 ('SEBI circular') in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations, of the state of affairs of the InvIT as at March 31, 2021, its loss including other comprehensive income, its cash flows and Statement of changes of the unit holders' equity for the year ended March 31, 2021, its net assets at fair value as at March 31, 2021, its total return at fair value and the net distributable cash flows of the Trust for the year ended March 31, 2021.

Basis for Opinion

We conducted our audit of the Financial Statements in accordance with the Standards on Auditing (SAs) and other pronouncements issued by the Institute of Chartered Accountants of India (ICAI). Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of our report. We are independent of the Trust in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India and we have fulfilled our other ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Financial Statements.

Responsibility of Management for the Financial Statements

The Management of the Investment Manager ('the Management') is responsible for the preparation of these financial statements that give a true and fair view of the financial position as at March 31, 2021, financial performance including other comprehensive income, cash flows and the movement of the unit holders' equity for the year ended March 31, 2021, the net assets at fair value as at March 31, 2021, the total return at fair value and the net distributable cash flows of the Trust for the year ended March 31, 2021 in accordance with the requirements of the SEBI regulations, Indian Accounting Standards (Ind AS) as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and other accounting principles generally accepted in India, to the extent not inconsistent with SEBI regulations. This responsibility also includes maintenance of adequate accounting records for safeguarding of the assets of the Trust and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, management is responsible for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Trust or to cease operations, or has no realistic alternative but to do so.

The Management are also responsible for overseeing the Trust's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs and other pronouncements issued by ICAI will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the Trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Other Matters

(i) Our report is intended solely for the information and use of the Management in connection with private placement of units of the Trust on a recognized stock exchange for the proposed conversion of the Trust from a Private Unlisted InvIT into Private listed InvIT and should not be used by parties other than the Management.

(ii) We have also issued audit report dated September 17, 2021 on the Special Purpose Financial Statement for the year ended March 31, 2021 for the purpose of preparation of Combined Financial Statements of the Trust for inclusion in the private placement memorandum in connection with the proposed issue of unlisted units on a private placement basis.

Report on Other Legal and Regulatory Requirements

Based on our audit and as required by SEBI Regulations, we report that:

(a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

(b) The Balance Sheet and the Statement of Profit and Loss are in agreement with the books of account of Trust;

(c) In our opinion, the aforesaid financial statements comply with the Accounting Standards (Ind AS) and/or any addendum thereto as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended, to the extent not inconsistent with SEBI Regulations.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership Number: 501396
UDIN:

Place of Signature: Gurugram
Date: June 15, 2023

Indian Highway Concessions Trust
Balance Sheet as at March 31, 2021
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note No.	As at March 31, 2021	As at March 31, 2020 (refer note 23)
ASSETS			
Current assets			
Other current assets	3	-	-
Total current assets		-	-
TOTAL ASSETS		-	-
EQUITY AND LIABILITIES			
Equity			
Unit capital	4	-	-
Other equity	5	(173.92)	-
Total Unit Holder's Equity		(173.92)	-
LIABILITIES			
Current liabilities			
Financial liabilities			
Trade payables			
-Dues to micro, small and medium enterprises	6	-	-
-Dues to other than micro, small and medium enterprises	6	173.77	-
Other current liabilities	7	0.15	-
Total current liabilities		173.92	-
TOTAL EQUITY AND LIABILITIES		-	-

Summary of significant accounting polices 2.1
The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership No : 501396

Place : Gurugram
Date: June 15, 2023

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

Romesh Sobti
Chairman and Director
DIN : 00031034

Place : London
Date: June 15, 2023

Anup Vikal
Chief Executive Officer
DIN : 06518876

Place : Mumbai
Date: June 15, 2023

Ankit Dewan
Company Secretary and Compliance Officer
Membership No : A31131

Place : Mumbai
Date: June 15, 2023

Varun Mehta
Chief Financial Officer

Place : Mumbai
Date: June 15, 2023

Indian Highway Concessions Trust
Statement of Profit and Loss for the year ended March 31, 2021
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note No.	Year ended March 31, 2021	November 6, 2019 to March 31, 2020 (refer note 23)
Income			
Other income		-	-
Total income		-	-
Expenses			
Payment to auditors	8.1	**8.11**	
Other expenses	8	**165.81**	-
Total expenses		**173.92**	-
Loss before tax		**(173.92)**	-
Tax expense	9		
Current tax		-	-
Deferred tax		-	-
Total tax expense		-	-
Loss for the year/period		**(173.92)**	-
Other comprehensive income, net of tax		-	-
Total comprehensive income for the year/period		**(173.92)**	-
Earnings per unit	10		

Summary of significant accounting polices 2.1
The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

per **Amit Gupta**
Partner
Membership No : 501396

Place : Gurugram
Date: June 15, 2023

Romesh Sobti
Chairman and Director
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Ankit Dewan
Company Secretary and Compliance Officer
Membership No : A31131

Place : Mumbai
Date: June 15, 2023

Varun Mehta
Chief Financial Officer

Place : Mumbai
Date: June 15, 2023

Indian Highway Concessions Trust
Statement of Cash Flows for the year ended March 31, 2021
(All amounts in ₹ lacs, unless otherwise stated)

	Particulars	Note No.	Year ended March 31, 2021	November 6, 2019 to March 31, 2020 (refer note 23)
(A)	**Cash flow from operating activities :**			
	Loss before tax		(173.92)	-
	Operating loss before working capital changes		(173.92)	-
	Adjustments for:			
	Increase in trade payables		173.77	-
	Increase in other current liabilities		0.15	-
	Net Cash from operating activities (A)		-	-
(B)	**Cash flows from investing activities**			
	Net Cash from investing activities (B)		-	-
(B)	**Cash flows from financing activities**			
	Net Cash from financing activities (C)		-	
	Net Increase / (Decrease) in Cash & cash equivalents (A+B+C)		-	-
	Cash and cash equivalents as at the beginning of the year/period		-	-
	Cash and Cash equivalents as at the end of the year/period		-	-

Reconciliation of cash & cash equivalent as per the statement of cash flows:

Cash and Cash Equivalents as per above comprise the following:

Particulars	As at March 31, 2021	As at March 31, 2020 (refer note 23)
Bank balances		
In current accounts	-	-
Fixed deposits (less than 3 months maturity)	-	-
Balance as per statement of cash flows	-	-

1 Figures in bracket indicate cash outflow.
2 The above Cash Flow Statement has been prepared under the "Indirect Method " as set out in the Indian Accounting Standard (Ind AS-7) Statement of Cash flows notified under section 133 of the Companies Act, 2013 read with Rule 3 of the Companies (Indian Accounting Standard) Rules, 2015.
3 The Trust did not have any cash flow changes arising from non-cash transactions from financing activities.

Summary of significant accounting polices 2.1
The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership No : 501396

Place : Gurugram
Date: June 15, 2023

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

Romesh Sobti
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Date: June 15, 2023

Ankit Dewan
Company Secretary and Compliance Officer
Membership No : A31131

Place : Mumbai
Date: June 15, 2023

Varun Mehta
Chief Financial Officer

Place : Mumbai
Date: June 15, 2023

Indian Highway Concessions Trust
Statement of Changes in Unitholders' equity for the year ended March 31, 2021
(All amounts in ₹ lacs, unless otherwise stated)

A **Unit capital** (Refer note 2.1)

Particulars	**As at November 6, 2019 (refer note 23)**	**Changes in unit capital during the period**	**As at the March 31, 2020**	**Changes in unit capital during the year**	**As at the March 31, 2021**
Unit capital	-	-	-	-	-

B **Other Equity**

Particulars	**Retained earnings**	**Total**
As at November 6, 2019 (refer note 23)	-	-
Profit/loss for the period	-	-
Other comprehensive income for the period	-	-
As at March 31, 2020	**-**	**-**
Loss for the year	(173.92)	(173.92)
Other comprehensive income for the year	-	-
As at March 31, 2021	**(173.92)**	**(173.92)**

The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership No : 501396

Place : Gurugram
Date: June 15, 2023

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

Romesh Sobti
Chairman and Director
DIN : 00031034

Place : London
Date: June 15, 2023

Anup Vikal
Chief Executive Officer

Place : Mumbai
Date: June 15, 2023

Ankit Dewan
Company Secretary and
Compliance Officer
Membership No : A31131

Place : Mumbai
Date: June 15, 2023

Varun Mehta
Chief Financial Officer

Place : Mumbai
Date: June 15, 2023

1. Trust Information

Indian Highway Concessions Trust (the "Trust") was setup as an irrevocable trust under the Indian Trust Act, 1882 pursuant to an Indenture of Trust dated November 06, 2019 which was duly registered on November 13, 2019 in the office of the Sub-Registrar -V(1), New Delhi and was subsequently amended by First Amended and Restate Indenture of Trust" dated December 19, 2019 and further amended on October 4, 2021 and June 13, 2023. The Trust was registered as an Infrastructure Investment Trust ('InvIT') with Securities Exchange Board of India ('SEBI') under the under the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 vide Certificate of Registration (IN/InvIT/19-20/0013) dated February 24, 2020.

Maple Highways Pte. Ltd. (the "Sponsor") is the sponsor of the Trust. The Trust has been settled for an initial sum of ₹ 10,000. The Trustee to the Trust is Axis Trustee Services Limited (the "Trustee") and Investment manager for the Trust is Maple Infra InvIT Investment Manager Private Limited (the "Investment Manager").

The Trust has been formed to invest in infrastructure assets primarily in road sector and will implement and hold road projects through special purpose vehicles.

2. Significant Accounting Policies

2.1 Basis of Preparation and presentation

The Financial Statements of the Trust have been prepared in accordance with the Indian Accounting Standards (Ind AS) as defined in Rule 2 (1) (a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended, prescribed under Section 133 of the Companies Act, 2013 and SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended and the circulars issued thereunder ("SEBI InvIT Regulations").

The Financial Statements have been prepared solely for the purpose of preparation of Financial Statements of the Trust in connection with private placement of units of the Trust on a recognized stock exchange for the proposed conversion of the Trust from a Private Unlisted InvIT into Private listed InvIT and should not be used by parties other than the Management. As a result, the Financial Statements may not be suitable for another purpose.

Further, no units have been issued till date, so certain disclosures as applicable under the SEBI InvIT Regulations and as required by the Ind AS has not been given, including but not limited to

a) Statement of Net Assets at Fair Value
b) Statement of Total Returns at Fair Value
c) Statement of Net Distributable Cash Flows (NDCFs)
d) Investment Manager and Project Manager Fees
e) Statement of Earnings per Unit

The Financial Statements are presented in India Rupees (₹) which is also the functional currency of the Trust. All values are rounded to the nearest lacs, unless otherwise indicated. Certain amounts that are required to be disclosed and do not appear due to rounding-off are expressed as 0.0.

These Financial Statements correspond to classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. These financial statements have been prepared on an accrual basis and historical cost convention except for except for certain financial assets and liabilities (refer accounting policy regarding financial instruments) which have been measured at fair value.

2.2 Summary of significant accounting policy

a. Current and Non-Current Asset

An asset is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be realised in, or is intended for sale or consumption in, the Trust's normal operating cycle; or
ii) it is held primarily for the purpose of being traded; or
iii) it is expected to be realised within twelve months after the reporting date; or
iv) it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.

All other assets are classified as 'non-current.

b. Current and Non-Current Liability

A liability is classified as 'current' when it satisfies any of the following criteria:

i) it is expected to be settled in the Trust's normal operating cycles; or
ii) it is held primarily for the purpose of being traded; or
iii) it is due to be settled within twelve months after the reporting date; or
iv) the Trust does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

All other liabilities are classified as 'non-current'.
The operating cycle is the time between the acquisition of assets for processing and their realisation in cash and cash equivalents. The normal operating cycle of the Trust is considered as 12 months period.

c. Financial instruments:

(i) Financial Assets

<u>Initial recognition and measurement</u>

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Trust's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Trust has applied the practical expedient, the Trust initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Trust's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at fair value through OCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

<u>Subsequent measurement</u>
For purposes of subsequent measurement financial assets are classified in four broad categories:

- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through other comprehensive income (FVTOCI) with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortised cost (debt instruments)

A 'financial asset' is measured at the amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

This category is the most relevant to the Trust. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the profit or loss. The losses arising from impairment are recognised in the profit or loss. The Trust's financial assets at amortised cost includes trade receivables, and other financial assets.

Financial assets at fair value through OCI (FVTOCI) (debt instruments)

A 'financial asset' is classified as at the FVTOCI if both of the following criteria are met:
a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. For debt instruments, at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value changes recognised in OCI is reclassified from the equity to profit or loss.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Trust can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under Ind AS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS103 applies are classified as at FVTPL.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit and loss when the right of payment has been established, except when the Trust benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the balance sheet at fair value with net changes in fair value recognised in the statement of profit and loss.

This category includes derivative instruments and listed equity investments which the Trust had not irrevocably elected to classify at fair value through OCI. Dividends on listed equity investments are recognised in the statement of profit and loss when the right of payment has been established.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Trust 's balance sheet) when:

- The rights to receive cash flows from the asset have expired, or
- The Trust has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement and either;
  (a) the Trust has transferred substantially all the risks and rewards of the asset, or
  (b) the Trust has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

Expected credit losses (ECLs) are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Trust applies a simplified approach in calculating ECLs. Therefore, the Trust does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

(ii) Financial Liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

Subsequent measurement

For purposes of subsequent measurement, financial liabilities are classified in two categories:
• Financial liabilities at fair value through profit or loss
• Financial liabilities at amortised cost (loans and borrowings)

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Trust that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109.

Gains or losses on liabilities held for trading are recognised in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ losses are not subsequently transferred to P&L. However, the Trust may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit and loss. The Trust has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.
This category generally applies to borrowings.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit and loss.

d. Revenue Recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Fund and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. The specific recognition criteria described below must also be met before revenue is recognised:

Interest Income
For all financial instruments measured at amortized cost, interest income is recorded using effective interest rate (EIR), which is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instruments or a shorter period, where appropriate, to the net carrying amount of the financial asset. Interest income is included in other income in the statement of profit and loss.

Other Incomes
Other incomes are accounted for, when there is certainty of realization and can be measured realiably.

e. Accounting for Taxes on Income

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date. Current income tax relating to items recognised outside the statement of profit or loss is recognised outside the statement of profit or loss (either in other comprehensive income or in equity). Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. The Investment Manager periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax is provided using the balance sheet approach on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

The carrying amount of deferred tax asset is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside the statement of profit and loss is recognised outside the statement of profit and loss. Deferred tax items are recognised in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

f. Impairment of Assets (Other than financial assets measured at fair value)

As at each balance sheet date, the Trust assesses whether there is an indication that an asset may be impaired and also whether there is an indication of reversal of impairment loss recognised in the previous periods. If any indication exists, or when annual impairment testing for an asset is required, if any, the Trust determines the recoverable amount and impairment loss is recognised when the carrying amount of an asset exceeds its recoverable amount.

Recoverable amount is determined:
• In the case of an individual asset, at the higher of the fair value less cost to sell and the value in use; and
• In the case of cash generating unit (a group of assets that generates identified, independent cash flows), at the higher of the cash generating unit's fair value less cost to sell and the value in use.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Trust bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Trust's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year.
Impairment losses of continuing operations, including impairment on inventories, are recognised in profit and loss section of the statement of profit and loss.

g. Provisions, Contingent Liabilities and Contingent Assets

(a) Provisions are recognized for liabilities that can be measured only by using a substantial degree of estimation, if
- (i) the Trust has a present obligation as a result of a past event.
- (ii) a probable outflow of resources is expected to settle the obligation, and
- (iii) the amount of the obligation can be reliably estimated.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

(b) Reimbursement expected in respect of expenditure required to settle a provision is recognized only when it is virtually certain that the reimbursement will be received.

(c) Contingent Liability is disclosed in the case of
- (i) a present obligation arising from past events, when it is not probable that an outflow of resources will be required to settle the obligation.
- (ii) a present obligation when no reliable estimate is possible, and
- (iii) a possible obligation arising from past events where the probability of outflow of resources is not remote.

(d) Contingent Asset is disclosed, where an inflow of economic benefits is probable.
(e) Provisions, Contingent Liabilities and Contingent Assets are reviewed at each Balance Sheet date.

(f) Onerous contracts:

If the Trust has a contract that is onerous, the present obligation under the contract is recognised and measured as a provision. However, before a separate provision for an onerous contract is established, the Trust recognises any impairment loss that has occurred on assets dedicated to that contract.

An onerous contract is a contract under which the unavoidable costs (i.e., the costs that the Trust cannot avoid because it has the contract) of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract (i.e., both incremental costs and an allocation of costs directly related to contract activities).

h. Claims

Claims against the Trust are accounted for as and when accepted and claims by the Trust are accounted for as and when the claim is received.

i. Earnings Per Unit (EPU)

Basic Earnings Per Unit is calculated by dividing the net profit or loss for the period attributable to unit holders of the Trust (after deducting preference dividends and attributable taxes if any) by the weighted average number of units outstanding during the year.

For the purpose of calculating Diluted Earnings Per Unit, the net profit or loss for the period attributable to unit holders and the weighted average number of units outstanding during the period are adjusted for the effects of all dilutive potential units.

j. Cash Flow

Cash flows are reported using the indirect method, whereby net profit before tax is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Trust are segregated and presented accordingly.

k. Segment reporting

Operating results are regularly reviewed by the Trust's Chief Operating Decision Maker ('CODM') who makes decisions about resources to be allocated to the segment and assesses its performance.

Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property and equipment and intangible assets other than goodwill.

l. Fair Value measurement

The Trust measures financial instruments, such as, derivatives at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

In the principal market for the asset or liability, or
In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Trust.
The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest."

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.
The Trust uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the Financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For the purpose of fair value disclosures, the Trust has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

m. Use of Judgement, Estimates and Assumptions

The preparation of financial statements in conformity with Ind AS requires that management of the Trust makes estimates, judgements and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses of the period and the disclosures relating to contingent liabilities and contingent assets as of the date of the financial statements. Application of accounting policies is involving complex and subjective judgements and the use of the assumptions in these Financial statements have been disclosed. Accounting estimates could change from period to period. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed ongoing basis. Revision in accounting estimates are recognised in the period in which the estimates are revised and if material, their effects are disclosed in the notes to the Financial statements.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below. The Trust has based its assumptions and estimates on parameters available when the Financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond control of the management.

Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the DCF model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

Taxes

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.
The Trust has a history of losses, which may not be used to offset taxable income elsewhere in the Trust. The Trust neither have any taxable temporary difference nor any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets.

On this basis, the Trust has determined that it cannot recognise deferred tax assets on the tax losses carried forward.

2.3 New and amended standards

There are no new standards that are notified, but not yet effective, upto the date of issuance of the Trust's Financial statements.

Further, several amendments apply for the first time for the year ended March 31, 2021, but do not have an impact on the Financial statements of the Trust.

(All amounts in ₹ lacs, unless otherwise stated)

3 Other current assets	**As at March 31, 2021**	**As at March 31, 2020 (refer note 23)**
Unsecured, considered good		
Balance with government authorities	1.87	-
Less: Provision for input tax credit availed (Refer note 18)	(1.87)	-
	-	-

4 Unit capital	**As at March 31, 2021**	**As at March 31, 2020 (refer note 23)**
a) Initial settlement amount	-	-
	-	-
b) Unit capital at the beginning of the year/period and at the end of the year/period (Refer Note 23)		
	-	-
	-	-

5 Other Equity	**As at March 31, 2021**	**As at March 31, 2020 (refer note 23)**
Retained earnings		
Balance at the beginning of the year/period	-	-
Loss for the year/period	(173.92)	-
Balance at the end of the year/period	**(173.92)**	**-**

6 Trade payables	**As at March 31, 2021**	**As at March 31, 2020 (refer note 23)**
- total outstanding dues of micro enterprises and small enterprises (Refer note 21)	-	-
- total outstanding dues of creditors other than micro enterprises and small enterprises (Refer note 20)	173.77	-
Total	**173.77**	**-**

7 Other current liabilities	**As at March 31, 2021**	**As at March 31, 2020 (refer note 23)**
Statutory dues	0.15	-
Total	**0.15**	**-**

(All amounts in ₹ lacs, unless otherwise stated)

8 Other expenses	**Year ended March 31, 2021**	**November 6, 2019 to March 31, 2020 (refer note 23)**
Legal and professional fees	161.94	-
Tender fees	1.60	-
Provision for input tax credit availed (Refer note 18)	1.87	-
Office expenses	0.01	-
Miscellaneous expenses	0.39	-
Total	**165.81**	**-**

8.1 Payment to Auditor*	**Year ended March 31, 2021**	**November 6, 2019 to March 31, 2020 (refer note 23)**
Special purpose audit fee	2.00	-
Certification fee	6.00	-
Reimbursement of expenses	0.11	-
	8.11	**-**

*excluding applicable taxes

(All amounts in ₹ lacs, unless otherwise stated)

9 Income Tax Expenses

In accordance with Section 10(23FC) of the Income tax Act, 1961, the income of business trust in the form of interest earned or dividend earned is exempt from tax. However, for all other incomes earned by the Trust, it will be required to provide for current tax liability

	Year ended March 31, 2021	November 6, 2019 to March 31, 2020 (refer note 23)
Current tax	-	-
Deferred tax	-	-

Reconciliation of tax expense and the accounting profit

Particulars	**Year ended March 31, 2021**	**November 6, 2019 to March 31, 2020 (refer note 23)**
Loss before tax	(173.92)	-
Income tax rate applicable to the Trust*	42.74%	42.74%
Expected tax expense **(A)**	(74.34)	-
Adjustments in respect of :		
Deferred tax asset not recognised due to absence of certainty of future taxable profit	74.34	-
Total adjustments **(B)**	74.34	-
Net Tax Expense **(A+B)**	-	-

*Income tax rate applicable to the Trust has been computed as follows

Base tax rate	30.00%
Surcharges (% of base tax rate)	37.00%
Cess (% of base tax rate)	4.00%
Applicable income tax rate	42.74%

10 Earnings per unit

There are no units issued by the Trust as on March 31, 2021. Hence the disclosures in respect of Earnings per Unit have not been given.

11 Capital and other commitments

Total commitments as at March 31, 2021 - Nil (March 31, 2020- Nil)

12 Contingent liabilities

Contingent liabilities as at March 31, 2021 - Nil (March 31, 2020- Nil)

13 Segment information

The primary business of the Trust is operations and management of road projects. Based on the guiding principles given in Ind AS - 108 “Operating Segments”, this activity falls within a single operating segment. Further, the entire operations of the Trust is only in India and hence, disclosure of secondary/geographical segment information does not arise. The Trust has not earned any revenues during the year.

(All amounts in ₹ lacs, unless otherwise stated)

14 Related party disclosures

Information required to be disclosed under Ind AS 24- "Related Party Disclosures"

I. List of related parties as per the requirements of Ind AS 24- "Related party disclosures" and Regulation 2(1) (zv) of the SEBI InvIT Regulations

A. Parties to the Trust

i. Maple Highways Pte Limited (Sponsor)
ii. Maple Infra InvIT Investment Manager Private Limited (Investment Manager)
iii. Maple Highway Project Management Private Limited (to be Project Manager)
iv. Axis Trustee Services Limited (Trustee of the Trust)

B. Directors of the parties to the Trust specified in I(A) above

Particulars	Maple Highways Pte Limited	Maple Infra InvIT Investment Manager Private Limited	Maple Highway Project Management Private Limited	Axis Trustee Services Limited
Directors	Mr. Cyril Sébastien Dominique Cabanes Ms. Wai Leng Leong	Mr. Romesh Sobti Mr. Saurabh Agarwal Mr. Yudhvir Singh Malik Mr. Anil Aggarwal	Mr. Saurabh Agarwal Mr. Deepak Malhotra	Mr. Rajesh Kumar Dahiya Mr. Ganesh Sankaran Mr. Sanjay Sinha

II. Related party transactions during the year	Year ended March 31, 2021	November 6, 2019 to March 31, 2020 (refer note 23)
Maple Infra InvIT Investment Manager Private Limited		
Payment by Investment Manager on behalf of the Trust	**171.93**	**-**

III. Related party outstanding balance	As at March 31, 2021	As at March 31, 2020 (refer note 23)
Maple Infra InvIT Investment Manager Private Limited		
Trade payable (refer note 20)	**171.93**	**-**

15 Financial asset and liabilties at amortized cost

Particulars	Note No.	As at March 31, 2021	As at March 31, 2020 (refer note 23)
Financial Assets			
Total Financial Assets		-	-
Financial liability			
Trade Payables	6	173.77	-
Total Financial Liabilities		**173.77**	**-**

The carrying amount of financial assets and financial liabilities measured at amortized cost in the financial statements are a resonable approximation of their fair value since the Trust does not anticipate that the carrying amounts would be significantly different from the value that would eventually be received or settled.

(All amounts in ₹ lacs, unless otherwise stated)

16 Financial risk management

The Trust has exposure to the following risks arising from financial instruments:
▪ Credit risk ;
▪ Liquidity risk ; and
▪ Market risk

Risk management framework

The Trust's risk management policies are established to identify and analyse the risks faced by the Trust, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Trust's activities.

The Board of Directors of Investment Manager has overall responsibility for the establishment and oversight of the Trust's risk management framework.
In performing its operating, investing and financing activities, the Trust is exposed to the Credit risk, Liquidity risk and Market risk.

i Credit risk

Credit risk is the risk that a counter party will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Trust is exposed to credit risk from its investing activities including loans to subsidiaries, deposits with banks and other financial instruments.

ii Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and making available an adequate amount of committed credit facilities with staggered maturities to reduce refinancing risk in any year and to fund working capital, debt servicing, dividend payments, new investments and close out market positions if required. The trust maintains significant flexibility to respond to opportunities and events by ensuring that committed credit lines are available to meet future funding requirements. The Trust's liquidity management policy involves close monitoring of liquidity position by monitoring cash collection and level of liquid assets necessary to meet cash outflow obligation, monitoring balance sheet liquidity ratios against external regulatory requirements and maintaining debt financing plans.

Maturity profile of financial liabilities

The table below provides details regarding the remaining contractual maturities of financial liabilities at the reporting date based on contractual undiscounted payments.

March 31, 2021	Carrying amount	Not later than 1 year	Between 1 and 2 years	Between 2 and 5 years	Later than 5 years	Total
Non-derivative financial liabilities						
Trade payables	173.77	173.77	-	-	-	173.77
Total	**173.77**	**173.77**	**-**	**-**	**-**	**173.77**

March 31, 2020 (refer note 23)	Carrying amount	Not later than 1 year	Between 1 and 2 years	Between 2 and 5 years	Later than 5 years	Total
Non-derivative financial liabilities						
Trade payables	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**

ii Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risks: interest rate risk, foreign currency risk and other price risk.

a) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Since the Trust has no interest bearing borrowings or any other significant transactions dependent on interest rates, the exposure to risk of changes in market interest rates is minimal.

b) Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate due to changes in foreign exchange rates. The Trust is not exposed to foreign currency risk as it has no borrowings or payables or any other significant transactions in foreign currency.

c) Other price risk

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or foreign currency risk). The Trust is not exposed to price risk as it has no investments or any other financial assets.

17 Capital Management

For the purpose of the Trust's capital management, capital includes issued unit capital and all other reserves attributable to the unit holders of the Trust. The primary objective of the Trust's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximise unit holder value.

As at March 31, 2021 and March 31, 2020, the Trust has not issued any units and has no debt. Consequent to such capital structure, there are no externally imposed capital requirements.

18 The Trust has availed input tax credit of ₹ 1.87 lacs, on services availed by the Trust. However, considering there is no output services for which input tax credit can be utilised, the Trust has made a provision for the reversal of the input tax credit availed amounting to ₹ 1.87 lacs in these financial statements.

19 The Trust is in the process to issue units on a private placement basis, in accordance with SEBI InvIT Regulations. The Trust proposes to acquire 100% equity shares of Shree Jagannath Expressways Private Limited (the "Project SPV") and accordingly has entered into a Securities Purchase Agreement ('SPA') dated January 20, 2021 with the Project SPV and its shareholders. The Project SPV is a private limited company registered under Companies Act, 1956.

20 The Trustee vide agreement dated December 23, 2019 has appointed Maple Infra InvIT Investment Manager Private Limited as the Investment Manager of the Trust. Further, vide letter dated January 5, 2021, the Trust has entered into an arrangement with Investment Manager to discharge payments on behalf of the Trust for the expense and other liabilities incurred by the Trust till the time the Trust has issued any unit capital. The payments made by the Investment Manager shall be reimbursed by the Trust as and when unit capital is issued by the Trust. Accordingly, as on March 31, 2021 the Trust has incurred expenses of ₹ 171.93 lacs on account of professional fees and other regular operational expenses which has been paid by the Investment Manager and has been shown as payable to the Investment Manager under the head Trade payables. Further, TDS deducted on such expenses has also been deposited by the Investment Manager on behalf of the Trust.

21 Based on the information available with the Trust, there are no amounts due to Micro, Small and Medium Enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 as at March 31, 2021. No interest has been paid/ is payable by the Trust during the year ended March 31, 2021 in terms of Section 16 of the Micro, Small and Medium Enterprises Development Act, 2006.

22 Disclosures pursuant to SEBI Circulars
(SEBI Circular No. CIR/IMD/DF/114/2016 dated October 20, 2016 and No. CIR/IMD/DF/127/2016 dated November 29, 2016 issued under the SEBI InvIT Regulations):
As the Trust has not aquired any Road assets/Project and has not issued any units to its unitholders as at March 31, 2021, the below disclosures are not applicable to the Trust for the year ended March 31, 2021 and March 31, 2020 and have presented accordingly.

A. Statement of Net Asset at Fair Value as at

Particulars	March 31, 2021		March 31, 2020	
	Book Value	Fair Value	Book Value	Fair Value
A. Assets	-	-	-	-
B. Liabilities (at book value)	-	-	-	-
C. Net Assets (A-B)	-	-	-	-
D. Number of units	-	-	-	-
E. Net Asset Vaue (C/D)	-	-	-	-

B. Statement of total returns at fair value

Particulars	March 31, 2021	March 31, 2020
Total comprehensive income (as per the statement of profit and loss)	-	-
Add/(less): Other changes in the fair value not recognised in total comprehensive income	-	-
Total Return	-	-

C. Statement of Net Distributable Cash Flows (NDCFs) of Indian Highway Concessions Trust

Description	Year ended March 31, 2021	Year ended March 31, 2020
Net Distributable Cash Flows	-	-

23 The Sponsor set up the Trust on November 6, 2019, pursuant to the Indenture of Trust, amended by the Amended and Restated Indenture of Trust on December 23, 2019 , as an irrevocable trust under the provisions of the Indian Trusts Act, 1882. The Trust was registered with SEBI as an infrastructure investment trust under the InvIT Regulations on February 24, 2020 having registration number IN/InvIT/19-20/0013. However, there were no financial transactions during the period from November 6, 2019 to March 31, 2020.

24 In March 2020, the World Health Organisation declared COVID-19 to be a pandemic. The Trust currently has no assets. Based on management assessment there is no impact of COVID-19 on the Trust.

25 Subsequent to year ended March 31, 2021, the Trust has issued unit capital on June 24, 2022 and November 3, 2022 amounting to Rs. 91,000.00 lacs and Rs. 2,61,170.00 lacs respectively in relation to acquisition of road projects in two subsidiaries. These being non-adjusting events have no impact on these financial statements.

The accompanying notes are an integral part of these financial statements.

As per our report of even date attached.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership No : 501396

Place : Gurugram
Date: June 15, 2023

For and on behalf of the Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(Acting as an investment manager to Indian Highway Concessions Trust)

Romesh Sobti
Chairman and Director
DIN : 00031034

Place : London
Date: June 15, 2023

Anup Vikal
Chief Executive Officer

Place : Mumbai
Date: June 15, 2023

Ankit Dewan
Company Secretary and Compliance Officer
Membership No : A31131

Place : Mumbai
Date: June 15, 2023

Varun Mehta
Chief Financial Officer

Place : Mumbai
Date: June 15, 2023

PROJECTIONS OF REVENUE FROM OPERATIONS AND CASH FLOW FROM OPERATING ACTIVITIES

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INDEPENDENT AUDITOR'S REPORT ON THE PROJECTIONS OF REVENUE FROM OPERATIONS AND CASH FLOW FROM OPERATING ACTIVITIES AND UNDERLYING ASSUMPTIONS

Indian Highway Concessions Trust
acting through its Investment Manager,
The Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
Wing A, Sahar Office Unit No. 2
Ground floor
Village Marol, Andheri East
Mumbai - 400 099
Tel: 022-68176666

Dear Sirs,

1. We have examined the accompanying Statement of Projections of revenue from operations and cash flow from operating activities and the underlying assumptions of Indian Highway Concessions Trust ('Trust'),Shree Jagannath Expressways Private Limited ('SJEPL') and NCR Eastern Peripheral Expressway Private Limited ('NCREPE') (the "Project SPVs") (collectively referred to as 'Trust Group') and each of SJEPL and NCREPE individually, for the years ending March 31, 2024, March 31, 2025 and March 31, 2026 and along with the basis of preparation and other explanatory information and the significant assumptions (hereinafter referred to as 'Statement of Projections'), in accordance with the Standard on Assurance Engagement 3400, "The Examination of Prospective Financial Information", issued by the Institute of Chartered Accountants of India and the terms of our engagement agreed with you vide our engagement letter dated June 01, 2023 requesting us to carry out work on the projected information, proposed to be included in the information memorandum in connection with the listing of existing units of Trust and proposed conversion of private unlisted Infrastructure Investment Trust ('InvIT') to private listed InvIT.

2. The Statement of Projections of the Trust Group has been prepared in relation to the listing of existing units of Trust and proposed conversion of private unlisted InvIT to private listed InvIT, in accordance with the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended from time to time, including the circulars notifications, clarifications and guidelines issued thereunder ("InvIT Regulations").

3. The preparation and presentation of Statement of Projections including the underlying assumptions and basis of preparation and consolidation, as set out in Note 2 to the Statement of Projections to be included in information memorandum is the responsibility of the Investment Manager to the Trust and has been approved by the Board of Directors of the Investment Manager to the Trust. The Statement of Projections has been prepared by the Investment Manager using a set of assumptions that include hypothetical assumptions about future events, which are, by their nature, subject to significant risks and uncertainties. Consequently, users are cautioned that these projections may not be appropriate or meaningful for any purpose other than described above.

4. Our responsibility is to examine the evidence supporting the assumptions (excluding hypothetical assumptions) and other information in the Statement of Projections on test basis. Our responsibility does not include verification of the accuracy of the Statement of Projections (including quantitative details). Therefore, we do not vouch for the accuracy of the same.

5. The assumptions used for the preparation of these Statement of Projections have been provided to us by the Investment Manager to the Trust and relied upon by us as regards certain matters included therein, including but not limited to estimates as under:
   a) Technical estimates of expected traffic, future toll tariff; changes in wholesale price index based on traffic study reports and estimated future expenditure for major maintenance of roads based on reports issued by various third-party external experts,

b) Investment Manager's current assumptions and expectations regarding future events and factors such as country's gross domestic product growth; general economic conditions; current and future traffic mix; per capita income and demographic changes; development of alternate/ feeder routes; alternate means of transportation; fuel prices; reduction in commercial or industrial activities in the regions served by the roads and natural disasters; government polices around mining, extraction of minerals etc.

Variation of the above factors may cause the actual traffic volumes to be materially different from any future traffic volumes expressed or implied by the traffic study reports and considered in these Statement of Projections.

6. Based on our examination of the evidence supporting the assumptions and our reliance on reports of technical experts and assumptions used by the investment manager as stated in para 5 above, nothing has come to our attention which causes us to believe that these assumptions do not provide a reasonable basis for the Statement of Projections. Further, in our opinion, the Statement of Projections, read together with the basis of preparation and notes therein, is properly prepared on the basis of the assumptions as set out in Note 2 to the Statement of Projections and is on consistent basis with the accounting policies used for preparation of the Financial Statements as required by the InvIT Regulations and included in the information memorandum, which are prepared in accordance with Indian Accounting Standards as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015 prescribed under Section 133 of the Companies Act, 2013 read with relevant rules and other accounting principles generally accepted in India and the InvIT Regulations.

7. Events and circumstances frequently do not occur as expected. Even if the events anticipated under the hypothetical assumptions described in the Statement of Projections occur, actual results are still likely to be different from those stated in the Statement of Projections since other anticipated events frequently do not occur as expected and the variation may be material. The actual results may therefore differ materially from those forecasted and projected. For the reasons set out above, we do not express any opinion as to the possibility of achievement of the projections stated in the Statement of Projections.

8. We draw attention to note 3 of the Statement of Projections which describes the uncertainty of possible impact of delay in completion of SJEPL's project, non-receipt of Completion Certificate by the Project SPV and uncertainty of potential penalties and/or termination of Concession Agreement which may devolve upon the Project SPV and the Trust Group.

9. We draw attention to Note 4 of the Statement of projections wherein the investment manager has provided reasons for decrease in actual revenue of SJEPL as compared to last projected revenue for year ended March 31, 2023, and consequent decrease in projected revenue for years ending March 31, 2024 and March 31, 2025 of SJEPL from their projections dated June 7, 2022 which was included in placement memorandum dated June 23, 2022 in connection with the issue of unlisted units of trust on private placement basis as required under InvIT Regulations at that time.

10. This report is required by InvIT Regulations requiring the independent auditor to issue a report on the Statement of Projections and is issued for the sole purpose of the listing of existing units of Trust and proposed conversion of private unlisted InvIT to private listed InvIT under the InvIT Regulations. Our work has not been carried out in accordance with auditing or other standards and practices generally accepted in jurisdictions outside India, including in the United States of America, and accordingly should not be relied upon as if it had been carried out in accordance with those standards and practices. US securities regulations do not require profit forecasts to be reported on by a third party. This report should not be relied upon by prospective investors in the United States of America, including persons who are Qualified Institutional Buyers as defined under Rule 144A under the United States Securities Act of 1933 participating in the offering. We accept no responsibility and deny any liability to any person who seeks to rely on this report and who may seek to make a claim in connection with any offering of securities on the basis that they had acted in reliance on such information under the protections afforded by United States of America law and regulation.

11. We have no responsibility to update our report for events and circumstances occurring after the date of the report.

12. This report is addressed to and is provided to Investment Manager solely for inclusion in the information memorandum in connection with the listing of existing units of Trust and proposed conversion of private unlisted InvIT to private listed InvIT and is not to be used, referred to or distributed for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

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per Amit Gupta
Partner
Membership Number: 501396

UDIN: 23501396BGYBQA2977
Place of Signature: Gurugram
Date: June 15, 2023

Projections of revenue from operations and cash flow from operations for SJEPL
(All amounts in INR lakhs unless otherwise stated)

Particulars	March 31, 2024	March 31, 2025	March 31, 2026
Projected revenue from operations:			
Toll income from expressways	23,800.00	26,300.00	28,900.00
	23,800.00	**26,300.00**	**28,900.00**
Projected cash flow from operations:			
Cash inflow from revenue from operations	23,800.00	26,300.00	28,900.00
Less:			
Actual outflow for operating and maintenance cost	(2,895.98)	(3,056.00)	(3,211.40)
Immediate repair work & Major Maintenance Repair	(14,307.00)	-	-
	(17,202.98)	**(3,056.00)**	**(3,211.40)**
Cash generated from operations	6,597.02	23,244.00	25,688.60
Less: Direct taxes paid (net of refunds)	-	-	(364.35)
Net cash flow from operating activities	**6,597.02**	**23,244.00**	**25,324.25**

For and on behalf of Board of Directors of
Maple Infra Invit Investment Manager Private Limited
(as Investment Manager of Indian Highway Concessions Trust)

Romesh Sobti	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Chairman and Director	Chief Executive Officer	Company Secretary and Compliance Officer	Chief Financial Officer
DIN: 00031034		M. No.: A31131	
Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 15, 2023	Date: June 15, 2023	Date: June 15, 2023	Date: June 15, 2023

Projections of revenue from operations and cash flow from operations for NCREPE
(All amounts in INR lakhs unless otherwise stated)

Particulars	March 31, 2024	March 31, 2025	March 31, 2026
Projected revenue from operations:			
Toll income from expressways	46,900.00	52,000.00	58,200.00
	46,900.00	**52,000.00**	**58,200.00**
Projected cash flow from operations:			
Cash inflow from revenue from operations	46,900.00	52,000.00	58,200.00
Less:			
Actual outflow for operating and maintenance cost	(7,546.00)	(7,848.00)	(9,283.00)
Immediate repair work & Major Maintenance Repair	(8,001.00)	-	(2,271.84)
	(15,547.00)	**(7,848.00)**	**(11,554.84)**
Cash generated from operations	31,353.00	44,152.00	46,645.16
Less: Direct taxes paid (net of refunds)	-	-	-
Net cash flow from operating activities	**31,353.00**	**44,152.00**	**46,645.16**

For and on behalf of Board of Directors of
Maple Infra Invit Investment Manager Private Limited
(as Investment Manager of Indian Highway Concessions Trust)

Romesh Sobti	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Chairman and Director	Chief Executive Officer	Company Secretary and Compliance Officer	Chief Financial Officer
DIN: 00031034		M. No.: A31131	
Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 15, 2023	Date: June 15, 2023	Date: June 15, 2023	Date: June 15, 2023

Indian Highway Concessions Trust
Projections of revenue from operations and cash flow from operating activities
Summary of significant assumptions and other explanatory information

Projections of revenue from operations and cash flow from operations for the Trust Group
(All amounts in INR lakhs unless otherwise stated)

Particulars	**March 31, 2024**	**March 31, 2025**	**March 31, 2026**
Projected revenue from operations:			
Toll income from expressways	70,700.00	78,300.00	87,100.00
	70,700.00	**78,300.00**	**87,100.00**
Projected cash flow from operations:			
Cash inflow from revenue from operations	70,700.00	78,300.00	87,100.00
Less:			
Actual outflow for operating and maintenance cost	(10,507.98)	(10,976.60)	(12,574.26)
Immediate repair work & Major Maintenance Repair	(22,308.00)	-	(2,271.84)
Management expenses	(5,880.00)	(5,880.00)	(5,880.00)
	(38,695.98)	**(16,856.60)**	**(20,726.11)**
Cash generated from operations	32,004.02	61,443.40	66,373.89
Less: Direct taxes paid (net of refunds)	-	-	(364.35)
Net cash flow from operating activities	**32,004.02**	**61,443.40**	**66,009.55**

For and on behalf of Board of Directors of
Maple Infra Invit Investment Manager Private Limited
(as Investment Manager of Indian Highway Concessions Trust)

Romesh Sobti	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Chairman and Director	Chief Executive Officer	Company Secretary and Compliance Officer	Chief Financial Officer
DIN: 00031034		M. No.: A31131	
Place: London	Place: Mumbai	Place: Mumbai	Place: Mumbai
Date: June 15, 2023	Date: June 15, 2023	Date: June 15, 2023	Date: June 15, 2023

1. General information

Indian Highway Concessions Trust (the "Trust") was setup as an irrevocable trust under the Indian Trust Act, 1882 pursuant to an Indenture of Trust dated November 06, 2019 which was subsequently amended by "Amended and Restated by Indenture of Trust" dated December 19, 2019 and further amended and restated on October 04, 2021. The Trust was registered as an Infrastructure Investment Trust ('InvIT') with Securities Exchange Board of India ('SEBI') under the Securities Exchange Board of India (Infrastructure Investment Trust) Regulations, 2014 vide Certificate of Registration dated February 24, 2020.

Maple Highways Pte. Ltd. (the "Sponsor") is the sponsor of the Trust. The Trust has been settled for an initial sum of ₹ 10,000. The Trustee to the Trust is Axis Trustee Services Limited (the "Trustee"), Investment manager for the Trust is Maple Infra InvIT Investment Manager Private Limited (the "Investment Manager") and the Project Manager for the Trust is Maple Highway Project Management Private Limited (the "Project Manager"). The Trust has been formed to invest in infrastructure assets primarily in the road sector in India. The Trust's road project is an eligible infrastructure project under the InvIT Regulations and is held through special purpose vehicles.

Trust has two subsidiaries namely Shree Jagannath Expressway Private Limited ("SJEPL"), NCR Eastern Peripheral Expressway Private Limited ("NCREPE"). The Trust has acquired 100% equity shares of SJEPL from its erstwhile shareholders on June 28, 2022. The Trust incorporated a SPV as NCREPE, a Private Limited company on April 25, 2022. NCREPE entered into Concession agreement dated May 06, 2022, with NHAI to Toll, Operate and Transfer (TOT) existing eastern peripheral expressway in Delhi for a period of 20 years and toll operations commenced from November 11, 2022. These two subsidiaries are audited by the firm of Chartered accountants other than S.R. Batliboi & Co. LLP.

2. Basis of preparation of projections

The projection of revenue from operations and cash flows from operating activities of SJEPL, NCREPE (collectively referred to as "Project SPVs") and the Trust along with Project SPVs (collectively referred to as "Trust Group") and each of SJEPL and NCREPE individually for the financial years ending March 31, 2024, March 31, 2025 and March 31, 2026 along with the basis of preparation and other explanatory information and the significant assumptions (the 'Statement of Projections') have been compiled by Investment Manager to the Trust and has been approved by the Board of Directors of the Investment Manager to the Trust solely for inclusion in the information memorandum in connection with the listing of existing units and conversion of Trust from private unlisted InvIT to private listed InvIT. Therefore, the use of these Statement of Projections is not appropriate and should not be used or relied upon for any purpose other than described above.

The Statement of Projections have been prepared based on the accounting policies used for preparation of the historical Consolidated Financial Statements of the Trust Group as required by the SEBI (Infrastructure Investment Trusts) Regulations, 2014 amended from time to time including circulars notifications, clarifications and guidelines issued thereunder ("InvIT Regulations"), which are prepared in accordance with Indian Accounting Standards ("Ind AS") as defined in Rule 2(1)(a) of the Companies (Indian Accounting Standards) Rules, 2015, as amended prescribed under Section 133 of the Companies Act, 2013 read with InvIT Regulations.

Though the aforesaid Projections are prepared using the principles of the Ind AS framework, they do not provide for all the detailed disclosures as required under Ind AS. Projected operating cash flows of the SJEPL, NCREPE and Trust Group have been calculated using the direct method under Ind AS 7 - Statement of Cash Flows and is computed by deducting the projected operating expenses and income taxes from the projected revenue from operations and adjusted for projected working capital changes and non-cash expenses (if any). Projected cash flow from operations do not include any items pertaining to financing or investing nature.

The Statement of Projections are presented in India Rupees (₹) which is also the functional currency of the Trust Group. All values are rounded to the nearest lacs, unless otherwise indicated.

The Projections include the following information:

a) Projections of revenue from operations and operating cash flows for each of the Project SPVs for the financial years ending March 31, 2024, March 31, 2025 and March 31, 2026;
b) Projections of revenue from operations and operating cash flows of the Trust Group for the financial years ending March 31, 2024, March 31, 2025 and March 31, 2026; and
c) Summary of significant assumptions and other explanatory information.

The Trust Group follows March 31 as its accounting year end. Accordingly, the Projections are prepared for the financial years ending March 31, 2024, March 31, 2025 and March 31, 2026 ('Projections Period').

It is clarified that the Statement of Projections have been prepared on the basis of a mixture of best-estimate (i.e. assumptions as to future events which are expected to take place and the actions expected to take place as of the date the information is prepared) and hypothetical assumptions (about future events and actions which may or may not necessarily take place).

3. Delay in completion of Project Highway

SJEPL entered into a Concession Agreement ('CA') on August 6, 2010 with NHAI for augmentation and expansion of the existing 4 lane highway to 6 lane highway on a section of NH 5 in Odisha for 67 Kms of toll project road ('Project Highway') on DBFOT model for a period of 26 years starting from December, 14, 2011 being the Appointed Date. SJEPL was also granted right to collect toll on existing 4 lane highway from the Appointed Date.

As per the CA, SJEPL was obligated to complete the above-mentioned work within a period of 910 days from Appointed Date i.e. by Jun 11, 2014. However, due to delays in handover of land by NHAI and other operational delays, the work was delayed and NHAI vide supplementary agreement dated November 11, 2016 extended the scheduled completion date to March 31, 2017. SJEPL was granted Provisional Completion Certificate ('PCC') by the Independent Engineer ('IE') on January 12, 2017 for 56.878 Kms of the total 67 Kms of Project Highway and, it is still awaited for the balance distance (kms)

Further, SJEPL has completed a majority of the punch list items as specified in the PCC dated January 12, 2017 and that the balance punch list items were either pending due to extraneous factors or as SJEPL had applied to NHAI for de-scoping of the same. As on date, SJEPL is collecting toll on the entire project stretch.

Though the IE had recommended for an extension of time for completion of the project till June 30, 2021, no formal approval from NHAI has been received by SJEPL post 31 March 2017. As per the CA, if the above-mentioned delay is not approved by the NHAI, it may result in termination of the CA and consequent penalty and liability may devolve upon SJEPL, which was also imposed by NHAI while granting the in-principle approval for change in shareholding by SJEPL.

The management of Investment Manager believes that delay in completion is not on any grounds attributable to SJEPL- and that obtaining the final completion certificate from the NHAI is only procedural in nature and since recommendations of the IE for extension of time has been received from time to time, no liability in this regard shall devolve upon SJEPL and the Trust Group. Further, delays in construction, including the penalties and extension of Concession Agreement has been referred to Conciliation Committee of Independent Experts ('CCIE') by erstwhile shareholders of SJEPL and NHAI, which is currently pending disposal with CCIE. Also, as per the SPA, Trust Group is indemnified by the selling shareholders for any liability or all possible losses which may devolve upon the Trust in this regard.

4. Significant assumptions

The Statement of Projections have been prepared based on the significant assumptions including hypothetical assumptions summarized below.
The Investment Manager has obtained report from a third-party traffic consultant expert ("Steer (formerly Steer Davies Gleave India Private Limited)" for SJEPL and "IBI Group India Private Limited" for NCREPE) ("Traffic Consultants") and third-party technical consultant expert ("Ramboll India Private Limited" for SJEPL and "SAMARTH INFRAENGG Technocrats Private Limited" for NCREPE) ('Technical Consultants') in assessment of the assumptions, market fundamentals, industry drivers and outlook amongst other things for the preparation of the Statement of Projections.

SJEPL and NCREPE are exclusively toll based projects whose revenue is based on and subject to various estimates, forecasts and assumptions that are subjective in nature. The Traffic Reports and Statement of Projections reflect current expectations and views regarding future events, and contain forecasts, projections and other forward-looking statements that relate to future events. The future traffic growth considered in the Statement of Projections are after considering factors such as the country's gross domestic product growth, general economic conditions, current and future traffic mix, per capita income and demographic changes, development of alternate/ feeder routes, alternate means of transportation, fuel prices, reduction in commercial or industrial activities in the regions served by the roads and natural disasters, government polices around mining, extraction of minerals etc. as per the Traffic Consultants reports.

The Statement of Projections contain forecasts and projections that relate to future events including hypothetical assumptions, which are, by their nature, subject to significant risks and uncertainties. Events and circumstances may not occur as expected. Even if the events anticipated under the hypothetical assumptions described in the Statement of Projections occur, actual results could be different from those stated in the Statement of Projections.

However, Investment Manager do not expect the actual traffic volumes to be materially different from any future traffic volumes expressed or implied by the Traffic Reports and considered in these Statement of Projections and consider these projections to be fair and reasonable as on the date of the report.

The assumptions used in the Projections by the Investment Manager are in line with the information and assumptions as per the analysis of the industry experts.

The projections of the Trust Group have been prepared by combining the projections of revenue from operations and cash flows from operating activities of the Trust and Project SPVs, eliminating transactions (viz, interest on loan) between the Trust and Project SPVs and after considering the following assumptions:

For SJEPL

Revenue from operations

Revenue from operations of the Trust Group primarily consist of toll collection income from Project SPVs. Revenue projections do not include any other income (operating or otherwise) or income from interest / dividend from short-term investments as these sources of revenue have not been material historically and not likely to be material in Projections period.

i. Toll income from expressways

The base data for the projections of revenue from operations is based on traffic report of the external expert, Steer (formerly Steer Davies Gleave India Private Limited) who has based its report on the actual traffic data for the period upto March 31, 2023 and toll tariff rates for the financial year ending March 31, 2024. The key variables for toll income growth, tollable traffic growth, future traffic mix and the Wholesale Price Index ('WPI') are based on the Traffic Report obtained from Traffic consultant, Steer (formerly Steer Davies Gleave India Private Limited) (the "Traffic Report") for SJEPL.

Summary of estimates and details of the assumptions are as set forth below:

Project	**March 31, 2024**		**March 31, 2025**		**March 31, 2026**	
	Average tollable traffic growth rate	WPI rate	Average tollable traffic growth rate	WPI rate	Average tollable traffic growth rate	WPI rate
SJEPL	8.86%	5.02%	5.93%	4.00%	5.98%	4.00%

The source for WPI rate is Oxford Economics data as provided in the Traffic Report.

Further, below are the assumptions for the Traffic mix for the SJEPL; considered by Steer (formerly Steer Davies Gleave India Private Limited), the Traffic Consultant as on the date of the report and by Board of Directors of the Investment Manager:

Average Annual Daily Traffic (AADT)			
Particulars	**March 31, 2024**	**March 31, 2025**	**March 31, 2026**
Car/Jeep/Van	13,207 (57.00%)	14,061(60.69%)	14,985 (64.67%)
Light Commercial Vehicle	580 (2.50%)	590 (2.54%)	599 (2.59%)
Bus or Truck	3,632 (15.68%)	3,817 (16.47%)	4,007 (17.30%)
Multi Axle Vehicle (3 to 6 axles) including oversized vehicles	5,750 (24.82%)	6,072 (26.21%)	6,405 (27.64%)

We further confirm that, the Projections have been prepared based on the Traffic Report's base case scenario for traffic volume growth rates and no other adjustments been made to the Traffic Report. Further, no analysis has been performed to demonstrate the sensitivity of the Statement of Projections to changes in traffic volume growth rates or other assumptions.

Further, there has been decrease in actual revenue of SJEPL as compared to last projected revenue for year ended Mar 31, 2023 and consequent decrease in projected revenue for years ending March 31, 2024 and March 31, 2025 of SJEPL from the last set of projections approved by Board of Directors in June, 2022 and included in placement memorandum dated June 23, 2022 in connection with the issue of unlisted units of trust on private placement basis as required under InvIT Regulations at that time. The Traffic Consultant has included a detailed assessment for reasons for such decrease in actual numbers, which was mainly on account of drop in export orders of Iron Ore on account of COVID-19 measures in China and increase in export duty on Iron Ore and Pellets by the Government of India which resulted in decrease in export orders and eventually affected Bus/ Truck, 3-axle and MAV traffic counts. However, since lifting of export duty from Novermber'22, the average daily traffic has significantly increased and is in line with projections. Thus, the Investment Manager believes that such variations are unlikely to reoccur in future.

We further confirm that since December 2019, the outbreak of Covid 19 and related global; responses have caused material disruptions to the businesses around the world, leading to an economic slowdown. The slowdown in traffic and resultant impact on the project toll revenue from expressway saw significant volatility and weakness on the infrastructure road operations of the Project SPV during the financial years ended March 31, 2021 to March 31, 2023. However, with the pandemic receding and rapid increase in infrastructure development activities in India, the Investment Manager believes that these projections are reasonable.

We confirm that the traffic for these projections has been estimated by the Traffic Consultant and derived from the Traffic Report.

ii. Operation and repair cost:

a) Operation and maintenance expenses

The operation and maintenance cost includes routine, periodic/major maintenance, insurance costs, electricity and power charges, manpower costs, operational and toll maintenance expenses independent engineer's cost and administrative charges, including, but not limited to, road and site work expenses, employee benefit expenses and other operating and maintenance costs. Those costs are projected based on the Investment Manager's estimates of costs assumptions considering the inputs and other factors from the reports provided by the Technical Consultant (the "Technical Report") for the Project SPVs.

b) Major Repair and Maintenance expenses

We confirm that Major Maintenance Repair / Operation and Maintenance obligation costs as estimated by an external third -party Technical Consultant, Ramboll India Private Limited, in the Technical Report is complete in all respects which SJEPL is expected to incur for operation and maintenance obligations. It has been assumed that manpower cost forms part of it and is included in Operation and Maintenance obligation estimates provided by the external third -party Technical Consultant, Ramboll India Private Limited. Further, with respect to Major Maintenance Repair expenses, since the obligation to complete major maintenance is on the Trust Group, the cost as estimated by the Technical Consultant to be incurred as per the Technical Report has been assumed in the projections in FY 24 which will be partly funded by the reserve created till date to fund the major maintenance expenses. In addition to Operation and Maintenance obligation cost estimated by the technical consultant, management has estimated Operation and Maintenance obligation cost of Rs. 249 lakhs to be incurred in FY 2031. Consequently, Operation and Maintenance obligation cost provision of FY 2024-2025 & FY 2025-2026 has been increased by Rs. 34.09 lakhs each resulted in lower direct tax outflow in FY 2025-26.

Insurance expense considered in the Statement of Projections are based on premiums currently being paid by the SJEPL based on its project costs. The Investment Manager does not foresee any increase in the insurance cost over the projection period, hence the cost has been kept constant over the Projection period except for general increase in cost escalation. However, if there are damages to the infrastructure for which claims are made, the insurance premiums may change.

We further confirm that the projected operating and maintenance cost corresponds with the projected traffic and is primarily based on the currently available information on actual operating and maintenance cost associated with the operation of the SJEPL. Based on the concession agreement, the potential periodic / major maintenance cost is provided for in the statement of profit and loss for each financial year, and in the financial year of actual expenditure, the same is adjusted against the provision created for the same. The Statement of Projections do not envisage any unanticipated expenses which may be incurred due to any unforeseen circumstances.

iii. Capital expenditure

The SJEPL has received provision completion certificate on January 12, 2017, and final completion certificate is yet to be received. The SJEPL has completed the substantial balance construction work and has also capitalized the balance Project w.e.f. December 24, 2021.

iv. Depreciation and amortization

Toll collection rights is amortized over the period of concession, using weighted average tollable traffic amortization method. Under this method, the carrying value of the rights is amortized in the proportion of actual toll traffic for the year to projected traffic for the balance toll period, to reflect the pattern in which the assets economic benefits will be consumed. At each balance sheet date, the projected traffic for the balance toll period is reviewed by the Management.

SJEPL is expected to receive extension of Concession period, however, considering pending approval, no impact of such extension has been considered in these projections for calculation of depreciation and amortization expense.

Further, for tax purposes, amortization of toll collection rights has been assumed at the rate of 25% on written down value method.

v. Corporate Social Responsibility ('CSR') expense

No CSR expense is estimated in the Projection Period.

vi. Grant from NHAI

The SJEPL is entitled to certain grant to part finance the project cost as per the concession agreement. For the purpose of these projections, it has been assumed that the SJEPL will not receive any balance amount of ₹ 2,260.00 lacs Grant during the projections period.

For NCREPE

i. Toll income from expressways

The base data for the projections of revenue from operations is based on traffic report of the external expert, IBI Group India Private Limited, who has based its report based on the data for the month of September 2021, along-with actual ETC data for the month of October 2021 and toll tariff rates for the financial year ended March 31, 2023. The key variables for toll income growth, tollable traffic growth, future traffic mix, estimates on entry and exit points vehicles across various Toll plazas / Toll Gates of the Projects and the Wholesale Price Index ('WPI') are based on the Traffic Report obtained from Traffic consultants, IBI Group India Private Limited (the "Traffic Report") for the NCREPE. Summary of estimates and details of the assumptions are as set forth below:

Exit Plaza	March 31, 2024		March 31, 2025		March 31, 2026	
	Traffic growth rate	WPI rate	Traffic growth rate	WPI rate	Traffic growth rate	WPI rate
Jakhuali	5.11%		5.64%		5.54%	
Mawikalan	5.59%		5.93%		7.14%	
Duhai	6.22%		6.88%		5.98%	
Meerut Eway	6.20%		7.88%		4.38%	
Dasna	6.14%		7.18%		6.92%	
Bilakbarpur	6.07%	5.02%	7.22%	4.00%	8.02%	
Fatehpur Rampur	6.12%		8.70%		(20.90) %	
Maujpur	5.49%		6.06%		(3.18) %	4.00%
Chhajju Nagar	5.29%		5.82%		5.93%	
Yamuna Expressway	*		*		*	
EPE- Jewar Airport link	*		*		*	
EPE- NH334D Palwal – Aligarh Rd)	*		*		*	

*Exit plazas at Yamuna Expressway, EPE- Jewar Airport link and EPE- NH334D (Palwal – Aligarh Rd) are expected to commission in FY 2025-26 onwards, hence revenue from these three exit plazas are considered in the Traffic Report for FY 2025-26.

The source for WPI growth rate is Oxford Economics data as provided in the Traffic Report.

Further, below are the assumptions for the Traffic mix for the NCREPE; considered by the Traffic Consultant, IBI Group India Private Limited as on the date of the report and by Board of Directors of the Investment Manager:

Average Annual Daily Traffic (AADT)									
Particulars	**Jakhuali**	**Mawikalan**	**Duhai**	**Meerut Eway**	**Dashna**	**Bilakbarpur**	**Fatehpur Rampur**	**Maujpur**	**Chhajju Nagar**
Car/Jeep/Van	8,662 (53%)	4,227 (64%)	4,994 (68%)	2,191 (63%)	5,494 (63%)	3,077 (56%)	3,726 (59%)	1,662 (53%)	1,934 (34%)
LCV	3,168 (19%)	1,154 (17%)	1,284 (17%)	396 (12%)	1,384 (16%)	787 (14%)	1,194 (19%)	878 (28%)	1,045 (19%)
Bus or Truck	1,551 (9%)	624 (9%)	345 (5%)	324 (9%)	444 (5%)	325 (6%)	570 (9%)	267 (9%)	657 (12%)
Multi Axle Vehicle (3 to 6 axles) including oversized vehicles	3,123 (19%)	649 (10%)	754 (10%)	550 (16%)	1,407 (16%)	1,297 (24%)	839 (13%)	313	2,004 (35%)

We further confirm that, the Projections have been prepared based on the Traffic Report's base case scenario for traffic volume growth rates and no other adjustments been made to the Traffic Report. Further, no analysis has been performed to demonstrate the sensitivity of the Statement of Projections to changes in traffic volume growth rates or other assumptions.

We confirm that the traffic for these projections has been estimated by the Traffic Consultant and derived from the Traffic Report.

ii. Operation and repair cost:

a) Operation and maintenance expenses

The operation and maintenance cost includes routine, periodic/major maintenance, insurance costs, electricity and power charges, manpower costs, operational and toll maintenance expenses independent engineer's cost and administrative charges, including, but not limited to, road and site work expenses, employee benefit expenses and other operating and maintenance costs. Those costs are projected based on the Investment Manager's estimates of costs assumptions considering the inputs and other factors from the reports provided by the Technical Consultant (the "Technical Report").

Further, as per Concession agreement with NHAI, operation and maintenance for Toll Management System will be undertaken by NHAI till November 01, 2025, and accordingly from November 01, 2025, it has been assumed that the cost will be borne by NCREPE.

b) Major Repair and Maintenance expenses

We confirm that major repair costs as estimated by an external third -party Technical Consultant, SAMARTH INFRAENGG Technocrats Private Limited in the Technical Report is complete in all respects which the NCREPE is expected to incur for operation and maintenance obligations. It has been assumed that employee cost forms part of it and is included in Operation and Maintenance obligation estimates provided by an external third -party Technical Consultant, SAMARTH INFRAENGG Technocrats Private Limited. Further, with respect to major repair expenses, since the obligation to complete immediate repair is on the Trust Group, the cost as estimated by the Technical Consultant to be incurred as per the Technical Report has been assumed in the projections in FY 24 which will be partly funded by the reserve created to fund the immediate repair expenses. In addition to repair and maintenance cost estimated by the technical consultant, management has estimated repair and maintenance cost of Rs. 307 lakhs to be incurred in FY 2025-26 on account of periodic repair.

Further, major repair cost of Rs. 8,001.00 lakhs to be incurred in FY 2023-24 is at base rate of FY 2023-24 without considering the impact of WPI as the repair cost is already being incurred in FY 2023-24.

Insurance expense considered in the Statement of Projections are based on premiums currently being paid by the NCREPE based on its project costs. The Investment Manager does not foresee any increase in the insurance cost over the projection period, hence the cost has been kept constant over the Projection period except for general increase in cost escalation. However, if there are damages to the infrastructure for which claims are made, the insurance premiums may change.

We further confirm that the projected operating and maintenance cost corresponds with the projected traffic and is primarily based on the currently available information on actual operating and maintenance cost associated with the operation of the NCREPE. Based on the concession agreement, the potential periodic / major maintenance cost is provided for in the statement of profit and loss for each financial year, and in the financial year of actual expenditure, the same is adjusted against the provision created for the same. The Statement of Projections do not envisage any unanticipated expenses which may be incurred due to any unforeseen circumstances.

iii. Capital expenditure

NCREPE has received appointed date for commencement of operations from November 11, 2022, on payment of entire concession fees. No capital expenditure except for immediate repair expenses is envisaged during the concession period.

iv. Depreciation and amortization

Toll collection rights is amortized over the period of concession, using weighted average tollable traffic amortization method. Under this method, the carrying value of the rights is amortized in the proportion of actual toll traffic for the year to projected traffic for the balance toll period, to reflect the pattern in which the assets economic benefits will be consumed. At each balance sheet date, the projected traffic for the balance toll period is reviewed by the Management.

Further, for tax purposes, amortization of toll collection rights has been assumed within the period of concession on straight line basis.

v. Corporate Social Responsibility ('CSR') expense

No CSR expense is estimated in the Projection Period.

For Trust

i. Management Expenses

a. Investment Manager fees and Project Manager Fees

The Investment Manager and Project Manager are entitled to Investment Manager fees and Project Manager Fees ('IM & PM fee'). As the Trust has recently acquired the subsidiary/ asset, the amount of these management expenses has not yet been settled and hence the Trust has estimated an expense of 1% of net assets value of the Trust Group Assets per annum (which is also one of the contractual terms) based on the current expectation of the investment manager on the overall IM & PM fee for the Trust Group for next 3 years.

b. Other Trust expenses

The Trust expenses are mainly projected based on the quotations obtained from various intermediaries or expected terms and conditions of the relevant agreements and / or based on Management's experience and judgement. The other expenses comprise of fees for traffic consultant, technical consultant, auditor, compliances, valuer fees, legal fees etc. at the Trust level. The Trust has estimated other expense of ₹ 66.00 lacs for FY 24. This amount is escalated on a year on year by 10 %, as estimated by the Investment Manager.

ii. Finance costs

<u>For SJEPL</u>

Loans issued by the Trust to the SJEPL carry a coupon rate at 14% per annum w.e.f. June 28, 2022. Interest has been calculated on total debt of the SJEPL, including any such loans drawn in future. The projections of finance costs comprise only interest costs, which is the major component of finance-related costs which may be incurred by the SJEPL.

<u>For NCREPE</u>

Loans issued by the Trust to the NCREPE carry a coupon rate at 16% per annum w.e.f. November 04, 2022. Interest has been calculated on total debt of the NCREPE, including any such loans drawn in future. The projections of finance costs comprise only interest costs, which is the major component of finance-related costs which may be incurred by the NCREPE.

iii. Changes in working capital

<u>For Project SPVs</u>

Collection of tolls in the Project SPVs is majorly electronic collection and routine expenses are in cash or a credit period is available. The unpaid payables majorly consist of outstanding dues in relation to engineering, procurement, construction expenditure, operation and maintenance costs and other costs. We confirm that the changes in working capital are the difference in the net working capital amount from one accounting period to the next. Net working capital is defined as current assets minus current liabilities. The effective working capital deployed is relatively small or negligible in certain instances. Further, we believe the working capital is fairly stable and not expected to vary drastically over a period of time. Hence, changes in working capital are not significant and no impact of the same has been considered in the projected cash flows.

<u>For Trust</u>

Changes in working capital for the Trust Group over the Projection Period have been considered as the summation of the working capital changes in the Project SPVs and Trust during the Projection Period.

iv. Direct taxes (net of refunds)

<u>For Project SPVs</u>

Current income tax is measured at the amount expected to be recovered from, or paid to, the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in India where the Project SPVs operates and generates taxable income.

In certain years under projections, income tax is calculated under Minimum Alternate Tax (MAT) provisions as defined in Section 115JB of the Income Tax Act, 1961 based on the projected book profits of the Project SPVs. MAT paid in accordance with the tax laws, which gives future economic benefits in the form of adjustment to future income tax liability, is considered as an asset if there is convincing evidence that the entity will pay normal income tax.

<u>For Trust</u>

It has been assumed that Trust will receive interest income and / or dividends from the Project SPVs which is considered exempt under the Income Tax Act, 1961. No income other that the above has been assumed in the Trust. Hence, no income tax expense / cash flow is assumed during the Projection period. The transaction of receipt of interest / dividend income will stand eliminated in the Statement of Profit and Loss and in the Cashflow Statement of the Trust Group.

v. Other assumptions

The Investment Manager has made following additional assumptions in preparing the Statement of Projections:

1. We confirm that, the Trust being only a holding entity of the Project SPVs i.e., SJEPL and NCREPE, and since the Revenue of Trust includes interest income from the Project SPVs which gets eliminated at consolidated level, revenue from operations for Trust have been assumed to be Nil over the Projection period. However, Operation and management expenses at Trust level are being assumed in the projections.

2. The initial portfolio of Project SPVs is assumed to be remain unchanged throughout the Projection period. No further assets (apart from SJEPL and NCREPE) is assumed to be acquired or no assets are assumed to be divested during the Projections period.

3. The management has considered liability of Rs. 20810.00 lakhs on account of settlement of claims pending with National Highway Authority of India (NHAI) in these projections as management believes that same will be settled and paid in FY 2023-24.

4. The Trust had submitted a bid for a TOT project on May 10, 2023, comprising the TOT bundle 12 asset under the NHAI asset monetization scheme containing single stretch of Lalitpur-Sagar-Lakhnadon 316 km long, 4 National Highway (NH-44) with 4 toll plazas in the states of Uttar Pradesh and Madhya Pradesh ("TOT Bundle 12 Project"). The bid results are currently awaited. Accordingly, we cannot assure that we will win the bid or in the event we win the bid, the timely completion of the acquisition of the project by the Trust.

   Further, there is also no financial information, valuation or technical details currently available for the TOT Bundle 12 Project. Accordingly, we cannot assure you that there would not be any positive or adverse impact on the Statement of Projections of the Trust Group, in the event such bid is won and subsequently if the project is acquired.

5. It has been assumed that no outflows on account of any litigation related matters including current pending litigations / Contingent liabilities is expected to become due during the Projection period.

6. It has been assumed that no liability or liquidated damages on account of default in concession agreement shall devolve upon the Project SPV's during the Projections period.

7. We confirm that, it has been assumed for the purpose of projections that there will be no material change in taxation legislation or other applicable legislation during Projection Period.

8. No change in fair value of all financial instruments has been assumed during the Projections period.

9. No gain or loss has been considered on account of changes in foreign exchange rates, interest rates and derivative instruments.

10. We confirm that, the relevant tax exemptions, tax remissions, and preferential tax treatments granted remain valid and applicable and that the terms and conditions thereto are complied with.

11. We confirm that the Projections have been prepared using Ind AS standards and interpretations that are effective for the Ind AS financial statements for the period ended March 31, 2023. The Statement of Projections do not take into account the impact of any new Ind AS standards or interpretation not effective as at March 31, 2023. Ind AS standards or interpretations issued but not effective or not issued as at March 31, 2023 which may become effective during the Projections period may have an impact on the Projections and to that extent the actual figures may vary from the Projections.

12. The Projections are based on assumptions and are subject to a number of factors. Investors should be aware that future events, including actual traffic growth rates, cannot be predicted with any certainty and there may be deviations from the figures projected in the Projections. The Projections have been prepared based on the Traffic Report's base case scenario for traffic volume growth rates, and no analysis has been performed to demonstrate the sensitivity of the Projections to changes in traffic volume growth rates or other assumptions.

Yours faithfully,

For and on behalf of Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(as Investment Manager of Indian Highway Concessions Trust)

Ramesh Sobti	**Anup Vikal**	**Ankit Dewan**	**Varun Mehta**
Chairman & Director DIN: 00031304	Chief Executive Officer	Company Secretary and Compliance Officer M. No.:A31131	Chief Financial Officer
Place: London Date: June 15, 2023	Place: Mumbai Date: June 15, 2023	Place: Mumbai Date: June 15, 2023	Place: Mumbai Date: June 15, 2023

STATEMENT OF POSSIBLE DIRECT TAX BENEFITS AVAILABLE TO THE TRUST AND ITS UNIT-HOLDERS UNDER THE APPLICABLE LAWS IN INDIA

To

Indian Highway Concessions Trust ('Trust')
acting through its Investment Manager,
The Board of Directors of
Maple Infra InvIT Investment Manager Private Limited

Dear Sirs/Madams,

Statement of Possible Direct Tax Benefits available to Indian Highway Concessions Trust ("the Trust") and its unit-holders under the applicable laws in India

1. We refer to the proposed listing of existing units of the Trust on Bombay Stock Exchange and conversion of the Trust from a Private unlisted InvIT to Private listed InvIT (the "Transaction") and the enclosed Annexure which state the current position of possible direct tax benefits available to the Trust and to its Unitholders in Annexure 1 (the "Annexure") which has been prepared by management of Maple Infra InvIT Investment Manager Private Limited, (hereinafter referred as the "Investment Manager") and provides the possible direct tax benefits available to the Trust and to the unit-holders of the Trust under the Income-tax Act, 1961 ('the Act') presently in force in India (i.e. applicable for the financial year ending 31 March 2024 relevant to the assessment year 2024-25). Several of these benefits are dependent on the Trust or its unit-holders fulfilling the conditions prescribed under the relevant provisions of the Act. Hence, the ability of the Trust and / or its unit-holders to derive the direct tax benefits is dependent upon their fulfilling such conditions which, based on business imperatives the Trust faces in the future, the Trust or its unit-holders may or may not choose to fulfil.

2. The benefits discussed in the enclosed Annexure are not exhaustive and the preparation of the contents stated is the responsibility of the Investment Manager. We are informed that this Annexure is only intended to provide general information to the investors and is neither designed nor intended to be a substitute for professional tax advice. In view of the individual nature of the tax consequences and the changing tax laws, each investor is advised to consult his or her own tax consultant with respect to the specific tax implications arising out of their participation in the proposed transaction of the Trust particularly in view of the fact that certain recently enacted legislation may not have a direct legal precedent or may have a different interpretation on the benefits and consequences. Neither are we suggesting nor are we advising the investor to invest based on this Annexure.

3. We do not express any opinion or provide any assurance as to whether:
   i) the Trust or its unit-holders will continue to obtain these benefits in future;
   ii) the conditions prescribed for availing the benefits have been / would be met with; and
   iii) the revenue authorities/courts will concur with the views expressed herein.

4. The contents of the enclosed Annexure are based on information, explanations and representations obtained from the Investment Manager and on the basis of their understanding of the business activities and operations of the Trust. The same shall be subject to the notes to this Annexure.

5. The enclosed Annexure is based on the existing provisions of the income tax laws and its interpretation prevalent as of date, which are subject to change from time to time.

6. This Annexure is intended solely for information and for inclusion in information memorandum proposed to be filed with the Securities and Exchange Board of India, for the proposed Transaction, by the Trust outside the United States, as required under the provisions of the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended from time to time including the circulars, notifications, clarifications and guidelines issued thereunder and is not to be used, referred to or distributed for any other purpose.

7. This Annexure has been prepared solely in connection with the Transaction under the prescribed regulations. Reliance on the Annexure is on the express understanding that we do not assume responsibility towards the investors who may or may not invest relying on the Annexure.

For **S.R. Batliboi & Co. LLP**
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership Number: 501396
UDIN: 23501396BGYBPY4288
Place of Signature: Gurugram
Date: June 12, 2023

ANNEXURE TO STATEMENT OF POSSIBLE TAX BENEFITS AVAILABLE TO INDIAN HIGHWAY CONCESSIONS TRUST AND ITS UNITHOLDERS UNDER THE APPLICABLE LAWS IN INDIA

The information provided below sets out the possible tax benefits available to the unitholders in a summary manner only and is not a complete analysis or listing of all potential tax consequences of purchase, ownership and disposal of equity shares or units, under the Tax Laws presently in force in India. It is not exhaustive or comprehensive analysis and is not intended to be a substitute for professional tax advice.

UNITHOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS CONCERNING THE INDIAN TAX IMPLICATIONS AND CONSEQUENCES OF PURCHASING, OWNING AND DISPOSING OF UNITS, INCLUDING TAX IMPLICATIONS ON ANY DISTRIBUTIONS BY/ RECEIPTS FROM INDIAN HIGHWAY CONCESSIONS TRUST, IN THEIR PARTICULAR SITUATION.

The following is based on the provisions of the Income-tax Act, 1961 ('the Act') presently in force in India as amended by the Finance Act, 2023 applicable for financial year ending 31 March 2024 relevant to the assessment year 2024-25. The Act is amended from time to time.

I. UNDER THE INCOME-TAX ACT, 1961 (hereinafter referred to as 'the Act')

1. TAX BENEFITS AVAILABLE TO INDIAN HIGHWAY CONCESSIONS TRUST UNDER THE ACT

The following benefits are available to Indian Highway Concessions Trust ('the Trust') after fulfilling conditions as per the applicable provisions of the Act and the guidelines prescribed by the Securities and Exchange Board of India ('SEBI') [including the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended] ('SEBI Regulations').

1.1 Tax benefits in the hands of the Trust in respect of interest income received/ receivable from the underlying Special Purpose Vehicle(s) ('SPVs'):

Interest received or receivable by the Trust from the Project SPVs (being domestic companies) shall be exempt from tax in case of receipt from special purpose vehicle as defined under section 10(23FC) of the Act.

In this regard, please note that as per the explanation to section 10(23FC) of the Act, the expression "special purpose vehicle" means an Indian company in which the business trust holds controlling interest and any specific percentage of shareholding or interest, as may be required by the regulations under which such trust is granted registration.

Please note that in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case, the Tax Authorities are not satisfied by the disallowance considered by the Trust, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Income-tax Rules, 1962 ('the Rules').
In addition, section 194A(3)(xi) exempts SPV from provisions of tax deduction at source ('TDS') in respect of interest paid or payable to the Trust, provided such interest is in relation to interest other than 'interest on securities'.

To bring parity, the provisions of section 193 has been amended vide Finance Act 2023, which provides that no TDS is deductible in respect of interest as referred in Section 10(23FC) which is received by the business trust from special purpose vehicle as defined under section 10(23FC) of the Act.

1.2 Tax benefit in the hands of the Trust in respect of dividend income received/ receivable from the SPVs:

Dividend received or receivable by the Trust from the Project SPVs shall be exempt from tax in case of receipt from special purpose vehicle as defined under section 10(23FC) of the Act.

In this regard, please note that as per the explanation to section 10(23FC) of the Act, the expression "special purpose vehicle" means an Indian company in which the business trust holds controlling interest and any specific percentage of shareholding or interest, as may be required by the regulations under which such trust is granted registration. Please note that in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by the Trust, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules. Further, dividend paid by SPV to a business trust shall not be subject to any withholding tax under section 194 of the Act.

1.3 Section 10(34A) of the Act - Income from buy back of shares

The provisions of section 115QA mandate domestic companies (SPV) to pay an additional tax at the rate of 20% (plus applicable surcharge and cess) on buy-back of shares. Further, income arising from buy-back of unlisted shares shall not be taxable as per section 10(34A) of the Act in the hands of the shareholders. Accordingly, in case income arises in hands of the Trust from buy-back of unlisted shares by the Project SPVs then such income shall be exempt in the hands of the Trust.

Please note that in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible in the hands of the trust. In case the Tax Authorities are not satisfied by the disallowance considered by the Trust, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules.

1.4 Section 115UA(2) read with section 112 of the Act - Taxability of capital gains

In terms of section 115UA(2) of the Act, the total income of the Trust shall be chargeable to tax at the maximum marginal rate (MMR) in force except for the income chargeable to tax on transfer of Long Term Capital assets under section 112 of the Act, income chargeable to tax on transfer of Short Term Capital assets under section 111A of the Act and income referred in para 1.1 and 1.2 above. MMR is defined under the provisions of the Act to mean the rate of income-tax (including surcharge on income-tax, if any) applicable in relation to the highest slab of income as per the relevant Finance Act as increased by cess.

With respect to shares of a company not being listed on a recognized stock exchange, the determinative period of holding shall be more than 24 months for it to be considered to be long term capital asset. Thus, in case shares of a company not being listed on a recognized stock exchange are held for a period up to 24 months, it shall qualify as short term capital asset. With respect to other securities, the determinative period of holding is more than 36 months for it to be considered to be long term capital asset. In respect of shares of company, listed on a recognized stock exchange, the determinative period of holding shall be more than 12 months for it to be considered as long term capital assets.

As per the provisions of section 112(1)(d) of the Act, gains arising on the transfer of long term capital assets shall be chargeable to tax in the hands of the Trust at the rate of 20% (plus applicable surcharge and cess). Further, as per provisions of section 111A of the Act, the gains arising on transfer of short term capital asset shall be chargeable to tax in the hands of Trust at the rate of 15% (plus applicable surcharge and cess)

Section 48 of the Act prescribes the mode of computation of Capital Gains and provides for deduction of cost of acquisition/ improvement and expenses incurred in connection with the transfer of a capital asset, from the sale consideration to arrive at the amount of Capital Gains. However, in respect of long term capital gains, section 48 provides for substitution of cost of acquisition/ improvement with indexed cost of acquisition/ improvement, which adjusts the cost of acquisition/ improvement by a cost inflation index as prescribed from time to time. Such indexation benefit would not be available on bonds and debentures, taxable under section 112 of the Act

As per section 70 read with section 74 of the Act, short term capital loss arising during a year is allowed to be set-off against short term capital gains as well as long term capital gains. Balance loss, if any, shall be carried forward and set-off against any capital gains arising during subsequent eight assessment years. Also, as per section 70 and 74 of the Act, long term capital loss arising during a year is allowed to be set-off only against long term capital gains. Balance loss, if any, shall be carried forward and set-off against long term capital gains arising during subsequent eight assessment years.

Further, as per Section 71 of the Act, short term/ long term capital loss for the year cannot be set-off against income under any other head other than capital gains for the same year.

2. TAX BENEFITS AVAILABLE TO UNIT-HOLDERS OF INDIAN HIGHWAY CONCESSIONS TRUST

2.1 Tax Benefits available to the Unit-Holders of the Trust

Following tax benefit is specifically available to the unitholders of the Trust subject to the fulfillment of the conditions specified in the Act and SEBI Regulations:

Section 10(23FD) of the Act - Tax exemption in respect of income distributed by the Trust:

As per the provisions of section 115UA(1) of the Act, the income distributed by the Trust shall be deemed to be of the same nature and in the same proportion in the hands of the Unitholders as if such income was received by or accrued to the Trust. Vide Finance Act 2023, an exception has been brought to this provision which provides that income shall be chargeable to tax as Income from Other Sources in respect of units, where such income is received from a business trust and has not been subject to tax either for the unitholder under section 115UA or for the trust under section 10(23FC) or 10(23FCA).

As per the provisions of section 10(23FD), any income referred to in section 115UA(1) of the Act and distributed by the business trust shall not be included in the total income of the unit- holders except for the following income:

- Interest referred to in Section 10(23FC); and
- Specified dividend i.e. dividend income received in cases where SPV has exercised the option under Section 115BAA of the Act.

SPV have the option, subject to certain condition, to choose a concessional tax rate of 22 percent plus applicable surcharge cess under section 115BAA of the Act. In case, SPV has exercised the option under section 115BAA of the Act, any dividend distributed by the Trust out of the dividend paid by such SPV shall be taxable in the hands of unitholder. In other cases, the dividend distributed by Trust out of the dividend paid by SPV which has not exercised the option under section 115BAA of the Act, shall be exempt in the hands of unitholders under section 10(23FD) of the Act.

Please note that in view of the provisions of section 14A of the Act, any expenditure incurred in relation to earning the above exempt income shall not be tax deductible. In case the Tax Authorities are not satisfied by the disallowance considered by the Trust, the quantum of disallowance shall be computed in accordance with the provisions of section 14A read with Rule 8D of the Rules.

Transaction not regarded as transfer under section 47(xvii) of the Act
(Please note that the below implications are only relevant for the Sponsor Company)

According to sec. 47(xvii) of the Act, any transfer of a capital asset, being share of a special purpose vehicle to a business trust in exchange of units allotted by that trust to the transferor shall not be regarded as transfer and accordingly not be liable to capital gains tax.

According to sec. 49(2AC) the cost of units acquired in lieu of shares in SPV shall be deemed to be cost of acquisition of shares in SPV.

As per clause (hc) of explanation 1 of sec. 2(42A), for ascertaining the period of holding of such units, the period of holding of shares in SPV shall also be included.

Please note that any notional gain or loss arising on transfer of shares of SPV to business trust in exchange of units allotted by the trust as referred u/s 47(xvii) are to be excluded while calculating book profits for the purpose of Minimum Alternate Tax ('MAT') u/s 115JB. Similarly, any notional gain or loss arising upon change in carrying amount of the units held by Unitholder are to be excluded in calculating book profits for the levy of MAT u/s 115JB. *(clause (iie)/(fc) to explanation 1 to section 115JB)*

Further, actual gain or loss on disposal of units held by the Unitholder as referred to in section 47 (xvii) are considered for the purpose of MAT u/s 115JB. *(clause (iif)/(k) to explanation 1 to section 115JB)*

However, if the Unitholder opts for concessional tax regime u/s 115BAA/ 115BAB then provisions of MAT u/s 115JB shall not be applicable to the Unitholder and it shall forego its entire MAT credit available at the time of exercising concessional tax-regime.

2.2 General Benefits available to all the Unit-Holder of the Trust:

2.2.1 For resident and non-resident (other than FPI/FII) Unit-holder:

Long-term capital gains:

Income arising from transfer of units of the Trust , which is not undertaken on a recognized stock exchange and not subject to STT, shall be chargeable to tax at the rate of 20%, with indexation benefit (plus applicable surcharge and cess) under section 112 of the Act, if the said units are long term capital assets. Where the transfer of units of the Trust is undertaken on a recognized stock exchange and the transaction is subject to STT, the income arising therefrom shall be chargeable to tax at the rate of 10%, without indexation benefit (plus applicable surcharge and cess). The determinative period of holding for such units to qualify as long term capital asset is more than 36 months. Thus, where period of holding of such units is up to 36 months, the same shall qualify as short term capital asset.

In case of a Unit-holder being a resident individual or HUF, where the total taxable income as reduced by long-term capital gains taxable is below the basic exemption limit, such long-term capital gains will be reduced to the extent of the shortfall and only the balance long-term capital gains will be subjected to such tax in accordance with the proviso to sub-section (1) of section 112 of the Act.

Under the provisions of section 90(2) of the Act, a non-resident will be governed by the provisions of the Double Tax Avoidance Agreement (DTAA) between India and the country of tax residence of the non-resident and the provisions of the Act apply to the extent they are more beneficial to the assessee.

Short-term capital gain:

Short-term capital gains arising on transfer of units of the Trust, which is not undertaken on a recognized stock exchange and which is not subject to STT, shall be chargeable to tax at applicable tax rates prescribed under the relevant Finance Act. Where the transfer of units of the Trust is undertaken on a recognized stock exchange and the transaction is subject to STT, the income arising therefrom shall be chargeable to tax at the rate of 15% (plus applicable surcharge and cess).

Under the provisions of section 90(2) of the Act, a non-resident will be governed by the provisions of the Double Tax Avoidance Agreement (DTAA) between India and the country of tax residence of the non-resident and the provisions of the Act apply to the extent they are more beneficial to the assessee.

Set-off of losses:

Short Term Capital Loss computed for the given year is allowed to be set-off against Short Term/ Long Term Capital Gains computed for the said year under section 70 and 74 of the Act. Balance loss, if any, shall be carried forward and set-off against any capital gains arising during subsequent eight assessment years. Also, as per section 70 and 74 of the Act, long term capital loss arising during a year is allowed to be set-off only against long term capital gains. Balance loss, if any, shall be carried forward and set-off against long term capital gains arising during subsequent eight assessment years.

Further, as per Section 71 of the Act, short term/ long term capital loss for the year cannot be set-off against income under any other head other than capital gains for the same year.

Applicability of Minimum Alternate Tax/ Alternate Minimum Tax:

<u>Where Unitholder is a ‘domestic company’:</u>

In case of domestic companies that are liable to pay MAT under provisions of Section 115JB of the Act, the gains arising, if any, on sale of units of InvIT are to be included as part of book profits for the purpose of computing MAT liability. MAT paid by such companies should be available as credit for set-off against future tax liability, provided such companies do not opt to be governed by the concessional tax rates u/s 115BAA or 115BAB of the Act.

<u>Where Unitholder is a person ‘other than company’:</u>

In case of unitholders, other than companies, that are liable to Alternate Minimum Tax (AMT) under provisions of Section 115JC of the Act, the gains arising, if any, on sale of units of InvIT are to be included as part of adjusted total income for the purpose of computing AMT liability. AMT paid by such unitholders should be available as credit for set-off against future tax liability, provided they do not opt to be governed by the concessional tax rates u/s 115BAC or 115BAD of the Act.

Further, as per explanation 4 to section 115JB(2), the provisions of section 115JB shall not be applicable to a foreign company if the foreign company is a resident of a country having DTAA with India and such foreign company does not have a permanent establishment within the definition of the term in the relevant DTAA, or the foreign company is a resident of a country which does not have a DTAA with India and such foreign company is not required to seek registration under section 592 of the Companies Act 1956 or section 380 of the Companies Act 2013.

2.2.2 For unit-holders who are Foreign Portfolio Investors (‘FPIs’)/

In case of Foreign Portfolio Investor registered under SEBI (Foreign Portfolio Investors) Regulations 2014 (‘FPI’), as per section 2(14) of the Act, shares/ securities (other than those held as stock in trade) which were invested in accordance with the regulations made under the Securities and Exchange Board of India Act, 1992 shall be deemed to be capital assets. Accordingly, any income from such transfer shall be deemed to be in the nature of capital gain.

Long-term capital gains:

Income arising on transfer of units of the Trust, which is not undertaken on a recognized stock exchange and not subject to STT, shall be chargeable to tax at 10%, without indexation benefit (plus applicable surcharge and cess) in accordance with section 115AD of the Act, if the said units qualify as long term capital assets. Where the transfer of units of the Trust is undertaken on a recognized stock exchange and the transaction is subject to STT, the income arising therefrom shall be chargeable to tax at the rate of 10%, without indexation benefit (plus applicable surcharge and cess). The determinative period of holding for such units to qualify as long term capital asset is more than 36 months. Thus, for a period of holding of units up to 36 months, such units shall qualify as short term capital asset.

Short-term capital gain:

Short-term capital gains arising from transfer of units of the Trust, which is not undertaken on a recognized stock exchange and which is not subject to STT, shall be chargeable to tax @30% (plus applicable surcharge and cess) in accordance with section 115AD of the Act. Where the transfer of units of the Trust is undertaken on a recognized stock exchange and the transaction is subject to STT, the income arising therefrom shall be chargeable to tax at the rate of 15% (plus applicable surcharge and cess).

Set-off of losses:

Short Term Capital Loss computed for the given year is allowed to be set-off against Short Term/ Long Term Capital Gains computed for the said year under section 70 and 74 of the Act. Balance loss, if any, shall be carried forward and set-off against any capital gains arising during subsequent eight assessment years. Also, as per section 70 and 74 of the Act, long term capital loss arising during a year is allowed to be set-off only against long term capital gains. Balance loss, if any, shall be carried forward and set-off against long term capital gains arising during subsequent eight assessment years.

Further, as per Section 71 of the Act, short term/ long term capital loss for the year cannot be set-off against income under any other head other than capital gains for the same year.

Applicability of Minimum Alternate Tax:

As per the Explanation 4 to section 115JB, provisions of Minimum Alternate Tax shall not be applicable to any foreign company if –

(i) Such foreign company is a resident of country with which India has a DTAA and such foreign company does not have a permanent establishment in India; or

(ii) Such foreign company is a resident of country with which India does not have a DTAA and such foreign company is not required to seek registration under any law for the time being in force relating to companies.

Accordingly, provisions of MAT shall not apply to FPIs/ FIIs in case the above conditions hold true.

2.2.3 For unit-holders who are Mutual Funds:

Under section 10(23D) of the Act, any income earned by a Mutual Fund registered under the Securities and Exchange Board of India Act, 1992, or a Mutual Fund set up by a public sector bank or a public financial institution, or a Mutual Fund authorised by the Reserve Bank of India would be exempt from income-tax, subject to such conditions as the Central Government may by notification in the Official Gazette specify in this behalf.

In light with the provisions of section 196 of the Act, no deduction of tax shall be made on any sum payable to a Mutual Fund specified under clause (23D) of section 10. Accordingly, the Trust is not required to withhold tax on any sum payable to Mutual Fund set up under section 10(23D) of the Act.

2.2.4 For Venture Capital Companies/Funds:

For VCF/VCC registered prior to 21 May 2012

Under Section 10(23FB) of the Act, any income of Venture Capital Company to whom the certificate of registration is granted before 21/05/2012 under SEBI (Venture Capital Funds) Regulations, 1996 or as a subcategory I Alternative Investment Fund as is regulated under SEBI (Alternative Investment Funds Regulations) under the SEBI Act, 1992, would be exempt from income tax, subject to conditions specified therein.

As per Section 115U of the Act, any income derived by a person from his investment in Venture Capital Company/Venture Capital Fund would be taxable in the hands of the person making an investment in the same manner as if it were the income accruing or arising to or received by such person had the investments been made directly in the venture capital undertaking.

For VCF/VCC registered post 21 May 2012

VCF/VCC registered post 21 May 2012 shall be classified as a Category 1 Alternate Investment Fund which shall be governed by the SEBI (AIF) Regulations 2012. For such funds benefit of section 10(23FB) and section 115U shall not be applicable and shall be governed by section 115UB read with section 10(23FBA) and 10(23FBB) which states that business income earned by such fund shall be taxable in the hands of the Fund and exempt in the hands of the unit holders, and other income earned viz. capital gains, income from other sources shall be exempt in the hands of the fund and taxable in the hands of unit holder.

2.2.5 Benefits under Double Taxation Avoidance Agreement (DTAA):

Under the provisions of section 90(2) of the Act, a non-resident will be governed by the provisions of the DTAA between India and the country of tax residence of the non-resident and the provisions of the Act apply to the extent they are more beneficial to the assessee.

However, the non-resident investor will have to furnish a certificate of his being a tax resident in a country outside India and a suitable declaration stating that such non resident does not have a fixed base/ permanent establishment in India, to obtain the benefit of the applicable DTAA and such other document as may be prescribed as per the provision of section 90(4) of Act.

As per the provisions of section 90(2) of the Act, the provisions of the Act would prevail over the provisions of the DTAA to the extent they are more beneficial to the non-resident.

2.2.6 Section 10(23FE): Income of a specified person in the nature of dividend, interest or long-term capital gains arising from an investment made by it in India.

As per section 10(23FE) of the Act, dividend, interest and long-term capital gains arising from investments made by 'specified person' in India, whether in the form of debt or share capital or unit, shall be exempt, if such investment is:

(i) made on or after the 01 April 2020 but on or before the 31 March 2024
(ii) is held for at least 3 years
(iii) inter alia, is in a business trust

Further, such specified person (subject to certain conditions prescribed in section 10(23FE)) shall include:

(i) Wholly owned subsidiary of Abu Dhabi Investment Authority (ADIA)
(ii) Sovereign Wealth Funds (SWF) as notified by the Central Government
(iii) Pension funds as notified by the Central Government

Thus, where a unitholder being a specified person in accordance with the provision of section 10(23FE) of the Act and has been notified by the Central Government, has earned any income in the nature of interest, dividend, long term capital gain or any sum referred to in clause (xii) of sub-section (2) of section 56 from investment in a business trust (being an Infrastructure Investment Trust under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 made under the Securities and Exchange Board of India Act, 1992), such income shall be exempt from tax in India.

Vide Finance Act 2023, such exemption benefit has also been extended with respect to income referred to under section 56(2)(xii) of the Act. Thus, where specified persons as defined under section 10(23FE) of the Act receives any income as referred in section 56(2)(xii) of the Act, such income shall be exempt from tax in India.

In this regard, please note that there are no withholding tax provisions under the Act which provide for exemption from withholding taxes on above mentioned income accruing to the specified persons as defined under section 10(23FE) of the Act. However, vide Finance Act 2023, section 197 of the Act has been amended to include specified persons as defined under section 10(23FE) of the Act where such person received income from business trusts. Thus, such specified persons may apply for a NIL/ lower withholding tax certificate under section 197 of the Act in respect of income distributed by the business trust.

II. TAX DEDUCTION AT SOURCE[1]

Section 194LBA – Deduction of tax on certain income from the Trust

As per the amendments recently introduced by way of the Finance Act 2023, a non-resident unit holder claiming PF/ SWF exemption u/s 10(23FE) can obtain a lower/ nil withholding certificate u/s 197 of the Act.

Where any interest income referred in section 115UA of the Act, in the nature referred to in section 10(23FC)(a) is distributed by the Trust to its unitholder, the Trust shall deduct TDS at 10% - in case of a resident unitholder, and 5% (plus applicable surcharge and cess) - in case of a non-resident unitholder. The same shall be deducted at the time of credit of such payment to the account of the payee or at the time of payment thereof, whichever is earlier.

However, TDS at the rate of 10% shall be deducted on dividend income distributed by the Trust to its resident unitholders and 10% (plus applicable surcharge and cess) shall be deducted on dividend income distributed by the Trust to its non-resident unitholders, if the SPV has exercised the option of beneficial tax regime under section 115BAA of the Act. If the SPV has not exercised the option of Section 115BAA of the Act, then no TDS is required to be deducted on the distribution of dividend by the Trust.

Additionally, in view of section 90(2) of the Act, a non-resident will be governed by the provisions of the DTAA between India and the country of tax residence of the non-resident and the provisions of the Act apply to the extent they are more beneficial to the assessee.

Applicability of other provisions:

No income tax is deductible at source from income in the nature of capital gains arising to a resident unitholder under the provisions of the Act.

However, as per the provisions of Section 195 read with section 90 of the Act, any income on transfer of units of the Trust by non-residents may be subject to withholding of tax at the rate under the domestic tax laws or under the DTAA, whichever is more beneficial to the assessee (other than FPIs/ FIIs who are subject to provisions of section 196D(2) of the Act).

Further, section 196D of the Act provide that in case of a payee, being FPIs/ FIIs of country with which India has entered into DTAA, tax shall be deducted at the rate of 20% or the DTAA rates, whichever is lower, subject to the FPI/ FII furnishing a Tax Residency Certificate (referred to in Section 90(4) of the Act) to the payer.

Further, as per sub-section (2) of section 196D of the Act, no tax is to be deducted from any income, in the nature of capital gains arising to a FPI or FII from the transfer of units.

Section 194Q – Deduction of tax on payment of certain sum for purchase of goods

As per section 194Q of the Act, where any 'buyer' is responsible for paying any sum to any resident seller for purchase of any goods of the value or aggregate of such value exceeding fifty lakh rupees in any previous year then such buyer shall deduct TDS at 0.1% of such sum exceeding fifty lakh rupees. The same shall be deducted at the time of credit of such sum to the account of the seller or at the time of payment thereof by any mode, whichever is earlier.

For this purpose, "buyer" means a person whose total sales, gross receipts or turnover from the business carried on by him exceed ten crore rupees during the financial year immediately preceding the financial year in which the purchase of goods is carried out, not being a person, as the Central Government may, by notification in the Official Gazette, specify for this purpose, subject to such conditions as may be specified therein.

The provisions of section 194Q of the Act shall not apply to a transaction on which:
- Tax is deductible under any other provisions of this Act; and
- Tax is collectable under section 206C other than a transaction to which the provision of section 206C(1H) applies

[1] *Please note that the TDS rates mentioned in the given document may be subject to any concessions introduced/ allowed by the Government under any policy, press release, etc. Also, the same may also be subject to lower/ Nil withholding tax certificates which may be furnished by the unitholders*

Further, vide Circular 13 of 2021 dated 30th June, 2021, the Central Board of Direct Taxes [CBDT] has clarified that where buyer of goods is a non-resident and such purchase of goods is not effectively connected with the permanent establishment of the buyer in India, then such buyer is not required to deduct tax under section 194Q of the Act.

Further, the circular also clarifies that tax shall not be deducted where seller is a person whose income is exempt from tax under the Act (like person exempt under section 10) or under any other legislation passed by the Parliament (like RBI Act, ADB Act, etc.). However, the circular provides that the above clarification would not apply if only part of the income of the seller is exempt.

Section 206AA of the Act – Where PAN details are not furnished by the unitholder

As per Section 206AA of the Act, where a taxpayer does not have a Permanent Account Number ('PAN'), taxes have to be withheld on payment of income to the taxpayer (where chargeable to tax) at higher of the following:

- at the rate specified in the Act; or
- at the rate or rates in force; or
- at the rate of 20 percent

Pursuant to amendment in section 206AA vide notification 53/2016 dated 24 June 2016 introducing Rule 37BC, the requirement of quoting PAN at the time of withholding of tax on certain specified income is eliminated. Further, the CBDT issued a notification prescribing the rules for relaxation from withholding of tax at higher rates in the absence of PAN in the case of non-resident deductee and laid down the information and alternative documents required to claim such relaxation.

Section 206AB of the Act) – Where the return of income has not been furnished by the unitholder

As per Section 206AB of the Act, where taxes are required to be deducted on any sum (other than those referred to in section 192, 192A, 194B, 194BB, 194LBC or 194N) paid/ payable/ credited to a specified person, the taxes have to be withheld at higher of the following:

- at twice the rate specified in the Act; or
- at twice the rate or rates in force; or
- at the rate of 5 percent

Vide Finance Act, 2022, provisions of sec. 206AB of the Act have been amended (with effect from 01st April 2021) to provide that section 206AB of the Act shall also not apply where tax is required to be deducted under section 194-IA, 194-IB and 194M of the Act.

Vide Finance Act, 2022, the condition of specified person (that with effect from Financial Year 2021-22) has also been amended so as to mean a person, who-

(i) has not furnished the return of income for the assessment year relevant to the previous year immediately preceding the financial year in which tax is required to be deducted, for which time limit for furnishing return of income u/s 139(1) has expired: and

(ii) the aggregate of tax deducted at source and tax collected at source in his case is INR 50,000 or more in the said previous year

The above provisions shall not be applicable in case of non-resident not having a permanent establishment in India.

Further, in cases where both Section 206AA and Section 206AB of the Act are applicable, TDS shall be deducted at higher of the rate prescribed under both these sections.
Note1: Please note that the rate prescribed under section 206AB of the Act shall not be increased by any surcharge and cess.

III. TAX COLLECTION AT SOURCE

Section 206C(1H) – Tax collection on source

As per clause 1H of section 206C of the Act, every seller, who receives any amount as consideration for sale of any goods for value exceeding fifty lakh rupees shall at the time of receipt of such amount, collect from the buyer, a sum equal to 0.1 per cent of the sale consideration exceeding fifty lakh rupees as income-tax.

Further, it has been provided that the Seller would be required to collect such tax only if his total sales, gross receipts or turnover from his business exceeds INR 100 million during the financial year immediately preceding the financial year in which the sale of goods is carried out.

For this purpose, "buyer" means a person who purchases any goods, but does not include: (a) the Central Government, a State Government, an embassy, a High Commission, legation, commission, consulate and the trade representation of a foreign State; or (b) a local authority as defined in the Explanation to clause (20) of section 10; or (c) a person importing goods into India or any other person as the Central Government may, by notification in the Official Gazette, specify for this purpose, subject to such conditions as may be specified therein.

Further, in case buyer fails to furnish PAN or Aadhar to the seller, in such case seller is required to collect tax at the rate of 1 percent.

In addition, the section provides that the provisions of this section shall not be applicable if the buyer is liable to deduct TDS under other provisions of the Act on the goods purchased by him from the seller and has deducted such amount.

Further, vide Circular 13 of 2021 dated 30th June, 2021, the CBDT has clarified that if buyer has deducted the tax on a transaction under section 194Q of the Act, the seller is not required to collect the tax under section 206C(1H) of the Act on the same transaction. However, if, for any reason, tax has been collected by the seller under section 206C(1H) before the buyer could deduct tax under section 194Q of the Act on the same transaction, then buyer need not to deduct tax at source under section 194Q of the Act.

Further, the circular also clarifies that tax shall not be collected where buyer is a person whose income is exempt from tax under the Act (like person exempt under section 10) or under any other legislation passed by the Parliament (like RBI Act, ADB Act, etc.). However, the circular provides that the above clarification would not apply if only part of the income of the buyer is exempt.

Section 206CC of the Act – Where PAN details are not furnished by the unitholder

As per Section 206CC of the Act, where a buyer does not possess a Permanent Account Number ('PAN'), taxes have to be collected by the seller (where tax is required to be collected) at higher of the following:

- at twice the rate specified in the relevant provision of this Act; or
- at the rate of 5 percent

Vide Finance Act 2023, the said rate of tax shall not exceed 20% on payments made post July 01, 2023

The above provisions shall not be applicable in case of non-resident not having a permanent establishment in India.

Section 206CCA of the Act – Where the return of income has not been furnished by the unitholder

As per Section 206CCA of the Act, where tax is required to be collected at source under the provisions of the Act on any sum or amount received by a person from a specified person, the taxes have to be collected at higher of the following two rates:

- at twice the rate specified in the relevant provision of this Act; or
- at the rate of 5 percent

Vide Finance Act 2023, the said rate of tax shall not exceed 20% on payments made post July 01, 2023

Vide Finance Act, 2022, the condition of specified person (that with effect from Financial Year 2021-22) has also been amended so as to mean a person, who-

(i) has not furnished the return of income for the assessment year relevant to the previous year immediately preceding the financial year in which tax is required to be collected, for which time limit for furnishing return of income u/s 139(1) has expired: and
(ii) the aggregate of tax deducted at source and tax collected at source in his case is INR 50,000 or more in the said previous year

The above provisions shall not be applicable in case of non-resident not having a permanent establishment in India.

Further, in cases where both Section 206CC and Section 206CCA of the Act are applicable, TCS shall be collected at higher of the rate prescribed under both these sections.

Note1: Please note that the rate prescribed under section 206CCA of the Act shall not be increased by any surcharge and cess

IV. Application of other provisions

Section 94(7) of the Act (commonly known as dividend stripping)

Vide Finance Act, 2022, applicability of section 94(7) of the Act (commonly known as dividend stripping) has been extended to the units of Trust as well (that with effect from Financial Year 2022-23) which provides that where:

(i) any person buys or acquires any securities or unit within a period of three months prior to the record date[2];
(ii) such person sells or transfers such securities within three months after such record date or such units within a period of nine months after such record date;
(iii) the dividend or income on such securities or unit received or receivable by such person is exempt

then, the loss, if any, arising from the sale and purchase of securities and units, to the extent of dividend or income received or receivable on such securities or unit, shall be ignored for computing income chargeable to tax.

Section 94(8) of the Act (commonly known as bonus stripping)

Vide Finance Act, 2022, applicability of section 94(8) of the Act (commonly known as bonus stripping) has been extended to the units of Trust as well (that with effect from Financial Year 2022-23) which provides that where:

(i) any person buys or acquires any units within a period of three months prior to the record date[3];
(ii) such person is allotted additional units without any payment on the basis of holding of such units on such record date;
(iii) such person sells or transfers all or any of the units within a period of nine months after the record date, while continuing to hold all or any of the additional units referred in clause (ii) above

then, the loss, if any, arising from the sale and purchase of all or any of the units shall be ignored for computing income chargeable to tax and notwithstanding anything contained in any other provision of the Act, the amount of loss so ignored shall be deemed to be the cost of purchase or acquisition of such additional units referred to in clause (ii) above as are held on the date of such sale or transfer.

[2] *Record date means a date fixed to entitles the holder of such securities or units to receive dividend, income, or additional securities or unit without consideration, as the case may be.*

[3] *Record date means a date fixed to entitles the holder of such securities or units to receive dividend, income, or additional securities or unit without consideration, as the case may be.*

General tax rates and provisions:

1. The income-tax rates specified in this note are as applicable for the financial year 2023-24 (relevant to assessment year 2024-25), and are exclusive of surcharge and cess, if any. Rate of surcharge and cess are provided below:

Surcharge:

Domestic companies:
(i) If the total income does not exceed INR 10 million – Nil
(ii) If the total income exceeds INR 10 million but does not exceed INR 100 million - 7 %
(iii) If the total income exceeds INR 100 million - 12 %

Foreign companies:

(i) If the total income does not exceed INR 10 million - Nil
(ii) If the total income exceeds INR 10 million but does not exceed INR 100 million – 2%
(iii) If the total income exceeds INR 100 million – 5%

For individuals, HUF, AOP and BOI:

(i) If the total income does not exceed INR 5 million - Nil
(ii) If the total income exceeds INR 5 million but does not exceed INR 10 million – 10%
(iii) If the total income exceeds INR 10 million but does not exceed INR 20 million – 15%
(iv) If the total income (excluding dividend income or income under the provision of section 111A and section 112A of the Act) exceeds INR 20 million but does not exceed INR 50 million – 25%
(v) If the total income (excluding dividend income or income under the provision of section 111A and section 112A of the Act) exceeds INR 50 million – 37% (However, as per the provisions of Finance Act 2023, surcharge rate shall be 25% only in case of individuals who opt for new tax regime)
(vi) If total income is above 20 million (including dividend income or income under the provision of section 111A and section 112A of the Act) but is not covered under (iv) and (v) above – 15%

However, please note that the applicable surcharge does not exceed 15% in case of dividend income or income under the provision of section 111A and section 112A of the Act included in such total income

Further, vide Finance Act, 2022, the surcharge on long term capital gains under section 112 of the Act arising from transfer of long-term capital assets (including units of Trust) shall also be capped at 15%.

The above surcharge is subject to marginal tax benefit as per the income Tax Act, 1961.

Cess:

In all cases, Cess will be levied at the rate of 4 per cent of income-tax and surcharge.

2. The stated benefits will be available only to the sole/ first named holder in case the units are held by joint holders.

3. In respect of non-residents, the tax rates and the consequent taxation mentioned above shall be further subject to any benefits available under the applicable DTAA, if any, between India and the country in which the non-resident has fiscal domicile.

4. This statement is intended only to provide general information to the investors and is neither designed nor intended to be substituted for professional tax advice. In view of the individual nature of tax consequences, each investor is advised to consult his/her own tax advisor with respect to specific tax consequences of his/her participation in the scheme.

5. No assurance is given that the revenue authorities/courts will concur with the views expressed herein. Our views are based on the existing provisions of law and its interpretation, which are subject to changes from time to time. We do not assume responsibility to update the views consequent to such changes. We shall not be liable to any claims, liabilities or expenses relating to this assignment except to the extent of fees relating to this assignment, as finally judicially determined to have resulted primarily from bad faith or intentional misconduct. We will not be liable to any other person in respect of this statement.

6. This statement of possible direct tax benefits enumerated above is as per the Act as amended by the Finance Act, 2023 applicable for financial year ending 31 March 2024 relevant to the assessment year 2024-25. The above statement of possible Direct-tax Benefits sets out the possible tax benefits available to the Trust and its unitholders under the current tax laws presently in force in India. Several of these benefits available are dependent on the Trust or its unitholders fulfilling the conditions prescribed under the relevant tax laws.

7. The information provided above sets out the possible tax benefits available to the unit holders in a summary manner only and is not a complete analysis or listing of all potential tax consequences of the purchase, ownership and disposal of equity shares and units, under the current tax laws presently in force in India. It is not exhaustive or comprehensive and is not intended to be a substitute for professional advice. Investors are advised to consult their own tax advisor with respect to the tax implications arising on account of any investment in equity shares or units (including tax implications on account of any distributions by/ receipts from the Trust), particularly in view of the fact that certain recently enacted legislation may not have a direct legal precedent or may have a different interpretation impacting the benefits, which an investor can avail.

For and Behalf of Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
acting on behalf of
Indian Highway Concessions Trust

Director

MATERIAL CONTRACTS AND DOCUMENTS FOR INSPECTION

The following contracts, which are or may be deemed material have been entered into in due course. These contracts and also the documents for inspection referred to hereunder, may be inspected by theUnitholders at the principal place of business of the Trust, from 10:00 A.M. to 5:00 P.M., on all Working Days from the date of this Information Memorandum until the date of listing of the Units. Any of the contracts or documents mentioned in this Information Memorandum may be amended or modified at any time if so required in the interest of the Trust or if required by the other parties, without reference to the Unitholders, subject to compliance with applicable law and Trust Documents.

1. Amended and restated Indenture of Trust entered into between Megha Sethi and the Trustee dated June 13, 2023.

2. SEBI registration certificate for the Trust bearing number IN/InvIT/19-20/0013 dated February 24, 2020, as an infrastructure investment trust.

3. Amended and restated Investment Management Agreement entered into between the Trustee (acting on behalf of the Trust) and the Investment Manager dated June 13, 2023.

4. The Project Implementation and Management Agreement entered into between Trustee, the Project Manager, the Investment Manager and SJEPL, dated June 8, 2022.

5. The Project Implementation and Management Agreement entered into between Trustee, the Project Manager, the Investment Manager and NCREPE, dated October 13, 2022.

6. The Securities purchase agreement dated January 20, 2021 entered into between the Trust (acting through the Investment Manager (acting on behalf of the Trustee)) SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Galfar Engineering & Contracting SAOG and Bharat Road Network Limited read with the agreement to clarify and supplement the understanding in the securities purchase agreement dated June 7, 2022 entered into between the Trust (acting through the Investment Manager), SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG.

7. The claims management agreement dated January 20, 2021 entered into between SJEPL, Simplex Infra Development Private Limited, Simplex Infrastructures Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)) read with the agreement to clarify and supplement the understanding in the claims management agreement dated June 7, 2022 entered into between the SJEPL, Simplex Infra Development Private Limited, Simplex Infrastructures Limited, Galfar Engineering & Contracting (India) Private Limited and Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)).

8. The affirming letters dated January 20, 2021 issued by SREI Infrastructure Finance Limited and SIL issued to the Trust and the acknowledgement letter issued by SIL dated June 7, 2022 to the Trust acknowledging the additional documentation in relation to sale of equity shares of SJEPL.

9. The Earn Out Agreement dated January 20, 2021 entered into between SJEPL, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Galfar Engineering & Contracting SAOG and Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)).

10. Claims Benefit Assignment Agreement dated June 7, 2022, entered into between SJEPL Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)).

11. The Shareholder Loan Agreement dated June 7, 2022 entered into between the Trust (acting through the Trustee and represented by the Investment Manager) and SJEPL and amended thereto.

12. The Shareholder Loan Agreement dated October 13, 2022 entered into between the Trust (acting through the Trustee and represented by the Investment Manager) and NCREPE.

13. The Tripartite Agreement dated November 23, 2021 entered between NHAI, SJEPL and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)).

14. The tripartite agreement dated June 3, 2022, between NSDL, the Trust and the Registrar.

15. The tripartite agreement dated June 3, 2022, between CDSL, the Trust and the Registrar.

16. The concession agreement dated May 6, 2022 entered between NCREPE and NHAI, including all amendments and supplements made thereto

17. The concession agreement dated August 6, 2010 entered between SJEPL and NHAI, including all amendments and supplements made thereto.

18. The certified copies of the updated Memorandum and Articles of Association of the Investment Manager.

19. The board resolution of the directors of the Investment Manager dated June 8, 203, authorising listing of units on the designated Stock Exchange.

20. Approval from NHAI for change in shareholding of SJEPL dated October 21, 2021 bearing reference number NHAI/BOT/CGM(T)/Shareholding/Chandikhole-Jagatpur/2021/239.

21. The consents from the (i) Legal counsel for the Listing; (ii) Valuer; (iii) Registrar; (iv) Technical Consultants, (v) Compliance Officer of the Trust; and (vii) Traffic Consultations (viii) Industry consultant and (ix) Merchant Banker.

22. The Audited Financial Statements and the report thereon.

23. The report on statement of possible tax benefits dated June 12, 2023 from the Auditors.

24. Corporate governance policies of the Investment Manager.

25. Exemption application dated November 23, 2022 issued by the Investment Manager to SEBI seeking certain relaxations and exemptions from the provisions of InvIT Regulations and circulars issued thereunder in relation to the listing of the Units of the Trust;

26. SEBI response letter dated February 28, 2023 bearing reference number SEBI/HO/DDHS-RACPOD2/P/OW/2023/08512/1 to the Investmnet Manager providing point wise reply to the exemption / clarifications sought by the Investment Manager;

27. Exemption applications dated March 23, 2022 issued by the Investment Manager to SEBI seeking an extension for listing of the Units of the Trust and certain other clarifcations; and

28. SEBI response letter dated April 6, 2023 bearing reference number SEBI/HO/DDHS-RACPOD2/P/OW/2023/14186/2 to the Investment Manager providing an extension for listing of the Units of the Trust and response to clarifications sought.

29. Due Diligence certificate dated June 15, 2023 by the Lead Manager.

30. Placement Agreement dated June 15, 2023 entered into between the Trust (acting through the Trustee and represented by the Investment Manager) and the Lead Manager.

DECLARATION

The Investment Manager declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations, the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-

Romesh Sobti
Chairman and Director

Date: June 15, 2023
Place: London

DECLARATION

The Investment Manager declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Anil Aggarwal
Indepenent Director

Date: June 15, 2023
Place: Delhi

DECLARATION

The Investment Manager declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Deepak Malhotra
Director

Date: June 15, 2023
Place: Gurugram

DECLARATION

The Investment Manager declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Yudhvir Singh Malik
Independent Director

Date: June 15, 2023
Place: Gurugram

DECLARATION

The Investment Manager declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Seema Gupta
Independent Director

Date: June 15, 2023
Place: Gurugram

DECLARATION

The Investment Manager declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Investment Manager further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Louis St. Maurice
Director

Date: June 15, 2023
Place: Italy

DECLARATION

The Trustee declares and certifies compliance with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations, the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Trustee further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Axis Trustee Services Limited**

Sd/-
Authorised Signatory

Date: June 15, 2023
Place: Mumbai

DECLARATION

The Sponsor declares and certifies compliane with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations, the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Sponsor further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Highways Pte. Ltd**

Sd/-
Cyril Sébastien Dominique Cabanes
Director

Date: June 15, 2023
Place: Tokyo

DECLARATION

The Sponsor declares and certifies compliane with all relevant provisions of the InvIT Regulations, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be) and that no statement made in this Information Memorandum is contrary to the applicable provisions of the InvIT Regulations, the SCRA, SEBI Act and all rules, regulations and guidelines issued by the GoI or SEBI (as the case may be). The Sponsor further certifies that all the statements and disclosures in this Information Memorandum are material, true, correct, not misleading and adequate in order to enable the Investors to make an informed decision.

For **Maple Highways Pte. Ltd**

Sd/-
Wai Leng Leong
Director

Date: June 15, 2023
Place: Singapore

ANNEXURE A – VALUATION REPORTS

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Valuation Report

Indian Highway Concessions Trust ("the Trust") & Maple Infra InvIT Investment Manager Private Limited (in its capacity as "Investment Manager" of the Trust)

Valuation of InvIT as per Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 and Calculation of NAV of the Trust.

MAY 2023

Ref: LM/May31-18/2023
Date: May 31, 2023

To,
Indian Highway Concessions Trust
Ground Floor, Unit No 2, The ORB, Sahar,
Andheri East, Mumbai, Mumbai Suburban,
Maharashtra, 400 099

To,
Maple Infra InvIT Investment Manager Private Limited
(in its capacity as "**Investment Manager**" of the Trust)
6th Floor, Chanakya Off Ashram Road,
Ahmedabad - 380 009

Dear Sir(s)/Madam(s),

Sub: Valuation of Trust Assets as per Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended from time to time and calculation of Net Asset Value ("NAV") of the Trust.

We refer to the engagement letter dated February 10, 2023 appointing BDO Valuation Advisory LLP (hereinafter referred to as **"BDO Val", "we," "our,"** or **"us"**), to provide professional services to Indian Highway Concessions Trust ("**IHCT**" or "**the Trust**") with respect to independent valuation of Shree Jagannath Expressways Private Limited ("**SJEPL**") and NCR Eastern Peripheral Expressway Private Limited **("NEPEPL")** together referred as Trust Assets **("InvIT assets" or "SPVs")** as per the requirements of Securities and Exchange Board of India (Infrastructure Investment Trusts Regulations, 2014), and amendments thereto including any circulars and guidelines issued thereunder (**"SEBI InvIT Regulations"**). Maple Highways Pte. Ltd. (**"Sponsor"**) is the sponsor of the Trust. Maple Infra InvIT Investment Manager Private Limited is the investment manager of the Trust.

We thereby, enclose our independent valuation report providing our opinion on the fair enterprise value of the InvIT Asset on a going concern basis under the SEBI InvIT regulations considering the data as stated in **"Sources of Information**" of the Report as well as discussions with the relevant personnel of the Investment Manager. We have considered the cut-off date for the current valuation exercise to be March 31, 2023 (**"Valuation Date"**) and market factors, have been considered up to March 31, 2023.

We have been appointed by IHCT to undertake valuation of InvIT assets and calculation of NAV of the Trust as on March 31, 2023. This Report should not be used or relied upon for any other purpose.

In terms of the SEBI InvIT Regulations, we hereby confirm and declare that:

- BDO Valuation Advisory LLP was incorporated on January 7, 2019, however the signing partners of BDO Valuation Advisory LLP have more than five years of experience in the valuation of infrastructure assets and accordingly, BDO Valuation Advisory LLP satisfies all requirements of section 247 of the Companies Act, 2013 as required under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended or supplemented, including any guidelines, circulars, notifications and clarifications framed or issued thereunder (the "SEBI InvIT Regulations");
- We are competent to undertake the valuation;
- We are independent and have prepared this Report on a fair and unbiased basis;
- This Report is prepared in compliance with regulation 13(1) and regulation 21 of the SEBI InvIT Regulations; and
- We comply with the responsibilities as stated in regulation 13(1) and regulation 21 of the SEBI InvIT Regulations.

We further confirm that the valuation of InvIT Assets is carried out as per internationally accepted valuation methodologies and in cognizance of international valuation standards and Valuation Standards 2018 issued by the Institute of Chartered Accountants of India / ICAI Registered Valuers Organisation.

We have no present or planned future interest in the SPVs, the Investment Manager, the Sponsor or the Trustee, except to the extent of our appointment as an independent valuer for this Report.

A summary of the analysis is presented in the accompanying Report, as well as description of the methodology and procedure used, and the factors considered in formulating our opinion. The Report is subject to the attached exclusions and limitations and to all terms and conditions provided in the engagement letter for this assignment.

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This valuation report is based on the information provided to us by the Management of the Investment Manager/Trust ("**Management**"). The projections provided by the Management, based on independent traffic and technical studies, are only the best estimates of growth and sustainability of revenue and cash flows. We have reviewed the financial forecast for consistency and reasonableness; however, we have not independently verified the data provided.

Regards,

BDO Valuation Advisory LLP
IBBI Regn No.: IBBI/RV-E/02/2019/103

Lata Gujar More
Partner & Leader - Valuation
IBBI Regn No: IBBI/RV/06/2018/10488
VRN No: IOVRVF/BDO/2023-2024/1980

Encl: As above

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Table of Contents

1. Definitions, abbreviations & glossary of terms

BOT	Build, Operate and Transfer
BDO Val	BDO Valuation Advisory LLP
BE	Budgeted Estimate
BRNL	Bharat Road Network Limited
BV	Break Up Value
CA	Concession Agreement
CAGR	Compounded Annual Growth Rate
CCM	Comparable Companies Multiple
COD	Commercial Operation Date
CTM	Comparable Transaction Multiple
D/E ratio	Debt-Equity ratio
DBFOT	Design, Build, Finance, Operate and Transfer
DCF	Discounted Cash Flow
DE	Debt-Equity
EBIT	Earnings before interest and tax
EBITDA	Earnings Before interest, taxes and depreciation and amortization
EPC	Engineering, Procurement and Construction
EqV	Equity Value
ETC	Electronic Toll Collection
EV	Enterprise value
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flows to Firm
FY	Financial Year ending 31st March
GDP	Gross Domestic Product
INR	Indian Rupees
Investment Manager or IM	Maple Infra InvIT Investment Manager Private Limited
InvIT	Infrastructure Investment Trust
InvIT Assets	Shree Jagannath Expressway Private Limited and NCR Eastern Peripheral Expressway Private Limited
IRR	Internal rate of return
Km	Kilometer
MAT	Minimum Alternative Tax
the Sponsor	Maple Highways Pte. Ltd.
Mn	Million
MoRTH	Ministry of Road Transport & Highways
NAV	Net Asset Value
NBL	Nirmal BOT Limited
NCLT	National Company Law Tribunal
NEPEPL	NCR Eastern Peripheral Expressway Private Limited
NH	National Highway
NHAI	National Highways Authority of India

PAT	Profit After Tax
PBT	Profit Before Tax
PCU	Passenger Car Equivalent
PPP	Public Private Partnership
RE	Real Estimate
SEBI InvIT Regulations	Securities Exchange Board of India (Infrastructure Investment Trust Regulations, 2014)
SJEPL Project Road	Six lane stretch of 67.0 Kms on Chandikhole-Bhubaneshwar Section NH-16 (Old MH-5)
SJEPL	Shree Jagannath Expressway Private Limited
SH	State Highway
SPV	Special Purpose Vehicle
the Management	The management of the Investment Manager/the Trust
the Trust or IHCT	Indian Highway Concessions Trust
Valuation Date	March 31, 2023
WACC	Weighted Average Cost of Capital
WPI	Wholesale Price Index

2. Executive Summary

2.1 Brief Background and Purpose of Valuation

2.1.1 Indian Highway Concessions Trust ("the Trust") is a trust registered with the Securities and Exchange Board of India as an infrastructure investment trust under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014. The registration number of the Trust is No.IN/lnvlT/19-20/0013. Axis Trustee Services Limited is the Trustee of the Trust.

2.1.2 The main object of the Trust is to carry on the activity of an infrastructure investment trust, as permissible under the SEBI InvIT Regulations, namely, to raise resources and to make investments in accordance with the SEBI InvIT Regulations and such other incidental and ancillary matters thereto.

2.1.3 The Trust is managed by Maple Infra InvIT Investment Manager Private Limited **("Investment Manager")**. The project manager is Maple Highway Project Manager Private Limited **("Project Manager")**. The Sponsor of the Trust is Maple Highways Pte. Ltd. **("the Sponsor")**.

2.1.4 Maple Highways Pte Ltd. **("the Sponsor")** is a private limited company incorporated on April 5, 2019 under the Companies Act of Singapore and has its registered office and principal place of business at One Raffles Quay, #39-01 North Tower, Singapore 048583. It is a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of Caisse de dépôt et de placement du Québec ("CDPQ"). CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans.

2.1.5 As per SEBI InvIT regulations, InvIT requires valuation report from independent valuer, hence we have been appointed by IHCT to undertake valuation of InvIT Assets and calculation of NAV of the Trust as on March 31, 2023 **("Purpose")**.

2.1.6 The Trust has appointed BDO VAL to undertake the enterprise valuation of the InvIT Assets as per the requirements of Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014 and amendments thereto including any circulars and guidelines issued thereunder ("SEBI InvIT Regulations"). In addition to above, the Trust has also requested BDO to calculate the NAV of the Trust.

2.1.7 The Trust has provided us with the Balance Sheet of the Trust and the InVIT Assets as at March 31, 2023, the Trust has requested us to consider the investment in InVIT Assets for arriving at the NAV of the Trust. For the acquisition of SJEPL and NEPEPL, the trust has issued 352.2 Mn units of INR 100 each amounting to INR 35,217.0 Mn.

2.2 Valuation Methodology Adopted

2.2.1 Considering the nature of the business and facts of the assignment, the InvIT Assets have been valued using Discounted Cash Flow ("**DCF**") Method under Income Approach. Free Cash Flow to Firm ("**FCFF**") model under the DCF Method is used to arrive at the enterprise value of InvIT Assets. Further, the value of the SPVs would be reflected in its future earnings potential of the SPVs.

2.2.2 The Calculation of the NAV of the Trust has been arrived considering Net Asset Value ("NAV") method.

2.3 Valuation Conclusion

2.3.1 The enterprise value of SJEPL and NEPEPL is 24,299.4 Mn and 74,011.9 Mn respectively as on March 31, 2023. The NAV per unit of the Trust is arrived at INR 141.5.

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3. Introduction

3.1 Terms of Engagement

3.1.1 We, BDO Valuation Advisory LLP, Registered Valuer vide Registration Number IBBI/RV-E/02/2019/103, have been appointed by Indian Highway Concessions Trust ("Trust"), to determine the enterprise value of InvIT Assets on a going concern basis as per SEBI InvIT Regulations and to determine the NAV Value of the Trust.

3.1.2 This Report has been prepared pursuant to terms of engagement letter between BDO Val and the Trust dated February 10, 2023 including the terms and conditions set out therein.

3.2 Background and Purpose of Valuation

3.2.1 Indian Highway Concessions Trust ("**the Trust**") is a trust registered with the Securities and Exchange Board of India as an infrastructure investment trust under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014. The registration number of the Trust is No.IN/lnvlT/19-20/0013. Axis Trustee Services Limited is the Trustee of the Trust.

3.2.2 The main object of the Trust is to carry on the activity of an infrastructure investment trust, as permissible under the SEBI InvIT Regulations, namely, to raise resources and to make investments in accordance with the SEBI InvIT Regulations and such other incidental and ancillary matters thereto.

3.2.3 Maple Infra InvIT Investment Manager Private Limited **("Investment Manager")** is the investment manager of the Trust. The project manager is Maple Highway Project Manager Private Limited **("Project Manager").** The Sponsor of the Trust is Maple Highways Pte. Ltd. **("the Sponsor").**

3.2.4 Maple Highways Pte Ltd. **("the Sponsor")** is a private limited company incorporated on April 5, 2019 under the Companies Act of Singapore and has its registered office and principal place of business at One Raffles Quay, #39-01 North Tower, Singapore 048583. It is a wholly owned subsidiary of CDPQ Infrastructures Asia Pte. Ltd., which in turn is a wholly owned subsidiary of Caisse de dépôt et de placement du Québec ("CDPQ"). CDPQ is a long-term institutional investor that manages funds of its depositors, primarily Québec's public and para-public pension and insurance plans.

3.2.5 As per SEBI InvIT regulations, InvIT requires valuation report from independent valuer, hence we have been appointed by IHCT to undertake valuation of InvIT Assets and calculation of NAV of the Trust as on March 31, 2023 **("Purpose").**

3.2.6 This Report should not be used or relied upon for any other purpose. The suitability or applicability of this Report for any purpose other than that mentioned above has not been verified by us.

3.3 Sources of Information

3.3.1 For the purpose of this valuation exercise, we have relied on the following sources of information:

i. SPV specific information – The following SPV information as provided by the Management, verbally or in written form have been inter alia used in valuation:

a) Provisional Financial Statements of the SPVs for the period ended March 31, 2023;

b) Projected profit & loss statement, balance sheet and cash flow statement of the SPVs from April 1, 2023 to the Concession end date;

c) Concession Agreements entered with NHAI for the SPVs;

d) Technical Due Diligence/Technical Advisory Services Reports issued by independent consultant for the SPVs dated May 2023;

e) Traffic Study Reports issued by independent consultant dated May 2023;

f) List of one-time sanctions/approvals which are obtained or pending for the SPVs; and

g) On-going material litigations including tax litigations in relation to the SPVs.

ii. Data points from Crisil Draft Report dated May 2023 ("Crisil Report"), titled "An assessment of the roads sector in India".

iii. Other relevant data and information provided by the management and representatives of the Investment Manager either in written or oral form or in form of soft copy.

iv. Other industry related information available in public domain and international databases.

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4. Exclusions and Limitations

4.1 Restricted Audience:

4.1.1 This Report and the information contained herein are absolutely confidential and are intended for the presentation to the investors.

4.1.2 It should not be copied, disclosed, circulated, quoted or referred to, either in whole or in part, in correspondence or in discussion with any other person except to whom it is issued without the written consent of the Valuer. It can however be relied upon and disclosed in connection with any statutory and regulatory filing in connection with the proposed transaction in accordance with the provision of SEBI InvIT Regulations. In the event the Investment Manager or its management, the Sponsor, the Trust extend the use of the report beyond the purpose mentioned earlier in the report, with or without the consent of the Valuer, the Valuer will not accept any responsibility to any other party (including but not limited to the Investors) to whom this report may be shown or who may acquire a copy of the report.

4.1.3 It is clarified that this Report is not a fairness opinion under any of the stock exchange / listing regulations. In case of any third-party having access to this Report, please note that this Report is not a substitute for the third party's own due diligence / appraisal / enquiries / independent advice that the third party should undertake for its purpose.

4.2 Limitation Clause:

4.2.1 The Report is subject to the limitations detailed hereinafter. This Report is to be read in totality, and not in parts, in conjunction with the relevant documents referred to therein.

4.2.2 The scope of the assignment did not include performing audit tests for the purpose of expressing an opinion on the fairness or accuracy of any financial or analytical information that was used during the course of the work. Further, conducting a financial or technical feasibility study was also not covered.

4.2.3 During the course of our work, we have relied upon assumptions and projections as provided by Management. These assumptions require exercise of judgment and are subject to uncertainties. Also, we have relied on the technical due diligence and traffic due diligence report referred in para 3.3 of the Report.

4.2.4 Further, this Report is based on the extant regulatory environment and the financial, economic, monetary and business/market conditions, and the information made available to us or used by us up to, the date hereof, which are dynamic in nature and may change in future, thereby impacting the valuation of SPV. Subsequent developments in the aforementioned conditions may affect this Report and the assumptions made in preparing this Report and we shall not be obliged to update, review or reaffirm this Report if the information provided to us changes. The information presented in this valuation Report does not reflect the outcome of any due diligence procedures, which may change the information contained herein and, therefore, the valuation Report materially.

4.2.5 Valuation is not a precise science and the conclusions arrived at in many cases will of necessity be subjective and dependent on the exercise of individual judgment as the valuation analysis is governed by the concept of materiality. There is therefore no indisputable single value. While we have provided an assessment of the value based on an analysis of information available to us and within the scope of our engagement, others may place a different value on the businesses.

4.2.6 Valuation is based on estimates of future financial performance or opinions, which represent reasonable expectations at a particular point in time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, a particular event will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by the prospective financial analysis will vary from these estimates and the variations may be material.

4.2.7 The realization of these projections is dependent on the continuing validity of the assumptions on which they are based. Since the projections relate to the future, actual results are likely to be different from the projected results in case of events and circumstances not occurring as projected and the differences may be material. Our work did not constitute a validation of the financial projections of the financial projections of the Trust and the SPVs under consideration and accordingly, we do not express any opinion on the same. We have not commented on the appropriateness of or independently verified the assumptions or information provided to us, for arriving at the financial projections. Further, while we have discussed the assumptions and projections with the Management, our reliance on them for the purpose of valuation should not be construed as an assurance about the accuracy of the assumptions or the achievability of the financial projections.

4.2.8 This Report is based on information received from sources mentioned herein and discussions with the Management. This information has not been independently verified by us. We have assumed that the parties involved have furnished to us all information, which they are aware of concerning the financial statements and respective liabilities, which may have an impact on our Report. We have ignored some data provided to us which we believe may not be material for the purpose of our assignment.

4.2.9 We have not done any independent technical valuation or appraisal or due diligence of the assets or liabilities of the SPVs or any of other entity mentioned in this Report and have considered them at the value as disclosed by the Sponsor in their regulatory filings or in submissions, oral or written, made to us. Nothing has come to our knowledge to indicate that the material provided to us was misstated or incorrect or would not afford reasonable grounds upon which to base our Report.

4.2.10 We have not made any independent verification with respect to the title of assets or property for the purpose of this valuation. We have solely relied on representations, whether verbal or otherwise, made by the Management to us for the purpose of this Report.

4.2.11 For the present valuation analysis exercise, we have relied upon information available in the public domain; however, the accuracy and timeliness of the same has not been independently verified. Further, the Valuer has not verified the information in the Crisil report, or any other publicly available information cited in this Report.

4.2.12 In the particular circumstances of this case, the Valuer shall be liable only to the Sponsor, the Trust and the Investment Manager. The Valuer shall have no liability (in contract or under statute or otherwise) to any other party for any economic loss or damage arising out of or in connection with this engagement, however the loss or damage is caused other than in cases of fraud, gross negligence or willful misconduct, or on account of any natural calamities, shall be limited to the amount of fees actually received by us as laid out in the engagement letter, for such valuation work.

4.2.13 Whilst, all reasonable care has been taken to ensure that facts stated in the Report are accurate and opinions given are fair and reasonable, neither us, nor any of our Partners or Employees shall in any way be responsible for the contents stated herein. Accordingly, we make no representation or warranty, express or implied, in respect of the completeness, authenticity or accuracy of such statements. We expressly disclaim any and all liabilities, which may arise based upon the information used in this Report.

4.2.14 This Report does not look into the business / commercial reasons behind any Proposed Transaction or Issue nor the likely benefits arising out of the same. Similarly, it does not address the relative merits of investing in InvIT as compared with any other alternative business transaction, or other alternatives, or whether or not such alternatives could be achieved or are available. The assessment of commercial and investment merits of the Trust are sole responsibility of the investors of the Trust and we do not express any opinion on the suitability or otherwise of entering into any financial or other transactions with the Investment Manager, the Trust or the Sponsor.

4.2.15 We are not an advisor with respect to legal, tax and regulatory matters. No investigation of the SPVs' claim to title or assets has been made for the purpose of this Report and the SPVs' claim to such rights have been assumed to be valid. No consideration has been given to liens or encumbrances against the assets, beyond the loans disclosed in the accounts. Therefore, no responsibility is assumed for matters of a legal nature.

4.2.16 Except to the extent required under the SEBI InvIT Regulations, we are not responsible for matters of legal nature including issues of legal title and compliance with local laws in respect of the SPVs and also no consideration has been given to litigation and other contingent liabilities that are not recorded in the financial of the SPVs or disclosed otherwise in other documents related to the InvIT issue.

4.2.17 The estimate of value contained herein are not intended to represent value of the SPVs at any time other than the dates specifically mentioned for each valuation result, as per the agreed scope of engagement and as required under the SEBI InvIT Regulations.

4.2.18 The fee for the Report is not contingent upon the outcome of the Report.

4.2.19 In rendering this Report, we have not provided any legal, regulatory, tax, accounting, actuarial advice and accordingly we do not assume any responsibility or liability in respect thereof.

4.2.20 It may be noted that a draft of this Report (without valuation numbers) was provided to the Management to review the factual information in the Report as part of our standard practice to make sure that factual inaccuracies/ omissions are avoided in our final Report.

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5. Assignment Approach

The overall approach that has been followed to arrive at enterprise value of SPVs is summarized below:

i. Submission of detailed information checklist for valuation of the InvIT Assets;

ii. Review of the information provided to us as per the checklist for initial understanding of the business followed by preliminary discussion with the Management to gain insight on the business operations and brief background of SPVs;

iii. Analysis of additional information received post preliminary discussion. We had several meetings with the Management to discuss the business model, assumptions considered and future business outlook;

iv. Obtained various disclosures from the Management pertaining to approvals and litigations of the SPVs as required under the SEBI InvIT Regulations; and

v. The valuation of InvIT Assets is carried out as per internationally accepted valuation methodologies and in cognizance of international valuation standards and Valuation Standards 2018 issued by the Institute of Chartered Accountants of India / ICAI Registered Valuers Organisation.

vi. After arriving at the Enterprise Valuation of the InVIT Assets, NAV Value of the Trust has been determined using the NAV Method.

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6. Overview of the InvIT Assets and the Trust

Shree Jagannath Expressway Private Limited ("SJEPL")

6.1.1 Shree Jagannath Expressway Private Limited operates a 6-lane road infrastructure project on National Highway-16 (Old NH-5) from Chandikhole to Bhubaneswar section (Km 413 to Km 418 & from 0 to Km 62) in the state of Odisha. SJEPL has been awarded the project on Design, Built, Finance, Operate and Transfer ("DBFOT") basis.

6.1.2 The project was awarded by the NHAI for a Concession Period of 26 years starting from Appointed Date on December 14, 2011.

Source: The management of the Investment Manager

Site Photographs

6.1.3 The key details of SJEPL are as follows:

Particulars	SJEPL
Project Name	Six Laning of Chandikhole-Bhubaneshwar Section NH-16 (Old MH-5)
Name of Concessionaire	Shree Jagannath Expressway Private Limited
State	Odisha
NH/SH	NH-16 (Old NH-5)
PPP mode	Design, Build, Finance, Operate and Transfer (DBFOT) basis
Execution of CA	August 6, 2010
Appointed date	December 14, 2011
Provisional COD I	January 12, 2017
Scheduled Concession End Date	December 13, 2037
Original Concession period	26 years
Tollable Length (km)	67.0 Kms including structures (13 major bridges, 27 minor bridges,
Toll Plaza	1 Toll Plaza at Km 34+624

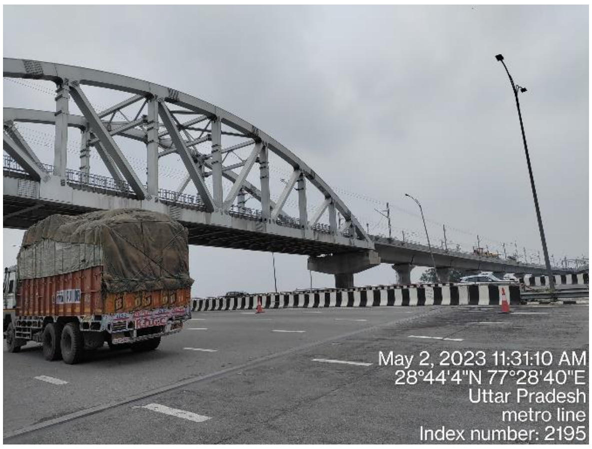
NCR Eastern Peripheral Expressway Private Limited (“NEPEPL”)

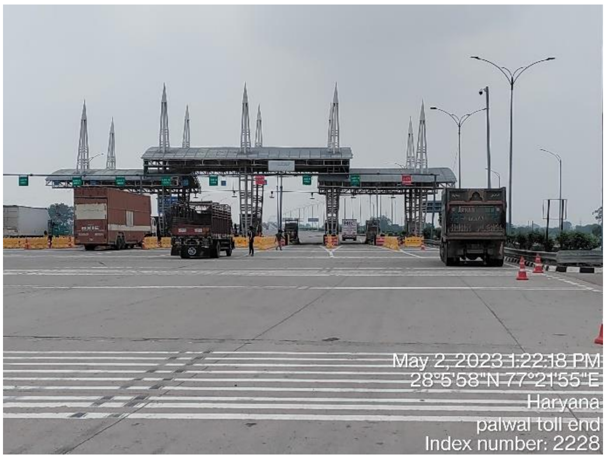
6.1.4 NCR Eastern Peripheral Expressway Private Limited proposes to operate a 6-lane divided Project Highway Stretch starting at Km 1+000 after Cloverleaf interchange at Km 0+000 from Junction of NH-1 (starting at 1.000 km distance from Km. 36.083 of NH-1) near Kundli Village at Sonipat district and ends at Km 136+000 after Cloverleaf Junction with NH-2 (Ending at 1.0 Km distance from Km 64+330 of NH-2 (New NH-44) on the outskirts of Palwal town while traversing through the State of Haryana and Uttar Pradesh.

6.1.5 The project was awarded by the NHAI for a Concession Period of 20 years starting from Appointed Date on November 11, 2022.

Source: Technical Diligence Report

Site Photographs





6.1.6 The key details of SPV are as follows:

Particulars	
Project Name	NCR Eastern Peripheral Expressway Limited
Name of Concessionaire	CDPQ
State	Uttar Pradesh and Haryana (National Capital Region)
NH/SH	NE-2
PPP mode	Toll, Operate and Transfer
Execution of CA	May 2, 2022
Appointed Date	November 11, 2022
COD Date	November 11, 2022
Original Concession period	20 years
Tollable Length (km)	135.0 Km
Toll Plaza	9 Toll Plaza Currently (3 more will be added in due course during concession period)

Indian Highway Concessions Trust ("the Trust")

6.1.7 Indian Highway Concessions Trust ("the Trust") is a trust registered with the Securities and Exchange Board of India as an infrastructure investment trust under the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014. The registration number of the Trust is No.IN/lnvlT/19-20/0013. Axis Trustee Services Limited is the Trustee of the Trust.

6.1.8 The main object of the Trust is to carry on the activity of an infrastructure investment trust, as permissible under the SEBI InvIT Regulations, namely, to raise resources and to make investments in accordance with the SEBI InvIT Regulations and such other incidental and ancillary matters thereto.

6.1.9 The Management of the Trust has provided the Provisional Balance Sheet of the Trust as on March 31, 2023.

Particulars	*INR Mn.*
Non-Current Investments	10,098.37
Loans and Advances	20,871.19
Cash and cash equivalent	4,007.82
Other current assets	1,498.10
Total current assets	**5,505.9**
Total assets	**36,475.5**
Unit capital	35,178.7
Other equity	1,089.1
Total Unit Holder's Equity	**36,267.8**
Borrowings	
Trade payables	193.4
Other current liabilities	14.3
Total current liabilities	**207.7**
Total equity and liabilities	**36,475.5**

6.1.10 The Trust has provided us with the Balance Sheet of the Trust and the InVIT Asset as at March 31, 2023. For the acquisition of SJEPL and NEPEPL, the trust has issued 352.2 Mn units of INR 100 each amounting to INR 35,217.0 Mn.

6.1.11 Shareholding Pattern of the Trust post issue of units for acquisition of SJEPL and NEPEPL

Name of Shareholder	No of Units Held	Stake %
CDPQ INFRASTRUCTURES ASIA III INC.	211,302,000	60.0%
MAPLE HIGHWAYS PTE. LTD.	52,825,500	15.0%
IIFL	64,503,700	18.3%
FAMY STERI PVT LIMITED	11,000,000	3.1%
Other Investors	12,538,800	3.6%
Total	**352,170,000**	**100.0%**

6.1.12 For disclosure on litigations please refer Annexure VI.

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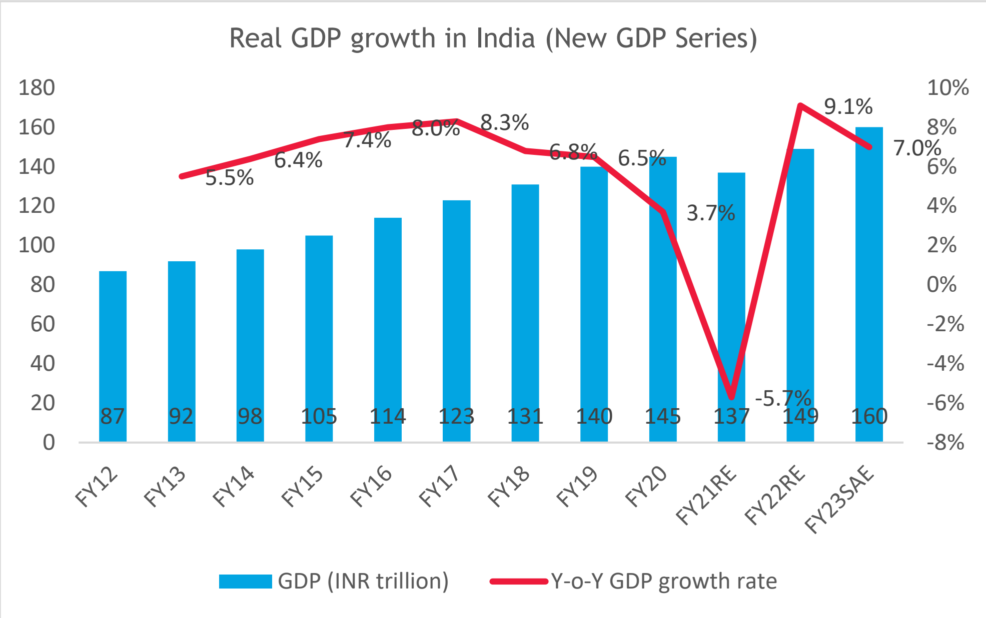
7. Industry Overview

The data points in this section is derived from the report "An assessment of the roads sector in India", May 2023 (the "CRISIL Report"), prepared by CRISIL Research, a division of CRISIL Limited (CRISIL), except for other publicly available information as cited in this section. The Sponsor commissioned the CRISIL Report for the purposes of confirming the understanding of the industry in connection with the Offer.

7.1 Overview of Indian Economy

7.1.1 India's GDP has increased from INR 87.4 trillion in FY2012 to INR 159.7 trillion in FY2023. India's GDP stood at INR 137.0 trillion in FY2021 below the fiscal 2019 level of INR 140.0 trillion.



Note: RE: Revised estimate, SAE: Second advance estimate

Source: Crisil Report

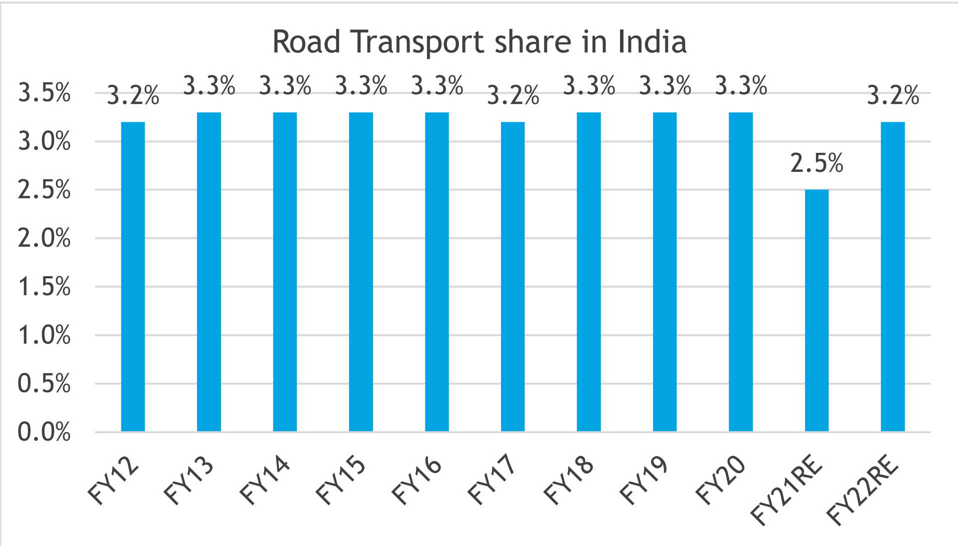
7.2 Roads infrastructure in India

India has the second-largest road network in the world, spanning 6.331 million km as of fiscal 2023. Road transportation, the most frequently used mode of transportation in India, accounted for ~86% of passenger traffic and close to ~64% of freight traffic as of fiscal 2022. Although national highways span nearly 144,955 km, constituting just 2% of road length, they accounted for about 40% of total road traffic in fiscal 2022. Secondary road system comprises state roads and major district roads, which accounted for the remaining 60% of traffic and 98% of road length.

Road Network	Length ('000Km)	% of total length	% of total traffic	Connectivity to
National Highways	145.0	2%	40%	Union capital, state capitals, major ports, foreign highways
State Highways	167.1	3%	60%	Major centres within the states, national highways
Other Roads	6,019.8	95%		Major and other district roads, rural roads - production centres, markets, highways, railway stations

7.2.1 Road sector's contribution to Indian GDP:

- Road transport is the dominant mode of transportation in terms of its contribution to Gross Value Added (GVA).
- The road transport sector's share in Indian GDP stood at 3.2% in fiscal 2022. The share of road transport in India's GDP has hovered around 3.3% from fiscals 2012 to 2023.



Note: RE: Revised estimate

Source: Crisil Report

7.3 Overview of PPP framework and models in operations

The Department of Economic Affairs (DEA) defines PPPs as:
"PPP is an arrangement between a government/ statutory entity/ government-owned entity and a private sector entity for the provision of public assets and/or public services, through investments being made and/or management being undertaken by the private sector entity, for a specified period of time. There is a well-defined allocation of risk between the private sector and the public entity in this arrangement. The private entity receives performance-linked payments that confirm with (or are benchmarked to) specified and pre-determined performance standards, measurable by the public entity or its representative".

7.3.1 **Some PPP models in Road Infrastructure are as follows:**

i. BOT-toll/-annuity/-hybrid annuity model (HAM) -These contracts are typically PPP agreements wherein a government agency provides a private player the rights to build, operate and maintain a facility on public land for a fixed period, after which assets are transferred back to the public authority. BOT contracts are, therefore, classified into the three types: Annuity-based Contract, Toll-based and HAM based.

ii. Toll collection - Under this model, the authority invites bids from private players to collect toll on roads constructed under EPC and BOT-annuity. It is used for short-duration projects, typically those lasting 12 months. The private player with the highest bid is awarded the project. The user fee is pre-determined by the contracting authority. The right to collect user fees during the concession period lies with the private player. A contract of this category involves negligible to minimal road construction and maintenance.

iii. EPC – EPC contracts are fixed-price contracts, wherein the client provides conceptual information about the project. Technical parameters, based on the desired output, are specified in the contract.

iv. Operate, maintain and transfer (OMT) – The OMT concept was introduced to assure road users of adequate quality and safety. An OMT project entails a contract for the right to collect toll and a contract for the operation and maintenance of the stretch.

v. Toll operate and transfer (TOT) – TOT model is a new PPP model under consideration by the NHAI to spur private participation in the roads sector. In this model, globally, the concessionaire pays a one-time concession fee upfront (lump sum) in the operations and tolling phase. The TOT concessionaire will then be allowed to operate and toll the project stretch for the concession period. Any capital improvement required may be taken up by the concessionaire as a part of the agreement in the TOT model.

Types of PPP models:

Type of project	Description	Development risk	Financing risk	Traffic risk and accrual of toll fee collection	Net cash outflow for the government	Revenue for private party	Concession period	Award criteria
BOT-toll	Private party builds road, undertakes O&M and collects toll	Concessionaire	Concessionaire	Concessionaire	Yes (In form of grant/equity support)	Toll	Around 20-30 years for the NHAI** and other authorities	Highest revenue sharing bid / highest premium/lowest equity support
BOT-annuity	Private party builds road, undertakes O&M* and collects annuity from the granting authority	Concessionaire	Concessionaire	Authority	Yes, net payment to be made is the difference between the toll collection and the annuity payable	Annuity payment	Around 20-25 years for NHAI and other authorities	Lowest annuity
BOT-HAM	Private party builds road, undertakes O&M. Gets 40% of payment during construction and 60% as annuity alongwith interest	Concessionaire	Concessionaire	Authority	40% during construction and 60% as semi-annual annuity alongwith interest, net of toll collected	Construction grant plus annuity payments, interest on annuities, inflation indexed O&M payments	Around 15 years of operations plus additional construction period	Lowest project cost plus O&M cost
EPC	Private party builds road, based on the cost incurred by the government	Concessionaire	Authority	Authority	Yes	Contract amount	Not required	Lowest contract price requested
OMT	Private party collects toll and undertakes O&M and Major Maintenance	No development risk except minimal risk in case of paved shoulders	Concessionaire	Concessionaire	No	Toll	Upto nine years for NHAI projects	Highest % of toll revenue share or highest premium per year
Tolling	Private party pays the estimated toll upfront to the authority and collects the toll during concession period	No development	Concessionaire	Concessionaire	No	Toll	Around one year for NHAI projects	Highest revenue-sharing bid
TOT	Private party pays an upfront Bid Concession Fee (summation of NPV of free cash flows basis concessionaire estimates) to the authority, undertakes O&M plus certain capex and collects the toll during concession period	Authority (in case upgradation of lanes is taken up during the concession period)	Concessionaire	Concessionaire	Yes	Toll	15, 20, 30 Years#	Highest Upfront Payment

Note: Development risk refers to construction risk in developing a road project

*** National Highways Authority of India*

**Operations & Maintenance*

#As per TOT bundles of NHAI in 2021-22

Source: Crisil Report

7.3.2 Electronic toll collection ("ETC") is a strategic focus area for regulatory and administrative bodies involved in the process of toll collection. It presents several advantages such as limiting toll leakages, reducing waiting time for vehicles, and improving overall traffic flow at toll plazas. In the future, this may result in significant changes in toll collection operating procedures, followed in each of the PPP models.

7.4 Key challenges faced by road sector in India

Given the share of roads in the overall transport of goods and passenger traffic, it is critical to develop the roads sector. Although the government has been continuously making efforts to give a fillip to the sector, several issues and challenges hamper the pace of development.

In order to improve private participation via the BOT-toll mode, NHAI and the ministry introduced changes to the BOT MCA, aimed at addressing key issues such as land acquisition, revenue assessment in case of traffic shortfall and stuck projects. Key amendments to the MCA are as below:

i. Land acquisition:
  - Minimum 90% right of way before issue of appointed date as against 80% earlier, providing more comfort to lenders and developers.
  - Balance 10% to be granted within 180 days of appointed date, else it would be removed from the scope of work. Automatic de-scoping clause would enable the developer to receive PCOD/COD on the completed stretch and start tolling
  - Termination clause if appointed date is not received within one year of concession signing date

ii. Traffic risk: Revenue assessment of project to be done every five years instead of 10 years (or once in a life time of a project) earlier. In case of traffic either exceeding or seeing a shortfall from the target traffic, the concession period would be adjusted accordingly, providing more comfort to lenders and developers .

iii. Stuck projects: In case the project has not achieved COD one year post its scheduled completion date, the project will be mutually foreclosed, and the authority will pay the concessionaire an amount equal or lower of:
  - 90% of the debt due less insurance cover and
  - Value of work done

iv. Subdued private participation due to limited financial flexibility witnessing strong revival: Funding constraints and financial stress have thwarted the pace of development in the roads sector. The PPP model for road construction and development acted as a catalyst and provided an impetus to the sector's growth. In fiscal 2008-12 of the total 10,600 km of national highways completed under the National Highways Development Programme, 50% was funded through the BOT (build-operate-transfer)-toll model and 10% through the BOT-annuity model. The rise of PPP in the road sector has also had some adverse effects. Period of 2007 to 2011 was considered to be the golden age for PPP in the road sector, wherein the road developers bid aggressively to bag more BOT-toll projects.

v. In the subsequent years, developers faced viability issues with the projects. Issues pertaining to subdued financing, lower traffic, high gearing ratio and delayed execution have stressed their balance sheets. Bidders for PPP toll projects have become limited on account of the said issues. This led to rise in EPC contracts but the quality of the roads constructed has been usually poor as the EPC contractor has no stake in the roads once these are constructed and handed over to the government. Further, maintenance of the roads has been poor after handover to the government, since there is no proper accountability on quality in the case of state-owned roads. In case of PPP projects, the developer ensures that the roads are in a good condition for a longer period of time, i.e., the concession period. In the recent years, the private participation has revived with the introduction of HAM model in 2016 and the subsequent favourable changes to the concession agreements in 2020 for the HAM and BOT model.

vi. Delays in project execution and resultant cost overruns: Delays in project execution have posed one of the major hurdles in the development of the road sector. Delays lead to significant cost overruns which lower returns for developers as well as adversely affect their debt-servicing ability. Reasons for the delays are numerous and include:
   1. Issues in Land Acquisition
   2. Environmental Clearances
   3. Forest Clearances
   4. Railway Clearances
   5. Shifting of utilities, religious structures and encroachments

   It is observed that the duration of delay and project cost escalation is on the higher side for projects involving interstate road construction owing to the involvement of different state agencies. In view of these issues, NHAI is working towards fast-track resolution and hence it has adopted Conciliation Committees which targets to settle arbitration disputes within a period of 18-20 months (Arbitration Act - amendment in 2019). As per the April 2022 press release, 251 cases have been referred to CCIE and claims worth Rs, 387.4 billion have been settled for an amount of Rs. 130.6 billion.

vii. Hurdles in bank funding for road projects: Banks are reluctant to fund road sector projects as they are approaching the sector exposure limits. Moreover, to ensure delays on account of land acquisition do not hinder the progress of a project, they demand 80-100% of the land to be available with the developer at the time the project is awarded. Given the dependence of infrastructure projects on banks for funding, the projects are not able to take off owing to such funding constraints.

viii. Moreover, the elongated working capital cycle in the core construction businesses of many entities has also strained their liquidity position and further increased their dependence on borrowed funds. The operating margin of several road contractors also witnessed pressure because of rising commodity prices (in case of fixed-price contracts) and idling of capacities since execution could not begin on many new projects.

ix. Reluctance to Pay Toll: The Indian population has not yet completely accepted the importance of toll for road construction and improvement of service delivery. Also, appeasement of people through provision of subsidies has been a major tool for reaping political gains in the country. There have been several instances of people, backed by various political groups, opposing toll plazas. Such instances have not only affected the sentiment of road developers but have service delivery within the sector.

7.5 Key policy measure to boost private participation

In order to encourage and facilitate private sector investment and participation in the roads sector, the central government via its respective authorities has undertaken certain policy measures and provided certain fiscal incentives within the sector. The most significant policy reforms in recent times are discussed below:

i. Right of way:
   - Deadline reduced from 240 days to 180 days for approval/ clearances for area under forest or sanctuary.
   - If appointed date is not received within 90 days of signing the agreement, contract may be terminated. Authority will pay contractor damages = 1% of the contract price to contractor for each day of delay.
   - If project is not completed within 90 days of scheduled completion date, contractor would be ineligible to bid for future projects till it is completed.
   - Lower compensation and longer tenure for maintenance obligations of contractor. Defect liability period increased from 4 years to 10 years.
   - Higher interest on mobilization advance paid to authority. Earlier recovery of mobilization advance by the authority. Release of retention money against bank guarantees discontinued.

ii. Introduction of Hybrid Annuity Model (HAM):
   - to reduce construction risk with land acquisition and other clearances already in place on appointed date;
   - to entice private players and bankers in the sector by lowering capital requirements and other risks; and
   - assured cash inflows to lenders as traffic risk will entirely be borne by the government.

iii. Model Concession Agreement (MCA) forms the core of public private partnership (PPP) projects in India. The MCA spells out the policy and regulatory framework for implementation of a PPP project. The key amendments made to MCA were back-ending of premium payment, redefinition of project milestones, lenders receive first charge on all receivables, deemed termination of projects, maintenance obligations, and toll fee notifications.

iv. Exit Policy was introduced in 2015 by the Cabinet Committee on Economic Affairs (CCEA) which allows 100% equity divestment in projects after two years of completion for all BOT projects, irrespective of year of award and the proceeds can be used to complete any highway projects, any power sector projects or to retire debt in any other infrastructure projects.

v. On May 13, 2015, the CCEA permitted NHAI to infuse funds in projects stuck in advanced stages of completion which will give NHAI first charge on toll revenue.

vi. In March 2014, premium rescheduling was announced for projects with delays or lower-than-expected traffic. This helped players manage cash flow mismatches, especially at a time when loan tenures were significantly lower than the project life, resulting in cash flow issues. It also helped specifically in the case of aggressively bid projects where premium payments amounted to a very large portion of the total cost.

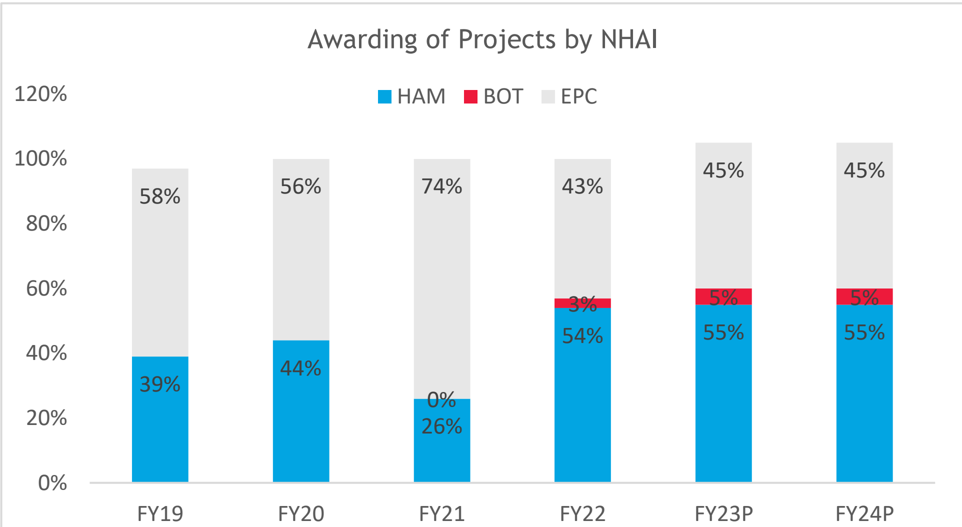
vii. In January 2014, the CCEA approved the proposal to facilitate the substitution of concessioners in ongoing and completed national highway projects. As per the proposal, existing concessioners are permitted to divest their equity in totality in on-going or completed projects. However, subsequent to the substitution, the leading substituting entity will be required to maintain at least 51% equity holding in the project SPV. The decision to permit substitution will be taken by lenders in consent with the NHAI.

viii. In August 2016, the ministry introduced a policy with regard to the payment of 75% of arbitration claims to the concessionaires. According to the policy, if an arbitration claim has been awarded in favour of a private concessionaire in a lower court/tribunal and the government agency has appealed against it in a higher court/tribunal, then the private player can receive 75% of the claimed amount. It will have to provide the authorities a bank guarantee of an equivalent amount to the government agency.

7.6 National Highways Development Project (NHDP)

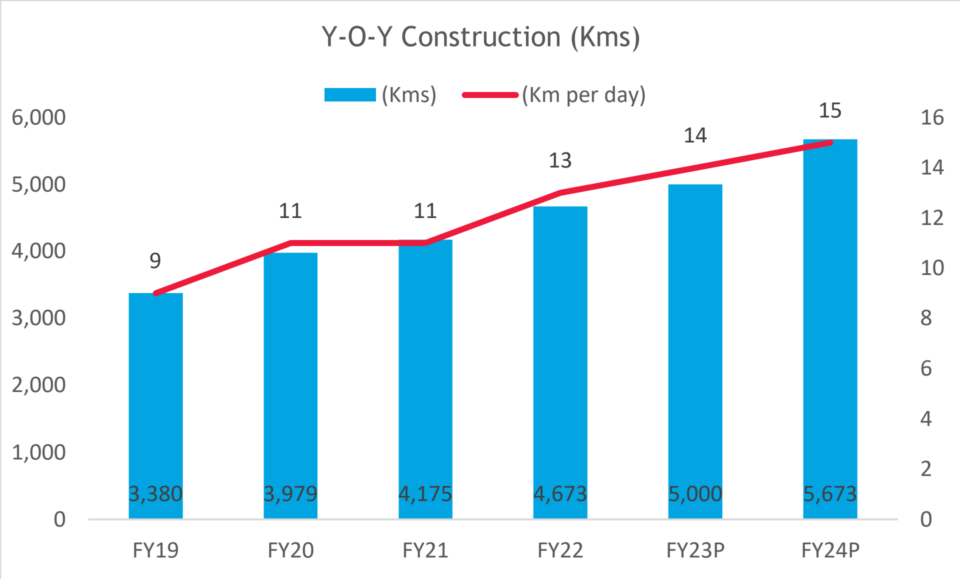
i. NHDP encompasses building, upgradation, rehabilitation and broadening of existing national highways. The project is executed by NHAI, in coordination with the public works departments of various states. NHAI also collaborates with the Border Roads Organisation for the development of certain stretches. NHDP is being implemented in seven phases.

ii. NHAI awarded 4,818 kms in fiscal 2021 - a three fiscal high to revive the roads sector, amidst the pandemic-led disruption. Of these, 54% were awarded under the Hybrid Annuity Model (HAM), 3% under the Build-Operate-Toll (BOT) mode and rest under the Engineering, Procurement and Construction (EPC) mode. In fiscal 2022, the awarding momentum continued unabated as the NHAI awarded 6,306 kms in the fiscal year.



Source: NHAI, Crisil Report   P: Projected

iii. Despite the lockdowns and labour-related issues, the construction at NHAI projects rose 5% on-year to 4,175 kms in fiscal 2021.



Source: NHAI, Crisil Report *P: Projected*

7.7 Bharatmala Pariyojana (BMP)

i. BMP is an umbrella project of the central government since 2015. It aims to improve efficiency in the roads sector. It is expected to supersede the National Highways Development Project (NHDP) and envisages the construction of 65,000 km of highways under the following categories: national corridor (north-south, east-west, and golden quadrilateral), economic corridor, inter-corridor roads, and feeder roads.

ii. Phase-I of the scheme envisages development of about 24,800 km length of national highways/roads, plus residual 10,000 km of NHDP between fiscals 2018 and 2022. Following are the components of BMP Phase -I: -

Category	Description	Total Length (Km)	Upgrade proposed in Phase I (Km)
National Corridor efficiency improvement	Lane expansion, de-congestion of existing National corridor	13,100	5,000
Economic Corridors development	Connecting economically important production & consumption centres	26,200	9,000
Inter-corridor and feeder routes development	Inter-connection between economic corridors, first mile and last mile connectivity	15,500	6,000
Border and international roads	Connectivity to border areas and boosting trades with neighbouring countries	5,300	2,000
Coastal and port connectivity roads	Connectivity to coastal areas to enable port led economic development	4,100	2,000
Expressways	Greenfield expressways	1,900	800
Total		**66,100**	**24,800**

Source: Crisil Report

7.8 Toll Traffic at National Highways

i. Toll collection to grow at CAGR (FY22-27) of 9.5-10.5% on a like-to-like basis and to grow at 18-19% considering new road additions and subsequent tolling on them. CRISIL Research expects total toll collection to have reached Rs 430 billion in the year fiscal 2022. The forecast has been achieved by considering improvement in economic activity, efficiency gains due to removal of check posts post implementations of GST, growth in vehicle population in both PV & CV segments, strong execution pipeline, better compliance and blocking of leakages due to implementation of ETC.

7.9 Key Budget Announcements for the infrastructure sector in Union Budget 2022-2023:

The Union Budget 2022-23 bet big on an investment push to lift economic growth, two years and three waves into the pandemic. The idea clearly is to push the growth multiplier rather than stoke consumption through direct budgetary support. For the next fiscal, the government's revenue expenditure is budgeted to grow less than 1% after growing 2.7% in the current fiscal. The total capex of the government (budgetary capex plus revenue grants for capital creation and capex by central public sector enterprises) is budgeted to rise 14.5% as compared with only 3.1% in the current fiscal. The government thus has tightened the belt around revenue expenditure and frontloaded infrastructure spending that would lead to faster economic growth.

i. At Rs 7.5 trillion, aggregate budgetary support (gross budgetary support or GBS) for capex next fiscal is up 39% over fiscal 2022RE. For infrastructure sectors, budgetary support is 30% up at Rs 4.3 trillion. These exclude Rs 620.57 billion equity infusion into AI Assets Holding Ltd (AIAHL) in fiscal 2022RE

ii. PM Gati Shakti Master Plan for expressways is to be formulated. The national highways network will be expanded by 25,000 km next fiscal.

iii. The highest budgetary allocation under capex is directed towards major infrastructure related sectors such as roads (Rs 2.6 trillion, 25.4% growth over fiscal 2023RE) and railways (Rs 2.4 trillion, growing 50.8%).

Ministry wise capital outlay

Capital Outlay (in INR billion)	FY16	FY17	FY18	FY19	FY20	FY21	FY22RE	FY23RE	FY24BE	% on year growth (FY22)
Ministry of Road, Transport and Highways	275.3	411.9	507.5	676.5	683.7	892.0	1,877.0	2,071.0	2,586.0	25%

Source: Crisil Report

i. The Union-Budget 2021-2022 has provisioned as sum of INR 200 billion to capitalize Development Financial Institution (DFI) called "National Bank for Financing Infrastructure and Development (NaBFID)". The main aim of DFI is to have a lending portfolio of at least INR 3 trillion in next few years.

ii. The Union Finance Minister announced "National Monetization Pipeline" of potential brownfield infrastructure assets under the union budget 2021-22. NHAI had plans to raise at least INR 100.0 billion in fiscal 2021 calendar year by monetizing its assets. The first tranche will be about 400-600 km and more assets can be added depending on the success of first tranche. NHAI plans to raise Rs. 350 Bn from 19-20 projects under InvIT model over the next few years.

7.10 Key Measures announced by government for Infrastructure sector to deal with Covid-19.

The outbreak of Covid-19 and subsequent lockdowns had impacted construction spending across construction sub-sectors in fiscal 2021. Despite this, the road construction at NHAI projects rose 5% on-year to 4,175 kms in FY2021 from 3,979 kms in FY2020. The central government have announced various measures to address the implications caused by Covid-19 and mitigate the losses borne by various industries.

iii. Up to 6-month extensions for completion of infrastructure projects: Central government has given extension of up to 6 months to contractors whose operations are hit by Covid-19.

iv. Covid-19 loans were extended by NHAI to BOT concessionaires at 2% + Bank rate. The loan amount would be lower of i) Debt obligation plus the O&M expenses or ii) Estimated toll collection minus actual collection during the period.

v. Extension in concession period was granted to road asset operators due to suspension in tolling activity from 26th March to 19th April 2020. Extension in concession period would be in proportion for period where daily toll collection would be less than 90% of average daily collection.

vi. RERA granted 6 to 9 months extension for real estate project completion: Due to Covid-19, majority of works on real estate projects got stalled as supply chain disruptions and labour shortages hampered projects.

vii. Release of retention money in proportion of work done and no further deduction of retention money for 3-6 months from contractors.

viii. Performance security on contracts reduced to 3% instead of 5-10%: The performance security deposit which is the proportion of total cost of project that contractor keeps with the client.

ix. Earnest Money Deposit (EMD) for tenders to be replaced by bid security self-declaration: Government of India have provided relaxation on Earnest money deposit on government tenders. EMD is to be replaced by bid security self-declaration.

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8. Valuation Approach

The present valuation analysis exercise is being undertaken to arrive at the enterprise value of InvIT Assets for the Purpose. Considering internationally accepted valuation methodologies and in cognizance of international valuation standards and Valuation Standards 2018 issued by ICAI Registered Valuers Organization, there are three generally accepted approaches to valuation:

i. **“Cost”** Approach

ii. **“Income”** Approach

iii. **“Market”** Approach

Within these three basic approaches, several methods may be used to estimate the value. An overview of these approaches is as follows:

8.1. Cost Approach

The cost approach values the underlying assets of the business to determine the business value of the InvIT Asset. This valuation method carries more weight with respect to holding companies than operating companies. Also, asset value approaches are more relevant to the extent that a significant portion of the assets are of a nature that could be liquidated readily if so desired.

i. Net Asset Value Method

- The Net Asset Value (“NAV”) method under cost approach, consider the assets and liabilities, including intangible assets and contingent liabilities. The net assets, after reducing the dues to the preference shareholders, if any, represent the value of the company.
- NAV method is appropriate in a case where the major strength of the business is its asset base rather than its capacity or potential to earn profits.
- This valuation approach is mainly used in cases where the asset base dominates earnings capability.
- As an indicator of the total value of the entity, the net asset value method has the disadvantage of only considering the status of the business at one point in time.
- Additionally, net asset value does not consider the earning capacity of the business or any intangible assets that have no historical cost. In many respects, net asset value represents the minimum benchmark value of an operating business.

ii. Break Up Value Method

- Under the Break-Up Value (“BV”) method, the assets and liabilities are considered at their realizable (market) values including intangible assets and contingent liabilities, if any, which are not stated in the balance sheet. From the realizable value of the assets, the payable value of all liabilities (existing plus potential) are deducted to arrive at the BV of the company.
- This Valuation approach is mostly used in case of companies where there are huge operating investments or surplus marketable investments.

8.2. Income Approach

The Income approach focuses on the income prospects of a company.

i. **<u>Discounted Cash Flow Method</u>**

- Under the Discounted Cash Flow ("DCF") method, the value of the undertaking is based on expected 'cash flows for future, discounted at a rate, which reflects the expected returns and the risks associated with the cash flows as against its accounting profits. The value of the undertaking is determined as the present value of its future free cash flows.
- Free cash flows are discounted for the explicit forecast period and the perpetuity value thereafter. Free cash flows represent the cash available for distribution to both, the owners and creditors of the business.
- Discount rate is the Weighted Average Cost of Capital ("WACC"), based on an optimal vis-à-vis actual capital structure. It is appropriate rate of discount to calculate the present value of future cash flows as it considers equity–debt risk and also debt–equity ratio of the firm.
- The perpetuity (terminal) value is calculated based on the business's potential for further growth beyond the explicit forecast period. The "constant growth model" is applied, which implies an expected constant level of growth (for perpetuity) in the cash flows over the last year of the forecast period.
- The discounting factor (rate of discounting the future cash flows) reflects not only the time value of money, but also the risk associated with the business's future operations.
- The Business/Enterprise Value so derived, is further reduced by value of debt, if any, (net of cash and cash equivalents) to arrive at value to the owners of business. The surplus assets / non-operating assets are also adjusted.
- In case of free cash flows to equity, the cash available for distribution to owners of the business is discounted at the Cost of Equity and the value so arrived is the Equity Value before surplus/ non-operating assets. The surplus assets / non-operating assets are further added to arrive at the Equity Value.

8.3. Market Approach

i. **<u>Market Price Method</u>**

- Under this approach, the market price of an equity share as quoted on a recognized stock exchange is normally considered as the fair value of the equity shares of that company where such quotations are arising from the shares being regularly and freely traded. The market value generally reflects the investors' perception about the true worth of the company.

ii. **<u>Comparable Companies Multiple Method</u>**

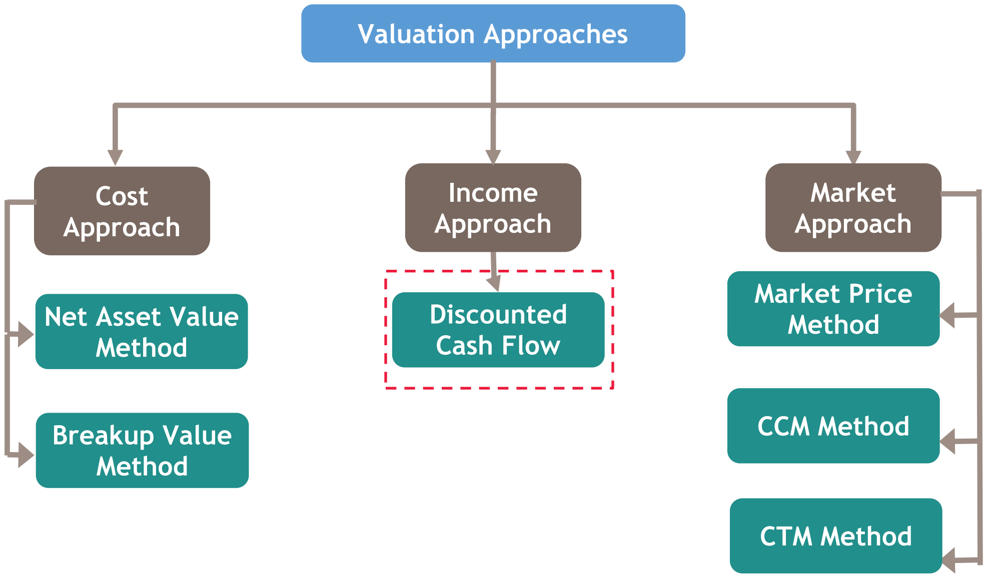
- Under the Comparable Companies Multiple ("CCM") method, the value is determined on the basis of multiples derived from valuations of comparable companies, as manifest through stock market valuations of listed companies. This valuation is based on the principle that market valuations, taking place between informed buyers and informed sellers, incorporate all factors relevant to valuation. Relevant multiples need to be chosen carefully and adjusted for differences between the circumstances.

- To the value of the business so arrived, adjustments need to be made for the value of contingent assets/liabilities, surplus Asset and dues payable to preference shareholders, if any, in order to arrive at the value for equity shareholders.

iii. <u>Comparable Transactions Multiple Method</u>

- Under the Comparable Transactions Multiple ("CTM"), the value of a company can be estimated by analysing the prices paid by purchasers of similar companies under similar circumstances. This is a valuation method where one will be comparing recent market transactions in order to gauge current valuation of target company.

8.4. Conclusion on Valuation Approach



i. <u>Cost Approach:</u>

This valuation approach is mainly used in cases where the asset base dominates earnings capability and hence has not been considered for current valuation. For the calculation of NAV value of the Trust, we have considered the NAV Method for the present valuation analysis exercise.

ii. <u>Income Approach:</u>

The Discounted Cash Flow method takes into account the specific strength of the company to be valued and represents the expected performance of the company based on its projections including the incremental working capital and capital expenditure requirement to achieve the projections. In the current case, the value of the SPVs would be reflected in its future earnings potential. Hence, the DCF Method under the income approach has been considered as an appropriate method for the present valuation analysis exercise.

iii. <u>Market Approach:</u>

The SPVs are not listed on any recognized stock exchange, hence the market price method of valuation was not considered. Since, current valuation is for specific road project, CCM Method and CTM Method for the present valuation analysis exercise are not considered as the different road projects have different concession period, geographical differences which are not identical to the listed companies.

9. Valuation Analysis of InvIT Assets and the Trust

9.1 As mentioned in para 2.2 under DCF Method, the value of undertaking is determined based on the future cash flows to be generated by the SPVs for the remaining concession period.

9.2 The key assumptions used in the financial projections are discussed in Section 10 of this report.

9.3 The other key assumption considered in DCF method is determination of an appropriate rate to discount the future cash flows. The Free Cash Flows to Firm ("FCFF") have been calculated for the SPVs as on the Valuation Date based on the financial projections provided by the Management.

9.4 FCFF refers to cash flows that are available to all the providers of capital, i.e., equity shareholders, preference shareholders and lenders.

9.5 In FCFF, the free cash flows available to the firm are discounted by Weighted Average Cost of Capital ("WACC") to arrive the net present value and terminal period cash flows. For the present valuation analysis exercise, Capital Asset Pricing Model ("CAPM") is considered for the calculation of Cost of Equity.

Cost of Equity

- Cost of Equity ("Ke") is a discounting factor to calculate the present value of the net free cash flows to equity shareholders of the entity.
- The returns expected by the equity shareholders depend on the perceived level of risk associated with the business and the industry in which the business operates.
- For this purpose, CAPM is used, which is a commonly used model to determine the appropriate cost of equity.
- The CAPM can be defined as follows:

Ke = Rf + (Rp * Beta) + CSRP

Wherein:

Ke = cost of equity

Rf = risk free rate

Rp = risk premium

Beta = a measure of the sensitivity of assets to returns of the overall market

Ksp = Company Specific Risk Premium (CSRP)

Note 1(a): Risk Free Rate (Rf)

The risk-free rate of return of 7.2% is based on yields of 10-year zero coupon bond yield as on March 31, 2023 and as listed on www.ccilindia.com.

Note 1(b): Market Return (Rm)

Market Return is a measure of rate of return that investors earns by investing in equity markets. It is calculated based on the average historical market return.

In the present case, the market return is considered at 15.00%.

Note 1(c): Risk Premium (Rp)

Risk premium is a measure of premium that investors require for investing in equity markets rather than bond or debt markets. A risk premium is calculated as follows:

Risk premium = Equity market return (Rm) – Risk free rate (Rf)

In the present case, the risk premium is arrived at 7.8%.

Note 1(d): Beta

Beta is a measure of the sensitivity of a company's stock price to the movements of the overall market index. For present valuation analysis exercise, the comparable companies that are engaged in primarily construction and operation of road assets in India are considered.

Beta of the following companies engaged in construction and operation of road assets in India, are considered for present valuation analysis:

Comparable Company
IRB Infra.Devl.
PNC Infratech
IRB InvIT Fund
MEP Infrastructure Developers Limited

<u>**WACC**</u>

- The discount rate for arriving at the present value of the Free Cash Flows to the Firm is the Weighted Average Cost of Capital ("WACC").
- The WACC is derived as follows:
  WACC = Ke * [E/(D+E)] + Kd *(1-t) *[D/(D+E)]

Wherein:

Ke = cost of equity

E/(D+E) = equity / total capital

Kd = cost of debt

t = tax rate

D/(D+E) = debt / total capital

9.6 The assumptions for the WACC considered for SPVs is stated in each SPV section.

9.7 For computation of NAV of the Trust, Net Asset Value Method has been considered.

10. Valuation of InvIT Assets

Shree Jagannath Expressway Private Limited (“SJEPL”)

10.1 The provisional balance sheet and profit and loss account of SJEPL as on March 31, 2023, has been considered for the purpose of valuation.

10.2 The financial projections as provided by the Management for the period from April 1, 2023, to December 13, 2037, has been considered for valuation. These financial projections are supported by independent Traffic Study reports and Technical Due Diligence/ Technical Advisory Service reports of independent consultants.

10.3 Key Inputs in Projections:

The key inputs of the projections provided by the Management supported by independent traffic and technical reports as follows:

a) Modification in Concession Period

- *As per the Clause 29.2.1 of the Concession Agreement between NHAI and SJEPL as provided by the Management, "In the event Actual Average Traffic shall have fallen short of the target traffic, then for every 1% shortfall as compared to the target traffic, the Concession period shall, subject to payment of Concession Fee in accordance with this Agreement, be increased by 1.5% thereof; provided such increase in Concession period shall not in any case exceed 20% of the Concession period".*
- The revised Concession end date considering the impact of Clause 29.2 – Modification in Concession Period will be February 13, 2043. However, the approval for the extension of concession period is not received from NHAI till the date of issuance of report. Therefore, original concession period of 26 years is considered in the current valuation exercise.
- Thus, the explicit period for the current valuation exercise is considered from respective Valuation date till December 13, 2037.

Particulars	Unit	Details
Target date as per CA	Date	April 1, 2020
Target traffic as per CA	PCUs	56,937
Comparison of average traffic at test date with target	%	13.3%
Original concession period	years	26.0
Increase in concession period	%	19.95%
Change in concession period	years	5.19
Revised concession period	years	31.2
Appointed date	Date	December 14, 2011
Original concession end date	Date	December 13, 2037

b) Traffic Volume

- Traffic volumes as received from the Management supported by Traffic Due Diligence report carried out by Steer dated May 2023 is considered.

c) Toll rates

- The toll rates derivation has been verified from the Traffic Study Report dated May 2023;

- The Management has considered annual revision of toll rate (user fees) which is in accordance to National Highway Fee (Determination of Rates and Collection) Rules, 2008 and amendment thereto dated December 3, 2010 whereby the base rate shall be increased without compounding by 3% p.a. and additionally, the applicable base rate shall be revised annually to reflect the increase in wholesale price index ("WPI") but such revision shall be restricted to forty percent of the increase in WPI on overall basis during the concession period; and
- WPI has been assumed as available from Oxford Economics for the period till the end of concession period.

d) Periodic Maintenance & Routine Maintenance Costs

- Estimates for projected Periodic Maintenance & Routine Maintenance Costs from the Management supported by Technical Due Diligence report carried out by Ramboll dated May 2023 are considered.

e) As informed by the Management, the erstwhile shareholders would indemnify the InvIT and its SPV against any financial losses suffered or incurred in connection with any pending contingent liabilities against the SPV till the date of transfer of InvIT asset to the Trust. Similarly, all contingent asset till the date of transfer of InvIT asset to the Trust will be claimed by the erstwhile shareholders. Hence, no impact of Contingent Liabilities/ Assets has been considered in the valuation of the SPV.

f) The estimated toll income for FY24 is INR 2,380.0 Mn which is expected to grow by 10.5% to INR 2,630.0 Mn in FY25.

g) On 19th November 2022, Government of India withdrew the export duties that were earlier levied on the export of Iron Ore and Iron Pellets. As established in earlier sections of the Traffic report, the Project's truck traffic observes a positive relationship with the movement of port bound commodities such as Iron Ore, Iron ore pellets, and coal. This was further validated by an increase in 2A, 3A and MAV traffic recorded on the Project starting Q3 Dec FY23 directly correlating with increased iron ore export at Paradip port.

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10.4 DCF Method:

- The key assumptions and other key inputs, mentioned earlier, as provided by the Management are considered in the valuation.
- The financial projections are management's best estimate of the range of economic conditions that will exist over the remaining useful life of the assets i.e. remaining agreed concession period for the SPV, capturing growth prospects and earning capabilities. The financial forecast provided by the Management has been reviewed for consistency and reasonableness, however we have not independently verified the data provided.
- The explicit period has been considered from April 1, 2023, to December 13, 2037.
- The tax computation as provided by the Management has been considered and reviewed to assess that the same has been calculated as per the provisions of the Income Tax Act, 1961. The interest expense is adjusted in the same for arriving at the tax computation under FCFF. The tax at MAT rate is payable throughout the concession period. Therefore, WACC at MAT rate i.e. 9.6% is used to discount the free cash flows to firm.
- The Enterprise Value of SJEPL as on March 31, 2023, is arrived at INR 24,299.4 Mn (Refer Annexure I).

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NCR Eastern Peripheral Expressway Private Limited ("NEPEPL")

10.5 The financial projections as provided by the Management for the period from April 1, 2023 to October 01, 2042 has been considered for valuation. These financial projections are supported by independent Traffic Study reports and Technical Due Diligence/ Technical Advisory Service reports of independent consultant.

10.6 Key Inputs in Projections:
The key inputs of the projections provided by the Management supported by independent traffic and technical reports as follows:

a) Modification in Concession Period

- *As per the Clause 24.5.1 of the Concession Agreement between NHAI and SPV as provided by the Management, "Subject to the Provisions of clause 24.2 and Clause 3.1, In the event Actual Fee 1 shall have fallen short of or exceeded the Target Fee 1 by more than 20%, then for every 1% shortfall or increase as compared to the Target Fee 1, the Concession Period subject to fulfilment of terms of the Concession Agreement , shall be increased by 1.5% or decreased by 0.75% thereof; provided that such increase or decrease in Concession period shall not in any case exceed not more than limits specified in Clause 3.1. For the avoidance of Doubt, and by way of illustration, it is agreed that in the event of shortfall or increase by 30% in Target Fee 1, the Concession period shall be increased by 15% or decreased by 7.5%".*

- *As per the Clause 24.5.2 of the Concession Agreement between NHAI and SPV as provided by the Management, "Subject to the Provisions of clause 24.3 and Clause 3.1, In the event Actual Fee 2 shall have fallen short of or exceeded the Target Fee 2 by more than 30%, then for every 1% shortfall or increase as compared to the Target Fee 2, the Concession Period subject to fulfilment of terms of the Concession Agreement , shall be increased by 1.5% or decreased by 0.75% thereof; provided that such increase or decrease in Concession period shall not in any case exceed not more than limits specified in Clause 3.1. For the avoidance of Doubt, and by way of illustration, it is agreed that in the event of shortfall or increase by 40% in Target Fee 2, the Concession period shall be increased by 15% or decreased by 7.5%".*

- *Thus, the Concession period of 20 years as per Concession Agreement between NHAI and SPV as provided by the Management remains unchanged as per the table below:*

Particulars	Target Date	As per CA	Projected	Var%	Modification Arises?	Extension CP
Target Date 1	Mar-29	643.6	724.32	12.6%	NO	NO
Target Date 2	Mar-36	1304.1	1497.8	14.9%	NO	NO

- Thus, the explicit period for the current valuation exercise is considered from April 1, 2023 to October 1, 2042.

b) Traffic Volume

Traffic volumes as received from the Management supported by Final Technical Diligence report carried out by SAMARTH INFRAENGG Technocrats Private Limited dated May 2023 is considered.

c) Toll rates

- The toll rates derivation has been verified from the Final Traffic Report dated May 2023;

- The Management has considered annual revision of toll rate (user fees) which is in accordance to National Highway Fee (Determination of Rates and Collection) Rules, 2008 and amendment thereto dated December 3, 2010 whereby the base rate shall be increased without compounding by 4% p.a. and additionally, the applicable base rate shall be revised annually to reflect the increase in wholesale price index ("WPI") but such revision shall be restricted to forty percent of the increase in WPI on overall basis during the concession period; and
- WPI has been assumed as available from Oxford Economics for the period till the end of concession period.

d) Periodic Maintenance & Routine Maintenance Costs

- Estimates for projected Periodic Maintenance & Routine Maintenance Costs from the Management supported by Final Technical Diligence report carried out by SAMARTH INFRAENGG Technocrats Private Limited dated May 2023 are considered.

e) The projected toll income for FY24 is INR 4,690.0 Mn which is expected to grow by 10.9% to INR 5,200.0 Mn in FY25.

10.7 DCF Method:

- The key assumptions and other key inputs, mentioned earlier, as provided by the Management are considered in the valuation.
- The financial projections are management's best estimate of the range of economic conditions that will exist over the remaining useful life of the assets i.e., remaining agreed concession period for the SPV, capturing growth prospects and earning capabilities. The financial forecast provided by the Management has been reviewed for consistency and reasonableness, however we have not independently verified the data provided.
- The explicit period has been considered from April 1, 2023 to October 1, 2042.
- The tax computation as provided by the Management has been considered and reviewed to assess that the same has been calculated as per the provisions of the Income Tax Act, 1961. The interest expense is adjusted in the same for arriving at the tax computation under FCFF.
- The Enterprise Value of NEPEPL as on March 31, 2023 is arrived at INR 74,011.9 Mn (Refer Annexure III).

11. Calculation of NAV of the Trust

11.1 We have considered the provisional standalone balance sheet of IHCT Trust for the period ended March 31, 2023 as provided by the representatives of the Trust.

11.2 The Trust has provided us with the Balance Sheet of the Trust and the InvIT Assets as at March 31, 2023, the Trust has requested us to consider the investment in InvIT Assets for arriving at the NAV of the Trust.

11.3 As informed by the Management, IHCT has issued 352,170,000 units. Considering the same, NAV per unit is arrived at INR 141.5 (Refer Annexure V).

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12. Valuation Summary

12.1 The current valuation has been carried out based on the valuation methodology explained herein earlier. Further, various qualitative factors, the business dynamics and growth potential of the business, having regard to information base, management perceptions, key underlying assumptions and limitations, were given due consideration.

12.2 We would like to highlight that in the ultimate analysis, valuation will have to be tempered by the exercise of judicious discretion and judgment taking into account all the relevant factors. There will always be several factors, e.g. quality of the management, present and prospective competition, yield on comparable securities and market sentiment, etc. which are not evident from the face of the balance sheets but which will strongly influence the worth of an entity or business.

12.3 The enterprise value of SJEPL and NEPEPL is 24,299.4 Mn and 74,011.9 Mn respectively as on March 31, 2023.The NAV per unit of the Trust is arrived at INR 141.5.

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13. Annexures

Additional procedures to be complied with in accordance with SEBI InvIT Regulations

List of Disclosures

Additional procedures to be complied with in accordance with SEBI InvIT regulations as per Schedule V of the SEBI InvIT Regulations:

a) List of one-time sanctions/approvals which are obtained or pending along with up to date/overdue periodic clearances

As given by the Management, InvIT Assets has now been 100% acquired by the Trust, hence no approvals are pending.

b) Statement of assets

As informed by the Management, all assets and liabilities of the InvIT Assets till the date of transfer of assets to InvIT as specified in Section 6 of this Report will be taken over by the Trust. However, the current assets as on March 31, 2023 will be transferred to erstwhile shareholders of the InvIT Assets as and when realized.

(INR Mn)

Particulars (INR Mn)	Net Tangile Assets	Net Intangible Assets	Intangible Assets under Development	Non Current Assets	Current Assets
SJEPL	11.7	11,862.9	10.7	13.6	1,509.4

(INR Mn)

Particulars	Net Fixed Assets	Current Assets
NEPEPL	61,979.0	1,868.7

c) Estimates of already carried as well as proposed major repairs & improvements

As given by the Management, estimates of past and proposed major repairs & improvements of the InvIT Assets is given in Annexure VI and VII.

d) Revenue pendency including local authority taxes associated with InvIT asset & compounding charges

As informed by the Management, the Trust and the Sponsor, there are no revenue pendency including local authority taxes pending to be payable to the Government authorities with respect to the InvIT Assets.

e) On-going material litigations including tax disputes in relation to the assets

As given by the management, the list of the on-going material litigations of the SJEPL have been given in Annexure VI.

As given by the management, no material litigations of NEPEPL as on March 31, 2023.

f) Vulnerability to natural or induced hazards that may not have been covered in town planning/building control

As informed by the Management, there are no such natural or induced hazards which have been not considered in town planning/building control with respect to the InvIT Assets.

Caveat to Disclosures in Annexures:

The Valuer has not independently verified the documents related to the disclosures mentioned in the Annexures and have relied on the representations given by the Management for the same.

Annexure I – Enterprise Valuation of SJEPL as per DCF Method

Draft Valuation as per Discounted Cash Flow Method as on 31-March-23 (INR Mn)																
WACC at Nil Tax	10.6%															
WACC at MAT	9.6%															
WACC at Full Tax rate	8.5%															
Year Ending		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**FY32**	**FY33**	**FY34**	**FY35**	**FY36**	**FY37**	**FY38#**
Net Sales		2,380.0	2,630.0	2,890.0	3,190.0	3,520.0	3,850.0	4,240.0	4,640.0	5,100.0	5,570.0	6,110.0	6,700.0	7,370.0	8,060.0	6,203.2
Cash EBITDA		2,090.4	2,324.4	2,568.9	2,852.4	3,165.6	3,478.3	3,851.3	4,234.0	4,675.8	5,126.4	5,645.9	6,215.0	6,863.6	7,531.1	5,814.0
Cash EBITDA Margins		*87.8%*	*88.4%*	*88.9%*	*89.4%*	*89.9%*	*90.3%*	*90.8%*	*91.2%*	*91.7%*	*92.0%*	*92.4%*	*92.8%*	*93.1%*	*93.4%*	*93.7%*
Less : Outflows																
MMR Expense		(1,430.7)	-	-	-	-	-	(539.6)	(817.6)	-	-	-	-	-	(1,160.3)	(1,523.1)
Incremental Working Capital		(164.6)	-	-	-	-	-	-	-	-	-	-	-	-	-	(174.6)
Change in Cash Reserve		873.0	(193.9)	(193.9)	(193.9)	(193.9)	(193.9)	345.7	623.7	(383.3)	(383.3)	(383.3)	(383.3)	(383.3)	776.9	1,139.7
CSR Expense		-	-	-	-	(4.5)	(11.0)	(18.1)	(26.2)	(34.9)	(43.3)	(52.5)	(63.0)	(75.6)	(89.3)	(73.1)
Taxation		(218.0)	(271.7)	(308.9)	(352.6)	(401.4)	(449.9)	(508.8)	(569.2)	(606.6)	(678.6)	(762.4)	(854.7)	(960.8)	(1,070.0)	(837.4)
Free Cash Flows (FCF)		**1,150.0**	**1,858.8**	**2,066.1**	**2,305.9**	**2,565.8**	**2,823.6**	**3,130.5**	**3,444.7**	**3,651.0**	**4,021.2**	**4,447.6**	**4,914.0**	**5,443.9**	**5,988.4**	**4,345.6**
Present Value Factor		0.96	0.87	0.80	0.73	0.66	0.60	0.55	0.50	0.46	0.42	0.38	0.35	0.32	0.29	0.27
Present Value of Cash Flows		**1,098.5**	**1,620.0**	**1,643.0**	**1,673.0**	**1,698.5**	**1,705.5**	**1,725.2**	**1,732.1**	**1,675.0**	**1,683.3**	**1,698.7**	**1,712.4**	**1,730.9**	**1,737.3**	**1,166.0**
NPV of Explicit Period	24,299.4															
Enterprise Value (EqV)	**24,299.4**															
Other Adjustments as on Valuation Date																
Debt	(12,504.0)															
Cash and Cash Equivalents	100.3															
Investments	343.1															
Equity Value	**12,238.8**															

 # for the period ending December 13, 2037.

Annexure II - WACC of SJEPL

Particulars	Nil Tax	MAT	Full Tax	Explanation
Risk free return (Rf)	7.2%	7.2%	7.2%	Risk free rate has been considered based on 10 years Zero coupon yield curve issued by Government of India as at Valuation Date.
Market Return (Rm)	15.0%	15.0%	15.0%	Market Return has been considered based on the long term average returns earned by an equity investor investing in India.
Risk premium	7.83%	7.8%	7.8%	Risk Premium = Market Return (Rm)- Risk Free Rate (Rf)
Relevered Beta (ß)	0.69	0.65	0.61	We have considered 5 years beta for comparable companies
Cost of equity (Ke)	**12.6%**	**12.3%**	**12.0%**	**Ke = Rf + ß x (Rm-Rf)**
Company Specific Risk Premium (Ksp)	1.0%	1.0%	1.0%	Specific Premium added on account of factors inter-alia, project specific risk and technical issues as stated in technical due diligence report.
Revised Cost of equity (Ke)	**13.6%**	**13.3%**	**13.0%**	**Ke = Rf + ß x (Rm-Rf) + Ksp**
Cost of debt (I)	8.6%	8.6%	8.6%	Weighted average cost of debt is considered.
Tax Rate (t)	0.0%	17.5%	34.9%	Based on statutory corporate tax rate in India as of the Valuation date.
Cost of Debt [Net of Tax] (Kd)	**8.6%**	**7.1%**	**5.6%**	**I * (1 - t)**
Debt / (Debt +Equity)	60.0%	60.0%	60.0%	Target long-term debt equity ratio of the comparable companies
WACC	**10.6%**	**9.6%**	**8.5%**	**WACC = Ke*(E/(D+E))+Kd*(D/(E+D))**
WACC Adopted	**10.6%**	**9.6%**	**8.5%**	**After rounding off**

Annexure III - Enterprise Valuation of NEPEPL as per DCF Method

Draft Valuation as per Discounted Cash Flow Method as on 31-March-23 (INR Mn)																					
WACC at Full Tax	8.6%																				
Year Ending		**FY24**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**FY32**	**FY33**	**FY34**	**FY35**	**FY36**	**FY37**	**FY38**	**FY39**	**FY40**	**FY41**	**FY42**	**FY43#**
Net Sales		4,690.0	5,200.0	5,820.0	6,470.0	7,180.0	7,960.0	8,950.0	10,220.0	11,390.0	12,340.0	13,600.0	15,020.0	16,530.0	17,890.0	19,450.0	21,110.0	22,910.0	24,670.0	26,620.0	14,417.5
Growth Rate			*10.9%*	*11.9%*	*11.2%*	*11.0%*	*10.9%*	*12.4%*	*14.2%*	*11.4%*	*8.3%*	*10.2%*	*10.4%*	*10.1%*	*8.2%*	*8.7%*	*8.5%*	*8.5%*	*7.7%*	*7.9%*	*-45.8%*
Cash EBITDA		3,935.4	4,415.2	4,891.7	5,455.3	6,124.7	6,862.5	7,808.6	9,032.9	10,155.4	11,056.0	12,264.7	13,620.1	15,047.0	16,312.2	17,767.1	19,314.8	20,997.7	22,643.0	24,480.9	13,172.6
Cash EBITDA Margins		*83.9%*	*84.9%*	*84.0%*	*84.3%*	*85.3%*	*86.2%*	*87.2%*	*88.4%*	*89.2%*	*89.6%*	*90.2%*	*90.7%*	*91.0%*	*91.2%*	*91.3%*	*91.5%*	*91.7%*	*91.8%*	*92.0%*	*91.4%*
Less : Outflows																					
MMR Expense		-	-	(227.2)	(498.6)	-	(246.6)	(1,303.4)	(375.1)	(1,160.9)	-	(310.9)	-	(1,769.2)	(1,075.4)	(363.7)	(14.2)	-	-	(4,038.5)	-
Capital Expenditure		(800.1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in MMR Reserve		-	-	-	-	-	-	-	(406.8)	379.0	(781.9)	(471.0)	(781.9)	987.2	339.3	(372.3)	(721.9)	(736.1)	(736.1)	3,302.4	-
Incremental Working Capital		(10.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.7
Taxation		(191.8)	(312.5)	(375.3)	(448.8)	(742.8)	(866.4)	(838.5)	(1,380.3)	(1,465.0)	(1,983.9)	(2,209.8)	(2,632.0)	(2,552.8)	(3,055.2)	(3,611.8)	(4,101.8)	(4,542.1)	(4,968.0)	(4,424.7)	(2,588.8)
Free Cash Flows (FCF)		**2,933.1**	**4,102.7**	**4,289.2**	**4,507.9**	**5,381.9**	**5,749.5**	**5,666.6**	**6,870.7**	**7,908.4**	**8,290.2**	**9,272.9**	**10,206.2**	**11,712.2**	**12,521.0**	**13,419.2**	**14,476.9**	**15,719.6**	**16,939.0**	**19,320.2**	**10,593.5**
Present Value Factor		0.96	0.88	0.81	0.75	0.69	0.64	0.58	0.54	0.50	0.46	0.42	0.39	0.36	0.33	0.30	0.28	0.26	0.24	0.22	0.20
Present Value of Cash Flows		**2,814.6**	**3,625.1**	**3,489.8**	**3,377.3**	**3,712.8**	**3,652.3**	**3,314.6**	**3,700.6**	**3,922.3**	**3,786.0**	**3,899.5**	**3,952.0**	**4,176.1**	**4,110.9**	**4,056.9**	**4,030.1**	**4,029.5**	**3,998.2**	**4,199.1**	**2,164.2**
NPV of Explicit Period	74,011.9																				
Enterprise Value (EqV)	**74,011.9**																				
Other Adjustments as on Valuation Date																					
Debt	(56,932.1)																				
Cash and Cash Equivalents	951.5																				
Equity Value	**18,031.2**																				

#for the period ending October 1, 2042

Annexure IV - WACC of NEPEPL

Particulars	Full Tax	Explanation
Risk free return (Rf)	7.2%	Risk free rate has been considered based on 10 years Zero coupon yield curve issued by Government of India as on March 31, 2023.
Market Return (Rm)	15.0%	Market Return has been considered based on the long term average returns earned by an equity investor investing in India.
Risk premium	7.8%	Risk Premium = Market Return (Rm)- Risk Free Rate (Rf)
Relevered Beta (β)	0.64	We have considered 5 years beta for comparable companies
Cost of equity (Ke)	**12.1%**	**Ke = Rf + β x (Rm-Rf)**
Cost of debt (I)	8.3%	Weighted average cost of debt is considered.
Tax Rate (t)	25.2%	Based on statutory corporate tax rate in India as of the Valuation date.
Cost of Debt [Net of Tax] (Kd)	**6.2%**	**I * (1 - t)**
Debt / (Debt +Equity)	60.0%	Target long-term debt equity ratio of the comparable companies
WACC	**8.6%**	**WACC = Ke*(E/(D+E))+Kd*(D/(E+D))**
WACC Adopted	**8.6%**	**After rounding off**

Annexure V: Calculation of NAV

Particulars	*INR Mn.*
Loans and Advances (A)	20,871.2
Cash and cash equivalents	4,007.8
Other Current assets	1,498.1
Total Current Assets (B)	**5,505.9**
Fair Value of Total Assets (A)+(B) = (C)	**26,377.1**
Less: Borrowings	-
Less: Current/Non-current Liabilities	207.7
Total Current/Non-current Liabilities (D)	**207.7**
Net Assets Value (C) - (D) = (E)	**26,169.4**
Add: Investments in SJEPL (Fair Value)	12,238.8
Investments in NCREPE (Fair Value)	18,031.2
Net Assets Value (pre-IM and HoldCo Expense)	**56,439.4**
Less: IM and HoldCo Expense	(6,604.7)
Net Assets Value (post-IM and HoldCo Expense)	**49,834.6**
No. of Units (in Mn)	352.2
Net Assets Value per Unit	**141.5**

Annexure VI: List of ongoing material litigations - SJEPL

S. No.	Issue	Nature of Claim (Classification and Categorisation)	Status	Remarks	Claim Amount (INR Millions)
1	Arbitration was invoked by SJEPL due to rejection by NHAI for collection of toll at increased rates after completion of construction of the new Mahanadi Bridge. SJEPL has filed for (1) Reimbursement of the toll amount from opening of the Mahanadi Bridge on 8-Apr-2014 till the date of award with interest at the prevailing rate plus 5% (2) Pass directions to publish a gazette notification for increase in toll immediately on passing of the award (3) Till the date when tolling is actually allowed, SJEPL should be reimbursed in terms of its bills already raised/yet to be raised.	Receivable	The matter is referred to Delhi High Court	The matter is disputed in Delhi High Court.	2,261.08
2	Proposal for imposing penalty on account of delay in completion of punch list	Payable	The matter is referred to CCIE		1,033.76
3	Request for reimbursement of additional costs incurred due to Change of Scope	Receivable	The matter is under discussion		2,099.52
4	Non-payment of labour cess	Payable	The matter is under discussion		87.67
5	Proposal for imposing penalty on account of deficient pavement crust	Payable	The matter is referred to CCIE		949.10
6	Proposal for imposing penalty on account of negative COS	Payable	The matter is referred to CCIE		360.16
7	Request for reimbursement of additional costs incurred due to Change in Law	Receivable	The matter is referred to CCIE		241.24
8	Compensation for loss of revenue due to Orissa High Court in writ petitions filed by keonjhar nava nirman samity and DREAMS	Receivable	The matter is referred to CCIE		1,268.87
9	**Overstay claim due to cost over run due to delay in handover of ROW/Land, etc.**	**Receivable**	**The matter is referred to CCIE**		6,996.40
10	Request for compensation of loss of revenue due to non payment of user fee by All Orissa Bus Owners' Association ("AOBOA")	Receivable	**The matter is referred to CCIE**		1,268.87

Annexure VII - Estimates of major repairs & improvements- SJEPL

(INR Mn.)

Particulars	SJEPL	Particulars	SJEPL
FY 24(P)	1,430.70	FY 32(P)	-
FY 25(P)	-	FY 33(P)	-
FY 26(P)	-	FY 34(P)	-
FY 27(P)	-	FY 35(P)	-
FY 28(P)	-	FY 36(P)	-
FY 29(P)	-	FY 37(P)	1,159.2
FY 30(P)	539.6	FY 38(P)	1,507.1
FY 31(P)	793.7		

(P): Projected

Annexure VIII - Estimates of major repairs & improvements- NEPEPL

(INR Mn)

Particulars (INR Mn)	NEPEL	Particulars (INR Mn)	NEPEL
FY 24(P)	-	**FY 34(P)**	181.70
FY 25(P)	-	**FY 35(P)**	-
FY 26(P)	181.7	**FY 36(P)**	955.9
FY 27(P)	383.4	**FY 37(P)**	558.7
FY 28(P)	-	**FY 38(P)**	181.7
FY 29(P)	175.3	**FY 39(P)**	6.8
FY 30(P)	891.1	**FY 40(P)**	-
FY 31(P)	246.6	**FY 41(P)**	-
FY 32(P)	733.8	**FY 42(P)**	1,724.5
FY 33(P)	-		

(P): Projected

ANNEXURE B – TECHNICAL REPORTS

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TRANSPORT

TECHNICAL REVIEW REPORT

CHANDIKHOLE-JAGATPUR- BHUBANESHWAR SECTION OF NH-5

Project name	**Technical Review Report on Chandikhole-Jagatpur-Bhubaneshwar Section ofNH-5**
Project no.	**1880003242**
Recipient	**Indian Highway Concessions Trust**
Document type	**Technical Review Report - Final**
Version	**R0**
Date	**05/05/2023**
Prepared by	**Sudipta Deb, Manish Kr Srivastava**
Checked by	**Sanjay Srivastava**

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Reg.no. U72200DL2006PTC276587

CONTENTS

TABLES

1. Introduction

NHAI awarded the project six laning of NH-5 (New NH-16) from Chandikhole to Bhubaneshwar (Km 413 to Km 418 & from 0 to Km 62) in the state of Orissa to Shree Jagannath Expressways Private Limited (SJEPL), ("the Concessionaire") on design build, operate and transfer ("DBFOT") basis through Public- Private/ Public Sector Partnership (PPP).

The Project achieved Provisional Completion on 12th January 2017. Now it is under operation and maintenance by Maple Highways (Indian Highway Concessions Trust).

- Initially, M/s Maple Highways Pte. Ltd (Client) appointed Ramboll India Private Limited to carry out due technical diligence study and submitted the report in August 2019.
- It was noted that there were severe distresses in major bridges which required detailed investigations to arrive at repair and rehabilitation measures. SJEPL subsequently appointed M/s AECOM for detailed investigation of major bridges. Ramboll India Private Limited updated the report with the findings from the detailed investigations carried out by M/s AECOM and submitted the report in December 2021.
- Further, Technical Review Report on the project was prepared by Ramboll based on following details and was submitted in September 2022.
    1. Updated punch list items of work notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE/Chand-Bhu/2021/477 dated 24th December 2021.
    2. Comprehensive Report on Rehabilitation Works on distressed major bridges dated 22nd June 2022 from Aecom India Pvt Ltd.
    3. Pavement Overlay recommendation letter from IE vide letter # MSVHBI/PRJNHAI/IE/Chand-Bhu/2021/34495 dated 01st April 2022
    4. Inspection of Site Acceptance Test (SAT) for Advance Traffic Management System (ATMS) vide IE letter # SVHBI/PRJNHAI/IE/Chand-Bhu/2019/544 dated 01st April 2022.
    5. Documentation of Site Acceptance Test (SAT) for Advance Traffic Management System (ATMS) on dated 07th December 2021 and Site Acceptance Test (SAT) for Toll Hardware & Software on dated 21st July 2021
    6. Shifting of toll plaza to Km 40.500 from existing plaza at Km 34.624 vide IE letter # MSVHBI/ PRJNHAI/IE/Chand-Bhu/2019/336 dated 05th April 2021

Now, M/s Maple Highways (Indian Highway Concessions Trust) appointed Ramboll India Private Limited to prepare this report evaluating the updated status of the project based on following details:

- Visual inspection of the pavement condition as per data shared by the Client.
- Identifying critical outcomes by reviewing technical correspondences between the Concessionaire, Independent Consultant and Authority provided by Client post last report.
- Review of the maintenance strategy (Routine and Periodic) by analysing data shared by the Client.
- Review of report on any Major Maintenance carried out that is being carried out.
- Estimation of Routine O&M and Periodic Maintenance expenditure for rest of the Concession Period based on provided data.
- Estimation of initial expenditure to be incurred due to deficiencies observed during diligence and site inspection

2. Salient Features of the project

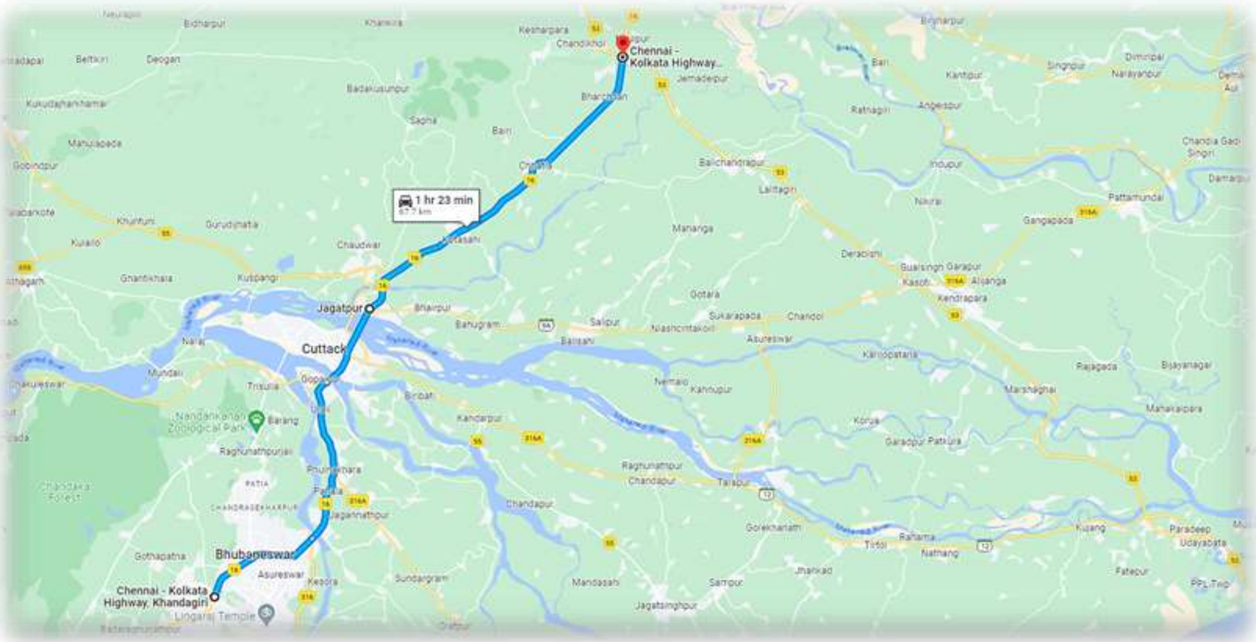

Figure 1: Location Map

2.1 Highway

- Length of the Road – 67 Km.
- Road-Cross Section and Pavement – As per Concession Agreement (CA) the paved carriageway has been widened to a width of 24.5 metres excluding median. However, the width is adjusted to fit into appropriate plans and cross-sections developed in accordance with Schedule D of the Concession Agreement.
- Median Width – 2.0 m wide in urban area to 5.0 m wide on outskirts.
- Pavement – Flexible pavement 10.5 m wide (7.0 m at some places) all along except at Toll Plaza location where rigid pavement has been provided.
- Service Roads (both sides): 7.0 wide service roads are provided.

2.2 Project Facilities

- Toll plaza – at Km 40+500 a new toll plaza is operational in the project from 15th April 2021 with Hybrid ETC, TMS, ATMS and control centre at this plaza location. Toll operations are shifted to this plaza for this project from the existing old plaza located at km 34.623
- Bus-bays and Bus shelters – 35 locations (LHS & RHS).
- Junctions – 180 junctions out of which 13 junctions are major junctions and 167 are minor junctions.
- Truck lay byes – 6 nos.

- Other project facilities include adequate Roadside Furniture, Safety Appurtenances, Pedestrian facilities, Landscaping and Tree Plantation, Street Lighting, Highway Route Patrol, Ambulance Services, Cranes etc.

2.3 Structures

Structures available at the site are as under:

- Major bridges -13 nos.
- Minor bridges – 27 nos.
- Culverts – 79 nos.
- ROB – 01 no.
- Flyover – 09 nos.
- VUP – 20 nos.
- PUP/CUP – 23 nos.

2.4 Concession Agreement

CA was signed on August 06, 2010, between NHAI and M/s Shree Jagannath Expressway Private Limited ("Concessionaire") having its registered office at Simplex House, 27, Shakespeare Sarani, Kolkata, West Bengal, India for the work – Six Laning of Chandikhole - Jagatpur- Bhubaneswar Section of NH-5 from Km 414+00 To Km 419+000 and from Km 0+000 To Km 62+000 in the State of Orissa as BOT (Toll) on DBFOT Pattern under NHDP Phase – V. This Concession Agreement is on DBFOT basis with concession period of 26 years including construction period of 910 days from the appointed date.

3. Key dates of the project

Table 3-1: Key Project Dates

Description	Date
Date of Agreement	06 August 2010
Appointed Date	14 December 2011
Scheduled Project Completion Date	11 June 2014
Provisional completion certificate Date /Commercial Operation Date (COD)	12 January 2017
Completion Certificate Date	Not achieved
Scheduled Concession Period End Date	13 December 2037
Extension of Time	31 March 2019

4. Assessment of Project Assets

4.1 Highway and Pavement

The pavement condition is found to be reasonable during visual condition survey. However, it is observed that there are some stretches which require some immediate maintenance. Independent Engineer and his site team also inspected the highway and identified few patches where pavements are damaged along with some defects, deficiencies, missing and re-painting of project facilities and appurtenances like Road Marking, MS Railings, Handrails, Traffic Signages, Crash Barriers, kerbs, cleaning of vegetations, trimming of trees and shrubs in median verges, non-functional streetlights. These are reported by IE in their O&M Inspection report dated 06th April 2023.
The project stretch was also thoroughly investigated and identified for major maintenance which comprises parts of 14 kms on left hand side and 16 kms of right-hand side main carriageway. Overlay was recommended by IE vide in their report dated 1st April 2022, based on FWD done and prevailing site conditions. The project stretch is recommended for 65mm DBM for 40 lane-kms, 50mm BC for 40 lane-kms and 40mm for BC 94 lane-kms. Milling of existing BC is also prescribed before laying fresh BC at these locations. Financial evaluation is also done by IE in the report which works out as INR 142 crores (approx.) including GST and the rates are based on Bhubaneshwar SOR for FY 2021-22. Km-wise representation of IE's recommendation for strengthening/overlay of the pavement is given in Table 4-1.

Table 4-1: Main Carriageway Lengths for Strengthening / Overlay

Main Carriageway Lengths for Strengthening / Overlay									
Chainage in Km	**Km 414 to Km 3**		**Km 3 to Km 22**		**Km 22 to Km 30**		**Km 30 to Km 62**		**Total Length in KM**
Side of highway	LHS	RHS	LHS	RHS	LHS	RHS	LHS	RHS	
Stretches in km	8	8	19	19	8	8	32	32	134
Length in Km for 65mm DBM	-	8	-	-	-	-	-	32	40
Length in Km for 50mm BC	8	-	-	-	-	-	32	-	40
Length in Km for 40mm BC	-	8	19	19	8	8	-	32	94

Punch list items of work for highway and service roads issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/ PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and it is represented here for main carriageway and exit & entry ramps of the project:

4.1.1 Main carriageway

- *Punch List 1(as per Schedule B) is presented in Table 4-2*

Table 4-2: Punch List 1 - Main Carriageway

SI. No.	From	To	Length in Km.	Status as on 13.11.2021	IE Observation during Joint Site visit
01	7+700	9+400	1.700	Completed	Completed
oz	16+000	16+900	0.900	Completed	Completed
03	31+700	31+900	0.200	Completed	Completed
04	44+400	45+160	0.760	Completed	Completed
05	46+400	47+480	1.080	Completed	Completed
05a	47+480	47+580	0.100	De Scope	De Scope as per I E letter No 2244 dated 14.03.2019./ Local Public
06	50+950	51+540	0.590	Completed	Completed
07	54+110	54+980	0.870	Completed	Completed
08	57+200	58+020	0.820	Completed	Completed

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-3*

Table 4-3: Punch List 2 - Main Carriageway

SI. No.	From	To	Length in Km.	Status as on 13.11.2021	IE Observation during Joint Site visit
1	3+220	3+600	0.380	Completed	Completed
2	4+180	4+820	0.640	Completed	Completed
3	5+370	5+480	0.110	*Completed*	De Scope as per MOM dated 20.01.2021)
4	5+480	5+975	0.495	De Scope	De Scope as per MOM dated 20.01.2021
5	18+750	19+550	0.800	Completed	Completed
6	40+250	40+980	0.730	Completed	Completed

4.1.2 Exit – Entry Ramp

❖ *Punch List 1(as per Schedule B) is presented in Table 4-4*

Table 4-4: Punch List 1 - Exit & Entry Ramps

Chainage (Km)	Nos	Provision	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
417+150	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
1+450	2	Entry & Exit	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
3+590	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
5+800	1	Exit	LHS	De scope Location	De Scope as per IE letter No 2244 dated 14.03.2019
9+444	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
10+550	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
11+820	1	Exit	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
15+356	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
15+824	1	Exit	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
17+800	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
21+339	2	Entry & Exit	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
22+138	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
24+200	1	Exit	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
27+900	1	Exit	LHS	Deleted	Ref. IE letter No.2063 dated 16.05.2018 (De-scoped)
28+526	1	Entry	LHS	Completed	Ref. IE letter No.2063 dated 16.05.2018 (completed)
32+380	1	Exit	LHS	Completed	Completed at Km. 32+336. Ref IE letter No.2230 dated 21.02.19
41+520	1	Exit	LHS	Completed	Completed at Km. 41+295 Ref IE letter No.2230 dated 21.02.19
44+260	1	Exit	LHS	Completed	Completed

Chainage (Km)	Nos	Provision	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
45+520	1	Entry	LHS	Completed	Completed
46+400	1	Exit	LHS	Completed	Completed
48+525	1	Entry	LHS	Completed	Completed
51+600	1	Entry	LHS	Completed	Completed as per modified drawing. Ref IE letter No.2230 dated 21.02.19
53+900	1	Exit	LHS	Completed	Completed
55+000	1	Entry	LHS	Completed	Completed
57+200	1	Exit	LHS	Completed	Completed at Km. 56+624. Ref IE letter No.2230 dated 21.02.19
57+900	1	Entry	LHS	Completed	Completed as per modified design location due to additional MB required for Entry Ramp at Ch.57+900 and after approval of COS (as per letter no 825 dt. 08.01.2014 of IE). Hence shifted to design location at km.58+083 as per modified drawing within available land. Ref. IE letter No.2230 dated 21.02.19
59+200	1	Exit	LHS	Completed	Completed
417+200	1	Exit	RHS	Completed	Completed as per modified drawing. Ref IE letter No.2063 dated 16.05.2018
1+600	1	Entry & Exit	RHS	Completed	Completed
3+590	1	Exit	RHS	Completed (Palasuni)	Completed as per modified drawing. Ref IE letter No. 2063 dated 16.05.2018
5+700	1	Entry	RHS	De-scope Location	De Scope as per IE letter No 2244 dated 14.03.2019
9+550	1	Exit	RHS	Completed	Completed as per modified drawing. Ref IE letter No.2063 dated 16.05.2018
15+824	1	Entry	RHS	De-scope Location	De-scoped
17+780	1	Exit	RHS	Completed	Completed at 17+960 Ref IE letter No.2063 dated 16.05.2018
19+950	1	Entry	RHS	Completed	Completed
21+520	1	Entry	RHS	Completed	Completed as per modified drawing. Ref. IE letter No. 2063 dated 16.05.2018.

Chainage (Km)	Nos	Provision	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
21+790	1	Exit	RHS	Completed	Completed at 21+900 Ref IE letter No.2063 dated 16.05.2018
23+185	1	Entry	RHS	Completed	Completed as per modified drawing. Ref IE letter No.2063 dated 16.05.2018
28+530	1	Exit	RHS	Completed	Completed at 28+750 Ref IE letter No.2063 dated 16.05.2018
32+450	1	Entry	RHS	De-Scope	De-Scoping due to LA constraint ref. IE letter No.2230 dated 21.02.2019
37+850	1	Entry	RHS	Completed	Completed at km.60+477 as per modified drawing within available land Ref. IE letter No.2230 dated 21.02.19
42+800	1	Exit	RHS	Completed	Completed
44+260	1	Entry	RHS	Completed	Completed
45+520	1	Exit	RHS	Completed	Completed
48+455	1	Exit	RHS	Completed	Completed as per design location at Km.48+585 as per acquired Land.
54+000	1	Exit	RHS	Completed	Completed
55+200	1	Entry	RHS	Completed	Completed
57+250	1	Entry	RHS	Completed	Completed at km. 57+113 as per modified drawing within available land Ref. IE letter No.2230 dated
57+800	1	Exit	RHS	Completed	Completed at km. 58+032 as per modified drawing within available land Ref. IE letter No.2230 dated
59+170	1	Entry	RHS	Completed	Completed

4.1.3 Service Roads:

Punch list items of work for service roads issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here for service road of the project:

4.1.3.1 Service Road (LHS)

- *Punch List 1(as per Schedule B) is presented in Table 4-5*

Table 4-5: Punch List 1 – LHS Service Road

From	To	Length (Km)	Status as on 13.11.2021	IE Observation during Joint Site visit
2.150	2.335	0.185	Completed	Completed
3.000	3.190	0.190	Completed	Completed
6.240	7 .800	1.560	Completed	Completed
7.800	9.300	1.650	Completed	Completed
9.300	10.500	1.200	Completed	Completed
11.820	12.000	0.180	Completed	Completed
12.000	12.800	0.800	De scope	To be done after Electrical utility shifting
13.000	13.400	0.400	De scope	To be done after Electrical utility shifting
13.400	13.520	0.120	Completed	Completed
13.520	13.760	0.240	De scope	To be done after Electrical utility shifting
13.760	14.710	0.950	Completed	Completed
14.710	15.030	0.320	Completed	Completed as per MOM on dated 20.01.2021
15.030	15.540	0.510	Completed	Completed
15.748	16.600	0.852	Completed	Completed
16.875	16.975	0.100	Completed	Completed
17.400	17.570	0.170	Completed	Completed
17.570	11.120	0.150	Completed	Completed
17.720	17.800	0.080	Completed	Completed as per MOM on dated 20.01.2021
21.012	21.725	0.653	Completed	Completed
27.550	27.650	0.100	Completed	Completed
27.900	27.990	0.090	Completed	Completed
28.600	28.675	0.075	Completed	Completed
31.800	I 34.820	3.020	Completed	Completed
41.520	I 42.900	1.380	Completed	Completed
44.260	I 45.520	1.260	Completed	Completed

46.250	48.740	2.490	Completed	Completed 46+250 to 48+600. Balance 48+600 to 48+740 not completed as it is beyond CA. Refer vide IE letter No.2228 dated 21.02.2019.
50.580	51.600	1.020	Completed	Completed 50+700 to 51+600. Balance50+580 to 50+700 not completed as it is beyond CA refer vide IE letter No. 2228 dated 21.02.2019.
54.100	54.700	0.600	Completed	Completed
55.080	55.180	0.100	Completed	Completed
56.800	57.920	1.120	Completed	Completed
59.068	59.130	0.062	Completed	Completed

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-6*

Table 4-6: Punch List 2 – LHS Service Road

From	To	Length (Km)	Status as on13.11.2021	IE Observation during Joint Site visit
414.000	414.250	0.250	Completed	Completed
416.200	417.400	1.200	Completed	Completed
0+510	0+700	0.190	Completed	Completed
1.300	1.700	0.400	Completed as per available width	Completed as per available width as per MOM dated 20.01.2021
1.830	1.910	0.080	Completed	Completed
1.910	2.150	0.240	Completed	Completed
3.190	3.590	0.400	Completed	Completed as per MOM on dated 20.01.2021
3.590	3.770	0.180	Completed	Completed
5.362	5.570	0.208	De Scope	De Scope as per IE letter No 2244 dated 14.03.2019
12.800	13.000	0.200	De Scope	To be done after Electrical utility shifting
17.730	18.050	0.320	Completed	Completed as per MOM on dated 20.01.2021
18.050	18.196	0.146	De Scope	De Scope
18.196	20.083	1.887	Not As per CA	Not As per CA
34.820	34.930	0.110	Completed	Completed 34+820 to 34+840. Balance 34+840 to 34+930 shifted to design location 31+800 to

From	To	Length (Km)	Status as on13.11.2021	IE Observation during Joint Site visit
				31+840 L/S & 32+220 to 32+270 R/S as per CA location. service road not required as VUP at Km.34+930 has been deleted. Refer vide IE letter No.2228 dated 21.02.19.
37.850	38.700	0.8S0	Completed	De-scoped 38+536 to 38+700. balance 37+850 to 38+536 shifted to design location from 55+900 to 55+200 L/S, 53+900 to 54+000 R/S, 55+200 to 55+300 R/S, 56+730 to 56+800 L/S, S7+800 to 57+900 R/S, 46+250 to 46+381 L/S, 59+060 to 59+068 L/S, 59+070 to 59+083 R/S &, 46+323 to 46+377 R/S as CA location cannot be constructed due to LA issue (Railway land not transferred till date). Refer vide IE letter No.2228 dated 21.02.19.

4.1.3.2 Service Road (RHS)

- *Punch List 1(as per Schedule B) is presented in Table 4-7*

Table 4-7: Punch List 1 – RHS Service Road

From	To	Length (Km)	Status on 13.11 .2021	IE Observation during Joint Site visit
3.000	3.190	0.190	Completed	Completed as per MOM on dated 20.01.2021
6.060	6.720	0.660	Completed	Completed
7.100	8.145	1.045	Completed	Completed
8.980	9.720	0.740	Completed	Completed
13.760	14.530	0.770	Completed	Completed
15.062	15.240	0.178	Not in CA	Not in CA
15.240	15.540	0.300	Completed	Completed
15.540	15.840	0.300	Not in CA	Not in CA
15.840	16.000	0.160	90m De Scope Balance complete	15.840 to 15.930 De-scoped as per MOM on dated 20.01.2021 15.930 to 16.000 Completed as per MOM on dated 20.01.2021
16.000	16.850	0.850	Completed	Completed
16.850	17.500	0.650	20m De Scope Balance complete	16.870 to 16.910 De-scoped as per MOM on dated 20.01.2021 16.910 to 17.500 Completed as per MOM on dated 20.01.2021
17.500	18.000	0.500	Completed	Completed as per MOM on dated 20.01.2021

From	To	Length (Km)	Status on 13.11 .2021	IE Observation during Joint Site visit
18.000	18.770	0.770	300m De Scope Balance complete	18.000 to 18.300 De-scoped as per MOM on dated 20.01.2021 18.300 to 18.770 Completed as per MOM on dated 20.01.2021
21.380	21.790	0.410	Completed	Completed
22.345	23.090	0.745	Completed	Completed
27.130	27.300	0.170	Completed	Completed
27.500	28.650	1.150	Completed	Completed
28.650	28.709	0.059	Completed	Completed
32.226	33.010	0.794	Completed	Completed
33.320	34.820	1.500	Completed	Completed
42.000	42.900	0.900	Completed	Completed
44.260	45.520	1.260	Completed	Completed
46.250	49.050	2.800	Completed	Completed 46+250 to 48+400. Balance 48+400 to 48+700 shifted to design location (47+700 to 49+050 R/S) due to encroachment by Chhatia Club. It is still pending refer vide IE letter No.2228 dated 21.02.19.
50.700	51.600	0.900	Completed	Completed
53.700	55.300	1.600	Completed	Completed 53+900 to 55+300. Balance 53+700 to 53+900 not completed as it is beyond CA refer vide IE letter No.2228 dated 21.02.2019.
57.250	57.920	0.670	Completed	Completed

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-8*

Table 4-8: Punch List 2 – RHS Service Road

From	To	Length (Km)	Status as on 3.11.2021	IE Observation during Joint Site visit
416.200	417.400	1.200	Completed	Completed
3.190	3.780	0.590	Completed	Completed as per MOM on dated 20.01.2021
5.370	5.550	0.180	De scope	Scope as per I E Letter No 2244 dated 14.03.2019
5.550	5.700	0.150	De scope	
5.700	5.940	0.240	De scope	
5.940	6.060	0.120	Completed	Completed

From	To	Length (Km)	Status as on 3.11.2021	IE Observation during Joint Site visit
18.770	19.080	0.310	Completed	Completed
19.080	19.150	0.070	Completed	Completed
19.150	19.500	0.350	Completed	Completed
19.500	20.083	0.583	Completed	Completed
20.996	21.270	0.274	Completed	Completed
21.270	21.380	0.110	Completed	Completed
21.975	22.070	0.095	Completed	Completed
22.070	22.345	0.275	De scope	De Scope
23.090	24.060	0.970	Completed	Completed as per MOM on dated 20.01.2021
24.060	24.655	0.595	Completed	Completed
34.820	35.300	0.480	Completed	Completed 34+820 to 34+840. Balance 34+840 to 35+300 shifting to design location 50+700 to50+700 L/S, 53+660 to 53+900 L/S & 46+250 to 46+270 R/S as per CA location. Service road not required as VUP at Km.34+930 has been deleted. Refer vide IE letter No.2228 dated 21.02.19.
37.850	39.400	1.550	Not Done	As per CA location cannot constructed due to LA issue-Missing Plots & payment issued including land constraint till date. Hence the same proposed to be de-scoped. Refer vide IE letter No.2228 dated 21.02.19
59.083	62.000	2.917	Completed	Completed

Repair/maintenance as required for entire length of Service Roads is reported by IE with recommended strengthening / overlay on Service Roads is given in Table 4-9:

Table 4-9: Service Road Stretches Requiring Strengthening / Overlay

Service Road Stretches Requiring Strengthening / Overlay		
Item Description	Thickness (mm)	Length (km)
WMM	200	3.524
DBM	50	5.432
BC	30	25.556

4.1.4 Junctions and Intersections

There are 180 junctions along the project road. Out of these, 13 junctions were classified as major junctions and 167 as minor junctions.

Punch list items of work for junction improvement or junction development issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here as below for junctions of the project:

4.1.4.1 Improvement of at grade Junctions (Major Intersections)

- *Punch List 1(as per Schedule B) is presented in Table 4-10*

Table 4-10: Punch List 1 - Major Intersections

Sr. No.	Description	Design Chainage	Type of Intersection	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
1	Fire Station	414+720	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	Completed
2	CRP	415+790	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	Completed
3	JaydevVihar	417+850	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out	Completed	Completed

Sr. No.	Description	Design Chainage	Type of Intersection	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
				arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.		
4	AcharyaVihar	418+820	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	Completed
5	Vani Vihar	0+705	I-	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	Completed
6	Rasulgarh	2+400	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	*Landscaping work done* *Lighting for PUP completed.*
7	Phulnakhra	11+118	y	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	*Landscaping work done* *Lighting for PUP completed.*
8	Khapuria	21+630	I-	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	Completed
9	Link Road	21+630	-t	Balance Bituminous work.	Completed	Completed
10	OMP	22+790	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing,	Completed	Completed

Sr. No.	Description	Design Chainage	Type of Intersection	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
				Land scaping at island, lighting.		
11	Jagatpur	27+580	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Land scaping at island, lighting.	Completed	Balance Landscaping work handed over to CMC, Cuttack
12	Manguli	31+840	+	Improvement of turning radius, Balance Bituminous work, Drainage/Drain out arrangement, Pedestrian crossing, Road Marking, Railing, Landscaping at island, lighting.	Completed	*Improvement of turning radius, Kerb, Pedestrian crossing, Road Marking, Railing, VUP lighting under process*

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-11*

Table 4-11: Punch List 2 - Major Intersections

SI. No.	Description	Chainage as per CA	Design Chainage	Scope (No.)	Status as on 13.11.2021	IE Observation during Joint Site visit
1	Puri Jn.	-	4+550	1	Completed	In Progress

4.1.4.2 Improvement of at grade junction (Minor Intersection)

❖ *Punch List 1(as per Schedule B) is presented in Table 4-12*

Table 4-12: Punch List 1 - Minor Intersections

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
34+050	LHS	34+130	LHS	1	Completed	Completed
34+586	LHS	34+630	LHS	1	Completed	Completed
34+072	RHS	34+950	RHS	1	Completed	Completed
35+454	RHS	35+431	RHS	1	Completed	Completed
37+446	RHS	37+415	RHS	1	Completed	Completed
39+600	LHS	39+860	LHS	1	Completed	Completed
43+730	LHS	43+700	LHS	1	Completed	Completed
48+184	RHS	48+175	RHS	1	Completed	Completed

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
48+260	LHS	48+240	LHS	1	Completed	Completed
48+044	RHS	49+065	RHS	1	Completed	Completed
31+860	LHS	51+875	LHS	1	Completed	Completed
38+106	RHS	53+140	RHS	1	Completed	Completed
56+940	LHS	56+940	LHS	1	Completed	Completed
61+200	RHS	59+930	RHS	1	Completed	Completed
60+660	LHS	60+700	LHS	1	Completed	Completed
60+850	RHS	60+820	RHS	1	Completed	Completed
61+080	LHS	61+090	LHS	1	Completed	Completed
61+080	RHS	61+080	RHS	1	Completed	Completed
61+200	LHS	61+564	LHS	1	Completed	Completed
61+200	RHS	61+566	RHS	1	Completed	Completed
414+134		414+134	LHS	1	Completed	Completed
414+144		414+144	RHS	1	Completed	Completed
414+280		414+280	LHS	1	Completed	Completed
414+320		414+320	RHS	1	Completed	Completed
414+380		414+380	RHS	1	Completed	Completed
414+514		414+580	LHS	1	Completed	Completed
414+650			LHS	1	Completed	Completed
414+690			RHS	1	Completed	Completed
415+664			RHS	1	Completed	Completed
415+920		415+920	RHS	1	Completed	Completed
415+968			RHS	1	Completed	Completed
416+020		415+960	RHS	1	Completed	Completed
416+100		416+140	LHS	1	Completed	Completed
416+130		416+130	RHS	1	Completed	Completed
416+376		416+376	LHS	1	Completed	Completed
416+480		416+480	RHS	1	Completed	Completed
416+610		416+610	RHS	1	Completed	Completed
416+700		416+700	LHS	1	Completed	Completed
416+776		416+730	RHS	1	Completed	Completed

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
416+850			RHS	1	Completed	Completed
416+994		416+994	RHS	1	Completed	Completed
417+140		417+140	RHS	1	Completed	Completed
417+160		417+160	LHS	1	Completed	Completed
417+360		417+360	RHS	1	Completed	Completed
417+440		417+440	LHS	1	Completed	Completed
417+486			RHS	1	Completed	Completed
417+594		417+594	LHS	1	Completed	Completed
417+650		417+650	LHS	1	Completed	Completed
417+806		417+806	LHS	1	Completed	Completed
417+846		417+846	LHS	1	Completed	Completed
417+890		417+890	RHS	1	Completed	Completed
417+984		417+984	RHS	1	Completed	Completed
418+090		418+090	RHS	1	Completed	Completed
418+160			RHS	1	Completed	Completed
418+396			RHS	1	Completed	Completed
418+626		418+670	RHS	1	Completed	Completed
0+365		0+365	RHS	1	Completed	Completed
0+949		0+949	LHS	1	Completed	Completed
0+992		0+992	LHS	1	Completed	Completed
1+000		1+000	RHS	1	Completed	Completed
1+320		1+320	LHS	1	Completed	Completed
1+700		1+700	LHS	1	Completed	Completed
2+430		2+430	RHS	1	Completed	Completed
2+570			LHS	1	Completed	Completed
2+846			RHS	1	Completed	Completed
3+010			RHS	1	Completed	Completed
3+070		3+070	RHS	1	Completed	Completed
3+479		3+479	RHS	1	Completed	Completed
6+030		5+990	RHS	1	Completed	Completed
6+130		6+130	RHS	1	Completed	Completed

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
6+190		6+190	RHS	1	Completed	Completed
7+075			LHS	1	Completed	Completed
7+435		7+435	RHS	1	Completed	Completed
8+800		8+800	RHS	1	Completed	Completed
9+010			LHS	1	Completed	Completed
9+090	.,_		LHS	1	Completed	Completed
10+506		10+506	LHS	1	Completed	Completed
11+164		11+164	LHS	1	Completed	Completed
12+816		12+816	RHS	1	Completed	Completed
13+371		13+371	RHS	1	Completed	Completed
14+230			LHS	1	Completed	Completed
14+294		14+310	LHS	1	Completed	Completed
14+974			RHS	1	Completed	Completed
15+018		15+018	LHS	1	Completed	Completed
15+046			RHS	1	Completed	Completed
15+110		15+110	LHS	1	Completed	Completed
15+204		15+204	LHS	1	Completed	Completed
15+661		15+661	LHS	1	Completed	Completed
15+661		15+661	RHS	1	Completed	Completed
16+020		16+020	LHS	1	Completed	Completed
16+170			RHS	1	Completed	Completed
16+360			RHS	1	Completed	Completed
16+590		16+590	LHS	1	Completed	Completed
16+656		16+730	LHS	1	Completed	Completed
16+720		16+820	LHS	1	Completed	Completed
16+894			RHS	1	Completed	Completed
17+066			LHS	1	Completed	Completed
17+355			RHS	1	Completed	Completed
17+589			LHS	1	Completed	Completed
17+735		17+735	RHS	1	Completed	Completed
17+901		17+901	LHS	1	Completed	Completed

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
18+580			LHS	1	De-scope	De-scope due to Balikuda VUP
18+660		18+660	LHS	1	Completed	Completed
19+525		19+525	RHS	1	Completed	Completed
19+725		19+725	RHS	1	Completed	Completed
19+741		19+741	LHS	1	Completed	Completed
20+141		20+141	LHS	1	Completed	Completed
20+141		20+141	RHS	1	Completed	Completed
21+074			RHS	1	Completed	Completed
21+190			RHS	1	Completed	Completed
22+090		22+140	LHS	1	Completed	Completed
22+284		22+284	RHS	1	Completed	Completed
23+035			LHS	1	Completed	Completed
23+619			LHS	1	Completed	Completed
23+675			RHS	1	Completed	Completed
23+801			RHS	1	Completed	Completed
24+135		24+135	RHS	1	Completed	Completed
24+159		24+159	LHS	1	Completed	Completed
24+245		24+245	LHS	1	Completed	Completed
24+245		24+245	RHS	1	Completed	Completed
24+530		24+680	RHS	1	Completed	Completed
27+345		27+345	RHS	1	Completed	Completed
28+240		28+190	RHS	1	Completed	Completed
31+206			RHS	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17
31+306			RHS	1	Completed	Completed
31+400			RHS	1	Completed	Completed
31+456			RHS	1	Completed	Completed
31+652			RHS	1	Completed	Completed
31+844	RHS	57+600	RHS	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
31+860	RHS	51+875	LHS	1	Completed	
31+944	RHS	46+790	LHS	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17
32+000	RHS	51+540	LHS	1	Completed	
32+180	RHS	51+840	RHS	1	Completed	
32+250	RHS	32+370	RHS	1	Completed	
32+596	LHS	38+700	RHS	1	Completed	
32+640	RHS	32+840	LHS	1	Completed	
32+698	RHS	48+175	LHS	1	Completed	
32+792	RHS	32+780	RHS	1	Completed	
33+200	RHS	33+180	RHS	1	Completed	
33+380	RHS	33+400	RHS	1	Completed	
33+406	RHS	48+340	RHS	1	Completed	
33+790	RHS	33+760	RHS	1	Completed	
34+050	RHS	34+130	LHS	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17
34+210	RHS	34+210	RHS	1	Completed	
36+220	RHS	36+200	RHS	1	Completed	
36+300	LHS	36+290	LHS	1	Completed	
36+356	RHS	36+760	RHS	1	Completed	
36+436	RHS	54+615	LHS	1	Completed	
36+580	RHS	36+560	RHS	1	Completed	
37+200	RHS	37+180	RHS	1	Completed	
37+970	LHS	37+970	LHS	1	Completed	
38+036	LHS	38+010	LHS	1	Completed	
38+106	RHS	53+140	RH5	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17
38+250	RHS	38+220	RHS	1	Completed	
38+406	RHS	38+370	RHS	1	Completed	

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
38+476	LHS	38+440	LHS	1	Completed	
39+036	LHS	39+010	LHS	1	Completed	
39+430	LHS	39+240	LHS	1	Completed	
42+634	LHS	42+670	LHS	1	Completed	
42+688	LHS	42+760	LHS	1	Completed	
42+986	LHS	42+990	RHS	1	Completed	
44+400	RHS	44+380	RHS	1	Completed	
45+256	RHS	45+250	RHS	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17
46+768	RHS	46+790	RHS	1	Completed	
47+530	RHS	47+520	RHS	1	Completed	
47+540	LHS	47+520	LHS	1	Completed	
47+850	LHS	47+850	LHS	1	Completed	
47+890	LHS	47+870	RHS	1	Completed	
50+120	LHS	45+900	RHS	1	Completed	
51+410	LHS	51+390	LHS	1	Completed	Completed as per design location ref. IE letter No.1904, 06.12.17
54+514	RHS	54+500	RHS	1	Completed	
57+060	LHS	57+050	LHS	1	Completed	
57+260	LHS	57+230	LHS	1	Completed	
57+604	LHS	57+580	LHS	1	Completed	
59+724	LHS	59+700	LHS	1	Completed	

Chainage as per CA	Side	Chainage as per Site	Side	No	Status as on 13.11.2021	Remarks
61+566	RHS	61+566	RHS	1	Completed	

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-13*

Table 4-13: Punch List 2 - Minor Intersections

SI. No.	Chainage (Km) as per CA	Chainage as per Site	Left C/Way	Right C/ Way	Total Scope as per CA (No.)	Status as on 13.11.2021	IE Observation during Joint Site visit
1	3+254	3+254		RH5	1	Completed	Completed
2	3+266	3+266	LHS		1	Completed	Completed
3	3+316	3+316		RHS	1	Completed	Completed
4	3+475	3+475	LHS		1	Completed	Completed
5	3+479	3+479		RHS	1	Completed	Completed
6	4+391	4+391	LHS		1	Completed	Completed
7	4+391			RHS	1	Completed	Completed
8	4+741			RHS	1	Completed	Completed
9	5+530			RHS	1	De Scope as per I E Letter No 2244 dated 14.03.2019	De Scope
10	19+525	19+525		RHS	1	Not Required connecting road not Available	De Scope

4.2 Structures

List of structures available at site is given in the table below.

Table 4-14: List of Structures

#	Type of structure	As per CA		
		New	Improvement	Total
1	Major Bridges	5	8	13
2	Minor Bridges (Main carriageway + serviceroad)	16	15	31

3	ROB	-	01	01
4	Flyover	09	-	09
5	Vehicular underpasses	17	8	25
6	Pedestrian/cattleunderpass	19	14	33
7	Culverts (Main carriageway + serviceroad)	49	68	117

4.2.1 Major Bridges

There are 06 major bridges along the project roads. Health conditions of these bridges were assessed to prepare rehabilitation, retrofitting schemes required for the old bridges as reported in Comprehensive Report on Rehabilitation Works by Aecom India Private Limited on 22nd June 2022. 04 nos. major bridges - (i) Kuakhai Bridge (Left-Old) at Km 4+840; (ii) Kathjodi Bridge (Left-Old) at Km 20+135; (iii) Mahanadi Bridge (Middle) at Km 24+672; (iv) Birupa Bridge (Left-Old) at Km 29+850 were identified by the team for further detailed investigations and detailed Rehabilitation was planned. The repair and replacement work of different items of these distressed bridges were executed as per the approved methodology, design / drawing and as per inspection and test plan. However, the newly built bridges were found to have no major distress/failure.

Rehabilitation works, thus identified, executed at site is provided by Aecom India Pvt Ltd in their Comprehensive Report on Rehabilitation Works on distressed major bridges dated 22nd June 2022. The details are given below:

Table 4-15: Repair & Rehabilitation of Major Bridges

Sl. No	Name of Bridge & Description in brief	Major Items of Repairs carried out
1	**Kuakhai Bridge Ch.- Km.4+840(Work Completed and opened to Traffic on 02.07.2021)** Total Length - 508 M. No of Span-17 Span length- 2x15.5M + 15x31.8M Superstructure - Balance Cantilever Foundation - Well Age – 70 years Appx	Replacements of Expansion Joints
		Deck Repair
		Repair of Railings
		Replacement of P2/P3 Articulation Joint with Steel brackets and HILTI bolts (Anchor Fastener)
		Servicing of Bearings
2	**Kathjodi Bridge Ch.- Km.20+135(Work Completed and opened to Traffic on 02.02.2022)** Total Length - 861.09 M No of Span-19 Span length - 2x16 + 17x48.77M Superstructure - Balance Cantilever Foundation - Well Age – 70 years Appx	Replacements of Expansion Joints
		Deck Repair
		Repair of Railings
		Servicing of Bearings
3	**Mahanadi Bridge Ch.- Km.24+672(Work Completed and opened to Traffic on 31.05.2022)** Total Length - 2253.55 M No of Span-47	Replacements of Expansion Joints
		Deck Repair
		Replacement of Railings

	Span length- 2x15.5 + 45x49.39M Superstructure - Balance Cantilever Foundation - Well Age – 70 years Appx	Servicing of Bearings
4	**Birupa Bridge Ch.- Km.29+850(Work Completed and opened to Traffic on 28.02.2022)** Total Length – 529.15 M. No of Span-17 Span length- 1x10.72 + 1x24.63 + 15x32.92M Superstructure - Balance Cantilever Foundation - Well Age - 70 years Appx	Replacements of Expansion Joints Deck Repair Replacement of Railings Servicing of Bearings

Punch list items of work for major bridges issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here in the list below:

4.2.1.1 Improvement of Major Bridges with no widening on MCW

❖ *Punch List 1(as per Schedule B) is presented in Table 4-16*

Table 4-16: Punch List 1 - Improvement of MJB with no widening on MCW

Existing Chainage (Km}	Str.	Stream / Feature Characteristics	Total Length of Structure (m)	Action to be Taken as per CA	Status as on 13.11.2020	IE Observation during Joint Site visit / Site data on May 2023
3+780	Left (New)	Palasuni	240	Bearings are rusted, Cleaning and painting required.	Completed	Completed
3+780	Right (New)	Palasuni	240	Bearing is corroded, Cleaning and painting required.	Completed	Completed
4+840	(left) (Old)	Kuakhai	517.73	New wearing course to lay. Deck slab and parapet to be repaired. Other minor repair work to be done	Completed	Completed
4+840	Right (new)	Kuakhai	516.95	New wearing Course to lay. Damaged portion of footpath and railing to be repaired.	Completed	Completed
20+135	Left (old)	Kathjodi	861.92	Nothing is in CA for Old Bridge.	Completed	*Completed*
20+135	Right (new)	Kathjodi	861.92	Existing protection work to be rehabilitated	Completed	Completed

22+300	Right (new)	Taldanda	96	Minor Repairing work to be done	Completed	Completed
24+672	Left (old)	Mahanadi	2253.2	Nothing is provided in CA for Old Bridge.	Completed	*Completed*
24+672	Right (new)	Mahanadi	2253.2	Damaged railing along with minor repair to be done.	Completed	Completed
29+850	Left (old)	Birupa	538.4	Nothing is provided in CA for Old Bridge.	Completed	*Completed*
29+850	Right (new)	Birupa	538.4	Damaged railing along with minor repair to be done.	Completed	Completed

4.2.2 Minor Bridges

There are 27 minor bridges along the project road. Condition of Minor Bridges are already recorded in the report submitted on 29 December 2021. General issues like clogging of drainage spouts, debris, vegetation noticed at the bridges can be resolved through routine and preventive maintenance.

Punch list items of work for minor Bridges issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here as:

4.2.2.1 New Minor Bridges on MCW

- *Punch List 1(as per Schedule B) is presented in Table 4-17*

Table 4-17: Punch List 1 - New Minor Bridges on MCW

Sr. No	Chainage	Description	Status as on 13.11.2021	IE Observation during Joint Site visit
1.	30+715	Floor protection as per CA to be done	Completed	Completed

4.2.2.2 New Minor Bridge on Service Road

- *Punch List 1(as per Schedule B) is presented in Table 4-18*

Table 4-18: Punch List 1 - New Minor Bridges on Service Road

Sl. No	Chainage	Description	Status as on 13.11.2021	IE Observation during Joint Site visit
1.	6+522 (LHS)	Local Canal work is completed	Completed	Completed

4.2.2.3 Improvement of Minor Bridges on MCW/SR

❖ *Punch List 1(as per Schedule B) is presented in Table 4-19*

Table 4-19: Punch List 1 - Improvement of Minor Bridges on MCW/SR

Sr. No	Chainage	Description	Status as on 13.11.2021	IE Observation during Joint Site visit
1.	5+967 (MCW/SR)	New wearing course to be laid Deck slab and Parapet to be repaired	Completed	Expansion Joint Work to be done after completion of Hanspal Flyover executing by another agency.

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-20*

Table 4-20: Punch List 2 - Improvement of Minor Bridges on MCW/SR

Sr. No.	Location	Status as on 13.11.2021	IE Observation during Joint Site visit
1.	Daya Canal at 3+230	Completed	Completed
2.	Extra widening at 0+562 (LHS)	Completed	Completed

4.2.3 Grade Separators & Underpasses

In general, the Grade Separators & Underpasses are in good structural condition. The treatment of expansion joints, clogged with debris at inlets for drainage, painting for pipe railings on barriers, removal of vegetations can be taken up through routine and preventive maintenance.

Punch list items of work for flyovers and underpasses issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here as:

4.2.3.1 Grade Separators (Flyover)

❖ *Punch List 1(as per Schedule B) is presented in Table 4-21*

Table 4-21: Punch List 1 - Flyover

Location	Chain ages	Length (m.)	Span Arrangement	Status as on 13.11.2021	IE Observation during Joint Site visit
Manguli / Chawk Interchange - Viaduct across NH-5	31+874	100.00	2x25m+1X30m+1x20m	Completed	Completed

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-22*

Table 4-22: Punch List 2 - Flyover

Location	Chainages	Length (m.)	Span Arrangement	Status on 13.11.2021	IE Observation during Joint Site visit
Puri Junction Flyover	4+560	76.70	2x20.85m+35m	Completed	Completed

4.2.3.2 New Vehicular Underpass

- *Punch List 1(as per Schedule B) is presented in Table 4-23*

Table 4-23: Punch List 1 - New Vehicular Underpass

Sl No	Location / Chainage	Balance work to be done	Status on 13.11.2021	IE Observation during Joint Site visit
1	416+704	Drainage arrangement, turning radius/rotary etc for completed VUP	Completed	Completed
2	1+650	Pavement work, drainage arrangement, turning radius/rotary etc for completed VUP	Completed as per available width	Balance work De Scope as per I E letter No 2244 dated 14.03.2019{Due to LA issue
3	8+000		Completed	Completed As per modified drawing & available Land
4	9+050		Completed	Completed As per modified drawing & available Land
5	13+918		Completed	Completed As per modified drawing & available Land
6	16+415		Completed	Completed As per modified drawing & available Land
7	21+095		Completed	Completed As per modified drawing & available Land
8	24+655		Completed	Completed As per modified drawing & available Land
9	33+500		Completed	Completed As per modified drawing & available Land
10	44+760		Completed	Completed As per modified drawing & available Land
11	46+815		Completed	Completed As per modified drawing & available Land

1	21+072 (Both existing carriageway)	Pavement **work,** drainage arrangement, turning radius/rotary etc for completed VUP	Completed	Completed As per available Land
2	24+655 (Both existing carriageway)		Completed	Completed As per available Land
3	61+564 (Both existing carriageway)		Completed	Completed As per available Land

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-24*

Table 4-24: Punch List 2 - New Vehicular Underpass

Chainages	Status on 10.10.2020	Status as on 13.11.2021	IE Observation during Joint Site visit
5+700	Balance	De scope	De Scope as per I E letter No 2244 dated 14.03.2019
19+100	Balance	De scope	Not in CA

4.2.3.3 New Pedestrian Underpasses /Subway

- *Punch List 1(as per Schedule B) is presented in Table 4-25*

Table 4-25: Punch List 1 - New Pedestrian Underpass / Subway

SI. No.	Location/ Chainage	Balance work to be done	Status as on 13.11.2021	IE Observation during Joint Site visit
1	61+160 (subway)	Seepage protection, drainage arrangement, handrail, floor/other tile works, sump with water pump.	Completed	Water pump with Pipeline work balance.

4.2.3.4 Improvement of pedestrian and cattle Underpass

- *Punch List 1(as per Schedule B) is presented in Table 4-26*

Table 4-26: Punch List 1 - Improvement of pedestrian and cattle Underpass

Location/ Chainage	Balance work to be done	Status as on 13.11.2021	IE Observation during Joint Site visit
5+720 (both side)	Repair of Minor cracks, cleaning of PUP, Drainage arrangement and provision of Steps/Ramp.	De Scope	De Scope as per I E letter No 2244 dated 14.03.2019
8+900 (Both side)		De Scope	(De-Scope) PUP slab top is parallel to Sr. Rd FRL
9+660 (Both side)		De Scope	(De-Scope) PUP slab top is parallel to Sr. Rd FRL
13+740 (Both side)		Completed	Completed

17+167 (Both side)		Completed	Completed
18+165 (Both side)		De Scope	(De-Scope) PUP slab top is parallel to Sr. Rd FRL
19+840 (both side)		Completed	Completed
22+480 (Both side)		Completed	Completed
28+190 (Both side)	Repair of Minor cracks, cleaning of PUP, Drainage arrangement and provision of Steps/Ramp.	Completed	Completed
33+050 (Both side)		De-Scope	De-Scoped due to existing structure does not exist at site ref. IE letter No.8151, 14.11.2018
39+980 (BS)		Completed	Completed

4.2.4 Box Culverts

No distress observed at Box culverts however maintenance activities are required for cleaning accumulated debris, vegetations and waterway.

Punch list items of work issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here as:

New Culvert on MCW Km. 40+600

❖ *By Punch List 2 (Items noticed for which land is available)*

As per site the CA location at 40+600, culvert is not constructed due to impact of new toll plaza at Ch. 40+500. This has reference to letter # NOD-SAICPL/IC-Orissa/NH-5/2019/ MG/8151, dated 14 November 2018.

New Culverts on Service Road

❖ *Punch List 1(as per Schedule B) is presented in Table 4-27*

Table 4-27: Punch List 1 - New Culverts on Service Road

Location/ Chainage	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
7+295	BSR	Completed	Completed
9+430	BSR	Completed	Completed
18+504	RSR	Completed	Completed
19+480	RSR	Completed	Completed
38+001	BSR	De-Scope	As per site there is deleted service road due to LA constraint. It was proposed to reduction in scope refer IE letter No.8151, 14.11.2018

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-28*

Table 4-28: Punch List 2 - New Culverts on Service Road

Location/ Chainage	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
18+504	LSR	Not in CA	Not in CA
19+480	LSR	Not in CA	Not in CA
38+987	RSR	Not Done	Cannot be done as there are no service road. This is also not given in CA
40+960	RSR	Not Done	Cannot be done as there are no service road. This is also not given in CA
37+979	BSR	Not Done	Cannot be done as there are no service road. This is also not given in CA
38+250	BSR	Not Done	Cannot be done as there are no service road. Refer letter No. NOD-SAICPL/IC-Orissa/NH- 5/2019/ MG/8151, Dated: 14.11.2018
41+402	RSR	Not Done	Cannot be done as there are no service road. This is also not given in CA
41+613	BSR	Completed	Completed only LSR & RSR not done as there are no service road. This is also not given in CA.
44+331	BSR	Completed	Completed
45+100	BSR	Completed	Completed
45+581	BSR	Completed	Completed
48+599	BSR	Not Done	Cannot be done as there are no service road. This is also not given in CA
54+080	RSR	Completed	Completed
55+081	BSR	Completed	Completed
59+061	RSR	Not Done	Cannot be done as there are no service road. This is also not given in CA
24+420		Not in CA	Not in CA
15+828	BSR	LHS done, RHS De-scope	LHS complete, RHS De-scope

4.3 Drainage

Punch list items of drainage work issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here as:

4.3.1 Longitudinal Drain

- *Punch List 1(as per Schedule B) is presented in Table 4-29*
  Longitudinal drains which are descoped or proposed to be descoped due to LA issue, payment issue, non-availability of land but comprises in the punch list during PCOD are listed here. Except this list, the drain length comprising the Punch list during PCOD is completed as per IE letter dated 24th December 2021.

Table 4-29: Punch List 1 - Longitudinal drains

Chainage From	Chainage To	Length (m)	Side	Type of Drain	Status as on 13.11.2021	IE Observation during Joint Site visit
414+640	414+654	14	LHS	Cone. Lined Drain	De-scope	De-scope
414+654	414+707	53	LHS	Cone. Lined Drain	Not required (Fire Station Jn.)	Not required
417+870	417+970	100	LHS	Conc. Lined Drain	De-scope	De-scoped due to Junction
417+970	418+030	60	LHS	Conc. Lined Drain	De-scope	De-scoped due to Retaining Wall
418+030	418+240	210	LHS	Conc. Lined Drain	De-scope	De-scoped due to Super elevation in Service Road and Forest area
418+240	418+430	190	LHS	Lined Drain	De-scope	
418+430	418+475	45	LHS	Conc. Lined Drain	Not required	Not required
1+400	1+610	210	LHS	Unlined Drain	De-scope	Land not available
1+610	1+750	140	LHS	Unlined Drain	De-scope	Mancheswar Rd & ROB_
1+800	1+960	160	LHS	Unlined Drain	De-scope	Not Possible
1+960	2+185	225	LHS	Unlined Drain	De-scope	De-scope/ Land not Available
2+185	2+300	115	LHS	Conc. Lined Drain	De-scope	
2+300	2+358	58	LHS	Conc. Lined Drain	De-scope	May be De-scoped due to Rasulgarh
11+951	12+350	399	LHS	Lined Drain below separator and footpath	49m Completed, Balance De scope	49m is Completed, Balance after completion of service road drain
12+350	13+281	931	LHS	Lined Drain below separator and footpath	De scope	After completion of service road drain

Chainage From	Chainage To	Length (m)	Side	Type of Drain	Status as on 13.11.2021	IE Observation during Joint Site visit
13+281	13+691	410	LHS	Lined Drain below separator and footpath	De scope	After completion of service road drain
13+691	13+750	59	LHS	Lined Drain below separator and footpath	De scope	After completion of service road drain
13+850	13+900	50	LHS	Lined Drain below separator and footpath	De scope	De-scope
13+900	14+000	100	LHS	Lined Drain	De scope	De-scope
15+740	15+967	227	LHS	Lined Drain below separator and footpath	De scope	De scope
18+286	18+316	30	LHS	Lined Drain below separator and footpath	De-scope	De-scope/ Land not Available
18+316	18+416	100	LHS	Lined Drain below separator and footpath	De-scope	De Scope
18+416	18+521	105	LHS	Lined Drain below separator and footpath	De-scope	
18+521	18+661	140	LHS	Lined Drain below separator and footpath	De-scope	
18+661	18+691	30	LHS	Lined Drain below separator and footpath	De-scope	
19+586	19+671	85	LHS	Lined Drain below separator and footpath	De-scope	
19+671	19+725	54	LHS	Lined Drain below separator and footpath	De-scope	
21+030	21+210	180	LHS	Lined Drain below footpath	De-scope	Kathjodi Bridge approach A2. Height 7m – May be de-scoped
21+210	21+270	60	LHS	Lined Drain	De-scope	Not required at site due to Link Road Ramp de-scoped
21+580	21+660	80	LHS	Lined Drain	De-scope	Land not available
21+660	21+690	30	LHS	Lined Drain	De-scope	Land not available
21+690	21+750	60	LHS	Lined Drain	De-scope	Land not available
21+750	21+975	225	LHS	Lined Drain	De-scope	Land not available

Chainage From	Chainage To	Length (m)	Side	Type of Drain	Status as on 13.11.2021	IE Observation during Joint Site visit
22+370	22+490	120	LHS	Lined Drain below footpath and space for line drain both up and down ramps	De-scope	Canal portion de-scoped
27+530	27+590	27+530	LHS	Conc lined drain below separator and footpath	De-scope	Descoped due to Jagatpur Junc.
31+700	031+800	1700	LHS	Lined drain	De-scope	De-Scope due to Manguli junction
45+520	46+090	880	LHS	Unlined Drain	De Scope	Not Required (de scope)
415+800	415+820	20	RHS	Conc. Lined Drain	De-scope	Not possible due to CRP Junction to be de-scoped.
416+740	416+780	40	RHS	Lined Drain	De-scope	Land not available (Electric pole/May be de-scoped
417+870	417+970	100	RHS	Conc. Lined Drain	De-scope	Not possible due to Joydev Junction- May be de-scoped.
417+970	418+030	60	RHS	Conc. Lined Drain	De-scope	Land not available (Retaining Wall)/ May be de-scoped.
418+807	418+870	63	RHS	Conc. Lined Drain	De-scope	Not possible due to Acharya Vihar Junction. (May be de-scoped)
+475	1+610	135	RHS	Unlined Drain	De-scope	Land not available due to Hizan Basti
1+610	1+750	140	RHS	Unlined Drain	De-scope	
1+800	1+960	160	RHS	Unlined Drain	De-scope	
1+960	2+185	225	RHS	Unlined Drain	De-scope	
2+185	2+300	115	RHS	Conc. Lined Drain	De-scope	
2+300	2+358	58	RHS	Conc. Lined Drain	De-scope	
2+358	2+433	75	RHS	Conc. Lined Drain	De-scope	
7+107	+184	77	RHS	Lined Drain	De-scope	Land not available due to Temple- 77mtr/ to be de-scoped
8+536	8+916	380	RHS	Lined Drain	Completed	5-meter balance
8+916	9+012	96	RHS	Lined Drain	Completed	10-meter balance.
11+066	11+315	249	RHS	Conc. Lined Drain	Decision pending (vide SJEPL letter no.	De scope due to local issues
11+560	11+620	60	RHS	Lined Drain	-SJEPL/AM/1-2444 dtd.20.04.21 &2452 dtd.06.05.2021and	De scope due to local issues

Chainage From	Chainage To	Length (m)	Side	Type of Drain	Status as on 13.11.2021	IE Observation during Joint Site visit
11+620	11+951	331	RHS	Lined Drain	NHAI letter no. -647 dtd. 27.05.2021	De scope due to local issues
11+951	12+350	399	RHS	Lined Drain	De-Scope	De-Scope Due to canal
12+350	13+281	931	RHS	Lined Drain	De-Scope	De-Scope Due to canal
13+281	13+691	410	RHS	Lined Drain	De-Scope	De-Scope Due to canal
13+691	13+750	59	RHS	Lined Drain	De-Scope	De-Scope Due to canal
13+750	13+900	150	RHS	Lined Drain	De-Scope	De-Scope Due to canal
14+300	14+700	400	RHS	Lined Drain	De-Scope	De-Scope Due to canal
14+700	15+000	300	RHS	Lined Drain	De-Scope	De-Scope Due to canal
15+000	15+210	210	RHS	Lined Drain	De-Scope	De-Scope Due to canal
15+690	15+740	50	RHS	Unlined Drain	De-Scope	De-Scope
15+740	15+967	227	RHS	Lined Drain	De-Scope	De-Scope
18+000	18+220	220	RHS	Lined Drain	De-Scope	De-Scope
18+220	18+286	66	RHS	Lined Drain below separator and footpath	De-Scope	De-Scope
18+521	18+661	140	RHS	Lined Drain	Completed	existing drain was renovated
18+661	18+691	30	RHS	Lined Drain	Completed	existing drain was renovated
27+530	27+590	40	RHS	Conc Lined Drain	De-Scope	De-Scope
28+600	28+700	100	RHS	Conc Lined Drain	De-Scope	De-Scope
38+560	39+010	450	RHS	Lined Drain	De-scope	De-Scope as it can't be constructed due to LA issue- Missing Plots & payment issued
39+010	39+360	350	RHS	Un Lined Drain	De-scope	De-Scope as it can't be constructed due to LA issue- Missing Plots & payment issued

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-30*

Table 4-30: Punch List 2 - Longitudinal drains

Chainage From	Chainage To	Length (m)	Side	Type of Drain	Status as on 13.11.2021	IE Observation during Joint Site visit
5+530	5+745	215	LHS	Lined	De-Scope	De-Scope
18+750	18+866	30	LHS	Lined	De-Scope	De-Scope
18+866	18+946	80	LHS	Lined	De-Scope	De-Scope
18+946	18+971	25	LHS	Lined	De-Scope	De-Scope
18+971	19+001	30	LHS	Lined	De-Scope	De-Scope
19+001	19+036	35	LHS	Lined	De-Scope	De-Scope
19+036	19+176	140	LHS	Lined	De-Scope	De-Scope
19+176	19+276	100	LHS	Lined	De-Scope	De-Scope
19+276	19+376	100	LHS	Lined	De-Scope	De-Scope
19+376	19+586	210	LHS	Lined	De-Scope	De-Scope
40+250	40+980	740	LHS	Unlined Drain	Completed	Completed lined Drain in place of Unlined Drain
3+225	3+300	75	RHS	Unlined Drain		De-Scope
3+300	3+414	114	RHS	Unlined Drain		De-Scope
4+180	4+360	180	RHS	Lined Drain	De-Scope	De-Scope
4+360	4+820	460	RHS	Lined	De-Scope	De-Scope
5+375	5+530	155	RHS	Unlined	De-Scope	De-Scope
5+530	5+970	440	RHS	Lined	De-Scope	De-Scope
18+750	19+550	800	RHS	Lined Drain	Completed	18+807 to 19+103 Completed, Balance portion existing drain was renovated.
040+250	040+980	740	RHS	Unlined Drain	Completed	Completed lined Drain in place of Unlined Drain

4.4 Protection Works

Punch list items of protection work issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here as:

- *Punch List 1(as per Schedule B) is presented in Table 4-31*

Protection works which are descoped, not required due to avenue plantation at side slope, site condition etc or still balance but comprises in the punch list during PCOD are listed here. Except this list, the length of protection works comprising the Punch list during PCOD is completed as per IE letter dated 24th December 2021.

Table 4-31: Punch List 1 - Descoped Protection works

Chainage From	Chainage To	Length (m)	Side	Status as on 13.11.2021	IE Observation during Joint Site
20+000	20+074	74	LHS	23 mtr. Completed. Balance not Required	23mtr. completed. Balance De-scope
21+060	21+110	50	LHS	Not Required	De- scope
21+079	21+109	30	RHS	Not Required	De- scope
29+800	29+820	20	LHS	Not Required	De scope
29+800	29+820	20	RHS	Not Required	De scope
30+370	30+390	20	LHS	Not Required	De scope
43+500	43+551	51	LHS	Not Required	Not required as per site condition.
43+551	43+620	69	LHS	Not Required	Not required as per site condition.
46+020	46+164	144	LHS	Not Required	Not required as avenue plantation is done in embankment slope
46+100	46+176	76	RHS	Not Required	Not required as avenue plantation is done in embankment slope
46+181	46+206	25	LHS	Not Required	Not required as avenue plantation is done in embankment slope
46+182	46+206	24	RHS	Not Required	Not required as avenue plantation is done in embankment slope
46+241	46+266	25	LHS	Not Required	Not required as avenue plantation is done in embankment slope
46+266	46+340	74	LHS	Not Required	Not required as avenue plantation is done in embankment slope
48+580	48+640	60	LHS	Not Required	Not required as avenue plantation is done in embankment slope
48+677	48+997	320	LHS	Not Required	Not required as avenue plantation is done in embankment slope
48+788	49+040	252	RHS	Not Required	Not required as avenue plantation is done in embankment slope
48+840	48+930	90	LHS	Not Required	Not required as avenue plantation is done in embankment slope
49+270	49+418	148	LHS	Not Required	Not required as avenue plantation is done in embankment slope
49+272	49+632	360	RHS	Not Required	Not required as avenue plantation is done in embankment slope

50+015	50+183	168	RHS	Not Required	Not required as avenue plantation is done in embankment slope
50+019	50+087	68	LHS	Not Required	Not required as avenue plantation is done in embankment slope
50+154	50+190	36	LHS	Not Required	Not required as avenue plantation is done in embankment slope
50+205	50+425	220	RHS	Not Required	Not required as avenue plantation is done in embankment slope
50+208	50+520	312	LHS	Not Required	Not required as avenue plantation is done in embankment slope
55+406	55+482	76	LHS	Not Required	Not required as avenue plantation is done in embankment slope
55+550	55+826	276	LHS	Not Required	Not required as avenue plantation is done in embankment slope
55+647	55+827	180	RHS	Not Required	Not required as avenue plantation is done in embankment slope
55+860	55+944	84	RHS	Not Required	Not required as avenue plantation is done in embankment slope

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-32*

Table 4-32: Punch List 2 - Descoped Protection works

Chainages		Length (m)		Side	Status as on 13.11.2021	IE Observation during Joint Site visit
From	To	LHS	RHS			
4+650	4+750	100	100	Both	RH5 Fly-Over LHS-Not Required	Not Required
5+345	5+585	240	240	Both	De Scope as per IE Letter No 2244 dated 14.03.2019	De Scope due awarded to another agency

4.5 Project Facilities

Punch list items of works for Project Facilities as per Schedule C of the CA issued by IE during PCOD of the project on 06th January 2017 is updated and notified by Independent Engineer of the project vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/477 dated 24th December 2021 and is represented here.

Few items of works which were found incomplete and / or deficient during PCOD was listed as Punch List 1 & 2. Those items include (i) Traffic Signs (ii) Overhead sign Boards (iii) Pavement Marking (iv) Safety Barriers like Metal Beam Crash Barriers, New Jersey Barriers & RCC Crash Barriers (v) Guard Posts (vi) MS Railing / Fencing (vii) Delineators (viii) Cats Eye (ix) Boundary stone (x) Hectometre/KM/5th KM stone (xi) Pedestrian Crossing (xii) Land scaping and tree plantation (xiii) Truck lay Bye (xiv) Bus Bay (xv) LED Blinkers (xvi) ATMS.

During Joint site visit IE observed most of the works are completed. IE updated it in their letter dated 24 December 2021.

Those items of work which are De-scoped, not required as per site condition or as per IE's observation work not executed due to prevailing / lingering issues as per the Punch list items provided by IE during PCOD of the project are listed below in following tables.

4.5.1 Traffic sign

- *Punch List 1(as per Schedule B) is presented in Table 4-33*

Table 4-33: Punch List 1 - Descoped Traffic Signs

Chainage	Side	Type	Details	Location	Size	MCW/SR	Status as on 13.11.21	IE Observation during Joint Site visit
8+880	LHS	Cautionary	5-31	Pedestrian Crossing	900mm Triangular	Service Road	Not required	De scope
8+880	LHS	Informatory	PUP	Pedestrian Underpass	800x600mm Rectangular	Service Road	Not required	De scope
9+655	LHS	Cautionary	5-31	Pedestrian Crossing	900mm Triangular	Service Road	Not required	Not required
9+655	LHS	Informatory	PUP	Pedestrian Underpass	800x600mm Rectangular	Service Road	Not required	Not required
17+385	LHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	Service Road	Not required	Not required
8+250	RHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	Service Road	Not required	Not Required
9+663	RHS	Cautionary	S-31	Pedestrian Crossing_	900mm Triangular	Service Road	Not Required	Not Required
9+663	RHS	Informatory	PUP	Pedestrian Underpass	800x600mm Rectangular	Service Road	Not Required	Not Required
14+275	RHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	MCW Shoulder		De scope
16+212	RHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	Service Road		De scope
16+700	RHS	Mandatory	S-19	Restriction End	600mm Circular	MCW Shoulder	Not Required	Not Required
17+656	RHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	Service Road	Not Required	Not Required
18+273	RHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	Service Road	Not Required	Not Required
19+790	RHS	Informatory	S-55	Bus Bay	800x600mm	Service	Not	Not Required

Chainage	Side	Type	Details	Location	Size	MCW/SR	Status as on 13.11.21	IE Observation during Joint Site visit
					Rectangular	Road	Required	
24+250	RHS	Informatory	S-55	Bus Bay	800x600mm Rectangular	Service Road	Not Required	Not Required

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-34*

Table 4-34: Punch List 2 - Descoped Traffic Signs

Chainage	Side	Type		Detail	Size	Location	Status as on 13.11.2021	Status as on 20.9.2021	IE observation during site visit
5+600	LHS	Mandatory	S-48	Speed Limit 80	600mm Circular	MCW	sign board not fixed	De-Scope	De-Scope
	LHS	Hazard marker		Hazard marker	Rectangular 300x900mm	MCW	sign board not fixed	De-Scope	De-Scope
	LHS	Hazard marker		Hazard marker	Rectangular 300x900mm	MCW	sign board not fixed	De-Scope	De-Scope
	LHS	Informatory	S-55	Bus Bay	Rectangular 800x600mm	S/R	sign board not fixed	De-Scope	De-Scope
	RHS	Informatory	S-55	Bus Bay	900mm Triangular	S/R	sign board not fixed	De-Scope	De-Scope
	RHS	Hazard marker		Hazard marker	Rectangular 300x900mm	MCW	sign board not fixed	De-Scope	De-Scope
	RHS	Hazard marker		Hazard marker	Rectangular 300x900mm	MCW	sign board not fixed	De-Scope	De-Scope
	RHS	Cautionary	S-64	U-turn ahead	900mm Triangular	S/R	sign board not fixed	De-Scope	De-Scope
	RHS	Informatory		VUP ahead	900mm Triangular	S/R	sign board not fixed	De-Scope	De-Scope
	RHS	Cautionary	S-64	Merging traffic ahead	900mm Triangular	MCW	sign board not fixed	Not Required	Not Required

4.5.2 Pavement Marking

❖ *Punch List 1(as per Schedule B) is presented in Table 4-35*

Table 4-35: Punch List 1 - Descoped Pavement Markings

Chainage (Km)	Nos	Provision	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
Pavement Marking of Entry & Exit					
5+800	1	Exit	LHS	De-scope	De-scope as per IE letter no 2244 dt 14.03.2019
5+700	1	Entry	RHS		De Scope as per IE letter No 2244 dt 14.03.2019
5+700	1	Entry	RHS		De Scope as per I E letter No 2244 dt 14.03.2019
Pavement Marking of Service Road (Left Hand Side)					
12.000	12.800	0.800		De scope	To be done after completion of Service Road
13.000	13.400	0.400		De scope	To be done after completion of Service Road
13.520	13.760	0.240		De scope	To be done after completion of Service Road

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-36*

Table 4-36: Punch List 2 - Descoped Pavement Markings

On MCW, Entry Exit Ramp and Service Road the Pavement marking is balance for 7.367 km, out which 2.680 km of land is not available but remaining 4.687 km is completed

4.5.3 LED Traffic Blinker

❖ *Punch List 1(as per Schedule B) is presented in Table 4-37*

Table 4-37: Punch List 1 - Descoped LED Traffic Blinkers

Chainages as per Site	Scope	Status as on 13.11.2021	IE Observation during Joint Site visit
03+410	2		Not required median closed
08+460	2		Not required median closed

4.5.4 Metal Beam Crash Barrier

❖ *Punch List 1(as per Schedule B) is presented in Table 4-38*

Table 4-38: Punch List 1 - Descoped MBCB

From	To	Length (m)	C/W	Side	Section	Status as on 13.11.2021	IE Observation during Joint Site visit
LHS Carriageway							
22+653	22+730	77	LHS	Left	Horizontal Curve	Concrete crash Barrier	As per site condition MBCB fixing not possible
23+017	23+238	21	LHS	Left	Horizontal Curve	Retaining wall	Not possible
RHS Carriageway							
9+707	9+908	201	RHS	Right	Horizontal Curve	Completed	Not possible due to local issue
16+853	16+865	12	RHS	Right	Horizontal Curve	Not required	Exit point of MCW not required
23+004	23+214	211	RHS	Right	Horizontal Curve	Not required	Not Required

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-39*

Table 4-39: Punch List 2 - Descoped MBCB

From	To	Length (m)	C/W	Side	Section	Status as on 13.11.2021	IE Observation during Joint Site visit
19+439	19+551	113	LHS	Left	Horizontal Curve	Not Required	De scope awarded to another agency
19+439	19+551	113	LHS	Left	Horizontal Curve	Not Required	De scope awarded to another agency
5+345	5+525	180	RHS	Right	Emb. Ht. 3m above	De-Scope	De-Scope

4.5.5 Median Crash Barrier with Antiglare screen in median width less than 2 m

❖ *Punch List 1(as per Schedule B) is presented in Table 4-40*

Table 4-40 Punch List 1 - Descoped Median Crash Barrier with Antiglare

From	To	Length (m)	Type	Requirement	Status as on 13.11.2021	IE Observation during Joint Site visit
414.000	414.240	240	Wire Rope Crash Barrier	As per CA	Completed 414.000 to 414.224 & balance not required	Completed
10.510	10.640	130	Wire Rope Crash	As per CA	Completed	Completed
10.650	10.760	110	Concrete (PCC)	As per CA	Plantation Done	Completed
11.480	11.600	120	Concrete (PCC)	As per CA	Plantation Done	Completed
11.790	11.940	40	Concrete (PCC)	As per CA	Plantation Done	Completed
11.940	12.220	280	Concrete (PCC)	As per CA	Plantation Done	Completed
13.470	13.680	210	Concrete (PCC)	As per CA	Plantation Done	Completed
14.280	14.410	130	Concrete (PCC)	As per CA	Plantation Done	Completed
14.410	14.900	490	Concrete (PCC)	As per CA	Plantation Done	Completed
15.600	15.810	210	Concrete (PCC)	As per CA	Plantation Done	Completed
15.810	16.000	190	Concrete (PCC)	As per CA	Plantation Done	Completed

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-41*

Table 4-41: Punch List 2 - Descoped Median Crash Barrier with Antiglare

Balance Location on Main Carriageway is 4.840 km, out which 0.320 km is completed, for 2.800 km land is not available and for remaining 1.720 km it is not required

4.5.6 M S Railing

❖ *Punch List 1(as per Schedule B) is presented in Table 4-42*

Table 4-42: Punch List 1 - Descoped MS Railing

Chainage		Length	Side	Description	Status as on 13.11.2021	IE Observation during Joint Site visit
From	To					
21+870	21+930	60	LHS		Retaining Wall	Not required
24+073	24+277	204	LHS		Not required	Not required

4.5.7 Highway Lighting

❖ *Punch List 1(as per Schedule B) is presented in Table 4-43*

Table 4-43: Punch List 1 - Descoped/Balance Highway Lighting

Description	Chainage	Type of Intersection	Status as on 13.11.2021	IE Observation during Joint Site visit
CRP Chowk	415+790	+	Balance	Hindrance due to 33kv line may be shifted to other location as per NHAI location
23+400	24+000	600	Not Possible	May be shifted to other location as per NHAI decided location
24+000	24+380	380	Not Possible	May be shifted to other location as per NHAI decided location
24+380	27+200	2820	Not as per CA	Central Old Bridge Lighting to be done as per punch list 1
55+900	56+150	250	Completed	Completed shifted ch:33+100 to 33+350

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-44*

Table 4-44: Punch List 2 - Descoped Highway Lighting

Chainages From	To	Length (m)	Status as on 13.11.2021	IE Observation during Joint Site visit
5+500	5+900	400	De-Scope	De scoped and awarded to another agency/ street light location may be as NHAI location

4.5.8 Lighting for VUP/PUP/Subways at different locations

❖ *Punch List 1(as per Schedule B) is presented in Table 4-45*

Table 4-45: Punch List 1 - Descoped / Pending Lighting at Underpasses

Chainage	Description	Status as on 13.11.2021	IE Observation during Joint Site visit
8+888	PUP	De-Scope	De-Scope due to PUP slab is at Service Road level
9+661	PUP	De-Scope	De-Scope due to PUP slab is at Service Road level
18+296	PUP	Completed	De-Scope due to PUP slab is at Service Road level
19+100	VUP	Not in CA	Not in CA
44+744	VUP	Completed	Power supply work pending
46+800	VUP	Completed	Power supply work pending

48+190	VUP	Completed	Power supply work pending
51+250	VUP	Completed	Power supply work pending
54+500	VUP	Completed	Power supply work pending
57+581	VUP	Completed	Power supply work pending
59+600	VUP	Not possible	To be Done

❖ *Punch List 2 (Items noticed for which land is available) is presented in Table 4-46*

Table 4-46: Punch List 2 - Descoped Lighting at Underpasses

Chainages	Description	Status as on 13.11.2021	IE Observation during Joint Site visit
5+700	PUP	De-Scope	De scoped, awarded to another agency
5+700	VUP	De-Scope	De scoped, awarded to another agency

4.5.9 Pedestrians Walkway

❖ *Punch List 1(as per Schedule B) is presented in Table 4-47*

Table 4-47: Punch List 1 - Descoped Pedestrian Walkway

From	To	Length (m)	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
414+000	414+165	165	LHS	Not Required	De-Scope
414+220	414+320	100	LHS	Not Required	De-Scope
417+590	417+626	36	LHS	Not Required	De-Scope
414+000	414+165	165	RHS	Not Required	De-Scope
414+165	414+220	55	RHS	Not Required	De-Scope
414+220	414+370	150	RHS	Not Required	De-Scope
418+870	418+920	50	RHS	Not Required	De-Scope
418+980	419+000	20	RHS	Not Required	De-Scope
0+000	0+140	140	RHS	Not Required	De-Scope
14+038	14+163	125	RHS	Not Required	Not Required

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-48*

Table 4-48: Punch List 2 - Descoped Pedestrian Walkway

Location/ Chainage	Description	Total Length	Status as on 13.11.2021	IE Observation during Joint Site visit
Built-up area/Urban area /Applicable TCS	As per CA (Both side)	As per CA	Not possible	Land not Available

4.5.10 Truck Lay Bye

- *Punch List 1(as per Schedule B) is presented in Table 4-49*

Table 4-49: Punch List 1 - Issues at Truck Lay Bye

Chainage	Side	Scope	Status on 13.11.2021	Observation during Joint Site visit
33+840	LHS	1	Completed	Water supply balance
6+330	RHS	1	Completed	Toilet & rest room not constructed vide SJEPL letter no SJEPL/ASP/1-1669 dt.20.12.2017 (Lighting work balance)
28+600	RHS	1	Completed	Water supply balance
34+315	RHS	1	Completed	Water supply balance
48+925	RHS	1	Completed	In progress

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-50*

Table 4-50: Punch List 1 - Descoped Truck Lay bye

Chainage	Side	Scope	Status on 13.11.2021	IE Observation during Joint Site visit
28+600	LHS	1	De-Scope	De-Scope
61+800	LHS	1	Completed	Lighting & water Supply Work Balance
6+360	LHS	1 (Relocation to be finalized)	De-Scope	De-Scope
61+800	RHS	1	Completed	Lighting & water Supply Work Balance

4.5.11 Bus Bay & shelter

- *Punch List 1(as per Schedule B) is presented in Table 4-51*

Table 4-51: Punch List 1 - Details of Bus Bays with shelter

Chainage	Qty	Side	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
414+950	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway.	Completed	Lighting work balance
415+950	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, marking, drainage arrangement, lighting, walkway etc.	Land not available, De-Scope	De-Scoped
417+370	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway	Completed	Lighting work balance
8+180	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Shelter Fixed	Shelter Fixed (guard rail, Marking, drainage arrangement, lighting, walkway etc.)
8+830	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Shelter Fixed	Shelter Fixed (guard rail, Marking, drainage arrangement, lighting, walkway etc.
10+380	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway.	Land not available De-Scope	De-Scoped
14+370	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Shifted to 13+990	Shelter Fixed balance work not done due to LA issue. Lighting work pending.
15+450	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	De-Scope	De-Scope
17+445	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway	De-Scope	De-Scope

Chainage	Qty	Side	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
			etc.		
18+250	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Land not available De-Scope	De-Scope
21+490	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Bus Bay shifted at 27+445 (LHS) Completed	*Completed*
22+975	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Completed*
24+055	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Bus Bay shifted at 31+635 (LHS) - Completed	*Completed*
32+280	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Completed*
47+965	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Completed*
51+300	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Lighting work under progress waiting for Electrical supply from Discom*
56+030	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Not required (Shifted to 61+150LHS as per IE letter no 1256 On dated 14.12.2015)	Shifted to 61+150 LHS as per IE letter no 1256 On dated 14.12.2015
61+150	1	LHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	Not in CA Shifted from 56+030 LHS as per IE letter no 1256 dated 14.12.2015. Lighting work *Completed*

Chainage	Qty	Side	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
0+240	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Land not available	De scoped
2+500	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed at 2+150 LHS. Due to unavailability of Land in RHS	*Bus Shelter cut and looted by unknown people Lighting work under process*
5+770	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	De-scope due to Hanspal Harizon Basti	Awarded to another Agency
8+200	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Descope	De scope
11+820	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	Shelter Fixed (guard rail, Marking, drainage arrangement, lighting, walkway etc.)
14+370	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway.	De-Scope	De scope
16+120	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	De-Scope	De scope
17+535	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	De-Scope	De scope
18+195	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	De-Scope	De-Scope
19+675	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	De-Scope	De-Scope

Chainage	Qty	Side	Remarks	Status as on 13.11.2021	IE Observation during Joint Site visit / Site data on May 2023
24+095	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Shelter fixed at 27+800 RHS. Guard rail to do.	*Completed*
47+920	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Completed*
51+300	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Lighting work under progress, pending the power supply from Discom*
56+030	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Not Required	Shifted to 61+150 RHS as per IE letter no 1256 dt 14.12.2015
56+950	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed	*Completed*
61+150	1	RHS	Bus Bay constructed, Shelter to be constructed including guard rail, Marking, drainage arrangement, lighting, walkway etc.	Completed but not in CA	Shifted from 56+030 RHS as per IE letter no 1256 dt 14.12.2015. Lighting work *completed*

- *Punch List 2 (Items noticed for which land is available) is presented in Table 4-52*

Table 4-52: Punch List 2 - Descoped Bus Bays with Shelter

Chainages	Qty (No.)	Side	Status as on 13.11.2021	IE Observation during Joint Site visit
2+500	1	LHS	De-Scope	De-Scope
5+640	1	LHS	De-Scope	De-Scope
415+830	1	RHS	De-Scope	De-Scope

4.5.12 Toll Management System (TMS)

- The entire TMS is recently overhauled by replacing the faulty / damaged equipment.
- Site Acceptance Test (SAT) is also carried out and is reported on 21st July 2021.
- TMS maintenance including Hybrid ETC are being maintained with open tolling technology
- The audit systems are in place and are in good working condition
- Maintenance of Toll Plaza equipment and replacement of expendable and short life items

4.5.13 HTMS

- HTMS is installed by Concessionaire
- Site Acceptance Test (SAT) is also carried out and is documented on dated 07th December 2021
- The acceptance test verifies that the system works as required and validates the correct functionality with following equipment (i) Emergency Call boxes with all accessories complete with solar & vandal mechanism, protection barrier, ECB control room Equipment, Interface card & accessories, (ii) VMS Board full matrix display area (3000mmx1800mm), Cantilever Gantry, (iii) Meteorological Data System (MET) complete with Installation and accessories, (iv) Automatic Traffic Counter cum Classifier (ATCC) – IR Based, (v) ATMS control center with ATMS Software, (vi) Optical Fiber Connectivity, HDPE Duct – 40/33.

5. Maintenance Strategy

The strategy for cost effective and performance based Immediate Repair & Rehabilitation of the pavement for main carriageway and service road with its periodic maintenance is carefully planned and recommended based on observed distress and its intensity through visual inspection and recent report of IE vide letter # MSVHBI/PRJNHAI/IE /Chand-Bhu/2021/34495 dated 01st April 2022. It is presented in Table 5-1.

Table 5-1: Major Repair Rehabilitation & Periodic Maintenance

Year	Description	Main Carriageway	Service Road	Wearing Coat
Upto 31-Mar-2024	Immediate repair & Rehabilitation	40mm BC on 83.70 km 3-lane & 50mm BC on 38.50 km 3-lane + 65mm DBM on 37 km 3-lane.	Milling and Inlay 30mm BC on 25.50 km + 50mm DBM at 5.40 km + 200mm WMM at 3.5 km	-
1-Apr-2029 to 31-Mar-2030 & 1-Apr-2030 to 31-Mar-2031	Renewal Layer	30mm BC on 50% length and micro surfacing on 50% length	Micro Surfacing	Milling and inlay of 25mm BC
1-Apr-2036 to 31-Mar-2037 & 1-Apr-2037 to 31-Mar-2038	Periodic Overlay	40mm BC on entire Length & 50mm DBM on 10% Length of the project	30mm BC on entire length	-
1-Apr-2041 to 31-Mar-2042 & 1-Apr-2042 to 14-Feb-2043 (End of Concession Period)	Renewal layer	30mm BC on 50% length on each year	Micro Surfacing (50% length)	Milling and inlay of 25mm BC

5.1 Stretches for Immediate Repair with DBM on Main Carriageway

The stretches identified for immediate repair by DBM on main carriageway is given in Table 5-2

Table 5-2: DBM on Main Carriageway

S.No.	Chainage		Side	Dimensions in (M)			Lane
	From	To		Length	Width	Depth	
1	414.100	414.175	RHS	75.00	12.50	0.065	Full Width
2	414.175	414.652	RHS	477.00	11.50	0.065	Full Width
3	414.782	415.724	RHS	942.00	11.50	0.065	Full Width

S.No.	Chainage		Side	Dimensions in (M)			Lane
	From	To		Length	Width	Depth	
4	415.854	417.000	RHS	1146.00	11.50	0.065	Full Width
5	417.000	417.300	RHS	300.00	16.00	0.065	Full Width
6	417.300	417.550	RHS	250.00	16.00	0.065	Full Width
7	417.550	418.761	RHS	1211.00	11.50	0.065	Full Width
8	418.891	419.000	RHS	109.00	11.50	0.065	Full Width
9	0.000	0.640	RHS	640.00	11.50	0.065	Full Width
10	0.770	1.120	RHS	350.00	11.50	0.065	Full Width
11	1.120	1.700	RHS	580.00	15.50	0.065	Full Width
12	1.700	1.800	RHS	100.00	8.00	0.065	Full Width
13	1.800	2.155	RHS	355.00	11.50	0.065	Full Width
14	2.645	3.000	RHS	355.00	11.50	0.065	Full Width
15	30.338	31.563	RHS	1225.00	12.50	0.065	Full Width
16	31.603	31.824	RHS	221.00	12.50	0.065	Full Width
17	31.824	31.900	RHS	76.00	16.00	0.065	Full Width
18	31.900	32.000	RHS	100.00	12.50	0.065	Full Width
19	32.000	33.000	RHS	1000.00	12.50	0.065	Full Width
20	33.000	33.260	RHS	260.00	12.50	0.065	Full Width
21	33.260	33.900	RHS	640.00	11.50	0.065	Full Width
22	33.900	37.000	RHS	3100.00	12.50	0.065	Full Width
23	37.000	39.000	RHS	2000.00	12.50	0.065	Full Width
24	39.000	40.200	RHS	1200.00	12.50	0.065	Full Width
25	40.800	43.000	RHS	2200.00	12.50	0.065	Full Width
26	43.000	44.000	RHS	1000.00	12.50	0.065	Full Width
27	44.000	46.400	RHS	2400.00	12.50	0.065	Full Width
28	46.400	47.200	RHS	800.00	11.50	0.065	Full Width
29	47.200	47.900	RHS	700.00	12.50	0.065	Full Width
30	47.900	48.450	RHS	550.00	12.50	0.065	Full Width
31	48.450	49.000	RHS	550.00	12.50	0.065	Full Width
32	49.000	51.000	RHS	2000.00	12.50	0.065	Full Width
33	51.000	52.000	RHS	1000.00	12.50	0.065	Full Width
34	52.000	53.000	RHS	1000.00	12.50	0.065	Full Width
35	53.000	54.000	RHS	1000.00	12.50	0.065	Full Width
36	54.000	55.000	RHS	1000.00	12.50	0.065	Full Width
37	55.000	56.500	RHS	1500.00	12.50	0.065	Full Width
38	57.400	57.900	RHS	500.00	12.50	0.065	Full Width

S.No.	Chainage		Side	Dimensions in (M)			Lane
	From	To		Length	Width	Depth	
39	57.900	58.900	RHS	1000.00	12.50	0.065	Full Width
40	58.900	59.000	RHS	100.00	12.50	0.065	Full Width
41	59.000	59.380	RHS	380.00	12.50	0.065	Full Width
42	59.380	59.780	RHS	400.00	12.50	0.065	Full Width
43	59.780	60.600	RHS	820.00	12.50	0.065	Full Width
44	60.600	60.900	RHS	300.00	12.50	0.065	Full Width
45	60.900	62.000	RHS	1100.00	12.50	0.065	Full Width
				37012.00			

5.2 Stretches for Immediate Repair with BC on Main Carriageway

The stretches identified for immediate repair by BC on main carriageway is given in Table 5-3

Table 5-3: BC on Main Carriageway

S.No.	Chainage		Side	Dimensions in (M)		
	From	To		Length	Width	Depth
1	414.100	414.175	LHS	75.00	12.50	0.050
2	414.175	414.652	LHS	477.00	11.50	0.050
3	414.782	415.724	LHS	942.00	11.50	0.050
4	415.854	417.000	LHS	1146.00	11.50	0.050
5	417.000	417.550	LHS	550.00	16.00	0.050
6	417.550	418.761	LHS	1211.00	11.50	0.050
7	418.891	419.000	LHS	109.00	11.50	0.050
8	0.000	0.640	LHS	640.00	11.50	0.050
9	0.770	1.000	LHS	230.00	11.50	0.050
10	1.000	1.120	LHS	120.00	11.50	0.050
11	1.120	1.700	LHS	580.00	15.50	0.050
12	1.700	1.800	LHS	100.00	8.00	0.050
13	1.800	2.155	LHS	355.00	11.50	0.050
14	2.645	3.000	LHS	355.00	11.50	0.050
15	3.000	3.500	LHS	500.00	12.50	0.040
16	3.500	3.660	LHS	160.00	10.00	0.040
17	3.900	4.020	LHS	120.00	10.00	0.040
18	4.020	4.520	LHS	500.00	10.00	0.040
19	4.520	4.720	LHS	200.00	10.00	0.040
20	4.520	4.720	LHS	200.00	10.00	0.040
21	4.720	4.835	LHS	115.00	10.00	0.040

S.No.	Chainage		Side	Dimensions in (M)		
	From	To		Length	Width	Depth
22	4.720	4.835	LHS	115.00	10.00	0.040
23	5.360	5.410	LHS	50.00	8.00	0.040
24	5.360	5.410	LHS	50.00	8.00	0.040
25	5.890	10.550	LHS	4660.00	12.50	0.040
26	10.550	11.023	LHS	473.00	11.50	0.040
27	11.203	11.800	LHS	597.00	11.50	0.040
28	11.800	13.660	LHS	1860.00	12.50	0.040
29	13.660	14.280	LHS	620.00	11.50	0.040
30	14.280	15.000	LHS	720.00	12.50	0.040
31	15.000	15.684	LHS	684.00	12.50	0.040
32	15.684	15.705	LHS	21.00	12.50	0.040
33	15.705	18.400	LHS	2695.00	12.50	0.040
34	19.700	19.900	LHS	200.00	12.50	0.040
35	19.900	20.152	LHS	252.00	10.00	0.040
36	19.900	20.152	LHS	252.00	10.00	0.040
37	20.152	21.024	LHS	872.00	8.00	0.040
38	21.024	21.250	LHS	226.00	10.00	0.040
39	21.024	21.250	LHS	226.00	10.00	0.040
40	21.250	21.390	LHS	140.00	8.00	0.040
41	21.780	21.930	LHS	150.00	8.00	0.040
42	21.930	22.000	LHS	70.00	8.00	0.040
43	22.000	22.100	LHS	100.00	8.00	0.040
44	22.100	22.345	LHS	245.00	12.50	0.040
45	22.442	22.570	LHS	128.00	12.50	0.040
46	22.570	22.741	LHS	171.00	8.00	0.040
47	22.859	23.165	LHS	306.00	8.00	0.040
48	23.165	23.700	LHS	535.00	12.50	0.040
49	24.600	24.780	LHS	180.00	12.50	0.040
50	27.033	27.290	LHS	257.00	16.00	0.040
51	27.290	27.900	LHS	610.00	11.50	0.040
52	27.900	28.600	LHS	700.00	12.50	0.040
53	28.600	28.876	LHS	276.00	16.00	0.040
54	28.600	28.876	LHS	276.00	16.00	0.040
55	28.936	29.478	LHS	542.00	10.00	0.040

S.No.	Chainage		Side	Dimensions in (M)		
	From	To		Length	Width	Depth
56	28.936	29.478	LHS	542.00	10.00	0.040
57	29.538	29.800	LHS	262.00	10.00	0.040
58	29.538	29.800	LHS	262.00	10.00	0.040
59	30.338	30.714	LHS	376.00	10.00	0.050
60	30.338	30.714	LHS	376.00	10.00	0.050
61	30.714	31.563	LHS	849.00	10.00	0.050
62	30.714	31.563	LHS	849.00	10.00	0.050
63	31.563	31.603	LHS	40.00	10.00	0.050
64	31.563	31.603	LHS	40.00	10.00	0.050
65	31.603	31.824	LHS	221.00	12.50	0.050
66	31.603	31.824	LHS	221.00	12.50	0.050
67	31.824	32.000	LHS	176.00	12.50	0.050
68	32.000	33.260	LHS	1260.00	12.50	0.050
69	33.260	33.900	LHS	640.00	11.50	0.050
70	33.900	34.000	LHS	100.00	12.50	0.050
71	34.000	38.000	LHS	4000.00	12.50	0.050
72	38.000	39.000	LHS	1000.00	12.50	0.050
73	39.000	40.200	LHS	1200.00	12.50	0.050
74	40.800	42.000	LHS	1200.00	12.50	0.050
75	42.000	44.000	LHS	2000.00	12.50	0.050
76	44.000	46.400	LHS	2400.00	12.50	0.050
77	46.400	47.200	LHS	800.00	11.50	0.050
78	47.200	47.900	LHS	700.00	12.50	0.050
79	47.900	48.450	LHS	550.00	12.50	0.050
80	48.450	49.000	LHS	550.00	12.50	0.050
81	49.000	51.000	LHS	2000.00	12.50	0.050
82	51.000	52.000	LHS	1000.00	12.50	0.050
83	52.000	54.000	LHS	2000.00	12.50	0.050
84	54.000	56.000	LHS	2000.00	12.50	0.050
85	56.000	56.500	LHS	500.00	12.50	0.050
86	57.400	57.900	LHS	500.00	12.50	0.050
87	57.900	58.900	LHS	1000.00	12.50	0.050
88	58.900	59.380	LHS	480.00	12.50	0.050
89	59.380	59.780	LHS	400.00	11.50	0.050

S.No.	Chainage		Side	Dimensions in (M)		
	From	To		Length	Width	Depth
90	59.780	60.000	LHS	220.00	12.50	0.050
91	60.000	60.600	LHS	600.00	12.50	0.050
92	60.600	60.900	LHS	300.00	11.50	0.050
93	60.900	62.000	LHS	1100.00	12.50	0.050
94	414.100	414.175	RHS	75.00	12.50	0.040
95	414.175	414.652	RHS	477.00	11.50	0.040
96	414.782	415.724	RHS	942.00	11.50	0.040
97	415.854	417.000	RHS	1146.00	11.50	0.040
98	417.000	417.300	RHS	300.00	16.00	0.040
99	417.300	417.550	RHS	250.00	16.00	0.040
100	417.550	418.761	RHS	1211.00	11.50	0.040
101	418.891	419.000	RHS	109.00	11.50	0.040
102	0.000	0.640	RHS	640.00	11.50	0.040
103	0.770	1.120	RHS	350.00	11.50	0.040
104	1.120	1.700	RHS	580.00	15.50	0.040
105	1.700	1.800	RHS	100.00	8.00	0.040
106	1.800	2.155	RHS	355.00	11.50	0.040
107	2.645	3.000	RHS	355.00	11.50	0.040
108	3.000	3.500	RHS	500.00	12.50	0.040
109	3.500	3.660	RHS	160.00	10.00	0.040
110	3.900	4.770	RHS	870.00	11.50	0.040
111	4.770	4.835	RHS	65.00	16.00	0.040
112	5.360	5.410	RHS	50.00	16.00	0.040
113	5.890	10.000	RHS	4110.00	12.50	0.040
114	10.000	10.550	RHS	550.00	12.50	0.040
115	10.550	11.023	RHS	473.00	11.50	0.040
116	11.203	11.800	RHS	597.00	11.50	0.040
117	11.800	13.660	RHS	1860.00	12.50	0.040
118	13.660	14.280	RHS	620.00	11.50	0.040
119	14.280	17.000	RHS	2720.00	12.50	0.040
120	17.000	18.400	RHS	1400.00	12.50	0.040
121	19.700	20.152	RHS	452.00	12.50	0.040
122	21.024	21.250	RHS	226.00	16.00	0.040
123	21.250	21.390	RHS	140.00	8.00	0.040

S.No.	Chainage		Side	Dimensions in (M)		
	From	To		Length	Width	Depth
124	21.390	21.780	RHS	390.00	8.00	0.040
125	21.780	22.345	RHS	565.00	8.00	0.040
126	22.442	22.570	RHS	128.00	13.00	0.040
127	22.570	22.741	RHS	171.00	8.00	0.040
128	22.741	22.859	RHS	118.00	8.00	0.040
129	22.859	23.165	RHS	306.00	8.00	0.040
130	23.165	23.700	RHS	535.00	12.50	0.040
131	24.600	24.780	RHS	180.00	12.50	0.040
132	24.600	24.780	RHS	180.00	12.50	0.040
133	24.780	27.040	RHS	2260.00	8.00	0.040
134	27.040	27.380	RHS	340.00	8.00	0.040
135	27.040	27.380	RHS	340.00	8.00	0.040
136	27.380	27.900	RHS	520.00	12.50	0.040
137	27.900	28.600	RHS	700.00	12.50	0.040
138	28.600	28.876	RHS	276.00	12.50	0.040
139	28.936	29.478	RHS	542.00	12.50	0.040
140	29.538	29.800	RHS	262.00	12.50	0.040
141	30.338	31.563	RHS	1225.00	12.50	0.040
142	31.603	31.824	RHS	221.00	12.50	0.040
143	31.824	31.900	RHS	76.00	16.00	0.040
144	31.900	32.000	RHS	100.00	12.50	0.040
145	32.000	33.000	RHS	1000.00	12.50	0.040
146	33.000	33.260	RHS	260.00	12.50	0.040
147	33.260	33.900	RHS	640.00	11.50	0.040
148	33.900	37.000	RHS	3100.00	12.50	0.040
149	37.000	39.000	RHS	2000.00	12.50	0.040
150	39.000	40.200	RHS	1200.00	12.50	0.040
151	40.800	43.000	RHS	2200.00	12.50	0.040
152	43.000	44.000	RHS	1000.00	12.50	0.040
153	44.000	46.400	RHS	2400.00	12.50	0.040
154	46.400	47.200	RHS	800.00	11.50	0.040
155	47.200	47.900	RHS	700.00	12.50	0.040
156	47.900	48.450	RHS	550.00	12.50	0.040
157	48.450	49.000	RHS	550.00	12.50	0.040

S.No.	Chainage		Side	Dimensions in (M)		
	From	To		Length	Width	Depth
158	49.000	51.000	RHS	2000.00	12.50	0.040
159	51.000	52.000	RHS	1000.00	12.50	0.040
160	52.000	53.000	RHS	1000.00	12.50	0.040
161	53.000	54.000	RHS	1000.00	12.50	0.040
162	54.000	55.000	RHS	1000.00	12.50	0.040
163	55.000	56.500	RHS	1500.00	12.50	0.040
164	57.400	57.900	RHS	500.00	12.50	0.040
165	57.900	58.900	RHS	1000.00	12.50	0.040
166	58.900	59.000	RHS	100.00	12.50	0.040
167	59.000	59.380	RHS	380.00	12.50	0.040
168	59.380	59.780	RHS	400.00	12.50	0.040
169	59.780	60.600	RHS	820.00	12.50	0.040
170	60.600	60.900	RHS	300.00	12.50	0.040
171	60.900	62.000	RHS	1100.00	12.50	0.040
172	0.000	1.000	RHS	1000.00	8.00	0.040
173	0.000	1.000	LHS	1000.00	8.00	0.040
				122276.00		

6. O&M and Other Costs

6.1 General

Cost Estimates is worked out for 'Balance Works' (CAPEX) and 'Operations and Maintenance' (OPEX). The cost estimates is worked out at present rates considering 2023-24 as the Base Year.

6.2 Assumptions

The cost estimates are based on following assumptions:

(a) Bitumen has been assumed to be sourced from HPCL Visakhapatnam.

(b) Hire charges for the Machinery have been worked out based on the "Revision of Scheduleof Rates-2014 on GST dated 16 Sep 2017 for Government of Odisha Works Department.

(c) Manpower rates taken from Central CPWD of India – April 2023.

(d) All Material Rates are obtained by Market Survey, Project site and Schedule of Rates Published by Government of Odisha Works Department.

(e) Coarse Sand/Metal sand are considered Kathajodi River Press Chak (CDA Ghat 12 Kmform NH-16 @ Km 20+200 to lead count approx. 20 Km and Aggregate considered Nearest quarry located Baramana 18 Km From NH-16 to Km 60+770 to Plant site andTapang (Chandikhole to Dubari) on project highway at approx. 45 km form the mid-point of Project Highway.

(f) Cement rate is taken from Tax Invoice dated Feb-23.

(g) Rate of steel is taken from SAIL Feb-23.

6.3 Rate Analysis Basis

Following have been considered for rate analysis:

(a) Rate analysis is based on material from SOR for year 2017-18 and escalated 5% every year collected from SOR-2017-18 "Revision of Schedule of Rates-2014 on GST dated 16 Sep 2017 for Government of Odisha Works Department.

(b) Hire charges for the Machinery is worked out based on the 'SOR'.

(c) Manpower rates taken from Central CPWD of India

(d) Bitumen is considered in our costing as VG-40 grade.

(e) Some Material Rates are obtained by Market Survey at Project site.

(f) Major factors are taken from MORT&H Standard Data Book.

(g) Overheads and profit is considered based on MOSRT&H Standard Data Bookand include all applicable prevailing taxes.

(h) Some of the rates are based on Consultant's experience on the similar ongoing projects in adjacent locations.

6.4 CAPEX

All the balance works will be responsibility of the existing sponsors of the Project. and will be completed as per "CP" (this abbreviation is being interpreted as 'as per Conditions Precedent for Agreement between Maple Highways and Seller)

6.5 Immediate Repairs and Rehabilitation

(a) Immediate repair cost for pavements works

6.5.1 Immediate Repairs

Immediate repair and rehabilitation measures as identified is laid down in Chapter 5 of the report.

Estimates for Immediate Repairs are given in Table 6-1. Immediate repair figure upto FY2024 is estimated to be INR 143.07 crores (including applicable GST) and no further CAPEX is envisaged in the project.

Table 6-1: Estimates for Immediate Repair of pavement

Item Description	Unit	Length	Quantity	Rate	Amount
Main Carriageway					
Tack Coat	Sqm	159288	1923645.5	15	28,854,683
DBM	Cum	37012	29841.89	11411	340,525,807
Bituminous Concrete	Cum	122276	63290.48	11852	750,118,769
Miscellaneous Expense.	LS				40,000,000
Service Road					
WMM	Cum	3524	5990.8	3604	21,590,843
Prime Coat	Sqm	3524	29954	46	1,377,884
Milling	Sqm	25556	204448	65	13,289,120
Tack Coat	Sqm	34512	276096	15	4,141,440
DBM	Cum	5432	2172.8	11411	24,793,821
Bituminous Concrete	Cum	25556	6133.44	11852	72,693,531
Earthwork in Shoulders	Sqm		299,150	81	24,231,150
Thermoplastic Paint (MCW+SR)	Sqm		51,870	409	21,214,634
Road Studs	Nos		19,487	250	4,871,750
			Total Amount INR		**1,347,703,431**
Total Amount upto March 2024 (INR Cr.) Including GST					**159.03**
Work executed upto March 2023 (INR Cr.) including GST					**15.96**
Net Balance Amount INR Cr. (including applicable GST)					**143.07**

6.6 O & M Estimates

Operation and Maintenance estimates have been worked out in following heads:

(a) Routine Maintenance
(b) Operations
(c) Major Maintenance

6.6.1 Routine Maintenance Estimates

6.6.1.1 Assumptions

Routine maintenance cost is based on following broad assumptions:

(a) 2.5% & 2.5% of total area of Main Carriageway area is considered for repairs every year for potholes and sealing of cracks respectively.
(b) Kerb, Concrete crash barrier and PGR (Pedestrian guard rail) painting once in every three years.
(c) Removal and safe disposal of dead animals along the highway @ 30 per Month.
(d) Replacement of damaged Metal Beam Crash Barriers @ 1% of total length per year.

6.6.1.2 Routine Maintenance

Routine Maintenance covers all activities required to maintain the road in traffic worthy conditionand provide desired comforts to the road users. Routine Maintenance can be classified into following three categories:

(a) Routine or day to day maintenance
(b) Pre-monsoon maintenance
(c) Post monsoon maintenance

6.6.1.3 Routine Maintenance or day to day maintenance

Routine maintenance is required continuously on the road stretch and structures and covers the following activities:

(a) Cleaning of the Road
(b) Pavement maintenance to include crack sealing and pothole repairs
(c) Shoulder repairs
(d) Maintenance of avenue plantation, horticulture and median plantation
(e) Maintenance of signage, gantry boards and other road furniture
(f) Maintenance of culverts, bridge drainage spouts, expansion joints, side slopes andverges
(g) Surface cleaning, dust or vegetation control, sand removal from structures
(h) Reporting any damage caused to bridges by traffic accidents
(i) Maintenance of guard rails and crash barrier etc.
(j) Inspection after each flood, and reporting any damage to the bridge, also the development of any scour, particularly those affecting foundations in the vicinity of piersand abutments.

6.6.1.4 Pre-monsoon Maintenance

This is carried out prior to the monsoons and includes the following:

(a) Attention at the time to heavy floods, particularly in preventing accumulations of logs,trees and other debris on upstream side of piers and abutments.
(b) Cleaning of roadside / median drains.
(c) Removal of vegetation growth on sub structures.
(d) Cleaning of Pipe culverts.

6.6.1.5 Post-monsoon Maintenance

This includes maintenance that is carried out immediately after the monsoons and includes the following:

(a) Inspection of all structures after each monsoon and reporting any damages.
(b) Cleaning of roadside drains.

6.6.2 Operations Estimates

6.6.2.1 Toll Plaza

This cost includes the following:

(a) Maintenance of Toll Plaza building, booths and tolling equipment.
(b) Provision of IT in-charge, IT supervisor, staff at Toll Plaza location.
(c) Administration and essential facilities for the staff and road users.
(d) Maintenance of Toll Plaza equipment and replacement of expendable and short life items.
(e) Electricity cost including standby generator.

6.6.2.2 Highway

This cost includes the following:

(a) Provision of three Patrolling Vehicle, including operating cost for round-the-clock patrolling the Project Highway.
(b) Provision of one ambulance at each Toll Plaza for accident victims.
(c) Provision of one Crane 20 Ton capacity at each Toll Plaza.
(d) Provision of one Vehicle to Police Personnel with Chauffeurs
(e) Expenditure on medical aid and provision of nursing staff.
(f) Cost of tests – two RI test every year consider and one BBD test every year.

6.6.2.3 Energy

Electrification is to be provided at toll plaza, junctions, Bus Bay, Truck Lay Byes, Canopy and Underpass. Following extent has been assumed/considered:

(a) Street light luminaries of 250 watts (Sodium Vapour/ Mercury Vapour).
(b) Electricity tariff @ ₹ 6.50 per unit and standby Generator traffic @ ₹ 18.00 per unit considered.
(c) During site visit we noticed 17+4=21 (4 nos. to be installed in New Toll Plaza) high mast lights, 799 Nos Double Arms, 834 Nos Single Arms, Structure lights 200 Nos andCanopy light 32 Nos. considered.

6.6.2.4 Miscellaneous

(a) IC cost considered as approx. 1/3 of construction period cost as per industry practice.(IC cost during construction period 1% of authority TPC)
(b) Over-head expenses @ 10% of Routine maintenance and Administration cost.
(c) Insurance premium @ have been taken as INR 10,797,200 per year (per month 899,767) as per Data shared by Client. Most insurance policy are already expired as ofnow in July 2019.
(d) Maintenance of ATMS and TMS (adopted as 10% of the capital cost per year for the allthe system & components being provided.)

6.6.3 Major Maintenance

Major Maintenance strategy is covered in Chapter 5.

6.6.4 Summary of O & M Estimates

Annual O&M estimates at present rates is placed at Table 6-2. Year-wise O&M estimates for the balance duration of concession period with escalation is given in Table 6-3.

Table 6-2: Annual O&M estimates

#	Item Head	Annual Cost
1	Routine Maintenance (6 lanes)	69,206,275
2	Street light power expenses	27,400,536
3	Operational expenses	25,192,581
4	Administrative expenses	20,449,800
5	Tolling Expenses (16 Lane Toll Plaza)	58,285,038
6	IC Fees (Assumed)	13,960,000
7	Insurance policy premium expenses	10,797,200
8	Maintenance of ATMS/TMS (10% of the capital cost)	15,757,909
	Total (₹) (including applicable GST)	**241,049,338**
	Total (Cr) (including applicable GST)	**24.10**

Table 6-3: Year-wise O&M estimates with escalation

Duration		Major Maintenance Cost		O & M Cost			
From	To	Periodic Maintenance	HTMS/TMS Replacement cost	Routine Maintenance	Operation & Tolling Cost	Energy Charges	Total for O&M
1-Apr-2023	31-Mar-2024	143.07		6.92	14.44	2.74	24.10
1-Apr-2024	31-Mar-2025			7.28	15.19	2.88	25.36
1-Apr-2025	31-Mar-2026			7.62	15.91	3.02	26.55
1-Apr-2026	31-Mar-2027			7.99	16.67	3.16	27.81
1-Apr-2027	31-Mar-2028			8.35	17.42	3.30	29.07
1-Apr-2028	31-Mar-2029			8.71	18.18	3.45	30.35
1-Apr-2029	31-Mar-2030	53.96		9.07	18.92	3.59	31.58
1-Apr-2030	31-Mar-2031	56.04	23.33	9.42	19.66	3.73	32.80
1-Apr-2031	31-Mar-2032			9.78	20.42	3.87	34.07
1-Apr-2032	31-Mar-2033			10.17	21.23	4.03	35.43
1-Apr-2033	31-Mar-2034			10.58	22.08	4.19	36.85
1-Apr-2034	31-Mar-2035			10.99	22.93	4.35	38.27
1-Apr-2035	31-Mar-2036			11.40	23.79	4.51	39.69
1-Apr-2036	31-Mar-2037	115.92		11.82	24.68	4.68	41.18
1-Apr-2037	31-Mar-2038	120.31	30.40	12.27	25.61	4.86	42.74
1-Apr-2038	31-Mar-2039			12.74	26.59	5.04	44.37
1-Apr-2039	31-Mar-2040			13.22	27.59	5.23	46.05
1-Apr-2040	31-Mar-2041			13.72	28.63	5.43	47.78
1-Apr-2041	31-Mar-2042	93.45		14.23	29.70	5.63	49.56
1-Apr-2042	14-Feb-2043	96.95		12.94	27.01	5.12	45.08
Total Amount (Cr.) Incl. GST 18%		**679.70**	**53.72**	**209.21**	**436.65**	**82.83**	**728.69**

Note: Escalation is considered based on WPI data as per Oxford Economics

DISCLAIMER

In preparing this report, Ramboll India Private Limited relied, in whole or in part, on data and information provided by Indian Highway Concessions Trust, which information has not been independently verified by Ramboll and which Ramboll has assumed to be accurate, complete, reliable, and current. Therefore, while Ramboll has utilized its best efforts in preparing this Report, Ramboll does not warrant or guarantee the conclusions set forth in this Report which are dependent or based upon data, information, or statements supplied by third parties or the client.

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Maple Infra InvIT Investment Manager Pvt. Ltd.

Final Technical Diligence Report

Tolling, Operation, Maintenance & Transfer of Eastern Peripheral Expressway (from km 1.000 to km 136.000) of NE-II in the National Capital Region (NCR)

SAMARTH INFRAENGG Technocrats Private Limited

MAY 2023

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1.1 INTRODUCTION

National Highways Authority of India (NHAI), constituted by an act of Parliament, is responsible for the Development, Maintenance and Management of National Highways (NH's) network in India. To boost up development of Country and match up with the growing demand, Government of India has ambitious plans to expand the National Highway network at a rapid pace. For this purpose, NHAI has proposed to leverage Asset Recycling in the highway sector and the same is expected to generate additional resources for construction of future highways. Accordingly, the model for monetization of public funded operational NH projects has been developed, which is called Toll, Operate and Transfer (TOT). Under the TOT model, right of collection of user fee of selected operational NH projects is proposed to be assigned for a specific time period, to developers or investors (Concessionaire). Further, during the tenure of the contact, the O&M responsibility would also remain with the assigned Concessionaire.

As a part of this endeavor, the NHAI intends to appoint Concessionaire to undertake Tolling, Operations and Maintenance.

The Packages in the Project Bundle 7 are as below:

Sl.No.	Stretch	State	Start (Km)	End (Km)	Length(km)
1	Eastern Peripheral Expressway	National Capital Region (NCR)	1+000	136+000	135.000
	Total				135.000

CDPQ interested to participate in the bid and thus appointed M/s SAMARTH INFRAENGG Technocrats Pvt. Ltd as the Consultants for undertaking technical due diligence study and prepare BOQ for the purpose of bidding.

This report presents the initial findings of the consultants on TOT Bundle 7 i.e., Eastern Peripheral Expressway (from km 1+000 to km 136+000).

1.2 PROJECT AT A GLANCE

The site of the fully access controlled 6-lane divided Project Highway Stretch also called as Eastern Peripheral Expressway starts at Km 1+000 after Cloverleaf interchange at Km 0+000 from Junction of NH-1 (starting at 1.000 km distance from Km. 36.083 of NH-1) near Kundli Village at Sonipat district and ends at Km 136+000 after Cloverleaf Junction with NH-2 (Ending at 1.0 Km distance from Km 64+330 of NH-2 (New NH-44) on the outskirts of Palwal town while traversing through the State of Haryana and Uttar Pradesh. The total Length of the project Highway is 135.000 Km (excluding entry & exit ramps of Interchange with NH1 & NH2 at start and end of the project road respectively.

Table 1: Project Corridor Chainage System

Referencing system	Project Corridor Start Point (km)	Project Corridor End Point (km)	Length (km)
Old Chainage	-	-	-
Chainage as per Schedule	1+000	136+000	135+000

The Project section starts at Km 1+000 after Cloverleaf interchange at Km 0+000 from Junction of NH-1 (starting at 1.000 km distance from Km. 36.083 of NH-1) near Kundli Village and ends Km 136+000 after Cloverleaf Junction with NH-2 (ending at 1.0 Km distance from Km 64+330 of NH-2 (New NH-44) on the outskirts of Palwal town. Photographs showing the start and end point of the project road are presented below:

Start Point at km 1.000

End Point at km 136.000

1.3 SALIENT FEATURES OF THE PROJECT ROAD

The major features along the project road are highlighted in following table:

Table 2: Salient Features of Project Corridor

Sl. No.	Particulars	Length/No	As Per Sch-A (Corrigendum)	As per Site
1	Start Chainage (Km)	Km	1	1
2	End chainage (Km)	Km	136	136
3	Length of the Project Corridor	Kms.	135	135
4	Connecting Road (LHS)	Kms.	12.865	12.865
5	Connecting Road (RHS)	Kms.	16.918	16.918
6	Toll Plaza MCW	Nos.	2	2
7	No. of Lanes @ Toll Plaza (Both side)	Nos.	9+9	9+9
8	Toll Plaza (Interchange)	Nos.	40	40
9	ROBs	Nos.	10	10
10	Interchange /Grade Separators	Nos.	8	8
11	Flyovers / Grade Separators	Nos.	15	15
12	VUPs	Nos.	61	62
13	LVUPs	Nos.	11	11
14	PUP's/CUP's	Nos.	155	155
15	Major Bridges	Nos.	4	4
16	Minor Bridges	Nos.	43	43
17	Culverts (Pipe)	Nos.	24	24
18	Culverts (Slab)	Nos.	10	10
19	Culvert (Box)	Nos.	108	108
20	High Embankments	Kms.	Nil	256.221
21	RE Blocks/PANELS	Kms.	Nil	0.503
22	Truck Lay bye	Nos.	1	1
23	High Mast Lights	Nos.	44	46
24	Highway Lighting (length only)	Kms.	Nil	135

Sl. No.	Particulars	Length/No	As Per Sch-A (Corrigendum)	As per Site
25	Single Arm Lightnings	Nos.	0	1988
26	Double Arm Lightnings	Nos.	-	2374
27	Solar Blinkers	Nos.	-	66
28	Earthen Drain	Kms.	-	270
29	Median drain	Kms.	-	29.3
30	Median Cuts	Nos.	Nil	3513
31	Chutes	Nos.	Nil	257
32	Median Opening	Nos.	24	24
33	Median kerb Damages	Kms.	Nil	0.085
34	Median Plantation Functional	Kms.	-	131.695
35	Median Plantation Non-Functional	Kms.	Nil	3.275
36	Road Markings	Kms.	-	1079.2
37	W-Beam Safety Barriers	Kms.	-	517.906
38	Rigid Concrete Barriers	Kms.	-	24.114
39	Delineators	Nos.	-	5249
40	Guard Posts	Nos.	Nil	456
41	Kilometer Stones	Nos.	-	252
42	Hectometer Stones	Nos.	-	1745
43	Boundary Fencing	Kms.	-	272
44	Road Signs	Nos.	-	2728
45	Gantry Sign Boards	Nos.	-	18
46	Cantilever Sign Boards	Nos.	-	82
47	Varying Message Signs (VMS)	Nos.	Nil	10

1.4 OBJECTIVE AND SCOPE OF SERVICES - FOR DUE DILIGENCE

The main objective of the study is to review the current status of project corridor including details pertaining to its construction and maintenance and to provide requisite technical information for processing the acquisition of said project by client. Objective of the study can be broadly defined with following tasks:

- Study CA requirements for construction/maintenance requirements
- Undertake Detailed Reconnaissance to appreciate the project corridor characteristics
- Collection of relevant records and documents and review of same
- Undertake Engineering Studies to Establish:
  - Present Condition of Existing Road Assets
  - Quality of Executed Works/Quantity of Reutilization
  - Requirement of Immediate improvement costs as per Sch B (1st Year Capex)
  - Major Maintenance Strategies Over Concession Period
  - Routine Maintenance & Operations Requirements Over Concession Period
  - Prepare BOQ
  - Prepare Rate Analysis and finalize unit rates
  - EPC and O&M Cost

End Result is the finalization of:

- 1st year Capex Requirements/Cost
- Major Maintenance Schedules/Cost
- Routine Maintenance Cost
- Operations Cost

The elaborate scope of services as defined in the "terms of reference" for consultants is as below:

i) Detailed reconnaissance
ii) Video graphic survey of the entire Project corridor.
iii) Carrying out inventory and condition surveys for Project Road.
iv) Carrying out Inventory and detailed condition surveys for bridges & cross drainage structures (along with Photographs thereof) including recommendation for either strengthening/rehabilitation or reconstruction.
v) 48 hrs. Axle load survey along with axle load spectrum analysis for rigid pavement of the project corridor, wherever applicable (7-day traffic count to be provided by client)
vi) Test pits required @ every 10 km interval along the Project corridor.
vii) Carrying out necessary laboratory tests to determine the CBR value of the subgrade materials to be obtained from potential borrow pits and the quality of the aggregates from potential quarries for the pavement layers, concrete etc. The existing ground which will support the embankment and pavement must be tested for its adequacy, particularly in silty or clayey water-logged areas.
viii) Carrying out deflection test by Falling Weight Deflect meter (FWD) for existing pavement as per relevant IRC code at the rate of 6 points in km in each direction making it 12 points for both directions in the damaged stretches as well as fair stretches.
ix) Availability of construction materials as per required specification to be confirmed. Detailed Logistic plan showing the locations of the potential Borrow pits, Quarries, etc. to be given for every 30 km length (package).
x) Report on existing condition of Toll Plazas and its associated facilities and proposal for their improvement.
xi) Preparation of Maintenance (Routine, Periodic and Major) costs to be incurred over the period of the concession keeping in mind the requirements of the draft Concession Agreement like adequate resources, maintenance of Cranes, Ambulance, ATMS, etc.,
xii) Independently develop a bottom-up forecast of Operating expenses for each project, with detailed break-up of each type of operating expense, along with underlying assumptions

1.5 DATA COLLECTION AND REVIEW

Consultants have collected various data from NHAI such as DPR reports, Alignment Plans etc. Review of following documents were done as part of study:

- Review CA

- Review of Schedules
- Review of Collected Drawings from NHAI PIU Office/Site
- ➢ Review CA
  - ✓ The scope of the Project is as defined in Schedule A and Schedule B
  - ✓ The Authority hereby grants "Concession" to the Concessionaire for a period of 30 (thirty years) commencing from the Appointed Date (the "Concession Period")
  - ✓ The Concessionaire shall procure that at all times during the Concession Period, the Project Highway conforms to the maintenance requirements set forth in Schedule-F (the "Maintenance Requirements").
- ➢ Review CA of TOT Projects for Maintenance
  - Eastern Peripheral Expressway For Flexible Pavement
    - ✓ Overlay whenever Roughness>2400mm/Km
    - ✓ No Scheduled OL given.
    - ✓ No mention of Deflection measurements, which should be done annually.
  - Eastern Peripheral Expressway For Rigid Pavement
    - ✓ Acceptable Roughness is 2400mm/Km
    - ✓ No mention of Deflection measurements, which should be done annually.
    - ✓ Skid number >45BPN as per IRC SP: 83-2018.
- ➢ Maintenance Requirements
  - ✓ In order to determine the Asset Performance Parameters for the Base Year, the Concessionaire shall carry out Revalidation and Testing on the road project to arrive at updated Base Year Parameters 45 days before Appointed Date (O&M Handover Date).
  - ✓ Initial Maintenance Requirement shall be assessed/revalidated based on Base Year Performance Parameters. For clarification of doubt, Concessionaire will arrive at Base Year Parameters 45-days after Appointed Date.
  - ✓ NHAI/Independent Consultant may audit the Revalidation and Testing processes

Asset Type	Performance Parameter	Level of Service (LOS)		Frequency of Inspection	Tools/Equipment	Standards and References for Inspection and Data Analysis	Time limit for Rectification/ Repair	Maintenance Specifications
		Desirable	Acceptable					
Flexible Pavement	Potholes	Nil	<0.1% of area and subjected to limit of 10mm in depth	Daily	Length Measurement Unit like Scale, Tape, odometer.	IRC 82: 2015 and Distress Identification Manual for Long Term Pavement Performance Program, FHWA 2003	24-48 hours	MORT&H Specification 3004.2

Asset Type	Performance Parameter	Level of Service (LOS)		Frequency of Inspection	Tools/Equipment	Standards and References for Inspection and Data Analysis	Time limit for Rectification/ Repair	Maintenance Specifications
		Desirable	Acceptable					
	Cracking	Nil	<5% subject to limit of 0.5 sqm for any 50m length	Daily			7-15 days	MORT&H Specification 3004.3
	Rutting	Nil	<5mm	Daily	Straight Edge		15 -30 days	MORT&H Specifications n 3004.2
	Corrugations and Shoving	Nil	0.1% of area	Daily	Length Measurement Unit like Scale, Tape, odometer.		2-7 days	IRC:82-2015
	Bleeding	Nil	<1% of area	Daily			3-7 days	MORT&H Specification 3004.4
	Ravelling /Stripping	Nil	<1% of area	Daily			7-15 days	IRC:82-2015 read with IRC SP 81
	Edge Deformation/ Breaking	Nil	<1m for any 100m section and/or width <0.1m at any Location restricted to 30cm from the edge.	Daily			7- 15 days	IRC:82-2015
	Roughness IRI / BI	2000 mm/km	2400 mm/km	Bi-Annually	Network Survey vehicle (NSV) with all its module such as Laser Profilometers, Transverse profile logger, Laser crack measurement system, Video logging modules, high resolution Odometer etc.	ASTM E950 (98) :2004 -Standard Test Method for measuring Longitudinal Profile of Travelled Surfaces with Accelerometer Established Inertial Profiling Reference and ASTM E1656 - 94:2000- Standard Guide for Classification of Automatic Pavement Condition Survey Equipment	180 days	IRC:82-2015
	Rutting	<10mm for any 50 m section and/or, length of section <5m	<10mm for any 50 m section and/or, length of section <10m	Bi-Annually			15 - 30 days	IRC:82-2015
	Pavement rating based on distress per IRC 82 / Pavement Condition Index as per ASTM 6433-07	>3/85	>2.1/70	Bi-Annually			180 days	IRC:82-2015/ ASTM D 6433-07
	Other Pavement Distresses	-	-	Bi-Annually			2 - 7 days	IRC:82-2015

<table>
<tr><th rowspan="2">Asset Type</th><th rowspan="2">Performance Parameter</th><th colspan="2">Level of Service (LOS)</th><th rowspan="2">Frequency of Inspection</th><th rowspan="2">Tools/Equipment</th><th rowspan="2">Standards and References for Inspection and Data Analysis</th><th rowspan="2">Time limit for Rectification/ Repair</th><th rowspan="2">Maintenance Specifications</th></tr>
<tr><th>Desirable</th><th>Acceptable</th></tr>
<tr><td rowspan="2"></td><td>Skid</td><td>60SN</td><td>50SN</td><td>Bi-Annually</td><td>SCRIM (Sideway force Coefficient Routine Investigation Machine or equivalent) British Pendulum Tester</td><td>IRC:82-2015</td><td>180 days</td><td>IRC:82-2015</td></tr>
<tr><td>Deflection / Remaining Life</td><td></td><td></td><td>Annually</td><td>Falling Weight Deflectometer</td><td>IRC 115: 2014</td><td>180 days</td><td>IRC:115-2014</td></tr>
<tr><td rowspan="2">Rigid Pavement</td><td>Roughness IRI BI</td><td><2200mm/km</td><td>>2400mm/km</td><td>Bi-Annually</td><td>Class I Profilometer</td><td>ASTM E950 (98):2004 and ASTM E1656 -94: 2000</td><td>180 days</td><td>IRC: SP:83-2018</td></tr>
<tr><td>Skid</td><td colspan="2">Skid Resistance No. at different speed of vehicles<table><tr><th>Minimum SN</th><th>Traffic Speed</th></tr><tr><td>36</td><td>50</td></tr><tr><td>33</td><td>65</td></tr><tr><td>32</td><td>80</td></tr><tr><td>31</td><td>95</td></tr><tr><td>31</td><td>110</td></tr></table></td><td>Bi-Annually</td><td>SCRIM (Sideway force Coefficient Routine Investigation Machine or equivalent) British Pendulum</td><td>IRC: SP:83-2018</td><td>180 days</td><td>IRC: SP:83-2018</td></tr>
<tr><td rowspan="5">Embankment/Slope</td><td>Edge drop at shoulders</td><td>Nil</td><td>40mm</td><td>Daily</td><td rowspan="2">Length Measurement Unit like Scale, Tape, odometer, etc.</td><td rowspan="4">IRC</td><td>7-15 days</td><td>MORT&H Specification</td></tr>
<tr><td>Slope of camber/cross fall</td><td>Nil</td><td><2% variation in prescribed slope of camber/cross fall</td><td>Daily</td><td>7-15 days</td><td>MORT&H Specification</td></tr>
<tr><td>Embankment Slopes</td><td>Nil</td><td><15 % variation in prescribed side slope</td><td>Daily</td><td>NA</td><td>7-15 days</td><td>MORT&H Specification</td></tr>
<tr><td>Embankment Protection</td><td>Nil</td><td>Nil</td><td>Daily</td><td>NA</td><td>7-15 days</td><td>MORT&H Specification</td></tr>
<tr><td>Rain Cuts/Gullies in slope</td><td>Nil</td><td>Nil</td><td>Daily Specially During Rainy Season</td><td>NA</td><td>IRC</td><td>7-15 days</td><td>MORT&H Specification</td></tr>
<tr><td>Cut section / Slope</td><td>Unstable Slopes</td><td>Nil</td><td>-</td><td>Daily Specially During Rainy Season</td><td>NA</td><td>IRC</td><td>2-7 days</td><td>MORT&H Specification</td></tr>
</table>

1.6 SURVEYS AND INVESTIGATIONS

The main objective of undertaking Surveys and Investigations is to appreciate the existing engineering features along the project corridor and to understand the present condition of the various elements of the project road and to prepare inputs required for various rehabilitation and maintenance strategies.

Following Survey and Investigations have been undertaken as a part of study with an objective to understand the present condition of the road and there by access the quality of construction and as well to prepare requisite rehabilitation/corrective designs where necessary.

- Asset Inventory Surveys
- Videography
- Structural Inventory
- Visual Pavement Condition Surveys
- Visual Structural Condition Surveys
- FWD test for entire road length along outer & inner lane at about 5 points in each Km in each CW
- Axle load survey two location for the assessment of axle loading pattern and estimation of VDF. (48 Hrs.)
- Material investigations for Lead and Rates

1.6.1 Road Inventory

The project corridor has Rigid pavement in the entire length, with 11.25m wide carriageway flanked by 3.0m paved shoulder on each side.

In general, the median width is 4.5m all along the project road except at Toll approaches (median width is 12m).

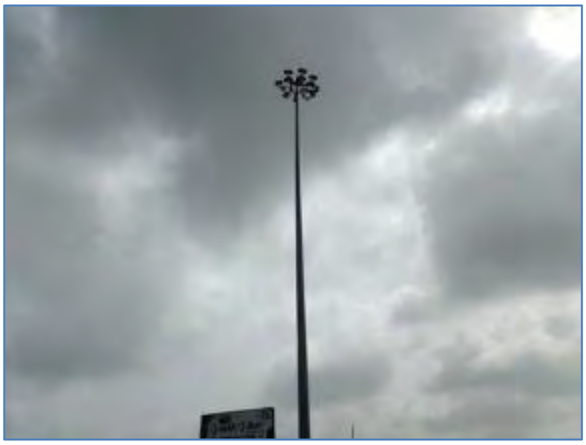
The project corridor generally runs in plain to mild rolling terrain. The land use along the project road is mostly Agricultural.

In general, road embankments are in the range of 2.5-11.5m height. Embankments higher than 2.5m are observed mainly in the approaches of CD structures and Underpass locations.

The Project Road has about 8 Interchanges along its length. Photographs showing the Interchanges are presented below:

 Interchange-1 at km 15+360	 Cloverleaf-1 at km 44+512
 Cloverleaf-2 at km 49+960	 Cloverleaf-3 at km 52+192

About 46 numbers of High mast lighting is observed along the project road. They are located at Toll Plaza / Toll Booth location. Photos showing High mast lighting are presented below:

 High mast lighting on Toll Plaza Location at Km 132+085	 High mast lighting on Toll Plaza Location at Km 1374.570

Altogether, the Project Road has about One Lay bye (01) Provided with Paver Blocks and Five (05) Highway Mini Nest on Main Carriageway. Few photos taken at the Lay bye and Highway Mini Nest are presented below:

Highway Mini Nest at km 39.500, RHS

Highway Mini Nest at km 95.500, RHS

Lay bye near km 22.850, RHS

The Project Road has two No's Toll Plaza on MCW at km 5.450 (Jakhauli), 132.085 (Chhajju Nagar). Rigid pavement exists in both toll plaza and in the tapering portions. The condition of toll plaza appears to be fair. They have 9 lanes lane in each direction. It is provided with High mast lights in the approaches.

Few photos taken at toll plaza location are presented below:

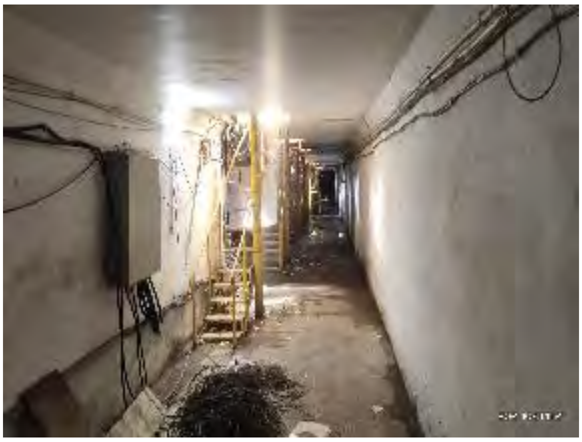
Toll Plaza at Km 132.085

Toll Plaza at Km 5.450

Digital Art Gallery at Toll Plaza km 5.450

Hydra near Toll plaza at Km 132.085

Toilet Block near Toll plaza

	
Administrative Building	Tunnel under Toll Plaza at Km. 132.085

Connecting roads have been observed at the project corridor. Few photos depicting the connecting road pavement surface type, condition and the other associated feature like fencing are presented below.

	
Connecting Road @ km 36.700 to km 37.860_4m	Connecting Road @ km 50.400_4m
	
Connecting Road @ km 70.091 to km 70.201-RHS_ 4m	Connecting Road @ km 61.995 to km 62.445-RHS_ 4m

	
Connecting Road @ km 55.900 to km 56.300-RHS_4m	Connecting Road @ km 48.650 to km 50.400-RHS_4m

The connecting Road Inventory Data is presented in Appendix 1 of this Report.

1.6.2 Visual Pavement Condition Surveys

In the entire stretch, the surface of the pavement condition is Fair in LHS direction and RHS side also appears in Fair condition. The surface distresses like Raveling, Cracking, patches & Potholes, Delamination Overlay distresses were observed. Panel replacement were observed in few locations of the project corridor. Some of photographs were presented below.

	
Fair Condition at Km 55.000, LHS	Panel Settled at Km 60.000, LHS
	

Fair Condition at Km 63.000, RHS	Longitudinal cracking at Km 20.050, LHS
 Panel Replacement at Km 19.000, RHS	 Reveling at Km 15.020, RHS
 Panel Replacement under progress at Km 109.600, LHS	 Panel Replacement Done at Km 112.100, RHS
 Panel Replacement under progress at Km 114.150, RHS	 Reveling at Km 115.100, LHS
	

Delamination at Km 120.150, LHS	Ravelling at Km 124.050, LHS
	
Fair Condition at Km 124.400, LHS	Fair Condition at Km 125.100, RHS
	
Ravelling at Km 126.100, LHS	Panel replacement Under Progress at Km 127.100, RHS
	
Fair Condition at Km 128.100, LHS	Patching & Ravelling at Km 129.100, LHS
	

Wide Cracking at Km 130.150, RHS	Ravelling at Km 131.150, RHS
 Fair Condition at Km 133.100, LHS	 Fair Condition at Km 134.150, RHS

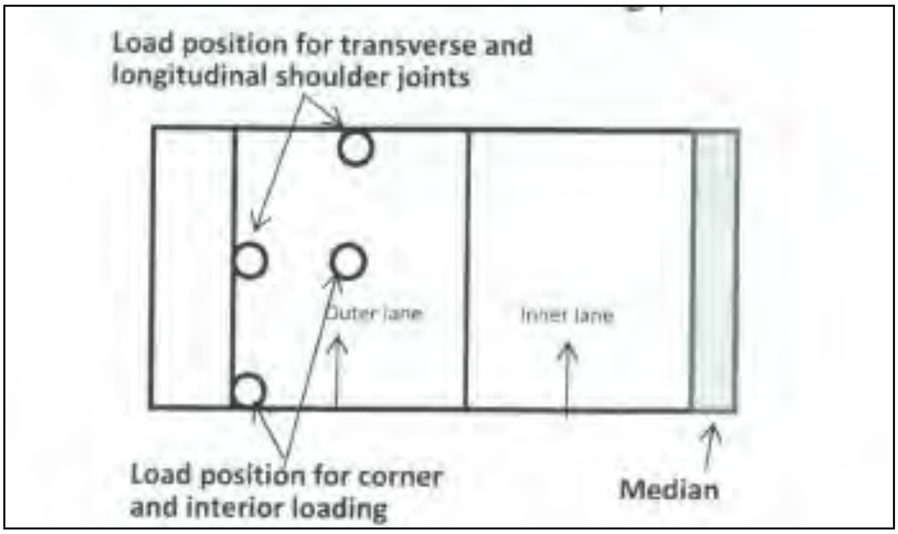
The visual Pavement Condition Data is presented in Appendix 2 of this Report

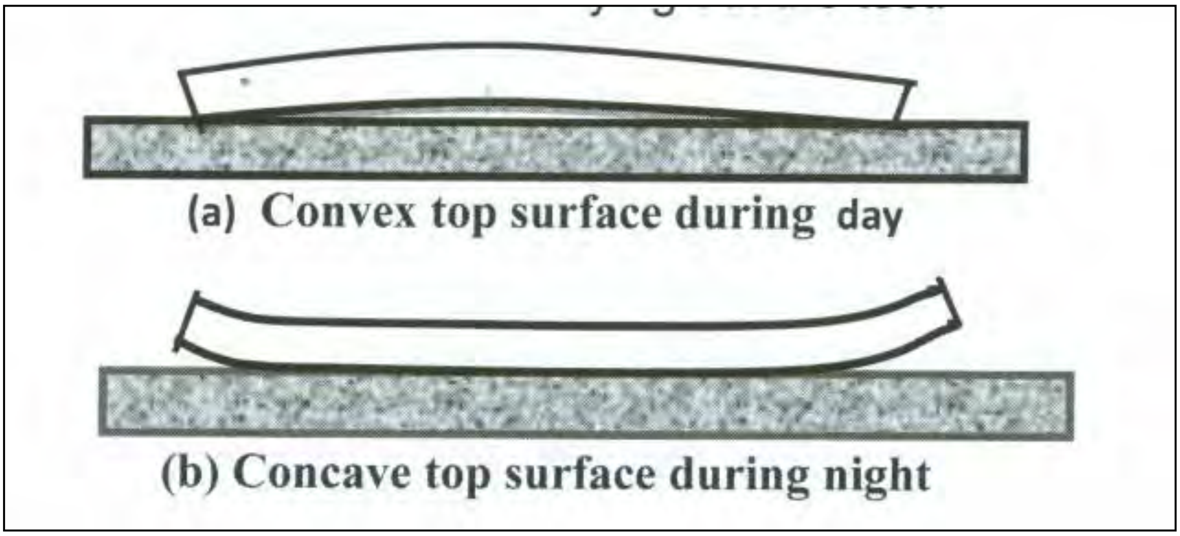
1.6.3 Falling Weight Deflectometer (FWD) Surveys

1.6.3.1 Pavement Evaluation using FWD Rigid Pavement

Structural condition of in-service rigid pavement can be evaluated using Falling Weight Deflectometer. FWD surveys are done at interior of panel to determine the Strength of Concrete and Subgrade Support and to Detect voids for loss of support FWD has been done in Wheel path. For Evaluation of Modulus of Subgrade reaction and Strength of Concrete i.e. “Interior” loading case is done when temp gradient is zero or Negative (Top Surface is Cooler than Bottom), i.e. in the Early Morning or night time has been dine.

Corner loading has no indirect measure from the test, FWD test to be done when pavement is not in curled position and Deflections measured along wheel paths to get void locations. Load position for various cases has been presented below:



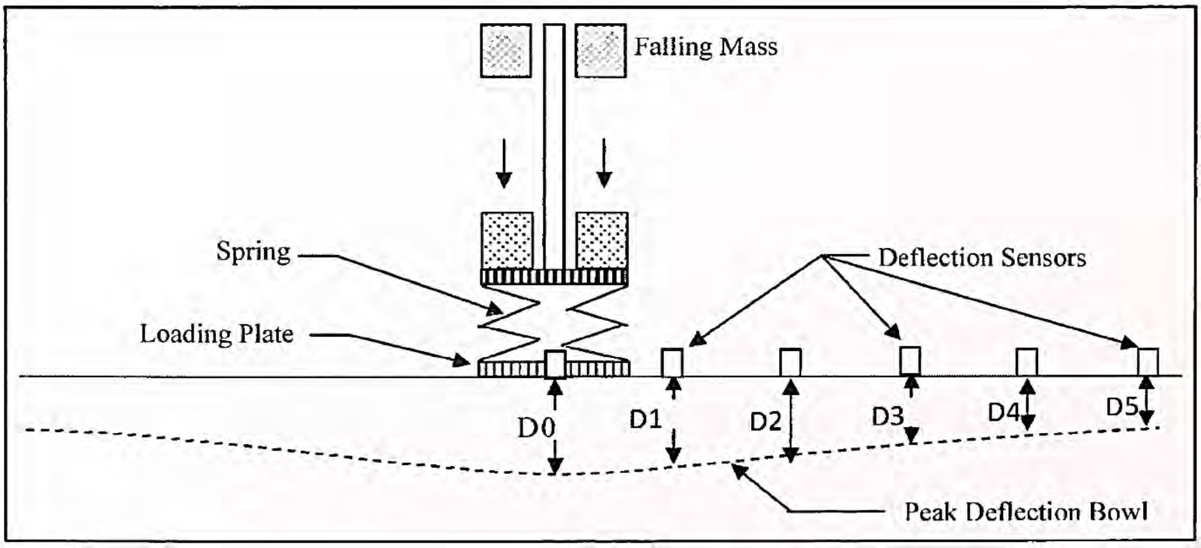


Among equipment available for structural evaluation of pavements, the Falling Weight Deflectometer (FWD) is extensively used world-wide because it simulates, to a large extent, the actual loading conditions of the pavement. When a moving wheel load passes over the pavement it produces load pulses. Normal stresses (vertical as well as horizontal) at a location in the pavement will increase in magnitude from zero to a peak value as the moving wheel load approaches the location. The time taken for the stress pulse to vary from zero to peak value is termed as 'rise time of the pulse'. As the wheel moves away from the location, magnitude of stress reduces from peak value to zero. The time period during which the magnitude of stress pulse varies from 'zero-to-peak-to-zero' is the pulse duration. Peak load and the corresponding pavement responses are of interest for pavement evaluation.

1.6.3.2 Working principle of Falling Weight Deflectometer

Falling Weight Deflectometer (FWD) is an impulse-loading device in which a transient load is applied to the pavement and the deflected shape of the pavement surface is measured. The working principle of a typical FWD is illustrated in Fig below. D0, D1, etc., are surface deflections measured at different radial distances. Impulse load is applied by means of a falling mass, which is allowed to drop vertically on a system of springs placed over a circular loading plate. The deflected shape of the pavement surface is measured using displacement sensors which are placed at different radial distances starting with the center of the load plate.

A mass of weights is dropped from a pre-determined height onto a series of springs / buffers placed on top of a loading plate. The corresponding peak load and peak vertical surface deflections at different radial locations are measured and recorded.



Basically, the FWD generates a transient, of different magnitudes of impulse load by selection of a suitable mass and an appropriate height of fall. Under the application of the impulse load, the pavement deflects. Velocity transducers are placed on the pavement surface at different radial locations to measure surface deflections. Geophones or seismometers are used as displacement transducers. Load and deflection data are acquired with the help of a data acquisition system. The collected FWD Data and Analysis is presented in Appendix 3 of this Report.

Sample photo taken during the FWD Surveys on Rigid Pavement are presented below:

Deflection Measurement in progress

Temperature Measurement in progress

FWD includes a circular loading plate of 300 to 450mm diameter, in the present survey 300mm diameter load plate is used. A falling mass in the range of 50 to 350 kg is dropped from a height of fall in the range of 100 to 600mm to produce load pulses of desired peak load and duration. The target peak load in the range of 40KN to 60KN or Higher may be applied on Concrete Pavement to get a reasonable deflection of the order of 0.15 mm since pavements of major highways in India consisting of 150mm DLC and 300mm PQC are very stiff and a higher load may be required to get a deflection of about 0.15mm. In the present case target peak load as high as 150 KN is also used to get a reasonable deflection on concrete pavement.

1.6.3.3 Methodology adopted for carrying the survey

- ✓ The FWD Surveys are carried out as per IRC:117-2015.

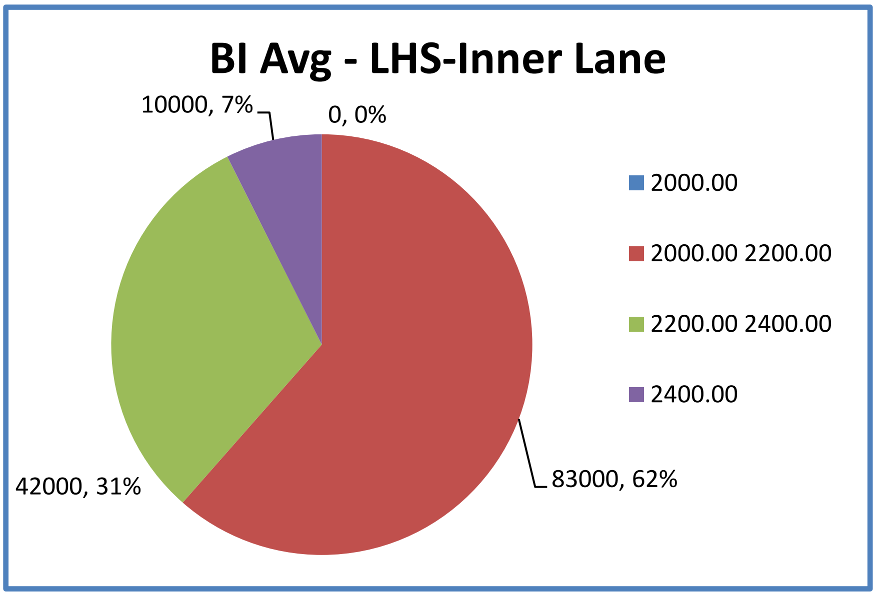
- ✓ The project road has three longitudinal joints. Panel size is nearly 4.5x3.8m
- ✓ Interior testing points has been considered at wheelpath of each lane. These points will also act as under wheel path for detection of voids.
- ✓ One point @ 500m in inner lane & middle lane and one point @ 300m in Outer Lane to know strength/subgrade support

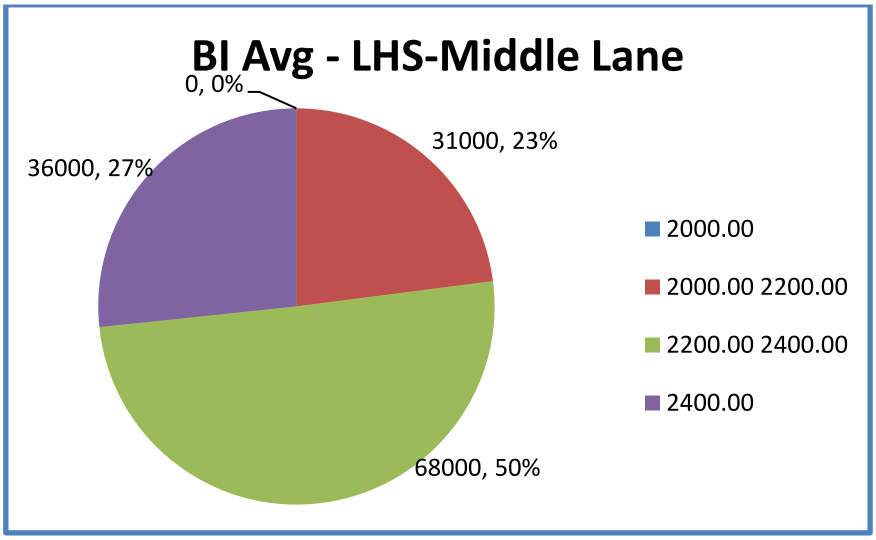
1.6.4 Roughness Surveys

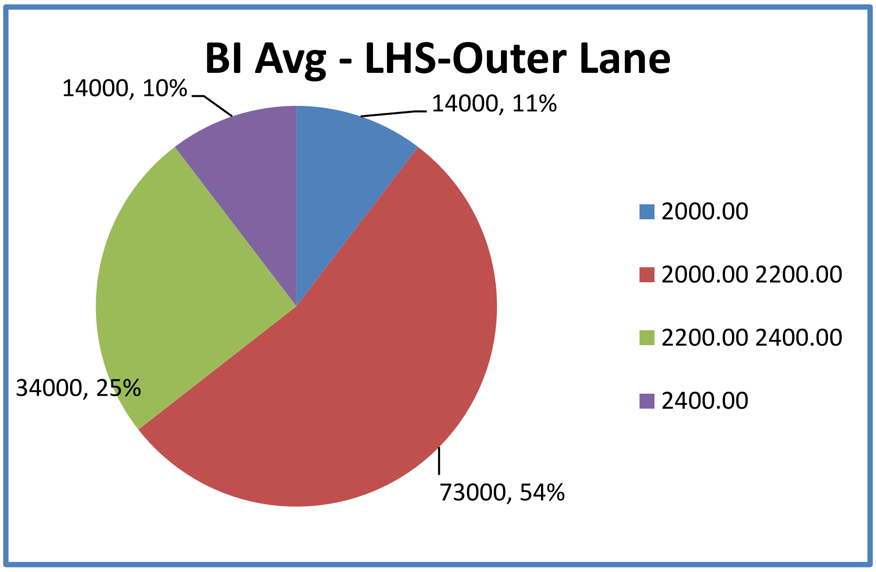
The Roughness data has been collected using Network Survey Vehicle and analyzed in terms of International Roughness Index (IRI), separately for each lane, for both direction of travel. Pavement Roughness report covering the data collection and methodology, computation of IRI for each lane km length in each direction is presented in Appendix 4 of this Report.

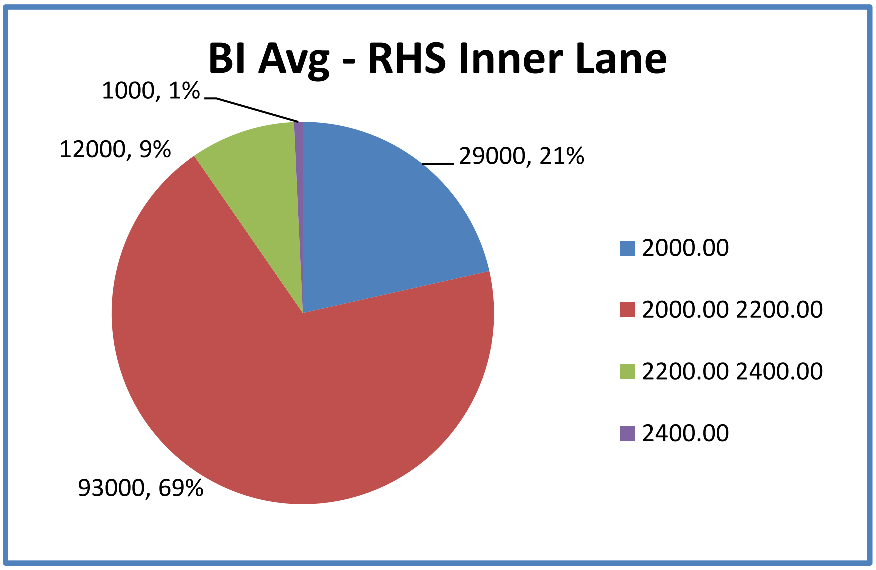
The summary of the project length in both directions falling in different ranges of roughness values are given below:

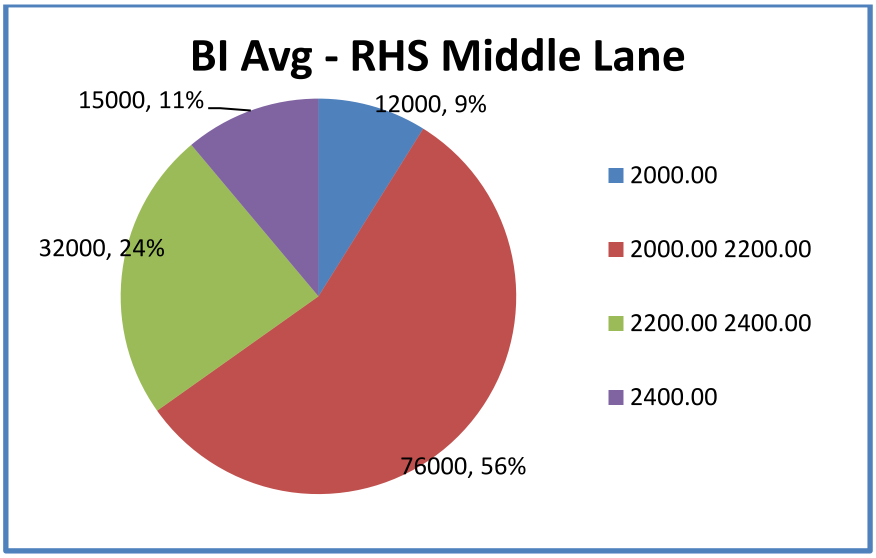
Average UI values along the corridor were grouped in to four categories, Pie chart showing the range of UI values in each carriageway of the project road have been presented below:

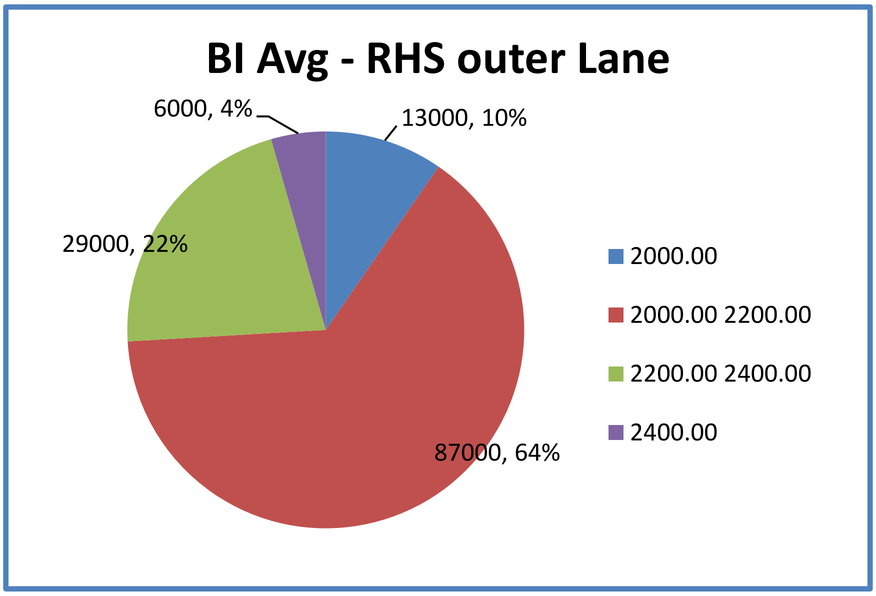



BI Avg - LHS-Middle Lane
0, 0%
31000, 23%
36000, 27%
68000, 50%
2000.00
2000.00 2200.00
2200.00 2400.00
2400.00


BI Avg - LHS-Outer Lane
14000, 10%
14000, 11%
34000, 25%
73000, 54%
2000.00
2000.00 2200.00
2200.00 2400.00
2400.00


BI Avg - RHS Inner Lane
1000, 1%
12000, 9%
29000, 21%
93000, 69%
2000.00
2000.00 2200.00
2200.00 2400.00
2400.00





It can be seen from the above pie charts; The Project Road has Fair to good riding quality in LHS carriageway and RHS carriageway respectively.

1.6.5 Borrow Area

The investigation is aimed at locating the potential borrow areas for sub-grade/ embankment fill and granular sub-base along the project road within economic haulage. To obtain this information regarding probable borrow pits along the corridor and to obtain this objective, the offices of Public Works Department and local people have been contacted. Based on the information received and field surveys carried out, the consultants identified the borrow areas which are new ones /existing ones belonging to the government or public.

1.6.6 Borrow Pits for Construction of Embankment and Sub grade

As Obtained information, 14 sources are identified and 11no's samples have been collected, potential borrow sources for subgrade are shown in the following table and include certain useful information such as, distance from the project road, location, village name etc. The soil up to 1.5m to 2m may use for embankment. Borrowing soil from these areas would require prior approval of the local authorities' negotiations with private people. Soil samples from these borrow sources have been collected in bulk quantities by excavating test pits down up to 0.5m-1.0m depth from the existing ground surface. The top organic soil layer of approximately 150 mm thickness has been removed before sampling. Schematic location of these borrow pits are shown in Figure 2.

Sampling and Laboratory Testing

The samples collected from these identified borrow pits have been tested for the following properties to assess the possibility of utilizing the local soil as embankment fill, sub-grade.

- Sieve analysis
- Atterberg limits
- Heavy compaction

Four (4) days soaked CBR as per IS standards at 97% of MDD as applicable for sub-grade (Heavy Compaction).

Table 3: Borrow Area Details

Sl.No	Borrow Area No	Chainage	Side	Offset	Village and contact person	Quantity	Rate	Remarks
1	EPE-BP-1	52+300	LHS	14 Km	Vill: Kandaulla Cont. Person: Dinesh Kumar Cont.no: 7210810867	15 Bhiga* 4 feet	Rate not told	Pvt. Land
2	EPE-BP-2	44+500	LHS	8 Km	Vill: Kurrampur Cont. Person: Faisal Rohil Cont.no: 9897961507	12 Bhiga* 4 feet	Rate not told	Pvt. Land
3	EPE-BP-3	35+750	LHS	5 Km	Vill: Rewra Rewra Cont. Person: Rohit Cont.no: 8585910743	10 Bhiga* 3 feet	Rate not told	Pvt. Land
4	EPE-BP-4	1+000	LHS	8 Km	Vill: Murshidpur Cont. Person: Kiran Pal Cont.no: 9991900481	15 Bhiga* 4 feet	Rate not told	Pvt. Land
5	EPE-BP-5	8+600	LHS	2 Km	Vill: Jagdishpur Cont. Person: Parveen Saini Cont.no: 9050525119	17 Bhiga* 3 feet	Rate not told	Pvt. Land

Sl.No	Borrow Area No	Chainage	Side	Offset	Village and contact person	Quantity	Rate	Remarks
6	EPE-BP-6	64+750	RHS	5.5 Km	Vill: Dadri Cont. person: Mohit Rane Cont.no: 9350425400	22 Bhiga* 4 feet	Rate not told	Pvt. Land
7	EPE-BP-7	74+850	LHS	8 Km	Vill: Til Begumpur Cont. person: Alimuddin Cont.no: 9412539639	12 Bhiga* 4 feet	Rate not told	Pvt. Land
8	EPE-BP-8	83+050	LHS	4.8 Km	Vill: Rampur Majre Cont. Person: Mundraj Bhati Cont.no: 9927033846	16 Bhiga* 4 feet	Rate not told	Pvt. Land
9	EPE-BP-9	92+050	LHS	5 Km	Vill: Unchi Dankaur Cont. Person: Tiwari Cont.no: 9720905848	13 Bhiga* 4 feet	Rate not told	Pvt. Land
10	EPE-BP-10	104+350	RHS	5.5 Km	Vill: Kurali Cont. Person: Salim Khan Cont.no: 9990659387	15 Bhiga* 4 feet	Rate not told	Pvt. Land
11	EPE-BP-11	114+800	RHS	1 Km	Vill: Jawan Cont. Person: Narender Singh Cont.no: 9050621668	20 Bhiga* 4 feet	Rate not told	Pvt. Land
12	EPE-BP-12	123+500	LHS	4 Km	Vill: Rampur Khor Cont. Person: Vijay Niverya Cont.no: 9991372022	15 Bhiga* 3 feet	Rate not told	Pvt. Land
13	EPE-BP-13	136+000	LHS	7 Km	Vill: Rajpura Cont. person: Sharma Ji Cont.no: 9728701610	20 Bhiga* 4 feet	Free of cost	Govt. Land
14	EPE-BP-14	25+700	LHS	7 Km	Vill: Dhikanli Cont. person: Sumit Cont.no: 9675891751	20 Bhiga* 3 feet	Rate not told	Pvt. Land

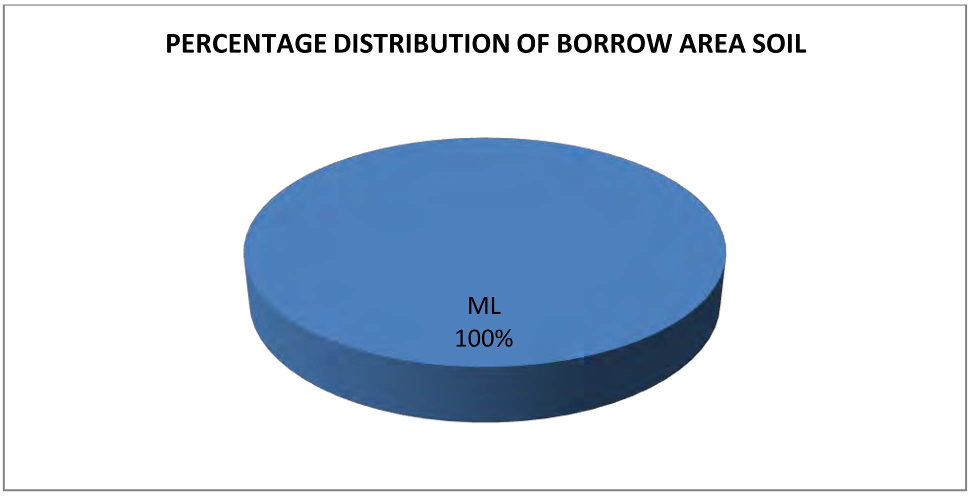
Soil samples from these borrow sources have been collected in bulk by excavating test pits down up to 1.0m depth from the existing ground surface. The top organic soil layer of approximately 150mm thickness was removed before sampling. The samples collected from these identified borrow pits/ gravel quarries have been tested for the suitability of utilizing them as embankment fill/ sub-grade.

 EPE-BP-1	 EPE-BP-2
 EPE-BP-3	 EPE-BP-4
 EPE-BP-5	 EPE-BP-6

 EPE-BP-7	 EPE-BP-8
 EPE-BP-9	 EPE-BP-10
 EPE-BP-11	 EPE-BP-12

	
EPE-BP-13	EPE-BP-14

Pie Chart showing the percentage distribution of soil classification of Borrow area sample is presented below:



Test results of borrow pits sample reveal that the soil collected primarily belong to silty soils. Total all samples are samples belongs to ML. The testing results are given below in the following table. The percentage distribution of borrow soil and soaked CBR of borrow soil given below.

Table 4: Results of Borrow Details

Lab Sample No	Site Identification		Grain Size Analysis					Atterberg Limits (%)			Soil Class	MDD (gm/cc)	OMC (%)	Soaked CBR 97% MDD	Free Swelling Index (%)
			Percentage passing from												
	Location (km)	Up/Dn	4.75 mm	425 mic	75 mic	Gravel %	Sand %	LL	PL	PI					
EPE-BP-2	44+500	LHS	100	99	94	0	6	23	20	3	ML	2.04	9.40	10.96	20.00
EPE-BP-5	8+600	LHS	95	90	82	5	13	-	NP	NP	ML	1.92	11.80	8.84	28.00

Lab Sample No	Site Identification		Grain Size Analysis					Atterberg Limits (%)			Soil Class	MDD (gm/cc)	OMC (%)	Soaked CBR 97% MDD	Free Swelling Index (%)
	Location (km)	Up/Dn	Percentage passing from					LL	PL	PI					
			4.75 mm	425 mic	75 mic	Gravel %	Sand %								
EPE-BP-6	64+750	RHS	99	98	92	1	7	-	NP	NP	ML	1.89	15.80	6.23	19.23
EPE-BP-7	74+850	LHS	99	96	66	1	33	-	NP	NP	ML	2.02	10.20	10.10	12.50
EPE-BP-8	83+050	LHS	99	97	91	1	8	-	NP	NP	ML	1.99	10.40	6.01	20.00
EPE-BP-9	92+050	LHS	95	92	84	5	11	-	NP	NP	ML	1.93	10.60	8.84	28.00
EPE-BP-10	104+350	RHS	99	95	71	1	28	-	NP	NP	ML	1.94	12.60	8.84	15.38
EPE-BP-11	114+800	RHS	99	97	85	1	14	-	NP	NP	ML	1.96	10.00	6.45	16.00
EPE-BP-12	123+500	LHS	99	98	89	1	10	-	NP	NP	ML	2.01	10.80	10.10	20.00
EPE-BP-13	136+000	LHS	98	97	92	2	6	-	NP	NP	ML	1.91	14.00	8.84	16.67
EPE-BP-14	25+700	LHS	99	99	92	1	7	-	NP	NP	ML	2.00	13.80	10.10	28.00

1.6.6 Aggregate and Sand Samples

Aggregates to be used for sub-base, base, surface courses and concrete works have been collected from the crushers under operation in the existing quarries. The locations, estimated quantity, basic cost of material and the approximate distance from each source to the nearest point on the project corridor are compiled in Tables below.

Table 5: Aggregate Samples Details

sample No.	Ex.Chainage (Km.)	Left/ Right	Name of Village	Name of Source/ Crusher	Lead from Nearest Ex. Chainage (Km.)	Approximate Quantity (ton)	Basic cost of the material (Rs.)	Remarks
EPE-AQ-1	136+000	LHS	Jamalgarh	Haryana Grit Udyog Cont. Person: Mohanpal Cont.no: 8307364216	50 Km	Plenty	40mm- Rs. 30/- per feet 20mm- Rs. 24/- per feet 10mm- Rs. 20/- per feet 6mm- Rs. 30/- per feet Dust. Rs. 20/- per feet	GST 5%
EPE-AQ-2	136+000	LHS	Bijasana	Mathura Stone Crusher Cont. Person: Amit Cont.no: 8818001200	70 Km	Plenty	65mm- Rs. 300/- per ton 40mm- Rs. 300/- per ton 20mm- Rs. 420/- per ton 10mm- Rs. 350/- per ton Dust. Rs. 330/- per ton	GST 5% Royalty Extra Rs.55/- per ton

sample No.	Ex.Chainage (Km.)	Left/ Right	Name of Village	Name of Source/ Crusher	Lead from Nearest Ex. Chainage (Km.)	Approximate Quantity (ton)	Basic cost of the material (Rs.)	Remarks
EPE-AQ-3	1+000	LHS	Vill: Kaliyana Charki Dadri	KVR Minerals Pvt. Ltd Contact Person: Kishan Contact no: 8818000054	120 Km	Plenty	VSI Material 40mm-Rs 450/- per ton 20mm-Rs 450/- per ton 10mm - Rs 450/- per ton 6mm -Rs 450/- per ton Dust - Rs 450/- per ton GSB- Rs. 310/- per ton	GST 5% and Royality Extra
EPE-AQ-4	1+000	LHS	Vill: Kaliyana Charki Dadri	Milan Stone Crusher Contact Person: Rajesh Contact no: 9813406818	120 Km	Plenty	40mm-Rs 370/- per ton 20mm-Rs 370/- per ton 10mm - Rs 360/- per ton 6mm -Rs 350/- per ton Dust - Rs 350/- per ton	GST 5% and Royality Extra

A total of 4 aggregate sample have been identified and collected from different crusher and quarries for the project corridor. Selection of the quarry would depend upon engineering properties, lead and quantity available. All samples have been tested for Aggregate Impact Value (AIV), with all of them fulfilling the stipulated requirement. Water absorption is found to be less than 2% for all samples. These test results are given below in the following table.

Table 6: Results of Aggregate Samples

S. No	Sample	Location	Side	A.I.V	Water Absorption	Specific Gravity	Remarks
1	EPE-AQ-1	136+000	LHS	12.50	0.22	2.61	
2	EPE-AQ-2	136+000	LHS	12.30	0.15	2.63	
3	EPE-AQ-3	1+000	LHS	9.63	0.34	2.61	
4	EPE-AQ-4	1+000	LHS	14.66	0.28	2.62	

EPE-AQ-1

EPE-AQ-2

EPE-AQ-3

EPE-AQ-4

One sample has been collected from river source. The sand sample has been tested for its suitability; these test results are presented in the following table. The sand sample has been tested for its suitability; these test results are presented in the following table.

Table 7: Sand Samples Details

Sl No	Sample No	10 mm Passing %	4.75 mm Passing %	2.36 mm Passing %	1.18mm Passing %	600mm Passing %	300mm Passing %	150mm Passing %	FM	ZONE
1	EPE-SAND-1	100	98	97	97	96	84	29	0.99	NO ZONE

EPE-SQ-1

EPE-M-Sand-1

1.6.7 Axle Load Surveys

Traffic loading has a significant impact on pavement performance and design. This is because the damage that vehicles create to a road depends very strongly on the axle loads of the vehicles. The exact relationship is influenced by the type of road structure and the way the road deteriorates but a "fourth power" damage law gives a good approximation.

Axle load study has been conducted using portable axle load pads. Surveys have been conducted on Eastern Peripheral Expressway at first Toll Plaza locations (Km 5+500) on 15th & 17th

September and 2nd plaza location (km 132+085) on 17th & 19th of Sepetember'2021. The surveys have been conducted in both the directions. The measurements have been made on random sampling basis. The collected axle load data and analysis is presented in Appendix 5 of this Report.

The vehicle damage factors have been calculated using the standard axle loadings given in IRC: 37-2018. The standard axle loadings adopted have been presented in the following table

Table 8: Details of Standard Axles Used

Axle Configuration	Standard Axle load (Tonnes)*	Remarks
Single Wheel, Single Axle	6.60	As per IRC 37-2018
Dual Wheel, Single Axle	8.16	As per IRC 37-2018
Dual Wheel, Tandem Axle group	15.10	As per IRC 37-2018
Dual Wheel, Tridem Axle group	22.90	As per IRC 37-2018

Few photographs illustrating the survey locations and axle load measurements are presented below.


Axle Load Survey


Axle Load Survey

Axle Load Survey


Axle Load Survey

Direction wise VDF for each mode of commercial traffic has been estimated. Results of axle load surveys have been presented in the following table.

Table 9: VDF Values Estimated at the Toll Plaza Locations

Mode Type	TP-1 at km 5+500		TP-2 at km 132+085	
	LHS	RHS	LHS	RHS
LCV	0.12	0.15	0.30	0.26
2 Axle Truck	1.3	1.09	1.14	1.50
3 Axle Truck	4.94	4.95	3.95	4.31
MAV (4-6 Axle)	13.06	7.20	4.51	13.19
Buses	0.500	0.500	0.500	0.500

1.7 VALIDATION OF PROVIDED DATA

The data provided in schedule-A and schedule-B has been validated by taking the physical measurements and condition assessment by visual observations. Complete Road Inventory and Condition is captured and each and every structure has been inspected to note down its structural configuration and condition. The following works highlight the findings on the existing data.

1.7.1 Road Works

In the project stretch, the Connecting Roads were observed for a length of Kms 29.783. Locations of connecting roads are listed as below:

Table 10: Connecting Road Locations

S. No.	Side	Existing Km			Type of Pavement	Road width
		From	To	Length (m)		
1	LHS	1+000	1+080	80	Paver Block	4
2	LHS	1+090	1+516	426	Paver Block	4
3	LHS	6+435	6+503	68	Paver Block	4
4	LHS	7+129	7+199	70	Paver Block	4
5	LHS	7+550	8+080	530	Paver Block	4
6	LHS	8+080	8+300	220	Paver Block	4
7	LHS	8+621	9+300	679	Paver Block	4
8	LHS	9+330	9+600	270	Paver Block	4
9	LHS	24+500	25+000	500	Paver Block	4
10	LHS	25+700	26+200	500	Paver Block	4
11	LHS	26+900	27+400	500	Paver Block	4
12	LHS	29+857	30+800	943	Paver Block	4
13	LHS	38+260	38+500	240	Paver Block	4
14	LHS	40+180	40+380	200	Paver Block	4
15	LHS	40+750	40+900	150	Paver Block	4
16	LHS	45+300	46+000	700	Paver Block	4
17	LHS	50+450	50+770	320	Paver Block	4
18	LHS	52+600	53+100	500	Paver Block	4
19	LHS	55+050	55+585	535	Paver Block	4
20	LHS	56+800	57+980	1180	Paver Block	5
21	LHS	58+340	58+609	261	Paver Block	4
22	LHS	59+000	59+243	243	Paver Block	4
23	LHS	61+605	61+810	205	Paver Block	4
24	LHS	61+996	62+056	60	Paver Block	4
25	LHS	66+300	66+520	220	Paver Block	4
26	LHS	66+904	67+519	615	Paver Block	4

S. No.	Side	Existing Km			Type of Pavement	Road width
		From	To	Length (m)		
27	LHS	68+752	68+902	150	Paver Block	4
28	LHS	97+500	100+000	2500	Paver Block	4
29	RHS	6+353	6+435	82	Paver Block	4
30	RHS	7+029	7+129	100	Paver Block	4
31	RHS	7+600	7+730	130	Paver Block	4
32	RHS	8+000	8+200	200	Paver Block	4
33	RHS	8+500	8+621	121	Paver Block	4
34	RHS	8+730	9+200	470	Paver Block	4
35	RHS	9+330	9+600	270	Paver Block	4
36	RHS	29+550	30+180	630	Paver Block	4
37	RHS	30+900	31+200	300	Paver Block	4
38	RHS	32+262	33+000	738	MUD	3
39	RHS	34+900	35+450	550	Paver Block	4
40	RHS	36+700	37+860	1160	Paver Block	4
41	RHS	40+750	40+900	150	Paver Block	4
42	RHS	41+650	41+950	300	Paver Block	4
43	RHS	42+300	43+800	1500	Paver Block	4
44	RHS	45+400	45+800	400	Paver Block	4
45	RHS	46+100	46+250	150	Paver Block	4
46	RHS	47+100	48+300	1200	Paver Block	4
47	RHS	48+650	50+400	1750	Paver Block	4.5
48	RHS	52+700	53+100	400	Paver Block	4
49	RHS	55+900	56+300	400	Paver Block	4
50	RHS	56+480	56+800	320	Kaccha Road with bushes	3
51	RHS	59+490	59+865	375	Kaccha Road	3
52	RHS	60+490	61+100	610	Paver Block	4
53	RHS	61+995	62+445	450	Paver Block	4
54	RHS	62+853	63+310	457	Paver Block	4
55	RHS	66+000	66+500	500	Paver Block	4
56	RHS	67+249	67+519	270	Paver Block	4
57	RHS	68+752	68+902	150	Paver Block	4
58	RHS	69+198	69+443	245	Paver Block	4
59	RHS	70+091	70+201	110	Paver Block	4
60	RHS	97+120	97+500	380	Paver Block	4
61	RHS	98+790	100+000	1210	Paver Block	4
62	RHS	104+960	105+800	840	Paver Block	4
	Total Length (m)			29783		

Median Drain is observed at super-elevated sections, location wise details are presented in the table below.

Table 11: Median Drains

Median Drains						
S. No	Chainage		Length (m)	Side	Condition	Remarks
	From (km)	To (km)				
1	2.900	3.550	0.650	LHS	Fair	Closed Drain
2	3.800	4.400	0.600	RHS	Fair	Closed Drain
3	6.200	7.250	1.050	RHS	Fair	Closed Drain
4	13.600	15.950	2.350	LHS	Fair	Closed Drain
5	43.300	44.500	1.200	LHS	Fair	

Median Drains						
S. No	Chainage		Length (m)	Side	Condition	Remarks
	From (km)	To (km)				
6	69.470	71.820	2.350	LHS	Fair	
7	71.890	72.700	0.810	RHS	Fair	
8	72.800	73.650	0.850	LHS	Fair	
9	73.750	75.300	1.550	RHS	Fair	
10	75.300	76.100	0.800	LHS	Fair	
11	78.350	80.100	1.750	LHS	Fair	
12	80.200	80.500	0.300	LHS	Fair	
13	83.320	84.750	1.430	LHS	Fair	
14	84.750	85.250	0.500	LHS	Fair	
15	85.400	86.400	1.000	LHS	Fair	
16	88.700	88.950	0.250	LHS	Fair	
17	88.950	89.450	0.500	RHS	Fair	
18	89.700	90.450	0.750	LHS	Fair	Cleaning Required
19	90.450	90.850	0.400	RHS	Fair	
20	98.100	101.920	3.820	LHS	Fair	
21	103.300	107.000	3.700	RHS	Fair	Covered Sheet Damage
22	107.800	107.980	0.180	LHS	Fair	
23	107.990	108.500	0.510	LHS	Fair	
24	108.700	109.150	0.450	RHS	Fair	
25	109.150	110.700	1.550	LHS	Fair	
Total Length of Median Drains (m)			29.30			

RE Walls are found in approaches of some of the Underpasses along the Project. Soil Embankment is observed at entire locations and also these are in Fair in condition. Entire project corridor having the Side kerb and chutes are observed. Summary of the Slope Protection details and side kerb details are listed in the tables below.

Table 12: Summary of Slope Protection Details

Approach Type	Length (Kms)
Embankment	256.221
Stone Pitching	0
RE Wall	0.503
Total Length (Kms)	256.724

Table 13: Summary of Side kerb & Chutes Details

Description	Units (Kms. / Nos.)
Side Kerb (Kms)	256.771
No. of Chutes	13418
Length of Side Kerb Damaged (Kms)	0.099

Description	Units (Kms. / Nos.)
No. of Chutes Damaged	11

Median width of 4.5m was generally adopted along the project road except at toll plaza locations. Median opening and Blinker Signal locations are presented in Tables below:

Table 14: Locations of Median Openings

Median Openings					
S. No.	Ex. Chainage (km)	Width (m)	Length (m)	Type of lane	Remarks
1	5160	4.5	240	Normal Lane	
2	5685	10	30	Normal Lane	
3	11720	4.5	20	Normal Lane	
4	20788	4.5	25	Normal Lane	
5	25940	4.5	20	Normal Lane	
6	30790	4.5	20	Normal Lane	
7	35463	4.5	25	Normal Lane	
8	40693	4.5	25	Normal Lane	
9	45488	4.5	25	Normal Lane	
10	49030	4.5	40	Normal Lane	
11	53384	4.5	33	Normal Lane	
12	58353	4.5	35	Normal Lane	
13	63800	4.5	40	Normal Lane	
14	68205	4.5	40	Normal Lane	
15	77703	4.5	55	Normal Lane	
16	91400	4.5	30	Normal Lane	
17	97840	4.5	40	Normal Lane	
18	100480	4.5	40	Normal Lane	
19	104220	4.5	40	Normal Lane	
20	110425	4.5	30	Normal Lane	
21	116988	4.5	25	Normal Lane	
22	121828	4.5	25	Normal Lane	
23	126798	4.5	25	Normal Lane	
24	132090	4.5	20	Normal Lane	

Solar Blinkers are presented below:

Table 15: Details of Solar Blinkers

Solar Blinkers At MCW					
S. No.	Chainage (km)	Location	No Blinkers	Working /Not Working	Remarks
1	14.700	LHS Shoulder	1	Working	
2	14.795	RHS Shoulder	1	Working	
3	15.000	LHS Shoulder	1	Working	
4	15.140	RHS Shoulder	1	Working	
5	15.270	RHS Shoulder	1	Working	

Solar Blinkers At MCW					
S. No.	Chainage (km)	Location	No Blinkers	Working /Not Working	Remarks
6	15.300	RHS Shoulder	1	Working	
7	15.300	LHS Shoulder	1	Working	
8	15.400	LHS Shoulder	1	Working	
9	15.700	LHS Shoulder	1	Working	
10	15.950	LHS Shoulder	1	Working	
11	15.990	RHS Shoulder	1	Working	
12	16.000	RHS Shoulder	1	Working	
13	39.700	LHS Shoulder	1	Working	
14	44.100	LHS Shoulder	1	Working	
15	44.200	LHS Shoulder	1	Working	
16	44.300	LHS Shoulder	1	Working	
17	44.400	RHS Shoulder	1	Not Working	
18	44.700	RHS Shoulder	1	Working	
19	44.800	RHS Shoulder	1	Working	
20	45.100	RHS Shoulder	1	Working	
21	45.200	LHS Shoulder	1	Working	
22	52.120	LHS Shoulder	1	Working	
23	72.330	LHS Shoulder	1	Working	
24	72.450	LHS Shoulder	1	Working	
25	72.490	LHS Shoulder	1	Working	
26	72.550	RHS Shoulder	1	Working	
27	72.600	RHS Shoulder	1	Working	
28	72.880	LHS Shoulder	1	Working	
29	72.950	RHS Shoulder	1	Working	
30	72.970	LHS Shoulder	1	Working	
31	73.020	RHS Shoulder	1	Working	
32	73.100	RHS Shoulder	1	Working	
33	73.300	RHS Shoulder	1	Working	
34	82.310	LHS Shoulder	1	Working	
35	82.680	LHS Shoulder	1	Working	
36	82.785	LHS Shoulder	1	Working	
37	83.000	LHS Shoulder	1	Working	
38	83.115	LHS Shoulder	1	Working	
39	83.135	LHS Shoulder	1	Working	
40	108.108	LHS Shoulder	1	Working	
41	108.203	LHS Shoulder	1	Working	
42	108.300	RHS Shoulder	1	Working	
43	108.460	LHS Shoulder	1	Working	
44	108.570	LHS Shoulder	1	Working	
45	108.590	RHS Shoulder	1	Working	
46	108.690	RHS Shoulder	1	Working	
47	108.950	RHS Shoulder	1	Working	
48	109.050	RHS Shoulder	1	Working	
49	109.350	RHS Shoulder	1	Working	
50	134.360	LHS Shoulder	1	Working	
51	134.500	LHS Shoulder	1	Working	
52	134.650	LHS Shoulder	1	Working	
53	134.700	LHS Shoulder	1	Working	
54	134.840	RHS Shoulder	1	Working	
55	134.900	LHS Shoulder	1	Not Working	
56	135.010	RHS Shoulder	1	Working	
57	135.130	LHS Shoulder	1	Not Working	
	Total		57		

Solar blinkers-Interchange Locations						
Sl. No.	Chainage	Side	Clover leaf	Type of Loop	No. of Solar Blinkers	Remarks
1	15.36	RHS	Interchange 1	North Loop 1	-	
2	15.36	RHS	Interchange 1	North Loop 2	-	
3	15.36	RHS	Interchange 1	North Ramp Entry	-	
4	15.36	RHS	Interchange 1	North Ramp Exit	1	
5	15.36	LHS	Interchange 1	South Loop 1	1	
6	15.36	LHS	Interchange 1	South Loop 2	-	
7	15.36	LHS	Interchange 1	South Ramp Entry	-	
8	15.36	LHS	Interchange 1	South Ramp Exit	-	
9	44.512	RHS	Clover Leaf 1	North Loop 1	-	
10	44.512	RHS	Clover Leaf 1	North Loop 2	-	
11	44.512	RHS	Clover Leaf 1	North Ramp Entry	-	
12	44.512	RHS	Clover Leaf 1	North Ramp Exit	-	
13	44.512	LHS	Clover Leaf 1	South Loop 1	-	
14	44.512	LHS	Clover Leaf 1	South Loop 2	-	
15	44.512	LHS	Clover Leaf 1	South Ramp Entry	1	
16	44.512	LHS	Clover Leaf 1	South Ramp Exit	-	
17	49.96	RHS	Clover Leaf 2	North Loop 1	-	
18	49.96	RHS	Clover Leaf 2	North Loop 2	-	
19	49.96	RHS	Clover Leaf 2	North Ramp Entry	-	
20	49.96	LHS	Clover Leaf 2	South Ramp Entry	-	
21	49.96	LHS	Clover Leaf 2	South Ramp Exit	-	
22	52.192	RHS	Clover Leaf 3	North Loop 1	-	
23	52.192	RHS	Clover Leaf 3	North Loop 2	-	
24	52.192	RHS	Clover Leaf 3	North Ramp Entry	-	
25	52.192	RHS	Clover Leaf 3	North Ramp Exit	-	
26	52.192	LHS	Clover Leaf 3	South Loop 1	-	
27	52.192	LHS	Clover Leaf 3	South Loop 2	-	
28	52.192	LHS	Clover Leaf 3	South Ramp Entry	-	
29	52.192	LHS	Clover Leaf 3	South Ramp Exit	2	
30	72.724	RHS	Clover Leaf 4	North Loop 1	-	
31	72.724	RHS	Clover Leaf 4	North Loop 2	-	
32	72.724	RHS	Clover Leaf 4	North Ramp Entry	-	
33	72.724	RHS	Clover Leaf 4	North Ramp Exit	-	
34	72.724	LHS	Clover Leaf 4	South Loop 1	-	
35	72.724	LHS	Clover Leaf 4	South Loop 2	-	
36	72.724	LHS	Clover Leaf 4	South Ramp Entry	-	
37	72.724	LHS	Clover Leaf 4	South Ramp Exit	-	
38	83.005	RHS	Interchange 2	North Loop 1	-	
39	83.005	RHS	Interchange 2	North Loop 2	-	
40	83.005	RHS	Interchange 2	North Ramp Entry	1	
41	83.005	RHS	Interchange 2	North Ramp Exit	1	

Solar blinkers-Interchange Locations						
Sl. No.	Chainage	Side	Clover leaf	Type of Loop	No. of Solar Blinkers	Remarks
42	83.005	LHS	Interchange 2	South Loop 1	-	
43	83.005	LHS	Interchange 2	South Loop 2	-	
44	83.005	LHS	Interchange 2	South Ramp Entry	1	
45	83.005	LHS	Interchange 2	South Ramp Exit	1	
46	108.57	RHS	Interchange 3	North Loop 1	-	
47	108.57	RHS	Interchange 3	North Loop 2	-	
48	108.57	RHS	Interchange 3	North Ramp Entry	-	
49	108.57	RHS	Interchange 3	North Ramp Exit	-	
50	108.57	LHS	Interchange 3	South Loop 1	-	
51	108.57	LHS	Interchange 3	South Loop 2	-	
52	108.57	LHS	Interchange 3	South Ramp Entry	-	
53	108.57	LHS	Interchange 3	South Ramp Exit	-	
54	135	RHS	Clover Leaf 5	North Loop 1	-	
55	135	RHS	Clover Leaf 5	North Loop 2	-	
56	135	RHS	Clover Leaf 5	North Ramp Entry	-	
57	135	RHS	Clover Leaf 5	North Ramp Exit	-	
58	135	LHS	Clover Leaf 5	South Loop 1	-	
59	135	LHS	Clover Leaf 5	South Loop 2	-	
60	135	LHS	Clover Leaf 5	South Ramp Entry	-	
61	135	LHS	Clover Leaf 5	South Ramp Exit	-	
	Total No. of Blinkers				9	

There are few Median Kerb damages along the project corridor and locations are presented in Table below:

Table 16: Median Kerb damage Locations

Median Kerb Damage Locations			
Sl. No.	Chainage	Side	Length(m)
1	2071	LHS Median	2
2	3812	LHS Median	5
3	9790	LHS Median	5
4	15829	LHS Median	5
5	60607	LHS Median	6
6	130597	LHS Median	10
7	2071	RHS Median	2
8	6425	RHS Median	8
9	79817	RHS Median	5
10	83776	RHS Median	12
11	85380	RHS Median	5
12	104367	RHS Median	5
13	105890	RHS Median	10
14	111485	RHS Median	5

Total Length(m)	85

Safety barriers have been provided along the project road. Summary of safety barriers details are provided in the below table:

Table 17: Summary of Safety Barriers

Description	Length (Kms)	Damaged (m)
W-Beam Safety Barriers	517.905	10.082
Concrete Crash Barriers	24.114	-

In existing Project stretch, there are total 8 Interchanges. Details of all Interchanges are as provided in below table.

Table 18: List of Ramps & Loops

Interchange				
S. No.	Interchange Chainage	Loops/Ramps	loop/Ramp Length (m)	Carriageway Width with Paved Shoulder (m)
1	15.360	S-Ramp Exit	650	9
		S-Ramp Entry	750	9
		Loop 1	650	9
		Loop 2	650	9
		N-Ramp Exit	800	9
		N-Ramp Entry	900	9
2	44.152	S-Ramp Exit	700	10
		S-Ramp Entry	900	11
		S-Loop 1	700	9
		S-Loop 2	700	9
		N - Ramp Exit	700	9.5
		N-Ramp Entry	800	9
		N-Loop 1	700	9
		N-Loop 2	600	9
3	49.960	S-Ramp Exit	800	7
		S-Ramp Entry	500	7
		N-Ramp Entry	1100	7
		N-Loop 1	600	7
		N-Loop 2	600	7
4	59.192	S-Ramp Exit	800	9
		S-Ramp Entry	1000	9
		S-Loop 1	650	9
		S-Loop 2	500	9
		N-Ramp Exit	800	9
		N-Ramp Entry	700	9
		N-Loop 1	600	9
		N-Loop 2	600	9
5	72.724	S-Ramp Exit	900	9

Interchange				
S. No.	Interchange Chainage	Loops/Ramps	loop/Ramp Length (m)	Carriageway Width with Paved Shoulder (m)
		S-Ramp Entry	650	9
		S-Loop 1	500	9
		S-Loop 2	500	9
		N-Ramp Exit	800	9
		N-Ramp Entry	600	9
		N-Loop 1	650	9
		N-Loop 2	650	9
6	83.005	S-Ramp Exit	1100	9
		S-Ramp Entry	800	9
		Loop 1	1100	9
		Loop 2	1100	9
		N-Ramp Exit	1000	9
		N-Ramp Entry	900	9
7	108.570	S-Ramp Exit	1000	9
		S-Ramp Entry	900	9
		Loop 1	700	9
		Loop 2	700	9
		N-Ramp Exit	1050	9
		N-Ramp Entry	800	9
8	135.000	S-Ramp Exit	650	9.5
		S-Ramp Entry	1200	9.5
		S-Loop 1	500	9.5
		S-Loop 2	600	9.5
		N-Ramp Exit	480	9.5
		N-Ramp Entry	540	9.5
		N-Loop 1	500	9.5
		N-Loop 2	600	9.5

Road furniture in the form of Signs/Markings, Gantry signs and traffic safety blinkers, lighting, high mast lights have been provided along the project road at few locations and are presented in the Tables below:

Table 19: Sign Boards on LHS

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
1	1.000	Gantry	Fair	Shoulder	Gantry
2	1.100	NE-II	Fair	Shoulder	Route Marker
3	1.250	Art Gallery	Fair	Shoulder	Safety
4	1.300	Maximum Speed limit	Fair	Shoulder	Safety
5	1.300	Help Line	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
392	85.420	Chevron	Fair	Median	Rectangular
393	85.430	Chevron	Fair	Median	Rectangular
394	85.440	Chevron	Fair	Median	Rectangular
395	85.450	Chevron	Fair	Median	Rectangular
396	85.700	Expressway	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
6	1.900	Feel Proud board	Fair	Shoulder	Safety
7	2.600	Art Gallery	Fair	Shoulder	Safety
8	3.500	Cantilever	Fair	Shoulder	Cantilever
9	4.250	Feel Proud board	Fair	Shoulder	Safety
10	4.520	Cantilever	Fair	Shoulder	Cantilever
11	4.750	Help Line	Fair	Shoulder	Rectangular
12	4.850	User fee Board	Fair	Shoulder	Safety
13	4.900	User fee Board	Fair	Shoulder	Safety
14	6.000	Chevron	Fair	Shoulder	Rectangular
15	6.050	Chevron	Fair	Shoulder	Rectangular
16	6.100	Chevron	Fair	Shoulder	Rectangular
17	6.150	Chevron	Fair	Shoulder	Rectangular
18	6.200	Chevron	Fair	Shoulder	Rectangular
19	6.250	Chevron	Fair	Shoulder	Rectangular
20	6.300	Chevron	Fair	Shoulder	Rectangular
21	6.350	Chevron	Fair	Shoulder	Rectangular
22	6.400	Chevron	Fair	Shoulder	Rectangular
23	6.450	Chevron	Fair	Shoulder	Rectangular
24	6.500	Chevron	Fair	Shoulder	Rectangular
25	6.550	Chevron	Fair	Shoulder	Rectangular
26	6.600	Chevron	Fair	Shoulder	Rectangular
27	6.650	Chevron	Fair	Shoulder	Rectangular
28	6.800	Chevron	Fair	Shoulder	Rectangular
29	6.990	Village board	Fair	Shoulder	Rectangular
30	7.000	Chevron	Fair	Median	Rectangular
31	7.050	Chevron	Fair	Median	Rectangular
32	7.100	Chevron	Fair	Median	Rectangular
33	7.150	Chevron	Fair	Median	Rectangular
34	7.200	Chevron	Fair	Median	Rectangular
35	7.250	Chevron	Fair	Median	Rectangular
36	7.650	Interchange ahead	Fair	Shoulder	Rectangular
37	7.900	Maximum Speed limit	Fair	Shoulder	Safety
38	8.200	Follow Speed limit	Fair	Shoulder	Safety
39	9.650	Help Line	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
397	85.820	Chevron	Fair	Shoulder	Rectangular
398	85.830	Chevron	Fair	Shoulder	Rectangular
399	85.840	Chevron	Fair	Shoulder	Rectangular
400	85.850	Chevron	Fair	Shoulder	Rectangular
401	85.860	Chevron	Fair	Shoulder	Rectangular
402	85.870	Chevron	Fair	Shoulder	Rectangular
403	85.880	Chevron	Fair	Shoulder	Rectangular
404	85.890	Chevron	Fair	Shoulder	Rectangular
405	85.900	Chevron	Fair	Shoulder	Rectangular
406	85.910	Chevron	Fair	Shoulder	Rectangular
407	85.920	Chevron	Fair	Shoulder	Rectangular
408	85.930	Chevron	Fair	Shoulder	Rectangular
409	85.940	Chevron	Fair	Shoulder	Rectangular
410	85.995	Speed Limit	Fair	Shoulder	Safety
411	86.170	Hazard	Fair	Shoulder	Rectangular
412	86.180	Hazard	Fair	Median	Rectangular
413	86.950	Hazard	Fair	Shoulder	Rectangular
414	86.950	Hazard	Fair	Median	Rectangular
415	87.500	Help Line	Fair	Median	Rectangular
416	87.985	Hazard	Fair	Shoulder	Rectangular
417	87.985	Hazard	Fair	Median	Rectangular
418	88.480	No Stopping	Fair	Shoulder	Safety
419	88.500	Keep Headway Distance	Fair	Shoulder	Safety
420	88.600	Right Hand Curve	Fair	Shoulder	Triangular
421	88.700	Chevron	Fair	Shoulder	Rectangular
422	88.710	Chevron	Fair	Shoulder	Rectangular
423	88.720	Chevron	Fair	Shoulder	Rectangular
424	88.730	Chevron	Fair	Shoulder	Rectangular
425	88.740	Chevron	Fair	Shoulder	Rectangular
426	88.750	Chevron	Fair	Shoulder	Rectangular
427	88.760	Chevron	Fair	Shoulder	Rectangular
428	88.770	Chevron	Fair	Shoulder	Rectangular
429	88.780	Chevron	Fair	Shoulder	Rectangular
430	88.790	Chevron	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
40	10.200	NH-II	Fair	Shoulder	Route Marker
41	11.800	Drive Don't fly	Fair	Shoulder	Safety
42	11.950	Maximum Speed limit	Fair	Shoulder	Safety
43	12.420	Cantilever	Fair	Shoulder	Cantilever
44	13.200	Don' t Drink Drive	Fair	Shoulder	Safety
45	13.200	Chevron	Fair	Shoulder	Rectangular
46	13.270	Chevron	Fair	Shoulder	Rectangular
47	13.300	Cantilever	Fair	Shoulder	Cantilever
48	13.370	Chevron	Fair	Shoulder	Rectangular
49	13.440	Chevron	Fair	Shoulder	Rectangular
50	13.510	Chevron	Fair	Shoulder	Rectangular
51	13.580	Chevron	Fair	Shoulder	Rectangular
52	13.600	Chevron	Fair	Median	Rectangular
53	13.630	Chevron	Fair	Median	Rectangular
54	13.690	Chevron	Fair	Median	Rectangular
55	13.850	VMS	Fair	Shoulder	VMS
56	13.920	Chevron	Fair	Median	Rectangular
57	14.000	Cantilever	Fair	Shoulder	Cantilever
58	14.095	Chevron	Fair	Median	Rectangular
59	14.190	Chevron	Fair	Median	Rectangular
60	14.285	Chevron	Fair	Median	Rectangular
61	14.380	Chevron	Fair	Median	Rectangular
62	14.400	Cantilever	Fair	Shoulder	Cantilever
63	14.495	Chevron	Fair	Median	Rectangular
64	14.590	Chevron	Fair	Median	Rectangular
65	14.700	Toll both	Fair	Shoulder	Rectangular
66	15.000	Chevron	Fair	Median	Rectangular
67	15.030	Chevron	Fair	Median	Rectangular
68	15.060	Chevron	Fair	Median	Rectangular
69	15.250	NH-II	Fair	Shoulder	Route Marker
70	15.310	Cantilever	Fair	Shoulder	Cantilever
71	15.600	Chevron	Fair	Shoulder	Rectangular
72	15.620	Chevron	Fair	Shoulder	Rectangular
73	15.640	Chevron	Fair	Shoulder	Rectangular
74	15.660	Chevron	Fair	Shoulder	Rectangular
75	15.680	Chevron	Fair	Shoulder	Rectangular
76	15.700	Chevron	Fair	Shoulder	Rectangular
77	15.720	Chevron	Fair	Shoulder	Rectangular
78	15.740	Chevron	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
431	88.800	Chevron	Fair	Shoulder	Rectangular
432	89.280	Hazard	Fair	Shoulder	Rectangular
433	89.280	Hazard	Fair	Median	Rectangular
434	89.400	NE - II	Fair	Shoulder	Route Marker
435	89.500	Do not stop	Fair	Shoulder	Safety
436	89.950	Chevron	Fair	Median	Rectangular
437	89.960	Chevron	Fair	Median	Rectangular
438	89.970	Chevron	Fair	Median	Rectangular
439	89.980	Chevron	Fair	Median	Rectangular
440	89.990	Chevron	Fair	Median	Rectangular
441	90.000	Chevron	Fair	Median	Rectangular
442	90.010	Chevron	Fair	Median	Rectangular
443	90.020	Chevron	Fair	Median	Rectangular
444	90.030	Chevron	Fair	Median	Rectangular
445	90.040	Chevron	Fair	Median	Rectangular
446	90.050	Chevron	Fair	Median	Rectangular
447	90.060	Chevron	Fair	Median	Rectangular
448	90.070	Chevron	Fair	Median	Rectangular
449	90.200	Expressway	Damage	Shoulder	Rectangular
450	90.300	No Stopping	Fair	Shoulder	Safety
451	90.480	Seat Belt	Damage	Shoulder	Safety
452	90.960	VMS	Fair	Shoulder	VMS
453	91.000	Speed Limit	Fair	Shoulder	Circular
454	91.300	Help Line	Fair	Median	Rectangular
455	91.330	Median Opening	Fair	Median	Triangular
456	91.780	Hazard	Damage	Shoulder	Rectangular
457	91.800	Hazard	Fair	Median	Rectangular
458	92.750	VMS	Fair	Shoulder	VMS
459	93.500	Drive don't fly	Fair	Shoulder	Safety
460	93.970	Filling Station	Fair	Shoulder	Rectangular
461	94.080	Speed Limit	Fair	Shoulder	Safety
462	94.150	Hazard	Fair	Shoulder	Rectangular
463	94.150	Hazard	Fair	Median	Rectangular
464	94.200	Help Line	Fair	Shoulder	Rectangular
465	94.400	NE - II	Fair	Shoulder	Route Marker
466	94.500	Highway Nest Mini	Fair	Shoulder	Safety
467	94.510	Hazard	Fair	Shoulder	Rectangular
468	94.510	Hazard	Fair	Median	Rectangular
469	94.700	CCTV Surveillance	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
79	15.760	Chevron	Fair	Shoulder	Rectangular
80	15.780	Chevron	Fair	Shoulder	Rectangular
81	15.800	Chevron	Fair	Shoulder	Rectangular
82	15.820	Chevron	Fair	Shoulder	Rectangular
83	16.300	NE-II	Fair	Shoulder	Route Marker
84	16.400	Maximum Speed limit	Fair	Shoulder	Safety
85	16.550	Help Line	Fair	Shoulder	Rectangular
86	17.000	Advance Direction	Fair	Shoulder	Rectangular
87	17.550	use seat bealt be safe	Fair	Shoulder	Safety
88	18.150	Don't use mobile while drive	Fair	Shoulder	Safety
89	19.200	first highway with drip Irrigation Systeam	Fair	Shoulder	Safety
90	20.900	NE-II	Fair	Shoulder	Route Marker
91	21.800	Maximum Speed limit	Fair	Shoulder	Safety
92	22.000	Speed Limit	Fair	Shoulder	Circular
93	23.400	Follow Speed limit	Fair	Shoulder	Safety
94	25.400	NE-II	Fair	Shoulder	Route Marker
95	26.300	Green Express way	Fair	Shoulder	Safety
96	27.000	Advance Direction	Fair	Shoulder	Rectangular
97	27.620	Maximum Speed limit	Fair	Shoulder	Safety
98	29.400	Don't use mobile phone	Fair	Shoulder	Safety
99	30.400	NE-II	Fair	Shoulder	Route Marker
100	33.300	Help Line	Fair	Shoulder	Rectangular
101	33.700	Keep Road Clean	Fair	Shoulder	Safety
102	35.400	NE-II	Fair	Shoulder	Route Marker
103	37.000	Advance Direction	Fair	Shoulder	Rectangular
104	38.200	Stop Vechicle left shoulder only	Fair	Shoulder	Safety
105	39.800	Maximum Speed limit	Fair	Shoulder	Safety
106	40.250	Help Line	Fair	Shoulder	Rectangular
107	40.400	NE-II	Fair	Shoulder	Route Marker
108	40.800	Can't Fly	Fair	Shoulder	Safety
109	41.800	Cantilever	Fair	Shoulder	Cantilever
110	42.720	Cantilever	Fair	Shoulder	Cantilever
111	43.300	Cantilever	Fair	Shoulder	Cantilever
112	43.300	Chevron	Fair	Shoulder	Rectangular
113	43.320	Chevron	Fair	Shoulder	Rectangular
114	43.340	Chevron	Fair	Shoulder	Rectangular
115	43.360	Chevron	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
470	94.970	Hazard	Fair	Shoulder	Rectangular
471	94.970	Hazard	Fair	Median	Rectangular
472	95.010	Filling Station	Fair	Shoulder	Rectangular
473	95.315	Filling Station	Fair	Shoulder	Rectangular
474	95.400	Hazard	Fair	Shoulder	Rectangular
475	95.400	Hazard	Fair	Median	Rectangular
476	96.100	No Stopping	Fair	Shoulder	Safety
477	97.100	No Stopping	Fair	Shoulder	Safety
478	97.350	Drinking and driving kills	Fair	Shoulder	Safety
479	97.800	Median Opening	Fair	Median	Triangular
480	97.830	Left Hand Curve	Fair	Shoulder	Triangular
481	97.840	Chevron	Fair	Shoulder	Rectangular
482	97.840	Right Hand Curve	Fair	Shoulder	Triangular
483	97.850	Chevron	Fair	Shoulder	Rectangular
484	97.860	Chevron	Fair	Shoulder	Rectangular
485	97.870	Chevron	Fair	Shoulder	Rectangular
486	97.880	Chevron	Fair	Shoulder	Rectangular
487	97.890	Chevron	Fair	Shoulder	Rectangular
488	97.900	Chevron	Fair	Shoulder	Rectangular
489	97.910	Chevron	Fair	Shoulder	Rectangular
490	97.920	Chevron	Fair	Shoulder	Rectangular
491	97.930	Chevron	Fair	Shoulder	Rectangular
492	97.940	Chevron	Fair	Shoulder	Rectangular
493	97.950	Chevron	Fair	Shoulder	Rectangular
494	97.960	Chevron	Fair	Shoulder	Rectangular
495	97.970	Chevron	Fair	Shoulder	Rectangular
496	97.980	Chevron	Fair	Shoulder	Rectangular
497	97.990	Chevron	Fair	Shoulder	Rectangular
498	98.000	Chevron	Fair	Shoulder	Rectangular
499	98.010	Chevron	Fair	Shoulder	Rectangular
500	98.020	Chevron	Fair	Shoulder	Rectangular
501	98.030	Chevron	Fair	Shoulder	Rectangular
502	98.040	Chevron	Fair	Shoulder	Rectangular
503	98.050	Chevron	Fair	Shoulder	Rectangular
504	98.050	Speed Limit	Fair	Shoulder	Safety
505	98.060	Chevron	Fair	Shoulder	Rectangular
506	98.070	Chevron	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
116	43.380	Chevron	Fair	Shoulder	Rectangular
117	43.400	VMS	Fair	Shoulder	VMS
118	43.420	Chevron	Fair	Shoulder	Rectangular
119	43.600	Cantilever	Fair	Shoulder	Cantilever
120	43.900	Village board	Fair	Shoulder	Rectangular
121	44.150	Traffic Merge	Fair	Shoulder	Triangular
122	44.200	Chevron	Fair	Median	Rectangular
123	44.230	Chevron	Fair	Median	Rectangular
124	44.260	Chevron	Fair	Median	Rectangular
125	44.290	Chevron	Fair	Median	Rectangular
126	44.305	U-turn prohibited	Fair	Shoulder	Rectangular
127	44.450	Village board	Fair	Shoulder	Rectangular
128	44.460	NE-II	Fair	Shoulder	Route Marker
129	44.500	Cantilever	Fair	Shoulder	Cantilever
130	44.700	Speed Limit	Fair	Shoulder	Circular
131	44.705	left Curve	Fair	Shoulder	Triangular
132	44.710	Village board	Fair	Shoulder	Rectangular
133	44.720	Cantilever	Fair	Shoulder	Cantilever
134	45.100	Traffic Merge	Fair	Shoulder	Triangular
135	45.300	NE-II	Fair	Shoulder	Route Marker
136	45.520	Feel proud to be	Fair	Shoulder	Safety
137	46.005	Advance Direction	Fair	Shoulder	Rectangular
138	46.300	Help Line	Fair	Shoulder	Rectangular
139	46.500	Hazard	Fair	Shoulder	Rectangular
140	46.520	NE-II	Fair	Shoulder	Route Marker
141	46.600	Speed Limit	Fair	Shoulder	Circular
142	47.300	Hazard	Fair	Median	Rectangular
143	48.200	Gantry	Fair	Shoulder	Gantry
144	48.550	Advance Direction	Fair	Shoulder	Rectangular
145	48.950	Median opening	Fair	Shoulder	Triangular
146	49.000	Hazard	Fair	Shoulder	Rectangular
147	49.200	Cantilever	Fair	Shoulder	Cantilever
148	49.300	Cantilever	Fair	Shoulder	Cantilever
149	49.310	Village board	Fair	Shoulder	Rectangular
150	52.120	Hazard	Fair	Shoulder	Rectangular
151	52.250	Village Name	Fair	Shoulder	Rectangular
152	52.300	Exit Board	Fair	Shoulder	Rectangular
153	52.350	Hazard	Fair	Shoulder	Rectangular
154	52.520	Merging ahead	Fair	Shoulder	Rectangular
155	52.550	U-Turn Prohibited	Fair	Shoulder	Circular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
507	98.080	Chevron	Fair	Shoulder	Rectangular
508	98.090	Chevron	Fair	Shoulder	Rectangular
509	98.100	Chevron	Fair	Shoulder	Rectangular
510	98.110	Chevron	Fair	Shoulder	Rectangular
511	98.120	Chevron	Fair	Shoulder	Rectangular
512	98.130	Chevron	Fair	Shoulder	Rectangular
513	98.140	Chevron	Fair	Shoulder	Rectangular
514	98.150	Chevron	Fair	Shoulder	Rectangular
515	98.160	Chevron	Fair	Shoulder	Rectangular
516	98.160	No Stopping	Fair	Shoulder	Safety
517	98.170	Chevron	Fair	Shoulder	Rectangular
518	98.180	Chevron	Fair	Shoulder	Rectangular
519	98.190	Chevron	Fair	Shoulder	Rectangular
520	98.200	Chevron	Fair	Shoulder	Rectangular
521	98.210	Chevron	Fair	Shoulder	Rectangular
522	98.220	Chevron	Fair	Shoulder	Rectangular
523	98.230	Chevron	Fair	Shoulder	Rectangular
524	98.240	Chevron	Fair	Shoulder	Rectangular
525	98.250	Chevron	Fair	Shoulder	Rectangular
526	98.260	Chevron	Fair	Shoulder	Rectangular
527	98.270	Chevron	Fair	Shoulder	Rectangular
528	98.280	Chevron	Fair	Shoulder	Rectangular
529	98.290	Chevron	Fair	Shoulder	Rectangular
530	98.300	Chevron	Fair	Shoulder	Rectangular
531	98.310	Chevron	Fair	Shoulder	Rectangular
532	98.320	Chevron	Fair	Shoulder	Rectangular
533	98.330	Chevron	Fair	Shoulder	Rectangular
534	98.340	Chevron	Fair	Shoulder	Rectangular
535	98.350	Chevron	Fair	Shoulder	Rectangular
536	98.800	Hazard	Fair	Shoulder	Rectangular
537	98.810	Hazard	Fair	Median	Rectangular
538	99.105	No Stopping	Fair	Shoulder	Safety
539	99.900	Hazard	Fair	Shoulder	Rectangular
540	99.900	Hazard	Fair	Median	Rectangular
541	100.100	No Stopping	Fair	Shoulder	Safety
542	100.400	Median Opening	Fair	Median	Triangular
543	100.530	NE - II	Fair	Shoulder	Route Marker
544	100.750	Help Line	Fair	Median	Rectangular
545	101.130	No Stopping	Fair	Shoulder	Safety
546	101.180	Hazard	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
156	52.920	Speed Limit	Fair	Median	Circular
157	53.080	Hazard	Fair	Shoulder	Rectangular
158	53.320	Median Opening	Fair	Median	Triangular
159	53.515	Advance Direction	Fair	Shoulder	Rectangular
160	53.670	Advance Direction	Fair	Shoulder	Rectangular
161	54.060	Help Line	Fair	Median	Rectangular
162	54.150	NE - II	Fair	Shoulder	Route Marker
163	54.950	Speed Limit	Fair	Shoulder	Circular
164	56.220	Hazard	Fair	Shoulder	Rectangular
165	56.600	CCTV Surveillance	Fair	Shoulder	Rectangular
166	57.920	Hazard	Fair	Shoulder	Rectangular
167	57.930	Hazard	Fair	Median	Rectangular
168	58.250	Median Opening	Fair	Median	Triangular
169	58.280	Hazard	Fair	Median	Rectangular
170	59.025	Help Line	Fair	Median	Rectangular
171	59.135	Advance Direction	Fair	Shoulder	Gantry
172	60.000	Slow Vehicle Keep Left	Fair	Shoulder	Safety
173	60.050	Advance Direction	Fair	Shoulder	Gantry
174	61.050	Speed Limit	Fair	Shoulder	Circular
175	61.965	Hazard	Fair	Shoulder	Rectangular
176	61.965	Hazard	Fair	Median	Rectangular
177	62.225	CCTV Surveillance	Fair	Shoulder	Rectangular
178	62.315	Advance Direction	Fair	Shoulder	Gantry
179	63.750	Median Opening	Fair	Median	Triangular
180	63.990	Help Line	Fair	Median	Rectangular
181	64.710	Hazard	Fair	Shoulder	Rectangular
182	64.725	Hazard	Fair	Median	Rectangular
183	65.015	Hazard	Fair	Median	Rectangular
184	66.030	Speed Limit	Fair	Shoulder	Circular
185	67.003	Advance Direction	Fair	Median	Gantry
186	68.150	Median Opening	Fair	Median	Triangular
187	68.225	Hazard	Fair	Median	Rectangular
188	69.000	Help Line	Fair	Median	Rectangular
189	69.610	Chevron	Fair	Shoulder	Rectangular
190	69.620	Chevron	Fair	Shoulder	Rectangular
191	69.630	Chevron	Fair	Shoulder	Rectangular
192	69.640	Chevron	Fair	Shoulder	Rectangular
193	69.650	Chevron	Fair	Shoulder	Rectangular
194	69.660	Chevron	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
547	101.180	Hazard	Fair	Median	Rectangular
548	102.060	No Stopping	Fair	Shoulder	Safety
549	102.200	Speed Limit	Fair	Shoulder	Safety
550	103.100	No Stopping	Fair	Shoulder	Safety
551	103.355	Hazard	Fair	Shoulder	Rectangular
552	103.355	Hazard	Fair	Median	Rectangular
553	103.430	Left Hand Curve	Fair	Shoulder	Triangular
554	103.500	Chevron	Fair	Median	Rectangular
555	103.800	Proud to be Indian	Fair	Shoulder	Safety
556	103.920	Hazard	Fair	Median	Rectangular
557	104.100	No Stopping	Fair	Shoulder	Safety
558	104.110	Median Opening	Fair	Median	Triangular
559	104.180	Hazard	Fair	Shoulder	Rectangular
560	104.180	Hazard	Fair	Median	Rectangular
561	105.100	No Stopping	Fair	Shoulder	Safety
562	105.500	Exit Board / Advance Direction	Fair	Shoulder	Cantilever
563	105.750	Hazard	Damage	Shoulder	Rectangular
564	105.750	Hazard	Fair	Median	Rectangular
565	105.980	Help Line	Fair	Median	Rectangular
566	106.000	No Stopping	Fair	Shoulder	Safety
567	106.300	Hazard	Damage	Shoulder	Rectangular
568	106.500	Advance Direction	Fair	Shoulder	Cantilever
569	106.700	Hazard	Fair	Shoulder	Rectangular
570	106.700	Hazard	Fair	Median	Rectangular
571	107.115	Hazard	Damage	Shoulder	Rectangular
572	107.115	Hazard	Fair	Median	Rectangular
573	107.200	No Stopping	Fair	Shoulder	Safety
574	107.250	Speed Limit	Fair	Shoulder	Safety
575	107.330	Advance Direction	Fair	Shoulder	Cantilever
576	107.480	Advance Direction	Fair	Shoulder	Gantry
577	108.100	No Stopping	Fair	Shoulder	Safety
578	108.300	Merging ahead	Fair	Shoulder	Rectangular
579	108.310	U-Turn Prohibited	Fair	Shoulder	Circular
580	108.800	Advance Direction	Fair	Shoulder	Rectangular
581	109.050	Chevron	Fair	Median	Rectangular
582	109.060	Chevron	Fair	Median	Rectangular
583	109.070	Chevron	Fair	Median	Rectangular
584	109.080	Chevron	Fair	Median	Rectangular
585	109.090	Chevron	Fair	Median	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
195	69.670	Chevron	Fair	Shoulder	Rectangular
196	69.670	Left Hand Curve	Fair	Shoulder	Triangular
197	69.680	Chevron	Fair	Shoulder	Rectangular
198	69.690	Chevron	Fair	Shoulder	Rectangular
199	69.700	Chevron	Fair	Shoulder	Rectangular
200	69.710	Chevron	Fair	Shoulder	Rectangular
201	69.720	Chevron	Fair	Shoulder	Rectangular
202	69.730	Chevron	Fair	Shoulder	Rectangular
203	69.740	Chevron	Fair	Shoulder	Rectangular
204	69.750	Chevron	Fair	Shoulder	Rectangular
205	69.760	Chevron	Fair	Shoulder	Rectangular
206	69.770	Chevron	Fair	Shoulder	Rectangular
207	69.780	Chevron	Fair	Shoulder	Rectangular
208	69.790	Chevron	Fair	Shoulder	Rectangular
209	69.800	Chevron	Fair	Shoulder	Rectangular
210	69.810	Chevron	Fair	Shoulder	Rectangular
211	69.820	Chevron	Fair	Shoulder	Rectangular
212	69.830	Chevron	Fair	Shoulder	Rectangular
213	69.840	Chevron	Fair	Shoulder	Rectangular
214	69.850	Chevron	Fair	Shoulder	Rectangular
215	69.860	Chevron	Fair	Shoulder	Rectangular
216	69.870	Chevron	Fair	Shoulder	Rectangular
217	69.880	Chevron	Fair	Shoulder	Rectangular
218	71.030	Hazard	Fair	Shoulder	Rectangular
219	71.080	Speed Limit	Fair	Shoulder	Circular
220	71.100	VMS	Fair	Shoulder	VMS
221	71.200	Advance Direction	Fair	Shoulder	Rectangular
222	71.420	Advance Direction	Fair	Median	Rectangular
223	71.570	Toll Boards	Fair	Shoulder	Cantilever
224	71.602	Right Hand Curve	Fair	Shoulder	Triangular
225	71.700	Advance Direction	Fair	Shoulder	Cantilever
226	71.730	Advance Direction	Fair	Shoulder	Cantilever
227	71.730	Help Line	Fair	Median	Rectangular
228	71.930	No Stopping	Fair	Shoulder	Safety
229	72.040	Toll Boards	Fair	Shoulder	Toll Boards
230	72.055	Merging ahead	Fair	Shoulder	Rectangular
231	72.330	NE - II	Fair	Median	Route Marker
232	72.420	Exit Board / Advance Direction	Fair	Shoulder	Cantilever
233	72.470	Merging ahead	Fair	Shoulder	Rectangular
234	72.882	Degree Loop	Fair	Shoulder	Triangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
586	109.100	Chevron	Fair	Median	Rectangular
587	109.110	Chevron	Fair	Median	Rectangular
588	109.120	Chevron	Fair	Median	Rectangular
589	109.130	Chevron	Fair	Median	Rectangular
590	109.380	U-Turn Prohibited	Fair	Shoulder	Circular
591	109.750	Right Hand Curve	Fair	Shoulder	Triangular
592	109.770	Expressway	Fair	Shoulder	Rectangular
593	109.800	Chevron	Fair	Shoulder	Rectangular
594	109.810	Chevron	Fair	Shoulder	Rectangular
595	109.820	Chevron	Fair	Shoulder	Rectangular
596	109.830	Chevron	Fair	Shoulder	Rectangular
597	109.830	Hazard	Fair	Shoulder	Rectangular
598	109.840	Chevron	Fair	Shoulder	Rectangular
599	109.850	Chevron	Fair	Shoulder	Rectangular
600	109.860	Chevron	Fair	Shoulder	Rectangular
601	109.870	Chevron	Fair	Shoulder	Rectangular
602	109.880	Chevron	Fair	Shoulder	Rectangular
603	109.890	Chevron	Fair	Shoulder	Rectangular
604	109.900	Chevron	Fair	Shoulder	Rectangular
605	109.910	Chevron	Fair	Shoulder	Rectangular
606	109.920	Chevron	Fair	Shoulder	Rectangular
607	109.930	Chevron	Fair	Shoulder	Rectangular
608	109.940	Chevron	Fair	Shoulder	Rectangular
609	110.050	No Stopping	Fair	Shoulder	Safety
610	110.300	Median Opening	Fair	Median	Triangular
611	110.350	Speed Limit	Fair	Shoulder	Safety
612	111.100	No Stopping	Fair	Shoulder	Safety
613	111.300	Help Line	Fair	Median	Rectangular
614	111.400	Hazard	Fair	Shoulder	Rectangular
615	112.100	No Stopping	Fair	Shoulder	Safety
616	112.230	Hazard	Fair	Shoulder	Rectangular
617	113.005	No Stopping	Fair	Shoulder	Safety
618	113.500	NE - II	Fair	Shoulder	Route Marker
619	114.004	Advance Direction	Fair	Shoulder	Gantry
620	114.180	Expressway	Fair	Shoulder	Rectangular
621	114.300	Hazard	Fair	Shoulder	Rectangular
622	114.490	Speed Limit	Fair	Shoulder	Safety
623	114.680	Help Line	Fair	Shoulder	Rectangular
624	114.700	Hazard	Fair	Median	Rectangular
625	114.700	Hazard	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
235	72.905	Advance Direction	Fair	Shoulder	Cantilever
236	73.000	Chevron	Fair	Median	Rectangular
237	73.010	Chevron	Fair	Median	Rectangular
238	73.010	Left Hand Curve	Fair	Shoulder	Triangular
239	73.020	Chevron	Fair	Median	Rectangular
240	73.030	Chevron	Fair	Median	Rectangular
241	73.040	Chevron	Fair	Median	Rectangular
242	73.050	Chevron	Fair	Median	Rectangular
243	73.060	Chevron	Fair	Median	Rectangular
244	73.070	Chevron	Fair	Median	Rectangular
245	73.080	Chevron	Fair	Median	Rectangular
246	73.090	Chevron	Fair	Median	Rectangular
247	73.095	CCTV Surveillance	Fair	Shoulder	Cantilever
248	73.100	Chevron	Fair	Median	Rectangular
249	73.110	Chevron	Fair	Median	Rectangular
250	73.120	Chevron	Fair	Median	Rectangular
251	73.130	Chevron	Fair	Median	Rectangular
252	73.140	Chevron	Fair	Median	Rectangular
253	73.150	Chevron	Fair	Median	Rectangular
254	73.160	Chevron	Fair	Median	Rectangular
255	73.170	Chevron	Fair	Median	Rectangular
256	73.180	Chevron	Fair	Median	Rectangular
257	73.190	Chevron	Fair	Median	Rectangular
258	73.200	Chevron	Fair	Median	Rectangular
259	73.210	Chevron	Fair	Median	Rectangular
260	73.220	Chevron	Fair	Median	Rectangular
261	73.230	Merging ahead	Fair	Shoulder	Rectangular
262	73.230	Chevron	Fair	Median	Rectangular
263	73.240	Chevron	Fair	Median	Rectangular
264	73.250	Merging ahead	Fair	Shoulder	Rectangular
265	73.450	No Stopping	Fair	Shoulder	Safety
266	73.510	VMS	Fair	Shoulder	VMS
267	73.640	Hazard	Fair	Shoulder	Rectangular
268	73.645	Hazard	Fair	Median	Rectangular
269	73.710	Seat Belt	Fair	Shoulder	Safety
270	74.050	Advance Direction	Fair	Shoulder	Gantry

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
626	114.800	NE - II	Fair	Shoulder	Route Marker
627	115.215	Keep Headway Distance 70m	Fair	Shoulder	Safety
628	115.220	Hazard	Fair	Shoulder	Rectangular
629	115.470	Exit Board	Fair	Shoulder	Rectangular
630	115.500	Gantry	Fair	Shoulder	Gantry
631	115.800	Hazard	Fair	Shoulder	Rectangular
632	115.800	Hazard	Fair	Median	Rectangular
633	116.380	Hazard	Fair	Shoulder	Rectangular
634	116.380	Hazard	Fair	Median	Rectangular
635	116.650	Hazard	Fair	Shoulder	Rectangular
636	116.650	Hazard	Fair	Median	Rectangular
637	116.900	Median Opening	Fair	Median	Triangular
638	117.100	Palwal Police Wish you safe journey	Fair	Shoulder	Safety
639	117.100	Palwal Police limit end	Fair	Median	Safety
640	117.170	Police assistance	Fair	Shoulder	Safety
641	117.270	Hazard	Damage	Shoulder	Rectangular
642	117.270	Hazard	Fair	Median	Rectangular
643	117.780	Hazard	Fair	Shoulder	Rectangular
644	117.780	Hazard	Fair	Median	Rectangular
645	118.100	Hazard	Fair	Shoulder	Rectangular
646	118.100	Hazard	Fair	Median	Rectangular
647	118.505	Hazard	Fair	Shoulder	Rectangular
648	118.505	Hazard	Fair	Median	Rectangular
649	118.800	Advance Direction	Damage	Shoulder	Rectangular
650	119.000	Advance Direction	Fair	Shoulder	Rectangular
651	119.030	Hazard	Damage	Shoulder	Rectangular
652	119.030	Hazard	Fair	Median	Rectangular
653	119.150	Expressway	Fair	Shoulder	Rectangular
654	119.700	Hazard	Fair	Shoulder	Rectangular
655	119.700	Hazard	Fair	Median	Rectangular
656	119.980	NE - II	Fair	Shoulder	Route Marker
657	120.010	CCTV Surveillance	Fair	Shoulder	Rectangular
658	120.200	Hazard	Fair	Shoulder	Rectangular
659	120.200	Hazard	Fair	Median	Rectangular
660	120.210	Keep Headway Distance 70m	Fair	Shoulder	Safety
661	120.510	Exit Board	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
271	74.250	Hazard	Fair	Shoulder	Rectangular
272	74.500	Do not stop	Fair	Shoulder	Safety
273	75.090	Right Hand Curve	Fair	Shoulder	Triangular
274	75.110	Hazard	Fair	Shoulder	Rectangular
275	75.110	Hazard	Fair	Median	Rectangular
276	75.300	Chevron	Fair	Shoulder	Rectangular
277	75.310	Chevron	Fair	Shoulder	Rectangular
278	75.320	Chevron	Fair	Shoulder	Rectangular
279	75.330	Chevron	Fair	Shoulder	Rectangular
280	75.340	Chevron	Fair	Shoulder	Rectangular
281	75.350	Chevron	Fair	Shoulder	Rectangular
282	75.360	Chevron	Fair	Shoulder	Rectangular
283	75.370	Chevron	Fair	Shoulder	Rectangular
284	75.380	Chevron	Fair	Shoulder	Rectangular
285	75.390	Chevron	Fair	Shoulder	Rectangular
286	75.490	No Stopping	Fair	Shoulder	Safety
287	75.600	Hazard	Fair	Shoulder	Rectangular
288	75.790	Expressway	Fair	Shoulder	Rectangular
289	75.990	Speed Limit	Fair	Shoulder	Safety
290	76.180	Hazard	Fair	Median	Rectangular
291	76.595	Gantry	Fair	Shoulder	Gantry
292	77.480	Help Line	Fair	Median	Rectangular
293	77.680	Exit Board	Fair	Median	Rectangular
294	77.680	Median Opening	Fair	Median	Triangular
295	78.100	Right Hand Curve	Fair	Shoulder	Triangular
296	78.110	Hazard	Fair	Shoulder	Rectangular
297	78.110	Hazard	Fair	Median	Rectangular
298	78.490	Chevron	Fair	Shoulder	Rectangular
299	78.500	Chevron	Fair	Shoulder	Rectangular
300	78.500	Advance Direction	Fair	Shoulder	Cantilever
301	78.510	Chevron	Fair	Shoulder	Rectangular
302	78.520	Chevron	Fair	Shoulder	Rectangular
303	78.530	Chevron	Fair	Shoulder	Rectangular
304	78.540	Chevron	Fair	Shoulder	Rectangular
305	78.550	Chevron	Fair	Shoulder	Rectangular
306	78.550	Hazard	Fair	Shoulder	Rectangular
307	78.550	Hazard	Fair	Median	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
662	120.690	Help Line	Fair	Shoulder	Rectangular
663	120.800	Hazard	Fair	Shoulder	Rectangular
664	120.800	Hazard	Fair	Median	Rectangular
665	121.170	Hazard	Damage	Shoulder	Rectangular
666	121.170	Hazard	Fair	Median	Rectangular
667	121.600	Hazard	Damage	Shoulder	Rectangular
668	121.600	Hazard	Fair	Median	Rectangular
669	122.097	Hazard	Fair	Shoulder	Rectangular
670	122.097	Hazard	Fair	Shoulder	Rectangular
671	122.580	Hazard	Damage	Shoulder	Rectangular
672	122.580	Hazard	Fair	Median	Rectangular
673	123.000	Hazard	Fair	Shoulder	Rectangular
674	123.000	Hazard	Fair	Median	Rectangular
675	123.150	Advance Direction	Damage	Shoulder	Rectangular
676	123.410	Hazard	Damage	Shoulder	Rectangular
677	123.410	Hazard	Fair	Median	Rectangular
678	123.950	Hazard	Damage	Shoulder	Rectangular
679	123.950	Hazard	Fair	Median	Rectangular
680	123.950	Hazard	Fair	Median	Rectangular
681	124.000	Advance Direction	Fair	Shoulder	Rectangular
682	124.100	Expressway	Fair	Shoulder	Rectangular
683	124.250	For Police Assistance Dial	Fair	Shoulder	Safety
684	124.450	Speed Limit	Fair	Shoulder	Safety
685	124.550	Hazard	Fair	Shoulder	Rectangular
686	124.550	Hazard	Fair	Median	Rectangular
687	124.730	NE - II	Fair	Shoulder	Route Marker
688	125.010	Don't use mobile while driving	Fair	Shoulder	Safety
689	125.050	Hazard	Fair	Shoulder	Rectangular
690	125.200	Keep Headway Distance 70m	Fair	Shoulder	Safety
691	125.500	exit Board	Fair	Shoulder	Rectangular
692	125.550	Hazard	Fair	Shoulder	Rectangular
693	125.550	Hazard	Fair	Median	Rectangular
694	126.110	Hazard	Fair	Shoulder	Rectangular
695	126.110	Hazard	Fair	Median	Rectangular
696	126.800	Median Opening	Fair	Median	Triangular
697	126.950	Hazard	Fair	Shoulder	Rectangular
698	126.950	Hazard	Fair	Median	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
308	78.560	Chevron	Fair	Shoulder	Rectangular
309	78.570	Chevron	Fair	Shoulder	Rectangular
310	78.580	Chevron	Fair	Shoulder	Rectangular
311	78.590	Chevron	Fair	Shoulder	Rectangular
312	78.600	Chevron	Fair	Shoulder	Rectangular
313	78.610	Chevron	Fair	Shoulder	Rectangular
314	78.620	Chevron	Fair	Shoulder	Rectangular
315	78.630	Chevron	Fair	Shoulder	Rectangular
316	78.640	Chevron	Fair	Shoulder	Rectangular
317	78.650	Chevron	Fair	Shoulder	Rectangular
318	78.660	Chevron	Fair	Shoulder	Rectangular
319	78.670	Chevron	Fair	Shoulder	Rectangular
320	78.680	Chevron	Fair	Shoulder	Rectangular
321	78.690	Chevron	Fair	Shoulder	Rectangular
322	78.700	Chevron	Fair	Shoulder	Rectangular
323	78.710	Chevron	Fair	Shoulder	Rectangular
324	78.800	Seat Belt	Fair	Shoulder	Safety
325	79.200	NE - II	Fair	Shoulder	Route Marker
326	79.400	No Stopping	Fair	Shoulder	Safety
327	79.500	Do not stop	Fair	Shoulder	Safety
328	79.780	Hazard	Fair	Median	Rectangular
329	80.020	Hazard	Fair	Shoulder	Rectangular
330	80.020	Hazard	Fair	Median	Rectangular
331	80.500	Seat Belt	Fair	Shoulder	Safety
332	80.690	Expressway	Fair	Shoulder	Rectangular
333	80.890	Toll Boards	Fair	Shoulder	Cantilever
334	81.000	Speed Limit	Fair	Shoulder	Circular
335	81.150	No Stopping	Fair	Shoulder	Safety
336	81.240	Advance Direction	Fair	Shoulder	Cantilever
337	81.250	Hazard	Fair	Shoulder	Rectangular
338	81.250	Hazard	Fair	Median	Rectangular
339	81.470	Advance Direction	Fair	Shoulder	Gantry
340	81.612	Hazard	Fair	Shoulder	Rectangular
341	81.612	Hazard	Fair	Median	Rectangular
342	81.730	Advance Direction	Fair	Shoulder	Cantilever
343	81.740	Advance Direction	Fair	Median	Cantilever
344	81.800	Toll Boards	Fair	Shoulder	Toll Boards
345	82.000	Highway Nest Mini	Fair	Shoulder	Safety
346	82.150	No Stopping	Fair	Shoulder	Safety
347	82.200	Exit Board	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
699	127.080	Advance Direction	Fair	Shoulder	Rectangular
700	127.150	Hazard	Damage	Shoulder	Rectangular
701	127.150	Hazard	Damage	Median	Rectangular
702	127.200	Chevron	Fair	Shoulder	Rectangular
703	127.210	Chevron	Fair	Shoulder	Rectangular
704	127.220	Chevron	Fair	Shoulder	Rectangular
705	127.230	Chevron	Fair	Shoulder	Rectangular
706	127.400	Hazard	Fair	Shoulder	Rectangular
707	127.400	Hazard	Fair	Median	Rectangular
708	127.750	Chevron	Fair	Shoulder	Rectangular
709	127.760	Chevron	Fair	Shoulder	Rectangular
710	127.770	Chevron	Fair	Shoulder	Rectangular
711	127.780	Chevron	Fair	Shoulder	Rectangular
712	127.790	Chevron	Fair	Shoulder	Rectangular
713	127.800	Chevron	Fair	Shoulder	Rectangular
714	127.810	Chevron	Fair	Shoulder	Rectangular
715	127.820	Chevron	Fair	Shoulder	Rectangular
716	127.830	Chevron	Fair	Shoulder	Rectangular
717	127.840	Chevron	Fair	Shoulder	Rectangular
718	127.850	Chevron	Fair	Shoulder	Rectangular
719	127.860	Chevron	Fair	Shoulder	Rectangular
720	127.870	Chevron	Fair	Shoulder	Rectangular
721	127.880	Chevron	Fair	Shoulder	Rectangular
722	128.000	Hazard	Fair	Shoulder	Rectangular
723	128.000	Hazard	Fair	Median	Rectangular
724	128.400	Hazard	Fair	Shoulder	Rectangular
725	128.400	Hazard	Fair	Median	Rectangular
726	128.500	Help Line	Fair	Median	Rectangular
727	129.000	Advance Direction	Fair	Shoulder	Rectangular
728	129.000	Hazard	Fair	Shoulder	Rectangular
729	129.000	Hazard	Fair	Median	Rectangular
730	129.100	Expressway	Fair	Shoulder	Rectangular
731	129.400	Speed Limit	Fair	Shoulder	Safety
732	129.480	Hazard	Fair	Shoulder	Rectangular
733	129.480	Hazard	Fair	Median	Rectangular
734	129.780	Hazard	Fair	Shoulder	Rectangular
735	129.850	NE - II	Fair	Shoulder	Route Marker
736	130.010	Don't Drink and Drive	Fair	Shoulder	Safety
737	130.050	Hazard	Fair	Shoulder	Rectangular
738	130.050	Hazard	Fair	Median	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
348	82.425	Hazard	Fair	Shoulder	Rectangular
349	82.427	Hazard	Fair	Median	Rectangular
350	82.700	Advance Direction	Fair	Shoulder	Cantilever
351	82.750	Merging ahead	Fair	Shoulder	Rectangular
352	83.135	Hazard	Fair	Shoulder	Rectangular
353	83.260	Left Hand Curve	Fair	Shoulder	Triangular
354	83.450	Chevron	Fair	Median	Rectangular
355	83.460	Chevron	Fair	Median	Rectangular
356	83.470	Chevron	Fair	Median	Rectangular
357	83.480	Chevron	Fair	Median	Rectangular
358	83.490	Chevron	Fair	Median	Rectangular
359	83.500	Chevron	Fair	Median	Rectangular
360	83.510	Chevron	Fair	Median	Rectangular
361	83.520	Chevron	Fair	Median	Rectangular
362	83.530	Chevron	Fair	Median	Rectangular
363	83.540	Chevron	Fair	Median	Rectangular
364	83.550	Chevron	Fair	Median	Rectangular
365	83.560	Chevron	Fair	Median	Rectangular
366	83.570	Chevron	Fair	Median	Rectangular
367	83.630	Expressway	Fair	Shoulder	Rectangular
368	83.650	Merging ahead	Fair	Shoulder	Rectangular
369	83.700	Do not drink and drive	Fair	Shoulder	Safety
370	83.770	Hazard	Fair	Shoulder	Rectangular
371	83.770	Hazard	Fair	Median	Rectangular
372	84.080	Advance Direction	Fair	Shoulder	Gantry
373	84.260	No Stopping	Fair	Shoulder	Safety
374	84.510	Gantry	Fair	Shoulder	Gantry
375	84.620	Right Hand Curve	Fair	Shoulder	Triangular
376	84.700	Emergency	Fair	Shoulder	Rectangular
377	84.760	Chevron	Fair	Shoulder	Rectangular
378	84.770	Chevron	Fair	Shoulder	Rectangular
379	84.780	Chevron	Fair	Shoulder	Rectangular
380	84.790	Chevron	Fair	Shoulder	Rectangular
381	84.800	Chevron	Fair	Shoulder	Rectangular
382	84.810	Chevron	Fair	Shoulder	Rectangular
383	84.820	Chevron	Fair	Shoulder	Rectangular
384	84.830	Chevron	Fair	Shoulder	Rectangular
385	84.840	Chevron	Fair	Shoulder	Rectangular
386	84.850	Chevron	Fair	Shoulder	Rectangular
387	84.860	Chevron	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
739	130.100	Expressway	Fair	Shoulder	Rectangular
740	130.200	Toll Boards	Fair	Shoulder	Cantilever
741	130.250	Hazard	Fair	Shoulder	Rectangular
742	130.250	Hazard	Fair	Median	Rectangular
743	130.900	Chevron	Fair	Shoulder	Rectangular
744	130.910	Chevron	Fair	Shoulder	Rectangular
745	130.920	Chevron	Fair	Shoulder	Rectangular
746	130.930	Chevron	Fair	Shoulder	Rectangular
747	130.940	Chevron	Fair	Shoulder	Rectangular
748	131.100	Toll Boards	Fair	Shoulder	Toll Boards
749	131.580	Highway Nest Mini	Fair	Shoulder	Safety
750	131.600	Toll Boards	Fair	Shoulder	Toll Boards
751	131.600	Toll Boards	Fair	Shoulder	Toll Boards
752	131.610	Toll Boards	Fair	Shoulder	Toll Boards
753	131.620	Toll Boards	Fair	Shoulder	Toll Boards
754	131.630	Toll Boards	Fair	Shoulder	Toll Boards
755	131.900	Hazard	Fair	Shoulder	Rectangular
756	131.900	Hazard	Fair	Median	Rectangular
757	131.950	Median Opening	Fair	Median	Triangular
758	132.200	Advance Direction	Fair	Shoulder	Rectangular
759	132.650	Hazard	Fair	Shoulder	Rectangular
760	132.650	Hazard	Fair	Median	Rectangular
761	132.800	Gantry	Missing	Shoulder	Gantry
762	133.130	Hazard	Fair	Shoulder	Rectangular
763	133.130	Hazard	Fair	Median	Rectangular
764	133.300	Hazard	Fair	Shoulder	Rectangular
765	133.300	Hazard	Fair	Median	Rectangular
766	133.600	Hazard	Fair	Median	Rectangular
767	133.830	Help Line	Fair	Median	Rectangular
768	134.000	Advance Direction	Fair	Shoulder	Cantilever
769	134.020	Expressway	Fair	Shoulder	Rectangular
770	134.200	Exit Board	Fair	Shoulder	Rectangular
771	134.350	Speed Limit	Fair	Shoulder	Circular
772	134.400	Speed Limit	Fair	Shoulder	Safety
773	134.450	Advance Direction	Fair	Shoulder	Cantilever
774	134.510	Hazard	Fair	Shoulder	Rectangular
775	135.015	Advance Direction	Fair	Shoulder	Rectangular
776	135.050	Speed Limit	Fair	Shoulder	Circular
777	135.060	Merging ahead	Fair	Shoulder	Rectangular
778	135.100	Advance Direction	Fair	Shoulder	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
388	84.880	NE - II	Fair	Shoulder	Route Marker
389	85.380	No Stopping	Fair	Shoulder	Safety
390	85.400	Chevron	Fair	Median	Rectangular
391	85.410	Chevron	Fair	Median	Rectangular

As per Site Sign Boards on LHS					
S. No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
779	135.600	U-Turn Prohibited	Fair	Shoulder	Circular
780	135.650	Merging ahead	Fair	Shoulder	Rectangular
781	135.700	Advance Direction	Fair	Shoulder	Rectangular
782	136.000	Thank You	Fair	Shoulder	Gantry

Table 20: Sign Boards on RHS - MCW

Sign Boards on RHS						Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks	S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
1	1.000	Gantry	Fair	Shoulder	Gantry	465	85.840	Chevron	Fair	Shoulder	Rectangular
2	1.200	NE-II	Fair	Shoulder	Rectangular	466	85.850	Chevron	Fair	Shoulder	Rectangular
3	1.950	use Seat belt be safe	Fair	Shoulder	Safety	467	85.860	Chevron	Fair	Shoulder	Rectangular
4	3.000	Advance Direction	Fair	Shoulder	Rectangular	468	85.900	Chevron	Fair	Median	Rectangular
5	3.950	Maximum Speed limit	Fair	Shoulder	Safety	469	85.910	Chevron	Fair	Median	Rectangular
6	3.940	Cantilever	Fair	Shoulder	Cantilever	470	85.920	Chevron	Fair	Median	Rectangular
7	3.930	Toll board	Fair	Shoulder	Toll Boards	471	86.100	Cantilever	Fair	Shoulder	Cantilever
8	3.920	Toll board	Fair	Shoulder	Toll Boards	472	86.250	Hazard	Fair	Shoulder	Rectangular
9	3.910	Toll board	Fair	Shoulder	Toll Boards	473	86.250	Hazard	Fair	Median	Rectangular
10	3.900	Toll board	Fair	Shoulder	Toll Boards	474	86.300	Restriction End	Fair	Shoulder	Circular
11	3.890	Toll board	Fair	Shoulder	Toll Boards	475	86.300	Chevron	Fair	Median	Rectangular
12	7.300	Toll board	Fair	Shoulder	Toll Boards	476	86.310	Chevron	Fair	Median	Rectangular
13	7.280	Chevron	Fair	Shoulder	Rectangular	477	86.320	Chevron	Fair	Median	Rectangular
14	7.260	Chevron	Fair	Shoulder	Rectangular	478	86.330	Chevron	Fair	Median	Rectangular
15	7.400	Chevron	Fair	Shoulder	Rectangular	479	86.340	Chevron	Fair	Median	Rectangular
16	7.415	Facility Informatory	Fair	Shoulder	Safety	480	86.350	Chevron	Fair	Median	Rectangular
17	7.420	Chevron	Fair	Shoulder	Rectangular	481	86.360	Chevron	Fair	Median	Rectangular
18	7.400	Chevron	Fair	Shoulder	Rectangular	482	86.370	Chevron	Fair	Median	Rectangular
19	7.380	Chevron	Fair	Shoulder	Rectangular	483	86.450	Left Hand Curve	Fair	Shoulder	Triangular
20	7.360	Chevron	Fair	Shoulder	Rectangular	484	86.500	Keep Distance	Fair	Shoulder	Safety
21	7.500	Cantilever	Fair	Shoulder	Cantilever	485	87.950	Speed Limit	Fair	Shoulder	Rectangular
22	7.550	Facility Informatory	Fair	Shoulder	Safety	486	88.002	Hazard	Fair	Shoulder	Rectangular
23	7.750	Help Line	Fair	Shoulder	Rectangular	487	88.002	Hazard	Fair	Median	Rectangular
24	8.250	Follow Speed limit	Fair	Shoulder	Safety	488	88.200	Exit Board	Fair	Shoulder	Rectangular
25	8.600	Maximum Speed limit	Fair	Shoulder	Safety	489	88.400	No Stopping	Fair	Shoulder	Safety
26	11.200	NE-II	Fair	Shoulder	Rectangular	490	89.250	Hazard	Fair	Shoulder	Rectangular
27	11.500	Facility Informatory	Fair	Shoulder	Safety	491	89.250	Hazard	Fair	Median	Rectangular
28	11.895	Keep the Road Clean	Fair	Shoulder	Safety	492	89.400	NE-II	Fair	Shoulder	Route Marker
29	12.200	Help Line	Fair	Shoulder	Rectangular	493	89.520	Chevron	Fair	Shoulder	Rectangular
30	13.200	Use Seat Belt	Fair	Shoulder	Safety	494	89.510	Chevron	Fair	Shoulder	Rectangular
31	13.400	Maximum Speed limit	Fair	Shoulder	Safety	495	89.500	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
32	13.380	Chevron	Fair	Shoulder	Rectangular
33	13.360	Chevron	Fair	Shoulder	Rectangular
34	13.340	Chevron	Fair	Shoulder	Rectangular
35	13.320	Chevron	Fair	Shoulder	Rectangular
36	13.950	Advance Direction	Fair	Shoulder	Rectangular
37	13.930	Chevron	Fair	Shoulder	Rectangular
38	13.980	Chevron	Fair	Shoulder	Rectangular
39	13.960	Chevron	Fair	Shoulder	Rectangular
40	13.940	Chevron	Fair	Shoulder	Rectangular
41	13.920	Chevron	Fair	Shoulder	Rectangular
42	14.200	Chevron	Fair	Shoulder	Rectangular
43	14.500	NE-II	Fair	Shoulder	Rectangular
44	14.480	Chevron	Fair	Shoulder	Rectangular
45	14.460	Chevron	Fair	Shoulder	Rectangular
46	14.440	Chevron	Fair	Shoulder	Rectangular
47	14.420	Chevron	Fair	Shoulder	Rectangular
48	14.400	Chevron	Fair	Shoulder	Rectangular
49	14.380	Chevron	Fair	Shoulder	Rectangular
50	14.700	Chevron	Fair	Shoulder	Rectangular
51	14.800	U-turn prohibted	Fair	Shoulder	Circular
52	14.900	Meraging Traffic	Fair	Shoulder	Triangular
53	14.880	Chevron	Fair	Shoulder	Rectangular
54	14.980	Chevron	Fair	Shoulder	Rectangular
55	15.150	Speed Limit	Fair	Shoulder	Circular
56	15.290	Cantilever	Fair	Shoulder	Cantilever
57	15.395	Village board	Fair	Shoulder	Rectangular
58	15.400	NE-II	Fair	Shoulder	Rectangular
59	15.700	Traffic merging	Fair	Shoulder	Triangular
60	15.680	Chevron	Fair	Shoulder	Rectangular
61	15.660	Chevron	Fair	Shoulder	Rectangular
62	15.640	Chevron	Fair	Shoulder	Rectangular
63	15.620	Chevron	Fair	Shoulder	Rectangular
64	15.600	Chevron	Fair	Shoulder	Rectangular
65	15.580	Chevron	Fair	Shoulder	Rectangular
66	16.100	Chevron	Fair	Shoulder	Rectangular
67	16.250	Cantilever	Fair	Shoulder	Cantilever

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
496	89.490	Chevron	Fair	Shoulder	Rectangular
497	89.480	Chevron	Fair	Shoulder	Rectangular
498	89.470	Chevron	Fair	Shoulder	Rectangular
499	89.460	Chevron	Fair	Shoulder	Rectangular
500	89.450	Chevron	Fair	Shoulder	Rectangular
501	89.440	Chevron	Fair	Shoulder	Rectangular
502	89.430	Chevron	Fair	Shoulder	Rectangular
503	89.420	Chevron	Fair	Shoulder	Rectangular
504	89.410	Chevron	Fair	Shoulder	Rectangular
505	90.290	No Stopping	Fair	Shoulder	Safety
506	90.500	Left Hand Curve	Fair	Shoulder	Triangular
507	90.600	NE-II	Fair	Shoulder	Route Marker
508	90.620	Don't stop	Fair	Shoulder	Safety
509	90.680	Seat Belt	Fair	Shoulder	Safety
510	90.740	Chevron	Fair	Shoulder	Rectangular
511	90.750	Chevron	Fair	Shoulder	Rectangular
512	90.760	Chevron	Fair	Shoulder	Rectangular
513	90.770	Chevron	Fair	Shoulder	Rectangular
514	90.780	Chevron	Fair	Shoulder	Rectangular
515	90.790	Chevron	Fair	Shoulder	Rectangular
516	90.800	Chevron	Fair	Shoulder	Rectangular
517	90.810	Chevron	Fair	Shoulder	Rectangular
518	90.820	Chevron	Fair	Shoulder	Rectangular
519	90.830	Chevron	Fair	Shoulder	Rectangular
520	90.840	Chevron	Fair	Shoulder	Rectangular
521	90.850	Chevron	Fair	Shoulder	Rectangular
522	90.860	Chevron	Fair	Shoulder	Rectangular
523	90.870	Chevron	Fair	Shoulder	Rectangular
524	91.990	Hazard	Fair	Shoulder	Rectangular
525	91.990	Hazard	Fair	Median	Rectangular
526	92.600	Help Line	Fair	Median	Rectangular
527	92.900	Speed Limit	Fair	Shoulder	Rectangular
528	93.350	Hazard	Fair	Shoulder	Rectangular
529	93.350	Hazard	Fair	Median	Rectangular
530	94.150	Hazard	Fair	Shoulder	Rectangular
531	94.150	Hazard	Fair	Median	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
68	16.350	Toll both heads	Fair	Shoulder	Toll Boards
69	16.325	Chevron	Fair	Shoulder	Rectangular
70	16.300	Chevron	Fair	Shoulder	Rectangular
71	16.275	Chevron	Fair	Shoulder	Rectangular
72	16.250	Chevron	Fair	Shoulder	Rectangular
73	16.495	Chevron	Fair	Shoulder	Rectangular
74	16.500	VMS	Fair	Shoulder	VMS
75	16.700	Cantilever	Fair	Shoulder	Cantilever
76	17.200	Cantilever	Fair	Shoulder	Cantilever
77	17.550	Don't use mobile Change Driving	Fair	Shoulder	Safety
78	18.700	Cantilever	Fair	Shoulder	Cantilever
79	19.395	Help Line	Fair	Shoulder	Rectangular
80	19.600	Maximum Speed limit	Fair	Shoulder	Safety
81	20.180	1st Project Drip Irrigation System	Fair	Shoulder	Safety
82	20.900	NE-II	Fair	Shoulder	Rectangular
83	21.500	Drive Don't Fly	Fair	Shoulder	Safety
84	22.000	Speed Limit	Fair	Shoulder	Circular
85	23.000	Advance Direction	Fair	Shoulder	Rectangular
86	23.500	Maximum Speed limit	Fair	Shoulder	Safety
87	26.200	Green Express Way	Fair	Shoulder	Safety
88	26.380	Advance Direction	Fair	Shoulder	Rectangular
89	26.500	Help Line	Fair	Shoulder	Rectangular
90	26.550	NE-II	Fair	Shoulder	Rectangular
91	28.520	Maximum Speed limit	Fair	Shoulder	Safety
92	29.450	Don't Drink & Drive	Fair	Shoulder	Safety
93	33.100	Advance Direction	Fair	Shoulder	Rectangular
94	33.150	solar power Entrie Strech	Fair	Shoulder	Safety
95	33.500	Help Line	Fair	Shoulder	Rectangular
96	33.545	NE-II		Shoulder	Rectangular
97	34.400	Maximum Speed limit	Fair	Shoulder	Safety
98	34.950			Shoulder	Only Pole is present
99	35.300	NE-II	Fair	Shoulder	Rectangular
100	35.750	Don't use mobile	Fair	Shoulder	Safety
101	38.300	Stop vechicle left Shoulder	Fair	Shoulder	Safety
102	38.650	Help Line	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
532	94.550	Hazard	Fair	Shoulder	Rectangular
533	94.550	Hazard	Fair	Median	Rectangular
534	94.990	Hazard	Fair	Shoulder	Rectangular
535	94.990	Hazard		Median	Rectangular
536	95.400	Hazard	Fair	Shoulder	Rectangular
537	95.900	No Stopping	Fair	Shoulder	Safety
538	95.950	Help Line	Fair	Median	Rectangular
539	96.550	Highway Nest Mini	Fair	Shoulder	Safety
540	96.570	Speed Limit	Fair	Shoulder	Rectangular
541	96.900	No Stopping	Fair	Shoulder	Safety
542	97.600	Right Hand Curve	Fair	Shoulder	Triangular
543	97.900	No Stopping	Fair	Shoulder	Safety
544	98.790	Hazard		Shoulder	Rectangular
545	98.790	Hazard	Fair	Median	Rectangular
546	98.900	No Stopping	Fair	Shoulder	Safety
547	99.900	No Stopping	Fair	Shoulder	Safety
548	99.990	Hazard	Fair	Shoulder	Rectangular
549	99.990	Hazard	Fair	Median	Rectangular
550	100.500	Highway Nest Mini	Fair	Shoulder	Safety
551	100.550	NE-II	Fair	Shoulder	Route Marker
552	100.800	Help Line	Fair	Median	Rectangular
553	100.900	No Stopping	Fair	Shoulder	Safety
554	101.250	Hazard	Fair	Shoulder	Rectangular
555	101.250	Hazard	Fair	Median	Rectangular
556	101.790	No Stopping	Fair	Shoulder	Safety
557	101.800	Left Hand Curve	Fair	Shoulder	Triangular
558	101.950	Chevron	Fair	Shoulder	Rectangular
559	101.960	Chevron	Fair	Shoulder	Rectangular
560	101.970	Chevron	Fair	Shoulder	Rectangular
561	101.980	Chevron	Fair	Shoulder	Rectangular
562	101.990	Chevron	Fair	Shoulder	Rectangular
563	102.000	Chevron	Fair	Shoulder	Rectangular
564	102.010	Chevron	Fair	Shoulder	Rectangular
565	102.020	Chevron	Fair	Shoulder	Rectangular
566	102.030	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
103	41.200	Drive Don't Fly	Fair	Shoulder	Safety
104	42.200	Follow Speed limit	Fair	Shoulder	Safety
105	42.450	Maximum Speed limit	Fair	Shoulder	Safety
106	42.650	Help Line	Fair	Shoulder	Rectangular
107	43.000	Advance Direction	Fair	Shoulder	Rectangular
108	42.970	Chevron	Fair	Median	Rectangular
109	42.940	Chevron	Fair	Median	Rectangular
110	43.300	Chevron	Fair	Median	Rectangular
111	43.270	Chevron	Fair	Median	Rectangular
112	43.240	Chevron	Fair	Median	Rectangular
113	43.210	Chevron	Fair	Median	Rectangular
114	43.180	Chevron	Fair	Median	Rectangular
115	43.150	Chevron	Fair	Median	Rectangular
116	43.700	Chevron	Fair	Median	Rectangular
117	43.670	Chevron	Fair	Shoulder	Rectangular
118	43.640	Chevron	Fair	Shoulder	Rectangular
119	43.800	NE-II	Fair	Shoulder	Rectangular
120	43.770	Chevron	Fair	Shoulder	Rectangular
121	43.740	Chevron	Fair	Shoulder	Rectangular
122	43.710	Chevron	Fair	Shoulder	Rectangular
123	43.900	Chevron	Fair	Shoulder	Rectangular
124	43.880	Chevron	Fair	Shoulder	Rectangular
125	43.860	Chevron	Fair	Shoulder	Rectangular
126	44.040	U-turn prohibted	Fair	Shoulder	Circular
127	44.020	Chevron	Fair	Shoulder	Rectangular
128	44.000	Chevron	Fair	Shoulder	Rectangular
129	44.100	Chevron	Fair	Shoulder	Rectangular
130	44.100	Meraging Traffic	Fair	Shoulder	Triangular
131	44.185	Right Hand Curve	Fair	Shoulder	Triangular
132	44.190	Cantilever	Fair	Shoulder	Cantilever
133	44.195	Stop	Fair	Shoulder	Octagonal
134	44.200	Chevron	Fair	Shoulder	Rectangular
135	44.200	village board	Fair	Shoulder	Rectangular
136	44.320	village board	Fair	Shoulder	Rectangular
137	44.500	NE-II	Fair	Shoulder	Rectangular
138	44.650	Chevron	Fair	Shoulder	Rectangular
139	44.700	Chevron	Fair	Shoulder	Rectangular
140	45.090	village board	Fair	Shoulder	Rectangular
141	45.200	Toll both heads	Fair	Shoulder	Toll Boards

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
567	102.040	Chevron	Fair	Shoulder	Rectangular
568	102.050	Chevron	Fair	Shoulder	Rectangular
569	102.060	Chevron	Fair	Shoulder	Rectangular
570	102.070	Chevron	Fair	Shoulder	Rectangular
571	102.080	Chevron	Fair	Shoulder	Rectangular
572	102.090	Chevron	Fair	Shoulder	Rectangular
573	102.100	Chevron	Fair	Shoulder	Rectangular
574	102.110	Chevron	Fair	Shoulder	Rectangular
575	102.120	Chevron	Fair	Shoulder	Rectangular
576	102.130	Chevron	Fair	Shoulder	Rectangular
577	102.140	Chevron	Fair	Shoulder	Rectangular
578	102.150	Chevron	Fair	Shoulder	Rectangular
579	102.160	Chevron	Fair	Shoulder	Rectangular
580	102.170	Chevron	Fair	Shoulder	Rectangular
581	102.180	Chevron	Fair	Shoulder	Rectangular
582	102.190	Chevron	Fair	Shoulder	Rectangular
583	102.200	Chevron	Fair	Shoulder	Rectangular
584	102.210	Chevron	Fair	Shoulder	Rectangular
585	102.220	Chevron	Fair	Shoulder	Rectangular
586	102.230	Chevron	Fair	Shoulder	Rectangular
587	102.240	Chevron	Fair	Shoulder	Rectangular
588	102.250	Chevron	Fair	Shoulder	Rectangular
589	102.260	Chevron	Fair	Shoulder	Rectangular
590	102.270	Chevron	Fair	Shoulder	Rectangular
591	102.280	Chevron	Fair	Shoulder	Rectangular
592	102.290	Chevron	Fair	Shoulder	Rectangular
593	102.300	Chevron	Fair	Shoulder	Rectangular
594	102.310	Chevron	Fair	Shoulder	Rectangular
595	102.320	Chevron	Fair	Shoulder	Rectangular
596	102.330	Chevron	Fair	Shoulder	Rectangular
597	102.340	Chevron	Fair	Shoulder	Rectangular
598	102.350	Chevron	Fair	Shoulder	Rectangular
599	102.360	Chevron	Fair	Shoulder	Rectangular
600	102.370	Chevron	Fair	Shoulder	Rectangular
601	102.380	Chevron	Fair	Shoulder	Rectangular
602	102.390	Chevron	Fair	Shoulder	Rectangular
603	102.400	Chevron	Fair	Shoulder	Rectangular
604	102.410	Chevron	Fair	Shoulder	Rectangular
605	102.420	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
142	45.450	Cantilever	Fair	Shoulder	Cantilever
143	45.620	Cantilever	Fair	Shoulder	Cantilever
144	46.200	Go slow	Fair	Shoulder	Circular
145	46.300	Cantilever	Fair	Shoulder	Cantilever
146	46.400	Cantilever	Fair	Shoulder	Cantilever
147	46.650	Hazard	Fair	Median	Rectangular
148	46.850	VMS	Fair	Shoulder	VMS
149	48.750	Hazard	Fair	Shoulder	Rectangular
150	48.950	Hazard	Fair	Shoulder	Rectangular
151	51.150	Hazard	Fair	Median	Rectangular
152	51.160	Hazard	Fair	Shoulder	Rectangular
153	51.315	Advance Direction	Fair	Shoulder	Gantry
154	51.500	Slow Vehicle Keep Left	Fair	Shoulder	Safety
155	51.600	Advance Direction	Fair	Shoulder	Rectangular
156	51.630	U-Turn Prohibited	Fair	Shoulder	Circular
157	51.640	U-Turn Prohibited	Fair	Shoulder	Circular
158	51.700	Hazard	Fair	Shoulder	Rectangular
159	51.720	Hazard	Fair	Median	Rectangular
160	51.720	Merging Ahead	Fair	Shoulder	Triangular
161	51.995	Exit Board	Fair	Shoulder	Rectangular
162	52.003	Hazard	Fair	Shoulder	Rectangular
163	52.030	Exit Board	Fair	Shoulder	Rectangular
164	52.100	Advance Direction	Fair	Shoulder	Rectangular
165	52.200	Hazard	Fair	Shoulder	Rectangular
166	52.200	Hazard	Fair	Median	Rectangular
167	52.250	Advance Direction	Fair	Shoulder	Rectangular
168	52.370	U-Turn Prohibited	Fair	Shoulder	Circular
169	52.380	Overtaking Prohibited	Fair	Shoulder	Circular
170	52.430	U-Turn Prohibited	Fair	Shoulder	Circular
171	52.500	Merging Ahead	Fair	Shoulder	Triangular
172	52.650	No Stopping	Fair	Shoulder	Safety
173	52.660	Speed Limit	Fair	Shoulder	Circular
174	52.670	Expressway	Fair	Shoulder	Rectangular
175	52.680	Hazard	Fair	Shoulder	Rectangular
176	52.750	Exit Board	Fair	Shoulder	Rectangular
177	52.900	Advance Direction	Fair	Shoulder	Gantry
178	53.080	No Stopping	Fair	Shoulder	Safety
179	53.160	Hazard	Fair	Shoulder	Rectangular
180	53.160	Hazard	Fair	Median	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
606	102.430	Chevron	Fair	Shoulder	Rectangular
607	102.440	Chevron	Fair	Shoulder	Rectangular
608	102.450	Chevron	Fair	Shoulder	Rectangular
609	102.460	Chevron	Fair	Shoulder	Rectangular
610	102.470	Chevron	Fair	Shoulder	Rectangular
611	102.950	No Stopping	Fair	Shoulder	Safety
612	103.010	Expressway		Shoulder	Rectangular
613	103.050	Speed Limit	Fair	Shoulder	Circular
614	103.400	Hazard	Fair	Shoulder	Rectangular
615	103.400	Hazard	Fair	Median	Rectangular
616	103.900	No Stopping	Fair	Shoulder	Safety
617	103.980	Hazard	Fair	Shoulder	Rectangular
618	103.980	Hazard	Fair	Median	Rectangular
619	104.300	Hazard	Fair	Shoulder	Rectangular
620	104.300	Hazard	Fair	Median	Rectangular
621	105.500	Help Line	Fair	Median	Rectangular
622	105.800	Hazard	Fair	Shoulder	Rectangular
623	105.800	Hazard		Median	Rectangular
624	105.850	No Stopping	Fair	Shoulder	Safety
625	106.250	Hazard	Fair	Shoulder	Rectangular
626	106.250	Hazard		Median	Rectangular
627	106.700	Hazard		Shoulder	Rectangular
628	106.700	Hazard		Median	Rectangular
629	106.900	No Stopping	Fair	Shoulder	Safety
630	107.040	Chevron	Fair	Shoulder	Rectangular
631	107.050	Chevron	Fair	Shoulder	Rectangular
632	107.060	Chevron	Fair	Shoulder	Rectangular
633	107.070	Chevron	Fair	Shoulder	Rectangular
634	107.080	Chevron	Fair	Shoulder	Rectangular
635	107.090	Chevron	Fair	Shoulder	Rectangular
636	107.100	Chevron	Fair	Shoulder	Rectangular
637	107.110	Chevron	Fair	Shoulder	Rectangular
638	107.120	Chevron	Fair	Shoulder	Rectangular
639	107.130	Chevron	Fair	Shoulder	Rectangular
640	107.140	Chevron	Fair	Shoulder	Rectangular
641	107.150	Chevron	Fair	Shoulder	Rectangular
642	107.160	Chevron	Fair	Shoulder	Rectangular
643	107.170	Chevron	Fair	Shoulder	Rectangular
644	107.180	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS						Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks	S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
181	53.430	Median Opening	Fair	Median	Triangular	645	107.190	Chevron	Fair	Shoulder	Rectangular
182	53.740	Advance Direction	Fair	Shoulder	Gantry	646	107.200	Chevron	Fair	Shoulder	Rectangular
183	54.050	Help Line	Fair	Median	Rectangular	647	107.210	Chevron	Fair	Shoulder	Rectangular
184	54.730	Advance Direction	Fair	Shoulder	Rectangular	648	107.220	Chevron	Fair	Shoulder	Rectangular
185	55.000	CCTV Surveillance	Fair	Shoulder	Rectangular	649	107.230	Chevron	Fair	Shoulder	Rectangular
186	55.060	Speed Limit	Fair	Shoulder	Circular	650	107.240	Chevron	Fair	Shoulder	Rectangular
187	55.600	Advance Direction	Fair	Shoulder	Gantry	651	107.250	Chevron	Fair	Shoulder	Rectangular
188	56.270	Hazard	Fair	Median	Rectangular	652	107.260	Chevron	Fair	Shoulder	Rectangular
189	56.300	Hazard	Fair	Shoulder	Rectangular	653	107.270	Chevron	Fair	Shoulder	Rectangular
190	56.960	Advance Direction	Fair	Shoulder	Rectangular	654	107.280	Chevron	Fair	Shoulder	Rectangular
191	57.290	NE-II	Fair	Shoulder	Route Marker	655	107.290	Chevron	Fair	Shoulder	Rectangular
192	57.980	Hazard	Fair	Median	Rectangular	656	107.300	Chevron	Fair	Shoulder	Rectangular
193	58.005	Hazard	Fair	Shoulder	Rectangular	657	107.310	Chevron	Fair	Shoulder	Rectangular
194	58.330	Hazard	Fair	Median	Rectangular	658	107.320	Chevron	Fair	Shoulder	Rectangular
195	58.430	Median Opening	Fair	Median	Triangular	659	107.330	Chevron	Fair	Shoulder	Rectangular
196	59.030	Help Line	Fair	Median	Rectangular	660	107.340	Chevron	Fair	Shoulder	Rectangular
197	61.050	CCTV Surveillance	Fair	Shoulder	Rectangular	661	107.350	Chevron	Fair	Shoulder	Rectangular
198	61.230	Follow lane discipline	Fair	Shoulder	Safety	662	107.360	Chevron	Fair	Shoulder	Rectangular
199	62.000	Hazard	Fair	Shoulder	Rectangular	663	107.370	Chevron	Fair	Shoulder	Rectangular
200	63.770	Hazard	Fair	Median	Rectangular	664	107.380	Chevron	Fair	Shoulder	Rectangular
201	63.870	Median Opening	Fair	Median	Triangular	665	107.390	Chevron	Fair	Shoulder	Rectangular
202	64.000	Help Line	Fair	Median	Rectangular	666	107.400	Chevron	Fair	Shoulder	Rectangular
203	64.800	Hazard	Fair	Median	Rectangular	667	107.410	Chevron	Fair	Shoulder	Rectangular
204	64.810	Hazard	Fair	Shoulder	Rectangular	668	107.420	Chevron	Fair	Shoulder	Rectangular
205	65.080	Hazard	Fair	Median	Rectangular	669	107.430	Chevron	Fair	Shoulder	Rectangular
206	65.300	Informatory	Fair	Shoulder	Safety	670	107.440	Chevron	Fair	Shoulder	Rectangular
207	65.650	NE-II	Fair	Shoulder	Route Marker	671	107.450	Chevron	Fair	Shoulder	Rectangular
208	66.150	CCTV Surveillance	Fair	Shoulder	Rectangular	672	107.460	Chevron	Fair	Shoulder	Rectangular
209	68.150	Speed Limit	Fair	Shoulder	Rectangular	673	107.470	Chevron	Fair	Shoulder	Rectangular
210	68.170	Hazard	Fair	Shoulder	Rectangular	674	107.480	Chevron	Fair	Shoulder	Rectangular
211	68.270	Median Opening	Fair	Median	Triangular	675	107.490	Chevron	Fair	Shoulder	Rectangular
212	69.000	Help Line	Fair	Median	Rectangular	676	107.500	Chevron	Fair	Shoulder	Rectangular
213	69.100	Follow lane discipline	Fair	Median	Safety	677	107.510	Chevron	Fair	Shoulder	Rectangular
214	69.450	Hazard	Fair	Shoulder	Rectangular	678	107.520	Chevron	Fair	Shoulder	Rectangular
215	69.450	Hazard	Fair	Median	Rectangular	679	107.530	Chevron	Fair	Shoulder	Rectangular
216	70.000	Chevron	Fair	Shoulder	Rectangular	680	107.540	Chevron	Fair	Shoulder	Rectangular
217	70.010	Chevron	Fair	Shoulder	Rectangular	681	107.550	Chevron	Fair	Shoulder	Rectangular
218	70.020	Chevron	Fair	Shoulder	Rectangular	682	107.560	Chevron	Fair	Shoulder	Rectangular
219	70.030	Chevron	Fair	Shoulder	Rectangular	683	107.570	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS						Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks	S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
220	70.040	Chevron	Fair	Shoulder	Rectangular	684	107.580	Chevron	Fair	Shoulder	Rectangular
221	70.050	Chevron	Fair	Shoulder	Rectangular	685	107.590	Chevron	Fair	Shoulder	Rectangular
222	70.060	Chevron	Fair	Shoulder	Rectangular	686	107.165	Hazard	Fair	Shoulder	Rectangular
223	70.070	Chevron	Fair	Shoulder	Rectangular	687	107.165	Hazard	Fair	Median	Rectangular
224	70.080	Chevron	Fair	Shoulder	Rectangular	688	107.173	Right Hand Curve	Fair	Shoulder	Triangular
225	70.090	Chevron	Fair	Shoulder	Rectangular	689	107.185	Speed Limit	Fair	Shoulder	Rectangular
226	70.100	Chevron	Fair	Shoulder	Rectangular	690	107.265	Expressway	Fair	Shoulder	Rectangular
227	70.110	Chevron	Fair	Shoulder	Rectangular	691	107.800	Expressway	Fair	Shoulder	Rectangular
228	70.120	Chevron	Fair	Shoulder	Rectangular	692	107.850	No Stopping	Fair	Shoulder	Safety
229	70.130	Chevron	Fair	Shoulder	Rectangular	693	108.300	Advance Direction	Fair	Shoulder	Rectangular
230	70.140	Chevron	Fair	Shoulder	Rectangular	694	108.300	Hazard	Fair	Shoulder	Rectangular
231	70.150	Chevron	Fair	Shoulder	Rectangular	695	108.300	Speed Limit	Fair	Shoulder	Circular
232	70.160	Chevron	Fair	Shoulder	Rectangular	696	108.870	U-Turn Prohibited	Fair	Shoulder	Circular
233	70.170	Chevron	Fair	Shoulder	Rectangular	697	108.910	No Stopping	Fair	Shoulder	Safety
234	70.180	Chevron	Fair	Shoulder	Rectangular	698	108.920	Merging Ahead	Fair	Shoulder	Triangular
235	70.190	Chevron	Fair	Shoulder	Rectangular	699	109.100	Hazard	Fair	Shoulder	Rectangular
236	70.250	Left Hand Curve	Fair	Median	Triangular	700	109.100	Hazard	Fair	Median	Rectangular
237	70.400	Chevron	Fair	Median	Rectangular	701	109.350	Merging Ahead	Fair	Shoulder	Triangular
238	70.410	Chevron	Fair	Median	Rectangular	702	109.350	Hazard	Fair	Shoulder	Rectangular
239	70.420	Chevron	Fair	Median	Rectangular	703	109.350	Speed Limit	Fair	Shoulder	Rectangular
240	70.430	Chevron	Fair	Median	Rectangular	704	109.750	Chevron	Fair	Shoulder	Rectangular
241	70.600	Left Hand Curve	Fair	Median	Triangular	705	109.740	Chevron	Fair	Shoulder	Rectangular
242	70.900	Left Hand Curve	Fair	Median	Triangular	706	109.730	Chevron	Fair	Shoulder	Rectangular
243	70.950	Chevron	Fair	Median	Rectangular	707	109.720	Chevron	Fair	Shoulder	Rectangular
244	70.960	Chevron	Fair	Median	Rectangular	708	109.710	Chevron	Fair	Shoulder	Rectangular
245	70.970	Chevron	Fair	Median	Rectangular	709	109.700	Chevron	Fair	Shoulder	Rectangular
246	70.980	Chevron	Fair	Median	Rectangular	710	109.690	Chevron	Fair	Shoulder	Rectangular
247	70.990	Chevron	Fair	Median	Rectangular	711	109.680	Chevron	Fair	Shoulder	Rectangular
248	71.000	Chevron	Fair	Median	Rectangular	712	109.670	Chevron	Fair	Shoulder	Rectangular
249	71.010	Chevron	Fair	Median	Rectangular	713	109.660	Chevron	Fair	Shoulder	Rectangular
250	71.020	Chevron	Fair	Median	Rectangular	714	109.650	Chevron	Fair	Shoulder	Rectangular
251	71.050	Hazard	Fair	Median	Rectangular	715	109.640	Chevron	Fair	Shoulder	Rectangular
252	71.050	Hazard	Fair	Median	Rectangular	716	109.850	No Stopping	Fair	Shoulder	Safety
253	71.200	National Expressway-2	Fair	Shoulder	Rectangular	717	109.900	Exit Board	Fair	Shoulder	Rectangular
254	71.400	Wear seat belt	Fair	Shoulder	Safety	718	110.000	NE-II	Fair	Shoulder	Route Marker
255	71.550	Gantry	Fair	Median	Gantry	719	110.300	Speed Limit	Fair	Shoulder	Rectangular
256	71.900	Restriction End	Fair	Shoulder	Circular	720	110.650	Expressway	Fair	Shoulder	Rectangular
257	72.250	Exit for Expressway	Fair	Shoulder	Rectangular	721	110.700	Advance Direction	Fair	Shoulder	Rectangular
258	72.300	Merging ahead	Fair	Shoulder	Triangular	722	110.700	Chevron	Fair	Median	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
259	72.550	Hazard	Fair	Shoulder	Rectangular
260	72.600	Cantilever	Fair	Shoulder	Cantilever
261	72.600	Chevron	Fair	Median	Rectangular
262	72.610	Chevron	Fair	Median	Rectangular
263	72.620	Chevron	Fair	Median	Rectangular
264	72.630	Chevron	Fair	Median	Rectangular
265	72.640	Chevron	Fair	Median	Rectangular
266	72.650	Chevron	Fair	Median	Rectangular
267	72.660	Chevron	Fair	Median	Rectangular
268	72.670	Chevron	Fair	Median	Rectangular
269	72.680	Chevron	Fair	Median	Rectangular
270	72.690	Chevron	Fair	Median	Rectangular
271	72.800	Hazard	Fair	Median	Rectangular
272	72.950	Hazard	Fair	Shoulder	Rectangular
273	73.000	Merging ahead	Fair	Shoulder	Triangular
274	73.000	Cantilever	Fair	Shoulder	Cantilever
275	73.200	Chevron	Fair	Shoulder	Rectangular
276	73.210	Chevron	Fair	Shoulder	Rectangular
277	73.300	Chevron	Fair	Shoulder	Rectangular
278	73.300	Exit for Expressway	Fair	Shoulder	Rectangular
279	73.400	Cantilever	Fair	Shoulder	Cantilever
280	73.500	Restriction End	Fair	Shoulder	Circular
281	73.700	Hazard		Shoulder	Rectangular
282	73.700	Hazard	Fair	Median	Rectangular
283	73.700	Chevron	Fair	Shoulder	Rectangular
284	73.710	Chevron	Fair	Shoulder	Rectangular
285	73.720	Chevron	Fair	Shoulder	Rectangular
286	73.800	Cantilever	Fair	Shoulder	Cantilever
287	73.900	Cantilever	Fair	Shoulder	Cantilever
288	74.000	Chevron	Fair	Shoulder	Rectangular
289	74.010	Chevron	Fair	Shoulder	Rectangular
290	74.020	Chevron	Fair	Shoulder	Rectangular
291	74.030	Chevron	Fair	Shoulder	Rectangular
292	74.040	Chevron	Fair	Shoulder	Rectangular
293	74.200	Cantilever	Fair	Shoulder	Cantilever
294	74.300	VMS	Fair	Shoulder	VMS
295	74.300	Don’t stop	Fair	Shoulder	Safety
296	74.300	Chevron	Fair	Shoulder	Rectangular
297	74.310	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
723	110.710	Chevron	Fair	Median	Rectangular
724	110.720	Chevron	Fair	Median	Rectangular
725	110.730	Chevron	Fair	Median	Rectangular
726	110.740	Chevron	Fair	Median	Rectangular
727	110.750	Chevron	Fair	Median	Rectangular
728	110.760	Chevron	Fair	Median	Rectangular
729	110.770	Chevron	Fair	Median	Rectangular
730	110.780	Chevron	Fair	Median	Rectangular
731	110.790	Chevron	Fair	Median	Rectangular
732	110.800	Chevron	Fair	Median	Rectangular
733	110.810	Chevron	Fair	Median	Rectangular
734	110.820	Chevron	Fair	Median	Rectangular
735	110.830	Chevron	Fair	Median	Rectangular
736	110.840	Chevron	Fair	Median	Rectangular
737	110.750	Left Hand Curve	Fair	Shoulder	Triangular
738	110.800	Do not drink and drive	Fair	Shoulder	Safety
739	111.350	Help Line	Fair	Shoulder	Rectangular
740	111.430	Hazard	Fair	Median	Rectangular
741	111.430	Hazard	Fair	Shoulder	Rectangular
742	111.700	Advance Direction	Fair	Shoulder	Cantilever
743	111.950	No Stopping	Fair	Shoulder	Safety
744	112.150	CCTV Surveillance	Fair	Shoulder	Rectangular
745	112.290	Hazard	Fair	Shoulder	Rectangular
746	112.290	Hazard	Fair	Median	Rectangular
747	112.750	Proud to be Indian	Fair	Shoulder	Safety
748	112.900	No Stopping	Fair	Shoulder	Safety
749	113.200	Drive don't fly	Fair	Shoulder	Safety
750	113.500	Speed Limit	Fair	Shoulder	Rectangular
751	113.520	NE-II	Fair	Shoulder	Route Marker
752	114.330	Hazard	Fair	Median	Rectangular
753	114.350	Expressway	Fair	Shoulder	Rectangular
754	114.730	Hazard		Shoulder	Rectangular
755	114.730	Hazard	Fair	Median	Rectangular
756	114.760	NE-II	Fair	Shoulder	Route Marker
757	115.100	Expressway		Shoulder	Rectangular
758	115.300	Hazard	Fair	Shoulder	Rectangular
759	115.300	Hazard	Fair	Median	Rectangular
760	115.450	110 Km ahead Digital Art Gallery	Fair	Shoulder	Safety
761	115.850	Hazard	Fair	Median	Rectangular

Sign Boards on RHS						Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks	S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
298	74.320	Chevron	Fair	Shoulder	Rectangular	762	115.980	Filling Station	Fair	Shoulder	Rectangular
299	74.330	Chevron	Fair	Shoulder	Rectangular	763	116.300	Hazard		Shoulder	Rectangular
300	74.340	Chevron	Fair	Shoulder	Rectangular	764	116.300	Hazard		Median	Rectangular
301	74.350	Chevron	Fair	Shoulder	Rectangular	765	116.350	Keep Headway Distance 70 m.	Fair	Shoulder	Safety
302	74.360	Chevron	Fair	Shoulder	Rectangular	766	116.800	Hazard	Fair	Median	Rectangular
303	74.370	Chevron	Fair	Shoulder	Rectangular	767	116.900	Hazard	Fair	Shoulder	Rectangular
304	74.380	Chevron	Fair	Shoulder	Rectangular	768	117.016	Faridabad Police wish you happy journey	Fair	Shoulder	Safety
305	74.550	Chevron	Fair	Median	Rectangular	769	117.300	Hazard		Shoulder	Rectangular
306	74.560	Chevron	Fair	Median	Rectangular	770	117.300	Hazard	Fair	Median	Rectangular
307	74.570	Chevron	Fair	Median	Rectangular	771	117.800	Hazard		Shoulder	Rectangular
308	74.580	Chevron	Fair	Median	Rectangular	772	117.800	Hazard	Fair	Median	Rectangular
309	74.590	Chevron	Fair	Median	Rectangular	773	118.000	Advance Direction	Fair	Shoulder	Rectangular
310	74.600	Chevron	Fair	Median	Rectangular	774	118.150	Hazard		Shoulder	Rectangular
311	74.610	Chevron	Fair	Median	Rectangular	775	118.150	Hazard	Fair	Median	Rectangular
312	74.620	Chevron	Fair	Median	Rectangular	776	118.650	Exit Board	Fair	Shoulder	Rectangular
313	74.630	Chevron	Fair	Median	Rectangular	777	118.700	Hazard		Shoulder	Rectangular
314	74.640	Chevron	Fair	Median	Rectangular	778	118.700	Hazard		Median	Rectangular
315	74.700	Chevron	Fair	Shoulder	Rectangular	779	118.810	Expressway		Shoulder	Rectangular
316	74.710	Chevron	Fair	Shoulder	Rectangular	780	118.985	Stop vehicle on left side shoulder only	Fair	Shoulder	Safety
317	74.720	Chevron	Fair	Shoulder	Rectangular	781	119.230	Expressway	Fair	Shoulder	Rectangular
318	74.730	Chevron	Fair	Shoulder	Rectangular	782	119.340	Help Line	Fair	Median	Rectangular
319	74.800	Cantilever	Fair	Shoulder	Cantilever	783	119.520	Speed Limit	Fair	Shoulder	Rectangular
320	74.850	Hazard	Fair	Shoulder	Rectangular	784	119.800	Hazard	Fair	Shoulder	Rectangular
321	74.850	Hazard	Fair	Median	Rectangular	785	119.800	Hazard	Fair	Median	Rectangular
322	74.900	Chevron	Fair	Shoulder	Rectangular	786	119.930	NE-II	Fair	Shoulder	Route Marker
323	74.910	Chevron	Fair	Shoulder	Rectangular	787	120.320	Hazard	Fair	Shoulder	Rectangular
324	75.100	Hazard	Fair	Shoulder	Rectangular	788	120.320	Hazard	Fair	Median	Rectangular
325	75.100	Hazard	Fair	Median	Rectangular	789	120.520	For Police Assistance Dial	Fair	Shoulder	Safety
326	75.400	Chevron	Fair	Median	Rectangular	790	120.830	Hazard	Fair	Shoulder	Rectangular
327	75.410	Chevron	Fair	Median	Rectangular	791	120.830	Hazard	Fair	Median	Rectangular
328	75.420	Chevron	Fair	Median	Rectangular	792	121.200	Hazard	Fair	Median	Rectangular
329	75.430	Chevron	Fair	Median	Rectangular	793	121.400	Keep Headway Distance 70 m.	Fair	Shoulder	Safety
330	75.440	Chevron	Fair	Median	Rectangular	794	121.600	Hazard		Shoulder	Rectangular
331	75.450	Chevron	Fair	Median	Rectangular	795	121.600	Hazard	Fair	Median	Rectangular
332	75.460	Chevron	Fair	Median	Rectangular	796	122.115	Hazard	Fair	Shoulder	Rectangular
333	75.470	Chevron	Fair	Median	Rectangular	797	122.115	Hazard	Fair	Median	Rectangular
334	75.750	Hazard	Fair	Shoulder	Rectangular	798	122.600	Hazard	Fair	Shoulder	Rectangular

Sign Boards on RHS						Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks	S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
335	75.750	Hazard	Fair	Median	Rectangular	799	122.600	Hazard	Fair	Median	Rectangular
336	75.800	Cantilever	Fair	Shoulder	Cantilever	800	123.030	Hazard		Shoulder	Rectangular
337	75.900	Expressway	Fair	Shoulder	Rectangular	801	123.030	Hazard		Median	Rectangular
338	76.100	Chevron	Fair	Shoulder	Rectangular	802	123.045	Expressway		Shoulder	Rectangular
339	76.200	Hazard	Fair	Shoulder	Rectangular	803	123.480	Hazard	Fair	Shoulder	Rectangular
340	76.200	Hazard	Fair	Median	Rectangular	804	123.480	Hazard	Fair	Median	Rectangular
341	76.200	Chevron	Fair	Shoulder	Rectangular	805	123.600	Exit Board	Fair	Shoulder	Rectangular
342	76.350	Wear seat belt	Fair	Shoulder	Safety	806	123.890	Expressway	Fair	Shoulder	Rectangular
343	76.600	Cantilever	Fair	Shoulder	Cantilever	807	123.970	Hazard	Fair	Shoulder	Rectangular
344	77.250	Restriction End	Fair	Shoulder	Circular	808	123.970	Hazard	Fair	Median	Rectangular
345	77.450	Emergency contact	Fair	Median	Rectangular	809	124.000	Don't use mobile while driving	Fair	Shoulder	Safety
346	77.500	Hazard	Fair	Shoulder	Rectangular	810	124.500	Speed Limit	Fair	Shoulder	Rectangular
347	77.500	Hazard	Fair	Median	Rectangular	811	124.580	Hazard	Fair	Shoulder	Rectangular
348	77.900	Expressway	Fair	Shoulder	Rectangular	812	124.690	Help Line	Fair	Median	Rectangular
349	78.090	Maximum Speed	Fair	Shoulder	Safety	813	124.780	NE-II	Fair	Shoulder	Route Marker
350	78.150	Hazard	Fair	Shoulder	Rectangular	814	125.550	Hazard	Fair	Shoulder	Rectangular
351	78.150	Hazard	Fair	Median	Rectangular	815	125.550	Hazard	Fair	Median	Rectangular
352	78.200	Gantry	Fair	Shoulder	Gantry	816	126.200	Hazard	Fair	Shoulder	Rectangular
353	78.800	Chevron	Fair	Median	Rectangular	817	126.200	Hazard	Fair	Median	Rectangular
354	78.810	Chevron	Fair	Median	Rectangular	818	126.400	Keep Headway Distance 70 m.	Fair	Shoulder	Safety
355	78.820	Chevron	Fair	Median	Rectangular	819	126.430	For Police Assistance Dial	Fair	Median	Safety
356	78.830	Chevron	Fair	Median	Rectangular	820	126.460	Expressway	Fair	Shoulder	Rectangular
357	78.840	Chevron	Fair	Median	Rectangular	821	126.980	Hazard	Fair	Shoulder	Rectangular
358	78.850	Chevron	Fair	Median	Rectangular	822	126.980	Hazard	Fair	Median	Rectangular
359	78.860	Chevron	Fair	Median	Rectangular	823	127.150	Hazard	Fair	Shoulder	Rectangular
360	78.870	Chevron	Fair	Median	Rectangular	824	127.150	Hazard	Fair	Median	Rectangular
361	78.880	Chevron	Fair	Median	Rectangular	825	127.300	Chevron	Fair	Shoulder	Rectangular
362	78.890	Chevron	Fair	Median	Rectangular	826	127.500	Hazard		Shoulder	Rectangular
363	78.800	Hazard	Fair	Shoulder	Rectangular	827	127.500	Hazard	Fair	Shoulder	Rectangular
364	79.000	Chevron	Fair	Shoulder	Rectangular	828	127.990	Hazard	Fair	Shoulder	Rectangular
365	79.010	Chevron	Fair	Shoulder	Rectangular	829	128.000	Advance Direction	Fair	Shoulder	Rectangular
366	79.020	Chevron	Fair	Shoulder	Rectangular	830	128.400	Hazard	Fair	Shoulder	Rectangular
367	79.030	Chevron	Fair	Shoulder	Rectangular	831	128.400	Hazard	Fair	Median	Rectangular
368	79.040	Chevron	Fair	Shoulder	Rectangular	832	128.600	Exit Board	Fair	Shoulder	Rectangular
369	79.050	Chevron	Fair	Shoulder	Rectangular	833	128.700	Expressway	Fair	Shoulder	Rectangular
370	79.060	Chevron	Fair	Shoulder	Rectangular	834	129.080	Hazard	Fair	Shoulder	Rectangular
371	79.070	Chevron	Fair	Shoulder	Rectangular	835	129.080	Hazard	Fair	Median	Rectangular
372	79.080	Chevron	Fair	Shoulder	Rectangular	836	129.380	Speed Limit	Fair	Shoulder	Rectangular
373	79.090	Chevron	Fair	Shoulder	Rectangular	837	129.500	Hazard	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
374	79.100	Chevron	Fair	Median	Rectangular
375	79.110	Chevron	Fair	Median	Rectangular
376	79.200	National Expressway-2	Fair	Shoulder	Rectangular
377	79.200	Restriction End	Fair	Shoulder	Circular
378	79.400	Chevron	Fair	Median	Rectangular
379	79.410	Chevron	Fair	Median	Rectangular
380	79.420	Chevron	Fair	Median	Rectangular
381	79.430	Chevron	Fair	Median	Rectangular
382	79.440	Chevron	Fair	Median	Rectangular
383	79.450	Chevron	Fair	Median	Rectangular
384	79.460	Chevron	Fair	Median	Rectangular
385	79.470	Chevron	Fair	Median	Rectangular
386	79.500	Don't stop	Fair	Shoulder	Safety
387	79.750	Chevron	Fair	Shoulder	Rectangular
388	79.760	Chevron	Fair	Shoulder	Rectangular
389	79.770	Chevron	Fair	Shoulder	Rectangular
390	79.780	Chevron	Fair	Shoulder	Rectangular
391	79.790	Chevron	Fair	Shoulder	Rectangular
392	79.800	Chevron	Fair	Shoulder	Rectangular
393	79.810	Chevron	Fair	Shoulder	Rectangular
394	79.820	Chevron	Fair	Shoulder	Rectangular
395	79.800	Hazard	Fair	Shoulder	Rectangular
396	79.800	Hazard	Fair	Median	Rectangular
397	79.900	Chevron	Fair	Median	Rectangular
398	79.910	Chevron	Fair	Median	Rectangular
399	79.920	Chevron	Fair	Median	Rectangular
400	80.200	Hazard	Fair	Shoulder	Rectangular
401	80.200	Hazard	Fair	Median	Rectangular
402	80.500	Chevron	Fair	Median	Rectangular
403	80.510	Chevron	Fair	Median	Rectangular
404	80.520	Chevron	Fair	Median	Rectangular
405	80.530	Chevron	Fair	Median	Rectangular
406	80.540	Chevron	Fair	Median	Rectangular
407	80.550	Chevron	Fair	Median	Rectangular
408	80.560	Chevron	Fair	Median	Rectangular
409	80.700	Expressway	Fair	Shoulder	Rectangular
410	80.900	Right Hand Curve	Fair	Shoulder	Triangular
411	80.950	Hazard	Fair	Shoulder	Rectangular
412	80.950	Hazard	Fair	Median	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
838	129.500	Hazard	Fair	Shoulder	Rectangular
839	129.800	Hazard	Fair	Shoulder	Rectangular
840	129.800	Hazard	Fair	Median	Rectangular
841	129.890	NE-II	Fair	Shoulder	Route Marker
842	130.050	Hazard	Fair	Shoulder	Rectangular
843	130.050	Hazard	Fair	Median	Rectangular
844	130.150	Help Line	Fair	Median	Rectangular
845	130.490	Hazard		Shoulder	Rectangular
846	130.490	Hazard	Fair	Median	Rectangular
847	130.500	Art Gallery 125 Km. Ahead		Shoulder	Safety
848	131.000	Filling Station	Fair	Shoulder	Rectangular
849	131.000	Chevron	Fair	Shoulder	Rectangular
850	131.010	Chevron	Fair	Shoulder	Rectangular
851	131.020	Chevron	Fair	Shoulder	Rectangular
852	131.030	Chevron	Fair	Shoulder	Rectangular
853	131.040	Chevron	Fair	Shoulder	Rectangular
854	131.050	Chevron	Fair	Shoulder	Rectangular
855	131.060	Chevron	Fair	Shoulder	Rectangular
856	131.070	Chevron	Fair	Shoulder	Rectangular
857	131.080	Chevron	Fair	Shoulder	Rectangular
858	131.090	Chevron	Fair	Shoulder	Rectangular
859	131.100	Chevron	Fair	Shoulder	Rectangular
860	131.110	Chevron	Fair	Shoulder	Rectangular
861	131.120	Chevron	Fair	Shoulder	Rectangular
862	131.130	Chevron	Fair	Shoulder	Rectangular
863	131.140	Chevron	Fair	Shoulder	Rectangular
864	131.150	Chevron	Fair	Shoulder	Rectangular
865	131.160	Chevron	Fair	Shoulder	Rectangular
866	131.170	Chevron	Fair	Shoulder	Rectangular
867	131.180	Chevron	Fair	Shoulder	Rectangular
868	131.190	Chevron	Fair	Shoulder	Rectangular
869	131.200	Chevron	Fair	Shoulder	Rectangular
870	131.210	Chevron	Fair	Shoulder	Rectangular
871	131.220	Chevron	Fair	Shoulder	Rectangular
872	131.230	Chevron	Fair	Shoulder	Rectangular
873	131.240	Chevron	Fair	Shoulder	Rectangular
874	131.250	Chevron	Fair	Shoulder	Rectangular
875	131.260	Chevron	Fair	Shoulder	Rectangular
876	131.270	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
413	81.100	Wear seat belt	Fair	Shoulder	Safety
414	81.300	Restriction End	Fair	Shoulder	Circular
415	81.500	Hazard	Fair	Shoulder	Rectangular
416	81.500	Hazard	Fair	Median	Rectangular
417	81.700	Hazard	Fair	Shoulder	Rectangular
418	81.700	Hazard	Fair	Median	Rectangular
419	81.800	Gantry	Fair	Shoulder	Gantry
420	82.100	Restriction End	Fair	Shoulder	Circular
421	82.500	Do not drink and drive	Fair	Shoulder	Safety
422	82.500	Exit for Expressway	Fair	Shoulder	Rectangular
423	82.600	Emergency contatct	Fair	Median	Rectangular
424	82.900	Speed Limit	Fair	Shoulder	Rectangular
425	83.070	Hazard	Fair	Median	Rectangular
426	83.150	Hazard	Fair	Shoulder	Rectangular
427	83.200	Merging Ahead	Fair	Shoulder	Triangular
428	83.400	Cantilever	Fair	Shoulder	Cantilever
429	83.650	Chevron	Fair	Shoulder	Rectangular
430	83.660	Chevron	Fair	Shoulder	Rectangular
431	83.650	Hazard	Fair	Shoulder	Rectangular
432	83.650	Hazard	Fair	Median	Rectangular
433	83.850	Exit for Expressway	Fair	Shoulder	Rectangular
434	83.900	Chevron	Fair	Shoulder	Rectangular
435	83.910	Chevron	Fair	Shoulder	Rectangular
436	83.920	Chevron	Fair	Shoulder	Rectangular
437	84.050	Cantilever	Fair	Shoulder	Cantilever
438	84.100	Gantry	Fair	Shoulder	Gantry
439	84.100	Chevron	Fair	Shoulder	Rectangular
440	84.110	Chevron	Fair	Shoulder	Rectangular
441	84.250	Restriction End	Fair	Shoulder	Circular
442	84.300	Chevron	Fair	Shoulder	Rectangular
443	84.310	Chevron	Fair	Shoulder	Rectangular
444	84.320	Chevron	Fair	Shoulder	Rectangular
445	84.330	Chevron	Fair	Shoulder	Rectangular
446	84.550	Right Hand Curve	Fair	Shoulder	Triangular
447	84.550	VMS	Fair	Shoulder	VMS
448	84.900	National Expressway-2	Fair	Shoulder	Rectangular
449	85.000	Cantilever	Fair	Shoulder	Cantilever
450	85.300	Chevron	Fair	Median	Rectangular
451	85.310	Chevron	Fair	Median	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
877	131.280	Chevron	Fair	Shoulder	Rectangular
878	131.290	Chevron	Fair	Shoulder	Rectangular
879	131.300	Chevron	Fair	Shoulder	Rectangular
880	131.310	Chevron	Fair	Shoulder	Rectangular
881	131.320	Chevron	Fair	Shoulder	Rectangular
882	131.330	Chevron	Fair	Shoulder	Rectangular
883	131.340	Chevron	Fair	Shoulder	Rectangular
884	131.350	Chevron	Fair	Shoulder	Rectangular
885	131.360	Chevron	Fair	Shoulder	Rectangular
886	131.370	Chevron	Fair	Shoulder	Rectangular
887	131.380	Chevron	Fair	Shoulder	Rectangular
888	131.390	Chevron	Fair	Shoulder	Rectangular
889	131.400	Chevron	Fair	Shoulder	Rectangular
890	131.410	Chevron	Fair	Shoulder	Rectangular
891	131.420	Chevron	Fair	Shoulder	Rectangular
892	131.430	Chevron	Fair	Shoulder	Rectangular
893	131.440	Chevron	Fair	Shoulder	Rectangular
894	131.450	Chevron	Fair	Shoulder	Rectangular
895	131.460	Chevron	Fair	Shoulder	Rectangular
896	131.470	Chevron	Fair	Shoulder	Rectangular
897	131.480	Chevron	Fair	Shoulder	Rectangular
898	131.490	Chevron	Fair	Shoulder	Rectangular
899	131.500	Chevron	Fair	Shoulder	Rectangular
900	131.200	Advance Direction	Fair	Shoulder	Rectangular
901	131.900	Toll Boards	Fair	Shoulder	Toll Boards
902	131.980	Hazard	Fair	Shoulder	Rectangular
903	131.980	Hazard	Fair	Median	Rectangular
904	132.000	Toll Boards	Fair	Shoulder	Toll Boards
905	132.010	Toll Boards	Fair	Shoulder	Toll Boards
906	132.020	Toll Boards	Fair	Shoulder	Toll Boards
907	132.030	Toll Boards	Fair	Shoulder	Toll Boards
908	132.040	Toll Boards	Fair	Shoulder	Toll Boards
909	132.200	Toll Boards	Fair	Shoulder	Toll Boards
910	132.630	Hazard	Fair	Median	Rectangular
911	132.680	Hazard	Fair	Shoulder	Rectangular
912	132.690	Toll Boards	Fair	Shoulder	Toll Boards
913	132.800	Advance Direction	Fair	Shoulder	Gantry
914	133.350	Hazard	Fair	Shoulder	Rectangular
915	133.350	Hazard	Fair	Median	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
452	85.320	Chevron	Fair	Median	Rectangular
453	85.330	Chevron	Fair	Median	Rectangular
454	85.340	Chevron	Fair	Median	Rectangular
455	85.350	Chevron	Fair	Median	Rectangular
456	85.360	Chevron	Fair	Median	Rectangular
457	85.370	Chevron	Fair	Median	Rectangular
458	85.380	Chevron	Fair	Median	Rectangular
459	85.400	Wear seat belt	Fair	Shoulder	Safety
460	85.800	Expressway	Fair	Shoulder	Rectangular
461	85.800	Chevron	Fair	Shoulder	Rectangular
462	85.810	Chevron	Fair	Shoulder	Rectangular
463	85.820	Chevron	Fair	Shoulder	Rectangular
464	85.830	Chevron	Fair	Shoulder	Rectangular

Sign Boards on RHS					
S.No.	Design Chainage	Type of Sign Board	Physical Condition	Location	Remarks
916	133.700	Toll Boards	Fair	Shoulder	Toll Boards
917	133.950	Expressway	Fair	Shoulder	Rectangular
918	134.100	Mandatory	Fair	Shoulder	Circular
919	134.230	NE-II	Fair	Shoulder	Route Marker
920	134.250	U-Turn Prohibited	Fair	Shoulder	Circular
921	134.250	Merging Ahead	Fair	Shoulder	Triangular
922	134.250	Advance Direction	Fair	Shoulder	Rectangular
923	134.480	Speed Limit	Fair	Shoulder	Rectangular
924	134.605	Hazard	Fair	Shoulder	Rectangular
925	134.605	Hazard	Fair	Median	Rectangular
926	134.850	Merging Ahead	Fair	Shoulder	Triangular
927	134.850	Speed Limit	Fair	Shoulder	Rectangular
928	134.850	Hazard	Fair	Shoulder	Rectangular

Table 21: Sign Boards on LHS - Interchanges

<table>
<tr><th colspan="9">Sign Boards - LHS</th></tr>
<tr><th>Sl. No.</th><th>Chainage</th><th colspan="2">Type of Loop</th><th>Side</th><th>Type of Sign Board</th><th>No. of Boards</th><th>Damage</th><th>Remarks</th></tr>
<tr><td rowspan="7">1</td><td rowspan="7">44.512</td><td rowspan="7">Clover Leaf 1</td><td rowspan="7">South Loop 1</td><td rowspan="7">LHS</td><td>Speed Limit</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td>Left Hand Curve</td><td>1</td><td></td><td>Triangular</td></tr>
<tr><td>Toll Information</td><td>1</td><td></td><td>Toll Boards</td></tr>
<tr><td>Compulsory ahead</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td>Chevron</td><td>21</td><td></td><td>Chevron</td></tr>
<tr><td>Merging ahead</td><td>1</td><td></td><td>Triangular</td></tr>
<tr><td>U-Turn Prohibited</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td rowspan="13">2</td><td rowspan="13">44.512</td><td rowspan="13">Clover Leaf 1</td><td rowspan="13">South Loop 2</td><td rowspan="13">LHS</td><td>Speed Limit</td><td>2</td><td></td><td>Circular</td></tr>
<tr><td>Left Hand Curve</td><td>1</td><td></td><td>Triangular</td></tr>
<tr><td>Toll Information</td><td>4</td><td></td><td>Toll Boards</td></tr>
<tr><td>Compulsory ahead</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td>Traffic Diversion</td><td>1</td><td></td><td>Rectangular</td></tr>
<tr><td>Go Slow</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td>Chevron</td><td>27</td><td></td><td>Chevron</td></tr>
<tr><td>Advance Direction</td><td>1</td><td></td><td>Advance Direction</td></tr>
<tr><td>Toll Information</td><td>2</td><td></td><td>Toll Boards</td></tr>
<tr><td>Merging ahead</td><td>1</td><td></td><td>Triangular</td></tr>
<tr><td>U-Turn Prohibited</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td>Stop Pay Toll</td><td>1</td><td></td><td>Octagonal</td></tr>
<tr><td>U-Turn</td><td>1</td><td></td><td>Circular</td></tr>
<tr><td>3</td><td>44.512</td><td>Clover Leaf 1</td><td>South Ramp Entry</td><td>LHS</td><td>Cantilever</td><td>1</td><td></td><td>Cantilever</td></tr>
</table>

Sign Boards - LHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					Left Hand Curve	1		Triangular
					Toll Information	1		Toll Boards
					Compulsory ahead	1		Circular
					Chevron	6		Chevron
					Advance Direction	2		Advance Direction
					Merging ahead	1		Triangular
4	44.512	Clover Leaf 1	South Ramp Exit	LHS	Speed Limit	1		Circular
					Toll Information	6		Toll Boards
					Compulsory ahead	1		Circular
					Advance Direction	1		Advance Direction
					Chevron	7		Chevron
					Merging ahead	1		Triangular
					U-Turn Prohibited	1		Circular
					Left Hand Curve	1		Triangular
5	49.960	Clover Leaf 2	South Ramp Entry	LHS	Steep Descent	1		Triangular
					Advance Direction	2		Advance Direction
					Toll Information	1		Toll Boards
					Two way Hazard & Pass Either Side	4		Rectangular
					Two way Hazard & Compulsory Keep Left	1		Rectangular
					Overtaking Prohibited		1	Circular
					Advance Direction	1		Advance Direction
					Chevron	7		Chevron
6	49.960	Clover Leaf 2	South Ramp Exit	LHS	Toll Information	2		Toll Boards
					Steep Descent	1		Triangular
					Overtaking Prohibited	1		Circular
					Speed Limit	1		Circular
					Hazard	1		Hazard
					Merging ahead	1		Triangular
					Two way Hazard	1		Rectangular
					Two way Hazard & Pass Either Side	3		Rectangular
					Two way Hazard & Compulsory Keep Left	1		Rectangular
					Chevron	10		Chevron
					Hazard	1		Hazard
					Merging ahead	1		Triangular
7	52.192	Clover Leaf 3	South Ramp Exit	LHS	Chevron	28		Chevron

Sign Boards - LHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					Toll Information	3		Toll Boards
					Merging ahead	1		Triangular
					U-Turn Prohibited	1		Circular
8	52.192	Clover Leaf 3	South Ramp Entry	LHS	Chevron	6		Chevron
					U-Turn Prohibited	1		Circular
					Gantry	1		Gantry
					No Entry	1		Circular
					Toll Information	2		Toll Boards
					Merging ahead	1		Triangular
					No Parking	1		Circular
9	52.192	Clover Leaf 3	South Loop 1	LHS	Chevron	19		Chevron
					No Entry	1		Circular
					Gantry	1		Gantry
					Toll Information	3		Toll Boards
					No Parking	1		Circular
					Overtaking Prohibited	1		Circular
					Merging ahead	1		Triangular
					Speed Limit	1		Circular
					U-Turn Prohibited	2		Circular
10	52.192	Clover Leaf 3	South Loop 2	LHS	Chevron	19		Chevron
					U-Turn Prohibited	1		Circular
					Toll Information	3		Toll Boards
					Exit Ramp for Expressway	1		Rectangular
					Merging ahead	1		Triangular
11	72.724	Clover Leaf 4	South Ramp Exit	LHS	Toll Information	3		Toll Boards
12	72.724	Clover Leaf 4	South Ramp Entry	LHS	Toll Information	3		Toll Boards
13	72.724	Clover Leaf 4	South Loop 1	LHS	Chevron	14	1	Chevron
					Toll Information	3		Toll Boards
14	72.724	Clover Leaf 4	South Loop 2	LHS	Chevron	16		Chevron
					Toll Information	3		Toll Boards
15	135.000	Clover Leaf 5	South Ramp Exit	LHS	Chevron	4		Chevron
16	135.000	Clover Leaf 5	South Ramp Entry	LHS	Chevron	4		Chevron
17	135.000	Clover Leaf 5	South Loop 1	LHS	Chevron	17		Chevron
					Cantilever	1		Cantilever
					Speed Limit	1		Circular
					Merging ahead	1		Triangular
					Hazard	5		Hazard

Sign Boards - LHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					Reassurance		1	Rectangular
18	135.000	Clover Leaf 5	South Loop 2	LHS	Chevron	23	1	Chevron
					Cantilever	3		Cantilever
19	108.570	Interchange 3	South Ramp Exit	LHS	Chevron	8		Chevron
					Speed Limit	2		Circular
					Hazard	1		Hazard
					Advance Direction	1		Advance Direction
					Toll Information	2		Toll Boards
20	108.570	Interchange 3	South Ramp Entry	LHS	Chevron	8		Chevron
					Speed Limit	3		Circular
					Hazard	1		Hazard
					Compulsory ahead	1		Circular
					Merging ahead	1		Triangular
21	108.570	Interchange 3	South Loop 1	LHS	Chevron	9		Chevron
					Speed Limit	3		Circular
					Reassurance	1		Rectangular
					Advance Direction	1		Advance Direction
					Merging ahead	1		Triangular
22	108.570	Interchange 3	South Loop 2	LHS	Chevron	9		Chevron
					Speed Limit	1		Circular
					Reassurance	1		Rectangular
					Hazard	2		Hazard
					Compulsory ahead	1		Circular
23	83.005	Interchange 2	South Ramp Exit	LHS	Chevron	13		Chevron
					Speed Limit	1		Circular
					Toll Information	6		Toll Boards
					Cantilever	2		Cantilever
					Hazard	1		Hazard
24	83.005	Interchange 2	South Ramp Entry	LHS	Chevron	18		Chevron
					Toll Information	3		Toll Boards
					Speed Limit	2		Circular
					Cantilever	2		Cantilever
					Hazard	1		Hazard
					Compulsary ahead	1		Circular
25	83.005	Interchange 2	South Loop 1	LHS	Chevron	7		Chevron
					Merging ahead	2		Triangular
					Toll Information	1		Toll Boards
26	83.005	Interchange 2	South Loop 2	LHS	Chevron	7		Chevron
					Height Limit	1		Circular
					Merging ahead	1		Triangular

Sign Boards - LHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					U-Turn Prohibited	1		Circular

Table 22: Sign Boards on RHS - Interchanges

Sign Boards - RHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
1	44.512	Clover Leaf 1	North Loop 1	RHS	Chevron	23		Chevron
					Advance Direction	1		Advance Direction
					Advance Direction	1		Advance Direction
					Right Hand Curve	1		Triangular
					Chevron	6		Chevron
					Merging ahead	1		Triangular
2	44.512	Clover Leaf 1	North Loop 2	RHS	Advance Direction	2		Advance Direction
					Speed Limit	1		Circular
					Cantilever	1		Cantilever
					Chevron	5		Chevron
					Toll Information	5		Toll Boards
					Compulsary ahead	1		Circular
					Chevron	21		Chevron
					Right Hand Curve	1		Triangular
					Merging ahead	1		Triangular
3	44.512	Clover Leaf 1	North Ramp Entry	RHS	Cantilever	1		Cantilever
					Speed Limit	1		Circular
					Left Reverse Bend	1		Triangular
					Toll Information	1		Toll Boards
					Advance Direction	1		Advance Direction
					Compulsary ahead	1		Circular
					Chevron	16		Chevron
					Chevron	9		Chevron
					Merging ahead	1		Triangular
					U-Turn Prohibited	1		Circular
4	44.512	Clover Leaf 1	North Ramp Exit	RHS	Toll Information	4		Toll Boards
					Speed Limit	1		Circular
					Chevron	7		Chevron
					Compulsary ahead	1		Circular
					Advance Direction	1		Advance Direction
					Chevron	3		Chevron
					Toll Information	2		Toll Boards
					U-Turn Prohibited	1		Circular
5	49.960	Clover Leaf 2	North Loop 1	RHS	Steep Descent	1		Triangular

Sign Boards - RHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					Reassurance	1		Rectangular
					Toll Information	2		Toll Boards
					Merging ahead	1		Triangular
					Two way Hazard & Pass Either Side	4		Rectangular
					Two way Hazard & Compulsary Keep Left	1		Rectangular
					Advance Direction	1		Advance Direction
					Reassurance	1		Rectangular
					Chevron	12		Chevron
6	49.960	Clover Leaf 2	North Loop 2	RHS	Speed Limit	1		Circular
					Toll Information	2		Toll Boards
					Advance Direction	1		Advance Direction
					Left Hand Curve	1		Triangular
					Overtaking Prohibited		1	Circular
					Hazard	2		Hazard
					Steep Ascent	1		Triangular
					Merging ahead	1		Triangular
					Two way Hazard & Pass Either Side	4		Rectangular
					Two way Hazard & Compulsary Keep Left	1		Rectangular
					Chevron	15		Chevron
					Hazard	1		Hazard
7	49.960	Clover Leaf 2	North Ramp Entry	RHS	Advance Direction	1		Advance Direction
					Left Hand Curve	1		Triangular
					Steep Descent	1		Triangular
					Hazard	2		Hazard
					Left Reverse Bend	1		Triangular
					Speed Limit	1		Circular
					Overtaking Prohibited	1		Circular
					Chevron	5		Chevron
					Toll Information	3		Toll Boards
					Merging ahead	1		Triangular
					Two way Hazard & Pass Either Side	4		Rectangular
					Two way Hazard & Compulsary Keep Left	1		Rectangular
							2	Only Pole is present

Sign Boards - RHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					Chevron	11		Chevron
					Hazard	1		Hazard
8	52.192	Clover Leaf 3	North Loop 1	RHS	Advance Direction	5		Advance Direction
					Speed Limit	1		Circular
					Overtaking Prohibited	1		Circular
					No Parking	1		Circular
					Advance Direction	3		Advance Direction
					Chevron	20		Chevron
					Merging ahead	1		Triangular
					U-Turn Prohibited	1		Circular
9	52.192	Clover Leaf 3	North Loop 2	RHS	National Highway Route Marking & Exit-8	1		Route Marker
					Speed Limit	1		Circular
					No Parking	1		Circular
					Overtaking Prohibited	1		Circular
					Toll Information	3		Toll Boards
					Two way Hazard	1		Rectangular
					Left Hand Curve	1		Triangular
					Exit Ramp for Expressway	1		Rectangular
					Chevron	30		Chevron
					Stop Pay Toll	4		Octagonal
					U-Turn Prohibited	1		Circular
10	52.192	Clover Leaf 3	North Ramp Entry	RHS	Advance Direction	1		Advance Direction
					Speed Limit	1		Circular
					Chevron	7		Chevron
					No Parking	1		Circular
					Toll Information	7		Toll Boards
					Stop Pay Toll	1		Octagonal
					Chevron	12		Chevron
11	52.192	Clover Leaf 3	North Ramp Exit	RHS	Chevron	8		Chevron
					Speed Limit	1		Circular
					Exit Ramp for Expressway	1		Rectangular
					Hazard	1		Hazard
					U-Turn	1		Circular
					Toll Information	3		Toll Boards
					Merging ahead	1		Triangular
					U-Turn Prohibited	1		Circular
12	72.724	Clover Leaf 4	North Loop 2	RHS	Chevron	15		Chevron
					Toll Information	3		Toll Boards
					Height Limit	1		Circular

Sign Boards - RHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
13	72.724	Clover Leaf 4	North Loop 1	RHS	Chevron	16		Chevron
					Toll Information	3		Toll Boards
					Advance Direction	1		Advance Direction
14	72.724	Clover Leaf 4	North Ramp Exit	RHS	Toll Information	3		Toll Boards
15	72.724	Clover Leaf 4	North Ramp Entry	RHS	Toll Information	3		Toll Boards
					U-Turn Prohibited	1		Circular
16	135.000	Clover Leaf 5	North Ramp Exit	RHS	Chevron	13		Chevron
					Cantilever	2		Cantilever
17	135.000	Clover Leaf 5	North Ramp Entry	RHS	Chevron	8		Chevron
					Cantilever	2		Cantilever
					Merging ahead	1		Triangular
18	135.000	Clover Leaf 5	North Loop 2	RHS	Chevron	20	2	Chevron
					Speed Limit	1		Circular
					Cantilever	2		Cantilever
19	135.000	Clover Leaf 5	North Loop 1	RHS	Chevron	22		Chevron
					Cantilever	1		Cantilever
					Speed Limit	1		Circular
					Hazard	1		Hazard
					U-Turn Prohibited	1		Circular
					Merging ahead	1		Triangular
20	108.570	Interchange 3	North Ramp Exit	RHS	Chevron	5		Chevron
					Compulsary ahead	1		Circular
					Speed Limit	3		Circular
					Merging ahead	1		Triangular
					Toll Information	2		Toll Boards
					Hazard	1		Hazard
					Advance Direction	1		Advance Direction
21	108.570	Interchange 3	North Ramp Entry	RHS	Chevron	6		Chevron
					Speed Limit	2		Circular
					Cantilever	1		Cantilever
					Compulsary ahead	1		Circular
					Merging ahead	1		Triangular
					Toll Information	2		Toll Boards
22	83.005	Interchange 2	North Ramp Exit	RHS	Chevron	25		Chevron
					Toll Information	4		Toll Boards
					Cantilever	2		Cantilever
					Hazard	1		Hazard
23	83.005	Interchange 2	North Ramp Entry	RHS	Chevron	10		Chevron
					Reassurance	1		Rectangular
					Hazard	2		Hazard

Sign Boards - RHS								
Sl. No.	Chainage	Type of Loop		Side	Type of Sign Board	No. of Boards	Damage	Remarks
					Speed Limit	1		Circular
					Cantilever	2		Cantilever
					U-Turn Prohibited	1		Circular
					Compulsory ahead	1		Circular

Table 23: Summary of Pavement Marking

Summary of Road Marking -LHS					
Condition	Median	Centre Line 1	Centre Line 2	Paved Shoulder	Total
Poor	0.2	1.6	0.8	1.7	4.3
Fair	129.6	92.6	91.8	105.5	419.5
Fair to Poor	5	40.6	42.2	27.6	115.4

Summary of Road Marking- RHS					
Condition	Median	Centre Line 1	Centre Line 2	Paved Shoulder	Total
Poor	1.800	2.400	1.800	1.000	7
Fair	126.600	91.800	85.200	92.600	396.2
Fair to Poor	6.600	40.800	48.000	41.400	136.8

The project Road has only 46 nos. of high masts at Toll plaza locations along the stretch. The details of the High masts are provided below:

Table 24: Locations of High mast Lighting

High mast Loops/Interchanges & Toll plaza								
Sl. No.	Chainage	Side	Clover leaf	Type of Loop	Type of Light	No. of Poles	Damage	Remarks
1	5.5	BHS	Toll plaza		Highmast	10		
2	15.360	RHS	Interchange 1	North Ramp Entry	Highmast	1		
3	15.360	RHS	Interchange 1	North Ramp Exit	Highmast	1		
4	15.360	LHS	Interchange 1	South Ramp Entry	Highmast	1		
5	15.360	LHS	Interchange 1	South Ramp Exit	Highmast	1		
6	44.512	RHS Median	Clover Leaf 1	North Ramp Exit	Highmast	1		
7	49.960	RHS Shoulder	Clover Leaf 2	North Loop 1	Highmast	2		
8	49.960	RHS Shoulder	Clover Leaf 2	North Loop 2	Highmast	2		
9	49.960	RHS Shoulder	Clover Leaf 2	North Ramp Entry	Highmast	2		
10	49.960	RHS Shoulder	Clover Leaf 2	South Ramp Entry	Highmast	1	1	Bulbs not Installed
11	49.960	LHS Shoulder	Clover Leaf 2	South Ramp Exit	Highmast	2		
12	52.192	LHS	Clover Leaf 3	South Loop 1	Highmast	1		
13	52.192	LHS	Clover Leaf 3	South Loop 2	Highmast	1		

High mast Loops/Interchanges & Toll plaza								
Sl. No.	Chainage	Side	Clover leaf	Type of Loop	Type of Light	No. of Poles	Damage	Remarks
14	72.724	RHS	Clover Leaf 4	North Loop 1	Highmast	1		
15	72.724	RHS	Clover Leaf 4	North Loop 2	Highmast	1		
16	72.724	RHS	Clover Leaf 4	North Ramp Exit	Highmast	1		
17	72.724	LHS	Clover Leaf 4	South Loop 1	Highmast	1		
18	72.724	LHS	Clover Leaf 4	South Loop 2	Highmast	1		
19	72.724	LHS	Clover Leaf 4	South Ramp Entry	Highmast	1		
20	83.005	RHS	Interchange 2	North Ramp Entry	Highmast	1		
21	83.005	RHS	Interchange 2	North Ramp Exit	Highmast	1		
22	83.005	LHS	Interchange 2	South Ramp Exit	Highmast	1		
23	108.570	RHS	Interchange 3	North Ramp Entry	Highmast	2		
24	108.570	RHS	Interchange 3	North Ramp Exit	Highmast	2		
25	108.570	LHS	Interchange 3	South Ramp Entry	Highmast	2		
26	108.570	LHS	Interchange 3	South Ramp Exit	Highmast	2		
27	132.085	BHS	Toll plaza		Highmast	2		
28	135.000	RHS	Clover Leaf 5	North Ramp Entry	Highmast	1		
	Total					46		

Table 25: Locations of Highway Lighting along the Corridor

Double Arm /Single Pole in MCW									
S.No.	Chainage (km)		Length (km)	No. of Single arm Light poles		Number of Double arm	Damage	No. of Bulbs Not Working	Remarks
	From	To		LHS	RHS	Median			
1	1.000	2.000	1.00	0	0	17		5	
2	2.000	3.000	1.00	0	0	16	1	10	
3	3.000	4.000	1.00	0	0	17		15	
4	4.000	5.000	1.00	0	0	17	1	15	
5	5.000	6.000	1.00	0	0	1		10	
6	6.000	7.000	1.00	0	0	17		10	
7	7.000	8.000	1.00	0	0	17		15	
8	8.000	9.000	1.00	0	0	16		15	
9	9.000	10.000	1.00	0	0	18		15	
10	10.000	11.000	1.00	0	0	16		20	
11	11.000	12.000	1.00	0	0	16		10	
12	12.000	13.000	1.00	23	23	8		10	
13	13.000	14.000	1.00	26	26	15		10	
14	14.000	15.000	1.00	5	7	1		5	
15	15.000	16.000	1.00	34	29	16	1.00	10	
16	16.000	17.000	1.00	17	19	7	2.00	10	
17	17.000	18.000	1.00	0	0	17		10	

Double Arm /Single Pole in MCW									
S.No.	Chainage (km)		Length (km)	No. of Single arm Light poles		Number of Double arm	Damage	No. of Bulbs Not Working	Remarks
	From	To		LHS	RHS	Median			
18	18.000	19.000	1.00	0	0	17		20	
19	19.000	20.000	1.00	0	0	16		10	
20	20.000	21.000	1.00	0	0	18		10	
21	21.000	22.000	1.00	0	0	17		20	
22	22.000	23.000	1.00	0	0	16		15	
23	23.000	24.000	1.00	0	0	17		15	
24	24.000	25.000	1.00	0	0	16		20	
25	25.000	26.000	1.00	0	0	18		25	
26	26.000	27.000	1.00	0	0	17		10	
27	27.000	28.000	1.00	0	0	16		10	
28	28.000	29.000	1.00	0	0	17		25	
29	29.000	30.000	1.00	0	0	17		10	
30	30.000	31.000	1.00	0	0	16		10	
31	31.000	32.000	1.00	0	0	17		10	
32	32.000	33.000	1.00	0	0	16		10	
33	33.000	34.000	1.00	9	0	15		10	
34	34.000	35.000	1.00	0	0	16		10	
35	35.000	36.000	1.00	0	0	17		25	
36	36.000	37.000	1.00	0	0	16		10	
37	37.000	38.000	1.00	0	0	17		10	
38	38.000	39.000	1.00	0	0	17		25	
39	39.000	40.000	1.00	0	0	16		25	
40	40.000	41.000	1.00	0	0	19		10	
41	41.000	42.000	1.00	0	0	16		10	
42	42.000	43.000	1.00	0	0	16		10	
43	43.000	44.000	1.00	17	18	8		10	
44	44.000	45.000	1.00	38	41	10		10	
45	45.000	46.000	1.00	18	19	9		10	
46	46.000	47.000	1.00	0	0	16		10	
47	47.000	48.000	1.00	0	0	16		20	
48	48.000	49.000	1.00	0	0	17		10	
49	49.000	50.000	1.00	0	0	16		10	
50	50.000	51.000	1.00	0	0	16		10	
51	51.000	52.000	1.00	11	14	17		10	
52	52.000	53.000	1.00	7	3	27		54	
53	53.000	54.000	1.00	0	0	17		34	
54	54.000	55.000	1.00	0	0	17		34	
55	55.000	56.000	1.00	0	0	17		34	

Double Arm /Single Pole in MCW									
S.No.	Chainage (km)		Length (km)	No. of Single arm Light poles		Number of Double arm	Damage	No. of Bulbs Not Working	Remarks
	From	To		LHS	RHS	Median			
56	56.000	57.000	1.00	0	0	16		32	
57	57.000	58.000	1.00	0	0	16		32	
58	58.000	59.000	1.00	0	0	17		34	
59	59.000	60.000	1.00	0	0	17		34	
60	60.000	61.000	1.00	0	0	16		32	
61	61.000	62.000	1.00	0	0	16		32	
62	62.000	63.000	1.00	0	0	17		28	
63	63.000	64.000	1.00	0	0	17		21	
64	64.000	65.000	1.00	2	0	16		4	
65	65.000	66.000	1.00	0	0	17		17	
66	66.000	67.000	1.00	0	0	15		19	
67	67.000	68.000	1.00	0	0	16		15	
68	68.000	69.000	1.00	0	0	15		18	
69	69.000	70.000	1.00	0	0	17		14	
70	70.000	71.000	1.00	0	0	16		19	
71	71.000	72.000	1.00	14	8	20		30	
72	72.000	73.000	1.00	14	8	31		62	
73	73.000	74.000	1.00	6	16	24		48	
74	74.000	75.000	1.00	0	0	17		19	
75	75.000	76.000	1.00	0	0	17		18	
76	76.000	77.000	1.00	0	0	16		15	
77	77.000	78.000	1.00	0	0	17		15	
78	78.000	79.000	1.00	0	0	15		15	
79	79.000	80.000	1.00	0	0	16		32	
80	80.000	81.000	1.00	0	0	17		12	
81	81.000	82.000	1.00	11	11	19		22	
82	82.000	83.000	1.00	0	5	29		24	
83	83.000	84.000	1.00	10	16	31		18	
84	84.000	85.000	1.00	0	0	17		14	
85	85.000	86.000	1.00	0	0	17		10	
86	86.000	87.000	1.00	0	0	17		20	
87	87.000	88.000	1.00	0	0	18		26	
88	88.000	89.000	1.00	0	0	15		3	
89	89.000	90.000	1.00	0	0	17		8	
90	90.000	91.000	1.00	0	0	18		10	
91	91.000	92.000	1.00	0	0	30		12	
92	92.000	93.000	1.00	0	0	26		15	
93	93.000	94.000	1.00	0	0	18		7	

Double Arm /Single Pole in MCW									
S.No.	Chainage (km)		Length (km)	No. of Single arm Light poles		Number of Double arm	Damage	No. of Bulbs Not Working	Remarks
	From	To		LHS	RHS	Median			
94	94.000	95.000	1.00	0	0	17		7	
95	95.000	96.000	1.00	0	0	17		8	
96	96.000	97.000	1.00	0	0	16		15	
97	97.000	98.000	1.00	0	0	17		6	
98	98.000	99.000	1.00	0	0	17		4	
99	99.000	100.000	1.00	0	0	17		25	
100	100.000	101.000	1.00	0	0	16		25	
101	101.000	102.000	1.00	0	0	29		21	
102	102.000	103.000	1.00	41	0	19		9	
103	103.000	104.000	1.00	0	0	22		19	
104	104.000	105.000	1.00	0	0	16		10	
105	105.000	106.000	1.00	0	0	17		9	
106	106.000	107.000	1.00	0	0	17		10	
107	107.000	108.000	1.00	18	19	16		26	
108	108.000	109.000	1.00	18	19	21		12	
109	109.000	110.000	1.00	0	0	21		3	
110	110.000	111.000	1.00	0	0	18		12	
111	111.000	112.000	1.00	0	0	18		15	
112	112.000	113.000	1.00	0	0	17		7	
113	113.000	114.000	1.00	0	0	17		6	
114	114.000	115.000	1.00	0	0	17		8	
115	115.000	116.000	1.00	0	0	18		10	
116	116.000	117.000	1.00	0	0	17		10	
117	117.000	118.000	1.00	0	0	18		30	
118	118.000	119.000	1.00	0	0	17		14	
119	119.000	120.000	1.00	0	0	17		30	
120	120.000	121.000	1.00	0	0	19		6	
121	121.000	122.000	1.00	0	0	16		32	
122	122.000	123.000	1.00	0	0	18		25	
123	123.000	124.000	1.00	0	0	15		16	
124	124.000	125.000	1.00	0	0	17		19	
125	125.000	126.000	1.00	0	0	17		13	
126	126.000	127.000	1.00	0	0	17		27	
127	127.000	128.000	1.00	0	0	18		9	
128	128.000	129.000	1.00	0	0	17		10	
129	129.000	130.000	1.00	0	0	15		7	
130	130.000	131.000	1.00	0	0	14		9	

Double Arm /Single Pole in MCW									
S.No.	Chainage (km)		Length (km)	No. of Single arm Light poles		Number of Double arm	Damage	No. of Bulbs Not Working	Remarks
	From	To		LHS	RHS	Median			
131	131.000	132.000	1.00	0	0	33		16	
132	132.000	133.000	1.00	0	0	31		13	
133	133.000	134.000	1.00	0	0	27		12	
134	134.000	135.000	1.00	14	14	35		12	
135	135.000	136.000	1.00	14	14	39		5	
Total			135.000	367	329	2374	4	2204	

Table 26: Locations of Highway Lighting at Interchanges

Loops/Interchanges								
Sl. No.	Chainage	Side	Clover leaf	Type of Loop	Type of Arm	No. of Poles	Damage	Remarks
1	44.512	RHS Median	Clover Leaf 1	North Loop 1	Single Arm	23		
2	44.512	RHS Shoulder	Clover Leaf 1	North Loop 2	Single Arm	26		
3	44.512	RHS Shoulder	Clover Leaf 1	North Ramp Entry	Single Arm	24		
4	44.512	RHS Shoulder	Clover Leaf 1	North Ramp Exit	Single Arm	22		
5	44.512	LHS Shoulder	Clover Leaf 1	South Loop 1	Single Arm	23		
6	44.512	LHS Shoulder	Clover Leaf 1	South Loop 2	Single Arm	26		
7	44.512	LHS Shoulder	Clover Leaf 1	South Ramp Entry	Single Arm	28	1	Pole Damage
8	44.512	LHS Median	Clover Leaf 1	South Ramp Entry	Single Arm	6		
9	44.512	LHS Shoulder	Clover Leaf 1	South Ramp Exit	Single Arm	23		
10	49.960	RHS Shoulder	Clover Leaf 2	North Loop 1	Single Arm	13		
11	49.960	RHS Median	Clover Leaf 2	North Loop 1	Single Arm	2		
12	49.960	RHS Shoulder	Clover Leaf 2	North Loop 2	Single Arm	12		
13	49.960	RHS Shoulder	Clover Leaf 2	North Ramp Entry	Single Arm	22		
14	49.960	RHS Shoulder	Clover Leaf 2	South Ramp Entry	Single Arm	9	1	Pole Damage
15	49.960	LHS Shoulder	Clover Leaf 2	South Ramp Exit	Single Arm	20		
16	52.192	RHS Median	Clover Leaf 3	North Loop 1	Single Arm	18		
17	52.192	RHS Median	Clover Leaf 3	North Loop 2	Single Arm	24		
18	52.192	RHS Median	Clover Leaf 3	North Ramp Entry	Single Arm	23		
19	52.192	RHS Shoulder	Clover Leaf 3	North Ramp Entry	Single Arm	16		
20	52.192	RHS	Clover Leaf 3	North Ramp Exit	Single Arm	22		
21	52.192	LHS	Clover Leaf 3	South Loop 1	Single Arm	23		
22	52.192	LHS	Clover Leaf 3	South Loop 2	Single Arm	18		
23	52.192	LHS	Clover Leaf 3	South Ramp Entry	Single Arm	27		
24	52.192	LHS	Clover Leaf 3	South Ramp Exit	Single Arm	32		
25	72.724	RHS	Clover Leaf 4	North Loop 1	Single Arm	24	1	Pole Damage
26	72.724	RHS	Clover Leaf 4	North Loop 2	Single Arm	19	1	Pole Damage

Loops/Interchanges								
Sl. No.	Chainage	Side	Clover leaf	Type of Loop	Type of Arm	No. of Poles	Damage	Remarks
27	72.724	RHS	Clover Leaf 4	North Ramp Entry	Single Arm	17		
28	72.724	RHS	Clover Leaf 4	North Ramp Exit	Single Arm	21		
29	72.724	LHS	Clover Leaf 4	South Loop 1	Single Arm	15		
30	72.724	LHS	Clover Leaf 4	South Loop 2	Single Arm	24		
31	72.724	LHS	Clover Leaf 4	South Ramp Entry	Single Arm	29	1	Pole Damage
32	72.724	LHS	Clover Leaf 4	South Ramp Exit	Single Arm	24		
33	135.000	RHS	Clover Leaf 5	North Loop 1	Single Arm	23	4	Bulb Damage
34	135.000	RHS	Clover Leaf 5	North Loop 2	Single Arm	25		
35	135.000	RHS	Clover Leaf 5	North Ramp Entry	Single Arm	20	14	Bulb Damage
36	135.000	RHS	Clover Leaf 5	North Ramp Exit	Single Arm	23		
37	135.000	LHS	Clover Leaf 5	South Loop 1	Single Arm	25		
38	135.000	LHS	Clover Leaf 5	South Loop 2	Single Arm	23		
39	135.000	LHS	Clover Leaf 5	South Ramp Entry	Single Arm	32		
40	135.000	LHS	Clover Leaf 5	South Ramp Exit	Single Arm	21		
41	15.360	RHS	Interchange 1	North Ramp Entry	Single Arm	31		
42	15.360	RHS	Interchange 1	North Ramp Exit	Single Arm	40		
43	15.360	LHS	Interchange 1	Loop 1	Single Arm	19		
44	15.360	LHS	Interchange 1	Loop 2	Single Arm	15		
45	15.360	LHS	Interchange 1	South Ramp Entry	Single Arm	26		
46	15.360	LHS	Interchange 1	South Ramp Exit	Single Arm	19		
47	83.005	RHS	Interchange 2	North Ramp Entry	Single Arm	30		
48	83.005	RHS	Interchange 2	North Ramp Exit	Single Arm	32		
49	83.005	LHS	Interchange 2	South Loop 1	Single Arm	33		
50	83.005	LHS	Interchange 2	South Loop 2	Single Arm	31		
51	83.005	LHS	Interchange 2	South Ramp Entry	Single Arm	42		
52	83.005	LHS	Interchange 2	South Ramp Exit	Single Arm	40		
53	108.570	RHS	Interchange 3	North Ramp Entry	Single Arm	18		
54	108.570	RHS	Interchange 3	North Ramp Exit	Single Arm	20		
55	108.570	LHS	Interchange 3	South Loop 1	Single Arm	2		
56	108.570	LHS	Interchange 3	South Loop 2	Single Arm	4		
57	108.570	LHS	Interchange 3	South Ramp Entry	Single Arm	25		
58	108.570	LHS	Interchange 3	South Ramp Exit	Single Arm	18		
	Total					1292	23	

The project Road has only 2 lay byes along the stretch. The details of the Truck lay byes are provided below:

Table 27: Details of Lay byes

Lay byes										
S. No.	Chainage(km)	Length (m)	Side	Width (m)	Separator Details				Water Pump	Rest room
					Length (m)	Width (m)	Kerb Height	Kerb width		
1	22.850	190	LHS	6.5	125	1.5	0.25	0.12	-	-
2	22.855	130	RHS	6.5	70	1.5	0.24	0.15	-	-

1.7.2 Bridge Works

List of Bridges found during the inventory surveys along the corridor are as follows:

Table 28: Details of CD & Other Structures

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
1	19+110	ROB	LHS	MCW	New	1 x 70	70
2	19+110	ROB	RHS	MCW	New	1 x 70	70
3	44+970	ROB	LHS	MCW	New	1 x 47.2 + 1 x 43.74	90.94
4	44+970	ROB	RHS	MCW	New	1 x 47.2 + 1 x 43.74	90.94
5	44+970	ROB	LHS	Ramp	New	1 x 43.5	43.5
6	44+970	ROB	RHS	Ramp	New	1 x 43.5	43.5
7	51+670	ROB	LHS	MCW	New	1 x 19+1 x 24+1 x 19	62
8	51+670	ROB	RHS	MCW	New	1 x 19+1 x 24+1 x 19	62
9	51+670	ROB	LHS	Ramp	New	1 x 19+1 x 24+1 x 19	62
10	51+670	ROB	RHS	Ramp	New	1 x 19+1 x 24+1 x 19	62
11	64+790	ROB	LHS	MCW	New	2 x 36	72
12	64+790	ROB	RHS	MCW	New	2 x 36	72
13	80+110	ROB	LHS	MCW	New	1 x 19+2 x 34.7	88.4
14	80+110	ROB	RHS	MCW	New	1 x 19+2 x 34.7	88.4
15	133+760	ROB	LHS	MCW	New	1 x 36	36
16	133+760	ROB	RHS	MCW	New	1 x 36	36
17	0+000	Flyover	LHS	MCW	NEW	2 x 29.5+1 x 40.2+ 1 x 25.0	124.2
18	0+000	Flyover	RHS	MCW	NEW	2 x 29.5+1 x 40.2+ 1 x 25.0	124.2
19	14+850	Flyover	LHS	MCW	NEW	1 x 17	17
20	14+850	Flyover	RHS	MCW	NEW	1 x 17	17
21	15+360	Flyover	LHS	MCW	NEW	1 x 40	40
22	15+360	Flyover	RHS	MCW	NEW	1 x 40	40
23	15+820	Flyover	LHS	MCW	NEW	1 x 17	17
24	15+820	Flyover	RHS	MCW	NEW	1 x 17	17
25	44+500	Flyover	LHS	MCW	NEW	2 x 30	60
26	44+500	Flyover	RHS	MCW	NEW	2 x 30	60
27	52+170	Flyover	LHS	MCW	NEW	2 x 28.5	57
28	52+170	Flyover	RHS	MCW	NEW	2 x 28.5	57
29	72+750	Flyover	LHS	MCW	NEW	2 x 31	62
30	72+750	Flyover	RHS	MCW	NEW	2 x 31	62
31	81+300	Flyover	LHS	MCW	NEW	1 x 31	31
32	81+300	Flyover	RHS	MCW	NEW	1 x 31	31
33	83+020	Flyover	LHS	MCW	NEW	1 x 31	31
34	83+020	Flyover	RHS	MCW	NEW	1 x 31	31
35	83+760	Flyover	LHS	MCW	NEW	1 x 31	31
36	83+760	Flyover	RHS	MCW	NEW	1 x 31	31

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
37	91+960	Flyover	LHS	MCW	NEW	4 x 31	124
38	91+960	Flyover	RHS	MCW	NEW	4 x 31	124
39	126+230	Flyover	LHS	MCW	NEW	1 x 29.5	29.5
40	126+230	Flyover	RHS	MCW	NEW	1 x 29.5	29.5
41	135+065	Flyover	LHS	MCW	NEW	1 x 16+2 x 31+1 x 16	94
42	135+065	Flyover	RHS	MCW	NEW	1 x 16+2 x 31+1 x 16	94
43	12+780	MJB	LHS	MCW	New	10 x 60	600
44	12+780	MJB	RHS	MCW	New	10 x 60	600
45	33+900	MJB	LHS	MCW	New	4 x 60	240
46	33+900	MJB	RHS	MCW	New	4 x 60	240
47	102+770	MJB	LHS	MCW	New	10 x 60	600
48	102+770	MJB	RHS	MCW	New	10 x 60	600
49	130+540	MJB	LHS	MCW	New	3 x 38	114
50	130+540	MJB	RHS	MCW	New	3 x 38	114
51	2+060	MNB	LHS	MCW	New	1 x 22.4	22.4
52	2+060	MNB	RHS	MCW	New	1 x 22.4	22.4
53	19+890	MNB	LHS	MCW	New	1 x 16	16
54	19+890	MNB	RHS	MCW	New	1 x 16	16
55	20+050	MNB	LHS	MCW	New	1 x 16	16
56	20+050	MNB	RHS	MCW	New	1 x 16	16
57	20+230	MNB	LHS	MCW	New	1 x 22.2	22.2
58	20+230	MNB	RHS	MCW	New	1 x 22.2	22.2
59	22+500	MNB	LHS	MCW	New	1 x 42.75	42.75
60	22+500	MNB	RHS	MCW	New	1 x 42.75	42.75
61	23+110	MNB	LHS	MCW	New	1 x 16	16
62	23+110	MNB	RHS	MCW	New	1 x 16	16
63	23+970	MNB	LHS	MCW	New	1 x 15	17
64	23+970	MNB	RHS	MCW	New	1 x 15	17
65	27+840	MNB	LHS	MCW	New	1 x 27.6	27.6
66	27+840	MNB	RHS	MCW	New	1 x 27.6	27.6
67	39+200	MNB	LHS	MCW	New	1 x 22.2	22.2
68	39+200	MNB	RHS	MCW	New	1 x 22.2	22.2
69	40+850	MNB	LHS	MCW	New	1 x 27.2	27.2
70	40+850	MNB	RHS	MCW	New	1 x 27.2	27.2
71	41+910	MNB	LHS	MCW	New	1 x 16.078	16.08
72	41+910	MNB	RHS	MCW	New	1 x 16.078	16.08
73	44+100	MNB	LHS	MCW	New	1 x 39.414	39.41
74	44+100	MNB	RHS	MCW	New	1 x 39.414	39.41
75	44+100	MNB	LHS	Ramp	New	1 x 23	23
76	44+100	MNB	RHS	Ramp	New	1 x 23	23
77	44+100	MNB	RHS	Ramp	New	1 x 23	23
78	44+100	MNB	RHS	Ramp	New	1 x 23	23
79	46+620	MNB	LHS	MCW	New	1 x 16	16
80	46+620	MNB	RHS	MCW	New	1 x 16	16
81	49+910	MNB	LHS	MCW	New	1 x 12.5	12.5
82	49+910	MNB	RHS	MCW	New	1 x 12.5	12.5
83	49+910	MNB	LHS	Ramp	New	1 x 10.22	10.22
84	49+910	MNB	RHS	Ramp	New	1 x 10.22	10.22
85	49+910	MNB	RHS	Ramp	New	1 x 10.22	10.22
86	53+120	MNB	LHS	MCW	New	1 x 21	21
87	53+120	MNB	RHS	MCW	New	1 x 21	21
88	56+250	MNB	LHS	MCW	New	1 x 22.2	22.2
89	56+250	MNB	RHS	MCW	New	1 x 22.2	22.2

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
90	57+980	MNB	LHS	MCW	New	1 x 31	31
91	57+980	MNB	RHS	MCW	New	1 x 31	31
92	62+000	MNB	LHS	MCW	New	1 x 16	16
93	62+000	MNB	RHS	MCW	New	1 x 16	16
94	65+070	MNB	LHS	MCW	New	1 x 16	16
95	65+070	MNB	RHS	MCW	New	1 x 16	16
96	66+010	MNB	LHS	MCW	New	1 x 22.2	22.2
97	66+010	MNB	RHS	MCW	New	1 x 22.2	22.2
98	67+800	MNB	LHS	MCW	New	1 x 32.2	32.2
99	67+800	MNB	RHS	MCW	New	1 x 32.2	32.2
100	73+690	MNB	LHS	MCW	New	1 x 32.2	32.2
101	73+690	MNB	RHS	MCW	New	1 x 32.2	32.2
102	76+220	MNB	LHS	MCW	New	2 x 42.2	84.4
103	76+220	MNB	RHS	MCW	New	2 x 42.2	84.4
104	77+530	MNB	LHS	MCW	New	1 x 8	8
105	77+530	MNB	RHS	MCW	New	1 x 8	8
106	81+650	MNB	LHS	MCW	New	1 x 32.2	32.2
107	81+650	MNB	RHS	MCW	New	1 x 32.2	32.2
108	104+030	MNB	LHS	MCW	New	1 x 28.8	28.8
109	104+030	MNB	RHS	MCW	New	1 x 28.8	28.5
110	110+960	MNB	LHS	MCW	New	1 x 28.5	28.5
111	110+960	MNB	RHS	MCW	New	1 x 28.5	28.5
112	119+160	MNB	LHS	MCW	New	1 x 22 + 1 x 26	48
113	119+160	MNB	RHS	MCW	New	1 x 22 + 1 x 26	48
114	127+590	MNB	LHS	MCW	New	1 x 18.3	18.3
115	127+590	MNB	RHS	MCW	New	1 x 18.3	18.3
116	129+160	MNB	LHS	MCW	New	1 x 12	12
117	129+160	MNB	RHS	MCW	New	1 x 12	12
118	132+730	MNB	LHS	MCW	New	3 x 9	27
119	132+730	MNB	RHS	MCW	New	3 x 9	27
120	133+230	MNB	LHS	MCW	New	1 x 12	12
121	133+230	MNB	RHS	MCW	New	1 x 12	12
122	134+695	MNB	LHS	MCW	New	1 x 23.3	23.3
123	134+695	MNB	RHS	MCW	New	1 x 23.3	23.3
215	135+460	MNB	LHS	Ramp	New	1 x 12	15.5
125	134+760	MNB	LHS	Ramp	New	1 x 12	12
126	134+760	MNB	LHS	Ramp	New	1 x 12	12
127	134+760	MNB	RHS	Ramp	New	1 x 12	12
128	3+360	VUP	BHS	MCW	New	1 x 14	15.4
129	3+805	VUP	BHS	MCW	New	1 x 12	13.2
130	4+925	VUP	BHS	MCW	New	1 x 12	13.2
131	7+115	VUP	BHS	MCW	New	1 x 12	13.2
132	8+065	VUP	BHS	MCW	New	1 x 22	26
133	17+530	VUP	BHS	MCW	New	1 x 13.6	15
134	22+970	VUP	BHS	MCW	New	1 x 22.2	25
135	25+720	VUP	BHS	MCW	New	1 x 12	13.2
136	27+390	VUP	BHS	MCW	New	1 x 12.6	14
137	29+850	VUP	BHS	MCW	New	1 x 12	13.2
138	30+170	VUP	BHS	MCW	New	1 x 12	13.2
139	31+140	VUP	BHS	MCW	New	1 x 18.6	21
140	31+560	VUP	BHS	MCW	New	1 x 12	13.8

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
141	32+250	VUP	BHS	MCW	New	1 x 12	13.3
142	35+350	VUP	BHS	MCW	New	1 x 12.5	14
143	37+460	VUP	BHS	MCW	New	1 x 12	13.3
144	39+700	VUP	BHS	MCW	New	1 x 12	13.2
145	40+880	VUP	BHS	MCW	New	1 x 12	13.2
146	42+340	VUP	LHS	MCW	New	1 x 24.5	28.5
147	42+340	VUP	RHS	MCW	New	1 x 24.5	28.5
148	44+700	VUP	LHS	Ramp	New	1 x 12	13.2
149	47+315	VUP	BHS	MCW	New	1 x 12	13.2
150	48+270	VUP	BHS	MCW	New	1 x 12	13.4
151	50+100	VUP	LHS	Ramp	New	1 x 10.22	11.62
152	50+470	VUP	BHS	MCW	New	1 x 12	13.6
153	51+100	VUP	LHS	MCW	New	1 x 17.5(SQ)	19.5
154	51+100	VUP	RHS	MCW	New	1 x 17.5(SQ)	19.5
155	52+220	VUP	LHS	Ramp	New	1 x 12	14.4
156	52+220	VUP	LHS	Ramp	New	1 x 12	14.4
157	52+220	VUP	LHS	Ramp	New	1 x 12	14.4
158	52+220	VUP	RHS	Ramp	New	1 x 12	14.4
159	52+220	VUP	RHS	Ramp	New	1 x 12	14.4
160	53+600	VUP	BHS	MCW	New	1 x 12.2	13.8
161	54+360	VUP	BHS	MCW	New	1 x 12	13.7
162	55+060	VUP	BHS	MCW	New	1 x 12	13.3
163	55+870	VUP	BHS	MCW	New	1 x 12.3	13.5
164	56+480	VUP	BHS	MCW	New	1 x 17.0	19
165	56+816	VUP	BHS	MCW	New	1 x 12	13.3
166	58+000	VUP	BHS	MCW	New	1 x 12	14.4
167	58+600	VUP	BHS	MCW	New	1 x 12	13.6
168	59+250	VUP	BHS	MCW	New	1 x 17.0	19
169	60+600	VUP	BHS	MCW	New	1 x 12.12	13.62
170	61+310	VUP	BHS	MCW	New	1 x 12.1	13.7
171	62+860	VUP	BHS	MCW	New	1 x 13.0	14.3
172	67+530	VUP	BHS	MCW	New	1 x 13.0	14.6
173	69+450	VUP	BHS	MCW	New	1 x 12.2	13.5
174	69+765	VUP	BHS	MCW	New	1 x 12.2	13.9
175	71+040	VUP	BHS	MCW	New	1 x 12.1	13.8
176	74+820	VUP	BHS	MCW	New	1 x 12.1	13.8
177	76+740	VUP	BHS	MCW	New	1 x 12.1	13.4
178	77+740	VUP	BHS	MCW	New	1 x 13.5	14.9
179	78+150	VUP	BHS	MCW	New	1 x 12	13.3
180	78+580	VUP	BHS	MCW	New	1 x 12(sq)	13.1
181	79+810	VUP	BHS	MCW	New	1 x 12	13.3
182	81+080	VUP	BHS	MCW	New	1 x 12	13.2
183	82+480	VUP	BHS	MCW	New	1 x 15	16.8
184	83+570	VUP	BHS	MCW	New	1 x 15	16.8
185	86+185	VUP	BHS	MCW	New	1 x 12	13.3
186	86+980	VUP	BHS	MCW	New	1 x 12	13.3
187	88+100	VUP	BHS	MCW	New	1 x 12.2	13.5
188	89+280	VUP	BHS	MCW	New	1 x 12.2	13.5
189	94+220	VUP	LHS	MCW	New	1 x 23.5	25.9
190	94+220	VUP	RHS	MCW	New	1 x 23.5	25.9
191	95+025	VUP	BHS	MCW	New	1 x 10.6	11.5
192	95+515	VUP	BHS	MCW	New	1 x 10.8	11.8
193	96+590	VUP	LHS	MCW	New	1 x 35.5	35.54

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
194	96+590	VUP	RHS	MCW	New	1 x 35.5	35.54
195	103+470	VUP	LHS	MCW	New	1 x 12	13
196	103+470	VUP	RHS	MCW	New	1 x 12	13
197	104+360	VUP	BHS	MCW	New	1 x 12	13.8
198	107+230	VUP	LHS	MCW	New	1 x 11.6	14
199	107+230	VUP	RHS	MCW	New	1 x 11.6	14
200	108+100	VUP	LHS	MCW	New	1 x 14	16
201	108+100	VUP	RHS	MCW	New	1 x 14	16
202	108+660	VUP	LHS	MCW	New	1 x 24	26.4
203	108+660	VUP	RHS	MCW	New	1 x 24	26.4
204	109+170	VUP	LHS	MCW	New	1 x 9	12.4
205	109+170	VUP	RHS	MCW	New	1 x 9	12.4
206	114+390	VUP	BHS	MCW	New	1 x 11.7	13
207	114+800	VUP	BHS	MCW	New	1 x 11.7	13.5
208	118+680	VUP	BHS	MCW	New	1 x 12	13.2
209	119+890	VUP	BHS	MCW	New	1 x 12	13
210	123+430	VUP	BHS	MCW	New	1 x 12	13.2
211	125+030	VUP	BHS	MCW	New	1 x 12	13.2
212	126+945	VUP	BHS	MCW	New	1 x 12	13.2
213	130+160	VUP	BHS	MCW	New	1 x 12	13.6
214	131+325	VUP	BHS	MCW	New	1 x 12	13.2
215	133+435	VUP	LHS	MCW	New	1 x 13	15.4
216	133+435	VUP	RHS	MCW	New	1 x 13	15.4
217	1+085	PUP	BHS	MCW	New	1 x 7	8
218	1+510	PUP	BHS	MCW	New	1 x 7	8.2
219	4+455	PUP	BHS	MCW	New	1 x 7	8
220	5+930	PUP	BHS	MCW	New	1 x 7	7.9
221	6+425	PUP	BHS	MCW	New	1 x 7	8
222	7+630	PUP	BHS	MCW	New	1 x 7	8
223	8+605	PUP	BHS	MCW	New	1 x 7	7.9
224	9+315	PUP	BHS	MCW	New	1 x 7	7.9
225	9+790	PUP	BHS	MCW	New	1 x 7	7.9
226	10+490	PUP	BHS	MCW	New	1 x 7	7.9
227	10+760	PUP	BHS	MCW	New	1 x 7	8
228	11+140	PUP	BHS	MCW	New	1 x 7	8.1
229	11+790	PUP	BHS	MCW	New	1 x 7	8.2
230	13+750	PUP	BHS	MCW	New	1 x 7	8
231	14+010	PUP	BHS	MCW	New	1 x 7	8
232	14+380	PUP	BHS	MCW	New	1 x 7	8.1
233	14+815	PUP	BHS	MCW	New	1 x 7	8
234	14+815	PUP	LHS	Ramp	New	1 x 7	8
235	14+815	PUP	RHS	Ramp	New	1 x 7	8
236	16+190	PUP	RHS	MCW	New	1 x 7	7.9
237	16+620	PUP	BHS	MCW	New	1 x 7	7.9
238	17+090	PUP	BHS	MCW	New	1 x 7	7.9
239	17+910	PUP	BHS	MCW	New	1 x 7	7.9
240	18+420	PUP	BHS	MCW	New	1 x 7	8
241	18+840	PUP	BHS	MCW	New	1 x 7	8
242	19+550	PUP	BHS	MCW	New	1 x 10.00	11.5
243	20+590	PUP	BHS	MCW	New	1 x 7	7.9
244	21+220	PUP	BHS	MCW	New	1 x 7	7.9
245	21+645	PUP	BHS	MCW	New	1 x 3	3
246	21+910	PUP	BHS	MCW	New	1 x 7	7.9

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
247	22+230	PUP	BHS	MCW	New	1 x 7.0	8
248	23+480	PUP	BHS	MCW	New	1 x 7	7.9
249	23+700	PUP	BHS	MCW	New	1 x 7	7.9
250	24+250	PUP	BHS	MCW	New	1 x 7	7.9
251	24+640	PUP	BHS	MCW	New	1 x 7	7.9
252	25+030	PUP	BHS	MCW	New	1 x 7	7.9
253	26+340	PUP	BHS	MCW	New	1 x 7	7.9
254	26+920	PUP	BHS	MCW	New	1 x 7	7.9
255	27+800	PUP	BHS	MCW	New	1 x 7	8
256	28+300	PUP	BHS	MCW	New	1 x 7	8
257	28+990	PUP	BHS	MCW	New	1 x 7	8
258	29+390	PUP	BHS	MCW	New	1 x 7	8
259	30+640	PUP	BHS	MCW	New	1 x 7	8
260	32+990	PUP	BHS	MCW	New	1 x 7	8
261	34+060	PUP	BHS	MCW	New	1 x 7	8
262	34+890	PUP	BHS	MCW	New	1 x 7	8
263	35+730	PUP	BHS	MCW	New	1 x 7	8
264	36+310	PUP	BHS	MCW	New	1 x 7	8
265	36+690	PUP	BHS	MCW	New	1 x 7	7.9
266	37+620	PUP	BHS	MCW	New	1 x 7	7.9
267	38+480	PUP	BHS	MCW	New	1 x 7	7.9
268	38+820	PUP	BHS	MCW	New	1 x 7	8
269	40+305	PUP	BHS	MCW	New	1 x 7	8
270	41+370	PUP	BHS	MCW	New	1 x 7	8
271	41+650	PUP	BHS	MCW	New	1 x 7	8
272	42+860	PUP	BHS	MCW	New	1 x 7	8
273	43+420	PUP	BHS	MCW	New	1 x 7	8
274	45+390	PUP	BHS	MCW	New	1 x 7	8
275	46+240	PUP	BHS	MCW	New	1 x 7	8
276	46+920	PUP	BHS	MCW	New	1 x 7	8
277	47+950	PUP	BHS	MCW	New	1 x 7	7.9
278	48+880	PUP	BHS	MCW	New	1 x 7	8
279	49+280	PUP	BHS	MCW	New	1 x 7	8
280	50+770	PUP	BHS	MCW	New	1 x 7	8
281	51+410	PUP	BHS	MCW	New	1 x 7	8
282	53+970	PUP	BHS	MCW	New	1 x 7	8
283	54+910	PUP	BHS	MCW	New	1 x 7	8
284	55+500	PUP	BHS	MCW	New	1 x 7	8
285	57+135	PUP	BHS	MCW	New	1 x 7	7.9
286	57+410	PUP	BHS	MCW	New	1 x 7	7.9
287	58+350	PUP	BHS	MCW	New	1 x 7	7.9
288	58+990	PUP	BHS	MCW	New	1 x 7	8
289	59+870	PUP	BHS	MCW	New	1 x 7.2	8.4
290	61+610	PUP	BHS	MCW	New	1 x 7	8
291	62+450	PUP	BHS	MCW	New	1 x 7	8
292	63+315	PUP	BHS	MCW	New	1 x 7	8.2
293	63+760	PUP	BHS	MCW	New	1 x 7	7.8
294	65+500	PUP	BHS	MCW	New	1 x 7	8
295	66+410	PUP	BHS	MCW	New	1 x 7	8.2
296	66+930	PUP	BHS	MCW	New	1 x 7	8
297	68+510	PUP	BHS	MCW	New	1 x 7	8.2
298	68+910	PUP	BHS	MCW	New	1 x 7	8.2
299	70+200	PUP	BHS	MCW	New	1 x 7	8.3

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
300	70+660	PUP	BHS	MCW	New	1 x 7	8.3
301	71+770	PUP	BHS	MCW	New	1 x 7	8.3
302	74+240	PUP	BHS	MCW	New	1 x 7	8
303	75+135	PUP	BHS	MCW	New	1 x 7	8
304	75+640	PUP	BHS	MCW	New	1 x 7	8.2
305	76+430	PUP	BHS	MCW	New	1 x 7	8.2
306	77+105	PUP	BHS	MCW	New	1 x 7	8.2
307	79+100	PUP	BHS	MCW	New	1 x 7	8.2
308	80+760	PUP	BHS	MCW	New	1 x 7	7.8
309	82+120	PUP	BHS	MCW	New	1 x 7	8
310	84+555	PUP	BHS	MCW	New	1 x 7	8
311	85+020	PUP	BHS	MCW	New	1 x 7	8
312	85+380	PUP	BHS	MCW	New	1 x 7	7.8
313	85+770	PUP	BHS	MCW	New	1 x 7	7.8
314	86+740	PUP	BHS	MCW	New	1 x 7	7.8
315	87+580	PUP	BHS	MCW	New	1 x 7	8
316	88+610	PUP	BHS	MCW	New	1 x 7	7.9
317	88+800	PUP	BHS	MCW	New	1 x 7	8.1
318	89+610	PUP	BHS	MCW	New	1 x 7	8.1
319	90+010	PUP	BHS	MCW	New	1 x 7	7.8
320	90+220	PUP	BHS	MCW	New	1 x 7	7.8
321	90+470	PUP	BHS	MCW	New	1 x 7	7.8
322	91+210	PUP	BHS	MCW	New	1 x 7	7.8
323	92+570	PUP	BHS	MCW	New	1 x 7	7.8
324	92+740	PUP	BHS	MCW	New	1 x 10	11.2
325	93+420	PUP	BHS	MCW	New	1 x 7	7.8
326	93+870	PUP	BHS	MCW	New	1 x 7	7.9
327	94+595	PUP	BHS	MCW	New	1 x 7	7.9
328	95+945	PUP	BHS	MCW	New	1 x 7	7.9
329	97+570	PUP	BHS	MCW	New	1 x 7	7.9
330	98+850	PUP	BHS	MCW	New	1 x 7	8
331	100+070	PUP	BHS	MCW	New	1 x 7	8
332	101+235	PUP	BHS	MCW	New	1 x 7	8
333	102+170	PUP	BHS	MCW	New	1 x 7	8
334	103+810	PUP	BHS	MCW	New	1 x 7.3	8.3
335	105+050	PUP	BHS	MCW	New	1 x 7	7.8
336	105+390	PUP	BHS	MCW	New	1 x 7	7.8
337	105+890	PUP	BHS	MCW	New	1 x 7	7.9
338	106+320	PUP	BHS	MCW	New	1 x 7	7.8
339	106+790	PUP	BHS	MCW	New	1 x 7	8.2
340	107+665	PUP	BHS	MCW	New	1 x 7	7.9
341	109+590	PUP	BHS	MCW	New	1 x 7	7.9
342	109+975	PUP	BHS	MCW	New	1 x 7	8.2
343	110+550	PUP	BHS	MCW	New	1 x 7	8.2
344	111+485	PUP	BHS	MCW	New	1 x 7	7.9
345	111+740	PUP	BHS	MCW	New	1 x 7	7.9
346	112+340	PUP	BHS	MCW	New	1 x 7	7.9
347	112+840	PUP	BHS	MCW	New	1 x 7	7.9
348	113+440	PUP	BHS	MCW	New	1 x 7	8
349	115+380	PUP	BHS	MCW	New	1 x 7	8.1
350	115+960	PUP	BHS	MCW	New	1 x 7	8
351	116+430	PUP	BHS	MCW	New	1 x 7	8
352	116+830	PUP	BHS	MCW	New	1 x 7	8.1

S No.	Design chainage	Type of Structure	Side	Structure on	Age of Structure	Span Arrangement (No x Length)	Total Length of Structure
353	117+380	PUP	BHS	MCW	New	1 x 7	8
354	117+885	PUP	BHS	MCW	New	1 x 7	7.8
355	118+240	PUP	BHS	MCW	New	1 x 7	7.8
356	120+390	PUP	BHS	MCW	New	1 x 7	7.8
357	120+920	PUP	BHS	MCW	New	1 x 7	7.8
358	121+290	PUP	BHS	MCW	New	1 x 7	7.8
359	121+570	PUP	BHS	MCW	New	1 x 7	7.8
360	122+110	PUP	BHS	MCW	New	1 x 7	7.8
361	122+590	PUP	BHS	MCW	New	1 x 7	7.8
362	123+030	PUP	BHS	MCW	New	1 x 7	7.8
363	124+040	PUP	BHS	MCW	New	1 x 7	7.8
364	124+545	PUP	BHS	MCW	New	1 x 7	7.8
365	125+540	PUP	BHS	MCW	New	1 x 7	7.8
366	126+440	PUP	BHS	MCW	New	1 x 7	7.8
367	127+130	PUP	BHS	MCW	New	1 x 7	7.9
368	128+060	PUP	BHS	MCW	New	1 x 7	7.9
369	128+545	PUP	BHS	MCW	New	1 x 7	8
370	128+560	PUP	BHS	MCW	New	1 x 7	8
371	129+125	PUP	BHS	MCW	New	1 x 7	7.9
372	129+605	PUP	BHS	MCW	New	1 x 7	7.9
373	129+900	PUP	BHS	MCW	New	1 x 7	7.9
374	132+020	PUP	BHS	MCW	New	1 x 7	7.7
375	134+200	PUP	BHS	MCW	New	1 x 7	7.8

1.8 QUALITY AUDIT

1.8.1.1 Embankment & Subgrade

The embankment for project road has been constructed with available soils from nearby areas. The soil appears to be silty sandy in nature and embankment appears to be in good condition over the entire length of project except few locations. No major settlements or depressions have been noted even at high embankment locations. There are no marshy/water logging areas along the length of project road.

The subgrade of the project road appears to be in good condition as revealed by test pit investigations. Laboratory results conducted on subgrade indicates that most of subgrade soils are of coarse-grained soils. Condition of subgrade appears to intact as no major evidence of subsidence of depressions exists along the corridor. CBR of subgrade soils for lab testing indicates a good value greater than 10% at all the locations.

1.8.1.2 Pavement Condition

The project corridor has been provided with rigid pavement over entire length, Toll Plaza and even on Interchanges also. Condition of Rigid pavement of main carriageway appears to be intact with distress in LHS & RHS Direction. Cracks, Raveling, Patching, Edge Breaks and Panel Replacements are observed. List of the distress observed is presented below:

Summary of the Rigid pavement condition is presented in the following table

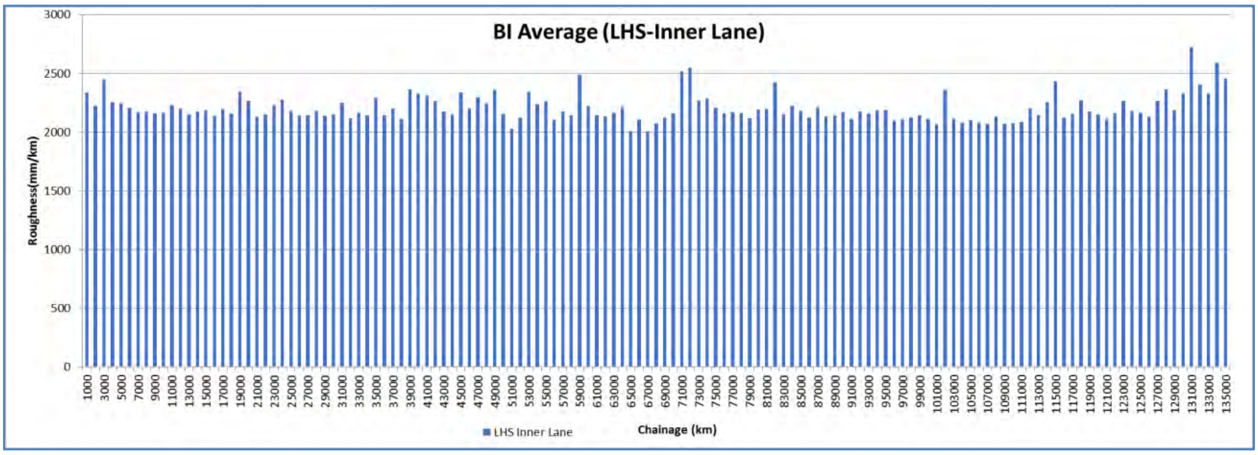
Table 29: Summary of Rigid Pavement Condition

Type of Distress	Summary	LHS	RHS	Loops
Multiple cracks	2211	1377	818	16
Longitudinal Cracking	592	246	60	286
Transverse Cracking	217	168	30	19
Corner Break	265	120	135	10
Ravelling	989	454	529	6
Pop outs	6	2	4	0
Patches	122	29	88	5
Edge Breaks	8	7	1	0
Settle panels	130	60	32	38
Replaced		784	459	0

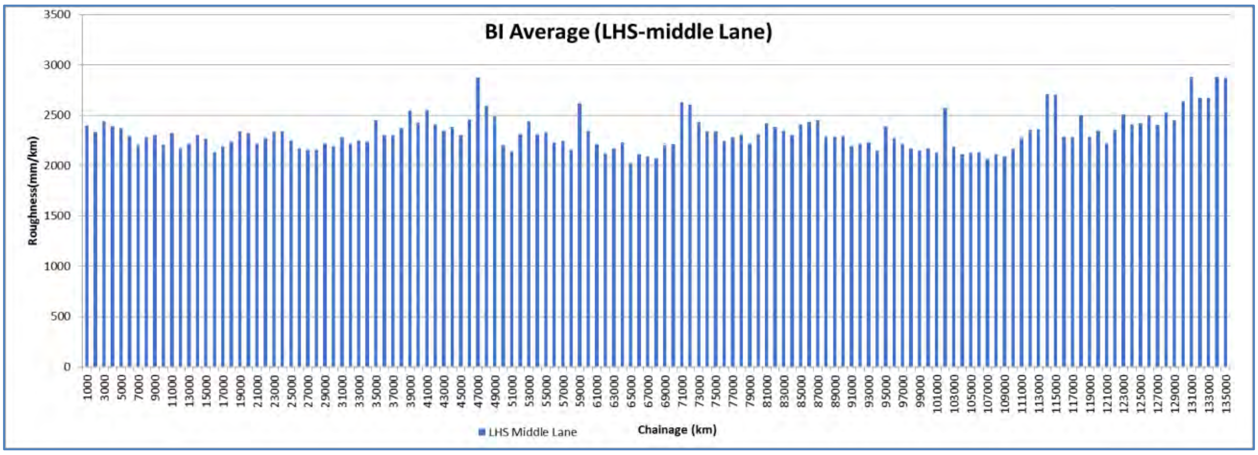
Note: As earlier schedule, the panels to be replaced 2503 and as on-site visit date, about 1243 panels have been already replaced by EPC and yet to replace another 1260 panels. As per site inventory and condition, total panels to be replaced or rectified is 2287 and considering the work to be done by EPC, the net panels to be replaced would be 1027 numbers. And accordingly considered the cost for the same.

1.8.1.3 Roughness

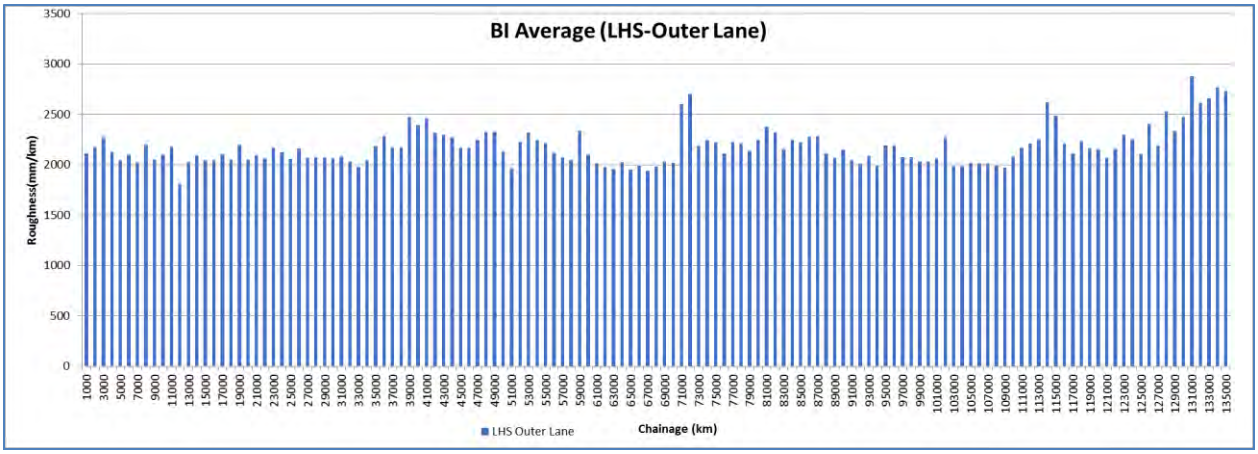
The roughness surveys conducted along the corridor indicate Fair riding quality over the length of project corridor. Bar diagrams showing the Lane Kilometer wise roughness along the project road are presented below:



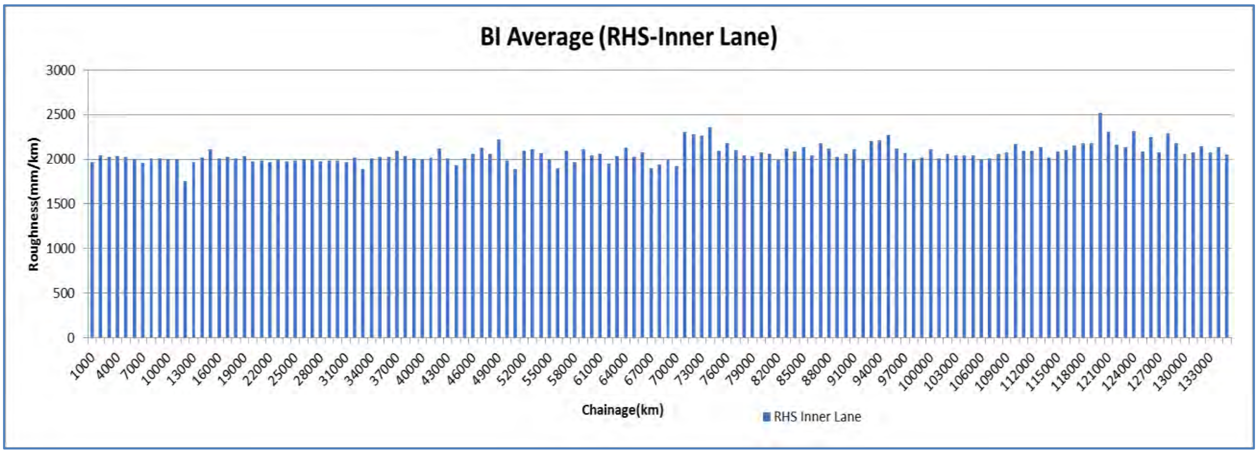
BI Avg LHS-Inner Lane



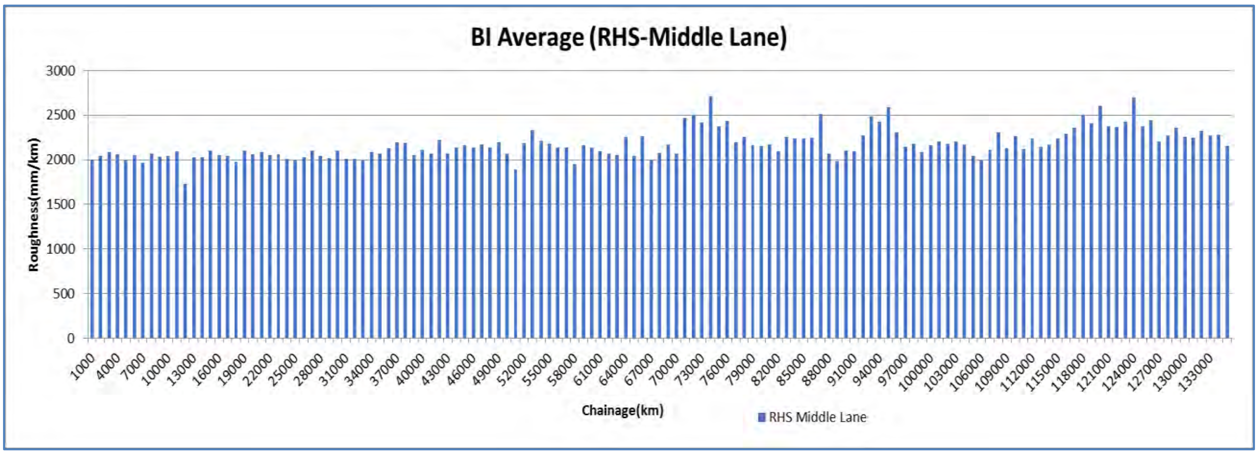
BI Avg LHS-Middle Lane



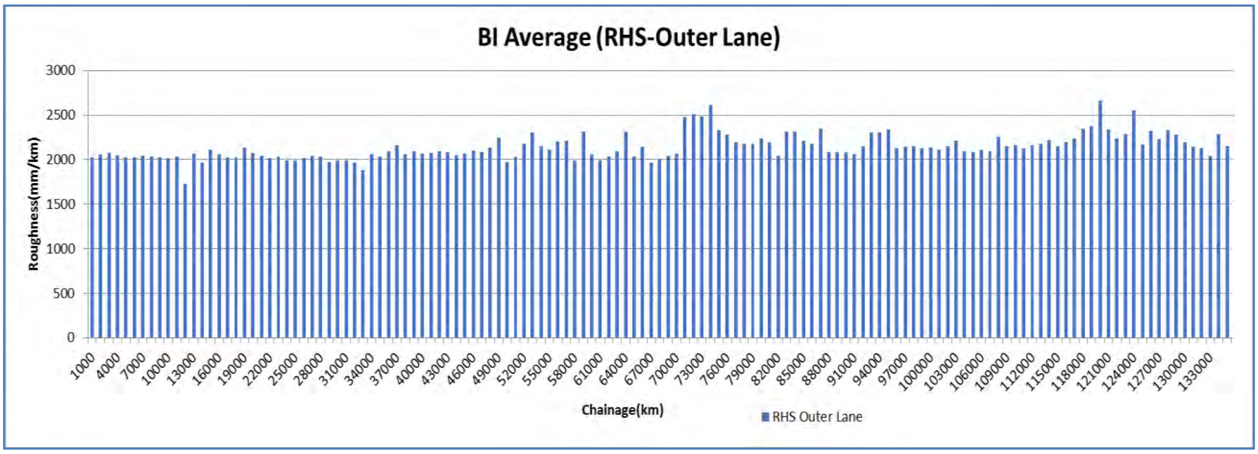
BI Avg LHS-Outer Lane



BI Avg RHS-Inner Lane



BI Avg RHS-Middle Lane



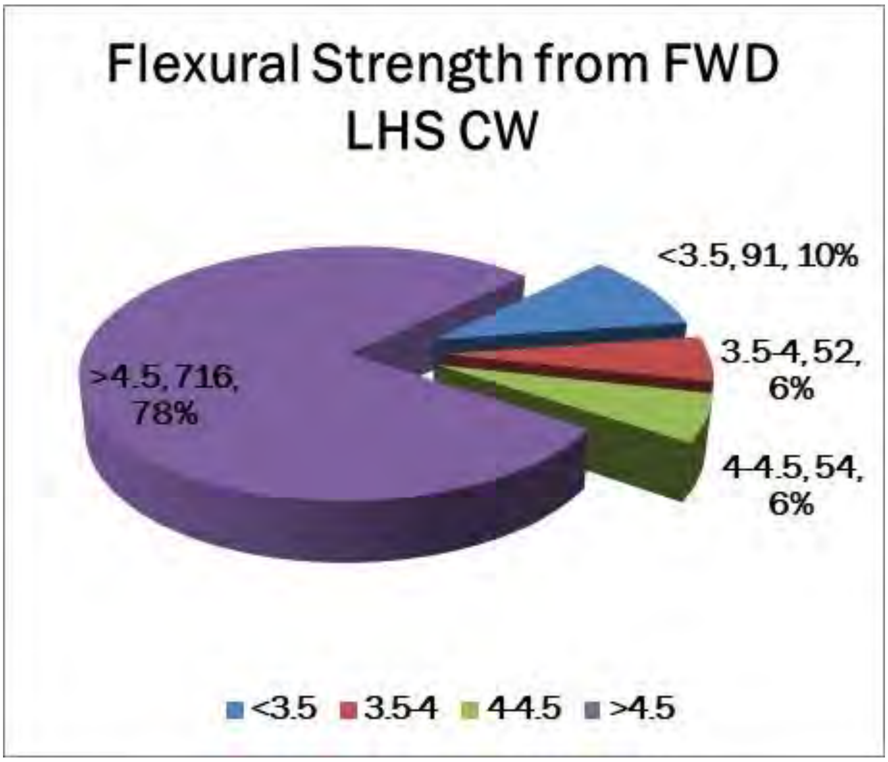
BI Avg RHS-Outer Lane

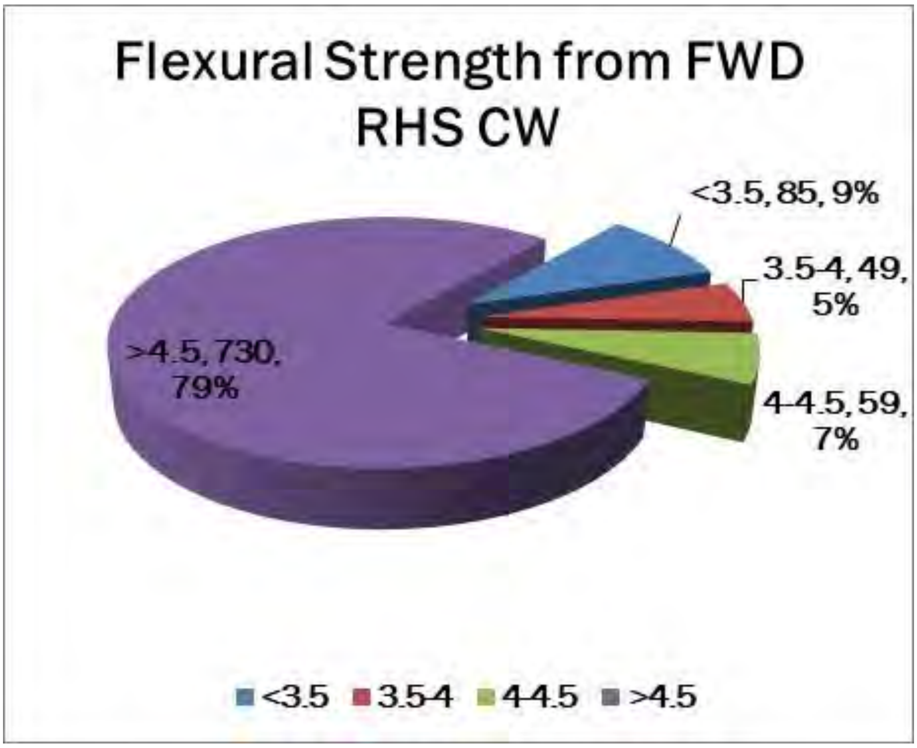
Almost entire project road is having Fair to good riding quality. From the above charts, 10Km on LHS Inner Lane &1Km on RHS inner lane and 36Km on LHS Middle lane & 15Km on RHS middle LAne,14Km on LHS outer lane & 6Km on RHS Outer Lane of the project road requires functional overlay as unevenness Index (UI) is more than 2400 mm/km.

1.8.1.4 FWD Deflections

1.8.1.5 Flexural strength of Concrete Rigid Pavement

Pie charts showing the variation of the Flexural Strength estimated from FWD Surveys are presented below:


Flexural Strength from FWD
LHS CW
<3.5, 91, 10%
3.5-4, 52, 6%
4-4.5, 54, 6%
>4.5, 716, 78%
<3.5
3.5-4
4-4.5
>4.5

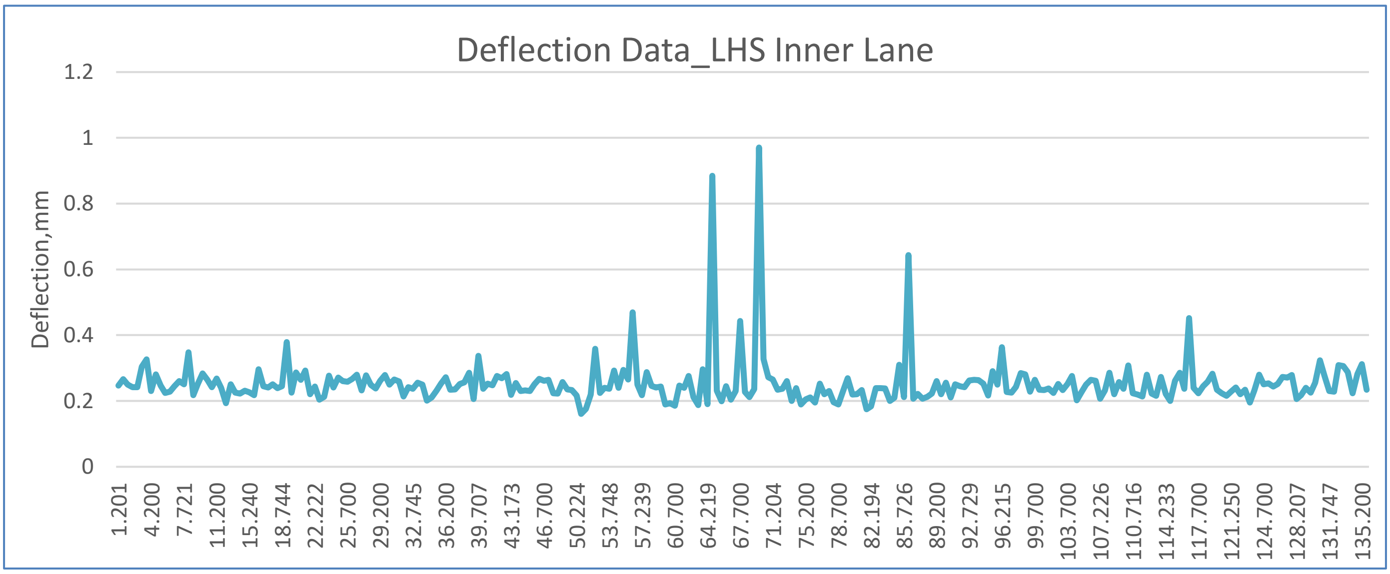

Flexural Strength from FWD
RHS CW
<3.5, 85, 9%
3.5-4, 49, 5%
4-4.5, 59, 7%
>4.5, 730, 79%
<3.5
3.5-4
4-4.5
>4.5

Flexural Strength of the PQC estimated from FWD Surveys indicates that more than 79% of samples in both LHS & RHS Carriageways are having values greater than 4.5 MPa. And 6% of samples in LHS carriageway and 5% of samples in RHS carriageway are having values between 3.5 - 4.5 MPa.

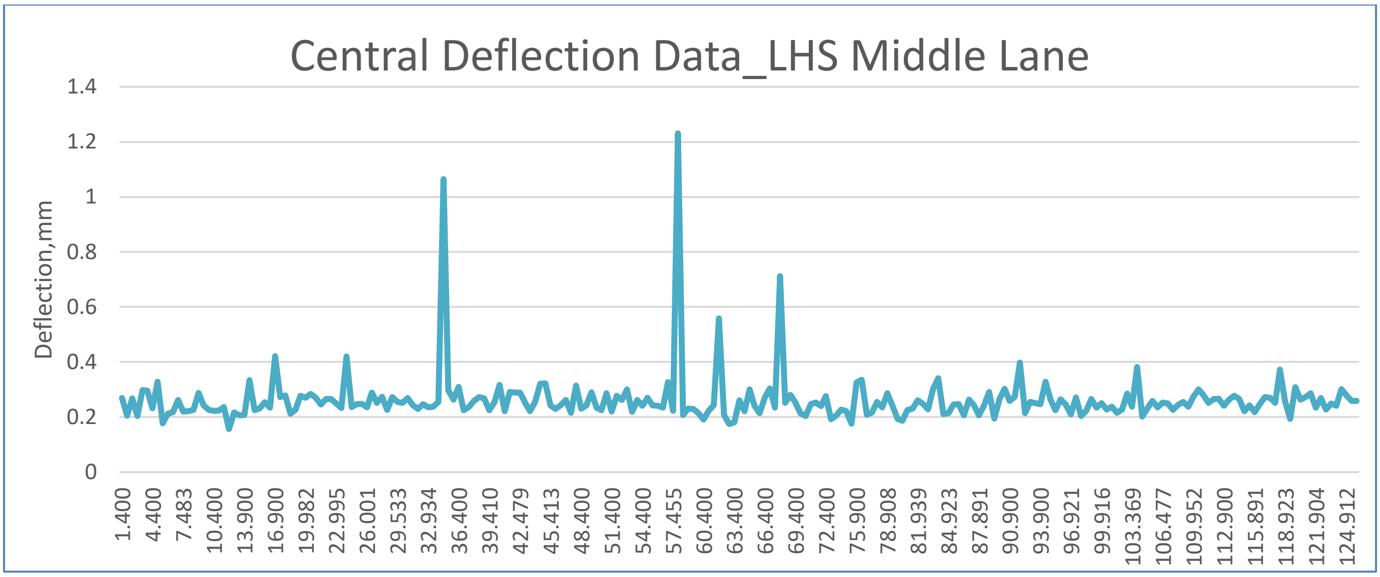
The PQC pavement was constructed and opened to traffic in 2019. It is already under traffic for 2 years. Initial design period for the PQC slab is 30 years out of which 2 years is already consumed. However, it is seen from FWD and core results that most of the length of pavement is intact and exhibit good structural strength which will have life for coming 30 years of operation except for few Km where Flexural strength is less than 4.5 Mpa.

1.8.1.6 Detection of Voids underneath the Rigid Pavement

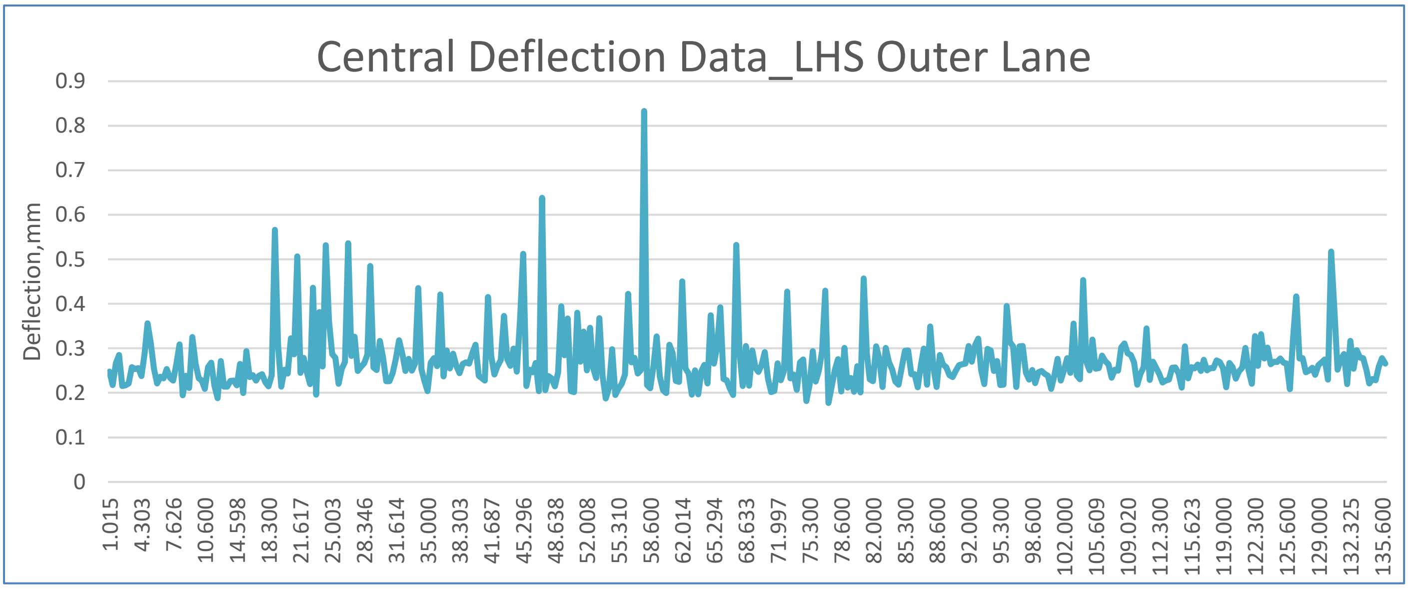
- Deflection of Voids below a pavement slab can be easily be done by a FWD. Deflections are measured along the wheel path and a plot of central deflections versus distance has to be made.
- The locations where the deflections are much higher than the normal may indicate presence of voids. Sample is shown in below



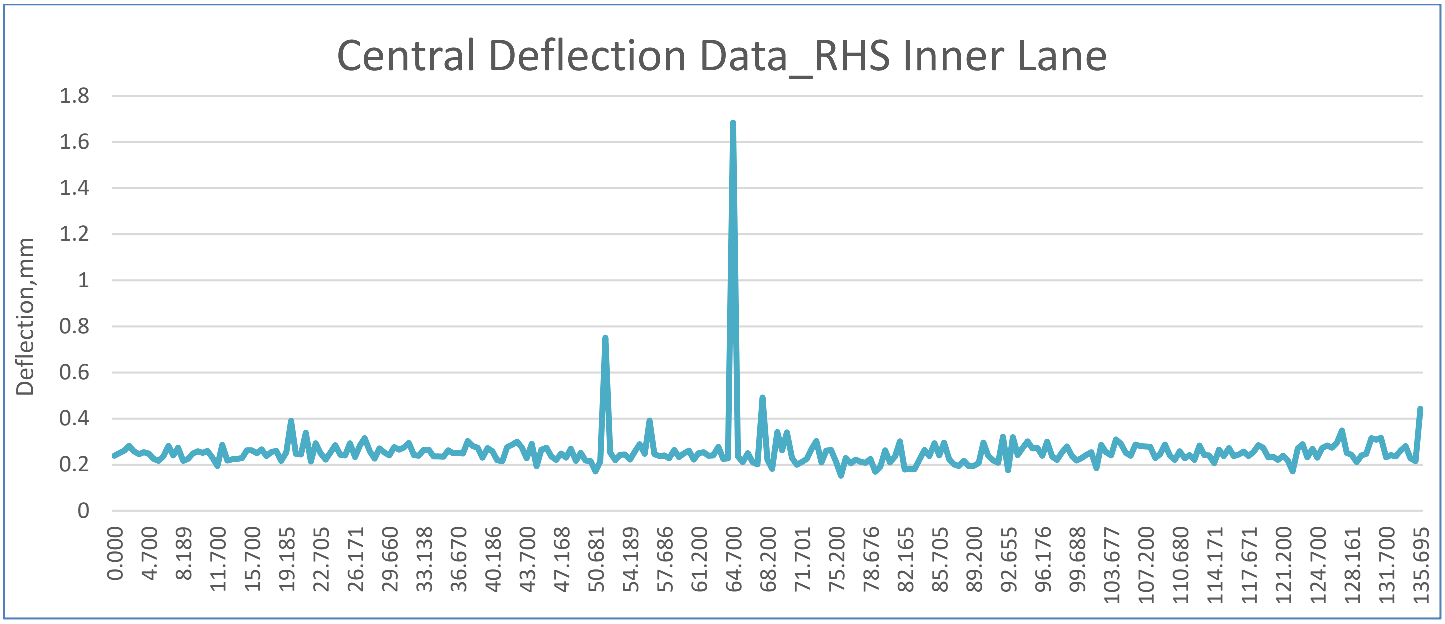
Central Deflection Data on LHS Inner Lane



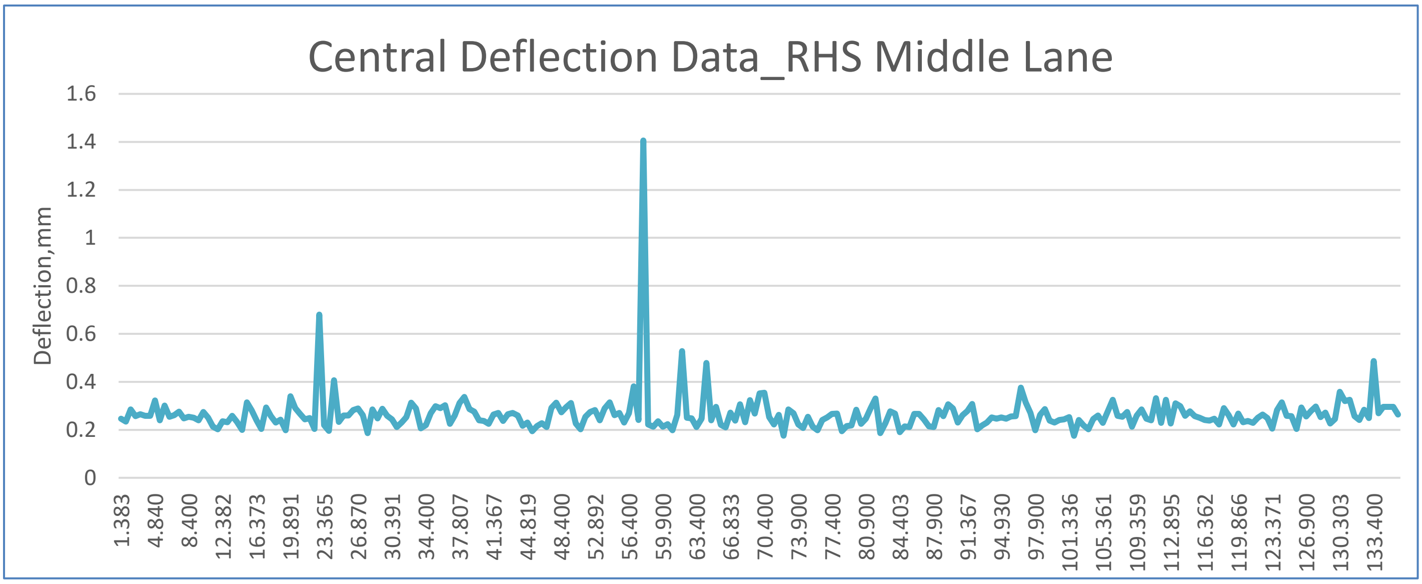
Central Deflection Data on LHS Middle Lane



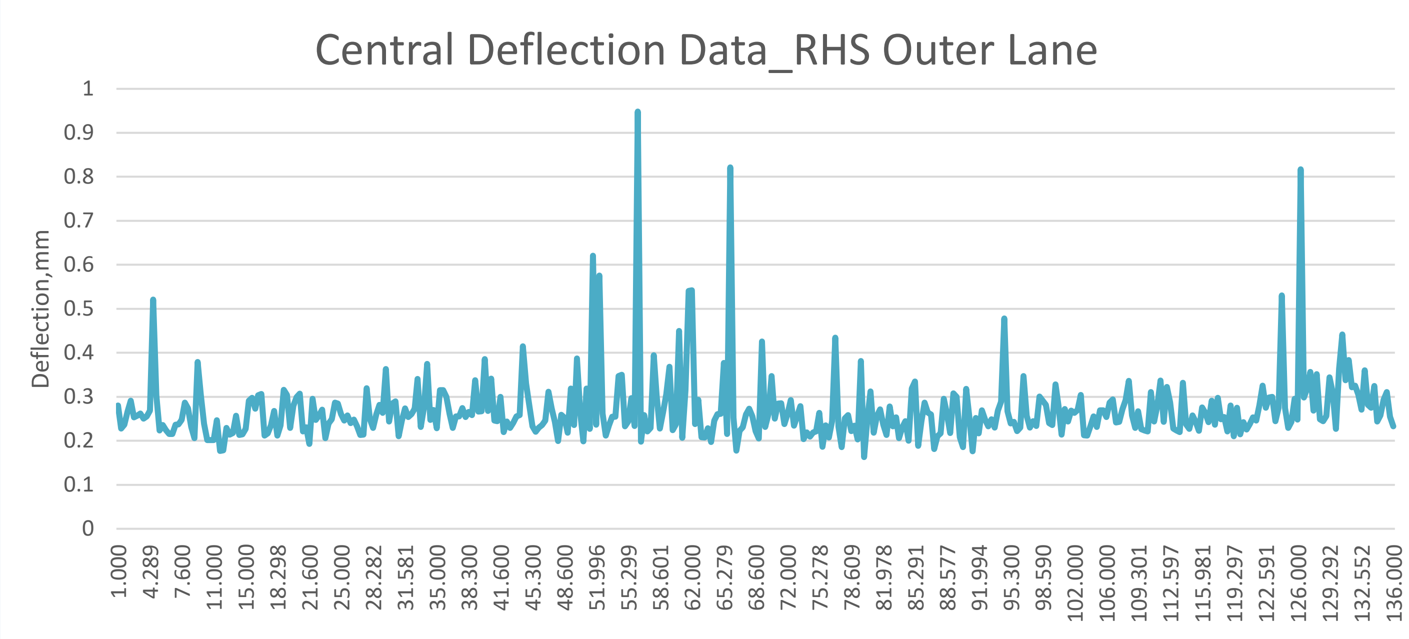
Central Deflection Data on LHS Outer Lane



Central Deflection Data on RHS Inner Lane



Central Deflection Data on RHS Middle Lane



Central Deflection Data on RHS Outer Lane

Summary of the voids presented in the both directions are represented in the below table:

Table 30: Summary of poor Sections

LHS Direction			RHS Direction		
Chainage (Km)	Deflection	Side	Chainage (Km)	Deflection	Side
16.900	0.422	LHS Middle	4.600	0.521	RHS OUTER
19.000	0.566	LHS OUTER	22.916	0.681	RHS Middle
21.313	0.507	LHS OUTER	24.400	0.406	RHS Middle
23.016	0.436	LHS OUTER	44.000	0.415	RHS OUTER
23.909	0.420	LHS Middle	51.538	0.620	RHS OUTER
24.322	0.532	LHS OUTER	51.680	0.751	RHS INNER
26.618	0.536	LHS OUTER	52.289	0.575	RHS OUTER
29.006	0.485	LHS OUTER	56.300	0.948	RHS OUTER
34.073	0.436	LHS OUTER	57.887	1.406	RHS Middle
34.928	1.065	LHS Middle	60.597	0.449	RHS OUTER
36.300	0.421	LHS OUTER	61.600	0.540	RHS OUTER
41.350	0.416	LHS OUTER	61.900	0.529	RHS Middle
45.296	0.512	LHS OUTER	62.000	0.542	RHS OUTER
47.346	0.638	LHS OUTER	64.391	0.478	RHS Middle
56.223	0.470	LHS INNER	64.700	1.684	RHS INNER
56.305	0.422	LHS OUTER	65.966	0.822	RHS OUTER
57.900	1.231	LHS Middle	67.692	0.492	RHS INNER
58.065	0.833	LHS OUTER	69.300	0.425	RHS OUTER
61.894	0.559	LHS Middle	76.992	0.435	RHS OUTER
62.014	0.450	LHS OUTER	94.586	0.478	RHS OUTER
64.722	0.885	LHS INNER	124.288	0.531	RHS OUTER
67.700	0.443	LHS INNER	126.284	0.817	RHS OUTER

LHS Direction		
Chainage (Km)	Deflection	Side
67.707	0.532	LHS OUTER
67.881	0.712	LHS Middle
69.700	0.971	LHS INNER
73.000	0.428	LHS OUTER
77.000	0.429	LHS OUTER
81.008	0.457	LHS OUTER
86.258	0.643	LHS INNER
104.305	0.453	LHS OUTER
116.700	0.452	LHS INNER
126.600	0.417	LHS OUTER
130.321	0.517	LHS OUTER

RHS Direction		
Chainage (Km)	Deflection	Side
130.585	0.441	RHS OUTER
133.400	0.487	RHS Middle
135.695	0.443	RHS INNER

Altogether about 6.80 Km length is considered for voids filling

1.8.1.7 Pavement Composition

Average Crust composition for main Carriageway (Rigid Pavement) is taken from the DPR report for analysis:

Schedule - A shows crust composition for the main carriageway is as:

Rigid Pavement	
PQC, mm	300
DLC, mm	150
GSB, mm	150
Subgrade, mm	600

1.8.1.8 CD Structures

The CD structures along the corridor are constructed appears to be as per the standards and specifications prevailing during execution. Presently, all structures appear new and seem to be in good condition without any major distress. Structure wise conditions along the project corridor are presented below:

The Summary of Major Structures is as listed below.

Table 31: Summary of Major Structures

S. No	Type of Structure	No. of Structures			Total No. of Structures	Total No. of Locations
		LHS	RHS	BHS		
1.00	ROB	8	8	0	16	10
2.00	MJB	4	4	0	8	4
3.00	MNB	37	38	0	75	43
4.00	Flyover	12	12	3	27	15
5.00	VUP	4	2	63	69	62
6.00	LVUP	1	0	10	11	11
7	PUP	1	2	152	155	155

*BHS-Box type Structures

Table 32: The Summary of Culverts is as listed below

S. No	Type of Structure	No. of Structures			Total No. of Structures	Total No. of Locations
		LHS	RHS	BHS		
1	PC	0	0	24	24	24
2	BC	0	0	108	108	108

Table 33: SUMMARY OF EXPANSION JOINTS & BEARINGS

S. No	Type of Structure	Expansion joints		Bearings			
				Pot PTFE		Elastomeric	
		Old	New	Old	New	Old	New
1	ROB	0.00	40.00	0.00	414.00	0.00	0.00
2	MJB	0.00	34.00	0.00	402.00	0.00	0.00
3	MNB	0.00	102.00	0.00	716.00	0.00	0.00
4	Flyover	0.00	40.00	0.00	666.00	0.00	72.00
5	VUP	0.00	0.00	0.00	14.00	0.00	0.00
Total No's		0.00	216.00	0.00	2212.00	0.00	72.00

Table 34: SUMMARY OF SUPERSTRUCTURES

Sl.no	Str	PSC Box & Steel Girder	PSC Box/Girder	RCC & PSC Girder	RCC Box	RCC Girder	RCC Slab	Steel Girders	Steel Girders	Steel Truss	Total no.of Structures
1	ROB	2	0	0	0	0	0	12	12	2	28
2	MJB	0	8	0	0	0	0	0	0	0	8
3	MNB	0	34	0	13	26	2	0	0	0	75
4	Flyover	0	19	2	6	0	0	0	0	0	27
5	VUP	0	2	0	66	1	0	0	0	0	69
6	LVUP	0	0	0	7	0	0	0	0	0	7
7	PUP	0	0	0	72	0	0	0	0	0	72
Total		2	63	2	164	27	2	12	12	2	286

Table 35: SUMMARY OF SUBSTRUCTURES

S. No	Type of Structure	ABUTMENT			PIER		
		RCC Wall Type	RCC Wall Type with RE Wall	RCC Circular type with RE Wall	RCC Wall Type	Trestle type	RCC Circular type
1	ROB	8	0	8	4	0	6
2	MJB	8	0	0	2	0	6
3	MNB	6	26	22	0	0	0
4	Flyover	0	6	15	0	0	7
5	VUP	0	0	3	0	0	2
Total No's		22	32	48	6	0	21

Chainage: 12+780

General Description

LHS MCW

• Type of Structure	: MJB
• Span Arrangement	: 10 x 60.00 m
• Total deck width of structure	: 1 x 19.50 m
• Type of Foundation	: Not visible
• Type of Substructure	: RCC Wall Type Abutment & Circular Type Pier
• Type of Superstructure	: PSC Box Girder
• Type of Bearing	: Pot PTFE
• Type of Railing / Crash Barrier	: RCC Crash Barrier
• Method of Inspection	: Visual

Observations

Visual Observations on condition of the structure are as below:

- ✓ Approach slab settlement observed at A1.
- ✓ Damages observed on wearing coat.
- ✓ All expansion joint rubber sealant damaged.
- ✓ Drainage spouts clogged at some locations.

Chainage: 12+780

General Description

RHS MCW

- Type of Structure : MJB
- Span Arrangement : 10 x 60 m
- Total deck width of structure : 19.5 m
- Type of Foundation : Not visible
- Type of Substructure : RCC Wall Type Abutment & Circular Type Pier
- Type of Superstructure : PSC Box Girder
- Type of Bearing : Pot PTFE
- Type of Railing / Crash Barrier : RCC Crash Barrier
- Method of Inspection : Visual

Observations

Visual Observations on condition of the structure are as below:

- ✓ Damages observed on wearing coat.
- ✓ All expansion joint rubber sealant damaged.
- ✓ Drainage spouts clogged at some locations.

Chainage: 15+820

General Description

BHS

- Type of Structure : FLYOVER
- Span Arrangement : 1 x 17 m
- Total deck width of structure : 2 x 19.50 m
- Type of Foundation : Not visible
- Type of Substructure : RCC Box
- Type of Superstructure : RCC Box
- Type of Bearing : NA
- Type of Railing / Crash Barrier : RCC Crash Barrier
- Method of Inspection : Visual

Observations

Visual Observations on condition of the structure are as below:

✓ Structure is in fair condition.

Chainage: 19+110

General Description

BHS

• Type of Structure	: ROB
• Span Arrangement	: 1 x 70 m
• Total deck width of structure	: 2 x 19.50 m
• Type of Foundation	: Not visible
• Type of Substructure	: Circular type Pier with RE Wall
• Type of Superstructure	: Steel Truss with RCC Deck Slab
• Type of Bearing	: Pot PTFE
• Type of Railing / Crash Barrier	: RCC Crash Barrier
• Method of Inspection	: Visual

Observations

Visual Observations on condition of the structure are as below:

- ✓ Exp. joints partially filled with debris.
- ✓ Drainage spouts clogged at some locations.
- ✓ Quadrant protection works partially damaged at RHS.
- ✓ Structure condition good.

Chainage: 19+890 (20/3)

General Description

LHS

- Type of Structure : MNB
- Span Arrangement : 1 x 16.0m
- Total deck width of structure : 19.5m
- Type of Foundation : Not Visible
- Type of Substructure : RCC Wall type with RE Wall
- Type of Superstructure : RCC Girder
- Type of Bearing : Pot PTFE
- Type of Railing / Crash Barrier : RCC Crash Barrier
- Method of Inspection : Visual

Visual Observations on condition of the structure are as below:

- ✓ Expansion joints filled with debris.
- ✓ Structure is good condition.

Chainage: 19+890 (20/3)
General Description
RHS

- Type of Structure : MNB
- Span Arrangement : 1 x 16.0m
- Total deck width of structure : 19.5m
- Type of Foundation : Not Visible
- Type of Substructure : RCC Wall type with RE Wall
- Type of Superstructure : RCC Girder
- Type of Bearing : Pot PTFE
- Type of Railing / Crash Barrier : RCC Crash Barrier
- Method of Inspection : Visual

Visual Observations on condition of the structure are as below:

- ✓ Expansion joints filled with debris.
- ✓ Structure is good condition.

Chainage: 108+100 (109/1)
General Description
BHS

- Type of Structure : VUP
- Span Arrangement : 1 x 14.0m
- Total deck width of structure : 2 x 17.50m
- Type of Foundation : Not visible
- Type of Substructure : RCC Circular type with RE Wall
- Type of Superstructure : Precast planks
- Type of Bearing : NA
- Type of Railing / Crash Barrier : RCC Crash Barrier
- Method of Inspection : Visual

Observations
Visual Observations on condition of the structure are as below:

- ✓ Drainage spouts are not provided.
- ✓ Structure condition good.

Chainage: 11+140

General Description
BHS

- Type of Structure : PUP
- Span Arrangement : 1 x 7.00
- Total deck width of structure : 2 x 17.50
- Type of Foundation : Raft
- Type of Substructure : RCC Box
- Type of Superstructure : RCC Box
- Type of Bearing : NA
- Type of Railing / Crash Barrier : RCC Crash Barrier
- Method of Inspection : Visual

Observations

Visual Observations on condition of the structure are as below:

✓ Structure condition is good.

Details of Culverts

S No	Location (Km)	Type of Culvert	Span Arrangements (m)	Carriage Way Width (m)	Deck Width (m)	Quadrant Stone Pitching (Yes/No)	Floor Aprons (Yes/No)	Observations as per site
1	1+400	RCC Box	1 x 3 x 2.5	2 x 16.50	56.4	No	NV	> Structure is in fair condition
2	4+050	RCC Box	1 x 6 x 1.5	2 x 16.50	45.0	No	NV	> Structure is in fair condition
3	5+160	RCC Box	1 x 3 x 2.5	2 x 16.50	99.5	No	NV	> Heavy vegetation on vent way.
4	7+370	RCC Box	1 x 3 x 2.5	2 x 16.50	55.5	No	NV	> Water stagnated under the structure.
5	10+640	RCC Box	1 x 3 x 2.5	2 x 16.50	55.5	No	NV	> Water stagnated under the structure.
6	10+840	RCC Box	1 x 3 x 2.5	2 x 16.50	65.8	No	NV	> Water stagnated under the structure.
7	19+470	RCC Box	1 x 3 x 2.5	2 x 16.50	140	No	NV	> Heavy vegetation on vent way.
8	20+950	RCC Box	1 x 3 x 2.5	2 x 16.50	41	No	NV	> Water stagnated under the structure.
9	21+645	RCC Box	1 x 3 x 2.5	2 x 16.50	42	No	NV	> Water stagnated under the structure.
10	22+790	RCC Box	1 x 3 x 2.5	2 x 16.50	65	No	NV	> Water stagnated under the structure.
11	25+290	RCC Box	1 x 3 x 2.5	2 x 16.50	49	No	NV	> Water stagnated under the structure.
12	26+095	RCC Box	1 x 3 x 2.5	2 x 16.50	50.23	NV	NV	> Not accessible
13	27+470	RCC Box	1 x 3 x 2.5	2 x 16.50	56	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
14	28+385	RCC Box	1 x 3 x 2.5	2 x 16.50	54.5	No	NV	> Water stagnated under the structure.
15	29+235	RCC Box	1 x 3 x 2.5	2 x 16.50	50	NV	NV	> Not accessible
16	31+690	RCC Box	1 x 3 x 2.5	2 x 16.50	63.5	No	NV	> Water stagnated under the structure.
17	35+170	RCC Box	1 x 3 x 2.5	2 x 16.50	53.3	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
18	36+355	RCC Box	1 x 3 x 2.5	2 x 16.50	46	No	NV	> Water stagnated under the structure.
19	37+130	RCC Box	1 x 3 x 2.5	2 x 16.50	44.2	NV	NV	> Not accessible

S No	Location (Km)	Type of Culvert	Span Arrangements (m)	Carriage Way Width (m)	Deck Width (m)	Quadrant Stone Pitching (Yes/No)	Floor Aprons (Yes/No)	Observations as per site
20	37+655	RCC Box	1 x 3 x 2.5	2 x 16.50	51	No	NV	> Heavy vegetation on vent way.
21	37+845	RCC Box	1 x 3 x 2.5	2 x 16.50	48.2	NV	NV	> Not accessible.
22	38+945	RCC Box	1 x 3 x 2.5	2 x 16.50	55	No	NV	> Water stagnated under the structure.
23	39+615	Pipe Culvert	1 x 1.2	2 x 16.50	88.5	Yes	No	> Pipe condition good.
24	40+715	RCC Box	1 x 3 x 2.5	2 x 16.50	59.2	No	NV	> Water stagnated under the structure.
25	42+640	RCC Box	1 x 3 x 2.5	2 x 16.50	60.18	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
26	45+940	RCC Box	1 x 3 x 2.5	2 x 16.50	48.82	NV	NV	> Not accessible
27	47+750	RCC Box	1 x 3 x 2.5	2 x 16.50	39	No	Yes	> Vegetation on vent way.
28	48+180	RCC Box	1 x 3 x 2.5	2 x 16.50	51.3	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
29	52+825	Pipe Culvert	1 x 1.2	2 x 16.50	63	NV	NV	> Not accessible.
30	53+570	RCC Box	1 x 3 x 2.5	2 x 16.50	50.12	No	NV	> Heavy vegetation on vent way.
31	54+276	RCC Box	1 x 3 x 2.5	2 x 16.50	64	NV	NV	> Not accessible
32	54+497	RCC Box	1 x 3 x 2.5	2 x 16.50	67.3	NV	NV	> Not accessible
33	54+960	Pipe Culvert	1 x 1.2	2 x 16.50	70	No	NV	> Heavy vegetation on vent way.
34	55+540	RCC Box	1 x 3 x 2.5	2 x 16.50	40	NV	NV	> Not accessible
35	57+080	RCC Box	1 x 3 x 2.5	2 x 16.50	56	No	NV	> Heavy vegetation on vent way.
36	57+700	RCC Box	1 x 3 x 2.5	2 x 16.50	60	Yes	Yes	> Heavy vegetation on vent way.
37	60+011	RCC Box	1 x 3 x 2.5	2 x 16.50	52.75	No	NV	> Water stagnated under the structure.
38	60+806	RCC Box	1 x 3 x 2.5	2 x 16.50	55.87	No	NV	> Water stagnated under the structure.

S No	Location (Km)	Type of Culvert	Span Arrangements (m)	Carriage Way Width (m)	Deck Width (m)	Quadrant Stone Pitching (Yes/No)	Floor Aprons (Yes/No)	Observations as per site
39	63+039	RCC Box	1 x 3 x 2.5	2 x 16.50	50	No	NV	> Heavy vegetation on vent way.
40	64+214	RCC Box	1 x 3 x 2.5	2 x 16.50	63.14	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
41	64+630	RCC Box	1 x 3 x 2.5	2 x 16.50	72.05	No	NV	> Water stagnated under the structure.
42	65+280	RCC Box	1 x 3 x 2.5	2 x 16.50	60.27	No	NV	> Water stagnated under the structure.
43	65+755	Pipe Culvert	1 x 1.2	2 x 16.50	55.25	No	NV	> Heavy vegetation on vent way.
44	66+515	Pipe Culvert	1 x 1.2	2 x 16.50	51.07	No	NV	> Heavy vegetation on vent way.
45	66+755	Pipe Culvert	1 x 1.2	2 x 16.50	57	No	NV	> Heavy vegetation on vent way.
46	67+262	RCC Box	1 x 3 x 2.5	2 x 16.50	42	No	No	> Not accessible
47	67+700	RCC Box	1 x 3 x 2.5	2 x 16.50	58.7	NV	NV	> Not accessible
48	68+602	RCC Box	1 x 3 x 2.5	2 x 16.50	50	No	NV	> Heavy vegetation on vent way.
49	69+215	RCC Box	1 x 3 x 2.5	2 x 16.50	46.3	No	NV	> Heavy vegetation on vent way.
50	70+395	Pipe Culvert	1 x 1.2	2 x 16.50	57.8	No	NV	> Heavy vegetation on vent way.
51	70+851	RCC Box	1 x 3 x 2.5	2 x 16.50	50.2	No	No	> Not accessible
52	71+210	RCC Box	1 x 3 x 2.5	2 x 16.50	51	No	NV	> Water stagnated under the structure. > Structure is fair condition
53	74+450	RCC Box	1 x 3 x 2.5	2 x 16.50	48	No	NV	> Heavy vegetation on vent way.
54	75+395	RCC Box	1 x 3 x 2.5	2 x 16.50	43	No	No	> Not accessible
55	76+560	RCC Box	1 x 3 x 2.5	2 x 16.50	65	No	NV	> Heavy vegetation on vent way.
56	78+370	RCC Box	1 x 3 x 2.5	2 x 16.50	54.5	No	NV	> Structure is fair condition
57	78+715	RCC Box	1 x 3 x 2.5	2 x 16.50	50	No	NV	> Water stagnated under the structure.

S No	Location (Km)	Type of Culvert	Span Arrangements (m)	Carriage Way Width (m)	Deck Width (m)	Quadrant Stone Pitching (Yes/No)	Floor Aprons (Yes/No)	Observations as per site
58	79+560	RCC Box	1 x 3 x 2.5	2 x 16.50	56.3	No	No	> Not accessible
59	79+945	RCC Box	1 x 3 x 2.5	2 x 16.50	64	No	No	> Not accessible
60	80+415	RCC Box	1 x 3 x 2.5	2 x 16.50	65	No	No	> Not accessible
61	80+915	RCC Box	1 x 3 x 2.5	2 x 16.50	53	No	No	> Not accessible
62	81+380	RCC Box	1 x 3 x 2.5	2 x 16.50	60	No	No	> Not accessible
63	86+470	RCC Box	1 x 3 x 2.5	2 x 16.50	46	No	No	> Not accessible
64	87+715	RCC Box	1 x 3 x 2.5	2 x 16.50	49	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
65	87+930	RCC Box	1 x 3 x 2.5	2 x 16.50	52	No	NV	> Heavy vegetation on vent way.
66	88+380	RCC Box	1 x 3 x 2.5	2 x 16.50	50	No	NV	> Water stagnated under the structure. > Heavy vegetation on vent way.
67	89+490	RCC Box	1 x 3 x 2.5	2 x 16.50	63.19	No	NV	> Heavy vegetation on vent way.
68	90+215	RCC Box	1 x 3 x 2.5	2 x 16.50	52	No	NV	> Structure is fair condition
69	92+570	RCC Box	1 x 3 x 2.5	2 x 16.50	65.5	No	NV	> Structure is fair condition
70	93+145	RCC Box	1 x 3 x 2.5	2 x 16.50	51.37	No	NV	> Water stagnated under the structure.
71	94+470	RCC Box	1 x 3 x 2.5	2 x 16.50	54.39	No	NV	> Structure is fair condition
72	95+315	RCC Box	1 x 3 x 2.5	2 x 16.50	52	No	NV	> Water stagnated under the structure. > Vegetation on vent way.
73	96+280	RCC Box	1 x 3 x 2.5	2 x 16.50	61.5	No	No	> Not accessible
74	96+845	RCC Box	1 x 3 x 2.5	2 x 16.50	70	No	No	> Not accessible
75	103+970	RCC Box	1 x 3 x 2.5	2 x 16.50	60.17			
76	104+885	RCC Box	1 x 3 x 2.5	2 x 16.50	50.55	No	NV	> Structure is fair condition
77	105+735	RCC Box	1 x 3 x 2.5	2 x 16.50	50			
78	106+450	RCC Box	1 x 3 x 2.5	2 x 16.50	50.5	No	No	> Vegetation on structure location.

S No	Location (Km)	Type of Culvert	Span Arrangements (m)	Carriage Way Width (m)	Deck Width (m)	Quadrant Stone Pitching (Yes/No)	Floor Aprons (Yes/No)	Observations as per site
79	110+265	RCC Box	1 x 3 x 2.5	2 x 16.50	48.5	No	NV	> Water stagnated under the structure. > Vegetation on vent way.
80	111+240	RCC Box	1 x 3 x 2.5	2 x 16.50	54	No	NV	> Structure is fair condition
81	111+740	RCC Box	1 x 3 x 2.5	2 x 16.50	48	No	NV	> Structure is fair condition
82	112+585	RCC Box	1 x 3 x 2.5	2 x 16.50	56	No	NV	> Structure is fair condition
83	112+970	RCC Box	1 x 3 x 2.5	2 x 16.50	45	No	NV	> Structure is fair condition
84	113+175	RCC Box	1 x 3 x 2.5	2 x 16.50	48	No	NV	> Vegetation on structure location.
85	113+590	RCC Box	1 x 3 x 2.5	2 x 16.50	53	No	No	> Not accessible
86	114+640	RCC Box	1 x 3 x 6.0	2 x 16.50	41	No	NV	> Water stagnated under the structure.
87	115+140	RCC Box	1 x 3 x 5.0	2 x 16.50	43.48	No	NV	> Water stagnated under the structure.
88	116+290	RCC Box	1 x 3 x 2.5	2 x 16.50	40.38	No	NV	> Water stagnated under the structure.
89	117+615	RCC Box	1 x 3 x 2.5	2 x 16.50	42	No	NV	> Water stagnated under the structure. > Vegetation on vent way.
90	118+430	RCC Box	1 x 3 x 2.5	2 x 16.50	45.25	No	NV	> Water stagnated under the structure.
91	118+940	RCC Box	1 x 3 x 2.5	2 x 16.50	43	No	NV	> Water stagnated under the structure.
92	119+540	RCC Box	1 x 3 x 2.5	2 x 16.50	48	No	NV	> Water stagnated under the structure. > Vegetation on vent way.
93	120+640	RCC Box	1 x 3 x 2.5	2 x 16.50	43	No	NV	> Water stagnated under the structure.
94	121+990	RCC Box	1 x 3 x 2.5	2 x 16.50	45	No	NV	> Water stagnated under the structure.
95	122+465	RCC Box	1 x 3 x 2.5	2 x 16.50	48.5	No	NV	> Water stagnated under the structure.
96	122+940	RCC Box	1 x 3 x 2.5	2 x 16.50	53	No	NV	> Water stagnated under the structure.
97	123+340	RCC Box	1 x 3 x 5.0	2 x 16.50	44.52	No	NV	> Water stagnated under the structure.
98	124+290	RCC Box	1 x 3 x 4.0	2 x 16.50	53.5	No	NV	> Structure is fair condition
99	125+390	RCC Box	1 x 3 x 5.0	2 x 16.50	44	No	NV	> Water stagnated under the structure.

S No	Location (Km)	Type of Culvert	Span Arrangements (m)	Carriage Way Width (m)	Deck Width (m)	Quadrant Stone Pitching (Yes/No)	Floor Aprons (Yes/No)	Observations as per site
100	125+870	RCC Box	1 x 3 x 2.5	2 x 16.50	45.6	No	NV	> Water stagnated under the structure.
101	126+620	RCC Box	1 x 3 x 5.0	2 x 16.50	52	No	Yes	> Structure is fair condition
102	127+845	RCC Box	1 x 3 x 4.0	2 x 16.50	43.5	No	NV	> Mud & debris in vent way
103	128+325	RCC Box	1 x 3 x 2.5	2 x 16.50	45.5	No	NV	> Mud & debris in vent way
104	129+000	RCC Box	1 x 3 x 2.5	2 x 16.50	43.5	No	NV	> Vegetation on vent way.
105	130+900	RCC Box	1 x 3 x 4.0	2 x 16.50	45	No	NV	> Vegetation on vent way.
106	132+400	RCC Box	1 x 3 x 2.5	2 x 16.50	43	No	NV	> Vegetation on vent way.
107	132+950	RCC Box	1 x 3 x 4.0	2 x 16.50	42	No	NV	> Structure is fair condition
108	133+625	RCC Box	1 x 3 x 2.5	2 x 16.50	76	No	NV	> Not accessible

Pictures of Culverts





Complete details of Structure inventory and condition is presented in Appendix 6 at the end of this Report

1.8.1.9 Drainage and Slope Protection

Median chutes and drains at curve locations are in good condition except for few locations where they need cleaning. No major distress is observed on the carriageway on downstream side at median drain locations. It may be prudent to consider a longitudinal drain in median to avoid water from one carriageway to flow on the other. It is necessary to see the possibility of draining of median drain to nearest culvert/outfall. This will help preventing distress on carriageway in the long run.

Slope protection in the form of Soil embankment and at few locations RE walls were provided near structure locations have been provided along the corridor.

1.8.1.10 Traffic Safety and Road Furniture

Metal beam crash barriers provided along the project road appear to be intact over entire length except for few locations where it got damaged.

Highway lighting was provided along the project corridor. High masts were provided at toll plaza locations. Traffic blinkers established at few locations along the corridor Road User Facilities

The lay bye provided on both sides at Km 22.850 along the corridor appear to be good condition.

1.9 REHABILITATION PLANS AND DESIGNS

1.9.1.1 Design Traffic Loading

Design Traffic loading has been estimated by considering the traffic (as given / DPR) and VDFs as estimated from the latest axle load survey data and estimated with 5% growth rates for all types of vehicles for the design period of 10 years, 15 years and 20 years as below:

Table 36: Traffic Volume (AADT)

Vehicle/Mode	AADT at Toll plaza (5+500) in 2021 (Vehicles)	AADT at Toll plaza (132+085) in 2021 (Vehicles)
Car	18400	3675
LCV	6640	1319
2A truck	1013	915
3A truck	1292	608
MAV truck	3733	2091
BUS	1469	26

Note: *50:50 directional distributions are considered.

Table 37: Estimated Design Traffic Loading

Year	Design Lane MSA on Existing Carriageway		Design Lane MSA on Existing Carriageway	
	LHS	RHS	LHS	RHS
10th year from Now	84	65	19	58
15th year from Now	144	112	33	99
20th year from Now	220	171	50	152

The computation of traffic loadings is presented in Appendix 7 of this Report. It can be seen from the above table that the traffic loadings more or less same on both directions.

1.9.1.2 Pavement Rehabilitation and Strengthening

Based on the FWD survey and their results it appears that the majority of the flexural strength values ranges more than 4.0 Mpa. The rigid pavement design period has been checked with various flexural strength values (i.e 3.5 Map, 4.0 Mpa & 4.5 Mpa) by considering the existing PQC & DLC thickness for 20 years design period. The flexural strength values less than 4.0 Mpa were not satisfying the design requirement of rigid pavement. However, the same shall be revalidate by taking FWD Points at closer interval and taking pavement cores and testing the same for Flexural strength. Panel replacements has been considered in immediate repairs cost based on present condition.

1.9.1.3 Structural Rehabilitation

All the structure found to be in good condition except little minor treatment like repair of stone pitching, cleaning of drainage spouts, cleaning of vegetation etc. may be required. Detailed structural rehabilitation quantities have been worked out based on the prevailing condition of existing structures. This methodology describes in detail the procedure for the execution of each item of rehabilitation work of the Existing Bridges of the project.

The scope of this methodology covers the items mentioned below for rehabilitation work of all the existing Bridges.

- Repair/ Replacement of Existing Bearings

- Repair / Replacement of Existing Expansion Joints
- Repair / Replacement of Existing Wearing Coat
- Profile Correction for Existing Deck Slab by Cement Concrete
- Sealing of Cracks for Bridges by Epoxy Resin
- Replacement of Spalled Concrete of ECW by Epoxy Mortar
- Cement Grouting for Repair of Existing Bridges
- Guniting / Shotcreting for Repair of Existing Bridges
- Providing & Fixing of Drainage Spouts
- Repair of Substructure Component
- Repair / Replacement of Railing & Crash Barrier
- Epoxy Bonding between New and Old Concrete.

All the structure found to be in good condition except little minor treatment like repair of stone pitching, cleaning of drainage spouts, cleaning of vegetation etc. may be required.

It is generally seen that most of the structures are not exhibiting sever signs of distresses. Trouble free service of 20 or more years can be expected subject to prompt and proper maintenance. The durability make-up measures are indicated.

1.10 DEVELOPMENT ZONES (SCHEDULE -B PROVISIONS)

It is specified that, "During carrying out the due diligence, the initial rectifications and improvements as identified by the Technical Consultant shall be carried out by the existing EPC contractors as per their DLP/O&M obligations or taken up by the Authority at the risk & cost of the existing EPC Contractor and site will be handed over to Concessionaire "as is where is" basis as per the contract agreement"

It Specifies

- Widening of existing Structures as per Cl. 1.
- Maintenance works as per Cl.2
- Junction/Interchanges improvements as per Cl. 3
- Development of drains as per Cl.4
- Median Openings as per Cl.5
- Provision of acceleration and deceleration lanes at entry/ exit ramps of interchanges as per Cl.6
- Development of project facilities as per Cl.7
- Development of rainwater harvesting structures as per Cl. 8
- Construction of slope protection as per Cl.9
- Traffic control devices/ road safety devices/ road side furniture as per Cl.10

- Art gallery, monument replicas as per Cl.11
- Completion Schedules for Improvement Proposals as per Cl.12

1.10.1.1 Widening of existing structures

Nil

1.10.1.2 Maintenance Works

As per the para 1 of schedule-B, the works have been not considered in CAPEX, as the same would be rectified by the existing EPC Contractor.

Other works which have not specified in schedule-B and found some distresses or rectification requirements have been quantified separately and included in the Immediate repair cost.

1.10.1.3 Junction/Interchanges Improvements

1.10.1.4 Junction improvements

Nil

1.10.1.5 Interchanges

Table 38: Interchanges

S. No.	Location (Existing km)	Name of Interchange	Current Status
1	91.875	Interchange to connect EPE and Yamuna Expressway	The construction work of the interchange is to be done by YEIDA for which LOA has been issued. However, due to a pending court case for increase in compensation, the land has not yet been handed over. The construction work will start after the handover of land and the construction cost is to be borne by NHAI.
2	113.85	Interchange to connect EPE and Jewar Airport	The DPR study for the interchange is under preparation by the DPR consultant.
3	126.137	Interchange to connect EPE and Aligarh-Palwal Road	The 3D gazette notification has been published. The tender is to be invited from NHAI for which the tender documents are under preparation by the consultant.

1.10.1.6 Drain locations

Nil

1.10.1.7 Median Openings

All the authorized median openings shall be provided detachable barriers in consultation with Authority/Independent Engineer wherever missing.

1.10.1.8 Provision of acceleration and deceleration lanes at entry/ exit ramps of interchanges

The acceleration and deceleration lanes shall be provided at following entry/exit ramps of Interchanges as per specifications and standards within available ROW

Table 39: Entry Exit Ramps

S. No	Existing km	Types of Interchange	Side	Acceleration Lane for Entry	Acc. Lane Towards	Deceleration Lane for Exit	Dec. Lane Towards
1	15+360	Dumbbell	LHS	Not as per Specifications	Baghpat NH-709B/ Provide proper road markings	Not as per Specifications	EPE/Provide proper road markings
			RHS	Not as per Specifications	Ghaziabad	Not as per Specifications	EPE
2	44+512	Partial Clover Leaf	LHS	Not Provided	Meerut	Not Provided	EPE
			RHS	Not Provided	Ghaziabad	Not Provided	EPE
3	52+192	Clover Leaf	LHS	Not Provided	Hapur NH-9 (old NH-24)	Not Provided	EPE
			RHS	Not Provided; Ramp connecting to Service Road	Ghaziabad	Not Provided	EPE
4	72+724	Clover Leaf	LHS	Not Provided	Bulandshahr NH-34 (old NH-91)	Not Provided	EPE
			RHS	Not Provided	Dadri	Not Provided	EPE
5	83+005	Dumbbell	LHS	Not as per Specifications	Salempur	Not as per Specifications	EPE
			RHS	Not Provided	Greater Noida	Not Provided	EPE
6	108+570	Dumbbell	LHS	Not Provided; ROW issue	Chhainssa	Not Provided; ROW issue	EPE
			RHS	Not Provided	Ballabhgarh	Not Provided; ROW issue	EPE
7	134+934	Clover Leaf	LHS	Not Provided; ROW issue	Aurangabad NH-19 (old NH-2)	Not Provided; Ramp connecting to Service Road	EPE
			RHS	Not Provided; Ramp connecting to Service Road	Palwal NH-19 (old NH-2)	Not Provided	EPE

1.10.1.9 Project Facilities

1.10.1.9.1 Toll Plaza

Toll plazas at all the locations along the expressway shall be retained and maintained

1.10.1.9.2 Landscaping and Tree Plantation

Table 40: Median Plantation

S. No.	Existing Km	Type of Interchange	Recommended Improvement proposal
1	15+360	Dumbbell Interchange	To improve the aesthetics a) Maintenance of vegetation of existing Landscape area needs to be improved. b) Already Installed Fountains and Lightings needs to be made functional/operational. c) Clear zone should be kept free of solid obstacles such as large trees and should be traversable by a vehicle. d) Sight lines and visibility are vital at junctions and must be maintained by the use of either low planting e) Regular mowing of vegetation is to be done.
2	44+512	Cloverleaf Interchange	
3	52+192	Cloverleaf Interchange	
4	72+724	Cloverleaf Interchange	
5	83+005	Dumbbell Interchange	
6	108+570	Dumbbell Interchange	
7	134+934	Cloverleaf Interchange	

1.10.1.9.3 Wayside Amenities

Table 41: Way side Amenities

Sl. No.	Location / Existing Km	Side	Remarks
1	39+500	LHS	BHS partially constructed
		RHS	
2	82+800	LHS	Proposed
	83+100	RHS	
3	95+600	LHS	BHS partially constructed
		RHS	

Note: NHAI has taken up/will be taken up Wayside Amentias as per extent policy of Authority

1.10.1.9.4 Fencing

The damaged / missing fencing shall be replaced with the new fencing as per the drawing given in drawing volume. Painting of existing fencing shall be carried out by the Concessionaire as per IRC: SP:99-2013

1.10.1.9.5 Cross Roads

The Cross roads falling within the ROW shall be constructed by the Concessionaire as per the site requirements in consultation with Authority /Independent Engineer

The Pipe Culverts (minimum 54 locations) shall also be provided to cross the existing Longitudinal Drain across the Cross-roads on both side of the structure whereas not exist at site.

1.10.1.9.6 Highway Patrol

Highway Patrol units (minimum three numbers) in accordance with IRC SP-99-2013 and comply with Operational requirements as mentioned in Schedule-F shall be provided. The Patrol Vehicles shall be provided as per the specifications given in NHAI Policy No. 12.19, dated 20th March 2018. It shall be fitted with GPS based Vehicle Tracking System (VTS) to monitor movement on 24 hoursx7 days of a week basis

1.10.1.9.7 Ambulances

Ambulance units (minimum three numbers) shall be continuously available along the Project Highway in accordance with IRC SP-99-2013 and comply with Operational requirements as mentioned in Schedule-F. The Ambulances shall be provided as per the specifications given in NHAI Policy No. 12.19, dated 20th March 2018.

These shall be fitted with GPS based Vehicle Tracking System (VTS) to monitor movement on 24hoursx7 days of a week basis.

1.10.1.9.8 Cranes

Cranes (minimum three numbers) shall be continuously available along the Project Highway in accordance with the provision of IRC SP- 99-2013 and to comply with Operational requirements as mentioned in Schedule-F. Mobile cranes having the capacity to lift a truck with a Gross Vehicle Weight of 30,000 (thirty thousand) kilograms shall be provided round the clock for rescue operations. The crane shall be fitted with GPS based Vehicle Tracking System (VTS) to monitor movement on 24hoursx7 days of a week basis.

1.10.1.9.9 ATMS and TMS

The Authority has provided the Traffic Monitoring Camera System (PTZ /Radar Camera etc.), Video Incident Detection System (VIDS), Vehicle Speed Detection System (VSDS) with ANPR system, VMS and ATCC etc. throughout the expressway, some of which are not functional or need /require the repair/rehabilitation, the concessionaire is required to visit the site and assess the condition which shall be handover to the concessionaire to make use of fully functional ATMS system. In this regard, it is suggested that Concessionaire shall follow **"**Functional and Technical Specifications released by the NHAI vide Ref. No. NHAI/CO/ATMS/02-2021, February 2021**".**

1.10.1.9.10 Traffic Aid post (TAP)

Traffic Aid Posts shall be constructed at the Toll Plaza in accordance with Clause 17.3 of the DCA and the Manual of specifications & standards.

1.10.1.9.11 Medical Aid Post (MAP)

Medical Aid Posts shall be constructed at the Toll Plaza in accordance with Clause 18.2 of the DCA and the Manual of specifications & standards.

1.10.1.10 Rain Water Harvesting

The Existing Rainwater harvesting structures shall be re-instated and maintained by the Concessionaire

1.10.1.11 Slope Protection

The side slope along the Project Highway shall be improved as per site requirement and protected by using suitable slope protection measures, as per the provision of Section-4 of IRC SP-99-2013

1.10.1.12 Traffic Control Devices/Road Safety Devices/Road Side Furniture

1.10.1.12.1 Traffic signs, road markings etc.

Existing damaged signage shall be replaced and maintained as per standards, in addition 18 number of new Cantilever gantry sign boards shall be provided

- The Concessionaire shall re-instate the road marking throughout the project highway as per IRC:35-2015 & IRC: SP:99-2013.
- Road Studs including solar studs shall be provided throughout the project highway as per IRC: SP:99-2013.
- Road Delineators shall be provided throughout the project highway as per IRC: SP:99-2013 & IRC:79-2019.
- The damaged/missing kilometer and 100m posts shall be provided.
- The existing solar blinkers shall be re-instated, repaired and maintained. In addition, New Solar Blinkers shall be provided at all the median openings, Junctions, entry/exit ramps, Loops and including U-turn facilities at Toll Plaza.
- Transverse bar marking shall be provided at all hazard locations including but not limited to the locations, Median openings (including U-Turn Facilities), Toll Plaza approaches, approaches to at-Grade junctions, before start of sharp curves, exit ramps & loops and down side of the approach of the flyovers for both carriageways of Main Highway etc
- The existing damaged and missing W-Beam crash barriers shall be re-instated throughout the project length including loops & Ramps also.
- Note: - The Concessionaire shall maintain existing (including damaged/missing/theft etc.) and new crash barriers in functional condition throughout the concession period
- The existing damaged and missing Kerb stones shall be re-instated/ provided throughout the project length including loops & Ramps / Lay Bye, etc.
- ii. All Kerb stones shall be painted as per specifications and standards.
- The damaged/ missing RCC Crash barriers and the hand rails over it shall be re-instated/ provided.
- ii. RCC Crash Barriers of Structures/ Bridges, Loops & Ramps, approaches of Grade-separated structures, etc. shall be painted as per specifications and standards.
- Traffic impact attenuators needs to be maintained and replaced if damaged at about 65 locations (at all interchange locations)
- All the existing art gallery equipment and monument replicas mentioned at Schedule - A, to be maintained and make operational aspects 6 days a week by the Concessionaire.

1.10.1.13 Completion Schedules for Improvement Proposals

S. No.	Description of Work	Date of Completion
1	Incident Management System (Sections. 7.6, 7.7, 7.8)	From Appointed Date
2	Installation / Rectification of road furniture related items (Section 10) Landscaping and Tree Plantation (Section 7.2)	6 months from Appointed Date / O&M Handover Date, whichever is later. However, remaining works out of works mentioned in S.No.2 of the same table shall be completed within 2 months after completion of works mentioned in S.No. 3 of this table.
3	Maintenance and Rehabilitation of Pavement and Structures (Section 2)	9 months from Appointed Date / O&M Handover Date, whichever is later
4	Toll Plaza and other facilities at Toll Plaza (Section 7.1,7.10, 7.11)	12 months from Appointed Date
5	ATMS & TMS (Section 7.9)	6 months from Appointed Date
6	Other Improvements (Section 1, 3, 4, 5, 6, 7.3, 7.4, 7.5, 8, 9,11)	12 months from Appointed Date

Table 42: Unit Rates

Sl.no	Activities	Unit	Rate (Rs) per Unit
1	Flyash	Cum	132.00
2	BC	Cum	10704.00
3	DBM	Cum	9441.00
4	WMM	Cum	3191.00
5	GSB	Cum	1200
6	GSB	Cum	2027.16
7	Embankment	Cum	326.00
8	Subgrade	Cum	371
9	DLC	Cum	4089
10	PQC	Cum	8713
11	RE panel	Sq.m	
12	M-15	Cum	6776
13	M-20	Cum	7665
14	M-25	Cum	8198
15	M-30	Cum	8213
16	M-35	Cum	8323
17	M-40	Cum	8972
18	M-45	Cum	10344
19	HYSD	Tonnes	69225

1.11 Operation and Maintenance

1.11.1.1.1 Introduction

Considering the type of pavement and schedule-F requirements and good industry practice, rigid pavement maintenance cost has been arrived.

1.11.1.1.2 CA specifications for Major Maintenance

- Schedule F of CA specifies that Roughness values exceeds 2400 mm/km in a length of lane KM, needs to be corrected within 180 days.

1.12 No specific requirement with respect to deflection (FWD) measurement.OST

Cost Component for various items and activities have been worked out by considering the Best Industry practice and most appropriate methods. The gist of the cost components considered are presented below

- Immediate Repair's Cost
- Routine Maintenance Cost
    - o Routine Maintenance of Road
    - o Repair and Replacement of various road items
    - o Tolling system and HTMS maintenance AMC cost
    - o Incident management
    - o Routine Maintenance for Structures
    - o Electricity bill of lighting areas near cities, I/C and other areas & Fuel expenditure
- Periodic Maintenance Cost
    - o Functional +Structural overlay MCW Section I+Overlay on Service Road
    - o Rigid Pavement Maintenance Cost
    - o dismantling existing & relaying wearing coarse for structures (MJBR/MNBR/VUP/PUP/CUP/Flyover)
    - o Replacement of Toll Hardware and software & HTMS at later date
- Toll Plaza Operation cost and Highway Patrolling and maintenance supervision staff cost
- Operation and management costs of rest areas and lay byes
- Safety audit and other inspection costs
- Insurance
- I.C for O&M period
- Administrative Cost
- Additional cost Required for capacity augmentation
- Grand Total Cost

Summary of EPC costs and summary of CAPEX is presented in the following tables

Table 43: Summary of EPC Cost

Sl No	Description	Amount (Rs.)
1	Earth Work	1,35,84,306
2	Pavement	14,74,44,558
3	Drains	34,20,000
4	Road furniture’s	7,45,122
5	Miscellaneous	3,62,62,500
6	Pipe Culvert	3,42,21,538
7	Bought Out items	3,70,12,189
8	Structures - R&R	3,41,64,286
9	Additional items	36,90,490
	Sub-Total	31,05,44,988
b	Contingencies, 5%	1,55,27,249
	TOTAL	32,60,72,237

Table 44: Summary of CAPEX

S.no	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	EPC (Highway & Str)	LS	1	326072237	326072237
2	Immediate Repair's (Highway)	LS	1	166648261	166648261
3	Immediate Repair's - Structures	LS	1	5443290	5443290
4	TMS	LS	1	113841420	113841420
5	ATMS	LS	1	0	0
6	Revalidation surveys	LS	1	18517264	18517264
	Total Immediate Repair Cost excluding GST				630522472
	Total Immediate Repair Cost including GST@12%				706185168
	Total Amount including GST in INR Crore at Base rate of FY2022				70.618

- The Total CAPEX Cost would be Rs.80.01 Crores @ base rate of FY2024
- EPC Cost has been estimated scope given in Schedule-B
- It is assumed that 100% of CAPEX will occur in FY2024
- Immediate Repair Cost has been estimated based on site investigation and analysis and considering the present condition of the Road and Structures
- The TMS Cost is for WIMs and SWBs. WIMS and SWBs considered 100% at Main Toll Plazas and 50% at loop plazas (either entry or exit)
- The ATMS & TMS systems exist at site are under Defect Liability period from 01.11.2021 to 01.11.2023 and hence the immediate repair cost is not considered for the same.
- Revalidation Surveys includes all the surveys to be done as part of Schedule-F.
- the costs are based on FY 2024 without escalation but with GST. Amount are in INR Crores.

Summary of O&M Cost I presented in the following table

Table 45: Summary of O&M Cost

Description	FY 2024	FY 2025	FY 2026	FY 2027
Routine Maintenance	10.68	10.68	10.68	10.68
R&R of Road items	5.16	5.16	5.16	5.16
*Toll and HTMS AMC cost	0.00	0.00	3.05	7.33
Incident management	5.12	5.12	5.12	5.12
R&R of Structures	0.73	0.73	0.73	0.73
Electricity bill of lighting	10.68	10.68	11.79	11.79
Toll Plaza Operation cost	22.28	22.28	27.61	27.61
SPV Cost	7.03	7.03	7.86	7.86
Survey Costs	2.07	2.07	2.07	2.18
Insurance charges	6.74	6.74	6.74	6.74
Audit charges	0.35	0.35	0.35	0.35
IE Fee	3.32	3.32	3.37	3.37
Administrative Cost	1.29	1.29	1.29	1.29
Total O&M Cost	75.458	75.458	85.827	90.209

Note: the costs are based on FY 2024 without escalation but with GST. Amount are in INR Crores.

* The ATMS & TMS systems exist at site are under Operation & Maintenance Period from 01.11.2021 to 01.11.2025 and accordingly Toll and HTMS AMC cost have been not considered for FY24 TO FY25 and part of FY 26.

Note: after discussing with Maple Highways team, operation cost for three additional interchanges has been considered in the revised cost files. On account of these additional interchanges, a sum of Rs.5.71 Crores (towards addition charges for SPV Staff, Electricity charges, Surveys Cost, IE Fee, TMS and ATMS AMC charges and Toll Operation) has been considered from FY2026 onwards.

Table 46: Summary of Major Maintenance Cost

Periodic Maintenance					
Year	Functional +Structural overlay MCW+ S/R	Major Maintenance of Rigid Pavement	Replacement of ATMS@ every 7 years	Replacement of TMS@ every 5 years	Structure specified repairs
2024	0.00	0.00	0.00	0.00	0.00
2025	0.00	0.00	0.00	0.00	0.00
2026	0.00	18.17	0.00	0.00	0.00
2027	0.00	0.00	0.00	32.55	5.79
2028	0.00	0.00	0.00	0.00	0.00
2029	0.00	0.00	17.53	0.00	0.00
2030	7.93	81.18	0.00	0.00	0.00
2031	0.00	0.00	0.00	0.00	24.66
2032	0.00	0.00	0.00	65.11	8.27
2033	0.00	0.00	0.00	0.00	0.00
2034	0.00	18.17	0.00	0.00	0.00

Periodic Maintenance					
Year	Functional +Structural overlay MCW+ S/R	Major Maintenance of Rigid Pavement	Replacement of ATMS@ every 7 years	Replacement of TMS@ every 5 years	Structure specified repairs
2035	0.00	0.00	0.00	0.00	0.00
2036	7.93	63.00	0.00	0.00	24.66
2037	0.00	0.00	17.53	32.55	5.79
2038	0.00	18.17	0.00	0.00	0.00
2039	0.00	0.00	0.00	0.00	0.68
2040	0.00	0.00	0.00	0.00	0.00
2041	0.00	0.00	0.00	0.00	0.00
2042	7.93	81.18	0.00	65.11	18.23
	23.79	279.87	35.06	195.32	88.08

Note: the costs are based on FY 2024 without escalation but with GST. Amount are in INR Crores.

Escalation considered as per WPI Data and the summary of escalated Cost is presented in the following table

Table 47: Summary of Project Cost (Escalated Cost)

Financial Year	Capex	Operations	Periodic	Total
2024	86.01	75.46	0.00	161.47
2025		78.48	0.00	78.48
2026		92.83	19.65	112.49
2027		101.47	43.14	144.61
2028		105.53	0.00	105.53
2029		109.75	21.33	131.08
2030		114.14	112.75	226.89
2031		118.71	32.45	151.16
2032		123.46	100.43	223.88
2033		128.40	0.00	128.40
2034		133.53	26.90	160.43
2035		138.87	0.00	138.87
2036		144.43	153.04	297.47
2037		150.21	93.04	243.24
2038		156.21	31.47	187.68
2039		162.46	1.23	163.69
2040		168.96	0.00	168.96
2041		175.72	0.00	175.72
2042		182.75	349.33	532.07
2043		190.06	0.00	190.06

Note: the costs are with GST and with Escalation. Amount are in INR Crores.

1.13 CONCLUSIONS

Foregoing discussions on various elements of project highway, following critical issues pertaining to project need careful attention for acquiring the same:

1) The project Road is the East Direction to the Capital Region of NCR. So, the project named as Eastern Peripheral Expressway. It passes through the states of Haryana & Uttar Pradesh.
2) Presently, the project Road length is 135.000 Km and it is six lane divided Carriageway with Rigid Pavement for entire length including toll Plaza locations.
3) The project Road length is 1.000 km to 12.800 km and 102.800 km to 136.000 km Haryana State.12.800 km to 102.800 km Uttar Pradesh State.
4) The Concession period as per article 3 of concession agreement is 20 (thirty years) commencing from the Appointed Date.
5) As per Schedule-F, Roughness on the Bituminous Concrete pavement surface is considered to be Desirable when its BI value is less than 2400 mm/Km and the same shall be Acceptable when its value is less than 2000mm/Km.
6) Roughness Surveys and skid resistance surveys shall be carried out bi-annually. The threshold values are should be limiting as per IRC SP: 83-2018
7) The project corridor has Rigid pavement in the entire length, with 11.25m wide carriageway flanked by 3.0m paved shoulder. No Earthen Shoulder observed along the Corridor.
8) The pavement condition is fair particularly the surface distress like Raveling, Cracking were observed. Panel replacement were observed in few locations of the project corridor.
9) Connecting Roads were observed in the project corridor for a length of 29.783Kms, and the condition is seeming to fair.
10) In the Project corridor, Median drain exists for a length of about 29.300km and at few locations covered slabs is also observed on the Median Drains. Maintenance works are going on at few locations.
11) Entire Length of the project corridor having the chutes drains were observed and at few Nos of chutes were damaged.
12) The Project Road has one existing lay bye on both sides and it was laid by the Paver blocks and the condition seems to fair. No Toilet blocks were observed at Lay bye locations.
13) Normal Median openings were observed in the project corridor. No Standing Lane were provided at these Median opening locations. Partial openings were observed at few Median opening locations.
14) The Project Road has two Toll Plazas in the Main Carriageway. Additional 40Nos. of Plazas were observed in the loops & Ramps. Facilities like 3 Nos. Helipad, 10Nos. of High masts, Art Gallery and Highway Mini nest, Toilet blocks were observed at Km 5+500 near Toll Plaza. In the 2nd plaza location only 2 Nos. of High masts, Highway Mini nest and Toilet blocks.
15) As per Schedule-A, the pavement crust thicknesses are about 300mm PQC layer plus 150mm DLC layer and 150mm GSB Material over subgrade.

16) The project Road has total 4 number of Major bridges, 10 number of ROBs, 8 number of Interchanges, 62 number of VUPs, 155 number of PUPs, 11 number of LVUPs 43 number of minor bridges, 15 Flyovers and about 24 pipe culverts and 108 box culverts.
17) All the structures are in good condition. Minor Cracks, honey combs, Drainage spouts logging were observed at few structures.
18) Median Plantation were observed along the project corridor. Required trimming and maintenance.
19) Dense vegetation is observed in the approaches of the Carriageway. Maintenance is in poor along the project corridor.
20) All the structures are in good condition. Minor Cracks, honey combs, Drainage spouts logging were observed at few structures.
21) Total 66 Nos Solar Blinkers are present in MCW were observed along the corridor. Additional 18 Nos. need to provide as per Schedule-B. Overall 84Nos. need to be maintained in the O&M.
22) All together 14 Sources Identified and 11 number of borrow samples collected. Test results indicates that all the sample belongs to lean silty type soil. Some of the samples hanging Four days soaked CBR values more than 6% (at 97% of MDD).
23) All the borrow material Identified belongs to ML type soil. The CBR values are ranging from 6 to 10%.
24) All the four aggregate samples identified have been tested for Aggregate Impact Value (AIV), water absorption, specific gravity. All of them fulfilling the stipulated requirement. Water absorption is found to be far less than 2% for all samples. Specific gravity values are around 2.6 gm/cc.
25) One sand sample collected and tested; it is found that the sand is not following in any of the sand zones.
26) Analysis of Axle Load survey data indicates that the VDF values are higher for Multi Axle Truck in the order of 13.00 in one direction at each plaza location. The VDFs for 3A trucks is varying between 4.0 and 5.0
27) Estimated design traffic loading by considering minimum 5% growth rate and latest VDF and AADT (given by Client / DPR) indicates that the 10th year design MSA is varying between 84 to 19 MSA in LHS Carriageway and is varying between 65 to 58 MSA in RHS Carriageway.
28) Pavement Condition data reveals that about 2200 number of panels are having multiple cracks and about 130 number of panels are settlements
29) Analysis of Roughness data indicates that about 60lane Km in LHS and 22 Lane Km in RHS having roughness values more than 2400 mm/Km
30) FWD Data on rigid pavement indicates that about 80% sample is having Flexural strength more than 4.5 MPa/m. about 9 to 10% samples is having flexural strength values less than 3.5 MPa
31) FWD Data also indicates that about 6.4 km is having void below the rigid pavement
32) Central minimum wages for category B type have been adopted for the project
33) All the surveys and investigations were done in Sept-2023 but the costs are at base rate of FY2024 with GST.

ANNEXURE C – TRAFFIC REPORTS

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Final Report
April 2023

Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhol

Indian Highways Concessions Trust
Our ref: 24321002
Client ref: Chariot 4.0

Final Report
April 2023

Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhol

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Our ref: 24321002

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Certain forward-looking statements in the Report are estimates based on interpretations or assessments of information available at the time of writing. The Report is thus to be viewed as an assessment that is time-relevant, specifically referring to conditions at the time of the review. Steer undertakes no obligation to update the Report for any reason.

While the estimates contained in the Report are not precise forecasts, they do represent, in our view a reasonable expectation of the future, based on information we have been provided with or sourced. However, the estimates necessarily rely on numerous assumptions and judgements, and circumstances may occur over the timeframe of the project that go counter to these assumptions and judgements and that affect the project’s realized revenues. Actual events may differ from those assumed, and events are subject to change. Therefore, Steer makes or provides no warranty, whether implied or otherwise, as to the accuracy of forward-looking information presented. Further, it is important to note that forecasts presented represent long term growth profiles; the results for individual time periods may vary from forecasted values.

Traffic Consultant developed the relationships in the models used to produce the forecasts for the projects based on data available through March 2023. This report does not consider variations in traffic performance due to changing macro and force majeure events such (but not limited to) as global wars, economic uncertainty (high inflation, global recession), and changes in the regulatory environment. The situation remains dynamic and is subject to significant change in the short and medium term. In this challenging context, Traffic Consultant has produced base forecasts with a view on a possible scenario for the traffic forecasts. However, it is important to note that this is only one view, and there continues to remain uncertainty as to the short-term, intermediate or prolonged effects of and responses to such macro-economic/force majeure events. As a result, no assurance can be provided by Traffic Consultant that the scenarios and assumptions Traffic Consultant has identified will prove to be accurate. Given the uncertainty inherent in this scenario, Traffic Consultant advises that all readers of the Report consider the Report in the context of their own assessment of the impact of such events.

Glossary Items

Acronym	Meaning
AADT	Annual Average Daily Traffic
CJV	Cars / Jeeps / Vans
LCV	Light Commercial Vehicles
MAV	Multi Axle Vehicle
OSV	Oversized Vehicles
COD	Commercial Operations Date
DPR	Detailed Project Report
GDP	Gross Domestic Product
GSDP	Gross State Domestic Product
FY	Financial Year
IHCPL	Indian Highways Company Pte. Ltd
HCM	Heavy Commercial Vehicles
NH	National Highway
NHAI	National Highways Authority of India
NSDP	National State Domestic Production
OD	Origin Destination
PCI	Per Capita Income
RNP	Registered Number Plate
SCF	Seasonality Correction Factors
SH	State Highway
T&R	Traffic and Revenue
YTD	Year-To-Date
Y-o-Y	Year-on-year

1 Introduction

The Assignment

1.1 Steer has been commissioned by Indian Highway Concessions Trust (the "Client") to undertake and update traffic and revenue (T&R) due diligence for the Client's recent acquisition of Bhubaneshwar – Cuttack – Chandikhol section of the Shree Jagannath Expressway Limited (SJEPL) toll road in India (the "Asset"). The earlier traffic due diligence was undertaken in September 2022. This report provides an update basis actual data as of March 2023.

1.2 The following table describes the key characteristics of the Asset.

Table 1.1: Description of Asset

Name of Section	State	NH / SH	Nos. of Lane	Total Length (km)	Toll Plaza*	Tolling Since (COD)	Concession Period
Bhubaneshwar - Chandikhol	Odisha	NH16	Six	67	Manguli/Tangi	December 2011	26 years

Source: Client data; *relocated from Manguli to Tangi in April 2021

Scope of work

1.3 The scope of work for the traffic and revenue forecasts process includes:

Table 1.2: Scope of work and sources of data

Scope of work	Data source
• Review of historical Traffic Management System (TMS) data, past T&R reports and documents	Traffic toll plaza data up to March 2023 as provided by Client
• Historical analysis and forecasts for baseline growth, including. – Background growth, – Seasonality	Historical toll plaza data provided by Client
• Validation of Revenue reported in FY23	• TMS data provided by Client • Revenue reconciliation using toll plaza traffic and ticket type data to calculate revenue and reconciling it with toll plaza reported revenue.
• Analysis of upcoming network improvements and other developments, that may have future impacts on traffic	Secondary research and our in-house experience of working in the vicinity of the asset. Impact analysis based on Generalised Journey Cost spreadsheet-based analysis
• Historical revenue analysis and forecasts for revenue estimation, including – Toll segmentation and trip factors,	Calculated from historical data provided by the Client

Scope of work	Data source
– Overloading shares	
• Final traffic growth forecasts including baseline growth rates and potential future impacts	Elasticity based base growth and potential impacts from secondary research and our in-house experience of working in the vicinity of the asset
• Toll revenue estimation for the balance concession including toll evolution	Toll evolution based on calculations provided in toll notification published by NHAI, and WPI line based on forecasts provided by the client

1.4 This report presents our draft T&R forecasts.

Key issues for the Asset

1.5 The Asset has both urban and heavy industrial influence on traffic. Historically, the Asset has been impacted with several external influences, and has recorded a good growth profile overall.

1.6 Being located very close to the mining belt of Odisha, as well as key ports, a lot of mineral ore mining/processing industries/international trade of minerals related movements have characterised the Asset.

1.7 The Asset also has proximity to the capital of the state, Bhubaneshwar, as well as other major tourist centres, whereby passenger vehicles also become important to the Asset.

Our approach

1.8 The approach employed by Steer in the preparation of these forecasts was developed to take advantage of existing knowledge of the Asset and available data from various sources made available by the Client as well as publicly sourced. It follows well-established practices for forecasting ongoing traffic growth on existing/brownfield Assets.

1.9 The analysis focused on two sets of issues, namely:

- understanding the traffic that is currently using the Asset; and
- identifying how and why that traffic is likely to change in the future.

1.10 To identify future changes in traffic, we have assessed the likely future socio-economic and demographic development of the regions served by the Asset that might drive baseline traffic growth, and the impact of any relevant network changes which might cause a diversion of traffic to or from the Asset.

1.11 To understand the current traffic on the Asset, we have analysed traffic data from multiple independent sources:

- Client-provided secondary data, including:
  - TMS data up to March 2023
  - Concession agreement and toll notifications
- As part of pervious study, Steer-commissioned TVC counts from 31st Aug to 3rd Sept 2022.
- As part of pervious study, Steer conducted OD surveys, on behalf of the Client, for 24 hours over 2nd and 3rd September 2022
- Secondary research to understand plans for new developments and progress of ongoing developments on the Asset.
- Review of Concession agreement and toll notifications provided by Client

- To arrive at the base position, Asset traffic data was used from the monthly traffic and revenue files shared by the Client. As part of pervious study, to gain confidence in the traffic data, and validate the TMS data, we undertook 4 day (24 hours) traffic volume counts (TVC) at all the toll plaza locations. TMS data for the same dates was requested from the Client which was then compared to TVC data collected.
- Revenue Reconciliation: We undertook revenue reconciliation, by building up revenue from the traffic reported by the toll plaza and subsequently match it to the reported revenue using the prevalent toll rates and reported segmentation/toll-frequencies, this is a key part of our analysis to validate the segmentation/toll-frequency assumptions and the AADT reported for the toll plaza.

1.12 We undertook the estimation of future traffic demand on the Asset through:

- Detailed assessment of the asset performance from traffic and revenue perspective based on the site visit observation, discussions with the toll plaza manager and client team.
- OD survey data was cleaned and analysed to determine the key commodity drivers of the traffic on the Asset. This information was further utilised in developing the views on the forecasts of traffic on this corridor. Outputs from OD data such as zonal influence, trip lengths, and commodity distribution are presented in this report.
- Developing a bespoke growth model for asset/plaza/toll class to forecast year-on-year traffic growth from FY23 to the end of each concession period.
- Investigating the elasticity of historical traffic growth compared to state (GSDP) and national (GDP) growth. Where historical data is limited, we have benchmarked the asset against our Steer knowledge base (e.g., similar asset types in the same state or on the same corridor), to derive appropriate elasticities.
- Applying our elasticities to independent GDP/GSDP forecasts.
- Identifying and analysing the potential impacts of any relevant changes to the competitive position of each asset – these include impacts of changes to road network including expressways and opening of competitive modes of travel.
- Identifying and analysing any other potential impacts to traffic and revenue on each asset – these include axle load norms, FASTag implementation.
- Considering changes in trends of segmentation over time and making suggestions for changes in exemptions in the future.
- Preparing traffic and revenue forecast for the Asset for the complete length of concession. The analysis here includes major network and other impacts including change in toll rates and more. We have developed a set of forecasting assumptions for three scenarios: a base case, upside and downside scenarios.

Contents of this Report

1.13 The report has been divided into six chapters:

- Chapter 1 introduces the methodology and approach to undertake the traffic and revenue due diligence;
- Chapter 2 describes the key characteristics of the Asset and its surrounding road network, primarily based on site visits;
- Chapter 3 summarises the current and historical traffic on the Asset, including results from the TMS, TVC and OD analysis;
- Chapter 4 discusses the socio-economic context of the corridor and region/state containing the Asset, and summarises our approach and results on estimating background traffic demand growth; and,

- Chapter 5 summarises our approach and results on estimating background traffic demand growth; and
- Chapter 6 summarises our key forecasting assumptions, results of impacts analysis, and presents our traffic and revenue forecasts for the Asset.

2 The Asset

Introduction

2.1 This chapter provides a description of the Asset, based on our site visit and our understanding of the region and network surrounding the Asset.

2.2 The Asset is a National Highway in the eastern state of Odisha along NH16. The Asset forms part of the 'Golden Quadrilateral' that connects the four major cities of India, Delhi, Mumbai, Chennai and Kolkata.

Figure 2.1: Asset location in the national network context

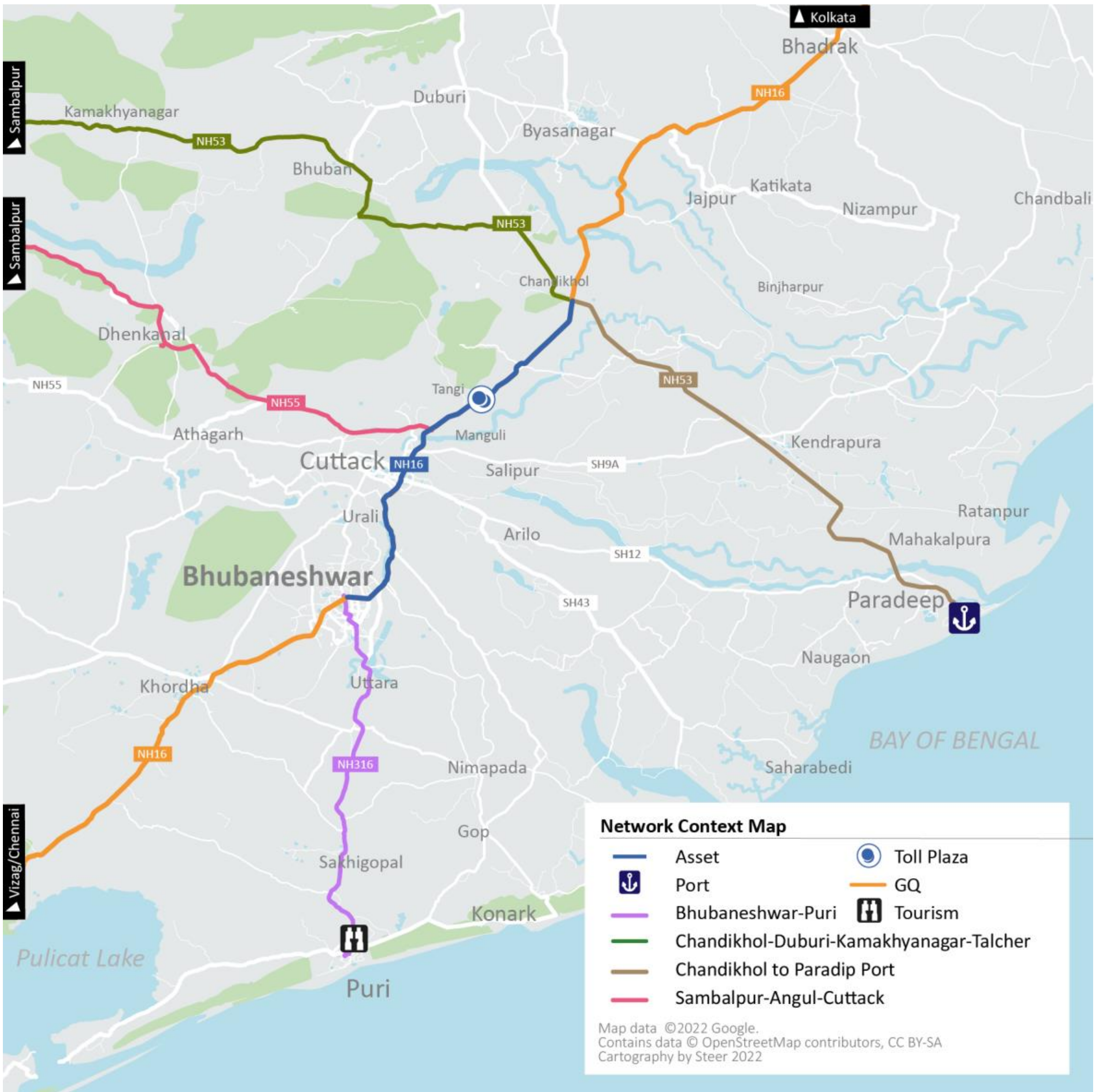
Source: Steer cartography using OpenStreetMap data

Asset description

2.3 The Asset is a 67 km toll road (6-lane stretch, divided by a central median) with one toll plaza. The Asset passes through the urban settlements of Bhubaneswar and Cuttack, which are two of the largest economic activity centers in Odisha and Bhubaneswar also being the capital of the state.

2.4 The map below shows the location of the toll plaza on the Asset along with regional network.

Figure 2.2: Asset with regional network



Source: Steer cartography using OpenStreetMap data

2.5 As part of pervious study, Steer team visited the Asset during 1st and 2nd September 2022 in order to understand the Asset, its surrounding network characteristics and to oversee the traffic surveys. It is a key economic corridor for movement of domestic goods along the eastern coast, as well for exports to other southeast Asian countries.

2.6 The old toll plaza on the Asset, the Manguli toll plaza which had 10 tolling lanes, was built as part of the previous concession when it was a 4-lane Asset. As per the current concession, a new toll plaza with 16 tolling lanes has been constructed about 6 km north of the Manguli plaza. The tolling shifted to the new toll plaza location, Tangi since April 2021. There are no interchanges/ junctions between Tangi and old plaza Manguli and hence there is no material impact in traffic characteristics due to the operational shift.

2.7 The toll plaza has 8 ETC-enabled lanes on either side. The recorded share of ETC vehicles is >85% for passenger and >98% for commercial vehicles.

2.8 Based on the received data and site observations, overloading fines were being imposed at the plaza until August 2022. However, the toll plaza's license to charge for overloading expired in September of FY22. Additionally, the WIM (Weigh-in-Motion) equipment utilized for measuring overloading requires replacement and is currently undergoing the process of replacement. As a result of these issues, no overloading fines have been charged from September 2022 to March 2023. Nevertheless, overloading fines will be reinitiated at the toll plaza in FY24 since the replacement of WIM is expected to finish by March’23.

2.9 The Asset has following three major connecting routes:

- **NH16** – The Asset is a part of NH16, and the sections north and south of it contribute to the traffic on it. The Chandikhol-Bhadrak section to the north of the Asset as well as Bhubaneshwar-Puintola section south of the Asset, have recently been upgraded to 6-laning which has uplifted the traffic movement on the corridor.
- **NH53** – This highway connects the mining-rich belt of Talcher-Duburi to Chandikhol and further continues till Paradip port. This section was in a poor condition for a considerable period, which diverted some of the port-bound traffic on the Asset. However, the Talcher-Duburi-Chandikhol section is now almost completely upgraded to 4-lane[1], which enables traffic movement directly to Paradip port. This has resulted in diversion of traffic away from the Asset, which is not expected to be regained by the Asset.
- **NH55** – This highway connects Sambalpur-Angul with Cuttack and also acts as a feeding route to the Asset. The current pavement condition of this section is very poor and therefore it has very limited movement. We expect the traffic on the Asset to also get improved once the section is upgraded to 4-lane by FY25. This is further discussed in chapter 6, where the estimation of impact of the upgrade is detailed out.

2.10 The asset consists of a significant number of structures, the most prominent are the bridge over the river Mahanadi and a 7 km elevated section through the city of Bhubaneswar. This results in the operating speeds on the asset ranging from 40-80kms/hr. Speeds are slower in the urban sections particularly in Cuttack and faster in interurban sections and north of the toll plaza.

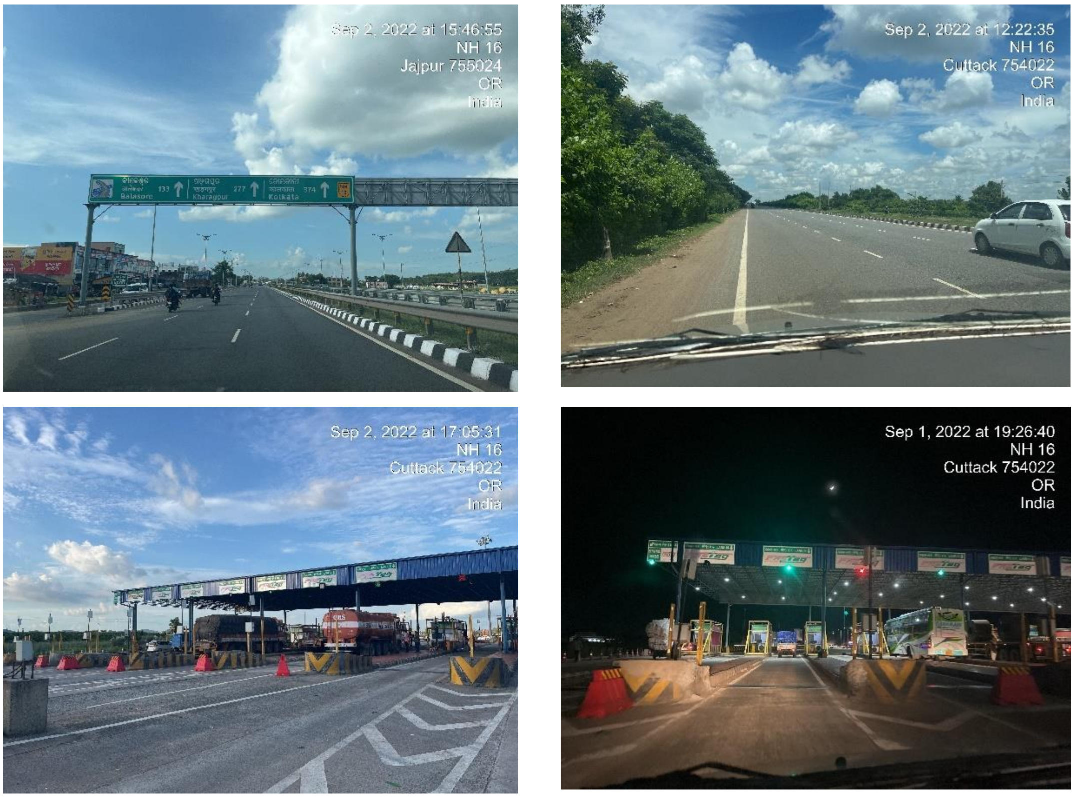
2.11 The landscape along the asset is essentially the delta region of Mahanadi and therefore is full of small rivers, canals and channels which run through villages.

2.12 The city of Puri and Konark are historical and religious centres and attract a lot of tourists from within Odisha as well as other states.

2.13 The following pictures show typical cross sections of the Asset, toll plaza and feeder routes.

[1] https://www.business-standard.com/article/news-cm/g-r-infraprojects-completes-road-project-in-odisha-121111501457_1.html

Figure 2.3: Road cross-section of the Asset and toll plaza



Source: Steer site visit

Figure 2.4: Feeder route sections of NH55 and NH53

Source: Steer site visit

Economic activities in the region

Figure 2.5: Context map of the Assets

Source: Steer cartography using OpenStreetMap data

Mining

2.14 Odisha is a leading producer of minerals contributing to 47.2% in value of the total mineral production in the country[2]. The state is a key producer of minerals such as Iron Ore (50% of national production), Bauxite (75% of national production), Chromite (nearly entire national production), Coal, and Manganese Ore.

2.15 The presence of the mining industry has led to emergence of several related industries such as manufacturing steel, ferro alloys, alumina, refractories as well as several downstream ancillary industries. Steel plants by major steel conglomerates located in the state and immediate catchment area of the Asset include:

- Essar Steel in Jagasinghpur (Paradip)
- Jindal Steel Plants in Jajpur and Angul
- TATA Steel plants in Jajpur and Kalinga Nagar
- Bhushan Steel in Dhenkanal and Sambalpur

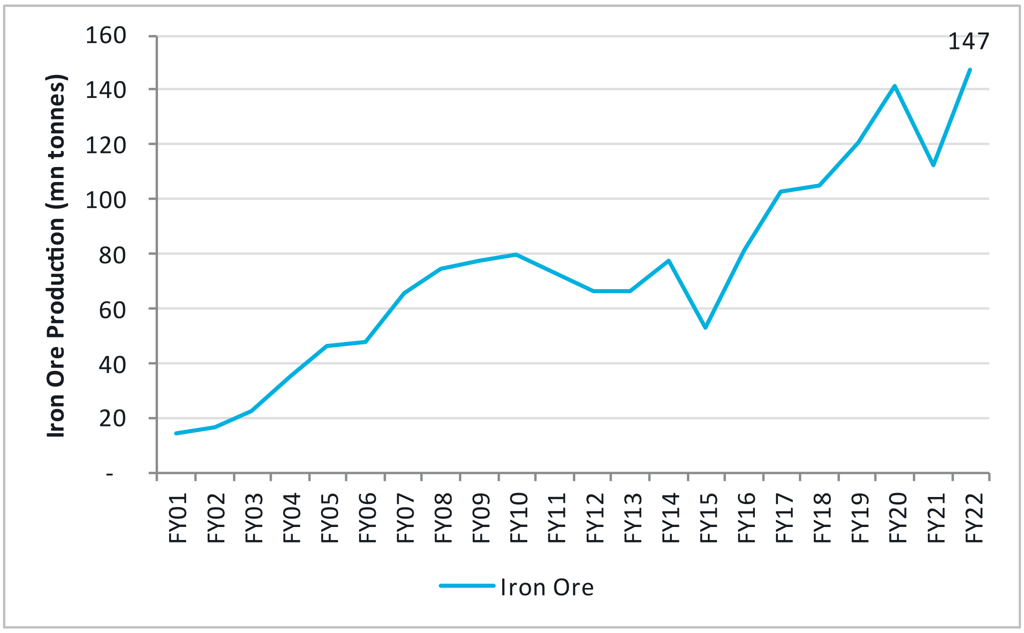
[2] Annual report, Ministry of Mines, 2021-22

A.1 The Asset is part of NH16 corridor which in proximity to the major mining and mineral processing regions:

- Joda Barbil area (iron, sponge iron, ferro alloys, iron ore crusher, mineral processing)
- Talcher-Angul area (thermal power, aluminium, coal washeries, ferro alloys, coal mines)
- Balasore area (pulp and paper, ferro alloys, rubber industries)
- Chandikhol (stone crusher, coke oven)
- Keonjhar (iron, sponge iron and steel products)

2.16 Iron ore mining in Odisha is strongly regulated. There was a partial ban imposed in FY15, which impacted the industry and by extension the traffic. However, the state has recorded a strong growth in iron ore production, especially in the FY19-22 period, since then which is being clearly witnessed in figure below.

Figure 2.6: Iron ore production in Odisha



Source: https://www.odishaminerals.gov.in/ResourceStatistics/MineralProduction

2.17 The marked rise in FY20 production can be attributed to mines, with their leases about to expire, being earmarked for auctions in early-2020. Sustained high production from Nov'19 to Mar'20 from these expiring leases contributed to production levels in FY20. In contrast, the state produced 113mn tonnes of iron ore in FY21 - a straight 30mn tonne decline vis-a-vis FY20[3].

2.18 Other than feeding the local iron/steel industries, Odisha transports iron to other states as well as exports to other countries. China is the biggest importer of iron ore from India with about 90% share in last three years. The high growth in iron ore production in the recent years can be partly attributed to increase in exports to China.

2.19 Three operational ports in the state are in proximity of iron ore mining clusters of Joda-Koira:

[3] Odisha Iron Ore production FY21, **https://www.steelmint.com/insights/steelmint-india-records-iron-ore-production-at-over-200-mn-t-in-fy21-220968**

- Paradip Port: at distance of about 340 km; handling iron ore since 2011
- Dhamra Port: at distance of about 340 km; handling iron ore since 1995
- Gopalpur Port: at distance of about 340 km; started handling iron ore recently starting 2020 as a focused commodity

2.20 The increase in iron ore production and trade has supported the high volume of traffic even during the COVID-19 impacted years, which is over and above the 'normal' economic recovery being experienced in the country.

2.21 Talcher, in Angul district, has significant coal reserves and is one of the fastest growing industrial and coal hubs in the state of Odisha. Majority of coal and by-products are transported by rail in this region.

Tourism

2.22 Bhubaneswar is the administrative and business hub of Odisha, being the capital of the state. Cuttack, the closest urban centre near the toll plaza, is a centre for medical and educational institutions.

2.23 Key tourism destinations influencing traffic on the Assets include Cuttack, Puri, Konark and Bhubaneshwar. Presence of historic temples and monuments have led to significant and sustained growth of cultural and religious tourism in the state. Puri, Konark and Chilka tourist circuit which is about 60 - 100 km from Bhubaneswar, are among the key tourist attractions in the state. The annual 'Rath yatra' festival celebrated in Puri in June attracts many pilgrims and tourists alike.

Summary

2.24 The Asset is part of a well-established national network corridor, being part of the 'Golden Quadrilateral' and connecting key markets of Kolkata-Odisha-Andhra Pradesh-Chennai/Tamil Nadu.

2.25 The traffic on the Asset is a healthy mix of variety of commodities including the consumption demand generated by Bhuvneshwar and intercity movement connecting the Key cities on the GQ. Further the Asset also caters to traffic from both heavy industries such as mineral mining/trade as well as that from urban/tourism centres.

2.26 It has been observed that in the recent years the industry specifically dependent on iron ore/iron pellets and other minerals have witnessed both economic and regulatory interventions, starting FY21 and FY22 resulting in variations observed in the proportion of commercial traffic catering to the movement of these commodities.

2.27 The next chapter discusses the historical traffic performance of the Asset and discusses the potential reasons for the variations observed. It further discusses the outputs of the primary surveys undertaken on the Asset.

3 Traffic description

Introduction

3.1 This chapter outlines historical and current traffic and revenues recorded on the Asset, as well as our analysis of origin-destination (OD) data and traffic volume count (TVC) data collected for this study.

3.2 Traffic data is generally collected and analysed to understand the volume and vehicle composition of traffic currently using the Asset as well as to validate the data recorded on toll plaza. OD data is used to obtain a better understanding of travel patterns, trip lengths, trip purposes and areas of influence in the vicinity of the Asset, as well as the commodities being moved by the goods vehicles. This analysis, combined with our understanding of the Asset (based on our site visit), enable us to identify the key drivers of traffic demand on the Asset.

3.3 We have used the toll plaza data (TMS) as the basis to estimate the current/base year annual average daily traffic (AADT). This data is provided by the Client and independently analysed and validated by Steer using traffic volume count (TVC) information. The base year traffic estimation is explained in detail in chapter 6.

3.4 The Asset has been operational for over 11 years. The historical traffic for period of December 2011 to March 2023 was provided by the Client.

Historical trends

3.5 The following table indicates the historical variation in traffic volume at toll plaza in terms of vehicle shares and total AADT. As mentioned in chapter 2, the toll revenue was collected on Manguli toll plaza till FY21 and from FY22 onwards it is being collected on Tangi toll plaza. However, due to the section between the two locations being homogenous, there is no variation in traffic characteristics.

Table 3.1: Historical AADT by vehicle class

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
CJV	7,808	7,830	8,065	9,062	10,632	10,689	10,786	10,567	10,424	11,121	12,747
LCV	1,228	1,368	1,260	1,202	1,136	1,159	1,088	1,007	677	533	573
2A/Bus^	2,258	2,273	2,212	2,465	2,895	2,925	2,896	3,075	2,430	2,574	3,100
3A/MAV*	4,717	4,626	4,319	4,558	4,990	5,129	5,207	5,809	6,039	5,027	4,864
Total	**16,010**	**16,096**	**15,855**	**17,288**	**19,652**	**19,902**	**19,977**	**20,457**	**19,571**	**19,255**	**21,285**
PCU	**37,647**	**37,517**	**36,023**	**38,773**	**43,473**	**44,283**	**44,537**	**47,441**	**45,908**	**42,264**	**44,800**

Source: Steer analysis of Client data, ^ Bus and 2A traffic is reported as one category in TMS, * 3A and MAV traffic is reported as one category in TMS till FY21. For consistency, PCU estimation of combined 3A/MAV is determined using PCU factor of 4.5 throughout the years.

3.6 In terms of vehicle composition, CJVs are the biggest and more consistent contributor on the Asset with a share of around 50% since inception of toll operations. High CJV volumes is primarily due to the Asset lying on a corridor which connects districts of Balasore, Bhadrak, Jajpur, Kendrapada with major cities of Cuttack and Bhubaneswar for business and social purposes and tourism traffic destined to Puri. This contribution has increased to about 60% in FY22 and FY23 due to combined effect of post-covid preference for travelling by personal vehicle and simultaneous decrease of share of 3A/MAV traffic carrying mining goods.

3.7 Bus and 2A traffic together are the third largest traffic contributor with about 14% share of the total AADT.

3.8 The historical vehicle wise year-on-year (YoY) growth rates are presented in the table below:

Table 3.2: Historical YoY growth rates and CAGR by vehicle class

YoY (%)	FY18	FY19	FY20	FY21	FY22	FY23	CAGR FY13-20	CAGR FY17-20	CAGR FY17-22	CAGR FY20-22	CAGR FY22-23	CAGR FY22-Q4'23
CJV	0.5%	0.9%	(2.0%)	(1.4%)	6.7%	14.6%	4.4%	(0.2%)	0.9%	2.6%	14.6%	21.9%
LCV	2.0%	(6.1%)	(7.5%)	(32.7%)	(21.3%)	7.5%	(2.8%)	(3.9%)	(14.0%)	(27.2%)	7.5%	12.6%
2A/Bus	1.0%	(1.0%)	6.2%	(21.0%)	5.9%	20.4%	4.5%	2.0%	(2.3%)	(8.5%)	20.4%	30.7%
3A/MAV	2.8%	1.5%	11.6%	4.0%	(16.8%)	(3.2%)	3.0%	5.2%	0.1%	(7.0%)	(3.2%)	13.9%
Total	**1.3%**	**0.4%**	**2.4%**	**(4.3%)**	**(1.6%)**	**10.5%**	**3.6%**	**1.3%**	**(0.4%)**	**(3.0%)**	**10.5%**	**20.7%**
PCU	**1.9%**	**0.6%**	**6.5%**	**(3.2%)**	**(7.9%)**	**6.0%**	**3.4%**	**3.0%**	**(0.6%)**	**(5.6%)**	**6.0%**	**19.0%**

Source: Steer analysis of Client data

3.9 The month-on-month volumes for FY23 are also presented in the tables below:

Table 3.3: FY23 April to August MADT

	Apr-22	May-22	Jun-22	Jul-22	Aug-22
CJV	12,383	12,561	13,361	12,177	11,118
LCV	605	604	589	536	508
Bus	941	933	975	949	890
2A	2,064	1,988	1,957	2,248	1,922
3A	1,715	1,602	1,548	1,420	1,394
MAV	3,225	3,221	3,084	3,064	2,853
OSV	1	0	1	1	1
Total	**20,934**	**20,909**	**21,514**	**20,396**	**18,686**
PCU	**41,968**	**41,533**	**41,562**	**40,627**	**37,343**

Source: Steer Analysis of Client data

Table 3.4: FY23 September to March MADT

	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
CJV	11,553	12,462	12,529	14,177	13,848	13,495	13,328
LCV	525	505	577	631	624	598	579
Bus	924	950	963	923	951	990	952

	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
2A	2,219	1,839	2,280	2,205	2,290	2,734	2,174
3A	1,404	1,394	1,589	1,639	1,582	1,703	1,632
MAV	2,922	2,812	3,090	3,306	3,777	4,331	4,149
OSV	1	1	1	1	1	1	1
Total	**19,548**	**19,963**	**21,028**	**22,882**	**23,074**	**23,852**	**22,814**
PCU	**39,135**	**38,427**	**41,796**	**44,305**	**46,255**	**50,167**	**47,142**

Source: Steer analysis of Client data

3.10 MAVs volumes observed a significant ramp up, growing from a 3,225 MADT in April-22 to 4,149 in Mach-23. This ramp up essentially started in Dec'22 when the MAV volumes increased from an average 3,000 MADT in Nov'22 to and Q4FY23 average of around 4000. As discussed earlier, this increase can be attributed to the withdrawal of export duties on Iron ore. However, a similar ramp up has not been observed in 2A, 3A volumes, which have shown either lower growth in volumes, or a muted trend from April'22 to March'23. This indicates that most of the recovery has been see in the MAV category.

3.11 To account for how 2As, 3As and MAVs have reacted differently to the changes in the economic, and political environment the incremental adjustment has been weighted differently for all three vehicle categories. This has been discussed further in Chapter 6.

3.12 However, the Asset has seen variation in traffic growth in the past due to various external factors. Some of these factors are discussed below.

Figure 3.1: Impact of historical events on traffic (PCU)

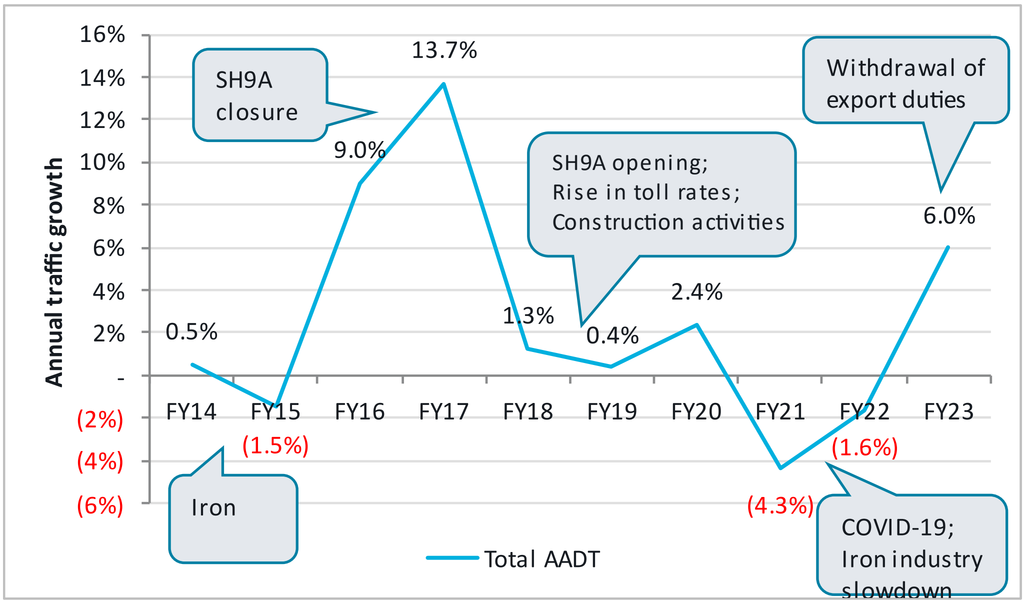


Table 3.5: Historical events impacting traffic

Timeline	Observations
FY15	A temporary ban on iron ore mining in May 2014, causing a drop in truck traffic.
FY16 - FY17	An alternate section of SH9A (referred in Chapter 2) was being improved during this period and hence the traffic diverted on the Asset, resulting in high growths.

Timeline	Observations
FY18	SH9A was re-opened to traffic after upgrades, which caused diversion from the Asset. The toll rates also increased by ~45% in FY18, due to inclusion of the charges of the Mahanadi bridge construction. This further dampened the growth in FY18. The impact of increase in the toll charges was mostly observed in cars.
FY19	Construction activities began on two of the feeder routes and upgradation activities on neighbouring road sections on north and south of the Asset (referred in Chapter 2), causing a suppressed growth in traffic. FY19 was also the year where new axle load norms with 25% additional load being allowed on trucks was introduced. This resulted in some dampening of truck growth.
FY20	The implementation of FASTag caused increase in share of 'Single' tickets being bought. However, this rule also caused the violations to increase in light vehicle categories such as cars and LCVs. Since these vehicles were not recorded at the toll plaza, we saw a decrease in the total light vehicle volume. Heavy commercial traffic showed significant growth, compared to national movements by the end of FY20, due to the increased exports to China, and record iron ore production during this period, as shown in chapter 2.
FY21	The traffic was heavily impacted by lockdowns implemented due to COVID-19 pandemic except 3A/MAV traffic. However, 3A/MAV traffic carrying iron ore goods was not impacted much as the exports to China through both Paradip and Gopalpur ports continued during this period.
FY23	While CJVs, LCVs and Buses have shown an improvement in FY23 vis-à-vis FY22, the 3A/MAV volumes have declined on year-on-year basis due to a slower first half (upto Nov'22) of the year. However, the Q3/Q4 average shows a 14% increase as compared to FY22 and is expected to sustain and grow from these levels depending on how iron ore commodity and policies around the same play out in the future. The first half of the year saw Iron Ore export orders drop May onwards on the back of weakened commodity cycles, COVID-19 measures in China, and a stringent export duty on steel making commodities including Iron Ore. This directly affected 3A/MAV traffic on the Asset. However, towards the end of November 2022, there was a surge in Iron Ore exports following the removal of tariffs on Iron Ore and pellets. In December, total exports increased by seven times on a month-on-month basis, and this trend continued to rise in February. Exports in February saw a 172%[4] increase compared to the same month last year, and these levels of export activity and corresponding traffic performance is to continue in the forecast years as well.

Source: Steer analysis

3.13 Post COVID-19 recovery of traffic and impacts of events related to iron ore trade are discussed in subsequent sections.

Impact of events related to iron ore (FY21-FY23 YTD)

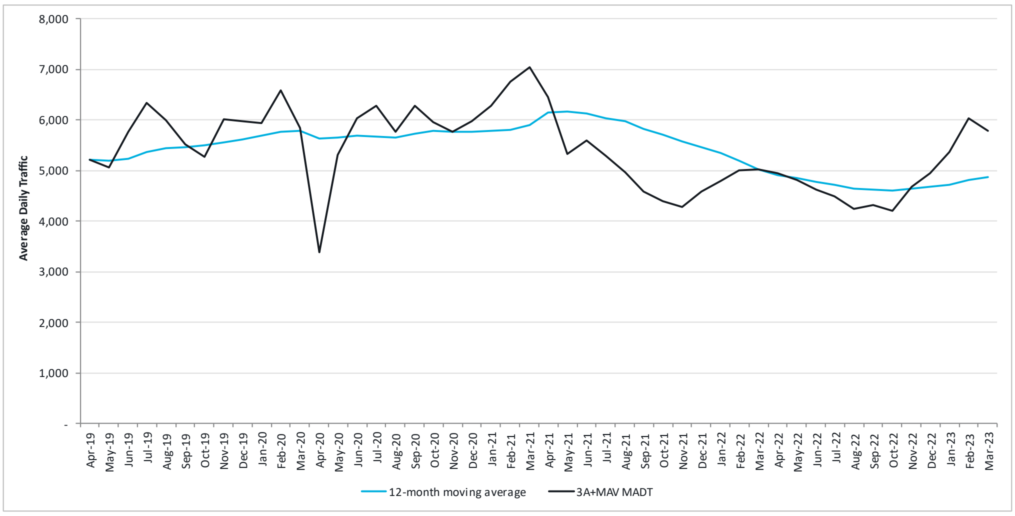
3.14 The heavy commercial traffic, including 3Axle and MAV trucks, recorded a decline in the period of FY21-FY23. This was triggered by several events which caused a slowdown in the

[4] Source: https://www.thehindubusinessline.com/economy/indias-iron-ore-exports-in-february-hit-a-13-month-high/article66576313.ece

iron/steel industry in the region of the Asset. In this section, we've described the timeline of these events.

3.15 The chart below shows the monthly variation in 3A-MAV traffic volume since Apr-19.

Figure 3.2: Monthly variation in 3A-MAV traffic on the Asset



Source: Steer analysis, based on data provided by the Client

3.16 Raw iron ore and pellets are critical commodities for the Asset and hence traffic is sensitive to events associated with iron ore mining, trade, policy, and transportation activities. This has been further qualified in the subsequent sections of the report in Chapter 6.

3.17 Table below summarises the events and their timelines.

Table 3.6: Impact of events associated with iron ore (FY21-FY23 YTD)

Timeline	Event	Impact on 3A/MAV
Jan - April 2021	Global iron ore prices reached all time high which incentivised exports. Spike in iron ore export by 66% out of which 90% was exported to China.	Positive
June - Nov 2021	Reported strike by local mining truck transporter association: Strike caused by unagreeable pay scales being proposed by the government.	Negative
	Suspended auction of iron ore products due to price escalation during June/July 2021. Iron ore auction has resumed from October 2021.	Negative
Nov 2021 - April 2022	Stable prices in global market. Kind of steadiness for export and domestic trade.	Balanced Sustainable 3A/MAV traffic on the Asset in range of 5,000 - 5,500 trucks which was expected to improve gradually in context of trade dynamics.
May 2022 – Nov 2022	Export duty hike:	Negative

Timeline	Event	Impact on 3A/MAV
	• Iron ores and concentrates to 50% from 30% • Pellets to 45% from zero	
Sep 2022	No reduction in floor price of iron ore by the State-run Odisha Mining Corporation. Domestic steel industries stare at closure.	
Nov 2022 till March 2023	Withdrawal of export duty on iron ore and iron pellets	Positive: 3A/MAVs observed a strong recovery in Dec Q3 and Q4 of FY23. This can be attributed to resumption in exports of Iron ore from India post the removal of export duties.

Source: Steer analysis

3.18 In FY20/FY21, Paradip port exported records amount of Iron Ore, at the same time Gopalpur port also started handling Iron Ore/Pellets as a focussed commodity. According to secondary data analysis and stakeholder interviews conducted during the site visit, we understand that some of the Paradip-bound traffic was then diverted to Gopalpur port. The table below shows the traffic volume handled at each of the ports over past years. As per the latest information available both Paradip and Gopalpur ports are now handling Iron Ore /Pellet exports to various geographies.

Table 3.7: Volume of Shipments Handled at Paradip/Gopalpur ('000 tonnes)

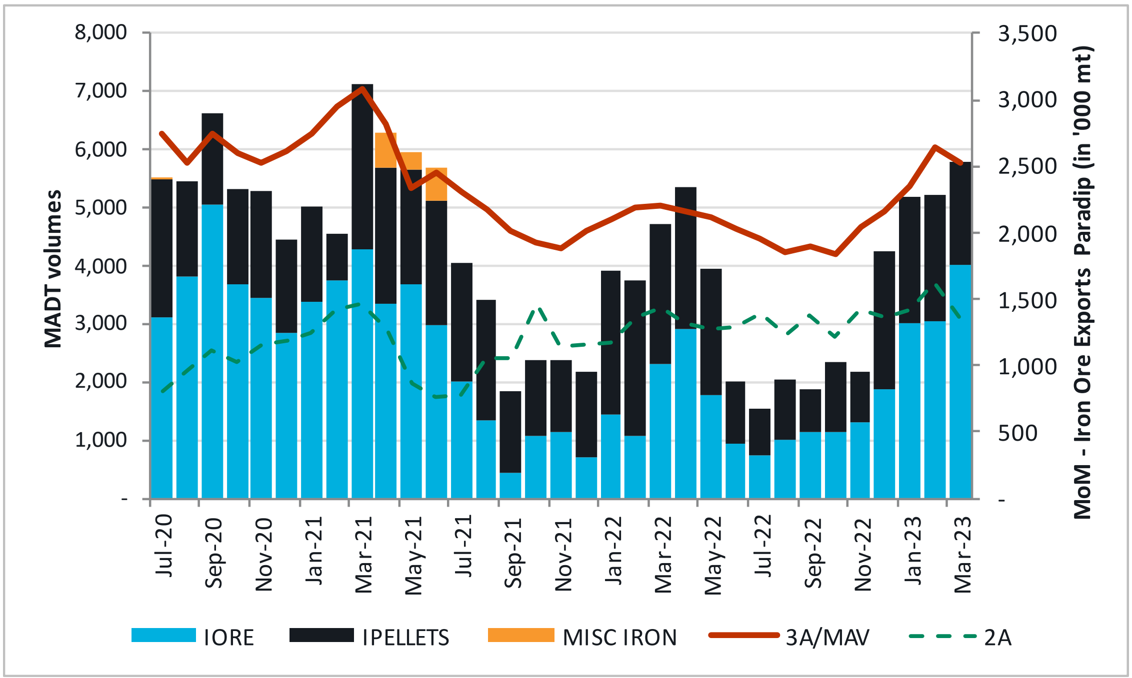
in '000 tonnes	FY18	FY19	FY20	FY21	FY22	FY23
Paradip Port	102,013	109,222	112,690	114,549	116,134	135,362
Gopalpur Port	-	1,512	5,560	10,651	7,973	-

Source: **https://paradipport.gov.in,** data available upto FY22 for Gopalpur port

3.19 The chart below offers insight into the correlation between the iron ore movement on ports in proximity to NH16 and the 3A/MAV traffic. The total iron ore movement on these ports has a direct correlation with the traffic volume on these highways, such as NH16 and 3A/MAV. The recovery of iron ore movement has also had a direct impact on the 3A/MAV traffic, which has followed a directly proportional trajectory. The 3A/MAV traffic has increased along with the increase in the iron ore movement, highlighting the elastic relationship between the two.

3.20 The imposition of export duties and China's domestic market closure had a significant impact on the total iron ore movement, resulting in a decline. However, with the withdrawal of export duties and the reopening of China's domestic market, the total iron ore movement is gradually recovering. The Q4 of FY23 witnessed iron ore movement volumes like the peak levels seen in Mar-April 22, indicating a significant recovery in the transportation of iron ore through these ports.

Figure 3.3: Comparison of monthly variation in 2A, 3A+MAV traffic and iron ore exports



Source: Steer analysis of Client data and data sourced from Paradip port trust data

3.21 The 6% PCU CAGR observed in FY23 is a combination of a slower first half due to reasons such as the imposition of export duties, seasonal variations etc. and a revival of exports after the withdrawal of export duties which may have led to an increase in traffic on the Asset as observed in Q3 and Q4. These events have been explained in detail in Table 3.3 and Table 3.4.

Toll frequency

3.22 Toll frequency or segmentation is typically the share of each ticket category recorded for a particular vehicle type. Each vehicle category has different segmentation. As a part of historical analysis, we calculate the toll frequency for each vehicle category from the monthly data shared by the Client. The most common ticket categories observed on a typical National Highway concession are: Single, Return, Monthly, Local and Exempt. Given the local nature of traffic, some assets offer custom made local passes to attract the local commuters to opt for these category passes instead of evading toll.

3.23 Understanding the toll frequency gives insights into the nature of the traffic. CJVs generally have higher shares of return or local personal passes, while heavy trucks mostly have single tickets since they travel longer distance. However, this varies from asset to asset or even toll plaza to toll plaza. The assets catering to short distance local traffic generally observes high share of return or other local monthly passes while the assets catering to strategic long-distance traffic generally observes high share of single ticket traffic.

3.24 The following are different types of tickets being sold at toll plaza of the Asset.

Table 3.8: Ticket types sold at the Asset

Category	Description
As per concession	
Single	Allows the vehicle to cross the toll plaza once

Category	Description
Return	Daily pass for crossing the toll plaza single time within 24 hours. Charged 1.5 times the single toll
Monthly	Discounted single entry ticket vehicles making multiple trips in a month
Local Personal	Discounted single entry monthly pass only for private cars of residents within 20 km radius of toll plaza.
Local Commercial	50% discount on single trips for commercial vehicles registered in the local district. The pass allows single entry only.
Exemptions	Officially exempted vehicles like ambulance, police cars, key political personnel etc.
Special category discount pass issued by concessionaire	
Disc A	Applicable only for goods traffic i.e., LCV, 2A, 3A, MAV categories. This category of discount allows maximum of two single trips in a day to vehicles from nearby areas of Jagatpur, Cuttack and Manguli in FY14 paying INR 50 for every single entry. No additional passes were issued after FY14.
Disc B+C	Applicable only for goods traffic i.e., LCV, 2A, 3A, MAV categories. These are passes issued to local truckers' association specifically from Manguli in FY14 paying INR 85 for every single entry without any restriction for maximum numbers of trip in a day. No additional passes were issued after FY14.
Pass F	Applicable only for commercial Mini LCVs which caters local demand within 20 km radius of toll plaza paying NR 60 per single entry.

Source: Steer analysis

3.25 Government of India has mandated Electronic Toll Collection (ETC) across National Highways in India, collected via "FASTag". The timeline of ETC implementation is presented in the following table.

Table 3.9: Timeline of national ETC implementation

Date	ETC Development
2014	FASTag system set up as a pilot on the Ahmedabad to Mumbai stretch of the Golden Quadrilateral, in November 2014 it was also implemented on the Delhi to Mumbai stretch of the Quadrilateral.
December 2019	FASTag is made mandatory on all National Highways with only one lane on either side kept as a Cash Lane; cash users entering ETC lanes were charged double the toll.
February 2021	FASTag is made mandatory for all vehicles at every toll plaza in the country starting 15th Feb 2021

Source: NHAI.gov.in and Wikipedia

3.26 The table below presents the reported percentage of traffic via FASTag in August 2022.

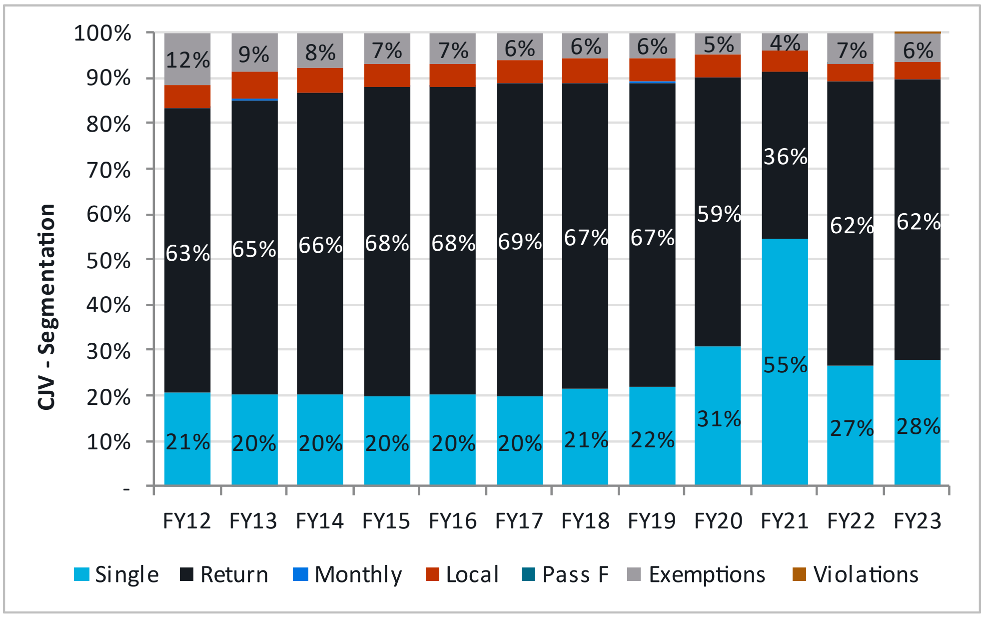
Table 3.10: Percentage of traffic via FASTag in FY23

Toll Plaza	CJV	LCV	2A/Bus	3A	MAV
Tangi toll plaza	98.4%	99.5%	99.8%	99.8%	99.9%

Source: Steer Analysis

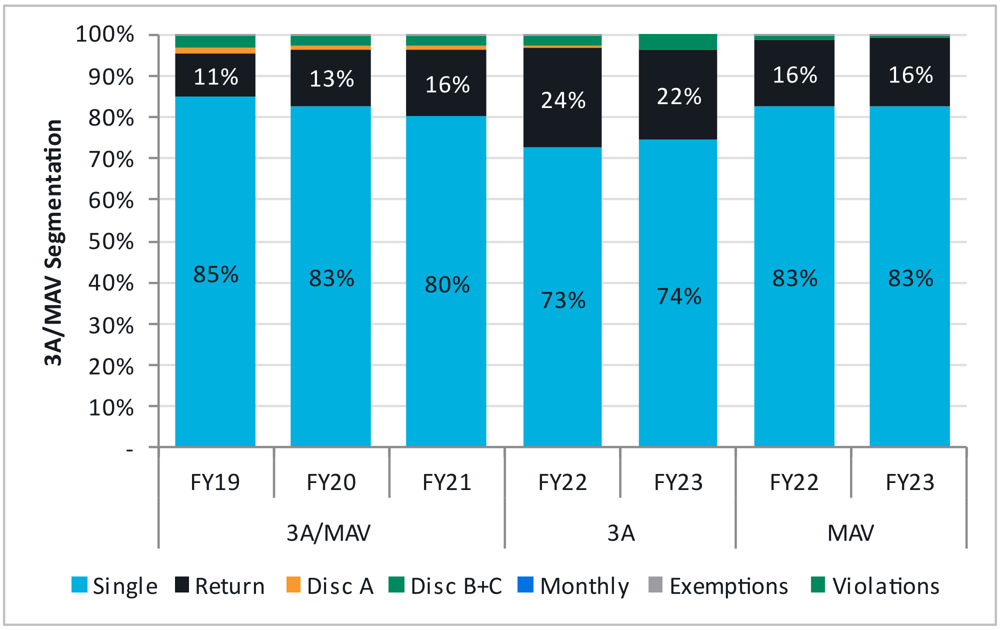
3.27 The following figures provide the toll segmentation for the historical years for CJV, and 3A+MAV while the sub sequent table provides the same for the remaining vehicle types.

Figure 3.4: Historical ticket segmentation for CJV



Source: Steer analysis of Client data

Figure 3.5: Historical ticket segmentation for 3A+MAVs



Source: Steer analysis of Client data

3.28 The share of exemptions observed on this Asset is in line with our observations on similar urban Assets across the region. Reason for change in composition in FY20 and FY21 compared to historical and current trend could be attributed to the drop in availability of local bus services which led to an increase in passenger movement using CJVs.

3.29 The ticket segmentation of other vehicle types is presented in the table below. Bus and 2A traffic historically are being reported as one category. The reason for low FASTag transactions for Bus category is due to local nature of movement catering primarily to educational institutes located near to toll plaza. These buses are being exempt at toll plaza.

Table 3.11: Historical ticket segmentation for LCV

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Single	20%	20%	20%	16%	17%	20%	29%	28%	32%	48%	42%	42%
Return	52%	46%	42%	43%	45%	48%	45%	48%	45%	33%	46%	46%
Disc A	-	0%	0%	0%	0%	0%	0%	0%	-	-	-	-
Disc B+C	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	0%
Monthly	1%	3%	4%	4%	3%	2%	2%	2%	2%	1%	0%	0%
Local	4%	8%	5%	5%	4%	4%	3%	3%	2%	3%	1%	-
Pass F	-	-	-	-	-	-	-	-	-	-	-	-
Exemptions	24%	22%	29%	32%	30%	26%	20%	19%	19%	16%	11%	1%
Violations	-	-	-	-	-	-	-	-	-	-	-	11%

Source: Steer analysis of Client data.

Table 3.12: Historical ticket segmentation for 2A/Bus

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Single	48%	35%	31%	31%	29%	29%	33%	34%	37%	49%	40%	39%
Return	41%	38%	33%	31%	34%	36%	32%	30%	29%	28%	35%	30%
Disc A	-	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%
Disc B+C	-	1%	1%	1%	1%	0%	0%	1%	0%	0%	0%	0%
Monthly	-	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Local	3%	4%	0%	0%	0%	0%	0%	0%	0%	-	-	-
Pass F	-	-	-	-	-	-	-	-	-	-	-	-
Exemptions	8%	19%	32%	35%	34%	33%	32%	34%	32%	22%	25%	0%
Violations	-	-	-	-	-	-	-	-	-	-	-	30%

Source: Steer analysis of Client data.

3.30 In compliance with NHAI rules, starting Sep-22, all forced exemptions which were earlier being categorised as 'fire trucks' by the toll plaza were shifted to the 'force free' category. This is why the shift from Exemptions to Violations is observed in FY23 for all vehicle categories, especially for Buses, 2As and LCVs.

Overloading

3.31 Overloaded vehicles on the Asset are charged at toll fee more than twice the single ticket price. The table shows the share of overloaded vehicles for each goods vehicle category in FY22 and FY23.

Table 3.13: Overloading Traffic shares for FY22 and FY23 onwards

Vehicle type	FY22*	FY23 onwards
LCV	0.01%	0.00%
2A	0.12%	0.00%
3A	2.23%	2.49%

Vehicle type	FY22*	FY23 onwards
MAV	0.73%	0.82%

Source: Steer review of Client TMS data, *FY22 includes data for period of September – April 2022

Data collection and validation

Overview

3.32 As mentioned previously, in order to validate and inform various inputs used in our forecasting, we undertook primary data collection on the Asset, comprising the surveys listed in the table below.

Table 3.14: Data collection schedule at Tangi toll plaza

4-days videography based TVC			1 day OD survey		
Start date	End date	Time (hrs)	Start date	End date	Time (hrs)
31st Aug-2022	3rd Sept-2022	00:00-23:59	2nd Sept 2022	3rd Sept 2022	08:00-07:59

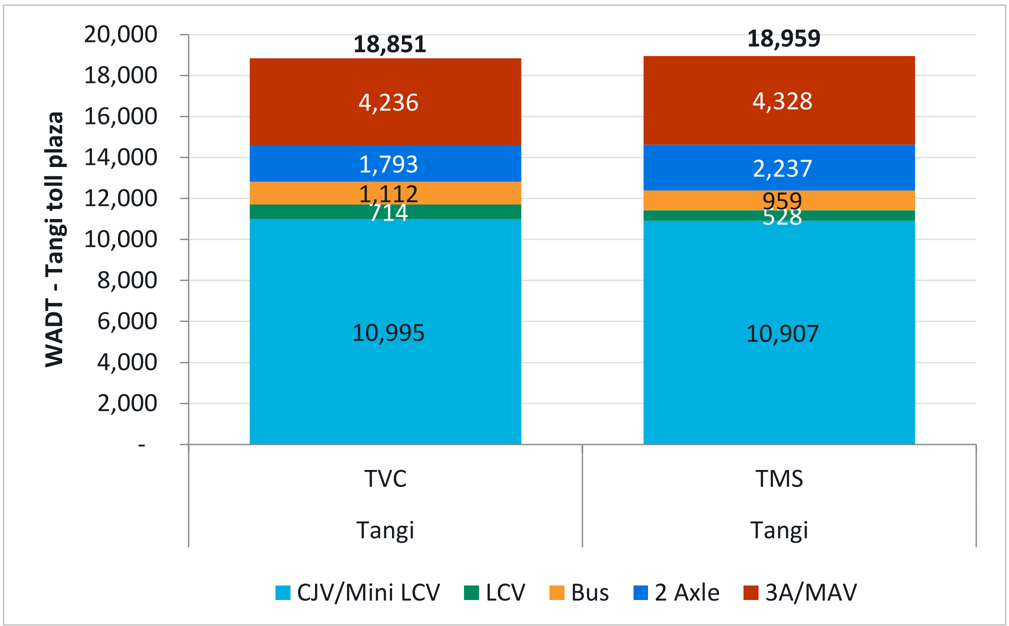
Source: Steer survey schedule

Key findings of TVC data analysis

WADT estimates

3.33 Taking an average of the TVC counts, we obtained the following weekly average daily traffic (WADT). This WADT excludes non-tollable vehicles such as tractors, two-wheelers, bullock-carts, etc., but includes officially exempt vehicles such as police cars, ambulances, emergency response vehicles, government vehicles and other vehicle types officially allowed as 'exempted' under the concession agreement.

Figure 3.6: WADT at Tangi toll plaza



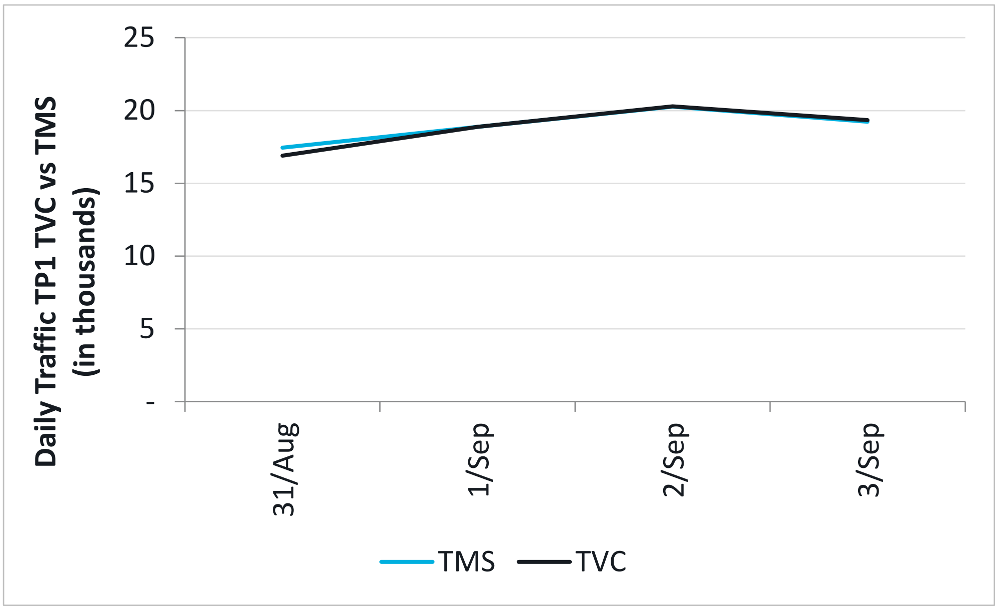
Source: Steer analysis

TVC v/s TMS analysis

3.34 As we use the TMS data to estimate the base year AADT, we have used our TVC data to validate the TMS data on those particular days, as supplied by the Client.

3.35 The following figures show the comparison between the daily traffic observed by TVC and TMS at Tangi toll plaza. As shown in the figures below, TVC and TMS show a close fit overall and the differences are within the acceptable range of variation.

Figure 3.7: Comparison of total traffic from TVC and TMS



Source: Steer analysis

3.36 From the observations above, the TVC counts are in line with the corresponding TMS data on a total level. Overall, as the comparison is well within an acceptable range of variation (0.6%) and the trends are also observed to be following a similar trend over the 3 days, TMS data is found to be reliable, and we have based our forecast on the TMS data.

3.37 The difference between TVC and TMS data varies across different vehicle categories. The table below shows the comparison of TVC and TMS data at a vehicle category level. It should be noted that the TMS data provided had the combined categories of Bus-2A. For like-to-like comparison, we applied the shares of the individual vehicle categories obtained from TVC.

Table 3.15: Comparison of TVC and TMS data by vehicle category

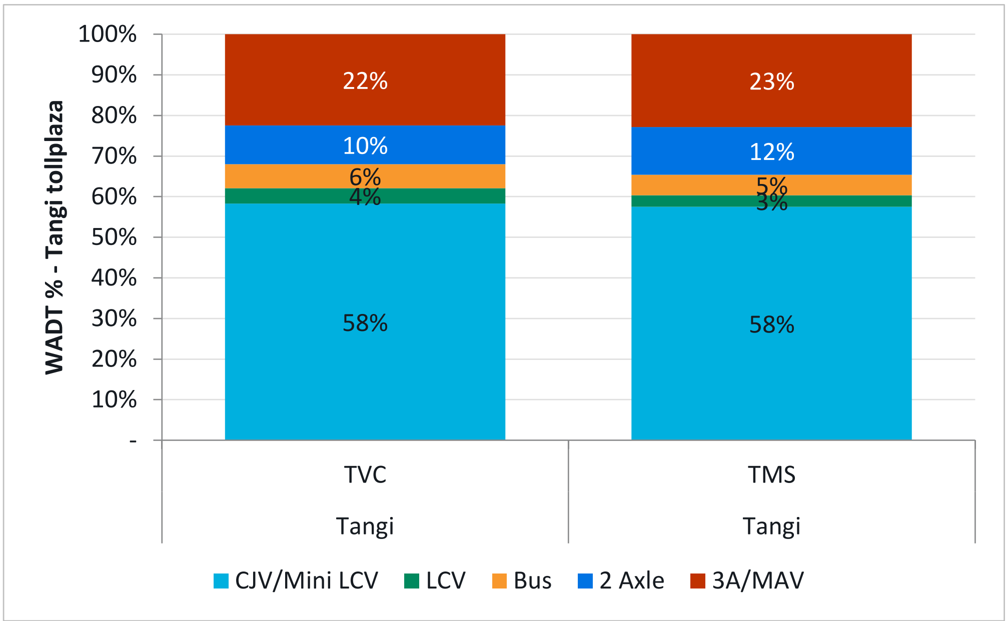
Source	Car	LCV	Bus	2A	3A	MAV	Total
TVC	10,997	727	1,111	1,778	1,405	2,839	18,858
TMS	10,907	528	959	2,237	1,402	2,927	18,959
Difference (%)	(0.8%)	(27.4%)	(13.7%)	25.8%	0.2%	3.0%	0.6%

Source: Steer analysis of Steer TVC data and TMS data shared by the client

3.38 Misclassification of vehicle categories often lead to variations in the individual category, for instance LCV-2A, mini-LCV (tolled at car level) and LCV, mini-bus (tolled at LCV level) and Bus.

Also, Bus and 2A are tolled at the same level, which could cause misclassification in recording data.

Figure 3.8: Comparison between vehicle shares from TVC and TMS WADTs



Source: Steer analysis of TVC and Client TMS data, 2022

3.39 We observed an overall good fit of the data at WADT level and minimal variation between the TVC and TMS data for the largest revenue generator, CJVs and MAVs. This gives us the confidence that the base year traffic calculated using the Client data forms a robust base year traffic estimate.

Key findings of Origin-Destination (OD) data analysis

Overview

3.40 Origin-destination (OD) analysis enables the understanding of the nature of traffic movement on the Asset. The OD analysis presented here is based on data collected in September 2022.

3.41 We have analysed the regional drivers of demand based on the following analyses:

- Zonal influence
- Commodity distribution
- Top OD pairs
- Trip length distribution

Sample Rates

3.42 Sample rates help understand the reliability of OD data. They are calculated by dividing OD samples by the TVC count observed on the same date for each vehicle category at the toll plaza. The table below presents the sample rates for key vehicle type aggregations at the toll plaza. We believe that the sample rates of the OD data are reasonable for the analysis required, especially for the heavy trucks, 3A and MAV.

Table 3.16: OD Sample rates

Vehicle Class	Sample Rate
Car	21%
Mini LCV	28%
LCV	44%
Bus	59%
2A	62%
3A	71%
MAV	61%

Source: Steer analysis

3.43 We obtained good sample rates on all the commercial trucks and LCVs. The sample rates for cars and small vehicles were relatively low, due to lower response rates and generally quick movements of the vehicles, which is typically observed on plazas closer to urban centres.

Zone categories

3.44 To facilitate better interpretation of key regional drivers of traffic as determined by their OD zones, and influenced by various towns, cities, states and regions in the vicinity of the Asset, we have aggregated zonal data as described in the table below.

Table 3.17: Zone aggregations for zonal influence analysis

Aggregate Zone	Description
Local	On or very close to the Asset.
Immediate area of influence (IAOI)	Within two districts from the Asset, roughly up to about 75-150 km from the Asset.
Rest of Odisha	Rest of the cities/Districts in the state that Asset lies in (other than Local/IAOI)
South India	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Goa, Puducherry
North India	Delhi NCR, Punjab, Haryana, Himachal Pradesh, parts of Rajasthan and Jammu & Kashmir
Western India	Gujarat/parts of Rajasthan/parts of Maharashtra
Northeast India	Assam, Meghalaya, Tripura, Nagaland, Arunachal Pradesh, Sikkim, Mizoram
Central India	Madhya Pradesh, parts of Maharashtra and Chhattisgarh
East India	West Bengal and Bihar
Islands	Andaman & Nicobar Island
Bangladesh	Bangladesh
Nepal	Nepal
Outside India	Outside India

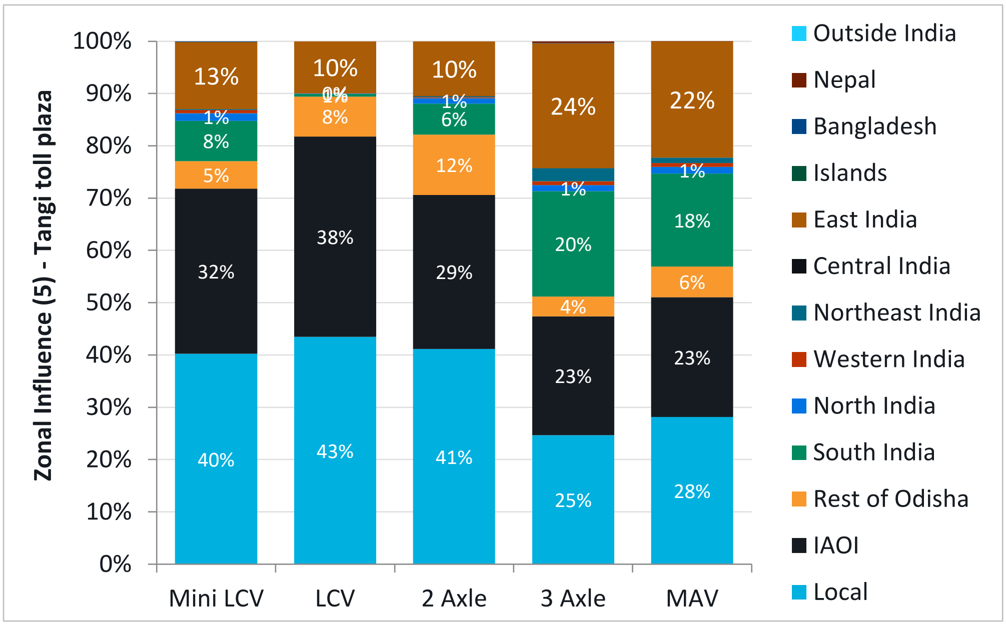
Source: Steer analysis

Zonal influence

3.45 This section presents the zonal influence at Tangi toll plaza of the Asset aggregated based on zonal aggregation listed in the previous sub-section. Zonal influence shows us the percentage of vehicles with one end of their trip in the mentioned zone.

3.46 The figure below presents the zonal influence on various vehicle types of the toll plaza. Generally smaller vehicles see a higher share of local trips than Trucks and MAVs. Across all vehicle categories minimum 50% trips are locally originated and within Odisha. This indicates presence of traffic related to iron ore, ports and steel clusters within Odisha which requires heavy movement of trucks within the state.

Figure 3.9: Zonal influence at Tangi toll plaza



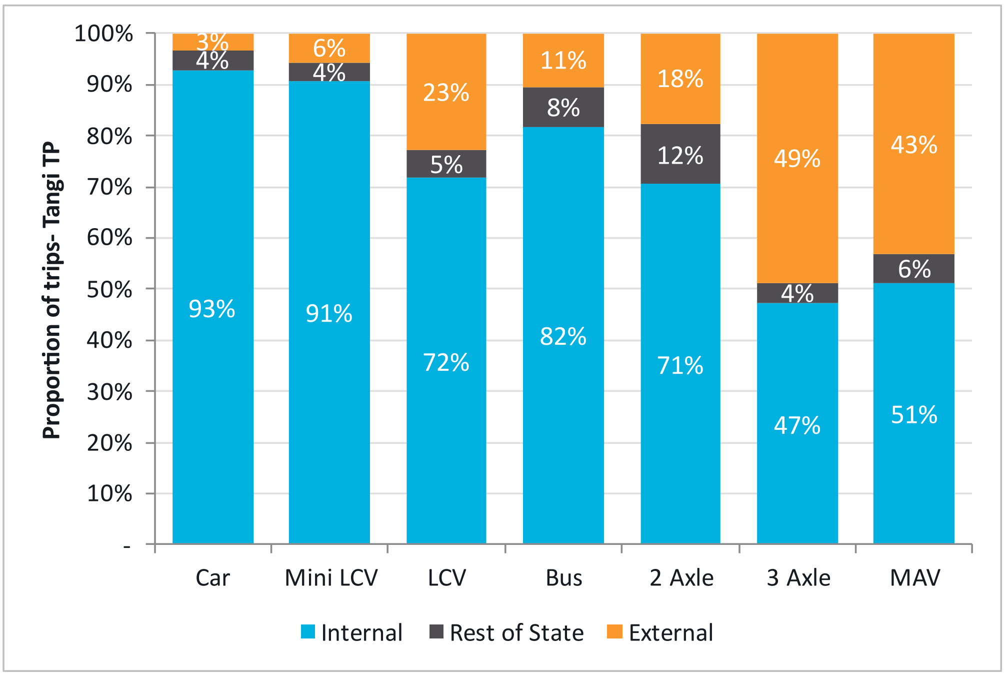
Source: Steer analysis

Internal External analysis

3.47 Internal-External analysis helps in identifying the proportion of trips which are driven by local/IAOI areas vs those away from the Asset.

3.48 Below figure shows the distribution of trips based on these categories. Understandably, these reflect the observations seen in the zonal influence presented earlier, at a higher level of aggregation.

Figure 3.10 Internal-external distribution at Tangi



Source: Steer analysis

Commodity distribution

3.49 We have grouped various commodities into aggregate categories for ease of interpretation, as shown in the table below. The charts in the following sub-section present information in terms of these aggregate commodity categories.

Table 3.18: Aggregate commodity categories

Commodity Description	Code
Agriculture Products / Cash crops (Wheat, Rice, Sugarcane, Maize etc.)	AGR
Perishable Items (Fruits, Vegetables)	PER
Animal Products/Dairy/Eggs/Fish/Meat/Animals	DFM
Building Material / Construction (Cement, Brick, Sand, Clay, Stone, Marble, Granite etc.)	CNS
Groceries/Cattle Food/Livestock(Sheep, Goat, Cow, etc)/ Food items (Soap, Salt, Sugar, Pulses, Spices, Biscuits, Bread, Drinks, etc.)	GRO
Iron Ore/and Iron Pellets/other Iron Minerals and related iron raw materials	IOR
Processed Steel (Steel coils/Steel wires/any other processed steel material)	STL
Coal	COL
Petroleum Products (Oil, LPG, CNG, etc.)	PET
Chemicals / Fertilizers (Acids, Fertilizers etc.)	CHM
Manufacturing items (Electronic items, Medicine, Leather, Wine, Rubber/ Tyre, Plastics, Cloth, Paper etc.)/Machinery	MAC
Automobiles (Finished products, Auto parts, Car/bike manufacturing)	AUT
Parcel/Courier	PAR
Miscellaneous (Household items, Container, Passengers, Scrap)	MSC
Steel/Metal	MET

Commodity Description	Code
Empty	EMT

Source: Steer analysis

3.50 The figure below presents the commodity distribution for goods vehicles at Tangi toll plaza. As also observed during our site visits, we see that a significant number of vehicles are “Empty”. There is a significant share of Raw Iron Ore being transported along this corridor, along with Groceries and Perishables. Overall, Manufacturing, Construction, Miscellaneous, Courier & Parcel products make-up the top aggregate category at the toll plaza.

3.51 The table below shows the comparison of total traffic volume and the volume of traffic related to iron and steel industry observed in FY20 (based on our previous studies of the Asset) and in FY23.

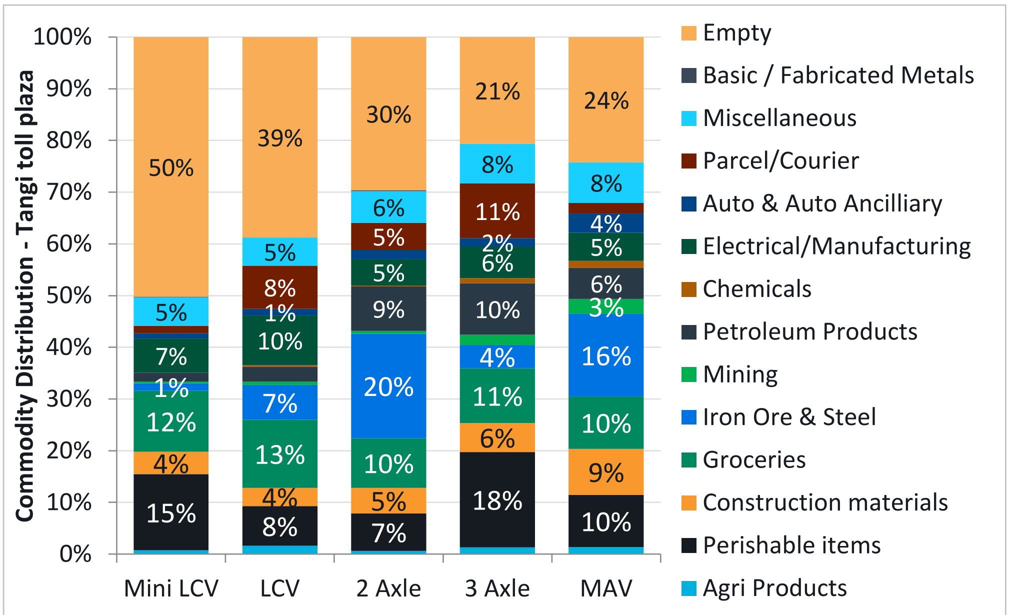
Table 3.19: Comparison of iron/steel related 3A-MAV traffic

3A/MAV Traffic	FY20	FY23
AADT	6,635	5,075
Iron/Steel related traffic	1,877	1,015

Source: Client data and Steer OD data

3.52 As seen in the table above, the variations in the iron/steel industry has resulted into a loss of about 860 3A/MAV trucks. We expect some of this traffic to recover over the next 18-24 months, as some of the regulatory/policy-based changes come through. This is further explained in detail in chapter 6.

Figure 3.11: Commodity distribution at Tangi toll plaza



Source: Steer analysis

Trip length analysis

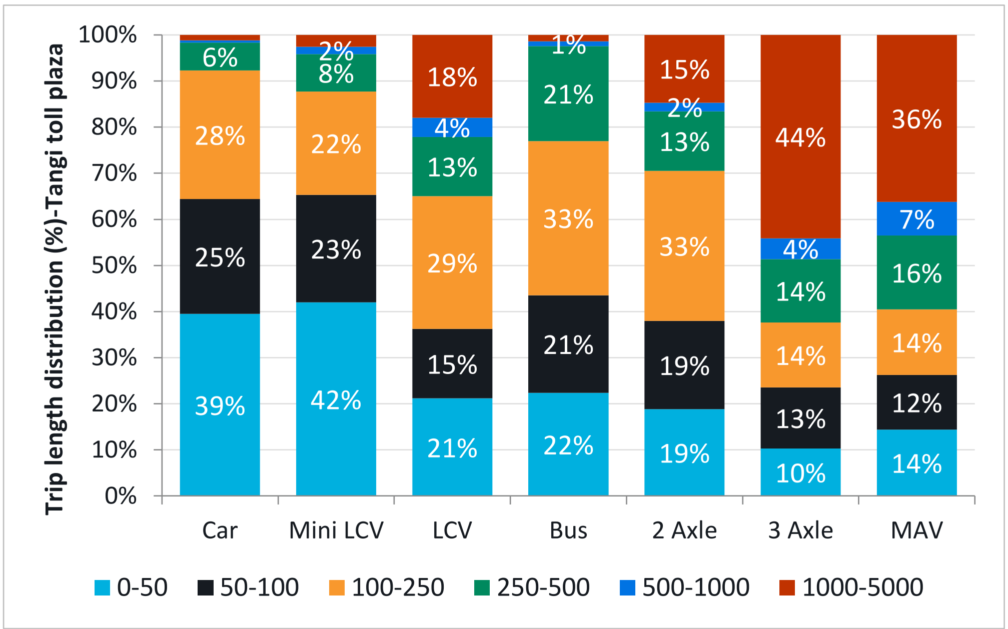
3.53 Trip-length distribution provides the distance-based profile of various vehicle types. This helps to validate assumptions around the share of macro-economic drivers, inputs from zonal influence and toll segmentation. For ease of interpretation, we have categorised distances into 6 groups

- local (0-50 km);
- short distance (50-100 km);
- medium distance (100-500 km);
- long distance (500-1000 km); and
- very-long-distance (+1000 km).

3.54 The trip distances were estimated using GIS analysis tool where the distance between two trips is calculated using their OD coordinates.

3.55 The majority of trips for all vehicle categories are within 250 kms, except 3A/MAVs. The 3A and MAVs trucks, have higher shares of trips covering more than 1000 kms. This is in line with general trend that smaller vehicles have shorter distances (0-250 km) compared to goods-carrying heavy vehicles.

Figure 3.12: Trip length distribution



Source: Steer analysis

Summary of survey data analysis

3.56 The traffic reported in TMS, is validated with the our independent TVC counts, especially for the total daily volume of traffic. This gives us reliability to estimate the base year traffic volume using the TMS data.

3.57 The commodity distribution includes goods that cater to the nation-centric demands and hence, confirms the strategic nature of the Asset which is similar to the nature of traffic observed on the other plazas of NH16 which have been studied in the past. The proportion of mineral movement in heavy commercial vehicles is significant.

3.58 The Asset's proximity to ports like Paradip, Dharma, and Gopalpur allow the Asset to cater to export/import demands being met by the above-mentioned ports. This, however, also makes the Asset relatively sensitive to a change in economic/political reforms which may affect export trends, which was observed in the FY20 vs FY23 data.

3.59 The increase in export duty, and mining bans affected the long-distance movements of trucks carrying minerals/Iron Ore in the first half of the, but local demand for minerals/iron ore continued to appear on the Asset particularly on 2A trucks. These vehicles catered to demand being generated from nearby areas such as Cuttack, Jagatpur, Bhubaneswar.

4 Socio-economic context and growth drivers

Introduction

4.1 The growth of traffic on existing (brownfield) roads depends on, firstly, how fast the background travel demand grows (background growth); and secondly, how successful the Asset is in attracting that traffic (traffic capture). Background travel demand is driven by the socio-economic conditions of the region where the Asset is located and conditions on a national scale. These include:

- Changes in factors such as population, economic growth (regional and national) and industrial production; and,
- Other local factors such as strategic port growth, and growth in local industries near the Assets.

4.2 In turn, the change in the competitive position of the Asset (and thus of the traffic capture it will achieve) derives from how the service offered and the prices charged on the Asset change in comparison to competing roads; and whether any new competing road facilities are available.

4.3 In this chapter, we assess the socio-economic indicators relevant to traffic growth on the Asset.

Population growth

National level

4.4 The total population in India has grown at a Compound Annual Growth Rate (CAGR) of 1.5% since 2000, decreasing over the years, as shown in the table below. The World Bank forecasts this growth to decrease to 0.6% CAGR by the 2030-45 period.

Table 4.1: CAGR of Population in India

Years	CAGR		
	Total population	**Rural population**	**Urban population**
1970 – 1985	2.3%	1.9%	3.8%
1985 – 2000	2.0%	1.7%	2.9%
2000 – 2015	1.5%	1.0%	2.6%
2015 – 2030*	1.0%	0.3%	2.3%
2030 – 2045*	0.6%	-0.3%	1.9%

Source: World Bank data on Health Nutrition and Population Statistics; ** forecast population growth*

4.5 Population growth has been higher in urban areas than in rural areas. The urbanization trend is forecast to continue, with an expected shrinking of the rural population over 30 years.

State level

4.6 The table below shows the evolution of population in the states containing the Asset, compared to that of the country. These states follow the national trend: faster growth in the cities than in rural areas. Odisha has grown at a rate similar or marginally lower than the national average in the decade between 2001 and 2011.

Table 4.2: Population Growth in India (2001 – 2011)

State / Union Territory	2001 Population (million)			2011 Population (million)			CAGR (2001 – 2011)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Odisha	37	31	6	42	35	7	1.3%	1.1%	2.4%
India	**1,029**	**742**	**286**	**1,210**	**833**	**377**	**1.6%**	**1.2%**	**2.8%**

Source: National Institution for Transforming India (NITI Aayog) – Census Data, http://niti.gov.in/content/population-number-male-female-rural-urban

4.7 Due to the complexities of urbanisation, and the dynamic nature of local population migration (both of which are very difficult to forecast with accuracy), we do not use population growth as a proxy for understanding future travel demand growth on the Asset. It has been included in this section simply to provide the underlying socio-economic context of the state/trends in the regions in which the Asset is located.

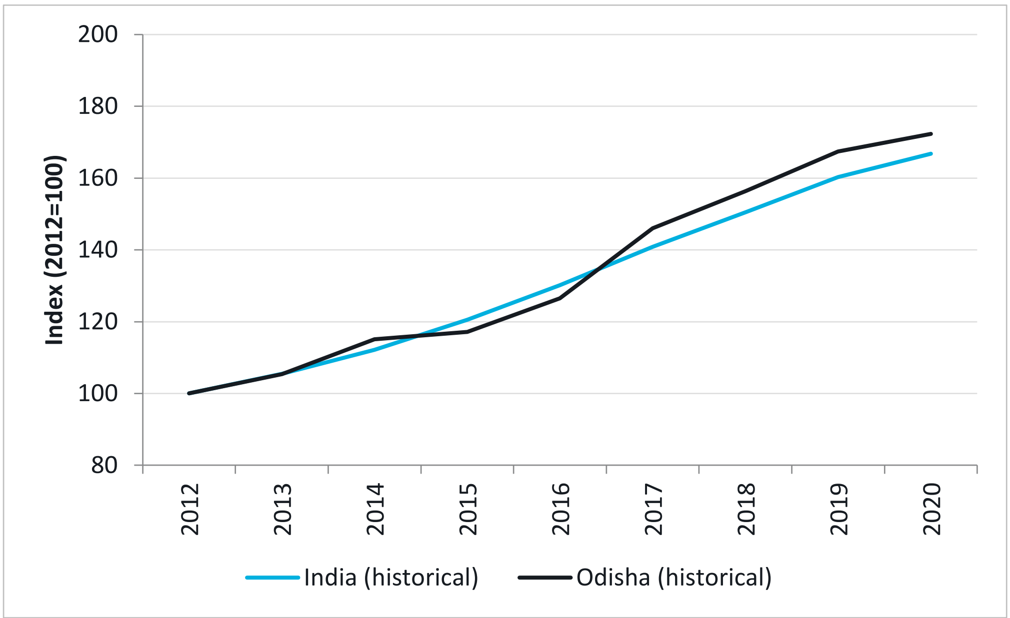
Economic growth

GDP and GSDP Growth

4.8 The Indian economy has grown at a CAGR of 6.9% over the past decade, aided by a strong growth in the services/tertiary sector (9.4% CAGR, FY12-FY19).

4.9 The economic performance of Odisha has been in-line or slightly higher than that of the country. The state contributes approximately 8% to India's GDP. The following figures illustrate the evolution of Odisha's GSDP.

Figure 4.1: Evolution of state GDP and national GDP, Odisha



Source: Ministry of Statistics and Program Implementation (MOSPI) and Odisha economic survey 2019-20

4.10 The Odisha economy has had strong growth, except for a drop in 2015, which was due to a combination of natural disasters and industrial recession in the state.

4.11 In recent years, strong growth in mining and allied industries has spurred higher growth in the economy of the state.

4.12 The global pandemic, COVID-19, impacted the economy in the country and the state. However, as iron ore and steel industry in the state has over-performed recently, the GSDP is likely to be higher.

Growth drivers

4.13 In the following sections we describe the assumptions in relation to forecasts of the key socio-economic drivers of traffic.

National GDP

4.14 India's GDP is the core variable that drives our socio-economic forecasts. We have used independent sources providing national GDP forecasts as mentioned in below table.

Table 4.3: Independent source used for economic forecasts of India's GDP

Source	Month/year of data	Forecasted Period*
Consensus Forecasts	October 2021	2022 – 2050

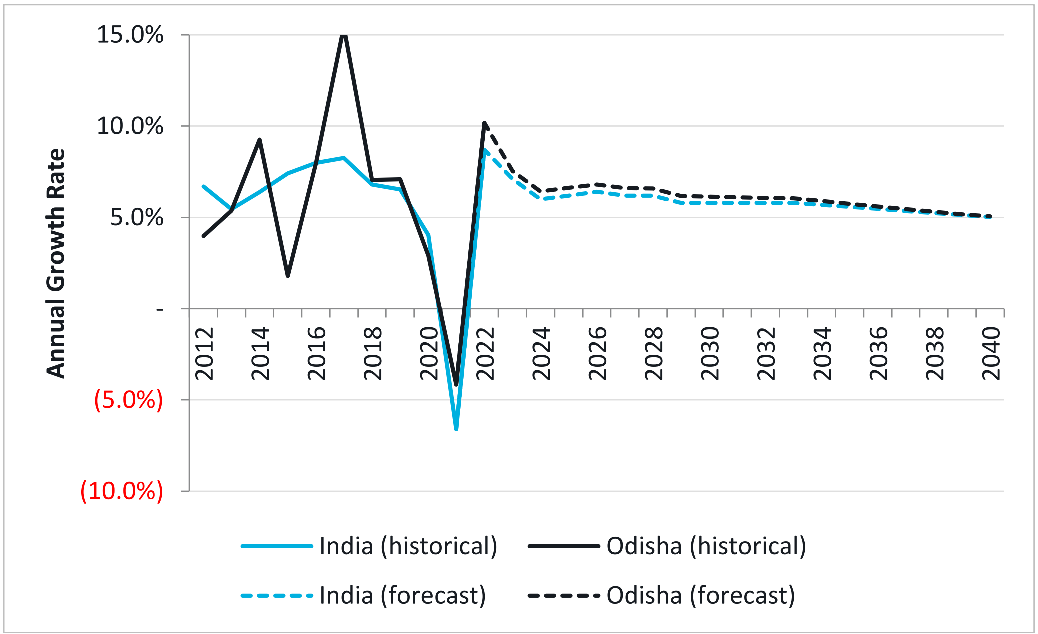
Source: Steer analysis based on third party forecasts. *Forecasts for immediate 2 years are extracted from Aug-22 publication

State GDP (GSDP)

4.15 We have estimated state level GSDPs by comparing historic trends of state level GSDP growth with the national GDP growth we have established GSDP projections for each state. We assumed that as the Indian economy grows, the states which have historically grown at a faster pace will, over 10 years, see a slowdown in GSDP growth, tending to the national average, whereas the states that have grown slower than the national GDP will begin to pick-up and grow faster. The GDP-GSDP gap would partially converge by 2034, and fully converge by 2040.

4.16 Our resulting GSDP forecasts are shown in the following figure.

Figure 4.2: Historic and Forecast GDP Growth, Odisha



Source: Steer analysis based on publicly available data

Iron Ore Production

4.17 As described previously, Odisha and particularly the region around the Asset is rich in iron ore deposits and hence has significant iron ore production, which is seen on the Asset. Historically, iron ore production has grown strongly in Odisha, as shown in the table below. However, the production levels have seen significant variation year-on-year providing no clear long-term trend. Some of the reasons for such variations include mining bans by the Supreme court, lease expiry, global and domestic demand disruptions and revivals.

Table 4.4: Growth in iron ore production in Odisha

FY	2014	2015	2016	2017	2018	2019	2020	2021	2022
Iron Ore production	17%	-32%	52%	27%	2%	15%	17%	(21%)	31%

Source: https://www.odishaminerals.gov.in/ResourceStatistics/MineralProduction

4.18 To provide a forecast of iron ore production, we established its relation to GDP, which gave us a factor of 0.9. We applied this factor to GDP growth year on year, to forecast the iron ore production growth rates going forward. The analysis based on which this relationship has been estimated is presented in the Appendices.

Paradip Port

4.19 Like iron ore production, we studied the growth in Paradip port historically, shown in the table below.

Table 4.5: Paradip port growth

FY	2014	2015	2016	2017	2018	2019	2020	2021	2022
Paradip port	20%	4%	8%	16%	15%	7%	3%	2%	1%

Source: https://paradipport.gov.in

4.20 Paradip port has also seen substantial growth historically. The port handled 55mn tonnes of cargo in FY13 rising to 114mn tonnes in FY21 representing a healthy CAGR of 9% over the years, however significant capacity additions (new SPM installed, new cargo berth added) have happened on the port over the years resulting in more than normal increases in cargo handled at the port. When compared with the historical GDP, we got an average factor of 0.9 for Paradip port growth too. Therefore, to provide a forecast of a normal port growth, we have assumed a factor of 0.9 to GDP in the long term (please refer appendices for analysis).

Summary

4.21 We have adopted economic indicators as a proxy for understanding future travel demand growth on the Asset. Due to the complexities of urbanisation, and the dynamic nature of local population migration (both of which are very difficult to forecast with accuracy), we do not use population growth as a reliable indicator.

4.22 Due to the regional and industrial influence explained in chapters 2& 3, the key growth drivers used for traffic demand projections are:

- National GDP;
- State GSDP;
- Iron ore production;
- Port movement.

4.23 The national GDP projections are sourced from independent economic publication (Consensus).

4.24 The growth projections of other drivers are estimated by studying the historical corelations of those respective drivers with the national GDP trends, which gave us factors to be applied on GDP projections.

5 Traffic Growth Analysis

Introduction

5.1 In this chapter, we present our approach, assumptions and results for base (or background) traffic growth for each vehicle category on the Asset.

5.2 Traffic growth is commonly related to a variety of macro-economic and industry- or commodity-specific factors (hereafter referred to as 'traffic growth drivers'). These growth drivers are typically identified from the results of the OD data analysis and the site visits that help us appreciate the nature of traffic movement – 'what' travels 'where' and 'why'.

5.3 To understand historical traffic trends in relation to these growth drivers, we have carried out regression analysis to determine the historical relationship between traffic belonging to each major vehicle category and its macroeconomic growth drivers at each toll plaza. The traffic demand is the dependent variable while the one or more identified growth drivers are the independent or explanatory variables.

5.4 Typically, passenger and light commercial vehicle traffic like cars, buses, LCVs and 2-axle trucks grow in line with the GSDP of the state in which the toll road is located. Heavy vehicle traffic like 3-axle trucks and MAVs grow in line with the national GDP. This is because the majority of light vehicles tend to travel shorter distances within the state, whereas a significant proportion of heavy vehicles carry commodities for long-distances across the country. These commodities also tend to be part of industry ecosystems whose demand-supply relationships are scattered across the country and therefore are more closely related to GDP growth.

Traffic Growth

5.5 The table below presents the historical growth rate of each vehicle type on the Asset.

Table 5.1: Historical YoY growth rates and CAGR by vehicle class

FY	FY14	FY17	FY20	FY21	FY22	FY23	FY14-FY20	FY17-FY20	FY20-FY22	FY14-FY22
CJV	7,830	10,632	10,567	10,424	11,121	12,747	5.1%	(0.2%)	2.6%	4.5%
LCV	1,368	1,136	1,007	677	533	573	(5.0%)	(3.9%)	(27.2%)	(11.1%)
Bus/2A	2,273	2,895	3,075	2,430	2,574	3,100	5.2%	2.0%	(8.5%)	1.6%
3A+MAV	4,626	4,989	5,806	6,039	5026	4,864	3.9%	5.2%	(7.0%)	1.0%
Total	16,096	19,652	20,457	19,571	19,255	21,285	4.1%	1.3%	(3.0%)	2.3%
PCU	37,517	43,473	47,441	45,908	42,264	44,800	4.0%	3.0%	(5.6%)	1.5%

Source: Steer analysis of Client data

5.6 However, in the case of this Asset, the historical traffic trend was heavily influenced by external factors, as described in Chapter 3. To understand the underlying growth of traffic on the Asset, we analysed the historical data to separate the effects of one-time events.

5.7 As previously described, following impacts the historical traffic on the Asset:

- A temporary ban on iron ore mining was imposed in May 2014, causing a drop in truck traffic in FY15;
- An alternate section of SH9A, shown in Figure 2.2, was being improved during FY16-FY17, during which the traffic diverted on the Asset, resulting in high growths;
- In FY18, SH9A was opened to traffic after upgrades, which caused diversion from the Asset to SH9A;
- The toll rates also increased by ~45% in FY18, due to inclusion of the charges of the Mahanadi bridge construction. This further dampened the growth in FY18. The impact of increase in the toll charges was mostly observed in cars;
- In mid-FY19, construction/upgradation activities began on three of the feeder routes to the Asset, as described in Chapter 2, causing a suppressed growth in traffic. FY19 was also the year where new axle load norms with 20% additional load being allowed on trucks was introduced. This resulted in some dampening of truck growth.
- The implementation of FASTag caused increase in share of 'Single' tickets being bought. However, this rule also caused the violations to increase in light vehicle categories such as cars and LCVs. Since these vehicles were not recorded at the toll plaza, we saw a decrease in the total light vehicle volume.
- In FY21, the traffic was heavily impacted by lockdowns implemented due to COVID-19 pandemic. Whereas the Truck traffic was influenced by mineral related movement as discussed in detail in Chapter 2 and 3.
- FY22, there was a change in location of the toll plaza as well as the impact of mineral related issues such as export duty, export + domestic demand moderation, truck strikes have impacted traffic followed by subsequent recovery in traffic volumes starting Dec FY23, and hence has been excluded from the analysis. Cars in the same period (FY22/FY23) have recorded a 6.7% growth and therefore have maintained their long-term performance as exhibited in the historical years.

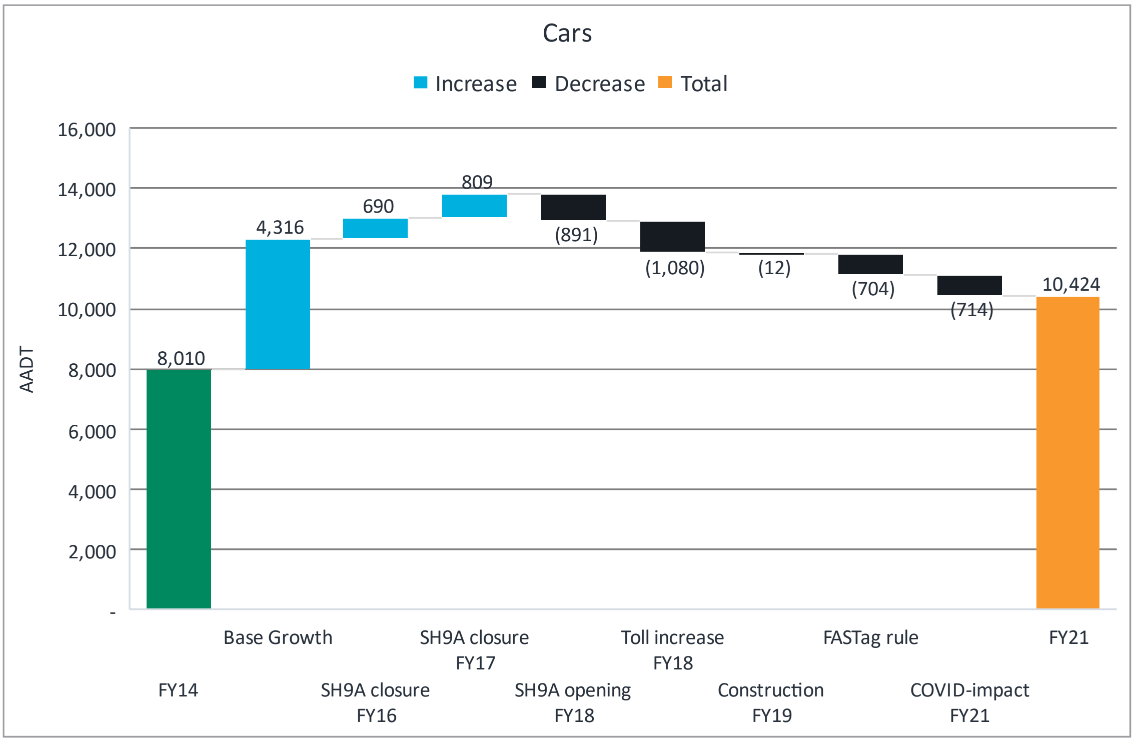
5.8 We analysed the extent of each these impacts using relevant information from OD data and publicly available information like toll charges in respective years, distances etc as briefly explained below. Please note that for the purpose of this analysis, we had to rely on the OD data we had from FY20, as that was the oldest clear source available to us.

- Iron-ore mining ban: We estimated this impact by multiplying the degrowth in iron ore production registered in FY15 to the share of traffic related to iron-ore industry, extracted from the OD.
- SH9A related diversions/Construction related dampening: We estimated this impact by comparing the generalised journey costs of trips via the Asset and via SH9A. In case of construction activities along the corridor, we built similar comparisons between the LOS of the Asset corridor before and during the construction. The diversions are estimated based on a simple logit choice model.
- Toll increase: Based on our experience of over 150 toll roads in the country, we have observed that the relationship of user behaviour of aversion of toll payment has a relationship of -0.2 to the increase in toll rates. In FY19, the toll rates were increased by about 50%, so the impact estimated was roughly 10% on traffic.
- FASTag implementation: during the FASTag implementation stage, due to various operational hassles, we saw a drop in traffic, to some extent, in FY20. We compared the FY20 degrowth to the CAGR of FY14-FY20 and assume that difference to be the effect of FASTag implementation.

- COVID-19 impact: We applied the CAGR of FY14-FY20 to FY21 to estimate what would've been the traffic volume in FY21, without the pandemic. The difference between this estimate and the actual FY21 volume gave us the impact of COVID-19.

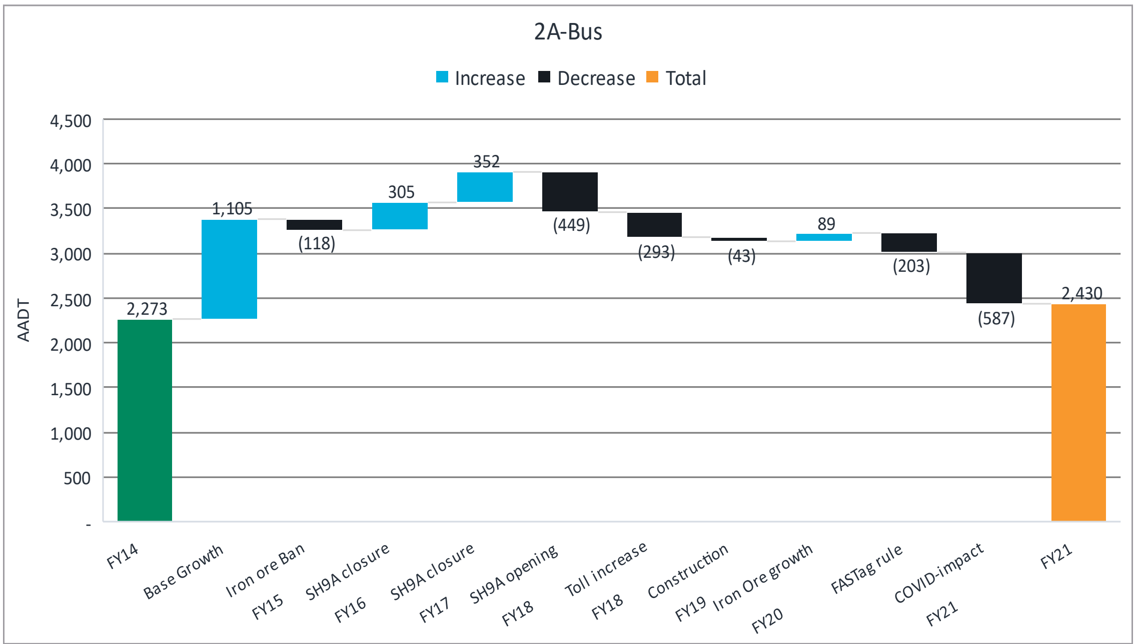
5.9 The following charts show the evolution of traffic on the Asset between FY14 and FY21.

Figure 5.1: Historical growth of Cars on the Asset



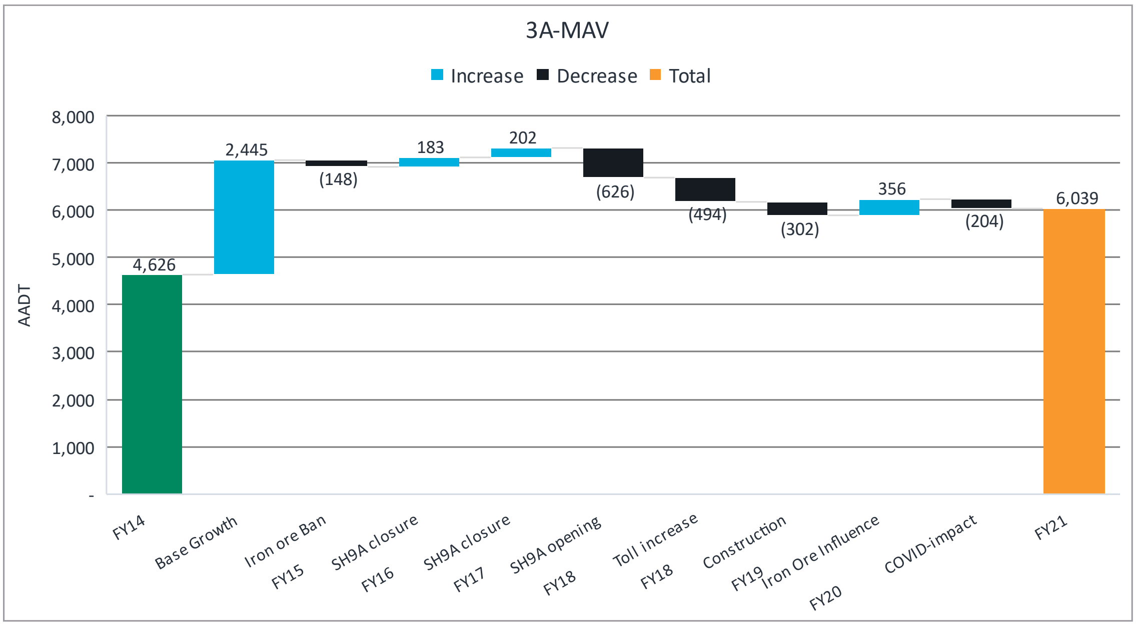
Source: Steer analysis of Vendor data using publicly available information

Figure 5.2: Historical growth of 2A and Buses on the Asset



Source: Steer analysis of Vendor data using publicly available information

Figure 5.3: Historical growth of 3A and MAV on the Asset



Source: Steer analysis of Vendor data using publicly available information

5.10 It can be seen that the external influences have had a dampening effect on the base growth of the traffic, historically. The elasticities obtained from regression analysis of the unadjusted historical data would therefore underestimate the underlying trend growth. We, therefore, use traffic data adjusted for one-off impacts to derive the underlying trend growth elasticities for traffic on the Asset. The estimated traffic volumes that would have existed in the absence of all the impacts, obtained from the base growths, are summarised in the table below.

Table 5.2: Estimated base growth of traffic on the Asset

	Cars	2A-Bus	3A-MAV
FY14 traffic	8,010	2,273	4,626
FY21 base traffic	12,562	3,237	6,850
Base CAGR	7.8%	6.1%	6.9%

Source: Steer analysis of Vendor data

5.11 When compared to the GSDP and GDP CAGRs for the same period, i.e. FY14-FY20, the implied elasticities are obtained as shown in the table below. These implied elasticities are in line with our observations and experience on similar assets located on strategic corridors. These also imply an underlying strong growth trend that are supported by growth in region around Bhubaneswar/Cuttack, growth in the steel industry which drives iron ore and coal production and in turn the growth at Paradip port and wider growth in country as the asset links Kolkata to southern and western parts of the nation

Table 5.3: Estimated elasticities on the Asset

	FY14-FY20 CAGR			Elasticity
	Traffic	GSDP Odisha	GDP	
Cars	7.8%	7.7%	-	1.01

	FY14-FY20 CAGR			Elasticity
	Traffic	GSDP Odisha	GDP	
2A-Bus	6.1%		-	0.79
3A-MAV	6.9%	-	6.9%	0.99

Source: Steer analysis of Vendor data and publicly available information

5.12 As the historical data available provided combined categories of 2A-Bus and 3A-MAV, we estimated the individual elasticities of each vehicle categories based on our understanding of the Asset and the general behaviour of each vehicle category in general.

Influence of Iron ore and Paradip port

5.13 Since historical data on the shares of trucks carrying iron ore on the Asset is not available, it is not possible to estimate the correct elasticities against the iron ore growth. We have assumed that the share of traffic, which is linked to iron-ore production in the region, will be directly influenced by the growth of iron-ore. We have, therefore, assigned an elasticity of 1 to the traffic share.

5.14 Similarly, as in the case or Iron Ore, Paradip port is expected to have a direct influence of the growth in the port. Hence, we have assigned an elasticity of 1 to the port related traffic.

Growth Drivers

5.15 Based on the OD data analysis, our site observations and experience of working on similar assets across the country, we have estimated the following growth drivers for each vehicle category on the Asset:

Table 5.4: Summary of growth drivers

Vehicle Class	Growth Driver
CJV	GSDP Odisha
LCV	GSDP Odisha
Bus	GSDP Odisha
2A	GSDP Odisha, Iron Ore Production, Paradip Port
3A	GDP, Iron Ore Production, Paradip Port
MAV	GDP, Iron Ore Production, Paradip Port

Source: Steer analysis

Growth Summary

5.16 The traffic on this asset has recorded strong growth relationships which are driven by faster growing industrial activities, connectivity with key economic corridor for commercial vehicles as well as major urban centres generating car traffic.

5.17 With traffic driven by both iron ore industry as well as port on part of the 'Golden Quadrilateral', this asset is expected to grow considerably above the average growth in the country. This is supported by the historical growth observed on the asset.

5.18 The table below summarises the growth drivers and the elasticities for all vehicle categories on the Asset. As the splits are not available for 3A and MAV from historical data, we have adopted the split from TVC and have assumed respective elasticities for estimating the forecasts.

5.19 From our analysis of available truck sale information, 3A trucks have recorded a low or negative sale patterns in the recent past. These are, therefore, expected to grow at a minimal rate. As the elasticities for 3A-MAVs could only be estimated in tandem, we have adjusted a low growth relationship on 3A high growth in MAVs, which are assumed to be leading the major chunk of growth in heavy vehicles. Therefore, we have assumed elasticities for 3A and MAV as 0.5 and 1 respectively.

Table 5.5: Summary of growth driver and elasticities

Vehicle category	Growth driver	Elasticity adopted
CJV	Odisha GSDP	1
LCV	Odisha GSDP	0.25
Bus	Odisha GSDP	0.5
2A	81% Odisha GSDP	0.85
	11% Iron ore production	1
	8% Paradip port growth	1
3A	85% GDP	0.5
	4% Iron ore production	1
	11% Paradip port growth	1
MAV	82% GDP	1
	8% Iron ore production	1
	10% Paradip port growth	1
OSV	100% GDP	1
	0% Iron ore production	0
	0% Paradip port growth	0

Source: Steer analysis

5.20 The shares of each growth driver mentioned in the table above have been estimated from OD data. In case of traffic related to iron-ore growth, we made an assumption that the share of empty trucks will be the same as loaded trucks obtained from OD data.

5.21 The above relationships give us a growth profile in accordance with the historical growth observed, as shown in the comparison table below. The table below also demonstrates the assumed forecast growth for each vehicle category. Note that the historical growth rates include the various impacts of network changes and specific growth factors that have influenced the asset as discussed in section above. It can be seen from the table below that as compared to the historical trends the projected growth rates are generally much lower. This is linked to the relatively lower GDP growth rate assumptions as well as a plausible elasticity assumption used in our forecasts. Given the strategic nature of this asset from both local (connecting major urban centres to rest of the state), regional (connectivity to a major port) and national perspective (part of the Golden Quadrilateral) the overall projected PCU growth rates are considered to be reasonable.

Table 5.6: Comparison of historical and forecast growth of traffic based on adopted elasticities

	FY15 - FY20 CAGR	FY24-FY45 CAGR
CJV	5.3%	5.6%
LCV	-2.9%	1.4%
Bus	7.2%	2.8%
2A	7.2%	4.8%
3A	6.2%	3.2%
MAV	6.2%	5.4%
Total	**5.3%**	**5.2%**
PCU	**5.8%**	**5.0%**

Source: Steer analysis

5.22 The detailed traffic and revenue forecasts are presented in Chapter 6 and Appendix A.

6 Traffic & Revenue Forecasts

Introduction

6.1 Following the discussion on estimated and assumed base growth rates in the previous chapter, this chapter first deals with the forecasting assumptions around base year AADT and potential impacts on traffic growth on the Asset. Later, it also presents the assumed toll segmentation, trip factors and evolution of toll rates for the concession period which are used to estimate the traffic and revenue forecast. In the final section, the chapter summarises the traffic growth rates for the concession length.

6.2 The following table lists key intermediate and final outputs that have been presented in earlier chapters.

Table 6.1: Key intermediate and final outputs in the forecast

Forecast	Final outputs	Intermediate outputs	Inputs	Chapter
Traffic	Base year AADT	ADT, SCF estimate for base year	Historical SCF and year-to-date AADT	Chapter 6
	Background traffic growth	Background forecast elasticity	Historical elasticities with respect to growth drivers	Chapter 3, 5, Appendix B
		Forecasts for growth drivers	Historical performance of growth drivers along with Client's GDP line	Chapter 4, 5
	Impact growth rates and staging	Impacts	Asset v/s alternate route costs for ongoing/upcoming network and other developments	Chapters 2, 6
Revenue	Annual/daily revenue forecasts	Forecast toll segmentation: Trip frequencies and trip factors	Historical trip frequencies	Chapter 3, 6
			Historical trip factors	Chapter 6
		Future toll rates	Toll evolution	Chapter 6

Source: Steer

6.3 All traffic is presented as AADT by vehicle category for financial years (April-March). All revenue is presented in Indian Rupees (nominal terms). Since FY45 is the last year of concession, we have presented our forecasts till FY45 in this chapter and in the Appendices.

Seasonality Correction factors

6.4 Traffic on any asset varies on a month-on-month level. Such variations maybe due to monsoons (typically Jul to Sept) or due to festivals in the region. For e.g., it is observed that typically the truck traffic during the first half of the financial year (April-September) is generally lower than the annual average, mainly because of peak summer season followed by monsoons affecting the freight movement patterns in large parts of the country in the July-September period. In addition to these there may be other seasonal variations specific to an asset.

6.5 In order to normalise for these variations across the year to provide an AADT estimate, Seasonality Correction Factors (SCF) are used. SCFs are estimated to convert the monthly traffic numbers to an AADT level while accounting for seasonal variation due to local/national festivals, weather changes and/or temporary external impacts. These are typically estimated using historical data for each plaza and vehicle category over multiple years. An SCF >1 means that the traffic for the month is lower than the annual average and vice-versa.

6.6 To achieve this, we studied the monthly traffic and seasonality. We have analysed the seasonality trends between monthly average daily traffic (MADT) and AADT for data during the historical years of tolling (as described in Chapter 3, section 3.19), excluding the years that were impacted by specific events. This averaged seasonality trend is then applied to the monthly traffic to obtain AADT as mentioned in the previous sections.

6.7 The seasonality factors assumed for individual vehicle types are shown in the table below.

Table 6.2: Seasonality correction factors

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
CJV	0.99	0.96	0.96	1.04	1.11	1.10	1.03	1.02	0.94	0.95	0.97	0.98
LCV	0.97	0.97	1.01	1.03	1.05	1.02	1.01	0.96	1.03	1.04	0.97	0.98
2A/ Bus	1.14	0.99	0.99	1.03	1.02	1.10	0.97	0.98	0.97	0.97	0.93	0.96
3A/MAV	1.04	1.02	1.01	1.03	1.02	1.03	1.09	0.99	0.96	0.99	0.91	0.93

Source: Steer analysis

Base year AADT estimate

6.8 The base year is the year on which long-term background forecast growth rates are applied to derive year-wise average annual daily traffic (AADT) estimates for forecast years. This is therefore an important aspect of our forecasting approach as baseline traffic and ultimately revenue forecasts for future years are built on top of the base year traffic estimate. We have used full year FY23 to arrive at the FY23 and FY24 for AADT estimates which have then been used as a basis for the forecasts.

6.9 Traffic data upto March 2023 was provided by the Client. For CJV, LCV and buses we believe that the traffic levels observed throughout FY23 were representative of normal traffic on the Asset and not a result of temporary shifts or impacts (such as COVID19 restrictions, festivals, or weather-related events).

6.10 However, for 2A, 3A and MAV trucks a decline was observed starting July'21 over FY21, Q1FY22 volumes . This decline was majorly driven by the loss of iron ore carrying trucks, as explained earlier in Chapter 3. This was further validated through our site visit, export data sourced for Paradip port, as well as an onsite stakeholder consultation that Iron Ore and mineral related movement were one of the key factors which contributed to these lower truck volumes.

6.11 On 19th November 2022[5], Government of India withdrew the export duties that were earlier levied on the export of Iron Ore and Iron Pellets. As established in earlier sections of the report, the Asset's truck traffic observes a positive relationship with the movement of port-bound commodities such as Iron Ore, Iron ore pellets, and coal. This was further validated by an increase in 2A, 3A and MAV traffic recorded on the Asset starting Q3 Dec FY23 directly correlating with increased iron ore export at Paradip port.

6.12 The table below shows the quarter-on-quarter evolution of traffic in FY23.

Vehicle Type	Q1 FY23	Q2 FY23	Q3 FY23	Q4 FY23	AADT
CJV	12,768	11,616	13,056	13,557	12,747
LCV	599	523	571	600	573
Bus	950	921	945	964	945
2A	2,003	2,130	2,108	2,399	2,156
3A	1,622	1,406	1,541	1,639	1,551
MAV	3,177	2,946	3,069	4,086	3,314
OSV	0	1	1	1	1
Total	**21,119**	**19,544**	**21,291**	**23,247**	**21,285**
PCU	**41,688**	**39,035**	**41,509**	**47,855**	**42,474**

Source: Steer analysis

6.13 Since the full FY23 did not have this component as it only appeared for 4 out of the 12 months, it was essential to make necessary adjustments to Base AADT for these vehicles to reflect the true base traffic volume for the Asset. The adjustment for this deficit has been discussed in the subsequent sections.

FY23 and FY24 AADT Estimates

6.14 FY23 reported AADT volumes has been used as an input in our analysis. The table below shows the volumes that were reported by the toll plaza for the full year.

Table 6.3: FY23 Base AADT

Vehicle Type	AADT
CJV	12,747
LCV	573
Bus	945
2A	2,156
3A	1,551
MAV	3,314
OSV	1
Total	**21,285**
PCU	**42,474**

[5] https://www.aninews.in/news/business/india-withdraws-export-duty-on-steel20221119135535/

Source: Steer analysis

6.15 For CJV, LCV and Buses the FY24 AADT follow the macro and elasticity relationships as discussed in chapter 5. However, for 2A, 3A and MAV, since resumption in iron ore related movement only started in Dec FY23, the full year FY23 estimate does not reflect the true AADT for these vehicle types.

Base estimates for Goods (2A, 3A and MAV) vehicles

6.16 In order to estimate a scenario where iron ore traffic was not part of the base, For 2As, 3As, and MAVs actual traffic up till August FY23 has been used to arrive at an FY24 AADT. As a result, the FY23 traffic for 3A-MAV volume for FY23 would have landed at a 4,730 AADT.

6.17 As discussed above, resumption of iron ore resulted in increased volumes in DecFY23 onwards, therefore necessary traffic adjustments have made to reflect the recovery in iron related mineral movement and is discussed below.

6.18 To adjust our FY24 position for trucks we compared our OD Survey results from Aug'19 to the OD Survey conducted in Aug'22. To estimate the iron ore related traffic, two key movements were studied using our OD data .

- Trips originating (O) and destined (D) to Paradip port and appearing on the toll plaza.
- Trips carrying minerals appearing on the toll plaza excluding Paradip port influenced trips.

6.19 **Paradip port trips**: By isolating trips originating or ending at Paradip (as detailed in Chapter 3 as well), a 4% deficit in 3A/MAV traffic was observed.

- The 4% delta amounts to a 3A/MAV the volume of approximately 260.

6.20 Similarly, by excluding Paradip as an origin or destination, we compared the remaining trips carrying mineral commodities and observed in 5% deficit in 3A/MAVs, as well as an 8% deficit in 2As.

- This 5% and 8% delta amounts to approximately 600 3A+MAV and 470 2A trucks.

6.21 Therefore, as compared to the FY20 proportion of trucks carrying minerals and with Paradip bound trips, a deficit of approx. 860 3A+MAV trucks has been recorded in FY23. Similarly, this deficit for 2A trucks amounts to approximately 470 trucks.

6.22 Based on these calculations traffic volumes i.e., 863 3A+MAV trucks and 47 2A trucks are expected to start using the Asset now since all restrictions which were curtailing the mineral/port bound traffic have been repealed. Out of this estimated loss, Dec-Mar FY23 period reflected up to 80% recovery in these traffic volumes across vehicle types.

6.23 Since it has been only 3 months since the resumption has happened, and overall positive macro-economic environment including recovery in Chinese economy and other geographies there is still some residual recovery (albeit in small volumes) which yet to be observed on the Asset. As discussed in earlier, 2As and 3As have not observed similar volume ramp ups like MAVs through FY23 after the withdrawal of export duties. To account for this, a higher share of the incremental recovery has been attributed to MAVs. Therefore, in our base case we have we have assumed that ~100% recovery of the total deficit observed in MAV volumes will recover through the course of FY24.

6.24 The AADT volume build-up from a FY23 base (assuming no iron ore/mineral related recovery) to FY24 (100% recovery in Iron Ore/mineral related movement) is presented in the table below:

Table 6.4 FY24 AADT estimate build up from FY23 traffic for 2A, 3A and MAV

Vehicle Type	FY23 (Without recovery in Mineral movement)	Recovery in mineral movement Dec FY23 onwards FY23 (representing 80% recovery)	Organic growth FY24 vs FY23	Recovery Mineral movement (Assuming incremental recovery)	FY24 AADT
2A	2,136	377	103	17	2,633
3A + MAV	4,730	690	238	91	5,750

Source: Steer analysis. FY24* is representative of the 2A, 3A, MAV volume with iron ore/port-bound recovery.

6.25 The table below shows the adopted FY24 AADT.

Table 6.5: Adopted FY24 AADT

	FY24 AADT
CJV	13,207
LCV	580
Bus	998
2A	2,633
3A	1,732
MAV	4,018
OSV	1
Total	**23,168**
PCU	**48,250**

Source: Steer Analysis; FY24 AADT is representative of the adopted base year estimates

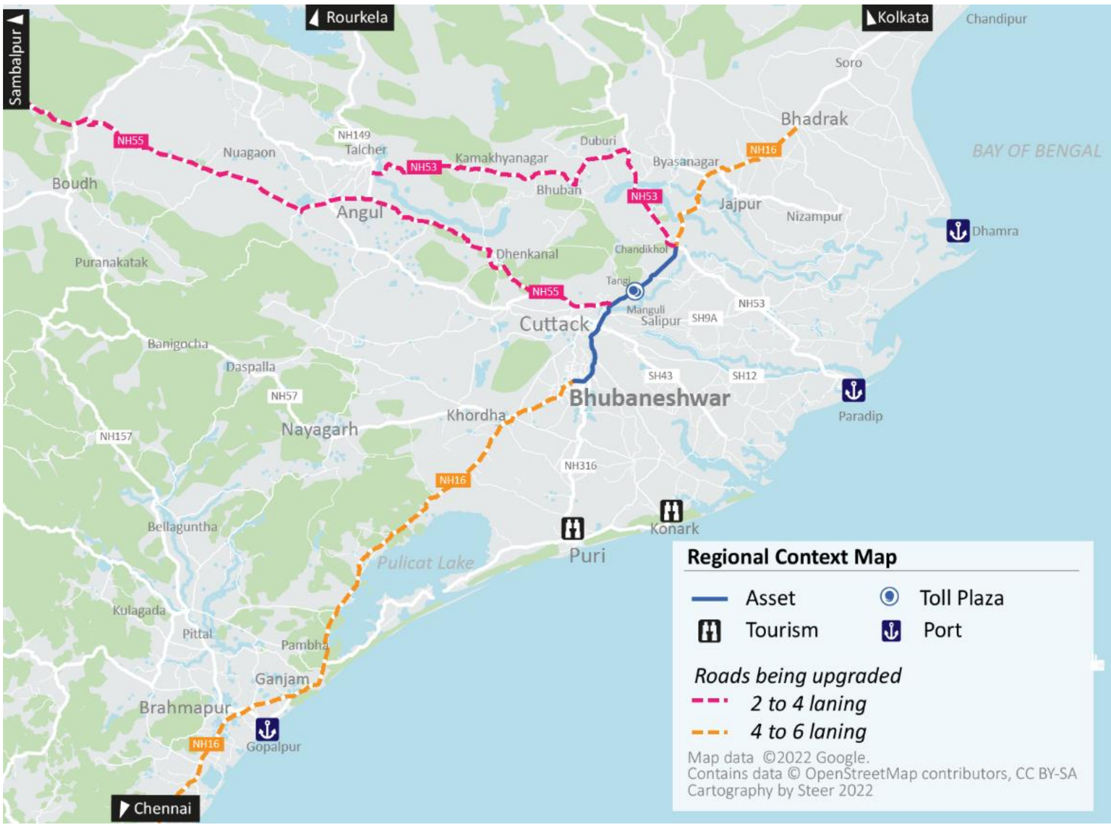
Analysis of potential impacts

Alternate routes and improvements

6.26 The section below details the impacts which we believe would affect traffic on the Asset during the concession period. As discussed earlier in Chapter 2, to assess the impacts on the Asset, whether positive or negative, we have studied developments (alternate roads, feeder roads and regulatory) in the surrounding road network.

6.27 The map below shows the road network surrounding the Asset.

Figure 6.1: Alternate routes and Asset routes shown against the regional network context



Source: Steer analysis and cartography

Impact assessment for network/other developments

6.28 As seen in the previous sub-section, the assessed impacts primarily fall into either the category of road network developments or development in other modes of transport. Under network developments, changes in the road network could be either brownfield (upgrade to existing road) or greenfield (development of new road). We typically assess impacts of the changes in costs and travel time on routes in these networks using binary logit models that compare generalised journey costs (GJC) between Asset and alternate routes. Under other developments, we typically use historical occurrences of the future event and benchmark observations from regional reference Assets. However, each case is dealt individually in its own network or industry context.

Upgradation of Cuttack-Angul-Sambalpur (2 to 4 laning)

6.29 The NH55 section connecting Angul to Manguli chowk on the Asset, immediately north of Cuttack, is currently being 4-laned. The expected timeline of completion of this section is FY25.

Quantification of impact

6.30 The OD shares of traffic on the Asset, using this section is ~1% of light vehicles and ~7% heavy vehicles. As the share of light vehicles in scope is very low, there is no impact expected on them.

6.31 A comparison of generalised journey costs (GJC) provides how different elements of cost and time affect traffic. This comparison was done for both light and heavy vehicles. Lower GJCs correspond to higher induced traffic. Based on Steer's studies and research in India, we have found that for every 1% reduction in the GJCs, the traffic increases by a factor of 0.3. We then applied the difference of GJCs to the elasticity of -0.3 to get net influence on the traffic.

6.32 The improvement in travel costs or GJC is translated into the impact on that share of OD movements using a linear inverse relationship. Therefore, the GJC influence is applied on the corresponding shares of traffic, which were extracted from OD data.

6.33 The estimated difference in GJCs is about 5% for heavy vehicles. The impact of completion of this section is, therefore, about ~0.2% in heavy vehicles, as shown in the table below. This impact is estimated to influence traffic in FY25

Table 6.6: Network development impact

Vehicle type	3A-MAV
GJC variation	-5%
OD share	7%
Impact elasticity	-0.3
Impact	0.2%

Source: Steer analysis of OD data, client TMS data and publicly available information

Revenue forecasting assumptions

6.34 To forecast the revenues for a particular year, the traffic forecast for each vehicle type is converted into tickets sold, which is then multiplied with the corresponding toll rate. While toll segmentation provides the breakup of trips paying each ticket type, trip factors provide the conversion factor to convert from traffic (trips) to tickets sold. This section discusses assumptions related to toll segmentation, trip factors and toll rates for the forecast period.

Toll evolution

6.35 Based on the concession agreement and the gazetted toll notification, we understand that base toll rates increase every year (revision month is March) based on WPI-linked inflation. These are rounded up to the nearest five to estimate the final toll rate charged to users.

6.36 We have used actual toll rates from the FY24 toll notification to validate the modelling of future toll evolution. Increase in WPI from FY25 onwards has been inputted based on the Client's WPI forecasts, as shown in the table below.

Table 6.7: WPI growth forecast assumptions

Financial year	WPI growth (%)
FY24	5.02%
FY25 onwards	4.0%

Source: WPI for FY24 as per official RBI estimates. FY25 onwards WPI inputs are calculated as shared by the Client.

Toll segmentation

6.37 We have analysed the historical toll plaza data split by toll categories and ticket type to understand segmentation trends, as shown in Chapter 2. Implementation of FASTag and increased ETC penetration have to lead to a reduction in exemptions and violations. With

FASTag implementation, the combined share of violation and exemption has reduced by 4-5% in CJVs, the biggest traffic contributor on this Asset.

6.38 The table below provides the toll segmentation assumed for the period of forecast. For the purpose of traffic and revenue forecast the average historical toll segmentation of FY23 is assumed taking into consideration current exemption and violation reported. We believe with FASTag penetration stabilising and reaching up to 99% in MAVs and minimal impact of COVID-19 the year, FY23 segmentation provides us with stable toll segmentation which can be used for the forecast years.

Table 6.8: Forecast toll segmentation, FY24 onwards

	CJV	LCV	Bus	2A	3A	MAV	OSV
Single	27.9%	42.0%	38.9%	38.9%	74.4%	82.7%	93.0%
Return	61.8%	45.8%	30.2%	30.2%	21.8%	16.3%	5.6%
Monthly	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	-
Local	3.5%	-	-	-	-	-	-
Disc A	-	-	0.0%	0.0%	0.3%	0.1%	-
Disc B+C	-	0.0%	0.1%	0.1%	2.9%	0.7%	-
Pass F	0.0%	-	-	-	-	-	-
Exemptions	6.3%	0.9%	0.3%	0.3%	0.1%	0.1%	1.4%
Violations	0.4%	11.3%	30.5%	30.5%	0.4%	0.0%	-

Source: Steer analysis of Client TMS data

6.39 There is no other toll category being charged, apart from the official list in the gazetted NHAI Revision of User fee rate w.e.f. 1st April 2023. This set of toll segmentation assumes that further changes in toll categories, unless specific discounts are offered, is unlikely.

Trip factors

6.40 The trip factors assumed remain consistent across each vehicle category. Due to the introduction of FASTag, the trip factor for all ticket types but Return and Monthly is assumed as 1, with Return having a trip factor of 2, Monthly a trip factor 45 for LCV/3A/MAV and a Monthly trip factor of 18 for Bus/2A. Also, the discounted passes issued at the Asset plazas are for single entry only therefore the assumed trip factor for such trips in estimation years is 1.

Revenue reconciliation

6.41 As part of the validation process to test our model, we have carried out a revenue reconciliation exercise where we compare actual reported revenue against the modelled revenue. For the Asset we have reconciled reported revenue for FY23 with the modelled revenue based on FY23 actual AADT and forecast assumptions on toll segmentation, trip factors and toll rates.

6.42 The comparison, as shown in the table below, shows that modelled revenue overall is within a variation of 0.0% from the reported revenue. This gives us confidence that the revenues estimated using the traffic data in our forecasts are accurately representing the revenues being reported from the Asset.

Table 6.9: Revenue reconciliation summary for FY23

Steer modelled revenue (INR Cr)	Reported revenue (INR Cr)	Difference (%)
197.1	197.1	(0.0%)

Source: Steer comparison between modelled and reported revenue for FY23

Traffic and Revenue forecasts

6.43 Based on the traffic and revenue-related forecast assumptions discussed above, we have modelled the traffic and revenue forecasts for the concession period for the Asset. The table below presents the AADT/PCU forecast and CAGRs on this Asset. Further, Annexure B presents year-wise AADT, traffic growth rates and revenues for the forecast period.

Table 6.10: Traffic forecasts (with impacts)

Vehicle Type	FY24	FY25	FY30	FY35	FY40	FY45
CJV	13,207	14,061	19,073	25,172	32,651	41,479
LCV	580	590	637	684	731	777
Bus	999	1,032	1,204	1,386	1,582	1,785
2A	2,633	2,785	3,621	4,600	5,761	7,088
3A	1,732	1,797	2,136	2,505	2,919	3,366
MAV	4,018	4,274	5,714	7,453	9,585	12,096
OSV	1	1	1	1	2	2
AADT	**23,170**	**24,539**	**32,387**	**41,803**	**53,230**	**66,594**
PCU's	**48,254**	**51,023**	**66,631**	**85,221**	**1,07,671**	**1,33,805**

Source: Steer analysis

Table 6.2: Traffic forecasts CAGRs (with impacts)

Vehicle Type	FY24-FY25	FY25-FY30	FY30-FY35	FY35-FY40	**FY24-FY45**
CJV	6.5%	6.3%	5.7%	5.3%	5.6%
LCV	1.6%	1.6%	1.4%	1.3%	1.4%
Bus	3.2%	3.1%	2.9%	2.7%	2.8%
2A	5.8%	5.4%	4.9%	4.6%	4.8%
3A	3.8%	3.5%	3.2%	3.1%	3.2%
MAV	6.4%	6.0%	5.5%	5.2%	5.4%
OSV	6.4%	6.0%	5.5%	5.2%	5.4%
AADT	**5.9%**	**5.7%**	**5.2%**	**5.0%**	**5.2%**
PCU's	**5.7%**	**5.5%**	**5.0%**	**4.8%**	**5.0%**

Source: Steer analysis

Table 6.11: Revenue forecast (INR Crores)

Vehicle Type	FY24	FY25	FY30	FY35	FY40	FY45
CJV	52	58	97	158	256	409

Vehicle Type	FY24	FY25	FY30	FY35	FY40	FY45
LCV	4	4	5	7	9	12
Bus	11	11	16	23	33	47
2A	28	30	49	78	122	186
3A	43	47	69	100	146	210
MAV	101	113	187	303	487	766
OSV	0	0	0	0	0	0
Total	**238**	**263**	**424**	**670**	**1,054**	**1,629**

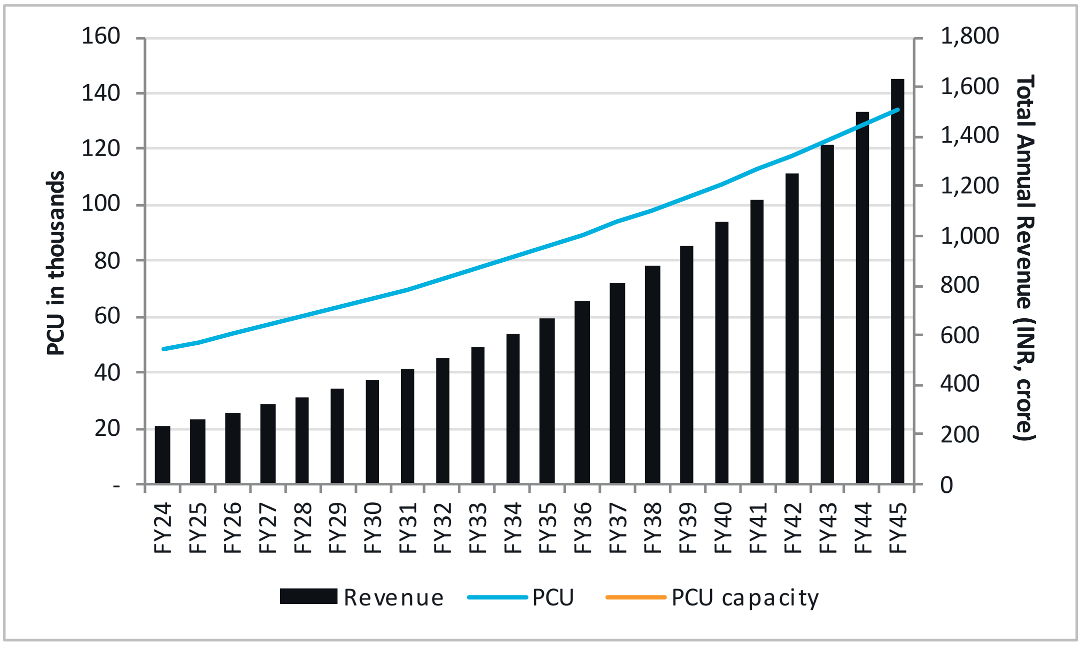
Source: Steer analysis

Table 6.3: Revenue forecasts CAGRs (with impacts)

Vehicle Type	FY24-FY25	FY25-FY30	FY30-FY35	FY35-FY40	**FY24-FY45**
CJV	10.6%	11.0%	10.3%	10.1%	10.3%
LCV	5.9%	6.1%	6.0%	6.0%	5.9%
Bus	7.4%	7.7%	7.5%	7.3%	7.4%
2A	10.0%	10.0%	9.6%	9.4%	9.5%
3A	9.2%	8.1%	7.8%	7.8%	7.9%
MAV	11.5%	10.6%	10.1%	10.0%	10.1%
OSV	11.3%	10.6%	10.2%	9.9%	10.1%
Total	**10.5%**	**10.0%**	**9.6%**	**9.5%**	**9.6%**

Source: Steer analysis

Figure 6.4: Traffic and growth rates for forecast PCUs – Base and With Impacts



Source: Steer analysis

6.44 Additional scenarios of forecasts based on potentially different timelines and volume of recovery of Iron/Mineral traffic in the base year have been included in the Appendix below.

Summary outlook

6.45 The traffic on the Asset observes a mix of passengers travelling for tourism, education and medical purposes. Areas like Cuttack, and Bhubaneswar are characterized by a strong medical presence. These factors will influence the growth of CJVs, and Buses. In addition to this, the Asset’s proximity ports, enables the movement of 2A/3A/MAVs as well.

6.46 The Asset experienced a sharp decrease in truck traffic during the fiscal year 2022 and the first half of fiscal year 2023. However, there was a notable improvement in the third and fourth quarters of FY23, as 3A/MAV performance picked up. This growth has a high correlation to increase in exports of Iron Ore and Iron pellets after changes in the duty levied on export of low grade Iron Ore and pellets.

6.47 Despite its location, which makes it sensitive to changes in commodity demand, the upward trend in Iron Ore and Iron pellets exports is expected to continue. Historically, whenever there has been an increase in iron ore and port-related movement, there has been a corresponding rise in the 2As, 3As, and MAVs observed on the Asset. (See Figure 3.4 for more details.) With the repeal of export duties and India's ability to serve global demand, the Asset is expected to continue its growth trajectory. However, this proportion of traffic continues to remain correlated how mineral movement serving both local and global demand remains, hence this traffic will have a correlation of 1 to the performance of iron related commodity.

6.48 Our findings and estimates in this report are based on our understanding from the site visit, analysis of primary data available both from surveys and the toll management system (both historical and current), macroeconomic assumptions prescribed by Client, feedback from Client meetings and secondary publicly available data. There can be risks associated with assumptions and the forecasts using them as summarised below.

6.49 With regards to the long-term background growth, we see the following risks:

- The political and economic environment in which the iron-ore industry operates cannot be forecasted as it is closely linked to how government responds to domestic demand, as well how the economic recovery in other geographies result in demand of this commodity. However, in base case we have assumed a business-as-usual scenario. Since most of the recent disruptions observed were due to a once in a lifetime event Covid19 disrupting supply chains, global demand as well as affecting local trade policies.

6.50 With regards to impacts, we see the following risks:

- Sustained loss of traffic on the Duburi-Talcher section, even after the 4-laning of Angul-Cuttack section which connects the Asset to Raigarh, Sambalpur and Sundargarh.

6.51 Overall, we see a positive outlook for the region and the Asset, as it serves as a connector to various ports like Gopalpur, and Paradip in addition to being located in close proximity to religious attractions in the form of Puri and Konark. By virtue of the Asset’s alignment on NH-16 and on the Golden Quadrilateral, the overall growth of traffic driven by an economic growth north and south of the Asset will also contribute to robust performance in the future.

Appendices

A Detailed Forecasts

Table A.1: Traffic forecasts for central case

Vehicle Category	CJV	LCV	Bus	2A	3A	MAV	OSV	Total	PCU
FY24	13,207	580	999	2,633	1,732	4,018	1	23,170	48,254
FY25	14,061	590	1,032	2,785	1,797	4,274	1	24,539	51,023
FY26	14,985	599	1,066	2,942	1,863	4,541	1	25,997	53,934
FY27	15,969	609	1,101	3,108	1,931	4,825	1	27,544	57,018
FY28	16,987	619	1,136	3,277	2,000	5,117	1	29,137	60,186
FY29	18,035	628	1,171	3,451	2,069	5,417	1	30,772	63,432
FY30	19,073	637	1,204	3,621	2,136	5,714	1	32,387	66,631
FY31	20,169	647	1,239	3,800	2,205	6,027	1	34,087	69,995
FY32	21,326	656	1,275	3,987	2,276	6,356	1	35,877	73,533
FY33	22,546	665	1,311	4,183	2,351	6,704	1	37,762	77,253
FY34	23,834	675	1,349	4,388	2,427	7,072	1	39,745	81,166
FY35	25,172	684	1,386	4,600	2,505	7,453	1	41,803	85,221
FY36	26,563	694	1,425	4,819	2,585	7,849	2	43,937	89,420
FY37	28,006	703	1,463	5,045	2,666	8,261	2	46,145	93,763
FY38	29,501	712	1,502	5,277	2,749	8,687	2	48,430	98,252
FY39	31,048	722	1,542	5,515	2,833	9,128	2	50,790	1,02,886
FY40	32,651	731	1,582	5,761	2,919	9,585	2	53,230	1,07,671
FY41	34,309	740	1,622	6,013	3,005	10,056	2	55,748	1,12,604
FY42	36,020	750	1,662	6,272	3,094	10,543	2	58,344	1,17,685
FY43	37,786	759	1,703	6,538	3,183	11,046	2	61,017	1,22,913
FY44	39,606	768	1,744	6,810	3,274	11,563	2	63,768	1,28,287
FY45	41,479	777	1,785	7,088	3,366	12,096	2	66,594	1,33,805

Source: Steer analysis

Table A.2: Revenue forecasts (INR crores)

Year	CJV	LCV	Bus	2A	3A	MAV	OSV	Total (INR Crores)
FY24	52	4	11	28	43	101	0	238
FY25	58	4	11	30	47	113	0	263
FY26	64	4	12	34	50	125	0	289
FY27	72	4	13	37	55	138	0	319
FY28	79	5	14	41	59	154	0	352
FY29	87	5	15	45	64	170	0	385
FY30	97	5	16	49	69	187	0	424
FY31	107	5	18	54	74	206	0	464
FY32	118	6	19	59	80	228	0	510
FY33	130	6	20	65	86	250	0	557
FY34	143	7	22	71	93	275	0	611

Year	CJV	LCV	Bus	2A	3A	MAV	OSV	Total (INR Crores)
FY35	158	7	23	78	100	303	0	670
FY36	175	7	25	86	109	335	0	737
FY37	193	8	27	93	117	367	0	806
FY38	213	8	29	102	126	403	0	881
FY39	233	9	31	111	135	443	0	962
FY40	256	9	33	122	146	487	0	1,054
FY41	282	10	36	132	157	532	0	1,149
FY42	309	10	38	144	169	584	0	1,255
FY43	339	11	41	157	181	639	0	1,369
FY44	374	12	44	172	195	701	0	1,498
FY45	409	12	47	186	210	766	0	1,629

Source: Steer analysis

B Port and Iron Ore Elasticity

B.1 As was previously stated in sections 4.18 and 4.21, an elasticity of 0.9 has been assumed for Port growth with respect to India GDP. The section below elaborates on the methodology to arrive at this estimate.

B.2 To calculate the elasticity that was employed in our projections, the annual growth of Iron Ore production and the total amount of cargo handled at Paradip Port were compared to India's historical GDP(in annual growth terms).

B.3 Outlier years were excluded while estimating the relationship to normalise the elasticity. The table below illustrates the historical data, and the years that were not considered while estimating the relationship (marked in blue), these outlier years show a significant jump over the previous years for ports due to non-organic growth achieved via capacity additions, whereas for Iron ore events such as Iron Ore bans (FY15) and subsequent recovery among other reasons have been considered while not considering these years :

Table B.1: Historical growth profiles of Iron Ore production and Port cargo with National GDP

Year	GDP National	Iron Ore production	Paradip port	Iron Ore v/s GDP	Paradip Port v/s GDP
2011	8.9%	(8.6%)	-	(0.97)	-
2012	6.7%	(9.2%)	-	(1.38)	-
2013	5.4%	0.7%	-	0.13	-
2014	6.1%	17.0%	20.2%	2.80	3.34
2015	7.2%	(31.7%)	4.4%	(4.44)	0.62
2016	8.1%	52.2%	7.6%	6.41	0.93
2017	7.1%	27.0%	16.4%	3.80	2.32
2018	6.5%	2.3%	14.7%	0.35	2.27
2019	7.5%	15.2%	7.1%	2.04	0.95
2020	4.0%	17.2%	3.1%	4.30	0.78
2021	(6.6%)	(20.6%)	1.6%	3.12	(0.25)
2022	8.7%	30.9%	1.4%	3.55	0.16
			Average	**0.97**	**0.93**

Source: Steer Analysis

B.4 Additionally, a comparison of the national GDP to the total amount of cargo handled at the major ports of India results in an elasticity of 0.8. Given that Paradip has historically had faster development than other significant Indian ports, we are confident that 0.9 is a reasonable elasticity at which Paradip port will grow. This is shown in the table below:

Table B.1: Indian Major Port Growth wrt to India GDP Growth

Year	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Total Cargo Handled (in mn tonnes)	606.37	647.43	679.36	699.05	704.93	672.6	720.29
YoY Growth		7%	5%	3%	1%	-5%	7%
India GDP	8.0%	8.3%	6.8%	6.5%	4.0%	(6.6%)	8.7%

Source: India Port Statistics

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Toll Traffic & Revenue Assessment for Eastern Peripheral Expressway under TOT-B7

Final Traffic Report

May 2023

CDPQ

MAPLE HIGHWAYS

DISCLAIMER

IBI Group India Private Limited while preparing the report relied on the Primary and Secondary data collection past data during the month of Sep-2021 and historic data related to project from various time periods on the project road and in the various relevant projects through various sources. Wherever the information is not readily available, reasonable assumptions have been made, in good faith to draw meaningful inferences and these have been mentioned in the respective sections of the report. All such assumptions are subject to further corroboration based on availability of information. The results of this study constitute the opinion of IBI Group. This opinion is based on professional effort with respect to the study’s scope of work and based on the information available to IBI at the time of execution of this study. IBI cannot guarantee or assure future events in connection to this traffic and revenue forecast.

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ABBREVIATIONS

AADT	Annual Average Daily Traffic
ADT	Average Daily Traffic
CA	Concession Agreement
CAGR	Compound Annual Growth Rate
COD	Commercial Operation Date
Cr.	Crore
DFC	Dedicated Freight Corridor
DPR	Detailed Project Report
DME	Delhi Mumbai Expressway
DMIC	Delhi Mumbai Industrial Corridor
EPE	Eastern Peripheral Expressway
FY	Financial Year
GDP	Gross Domestic Product
GSDP	Gross state Domestic Product
GQ	Golden Quadrilateral
GQ	Golden Quadrilateral
INR	Indian Rupee
IRC	Indian Roads Congress
Kms	Kilometers
LCV	Light Commercial Vehicle
MAV	Multi-axle Vehicle
Mn.	Millions
ZIF	Zonal Influence Factor
VOT	Value of Time
WPI	Wholesale Price Index
YOY	Year on Year
MORTH	Ministry of Road Transport and Highways
MSME	Ministry of Micro, Small and Medium Enterprises
NH	National Highway
NHAI	National Highways Authority of India
O-D	Origin – Destination
OSV	Over Sized Vehicle
PCI	Per Capita Income
PCU	Passenger Car Unit
PHF	Peak hour factor
PIA	Project Influence Area
PRR	Peripheral ring road
Rs.	Indian Rupees
SCF	Seasonal Correction Factor
SEZ	Special Economic Zone
SH	State Highway
SP	State Permit
SPV	Special Purpose Vehicle
TL	Trip Length
TLFD	Trip Length Frequency Distribution
TP	Toll Plaza
TVC	Traffic Volume Count
VOC	Vehicle Operating Cost
WPE	Western Peripheral Expressway

CONTENTS

01 Data Comparison Survey Vs ETC Vs DPR

02 Trip Purpose

03 Annual Average Daily Traffic (Base - AADT) (NHAI And ETC)

04 Historic Traffic Growth Surrounding Stretches

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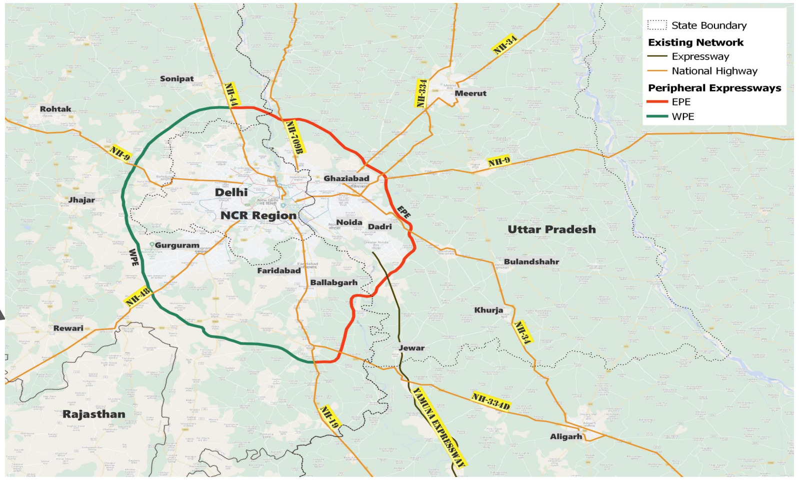
06 Trip Categories – Od Pairwise

07 Revenue Assessment Methodology

08 New (Proposed) Interchanges On EPE

THE PROJECT

TRAFFIC PROFILE



Authority- **NHAI**

Tolling Length **135** Km

Toll Plaza **9** Nos.

Road Configuration **6** Lane

Design Capacity **130,000* PCU**

Concession Period is **20** years

63.3 K

Vehicles per day (exit)

2.7 Cr.

Toll Revenue per Km per Annum

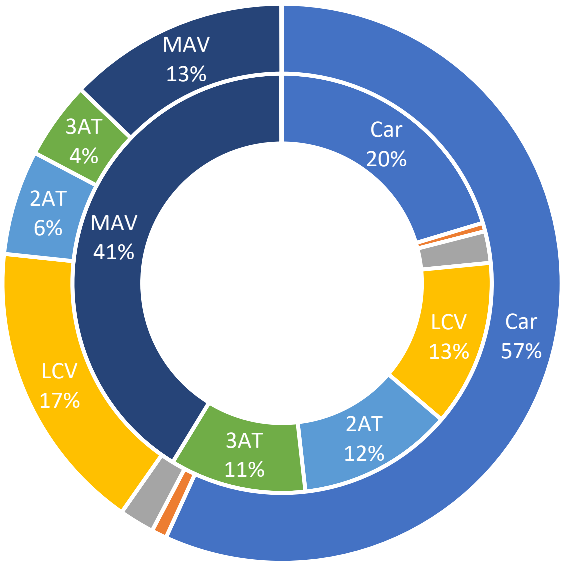
40 K

Avg. Link Volume (PCU)

INR 100.0

Lakhs per Day

Traffic & Revenue Composition

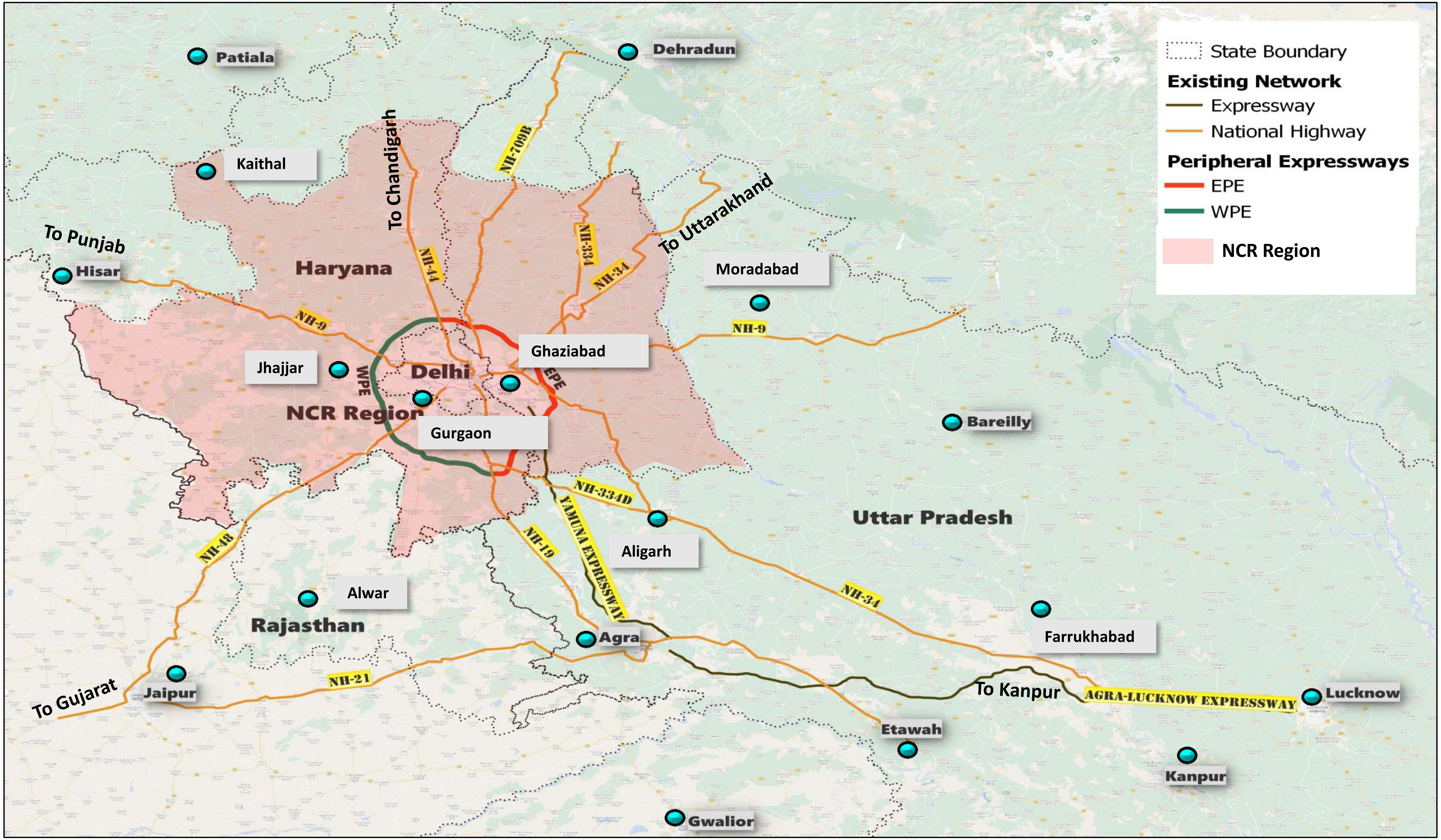


Traffic inside and Revenue Outside

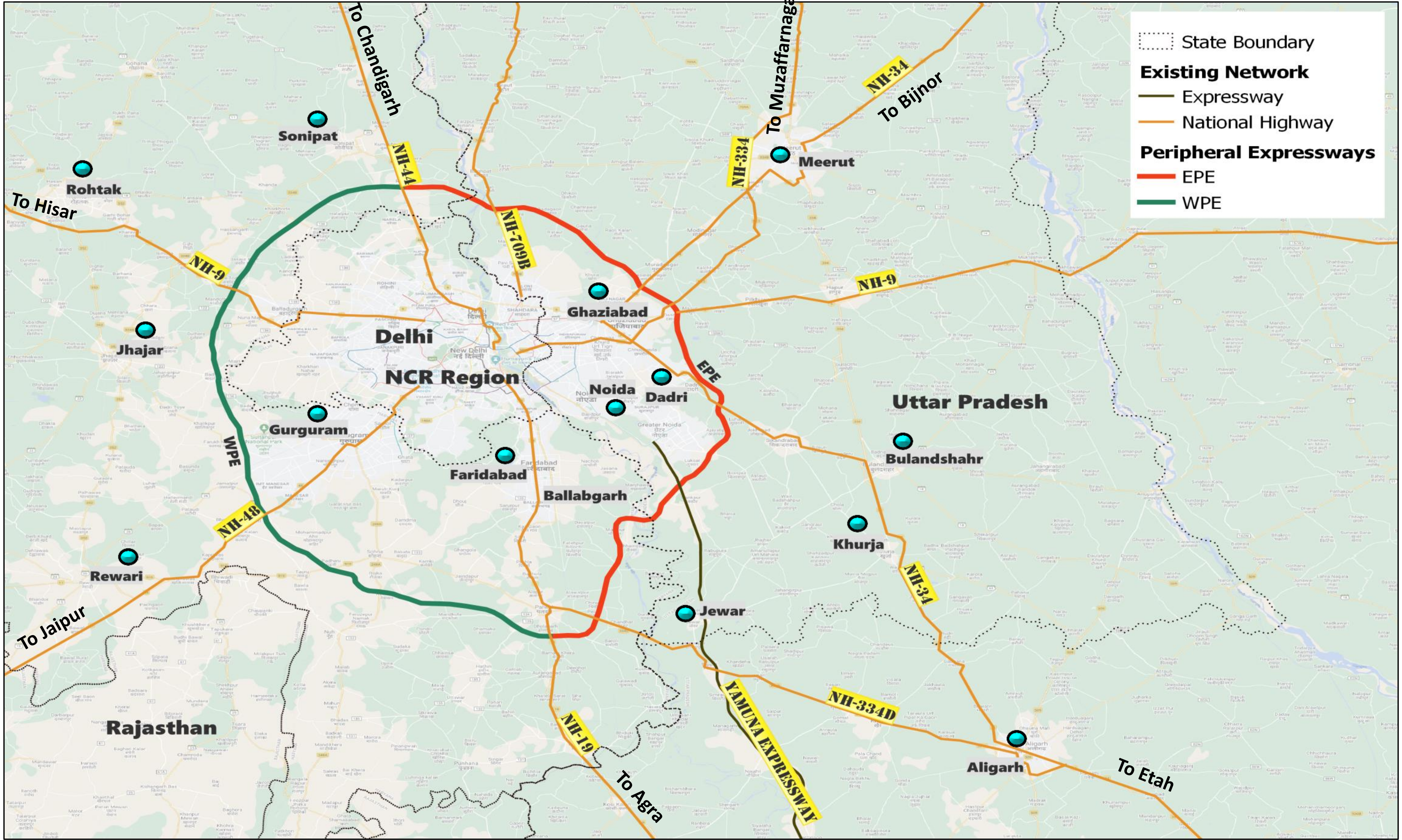
Data based on FY’22 AADT

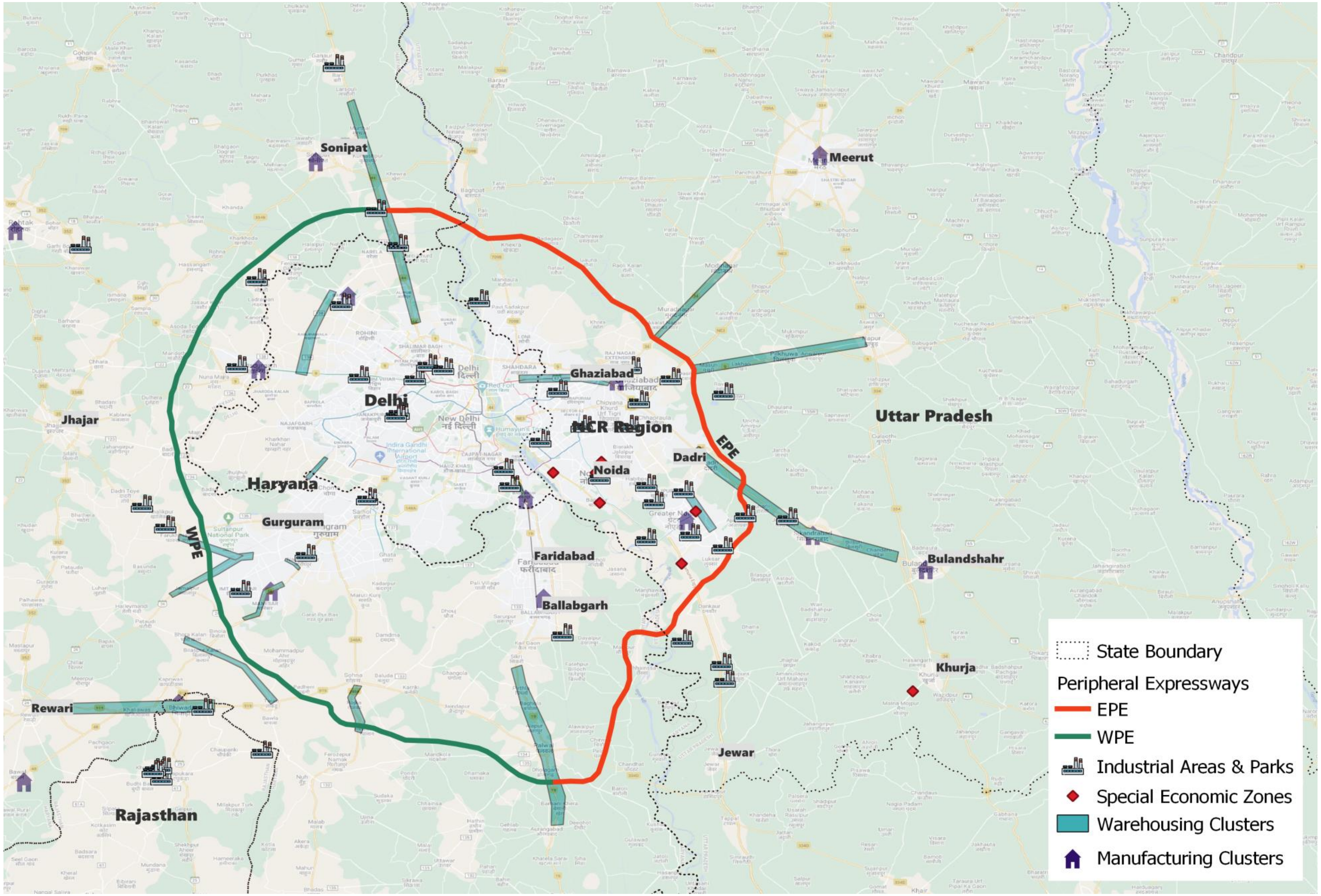
PROJECT MAPS

REGIONAL LEVEL ROAD NETWORK



LOCAL LEVEL ROAD NETWORK



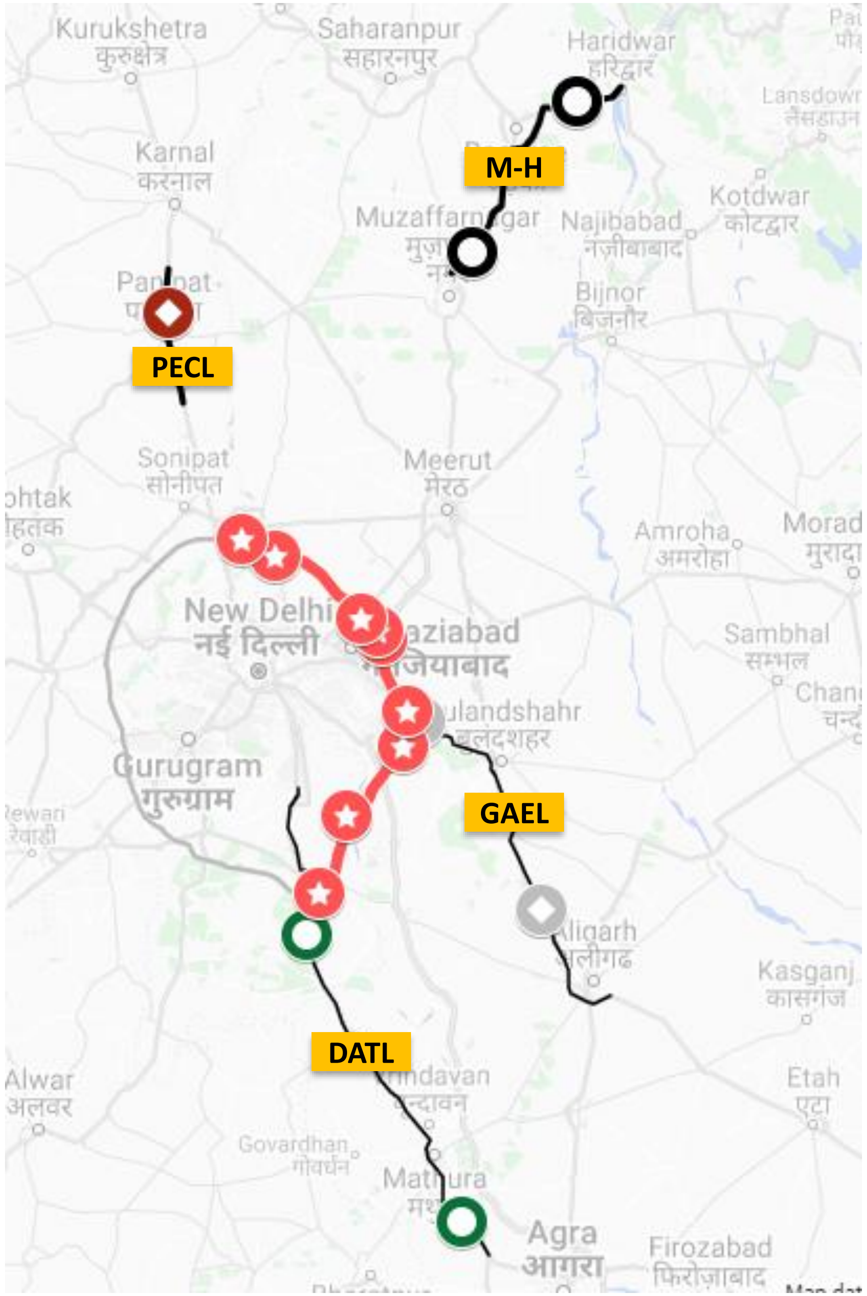


Key Industries surrounding EPE on

- Eastern side are IT/ ITES, Electronics, Agro-based, Cement & Ceramic Industry
- Western side are Textiles, Automobile & Ancillary Manufacturing, Agro-Processing, Electronics Pharmaceutical and Dairy Processing.

DATA COLLECTION & ANALYSIS

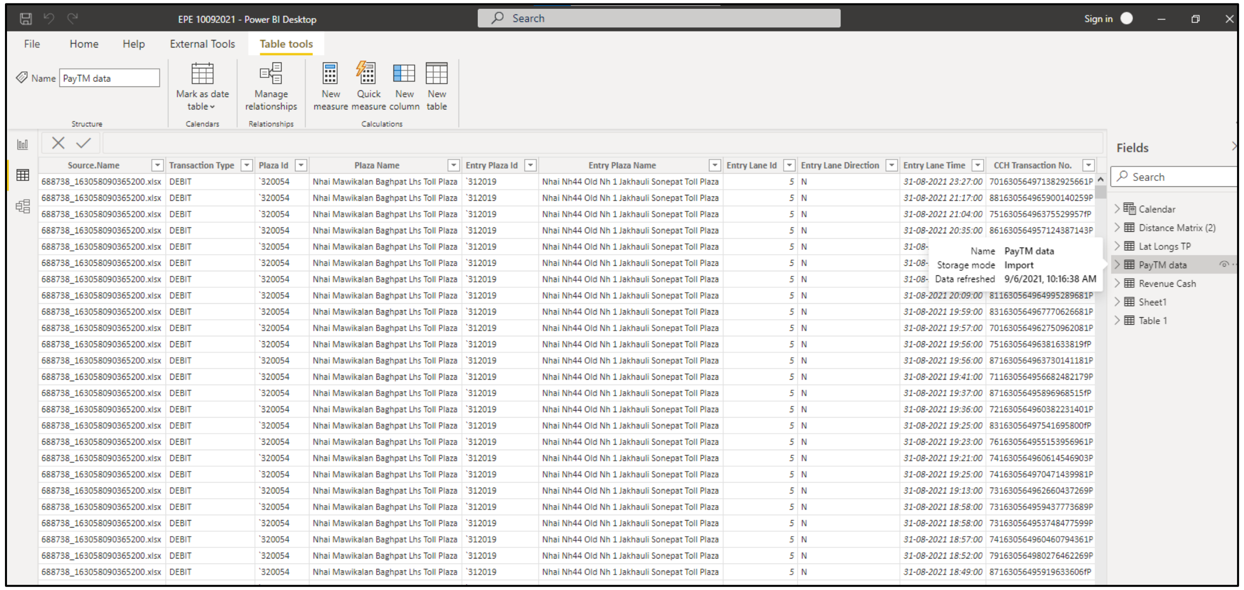
DATA COLLECTION ACTIVITY | SECONDARY DATA

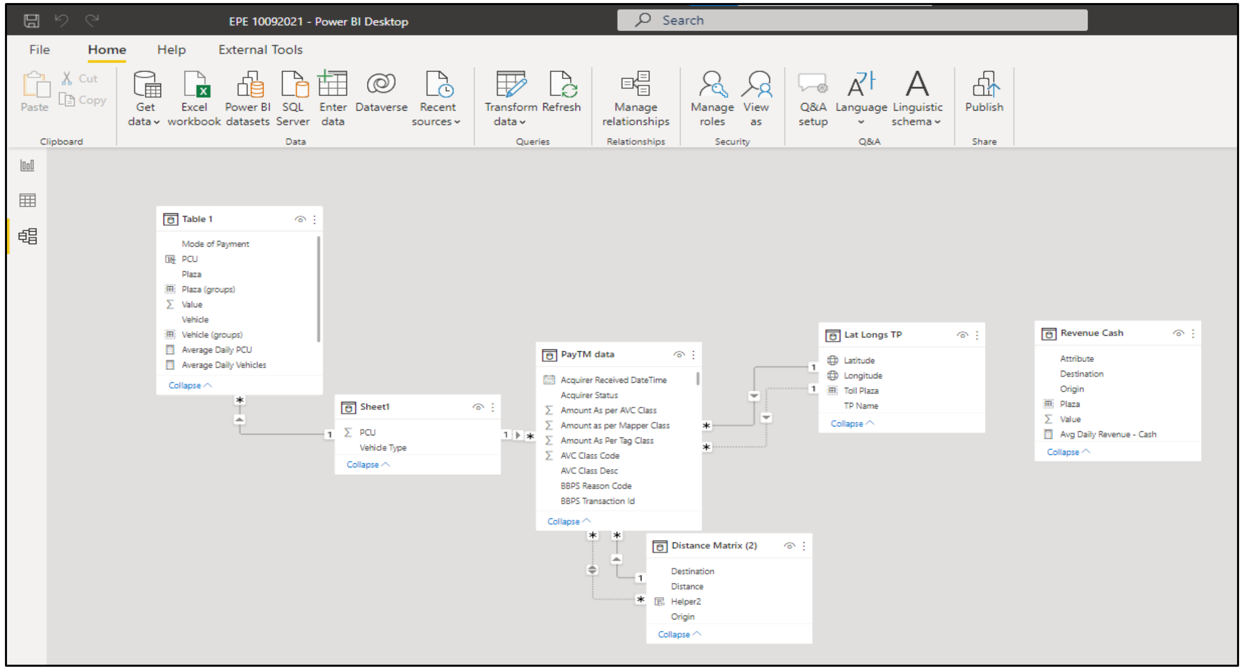


Sl.No	Location/Stretch	Data Type	Data Period	Utilization
1	Delhi Agra Tollways Ltd (DATL)	Historic Data	FY14 – FY 20	Seasonal Correction Factors & Growth Trends
2	Ghaziabad Aligarh Expressways Limited (GAEL)	Historic Data	FY17- FY 21	
3	Panipat Elevated Corridor Limited (PECL)	Historic Data	FY10 – FY20	
4	Muzaffarnagar - Haridwar	Origin – Destination Data	FY19	Impact of Delhi – Dehradun Expressway
5	Eastern Peripheral Expressway	Revenues & Traffic	4 months in 2018, months in 2019 and 7 months in 2021 (FY21) and 7 months in FY22	Available for few time periods since COD in Jun-2018. Used to observe the trend in toll collection

- Apart from above, NHAI DPR Traffic in Jul-21, ETC+Cash Traffic in Aug-21 are available
- Apart from the above, Historic data of various highways stretches from the states of Gujarat/Rajasthan, Maharashtra, West Bengal, Chhattisgarh, Madhya Pradesh, UP, Andhra Pradesh & Haryana was used to derive the elasticities based on various dependent and independent variables.
- Socioeconomic profile, development plans & reports pertaining to NCR region, Delhi Master Plan were referred as part of this traffic due diligence study
- Historic data on Independent and Dependent variables of the PIA states like registered vehicles, GSDP, Population and PCI etc. are collated for the Growth model.

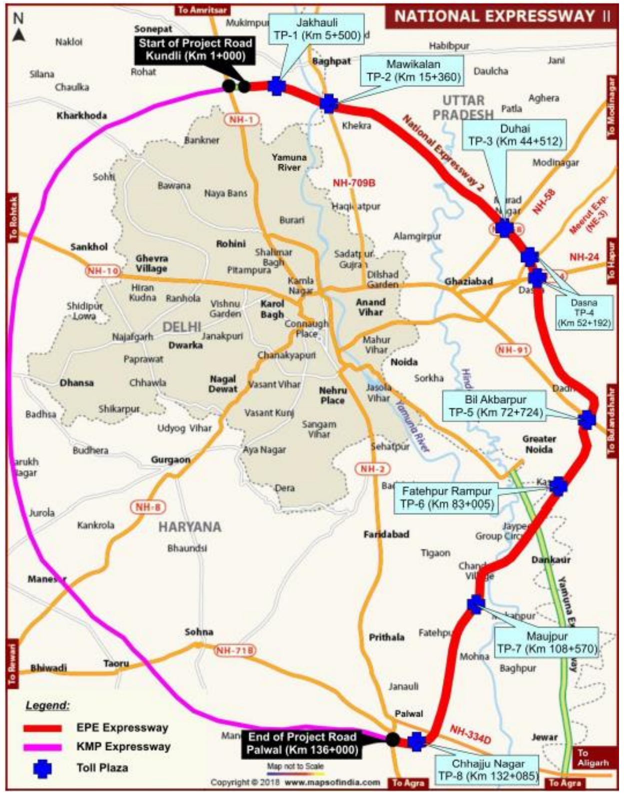
EPE DATA COLLATION AND ANALYSIS | POWER BI

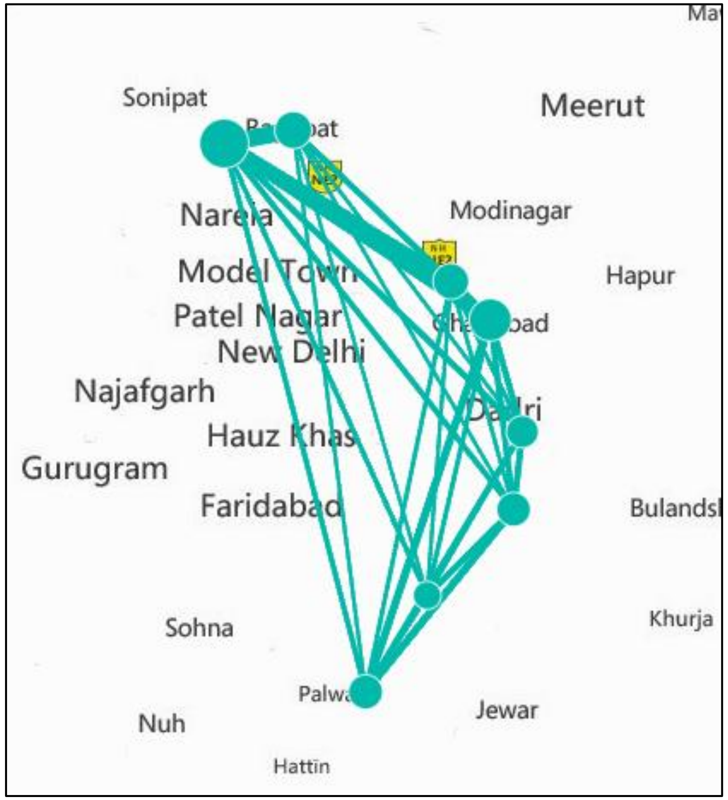




1. ETC Transactions data collection and arrangement
2. Overall, 8 Lakhs+ rows of transactions are collated
3. Transaction data cleaning
4. Creation of Lookup tables and Data table
5. Build relationship between tables
6. Create DAX measures for KPIs
7. Report summary and KPIs

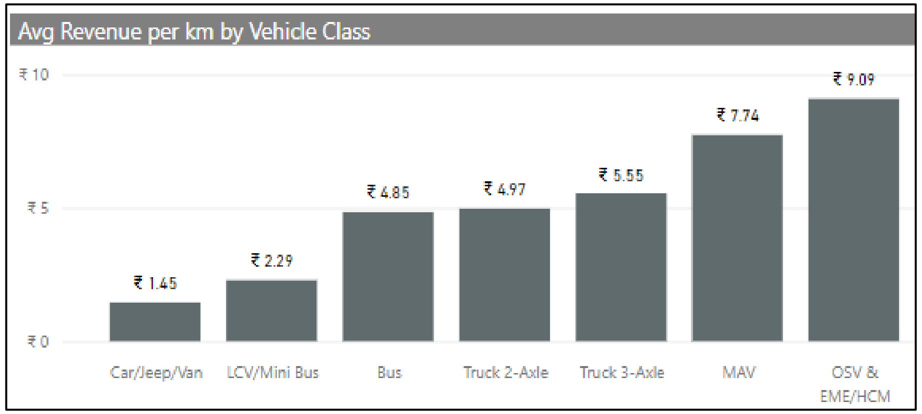
EPE HISOTORIC ETC DATA ANALYSIS





- The analysis is based on the ETC data for the month of Aug'21
- The Traffic distribution is illustrated in the matrix format with the entry plazas and the exit plazas.
- Jakhauli (Sonipat), Mawikalan, Dasna and Duhai are observed to be major pairs catering to traffic

Entry Plaza Name (groups)	1-Sonipat	2-Mawikalan	3-Duhai	4-Dasna	5-Bil akbarpur	6-Fatehpur	7-Maujpur	8-Chhajju Nagar	Total
1-Sonepat		9.4%	5.5%	6.8%	1.9%	1.3%	1.0%	1.2%	27.0%
2-Mawikalan	7.8%		1.6%	0.4%	0.1%	0.1%	0.0%	0.0%	10.0%
3-Duhai	7.3%	1.8%		3.6%	0.5%	0.3%	0.2%	0.5%	14.2%
4-Dasna	6.4%	0.6%	2.7%		1.6%	1.2%	0.7%	2.9%	16.0%
5-Bil Akbarpur	1.6%	0.2%	0.4%	1.8%		1.8%	0.6%	1.4%	7.8%
6-Fatehpur	1.4%	0.2%	0.3%	1.8%	1.8%		1.7%	2.8%	9.9%
7-Maujpur	0.9%	0.1%	0.2%	0.7%	0.5%	2.0%		1.1%	5.5%
8-Chhajju Nagar	1.0%	0.3%	0.6%	2.6%	1.7%	2.7%	0.8%		9.6%
Total	**26.4%**	**12.5%**	**11.2%**	**17.7%**	**8.0%**	**9.4%**	**4.8%**	**9.8%**	**100.0%**



IBI

EPE TOLL REVENUES AT DIFFERENT TIME PERIODS

CDPQ

Toll Revenue over different Time Periods | Annualized revenue from Monthly data

Sno	Month & Year	Annualised Toll Revenue (Rs. Cr)	Remarks
1	Jun-18	129.4	Partial operations
2	Jul-18	146.9	All entries and exits not functional fully
3	Aug-18	186	
4	Sep-18	192.6	
5	Jan-19	263	
6	Feb-19	274.6	
7	Sep-20	196.1	COVID-19 restricts from Mar'20 to Sep'20
8	Oct-20	257.4	
9	Nov-20	238.3	Farmers protest started
10	Dec-20	238.3	
11	Jan-21	165.1	
12	Feb-21	320.8	Mandatory usage of Fastag; if Cash toll is 2X
13	Mar-21	309.8	
14	Apr-21	279.4	2nd COVID wave restrictions; Meerut Eway IC opens
15	May-21	206.1	2nd COVID wave restrictions
16	Jun-21	294.1	2nd COVID wave restrictions
17	Jul-21	299.1	
18	Aug-21	333.4	ETC + Cash data*
19	Oct-21	386.7	ETC + Cash data*
20	Nov-21	428.5	ETC + Cash data*
21	Dec'21 (8 -11)	408.3	ETC + Cash data* [Termination of farmers protest on 11th Dec 2021]
22	Dec'21 (16 -22)	337.6	ETC + Cash data* [Covid restrictions]

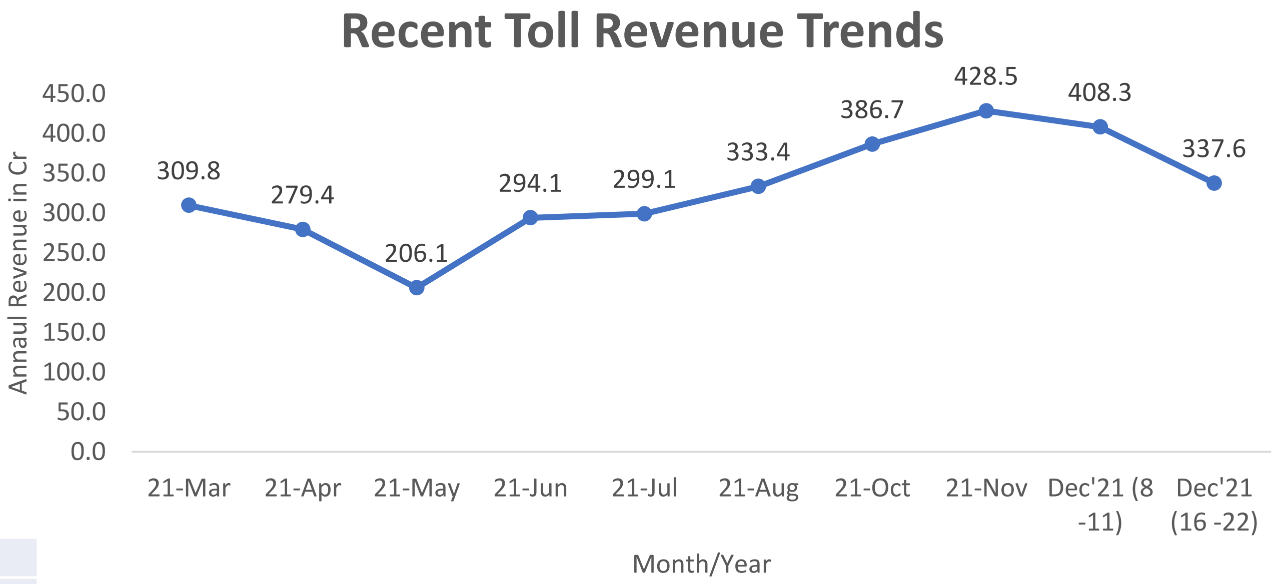
***Jakhauli TP doesn't have Cash data (as part of ETC)**

 # Jun’18 to Ju1'21 data is based on Paytm summary and Cash-ETC ratio of Aug’21

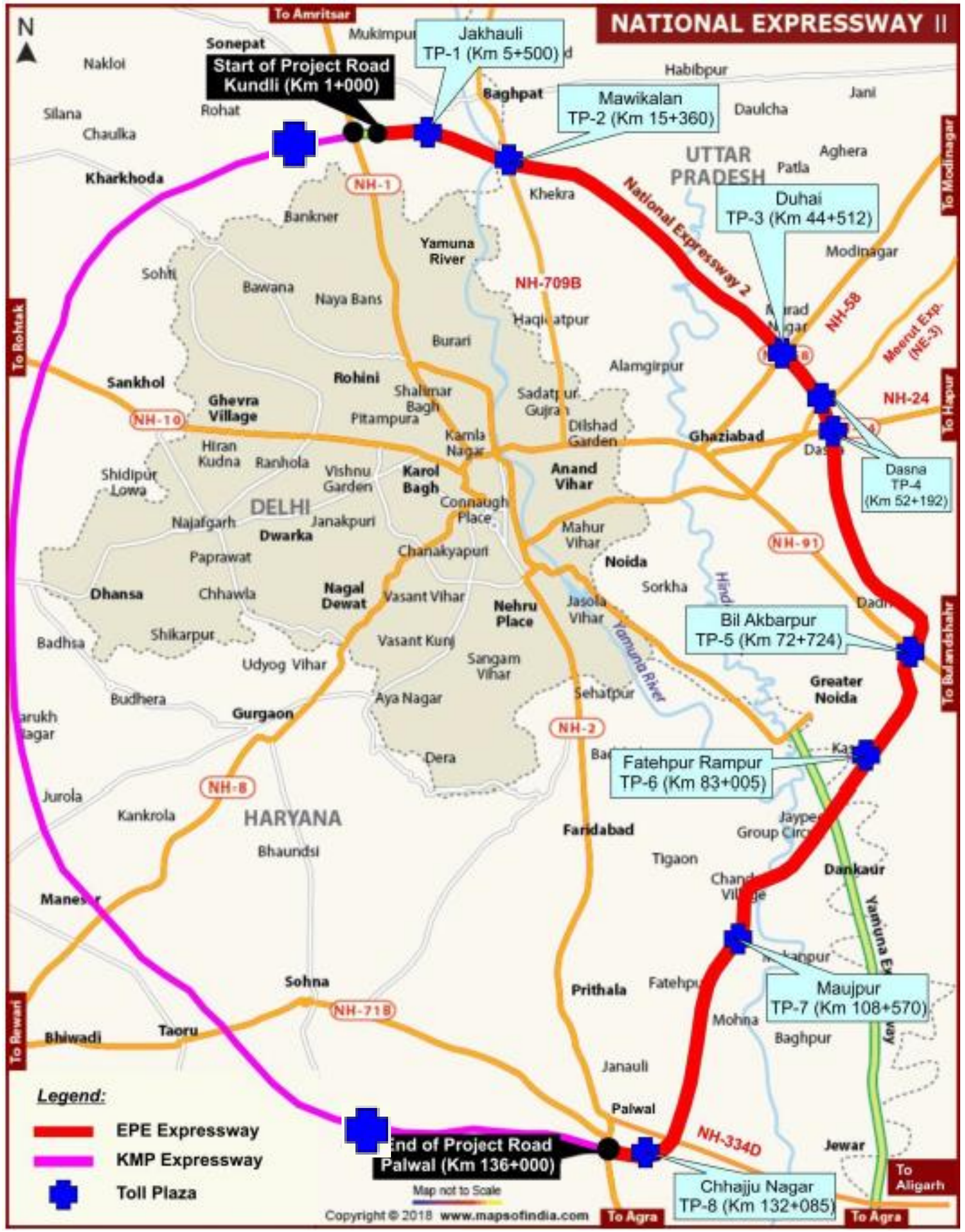
Cash ratio would have been slightly higher compared to Aug’21 due to rise in Fastag penetration

Toll revenues growth (CAGR) is 20% based on Sep’18 and Sep’21 revenues

Major factor for such high growth in revenues can be attributed to the 1-2 years of ramp up period in any green field project



DATA COLLECTION ACTIVITY | PRIMARY DATA

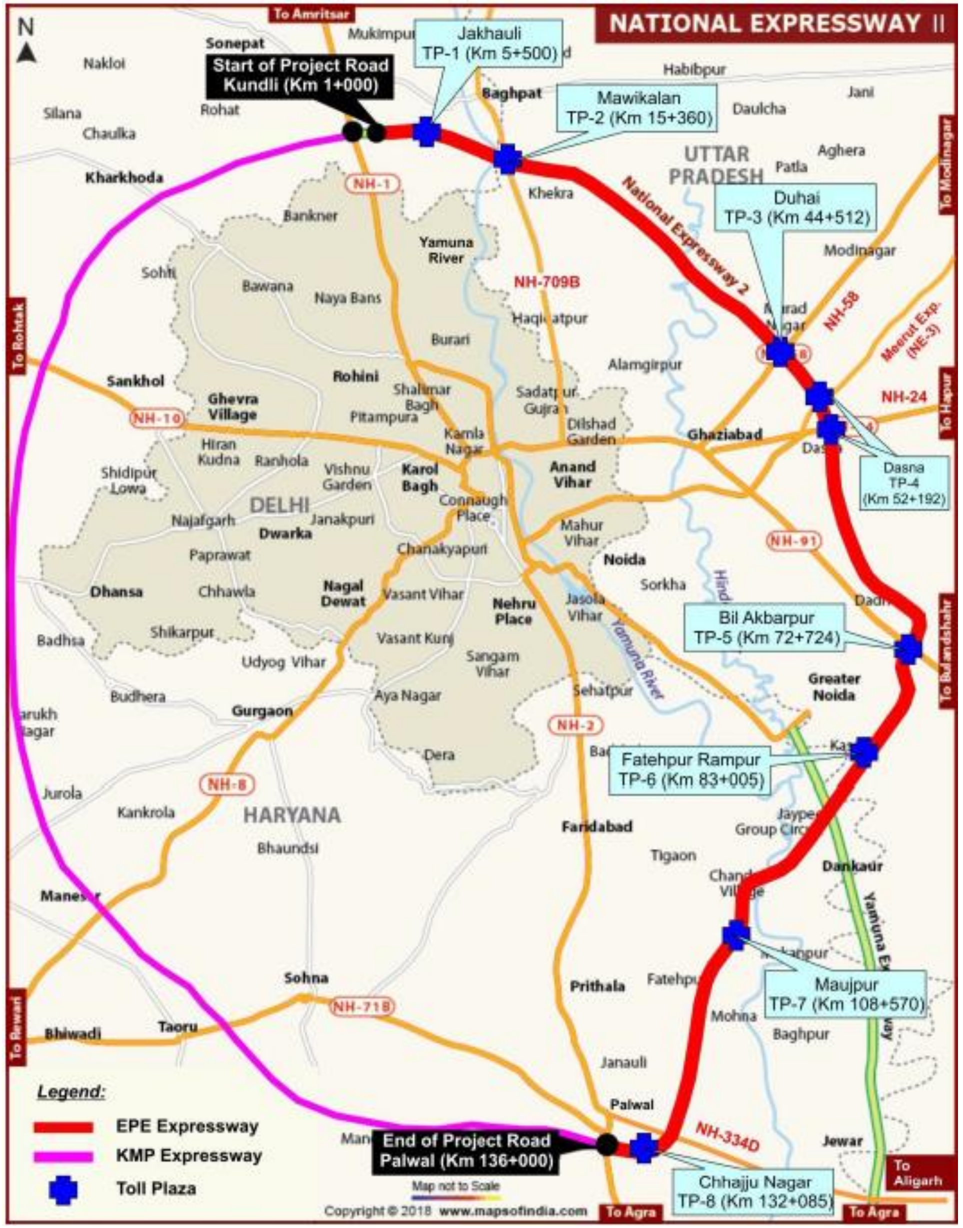


Sl.No	Location	Survey Type	Duration
1	Eastern Peripheral Expressway (Project Road)	CTVC using videography	2nd Week of September 2021
		OD survey	
2	Western Peripheral Expressway	CTVC using videography	

- Classified traffic volume count (CTVC) on the project road was conducted for 7 days at all the entry and exit locations to the project road; whereas on the alternate road that is Western peripheral Expressway, CTVC survey was conducted for 3 days at both the ends of the corridor.

- The Origin Destination survey was conducted for 1 day at all the exits of the project corridor.

SURVEY LOCATIONS | CTVC & OD



IC means Interchange

S.no	Toll Plaza	Chainage	Number of Entries and Exits	Number of Toll Lanes (Entry / Exit)
1	Jakhauli - Main	Km 5+500	Entries – 1 no Exits – 1 no	Entry Lanes – 9 no's Exit Lanes – 9 no's
2	Mawikalan – IC (Dumbbell)	Km 15+360	Entries – 2 no Exits – 2 no	Entry Lanes – 6 no's Exit Lanes – 6 no's
3	Duhai – IC (Cloverleaf)	Km 44+512	Entries – 3 no Exits – 4 no	Entry Lanes – 9 no's Exit Lanes –8 no's
4	Dasna (Meerut E'way) – IC (Cloverleaf)	Km 49 + 960	Entries – 3 no Exits – 2 no	Entry Lanes –12no's Exit Lanes – 8 no's
5	Dasna (Hapur) – IC (Cloverleaf)	Km 52+192	Entries – 4 no Exits – 4 no	Entry Lanes – 8 no's Exit Lanes – 8 no's
6	Bil Akbarpur – IC (Cloverleaf)	Km 72+724	Entries – 4 no Exits – 4 no	Entry Lanes – 8 no's Exit Lanes – 12 no's
7	Fatehpur Rampur – IC (Dumbbell)	Km 83+005	Entries –2 no Exits – 2 no	Entry Lanes – 6no's Exit Lanes – 6 no's
8	Maujpur – IC (Dumbbell)	Km 108+570	Entries –2 no Exits – 2 no	Entry Lanes –6 no's Exit Lanes – 6 no's
9	Chhajju Nagar - Main	Km 132+085	Entries – 1 no Exits – 1 no	Entry Lanes – 9 no's Exit Lanes – 9 no's

- The 7 Day CTVC was conducted at all the entries and exits (total 44 locations)
- The Origin Destination study was conducted at all the exits (total 22 locations)

ADT | SURVEY DATA

VEHICLE_TYPE	1.JAKHAULI	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBAR PUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	8,183	4,366	4,191	2,416	6,058	3,177	3,584	1,547	2,022
Minibus	46	16	11	6	23	12	21	8	17
Bus	566	460	35	34	79	10	47	1	17
LCV	3,374	1,381	1,374	489	1,705	920	1,305	1,035	1,085
2AT	525	133	172	203	251	224	378	182	491
3AT	701	179	225	162	414	295	183	99	516
MAV	2,170	544	453	332	851	875	514	189	1,481
OSV	3	2	2	3	3	2	3	8	6
VEHICLES	**15,567**	**7,082**	**6,464**	**3,645**	**9,384**	**5,515**	**6,034**	**3,070**	**5,636**
PCU	**28,467**	**11,236**	**9,613**	**5,864**	**14,727**	**10,107**	**9,720**	**4,848**	**13,438**

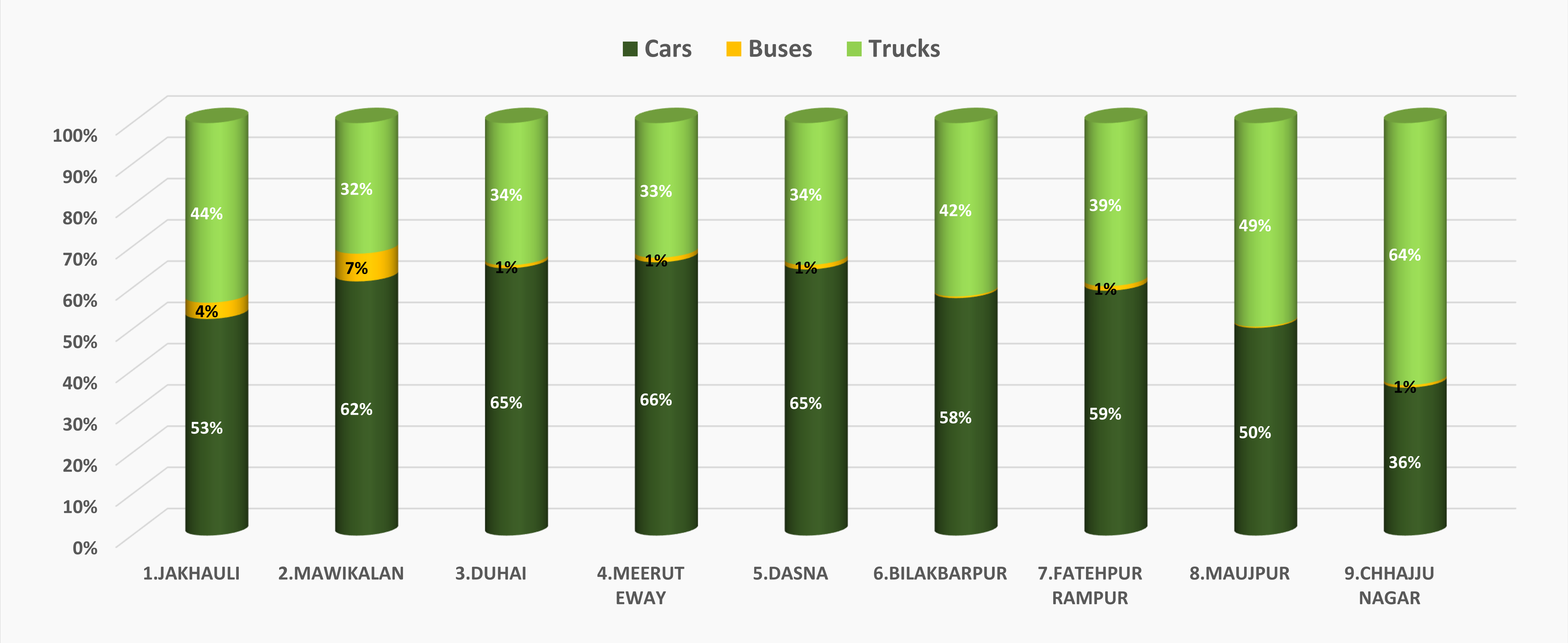
- From the above ADT, it is observed that Jakhauli (25%), Dasna(15%) and Mawi Kalan (11%) together contribute to more than 50% of the total exit traffic on the project corridor.

- Toll fee is being collected at Exit locations on the project road

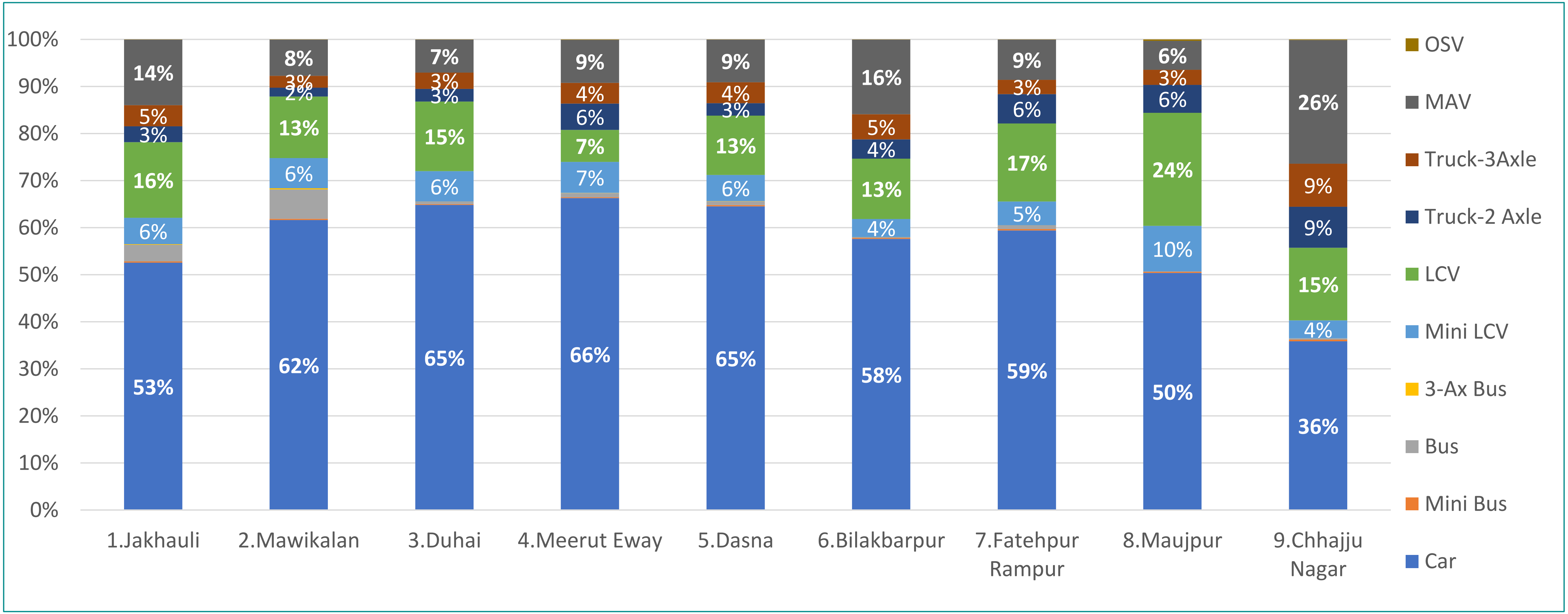
PCU Calculated by using IRC 64:1990

Average Daily Traffic at Toll Plaza exit locations.

ADT | SURVEY DATA - IBI | TRAFFIC COMPOSITION | PAX Vs GOODS

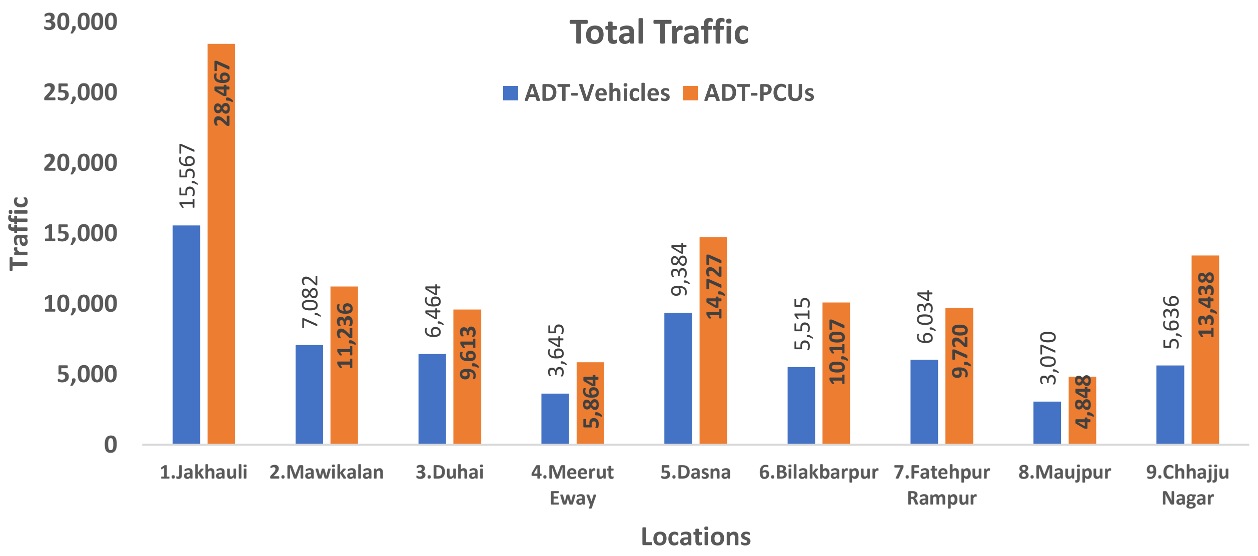


- It is observed that Passenger traffic especially car dominates the total traffic at all the toll plazas. Car composition varies between 36% and 66% at toll plaza locations.
- Truck composition varies between 32% and 64% at the toll plaza locations and is higher at Chhajju Nagar location and lowest at Mawikalan toll plaza.
- The Share of Buses is found to be very low at all the toll plazas



- Owing to the proximity to the dense urban areas such as Ghaziabad, Noida etc.. Duhai, Meerut E'way and Dasna interchanges (ICs) have the highest share of car traffic (65%, 66% and 65% respectively).
- MAVs with a share ranging from 26% at Chhajju Nagar to 7% at Duhai and LCVs with share ranging from 24% at Maujpur to 7% at Meerut E'way are observed to be next major modes travelling on the project corridor.
- Except for Jakhauli & Mawi Kalan, which have a bus traffic share of 4 % and 6 % other toll plazas have minimal share of bus traffic.

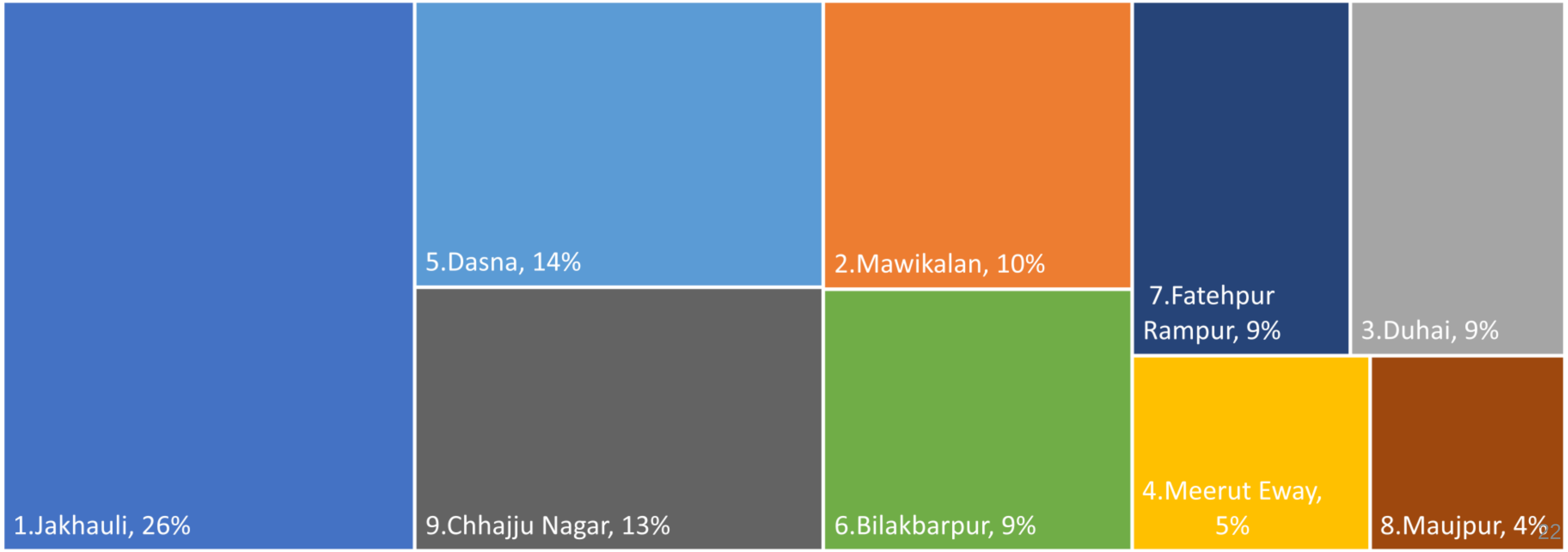
ADT | SURVEY DATA | TRAFFIC IN PASSENGER CAR UNITS (PCUs)



- Apart from Jakhauli with a traffic of 28,467 PCU (26% PCU share) and Chhajju Nagar with 13,438 PCU (13% PCU share), Dasna (Hapur) is observed to be the next biggest contributor with 14,727 PCU (14%). This can be attributed to the fact that Dasna exit provides the traffic direct connectivity to Ghaziabad, Noida and Hapur.
- Maujpur which provides connectivity to the Faridabad, Ballabhgarh region has the least traffic volume (around 5,000 PCU)

- The recently opened Meerut Expressway access contributes to nearly 5% of the total traffic in PCU terms.
- Maujpur which provides connectivity to the Faridabad, Ballabhgarh region has the least traffic volume of 4,848 PCU (4% PCU share)

Traffic Contribution (PCU terms)

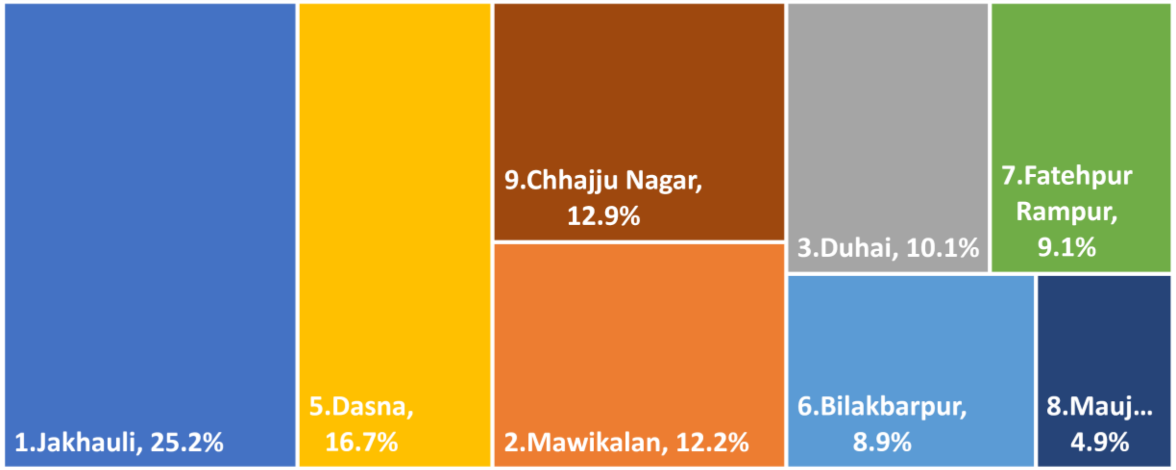


ADT | ETC DATA – AUG2021

VEHICLE_TYPE	1.JAKHAULI*	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBAR PUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	7,224	5,131	4,565		6,760	2,882	3,362	1,714	2,088
Minibus	217	114	105		128	61	95	66	76
Bus	582	491	45		82	25	59	20	36
LCV	1,951	1,023	949		1,155	552	858	590	685
2AT	1,195	439	397		677	414	580	386	674
3AT	643	194	224		483	272	173	96	477
MAV	1,992	602	580		1,173	780	542	215	1,543
OSV	4	0	3		3	1	1	2	1
VEHICLES	**13,807**	**7,994**	**6,868**		**10,461**	**4,987**	**5,670**	**3,088**	**5,579**
PCU	**26,716**	**12,918**	**10,766**		**17,701**	**9,448**	**9,670**	**5,178**	**13,737**

- The Electronic Fastag data for the month of September 2021 was made available to the traffic consultant.
- It was observed that, the toll rates for Meerut Expressway and Dasna are observed to be same and hence, the traffic under Dasna also consists of the traffic of Meerut Expressway.
- Based on the detailed analysis, Jakhauli with a share of 25%, Dasna with a share of 17% and Chhajju Nagar with a share of 13% were observed to be the biggest contributors to the traffic on the project road.

Traffic Contribution (PCU terms)



*Jakhauli TP doesn't have Cash data (as part of ETC)

PCU Calculated by using IRC 64:1990

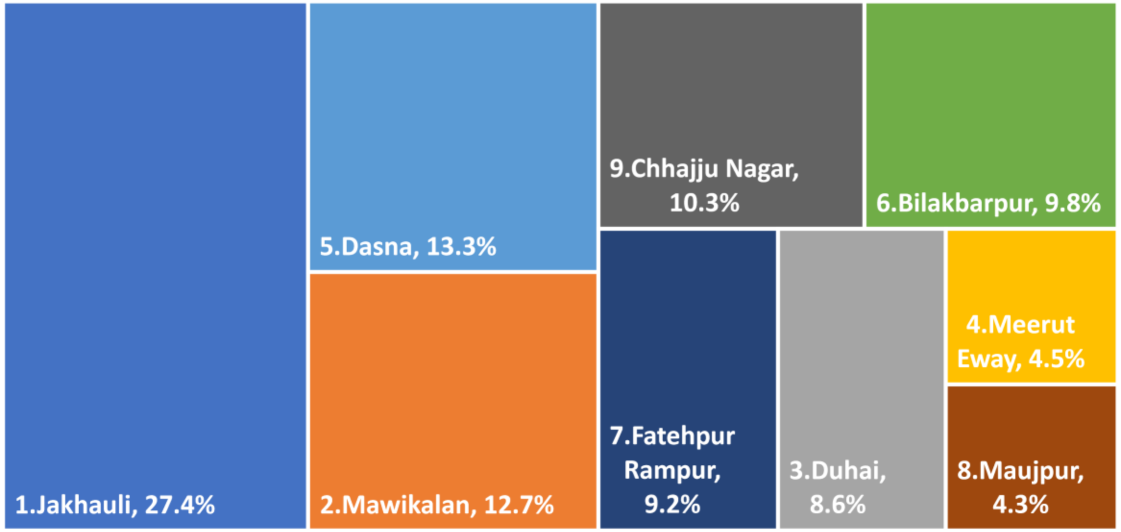
ADT | NHAI DPR DATA – JUL2021

VEHICLE_TYPE	1.JAKHAULI	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBAR PUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	9,302	5,359	4,392	1,954	5,660	3,599	3,428	1,651	1,940
Minibus	49	15	9	5	17	17	20	4	17
Bus	663	575	8	12	62	7	86	1	13
LCV	3,118	1,035	1,166	409	1,561	866	1,179	981	662
2AT	480	514	216	87	219	276	407	137	473
3AT	626	160	174	139	272	275	184	79	332
MAV	1,819	472	288	286	829	716	441	110	1,091
OSV	-	-	-	-	-	1	-	2	-
VEHICLES	**16,057**	**8,130**	**6,253**	**2,892**	**8,620**	**5,757**	**5,745**	**2,965**	**4,528**
PCU	**27,545**	**12,805**	**8,645**	**4,576**	**13,417**	**9,824**	**9,242**	**4,284**	**10,322**

- The NHAI Authority has conducted a Traffic Study as part of their Detailed Project Report Study in the month of July'2021.

- Based on the detailed analysis, a similar trend as earlier was observed with Jakhauli with a share of 27%, Dasna with a share of 13% and Chhajju Nagar with a share of 10% were observed to be the biggest contributors to the traffic on the project road.

Traffic Contribution (PCU terms)



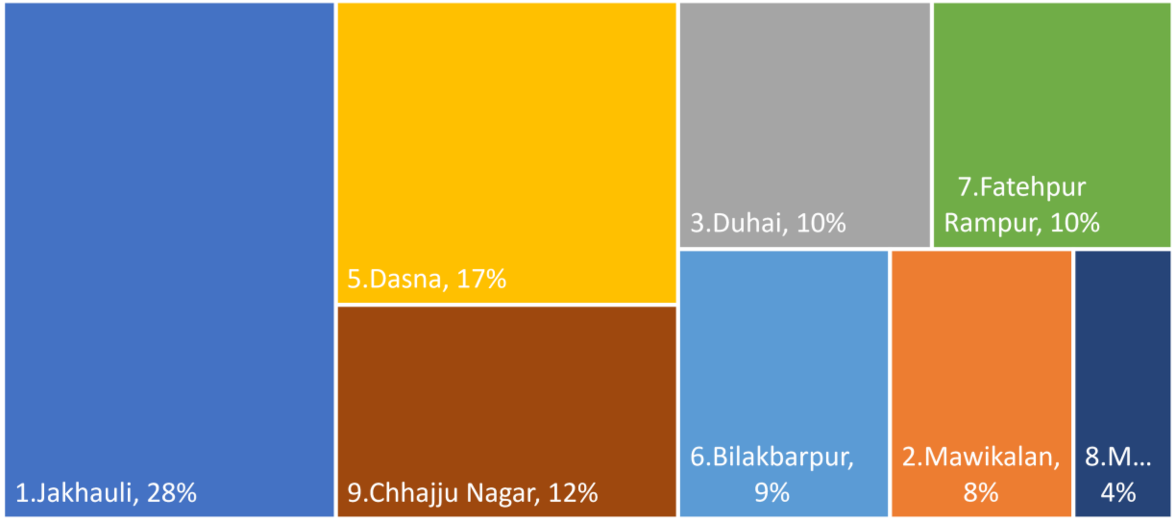
PCU Calculated by using IRC 64:1990

ADT | ETC DATA – OCT 2021

VEHICLE_TYPE	1.JAKHAULI*	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBAR PUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	8,249	3,624	5,322		6,013	2,639	3,479	1,608	1,632
Minibus	286	89	116		130	63	104	70	97
Bus	605	388	54		163	27	73	13	71
LCV	2,574	798	1,044		1,169	565	936	626	873
2AT	1,482	302	445		841	403	668	350	765
3AT	857	132	218		616	295	212	86	508
MAV	2,554	450	617		1,559	1,145	776	247	1,524
OSV	6	1	4		2	1	1	0	3
VEHICLES	16,613	5,783	7,819		10,494	5,138	6,250	3,000	5,472
PCU	32,893	9,446	12,004		19,849	10,913	11,398	5,114	13,988

- The Electronic Fastag data for the month of October 2021 was made available to the traffic consultant.
- It was observed that, the toll rates for Meerut Expressway and Dasna are observed to be same and hence, the traffic under Dasna also consists of the traffic of Meerut Expressway.
- Based on the detailed analysis, Jakhauli with a share of 28%, Dasna with a share of 17% and Chhajju Nagar with a share of 12% were observed to be the biggest contributors to the traffic on the project road.

Traffic Contribution (PCU Terms)



*Jakhauli TP doesn't have Cash data (as part of ETC)

PCU Calculated by using IRC 64:1990

ADT DATA COMPARISON (DPR vs ETC vs CONSULTANT SURVEY)

Toll Plaza	ADT (PCUs)			
	DPR Data	ETC+ Cash (Aug’21)	Consultant Survey (Sep-21)	ETC+ Cash (OCT-21)
1.Jakhauli*	27,545	28,645	28,467	32,893
2.Mawikalan	12,805	9,045	11,236	9,446
3.Duhai	8,645	11,320	9,613	12,004
4.Meerut E’way			5,864	
5.Dasna	13,417	19,291	14,727	19,849
6.Bilakbarpur	9,824	8,260	10,107	10,913
7.Fatehpur Rampur	9,242	10,153	9,720	11,398
8.Maujpur	4,284	4,745	4,848	5,114
9.Chhajju Nagar	10,322	13,193	13,438	13,988
Grand Total	**100,659**	**104,651**	**108,021**	**1,15,604**

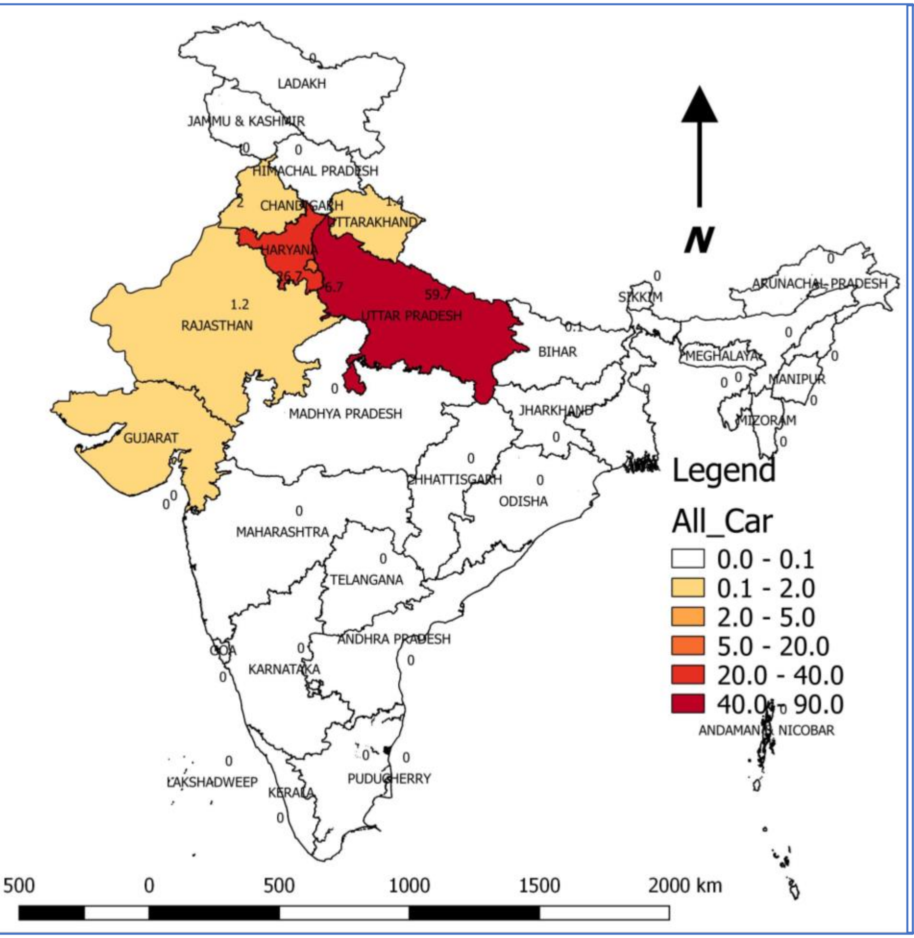
DPR conducted in Jul-21, ETC+Cash in Aug-21 (15 days) & Oct’21(7 days) and Consultant Survey in Sep-21 (7-days)

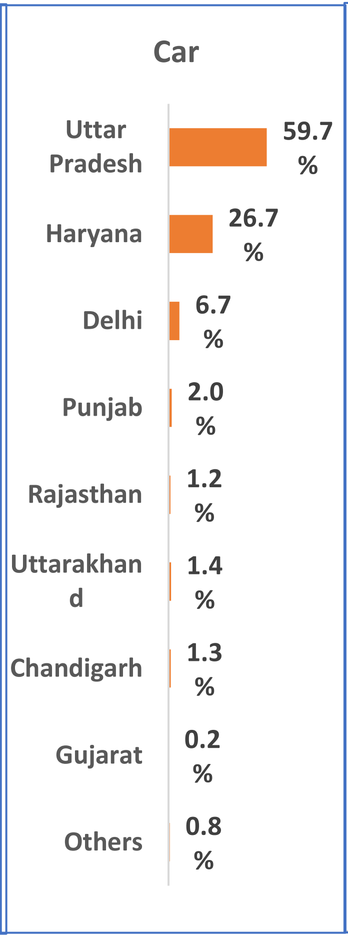
**Jakhauli TP doesn't have Cash traffic & revenue data (as part of ETC)*

- Traffic Consultant as part of this study has compared the ADTs obtained from 3 different sources namely, Consultants Survey Data, Fastag Data and NHAI DPR data. The Fastag data from the months of Aug’21 and Oct’21 was compared
- On comparison, it was observed that the total variation between Survey Data and ETC data of Aug’21 is 3%. Whereas on comparing with Oct’21 data the survey data is found to be 7% lower. This variation can be attributed to absence of cash data as part of overall ETC data for Jakhauli toll Plaza and seasonal variation.
- Similarly, on comparing with the NHAI DPR data high variation of nearly 7% (total traffic) was observed. The low ADT of NHAI might be the study was conducted during July-2021 which was still experiencing moderate traffic restrictions as part of 2nd Covid wave in the region.

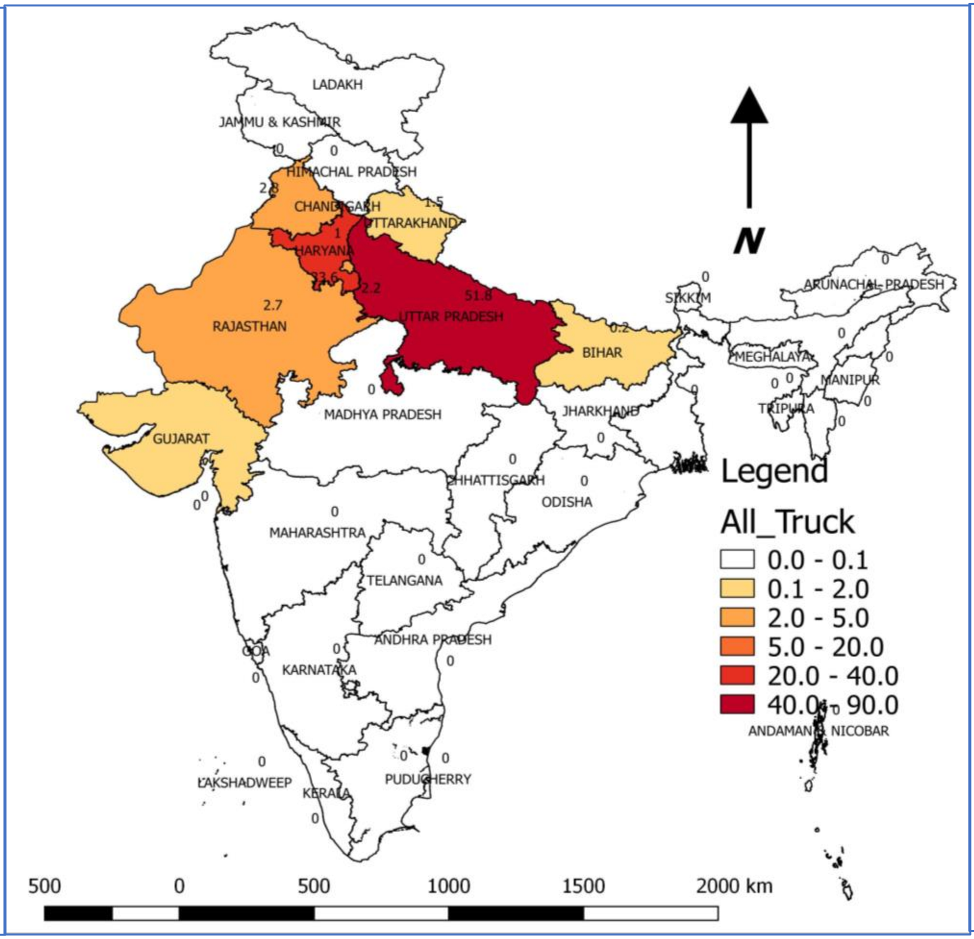
PROJECT INFLUENCE AREA - STATE LEVEL – OVERALL PROJECT CORRIDOR

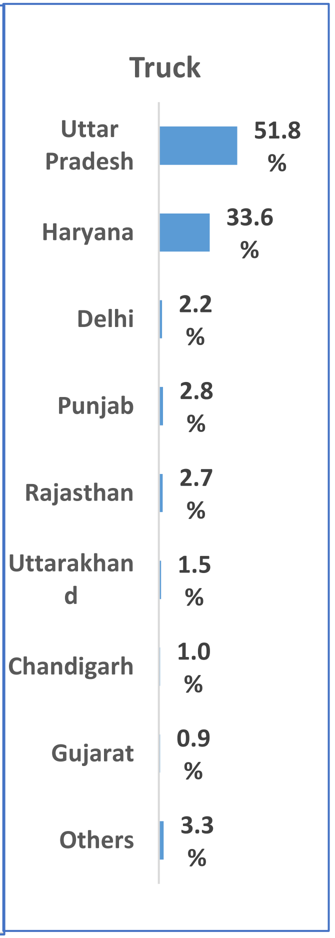
CAR Traffic Share





Truck Traffic Share

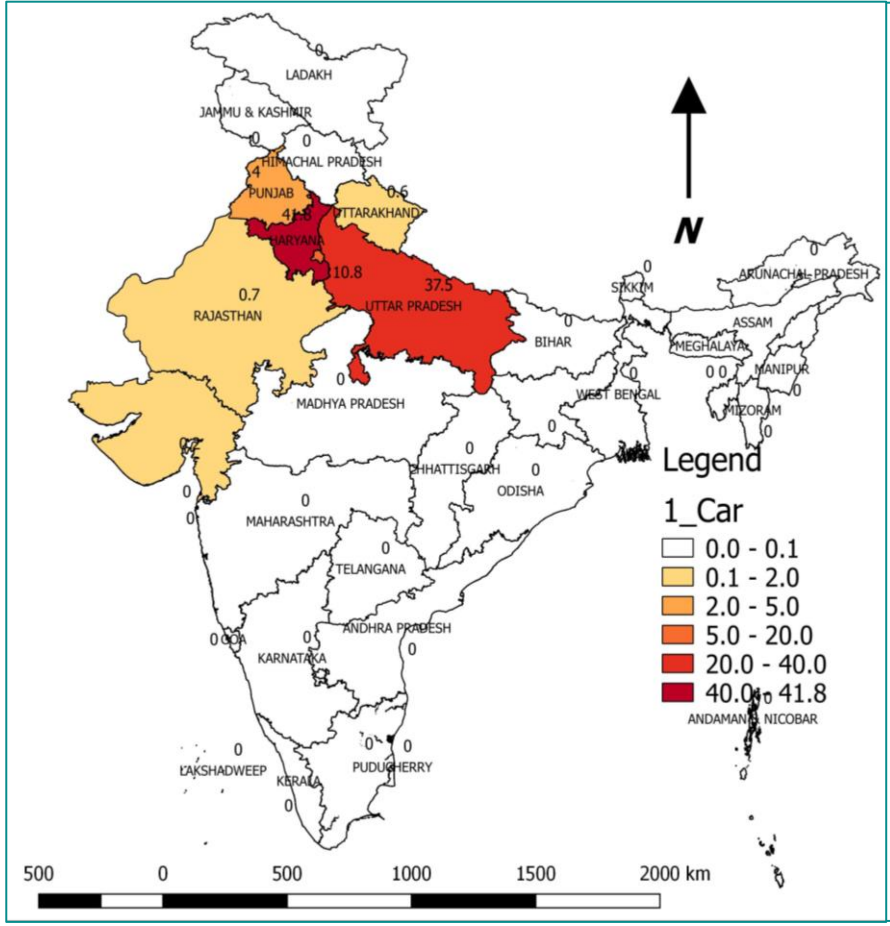


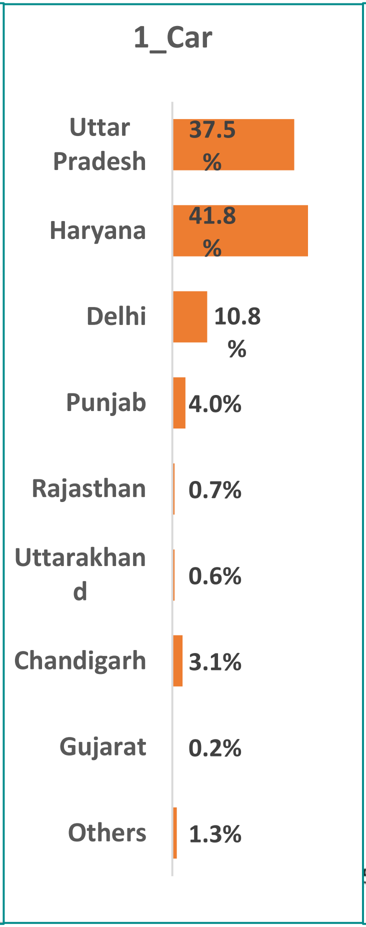


- Approximately 60% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at all toll plaza locations, around 26.7 % of the Car vehicle trips are origin-destined in Haryana state due to it is Proximity to Project road.
- 51.8 % of the truck traffic is plying within State of Uttar Pradesh. 33.6% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road. Significant amount car and truck traffic also observed from Delhi, Punjab, Rajasthan, Uttarakhand and Chandigarh.

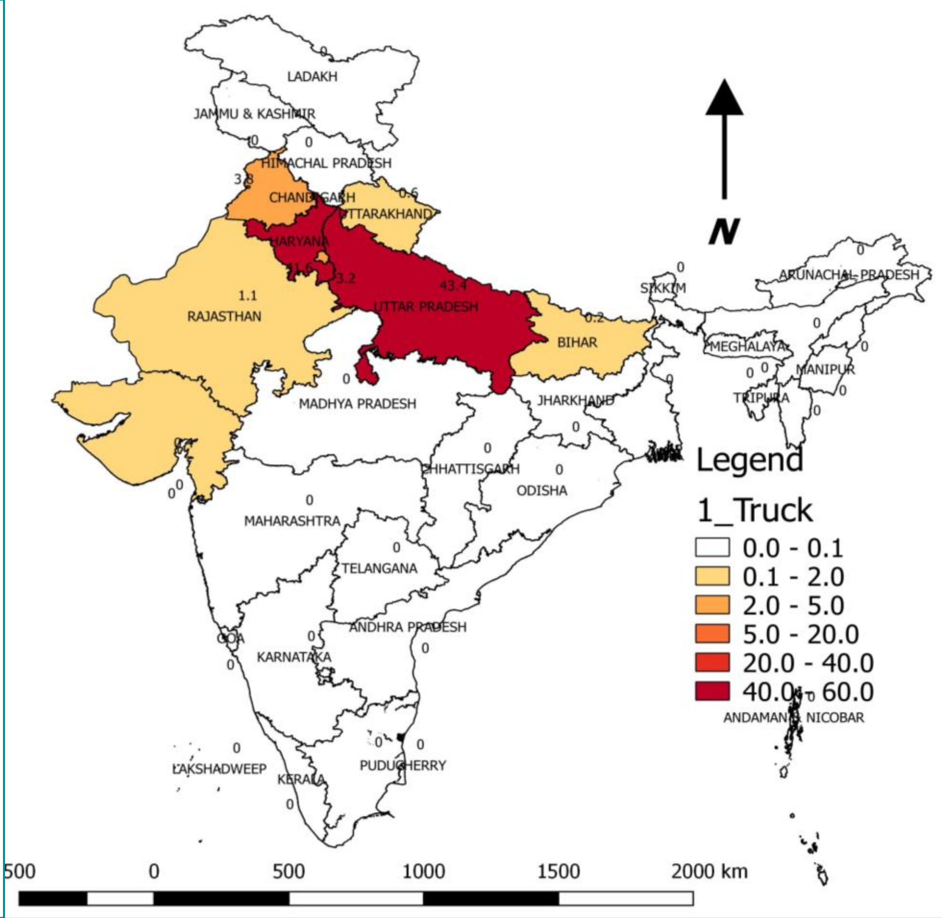
PROJECT INFLUENCE AREA - STATE LEVEL – TP 1

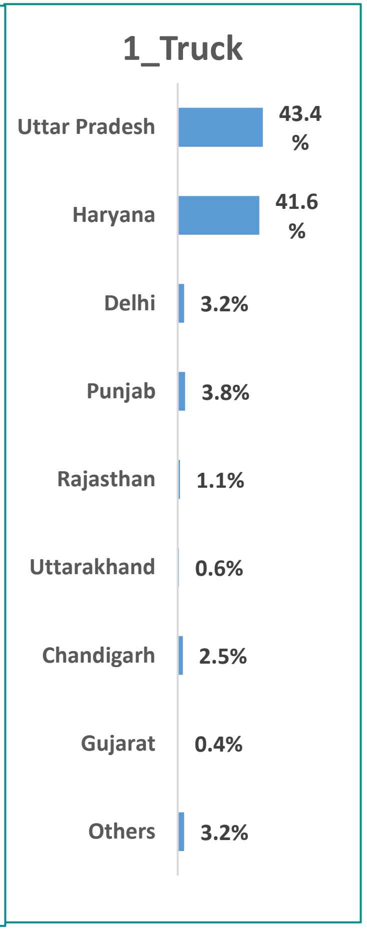
CAR Traffic Share





Truck Traffic Share

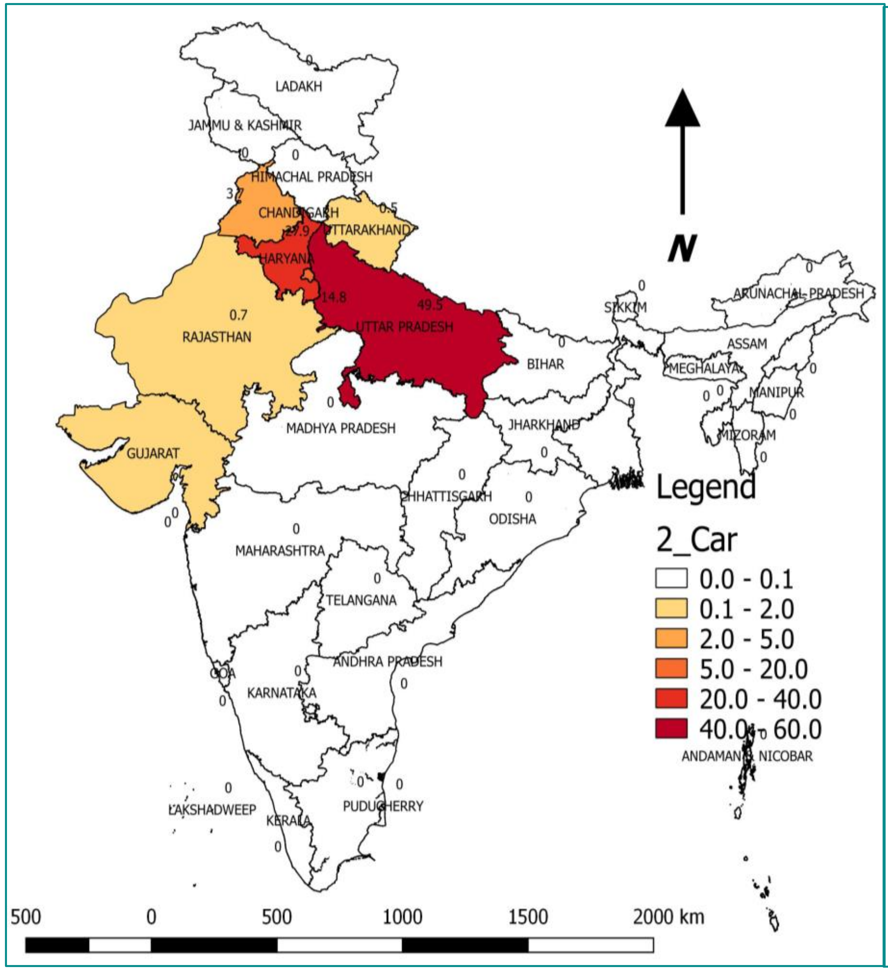


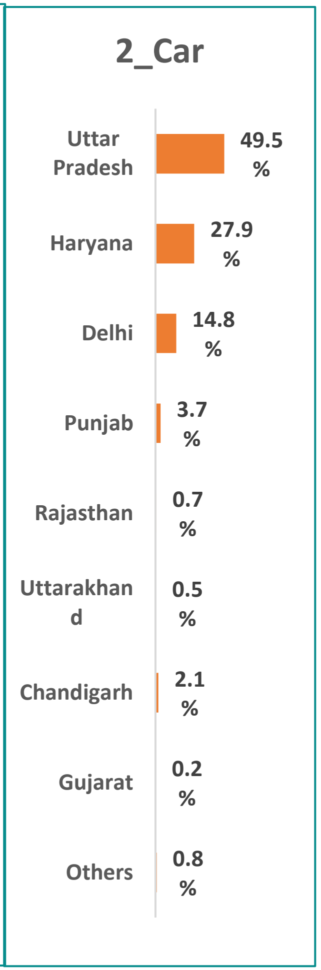


- Approximately 42% of the Car passenger vehicle trips are happening within the state of Haryana at Jakhauli Toll plaza, around 37.5% of the Car vehicle trips are origin-destined in Uttar Pradesh state due to it is Proximity to Project road.
- 41.6 % of the truck traffic is plying within State of Haryana. 43.4% of Truck traffic is origin-destined in Uttar Pradesh state due to it is Proximity to Project road. Significant amount car traffic also observed from Delhi and Punjab also.

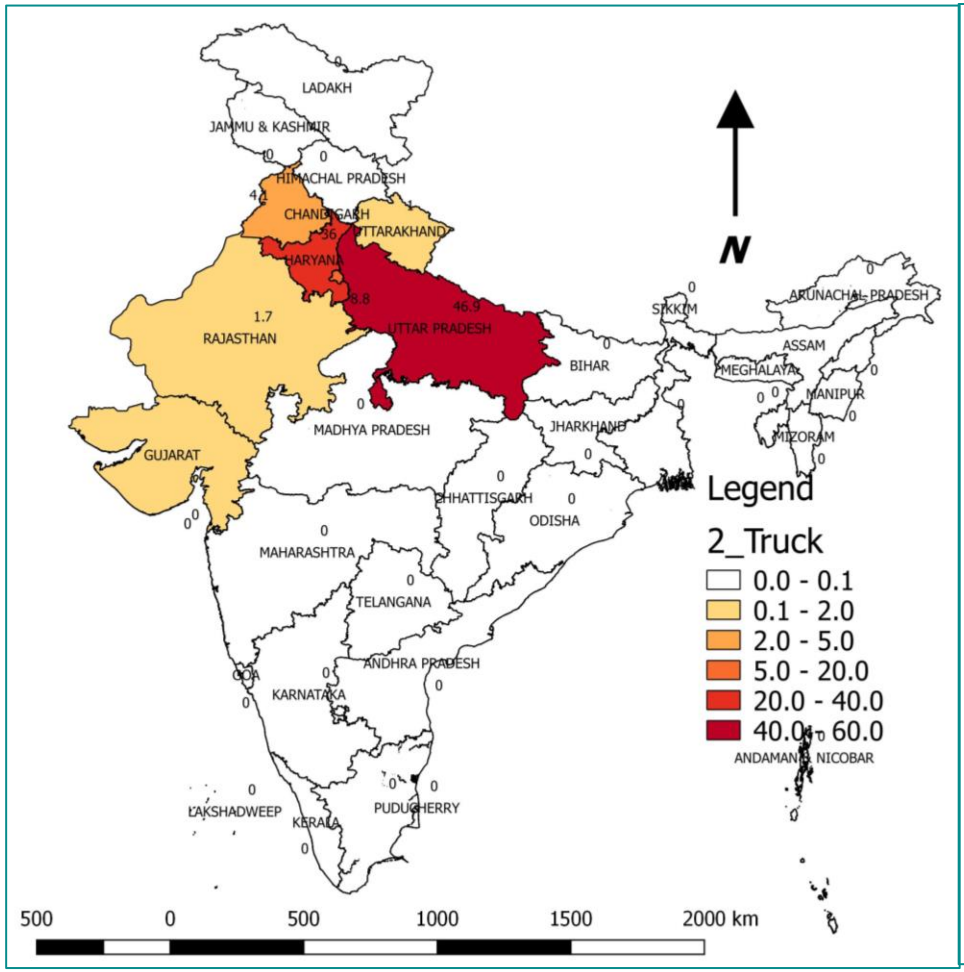
PROJECT INFLUENCE AREA - STATE LEVEL – TP 2

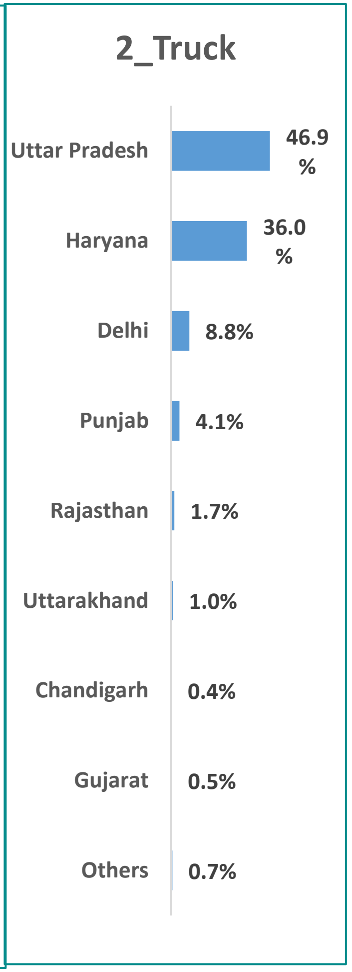
CAR Traffic Share





Truck Traffic Share



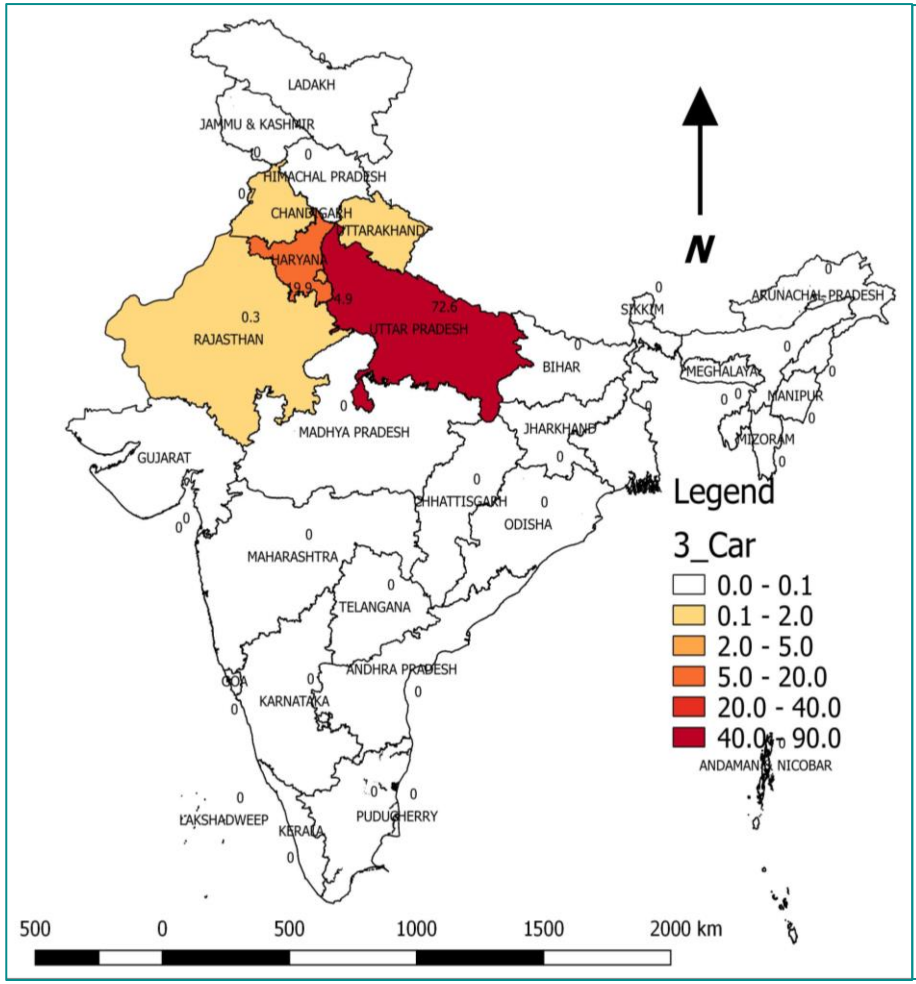


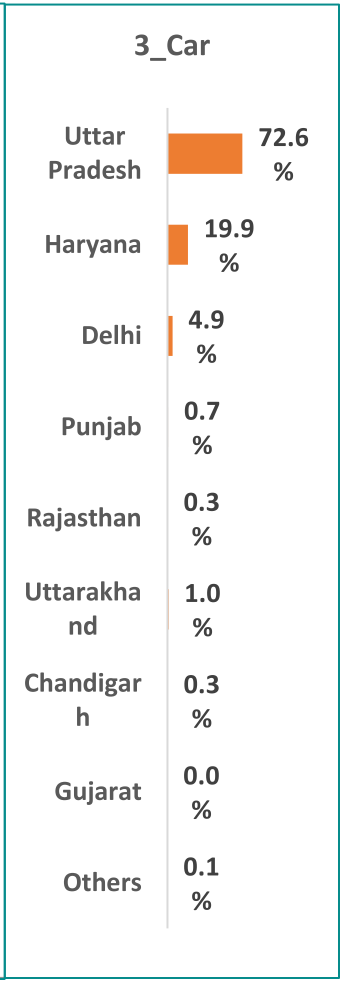
- Approximately 49.5% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at Mawikalan Toll plaza, around 27.9% of the Car vehicle trips are origin-destined in Haryana State due to it is Proximity to Project road.
- 46.9 % of the truck traffic is plying within State of Uttar Pradesh. 36% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road. Significant amount car and truck observed from Delhi and Punjab also.

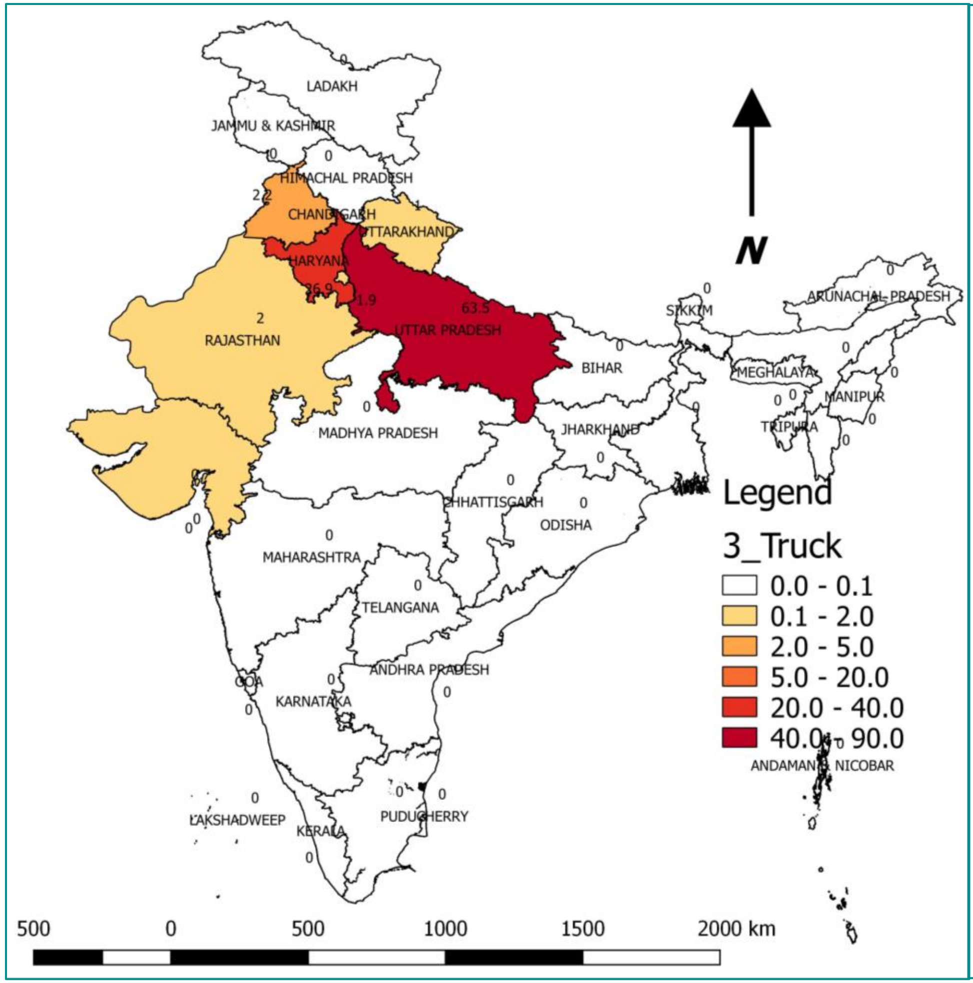
PROJECT INFLUENCE AREA - STATE LEVEL – TP 3

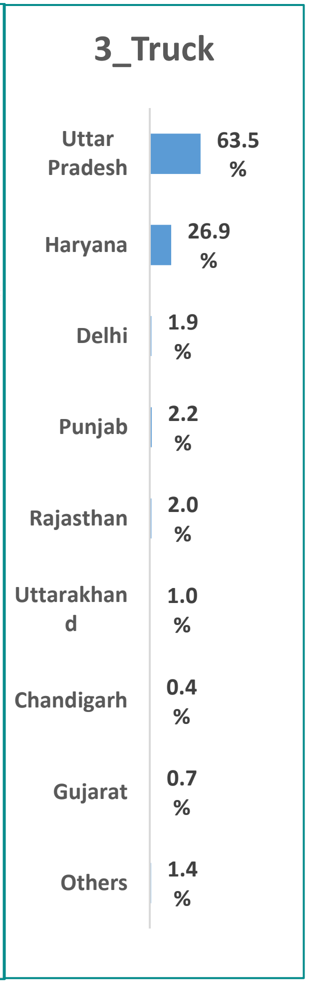
CAR Traffic Share

Truck Traffic Share









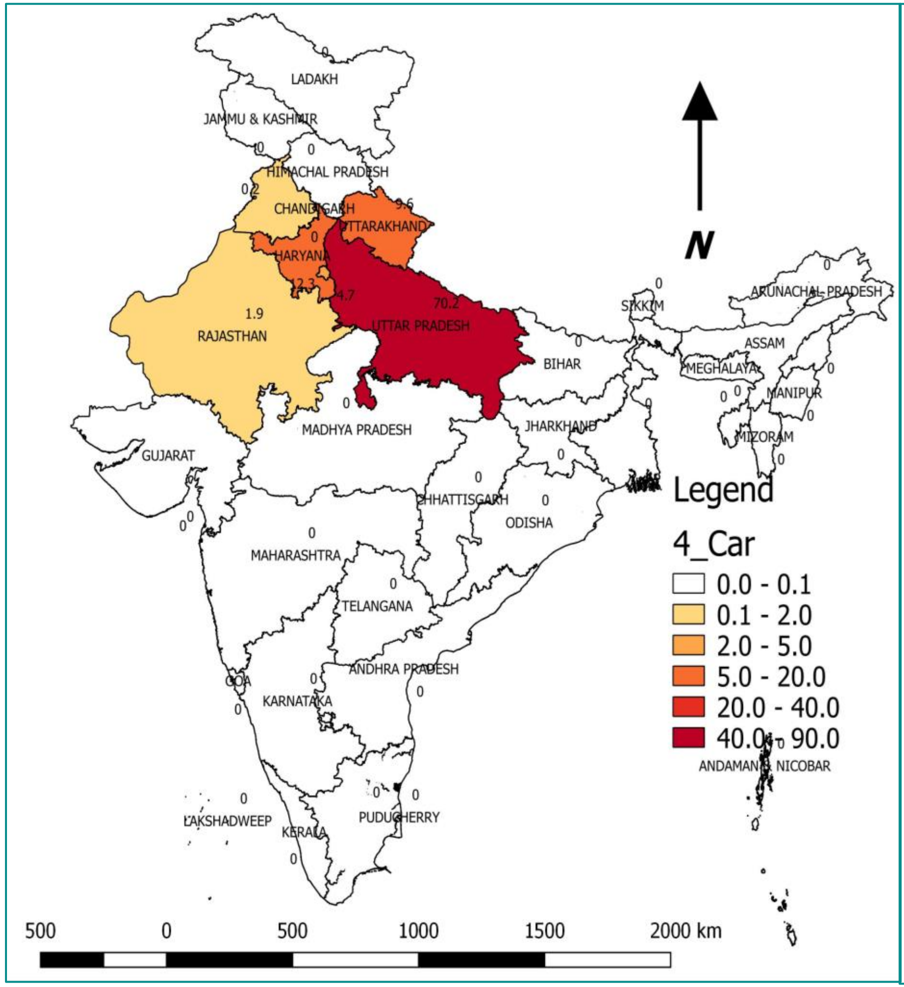
- Approximately 73% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at Duhai Toll plaza, around 20 % of the Car vehicle trips are origin-destined in Haryana State due to it is Proximity to Project road.
- 63.5 % of the truck traffic is plying within State of Uttar Pradesh. 26.9% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road.

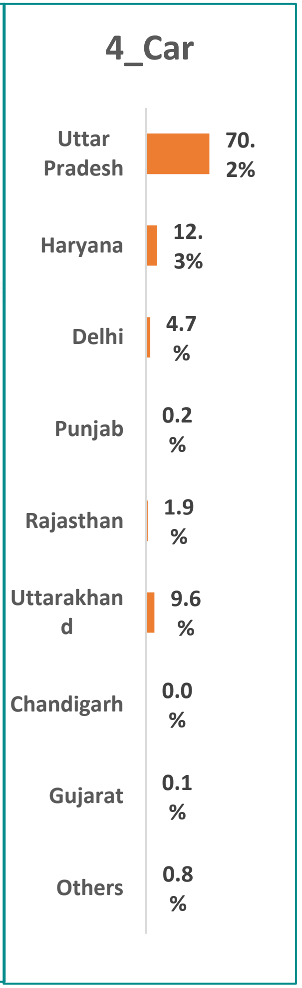
PROJECT INFLUENCE AREA - STATE LEVEL – TP 4

CDPQ

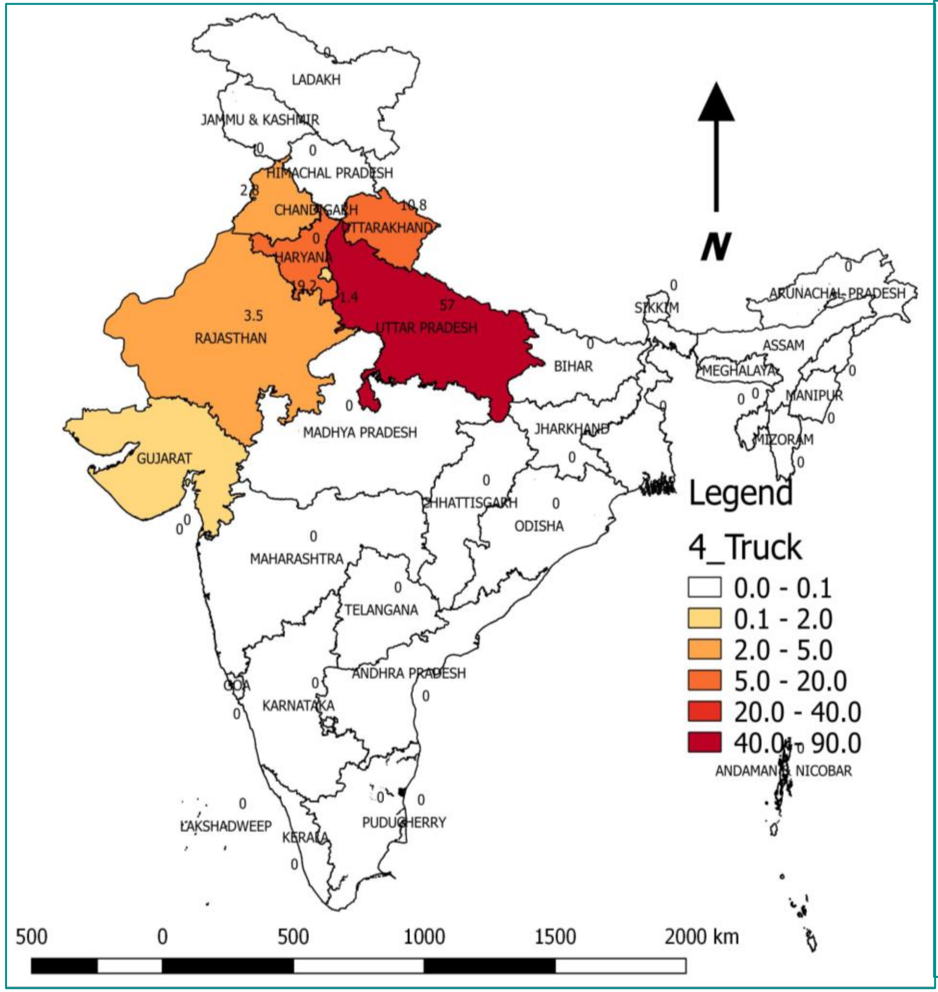
IBI

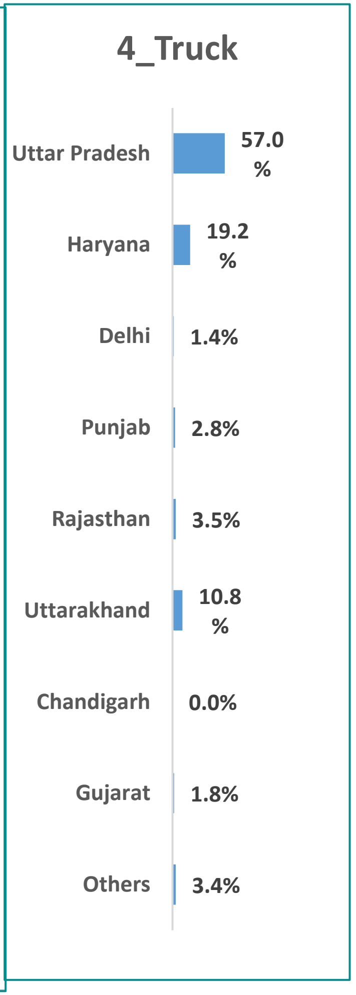
CAR Traffic Share





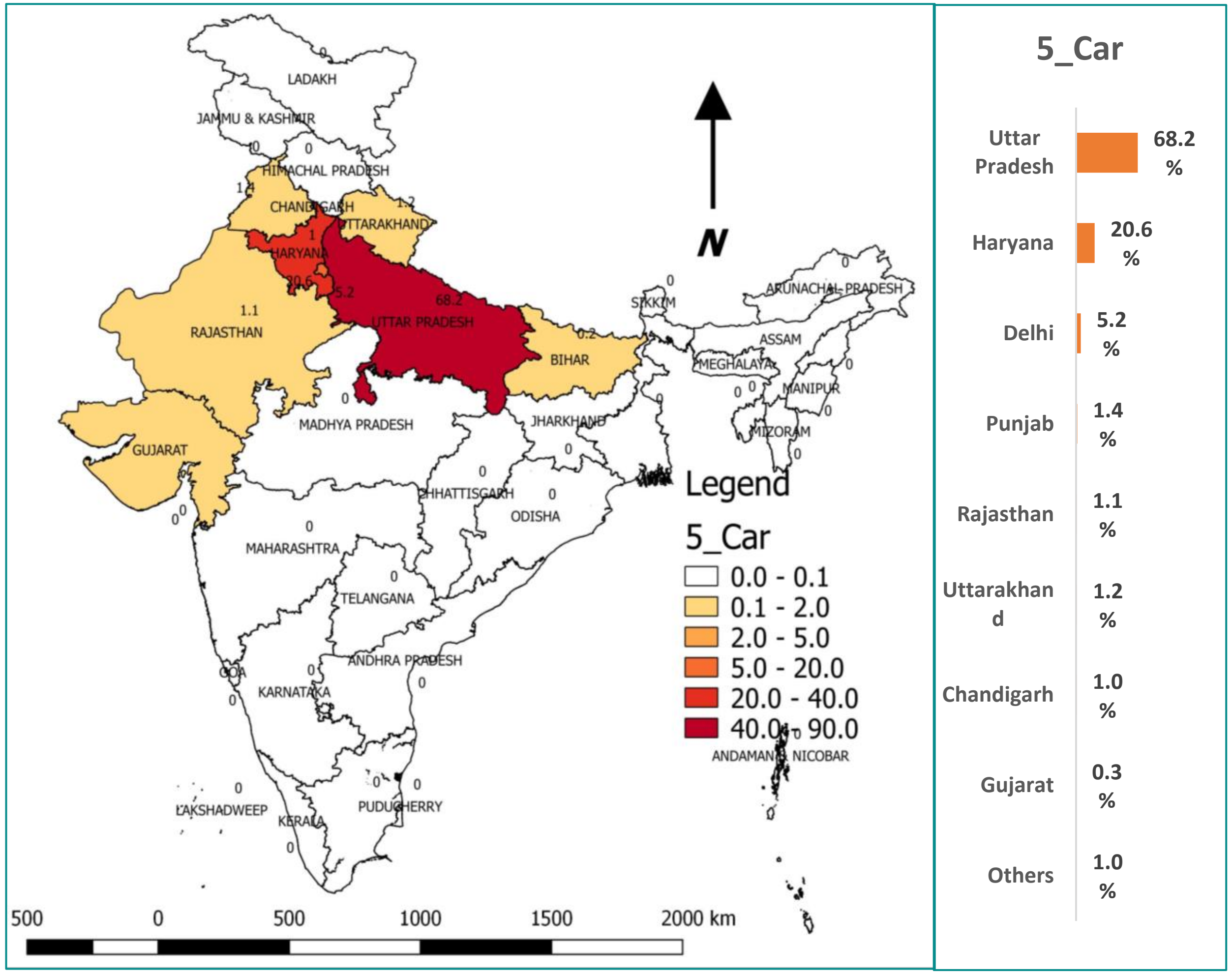
Truck Traffic Share



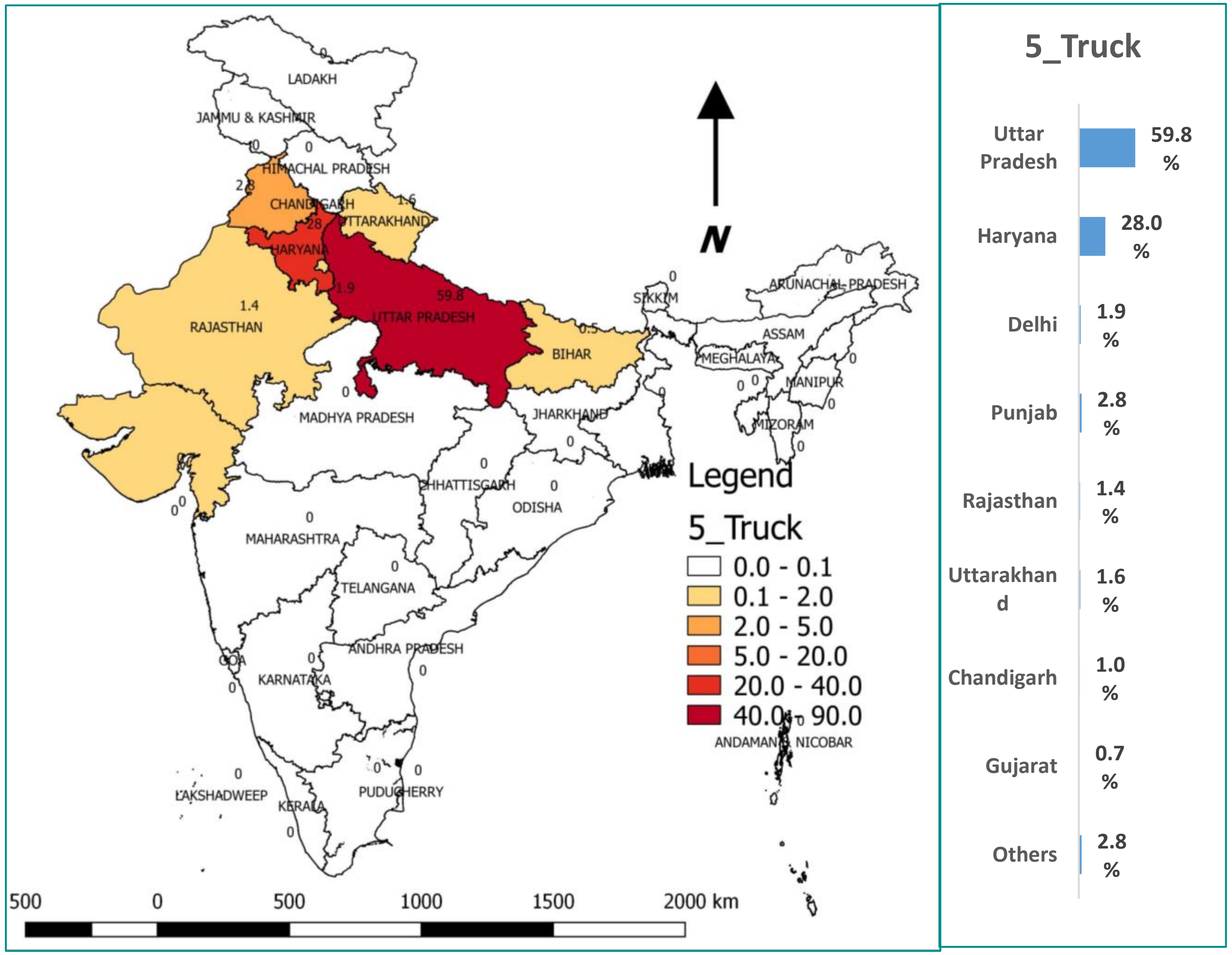


- Approximately 70% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at Meerut-Expressway Toll plaza, around 12.3 % of the Car vehicle trips are origin-destined in Haryana State due to it is Proximity to Project road.
- 57 % of the truck traffic is plying within State of Uttar Pradesh. 19.2% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road.9.6% of Car traffic and 10.8% of Truck traffic is origin-destined in state of Uttarakhand.

CAR Traffic Share



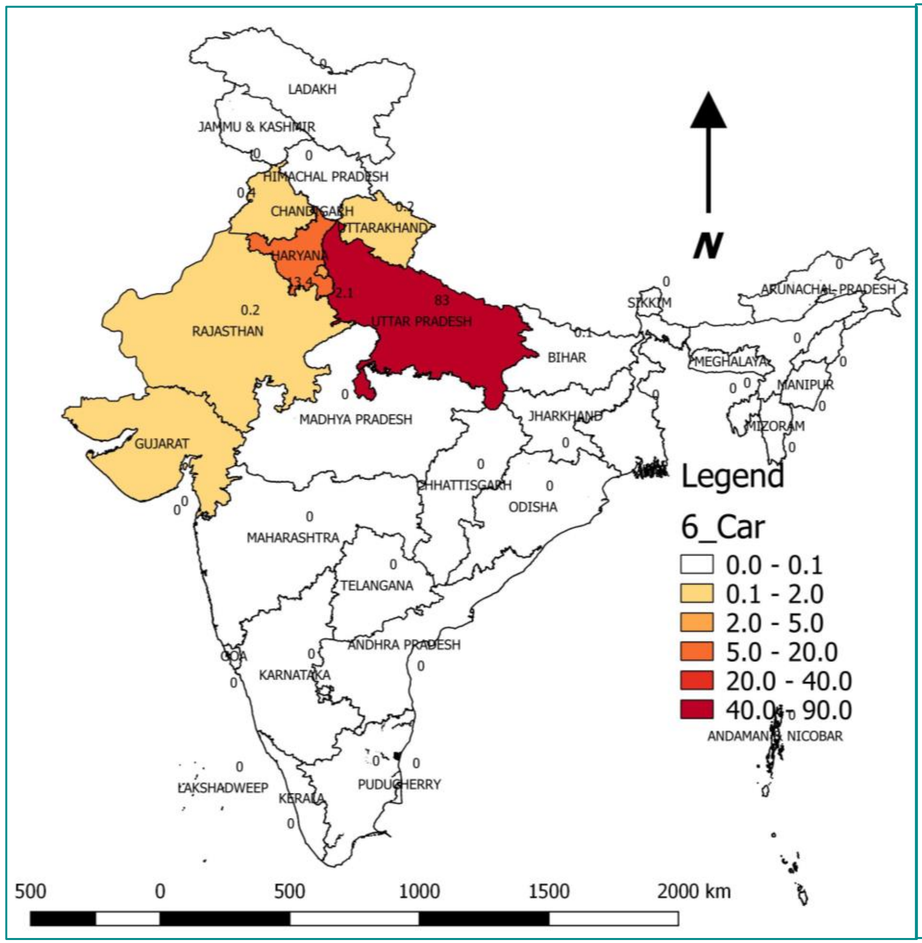
Truck Traffic Share

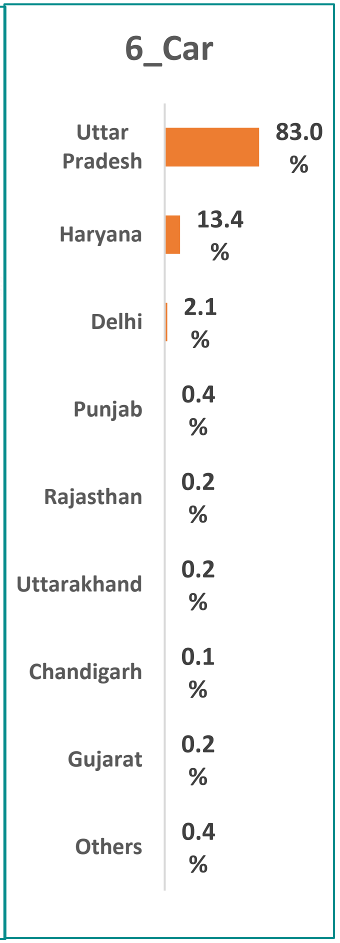


- Approximately 68.2% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at Dasna (Hapur) Toll plaza, around 20.6 % of the Car vehicle trips are origin-destined in Haryana State due to it is Proximity to Project road.
- 59.8 % of the truck traffic is plying within State of Uttar Pradesh. 28% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road. 5.2% of Car traffic is origin-destined in Delhi.

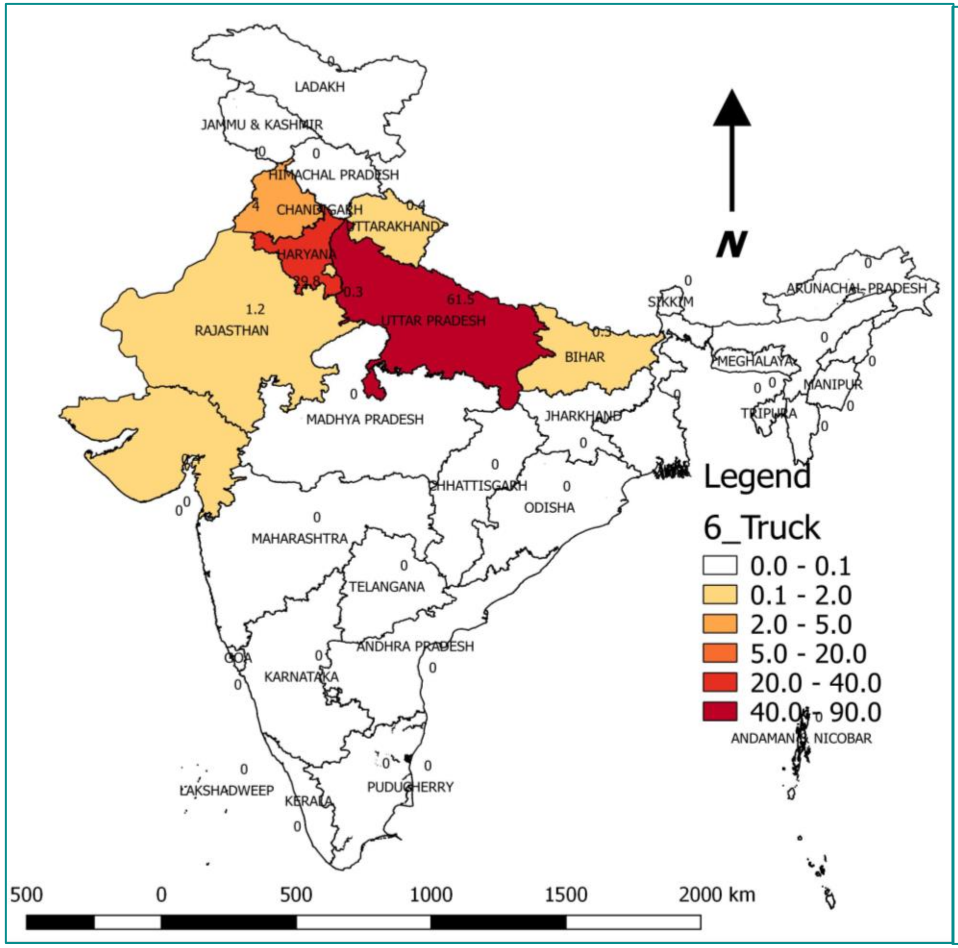
PROJECT INFLUENCE AREA - STATE LEVEL – TP 6

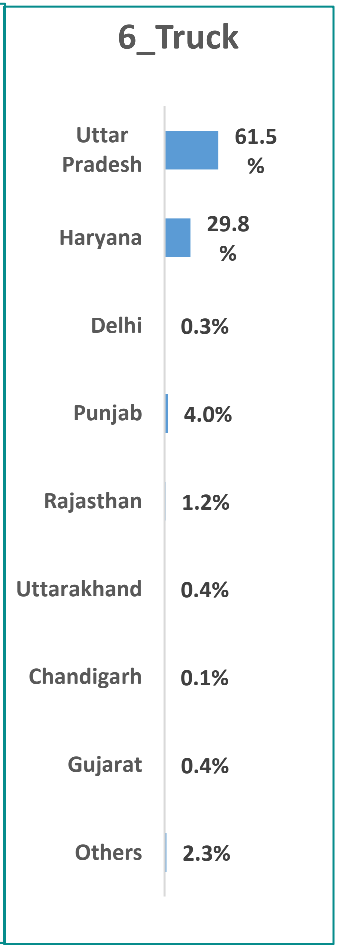
CAR Traffic Share





Truck Traffic Share



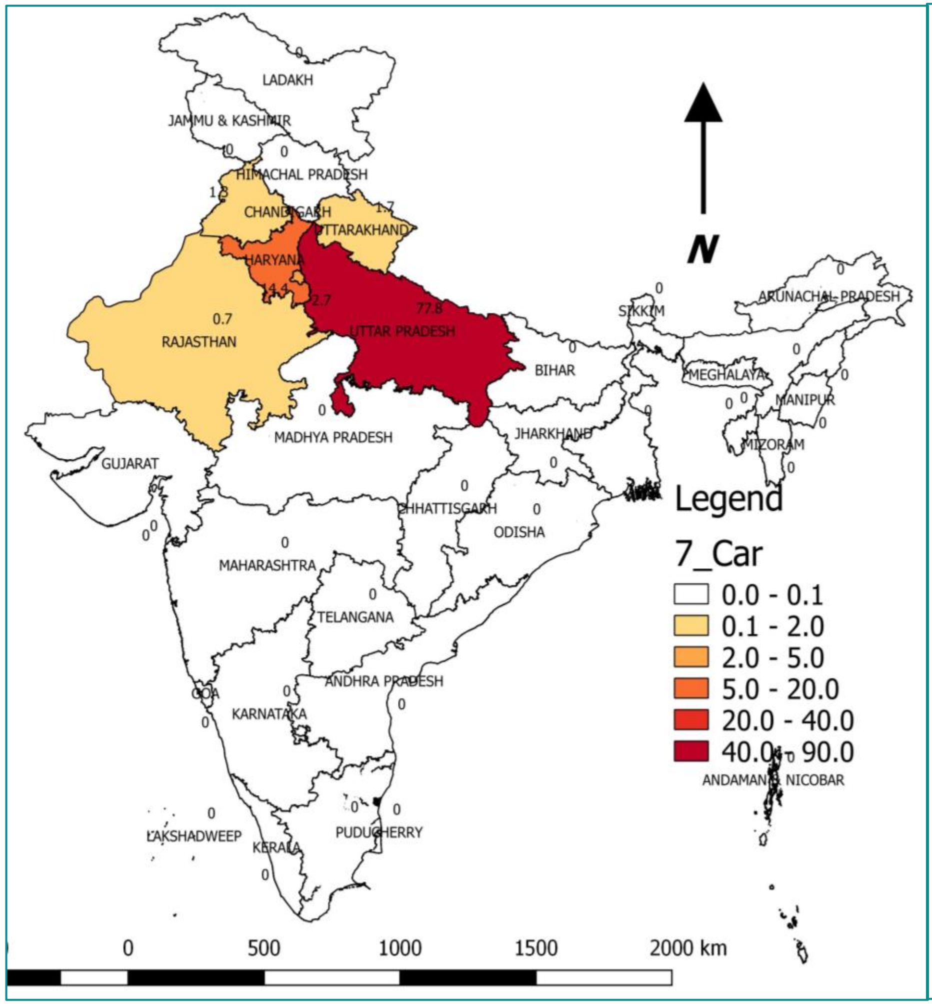


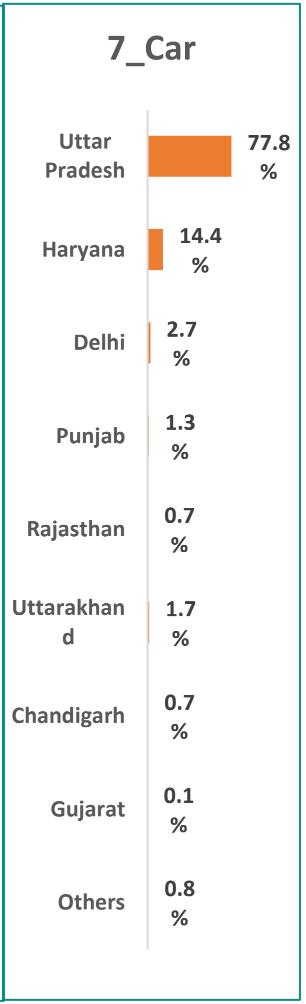
- Approximately 83% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at Bil Akbarpur Toll plaza, around 13.4% of the Car vehicle trips are origin-destined in Haryana State due to it is Proximity to Project road.
- 61.51 % of the truck traffic is plying within State of Uttar Pradesh. 29.8% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road.

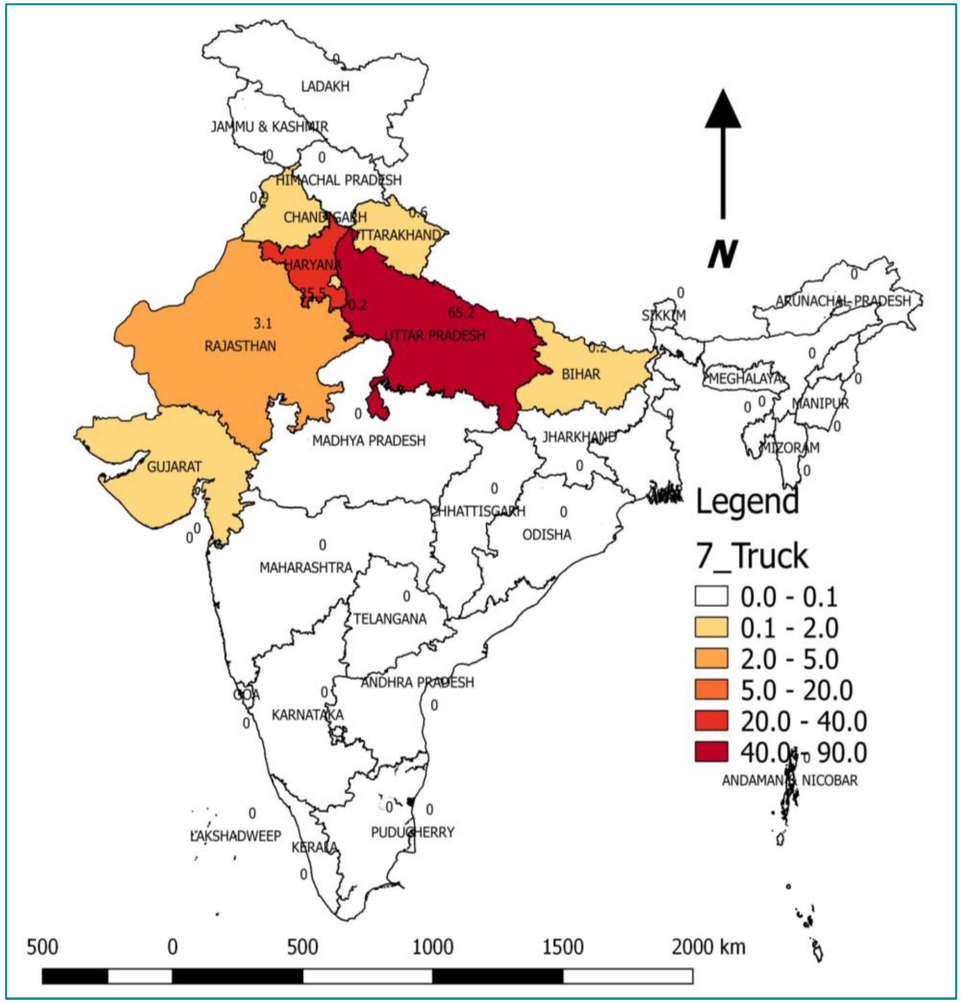
PROJECT INFLUENCE AREA - STATE LEVEL – TP 7

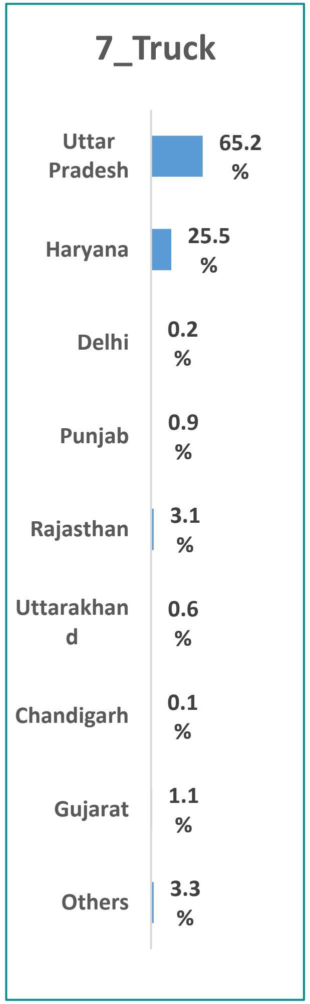
CAR Traffic Share

Truck Traffic Share





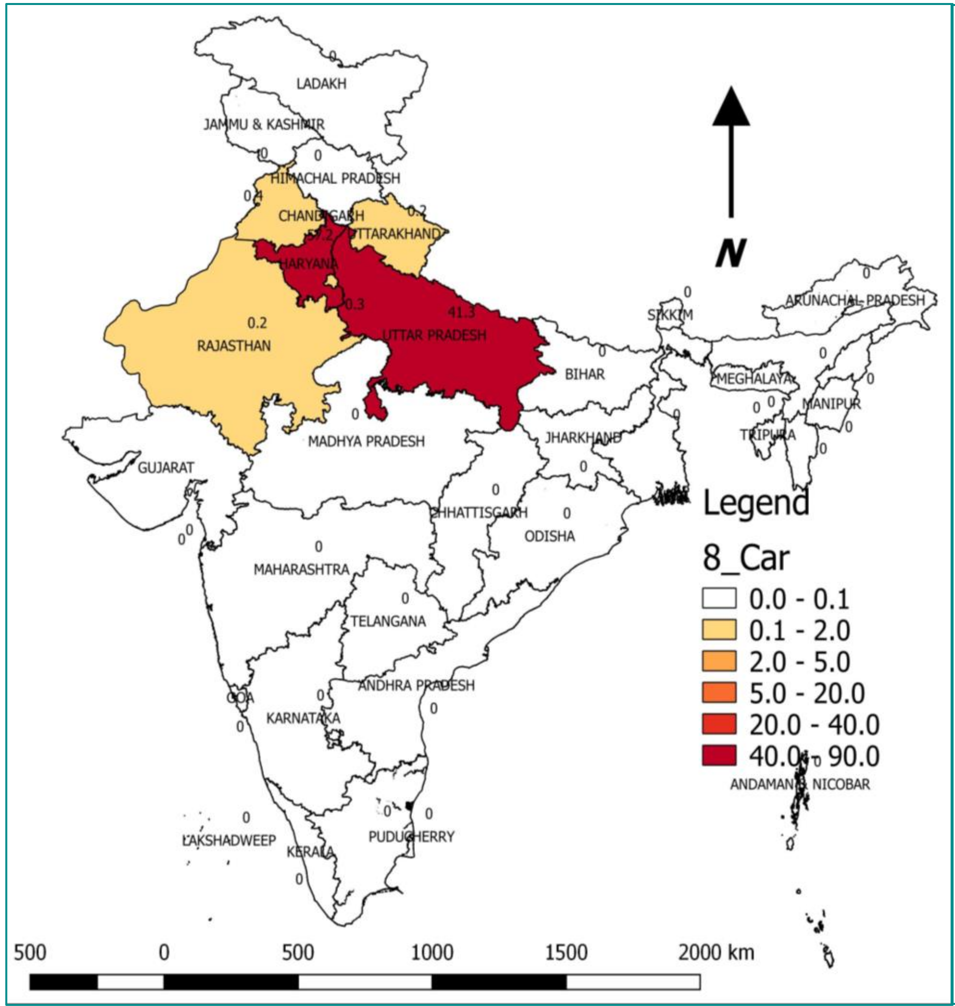


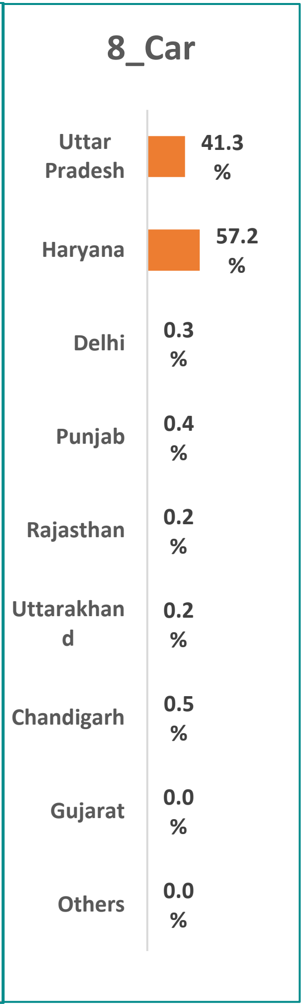


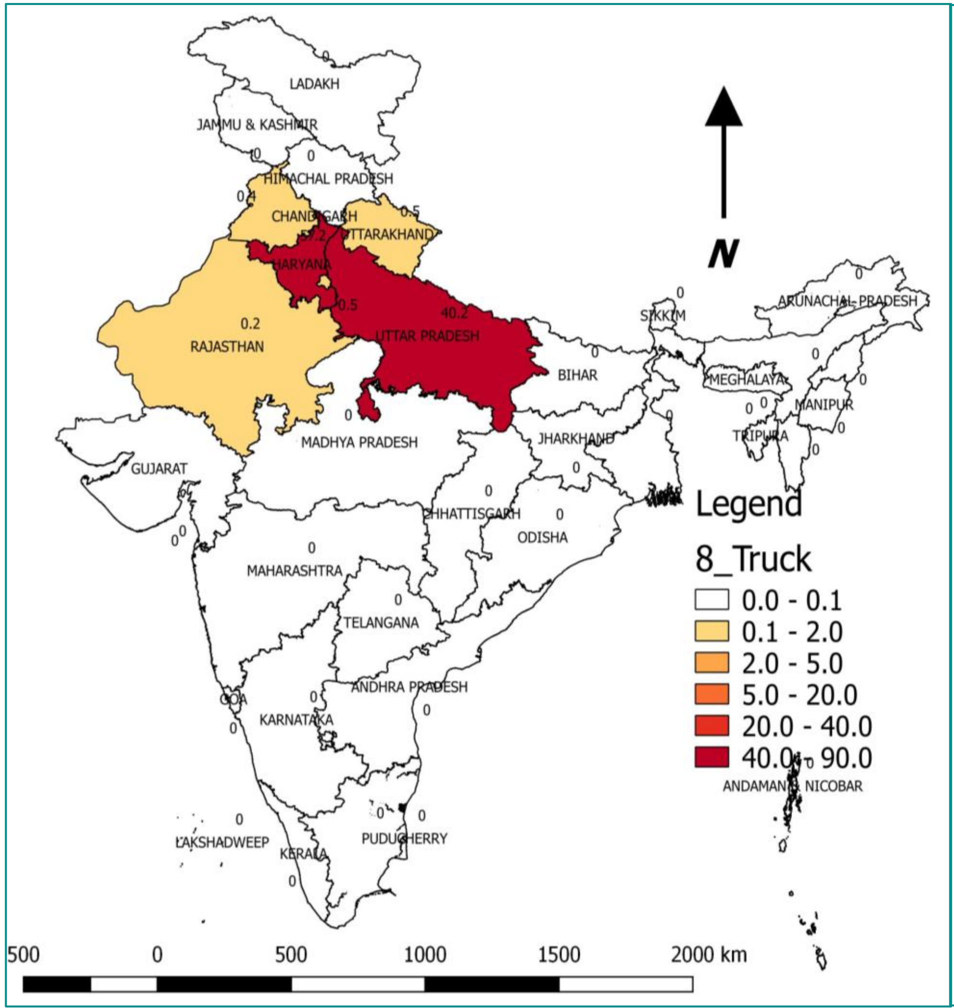
- Approximately 77.8% of the Car passenger vehicle trips are happening within the state of Uttar Pradesh at Fatehpur Rampur Toll plaza, around 14.4% of the Car vehicle trips are origin-destined in Haryana State due to it is Proximity to Project road.
- 65.2 % of the truck traffic is plying within State of Uttar Pradesh. 25.5% of Truck traffic is origin-destined in Haryana state due to it is Proximity to Project road.

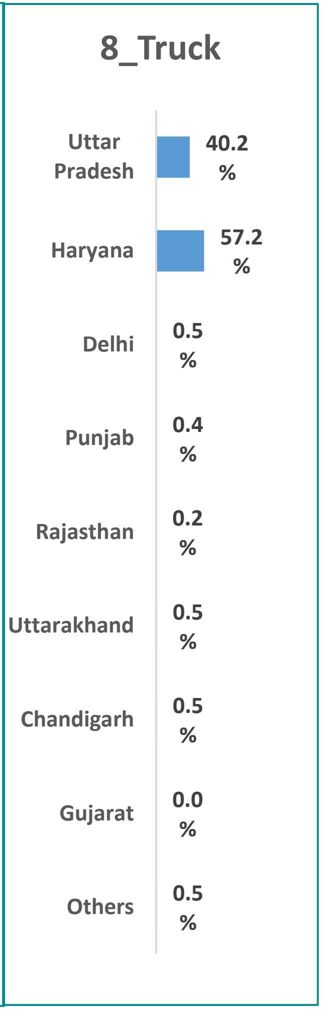
CAR Traffic Share

Truck Traffic Share





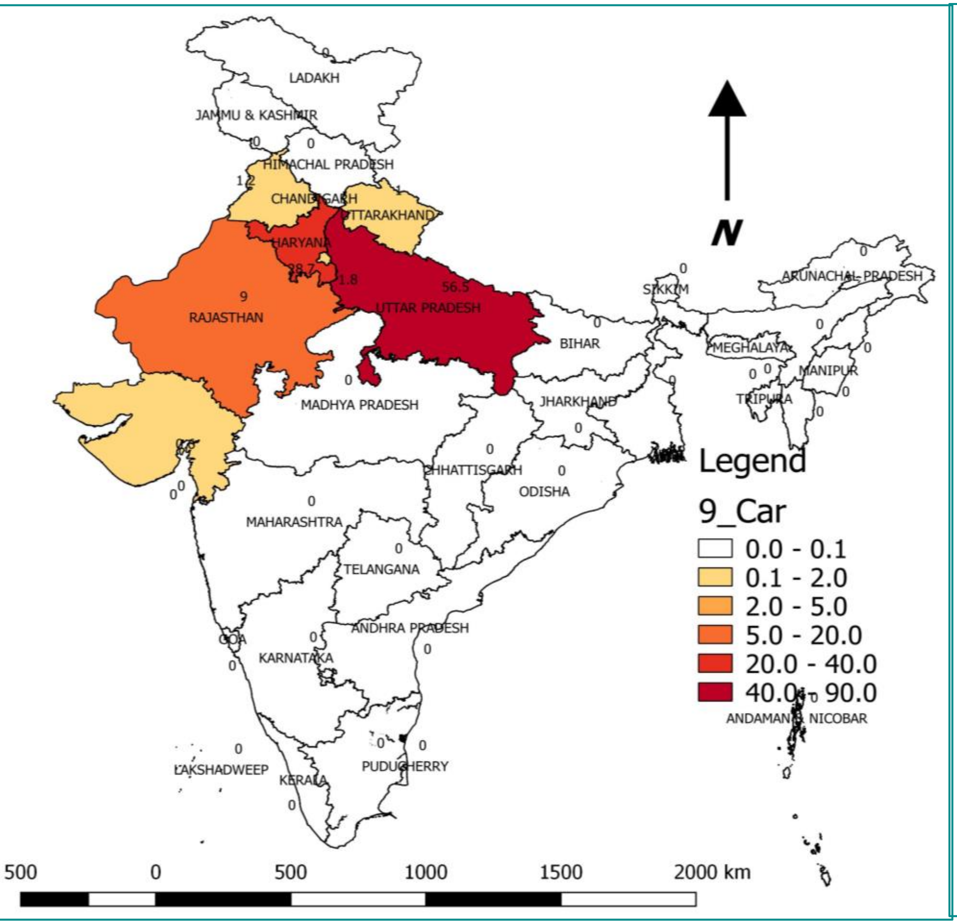


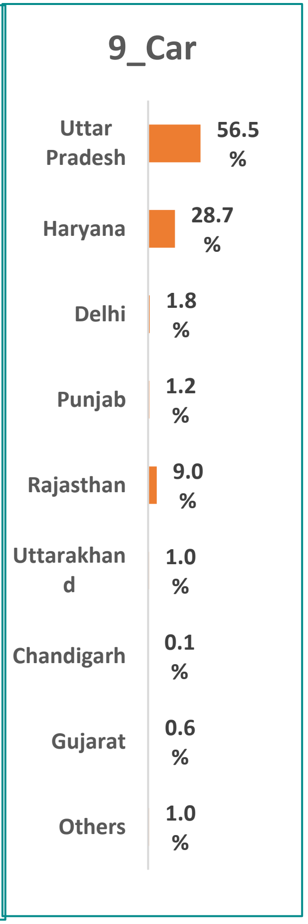


- Approximately 57.1 % of the Car passenger vehicle trips are happening within the state of Haryana at Maujpur Toll plaza, around 41.3% of the Car vehicle trips are origin-destined in Uttar Pradesh state due to it is Proximity to Project road.
- 57.2% of the truck traffic is plying within State of Haryana. 40.16% of Truck traffic is origin-destined in Uttar Pradesh state due to it is Proximity to Project road.

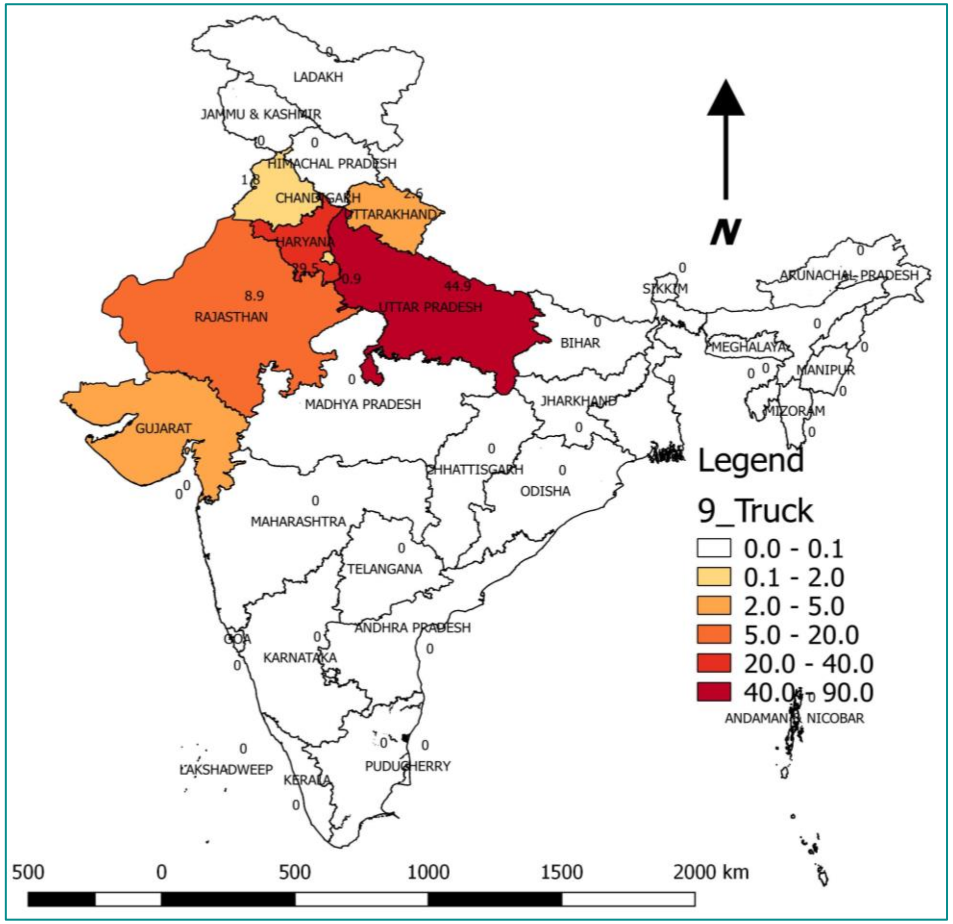
PROJECT INFLUENCE AREA - STATE LEVEL – TP 9

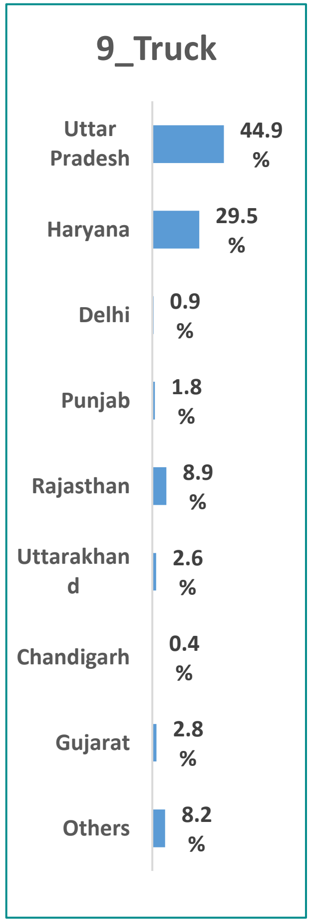
CAR Traffic Share





Truck Traffic Share

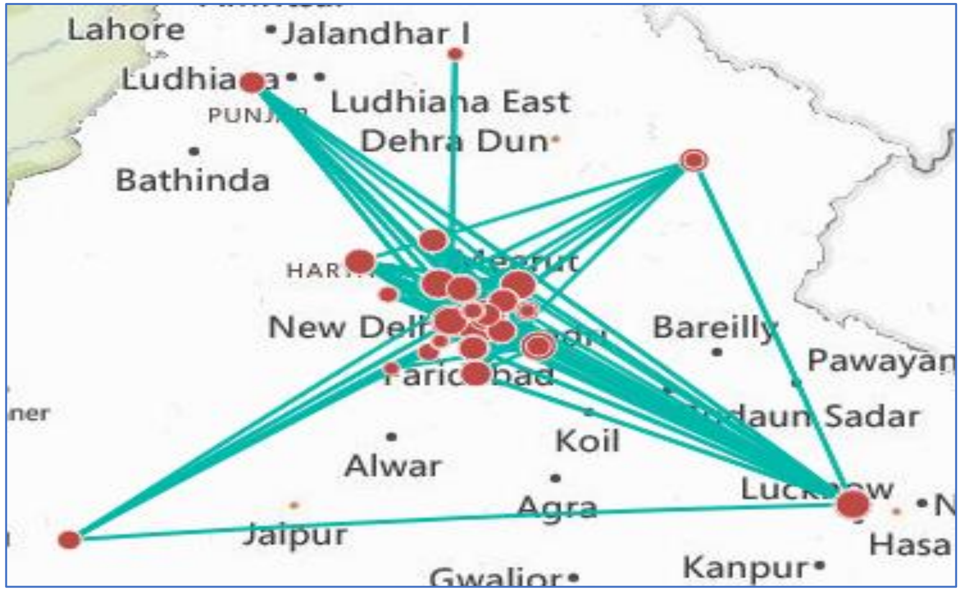


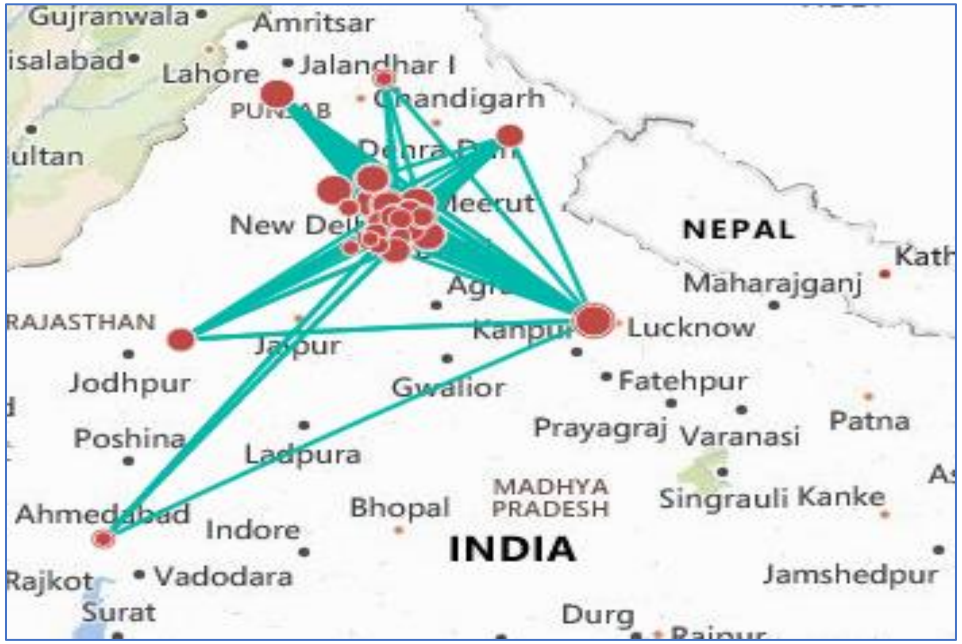


- Approximately 28.7 % of the Car passenger vehicle trips are happening within the state of Haryana at Chhajju Nagar Toll plaza, around 56.5% of the Car vehicle trips are origin-destined in Uttar Pradesh state due to it is Proximity to Project road.
- 29.5% of the truck traffic is plying within State of Haryana. 44.9% of Truck traffic is origin-destined in Uttar Pradesh state due to it is Proximity to Project road. Significant amount both Car & Truck traffic also observed from Rajasthan due to it is Proximity to project Road.

MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – OVERALL PROJECT CORRIDOR

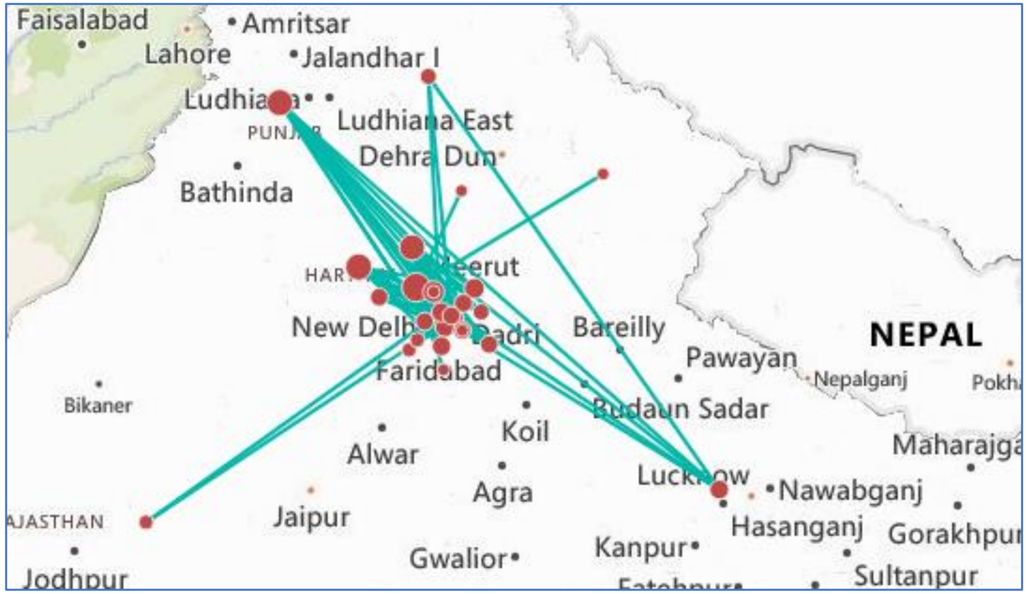
ALL				
PASSENGER TRIPS				
OD PAIR	**ORIGIN**	**DESTINATION**	**TRIPS**	**SHARE**
1	Kundli	Ghaziabad	568	1.5%
2	Sonipat	Ghaziabad	520	1.4%
3	Ghaziabad	Sonipat	491	1.3%
4	Noida	North - Meerut, Sardhana, Mawana	353	1.0%
5	Dadri	Ghaziabad	351	1.0%
6	North -Eastern Uttar Pradesh	Sikandrabad	349	0.9%
7	Baghpat,	Ghaziabad	347	0.9%
8	Ghaziabad	Kundli	344	0.9%
9	Ghaziabad	Panipat	309	0.8%
10	Raj Nagar Extension	North - Meerut, Sardhana, Mawana	301	0.8%
GOODS TRIPS				
1	Palwal	Dadri	455	1.8%
2	Kundli	Ghaziabad	396	1.6%
3	Noida	Faridabad	330	1.3%
4	Ghaziabad	Kundli	319	1.3%
5	Faridabad	Noida	257	1.0%
6	Baghpat,	Kundli	237	0.9%
7	Ghaziabad	Sonipat	226	0.9%
8	Kundli	Noida	206	0.8%
9	Sonipat	Ghaziabad	189	0.7%
10	Dasna, PilKhuva, Dhaulana	North - Meerut, Sardhana, Mawana	189	0.7%





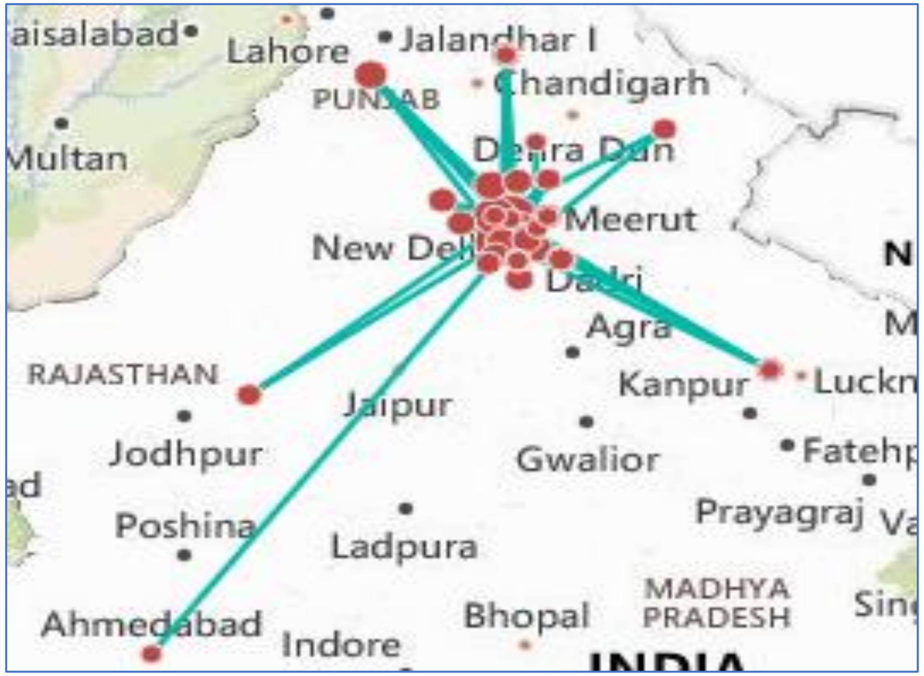
MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 01 (JAKHAULI)

1.JAKHAULI				
PASSENGER TRIPS				
OD PAIR	ORIGIN	DESTINATION	TRIPS	SHARE
1	Ghaziabad	Sonipat	491	5.6%
2	Ghaziabad	Kundli	344	3.9%
3	Ghaziabad	Panipat	309	3.5%
4	New Delhi	Sonipat	290	3.3%
5	New Delhi	Panipat	241	2.7%
6	Baghpat	Sonipat	219	2.5%
7	Baghpat	Kundli	204	2.3%
8	Noida	Sonipat	195	2.2%
9	Ghaziabad	Northern Haryana	190	2.2%
10	New Delhi	Chandigarh	190	2.2%
GOODS TRIPS				
1	Ghaziabad	Kundli	316	4.7%
2	Baghpat	Kundli	237	3.5%
3	Ghaziabad	Sonipat	226	3.3%
4	Ghaziabad	Panipat	154	2.3%
5	Baghpat	Sonipat	142	2.1%
6	Dasna, PilKhuva, Dhaulana	Kundli	137	2.0%
7	Noida	Sonipat	130	1.9%
8	Baghpat,	Panipat	118	1.7%
9	Ghaziabad	Northern Haryana	117	1.7%
10	Noida	Kundli	99	1.5%



MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 02 (MAWI KALAN)

2.MAWI KALAN				
PASSENGER TRIPS				
OD PAIR	ORIGIN	DESTINATION	TRIPS	SHARE
1	Kundli	Baghpat	186	3.8%
2	Sonipat	Baghpat	176	3.6%
3	Chandigarh	Central Delhi	146	3.0%
4	Ghaziabad	Baghpat	123	2.5%
5	Raj Nagar Extension	Baghpat	99	2.0%
6	Noida	Baghpat	98	2.0%
7	Dasna, PilKhuva, Dhaulana	Baghpat	87	1.8%
8	Kundli	Loni	86	1.8%
9	Sonipat	Loni	86	1.8%
10	Kundli	Baraut, Binouli, Khrishnapur	83	1.7%
GOODS TRIPS				
1	Kundli	Baghpat	161	7.2%
2	Kundli	Loni	96	4.3%
3	Northern Haryana	Loni	79	3.5%
4	Panipat	Loni	77	3.4%
5	Sonipat	Loni	65	2.9%
6	Sonipat	Baghpat	61	2.7%
7	Panipat	Baghpat	60	2.7%
8	Kundli	Ghaziabad	55	2.5%
9	Northern Haryana	Baghpat	46	2.0%
10	Dadri	Baghpat	42	1.9%

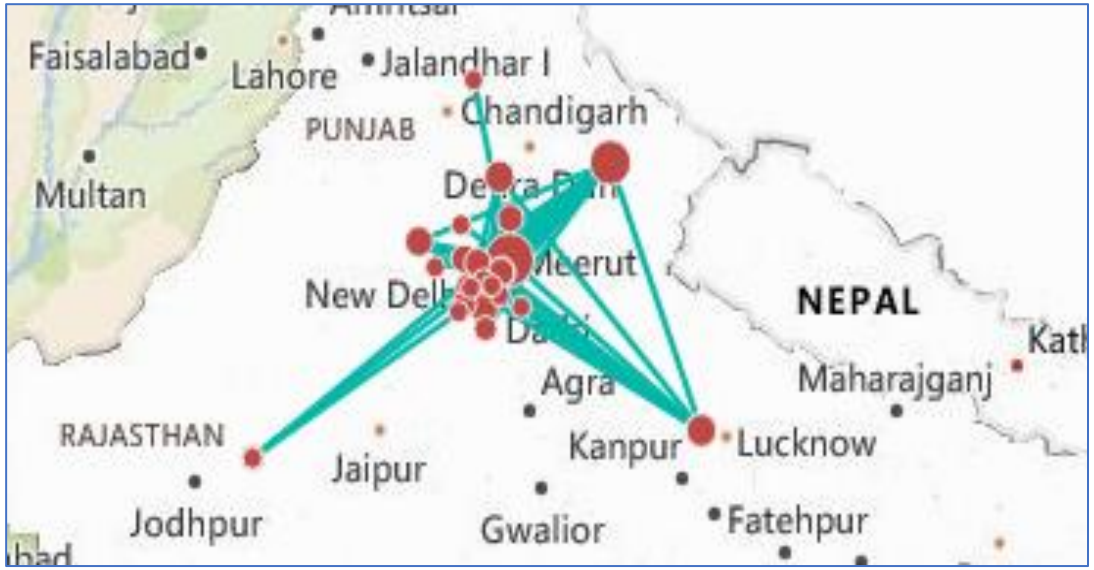


MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 03 (DUHAI)

3.DUHAI				
PASSENGER TRIPS				
OD PAIR	**ORIGIN**	**DESTINATION**	**TRIPS**	**SHARE**
1	Kundli	Ghaziabad	425	10.1%
2	Baghpat	Ghaziabad	281	6.7%
3	Dasna, PilKhuva, Dhaulana	Raj Nagar Extension	276	6.5%
4	Sonipat	Ghaziabad	261	6.2%
5	Dasna, PilKhuva, Dhaulana	Ghaziabad	145	3.4%
6	Dasna, PilKhuva, Dhaulana	Muradnagar	121	2.9%
7	Ghaziabad	Muradnagar	104	2.5%
8	North -North - Meerut, Sardhana, Mawana	Ghaziabad	85	2.0%
9	Khekra	Ghaziabad	71	1.7%
10	Ghaziabad	Raj Nagar Extension	60	1.4%
GOODS TRIPS				
1	Kundli	Ghaziabad	197	9.1%
2	Sonipat	Ghaziabad	92	4.3%
3	Baghpat,	Ghaziabad	85	3.9%
4	Dasna, PilKhuva, Dhaulana	Raj Nagar Extension	65	3.0%
5	Panipat	Ghaziabad	61	2.8%
6	Kundli	North - Meerut, Sardhana, Mawana	58	2.7%
7	Dasna, PilKhuva, Dhaulana	Ghaziabad	56	2.6%
8	Northern Haryana	Ghaziabad	52	2.4%
9	Dasna, PilKhuva, Dhaulana	Muradnagar	44	2.1%
10	South Punjab	Ghaziabad	35	1.6%

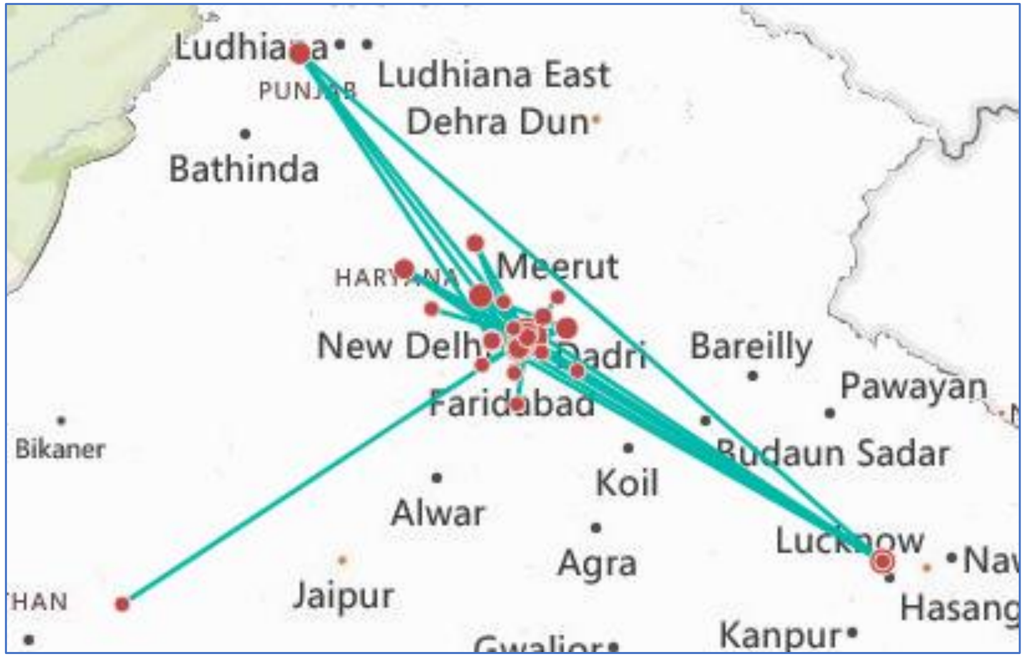
MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 04 (MEERUT E'WAY)

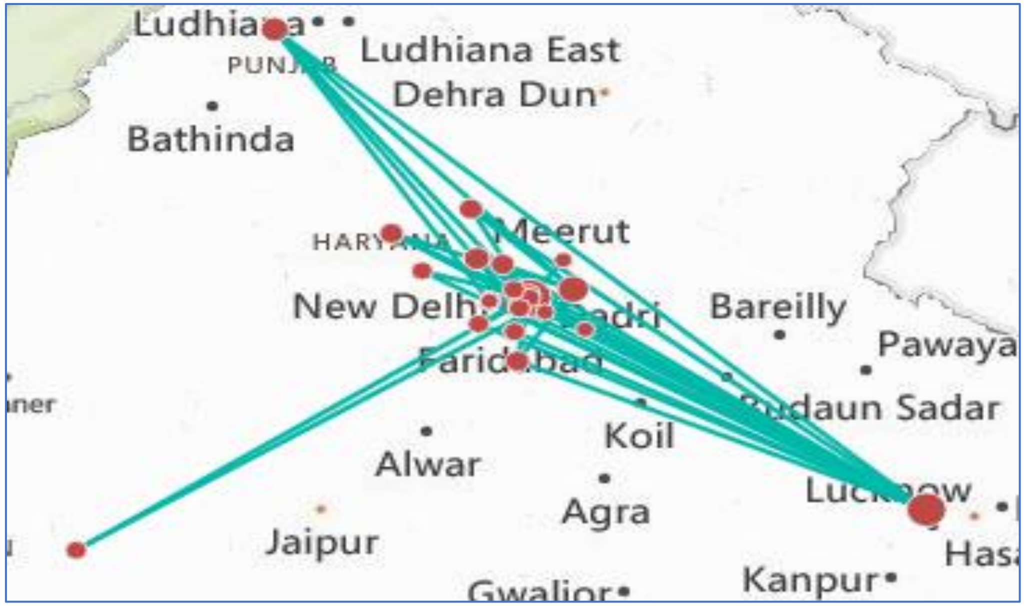
4.Dasna (Meerut E'Way)				
PASSENGER TRIPS				
OD PAIR	ORIGIN	DESTINATION	TRIPS	SHARE
1	Noida	North - Meerut, Sardhana, Mawana	309	12.7%
2	Raj Nagar Extension	North - Meerut, Sardhana, Mawana	288	11.9%
3	Dasna, PilKhuva, Dhaulana	North - Meerut, Sardhana, Mawana	184	7.6%
4	New Delhi	North - Meerut, Sardhana, Mawana	116	4.8%
5	Ghaziabad	North - Meerut, Sardhana, Mawana	101	4.2%
6	Kundli	North - Meerut, Sardhana, Mawana	78	3.2%
7	Noida	North Uttaranchal	74	3.1%
8	Palwal	North - Meerut, Sardhana, Mawana	63	2.6%
9	Mathura	North Uttaranchal	53	2.2%
10	Mathura	North - Meerut, Sardhana, Mawana	42	1.7%
GOODS TRIPS				
1	Dasna, PilKhuva, Dhaulana	North - Meerut, Sardhana, Mawana	159	13.4%
2	Palwal	North - Meerut, Sardhana, Mawana	105	8.8%
3	Noida	North - Meerut, Sardhana, Mawana	50	4.2%
4	Palwal	North Uttaranchal	44	3.7%
5	Raj Nagar Extension	North - Meerut, Sardhana, Mawana	42	3.6%
6	Western Haryana	North - Meerut, Sardhana, Mawana	39	3.3%
7	Faridabad	North Uttaranchal	31	2.6%
8	Hapur & Babugarh	North - Meerut, Sardhana, Mawana	28	2.3%
9	New Delhi	North - Meerut, Sardhana, Mawana	26	2.2%
10	Kundli	North - Meerut, Sardhana, Mawana	24	2.0%



MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 05 (DASNA-HAPUR)

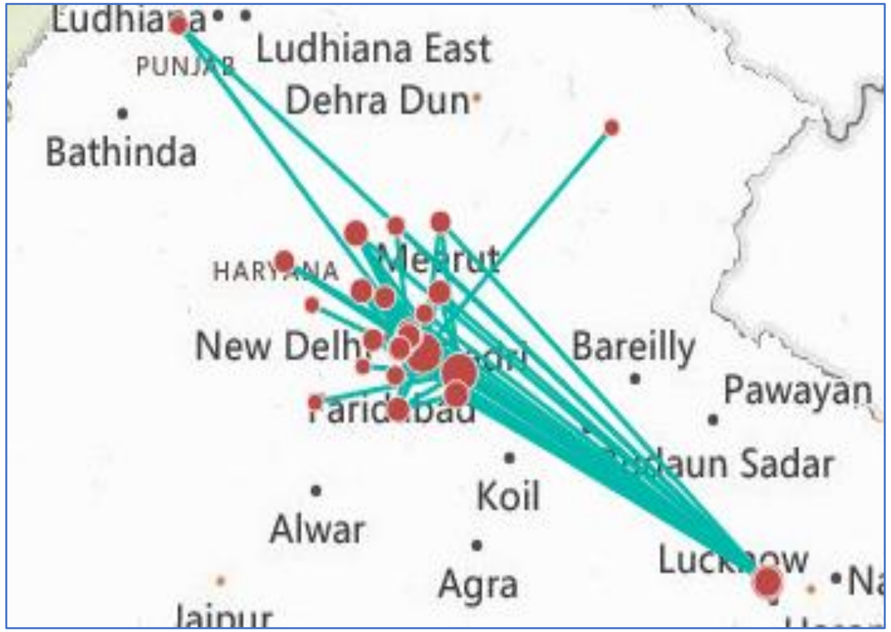
5.DASNA (HAPUR)				
PASSENGER TRIPS				
OD PAIR	**ORIGIN**	**DESTINATION**	**TRIPS**	**SHARE**
1	Dadri	Ghaziabad	345	5.6%
2	Sonipat	Ghaziabad	242	3.9%
3	Sonipat	Noida	235	3.8%
4	Raj Nagar Extension	Ghaziabad	209	3.4%
5	Sikandarabad	Ghaziabad	157	2.6%
6	Kundli	Ghaziabad	142	2.3%
7	Noida	Ghaziabad	135	2.2%
8	Kundli	Noida	121	2.0%
9	Raj Nagar Extension	Dasna, PilKhuva, Dhaulana	120	2.0%
10	Raj Nagar Extension	Noida	107	1.7%
GOODS TRIPS				
1	Kundli	Ghaziabad	142	4.4%
2	Kundli	Noida	121	3.8%
3	Kundli	Dasna, PilKhuva, Dhaulana	114	3.5%
4	Sonipat	Noida	102	3.2%
5	Sonipat	Ghaziabad	77	2.4%
6	Sonipat	Dasna, PilKhuva, Dhaulana	60	1.9%
7	Kundli	North-Eastern Uttar Pradesh	54	1.7%
8	Dadri	Dasna, PilKhuva, Dhaulana	49	1.5%
9	Palwal	Dasna, PilKhuva, Dhaulana	49	1.5%
10	Raj Nagar Extension	Dasna, PilKhuva, Dhaulana	46	1.4%

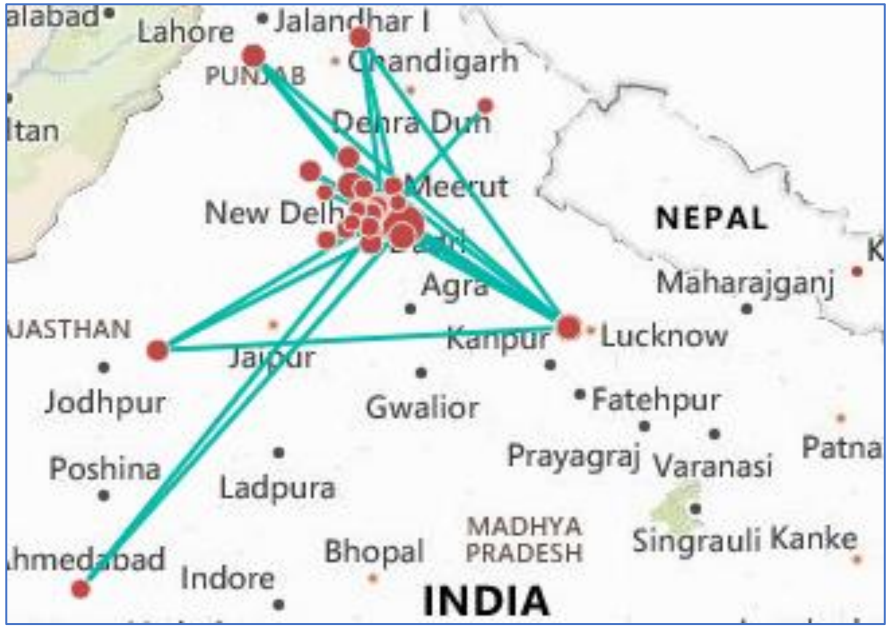




MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 06 (BIL AKBARPUR)

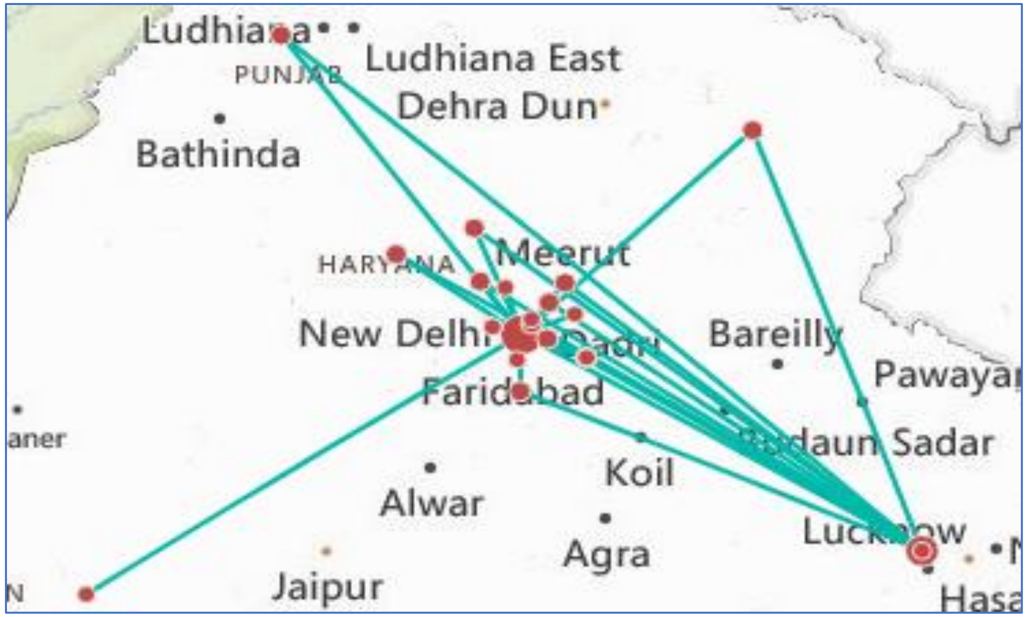
6.BIL AKBARPUR				
PASSENGER TRIPS				
OD PAIR	**ORIGIN**	**DESTINATION**	**TRIPS**	**SHARE**
1	North - Eastern Uttar Pradesh	Sikandrabad	349	10.9%
2	Western Haryana	Dadri	215	6.7%
3	North - Eastern Uttar Pradesh	Bulandshahr	193	6.0%
4	Ghaziabad	Bulandshahr	151	4.7%
5	Dasna, PilKhuva, Dhaulana	Dadri	135	4.2%
6	Dasna, PilKhuva, Dhaulana	Sikandarabad	135	4.2%
7	Greater Noida	Sikandarabad	131	4.1%
8	Ghaziabad	Sikandarabad	130	4.1%
9	Palwal	Dadri	96	3.0%
10	Greater Noida	Bulandshahr	94	2.9%
GOODS TRIPS				
1	Palwal	Dadri	451	19.5%
2	Palwal	Sikandarabad	124	5.3%
3	Palwal	Ghaziabad	109	4.7%
4	Kundli	Dadri	91	3.9%
5	Kundli	Sikandarabad	69	3.0%
6	Ludhiana	Sikandarabad	59	2.5%
7	Palwal	Bulandshahr	54	2.3%
8	Dasna, PilKhuva, Dhaulana	Sikandarabad	52	2.2%
9	Raj Nagar Extension	Sikandarabad	50	2.2%
10	Central Uttar Pradesh	Dadri	47	2.0%

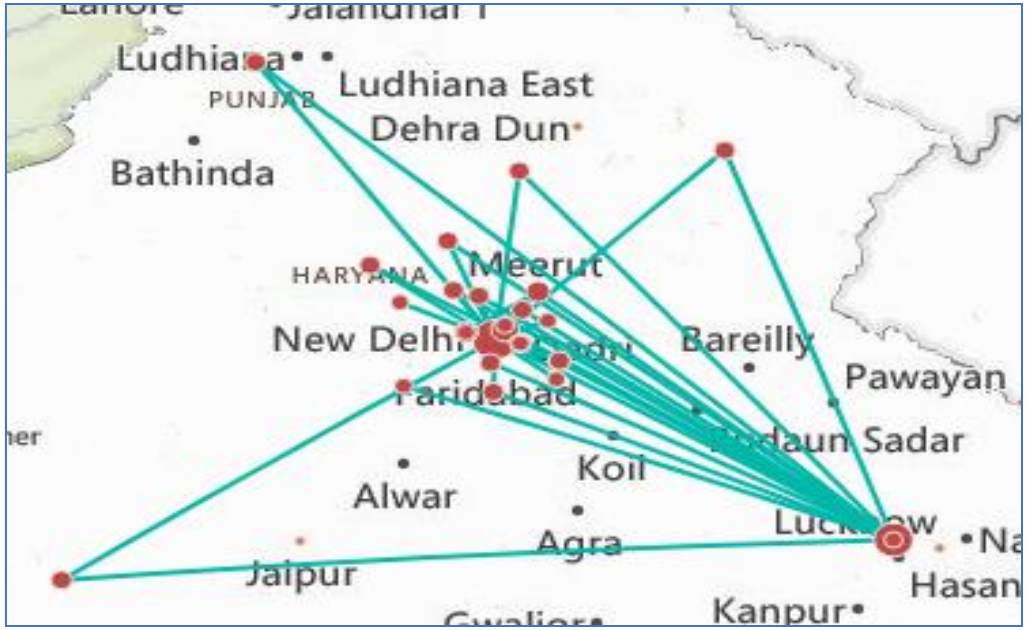




MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 07 (FATEHPUR RAMPUR)

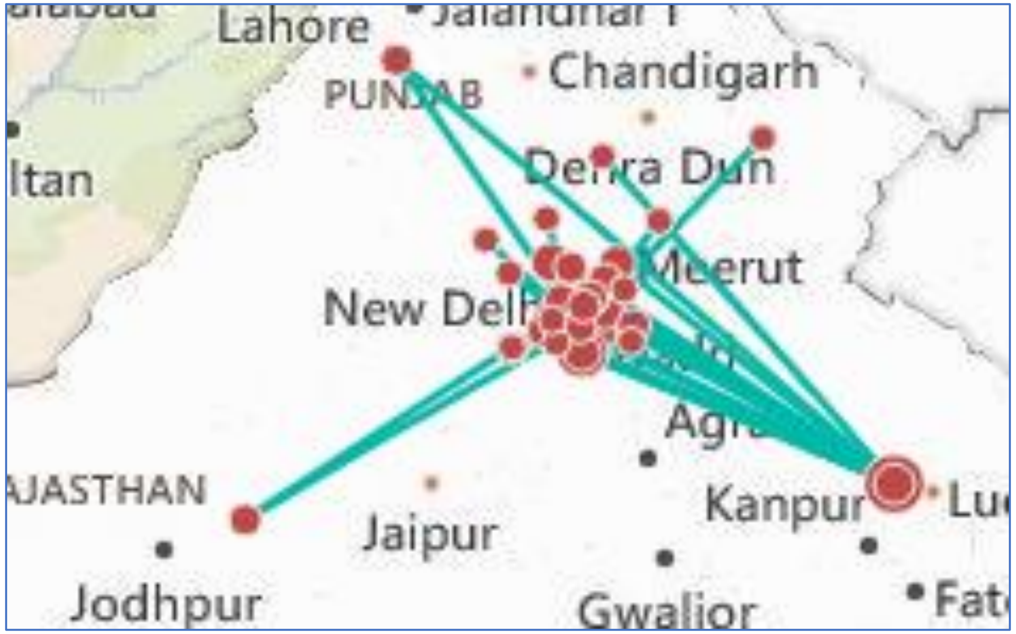
7.FATEHPUR RAMPUR				
PASSENGER TRIPS				
OD PAIR	ORIGIN	DESTINATION	TRIPS	SHARE
1	Palwal	Noida	204	5.7%
2	North Meerut, Sardhana, Mawana	Noida	190	5.3%
3	Dadri	Bilaspur	137	3.8%
4	Ghaziabad	Noida	128	3.5%
5	Bulandshahr	Noida	118	3.3%
6	North Meerut, Sardhana, Mawana	Greater Noida	111	3.1%
7	Dadri	Noida	105	2.9%
8	Niwari, Modinagar, Faridnagar	Noida	91	2.5%
9	Ghaziabad	Greater Noida	87	2.4%
10	Dadri	Greater Noida	70	1.9%
GOODS TRIPS				
1	Faridabad	Noida	253	10.6%
2	Palwal	Noida	184	7.7%
3	Faridabad	Greater Noida	131	5.5%
4	Ghaziabad	Noida	109	4.6%
5	Manesar	Noida	96	4.0%
6	Ghaziabad	Greater Noida	77	3.2%
7	North-Meerut, Sardhana, Mawana	Noida	70	2.9%
8	Alwar	Noida	53	2.2%
9	Sonipat	Noida	51	2.2%
10	Palwal	Greater Noida	49	2.1%

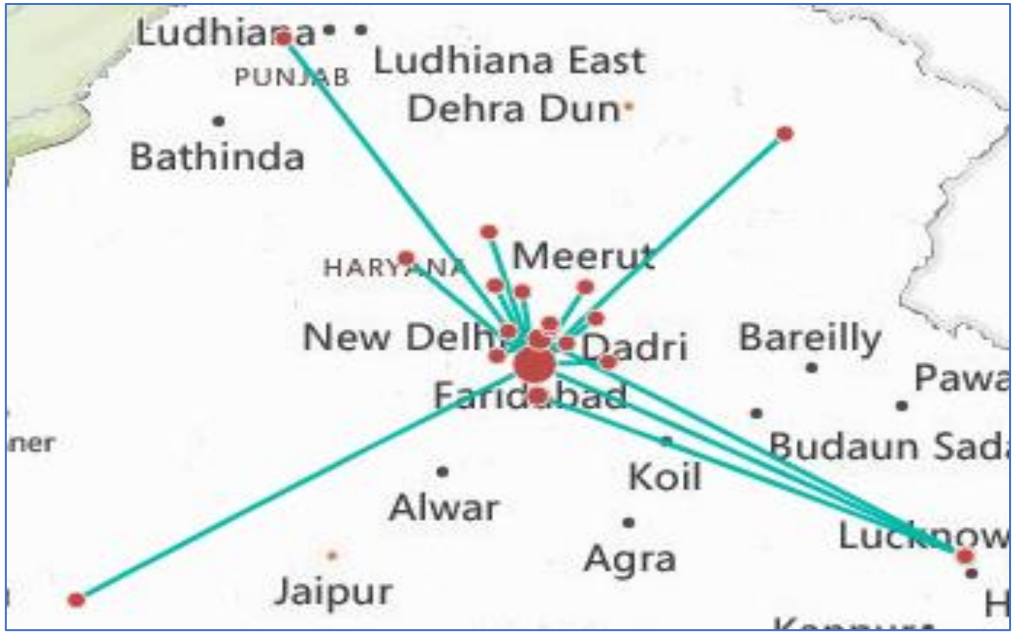




MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 08 (MAUJPUR)

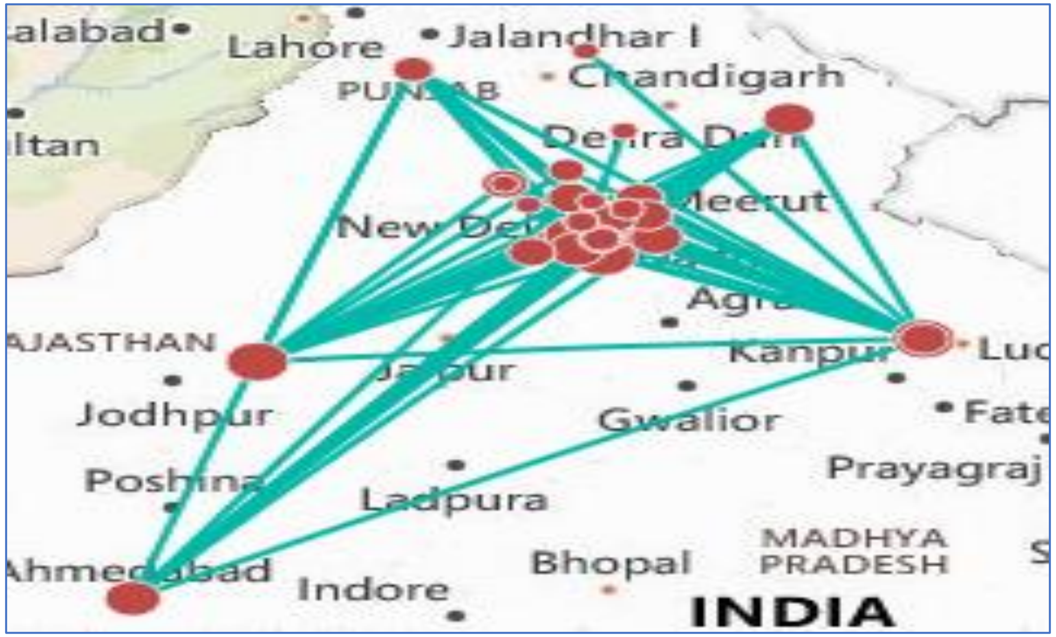
8.MAUJPUR				
PASSENGER TRIPS				
OD PAIR	**ORIGIN**	**DESTINATION**	**TRIPS**	**SHARE**
1	Noida	Faridabad	157	10.1%
2	Noida	Ballabhgarh	139	9.0%
3	Palwal	Ballabhgarh	102	6.6%
4	Palwal	Faridabad	83	5.3%
5	Ghaziabad	Faridabad	74	4.7%
6	Ghaziabad	Ballabhgarh	66	4.3%
7	Palwal	Central Uttar Pradesh	62	4.0%
8	Kundli	Faridabad	48	3.1%
9	Dankaur	Faridabad	45	2.9%
10	Dasna, PilKhuva, Dhaulana	Faridabad	42	2.7%
GOODS TRIPS				
1	Noida	Faridabad	320	21.2%
2	Noida	Ballabhgarh	142	9.4%
3	Ghaziabad	Faridabad	91	6.0%
4	Kundli	Faridabad	90	6.0%
5	Greater Noida	Faridabad	79	5.2%
6	Dadri	Faridabad	70	4.6%
7	Ghaziabad	Ballabhgarh	53	3.5%
8	Dasna, PilKhuva, Dhaulana	Faridabad	52	3.5%
9	Greater Noida	Ballabhgarh	40	2.7%
10	North Meerut, Sardhana, Mawana	Faridabad	38	2.5%





MAJOR OD PAIRS AND DESIRE LINE DIAGRAM – TP 09 (CHHAJJU NAGAR)

9.CHHAJJU NAGAR				
PASSENGER TRIPS				
OD PAIR	ORIGIN	DESTINATION	TRIPS	SHARE
1	Raj Nagar Extension	Palwal	121	5.9%
2	Dasna, PilKhuva, Dhaulana	Palwal	105	5.1%
3	Noida	Palwal	93	4.6%
4	Ghaziabad	Palwal	81	4.0%
5	Raj Nagar Extension	Southern Uttar Pradesh	81	3.9%
6	Noida	Southern Uttar Pradesh	75	3.7%
7	North	Meerut, Sardhana, Mawana-Southern Uttar Pradesh	66	3.2%
8	Noida	Jaipur	60	2.9%
9	North -Meerut, Sardhana, Mawana-	Palwal	52	2.5%
10	Faridabad	Palwal	40	2.0%
GOODS TRIPS				
1	Noida	Palwal	182	5.1%
2	Noida	Manesar	143	4.0%
3	Noida	Jaipur	103	2.9%
4	Dasna, PilKhuva, Dhaulana	Palwal	92	2.6%
5	Ghaziabad	Palwal	72	2.0%
6	Noida	Maharashtra & Goa	66	1.9%
7	Noida	Gujarat	56	1.6%
8	Ghaziabad	Jaipur	54	1.5%
9	Dadri	Palwal	52	1.5%
10	Noida	Alwar	47	1.3%



COMMODITY CHARACTERISTICS – OVERALL PROJECT CORRIDOR

All					
COMMODITY	LCV	2-Axle Truck	3-Axle Truck	MAV	TOTAL
Empty	44.1%	45.7%	36.4%	38.2%	41.7%
Iron & Steel	7.4%	6.8%	8.5%	8.8%	7.9%
Wholesale Consumer items	7.8%	7.0%	8.2%	5.2%	7.0%
Parcel & Courier etc.	7.6%	6.8%	6.7%	3.8%	6.3%
Fruits and Vegetables	2.8%	2.5%	4.0%	3.1%	3.0%
Plastic & allied products	3.0%	2.5%	3.1%	3.0%	3.0%
Jute, Cotton & Textiles	3.4%	3.4%	2.5%	1.9%	2.9%
Automobiles	2.2%	3.0%	2.8%	3.4%	2.7%
Sand	0.9%	1.4%	2.8%	5.7%	2.6%
Petroleum Products	1.8%	2.2%	3.6%	2.8%	2.4%
Food grains & Pulses	2.2%	1.6%	2.5%	2.3%	2.2%
Cement	1.3%	0.7%	1.2%	4.4%	2.1%
Other construction Material	0.9%	1.3%	1.8%	3.6%	1.8%
Wood and Forest products	1.9%	1.9%	2.3%	1.5%	1.8%
Others	12.7%	13.3%	13.5%	12.2%	12.7%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicles is observed to be 42 % on Project Corridor.
- Individually, LCVs and 2-Axle trucks are observed to be having an empty share of nearly 45%, whereas the 3ATs & MAVs have a share of 36% & 38% respectively.
- This trend is majorly due to the traffic being more local and captive to the project area and corridor.
- Iron & Steel, Consumer Items, Parcels, Plastic Materials, Fruits & Vegetables comprise more than 25% of all commodities on project corridors.
- Major commodities transported by LCV are Wholesale Consumer items, Parcel & Courier.
- Major Commodities transported by 2-Axle truck are Wholesale Consumer items and Parcel & Courier, Iron & Steel.
- 3-Axle trucks and MAVs are observed to be majorly carrying bulk commodities such as Iron & Steel, Sand etc.

COMMODITY CHARACTERISTICS – TP1 - JAKHAULI

1.Jakhauli					
COMMODITY	**LCV**	**2-AXLE TRUCK**	**3-AXLE TRUCK**	**MAV**	**TOTAL**
Empty	44.3%	47.7%	39.8%	39.6%	42.6%
Iron & Steel	8.2%	9.3%	13.0%	14.0%	10.7%
Wholesale Consumer items	9.1%	8.4%	8.9%	6.4%	8.2%
Parcel & Courier etc.	8.4%	4.5%	5.2%	3.0%	6.0%
Plastic dana & allied prod	4.2%	3.6%	5.6%	4.3%	4.3%
Food grains & Pulses	3.5%	2.1%	2.6%	3.1%	3.2%
Jute, Cotton & Textiles	3.0%	3.6%	1.1%	1.6%	2.4%
Fruits and Vegetables	2.2%	2.4%	3.7%	2.1%	2.4%
Cement	1.3%	0.6%	1.1%	4.0%	2.1%
Automobiles	1.1%	2.1%	2.8%	3.0%	2.0%
Petroleum Products	1.4%	1.5%	1.5%	2.8%	1.9%
Heavy Machinery & Industrial Equipment	1.6%	3.0%	1.1%	1.7%	1.7%
Dairy & Perishable Products	1.9%	2.7%	1.1%	0.9%	1.6%
Gas (Cylinders)	0.6%	0.9%	2.6%	2.8%	1.6%
Others	9.1%	7.5%	10.0%	10.6%	9.6%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 43 % at Jakhauli toll plaza.
- Individually, LCVs and 2-Axle trucks are observed to be having an empty share of nearly 45%, whereas the HGVs have a share of nearly 40%.
- This trend is majorly due to the traffic being more local and captive to the project area and corridor.
- Iron & Steel, Consumer Items, Parcels, dana & food grains comprise more than 25% of all commodities at Jakhauli.
- Major commodities transported by LCV are Wholesale Consumer items, Parcel & Courier.
- Major Commodities transported by 2-Axle truck are Iron & Steel, Wholesale Consumer items and Parcel & Courier
- 3-Axle trucks and MAVs are observed to be majorly carrying bulk commodities such as Iron & Steel, Wholesale Consumer items etc..

COMMODITY CHARACTERISTICS – TP2 - MAWIKALAN

2.Mawi Kalan					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	40.8%	25.8%	24.3%	22.9%	34.2%
Parcel & Courier etc.	14.1%	15.2%	11.7%	4.4%	11.6%
Sand	3.0%	12.3%	13.3%	29.3%	10.8%
Jute, Cotton & Textiles	6.1%	7.3%	3.9%	0.8%	4.7%
Gas (Cylinders)	2.3%	5.3%	9.1%	8.1%	4.4%
Iron & Steel	5.4%	0.0%	3.9%	2.9%	4.3%
Wholesale Consumer items	4.7%	5.6%	4.4%	1.6%	4.0%
Fruits and Vegetables	3.6%	3.5%	4.9%	2.5%	3.5%
Boulder/Marble/Granite	1.8%	4.4%	0.0%	7.0%	3.1%
Food grains & Pulses	2.9%	0.0%	2.3%	3.4%	2.8%
Petroleum Products	1.5%	5.3%	3.1%	3.0%	2.2%
Cement	1.9%	1.5%	1.5%	2.3%	1.9%
Plastic dana & allied prod	1.8%	2.3%	1.5%	1.3%	1.7%
Heavy Machinery & Industrial Equipment	1.5%	0.0%	3.4%	1.4%	1.5%
Others	8.6%	11.4%	12.5%	9.2%	9.2%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 34 % at Mawikalan toll plaza.
- Individually, the empty share of LCVs and 2-Axle trucks are observed to be 41% and 26% respectively. At the same time the HGVs have a share of nearly 23%.
- Parcel & Courier, Sand, Cotton & textiles and comprise more than 25% of all commodities at Mawikalan.
- Major commodities transported by LCV are Parcel & Courier (14%), Cotton & textiles (6%), Iron & Steel (5.5%) and Wholesale Consumer items (5%).
- Major Commodities transported by 2-Axle truck are Parcel & Courier (15%), Sand (12%), Cotton & textiles (7%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such as Sand (12% & 30%), Gas (Cylinders) (10%) etc..

COMMODITY CHARACTERISTICS – TP3 - DUHAI

3.Duhai					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	37.3%	37.4%	29.9%	20.6%	33.0%
Parcel & Courier etc.	10.0%	7.8%	4.1%	4.4%	8.0%
Wholesale Consumer items	8.8%	8.5%	3.4%	6.2%	7.7%
Sand	2.6%	3.2%	11.7%	19.0%	7.1%
Plastic dana & allied	6.8%	7.1%	4.7%	4.0%	6.0%
Iron & Steel	5.1%	4.5%	9.6%	4.7%	5.4%
Fruits and Vegetables	5.0%	5.5%	0.0%	2.1%	3.9%
Boulder/Marble/Granite	1.8%	1.2%	1.5%	11.0%	3.7%
Medicines & Pharma products	3.5%	2.3%	3.2%	1.2%	2.9%
Jute, Cotton & Textiles	1.9%	3.7%	7.7%	2.6%	2.8%
Others	2.2%	2.1%	1.7%	2.5%	2.2%
Automobiles	2.3%	3.3%	1.2%	1.8%	2.2%
Petroleum Products	2.2%	2.2%	2.2%	1.8%	2.1%
Wood and Forest products	1.8%	1.5%	2.0%	2.9%	2.1%
Others	8.5%	9.7%	16.9%	15.2%	10.9%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 33 % at the toll plaza. Individually, the empty share of LCVs and 2-Axle trucks are observed to be close to 37%. At the same time 3-Axle and MAVs have a share of nearly 30% and 21% respectively.
- Parcel & Courier, Wholesale Consumer items, Sand, dana & allied commodities, Iron & Steel comprise more than 25% of all commodities at Duhai.
- Major commodities transported by LCV are Parcel & Courier (10%), Wholesale Consumer items (9%), plastic dana (7%) and Iron & steel (5%).
- Major Commodities transported by 2-Axle truck are Parcel & Courier (8%), Wholesale Consumer items (8%) and plastic dana (7%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such as Sand (12% & 19%), Iron & Steel (10%, 5%)

COMMODITY CHARACTERISTICS – TP4 – DASNA (MEERUT E'WAY)

4.Dasna (Meerut E'Way)					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	40.3%	42.8%	33.8%	38.2%	39.3%
Parcel & Courier etc.	9.2%	12.4%	8.3%	7.7%	9.2%
Wholesale Consumer items	12.4%	8.8%	5.9%	2.0%	8.0%
Petroleum Products	2.3%	6.8%	14.3%	10.9%	7.1%
Iron & Steel	8.3%	4.5%	3.7%	5.4%	6.2%
Automobiles	3.3%	1.1%	5.2%	6.8%	4.2%
Fruits and Vegetables	2.7%	5.7%	2.2%	4.4%	3.6%
Boulder/Marble/Granite	2.9%	4.5%	2.4%	3.9%	3.4%
Sand	1.0%	2.3%	7.4%	5.0%	3.2%
Chemicals	3.2%	1.1%	2.2%	4.4%	3.1%
Plastic dana & allied	3.4%	1.1%	1.5%	0.9%	2.1%
Wood and Forest products	1.9%	1.1%	2.4%	0.9%	1.6%
Electrical and Electronic Items	2.5%	0.0%	1.7%	0.9%	1.5%
Medicines & Pharma products	1.2%	0.0%	0.0%	2.4%	1.2%
Others	5.4%	7.7%	8.9%	6.2%	6.5%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 40 % at the toll plaza. Individually, the empty share of LCVs and 2-Axle trucks are observed to be close to 40%. At the same time 3-Axle and MAVs have a share of nearly 34% and 39% respectively.
- Parcel & Courier, Wholesale Consumer items and Iron & Steel comprise more than 25% of all commodities at Dasna (Meerut E'way).
- Major commodities transported by LCV are Parcel & Courier (10%), Wholesale Consumer items (12%) and Iron & steel (8%).
- Major Commodities transported by 2-Axle truck are Parcel & Courier (12%), Wholesale Consumer items (9%) and petroleum products (7%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such as Petroleum products (14% & 11%), Parcel & Courier (8%) and Automobiles (5% & 7%)

COMMODITY CHARACTERISTICS – TP5 – DASNA (HAPUR ROAD)

5.Dasna (Hapur)					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	38.0%	46.7%	26.1%	30.2%	35.1%
Iron & Steel	10.6%	9.7%	9.5%	10.3%	10.3%
Wholesale Consumer items	8.0%	8.7%	10.4%	6.8%	8.0%
Jute, Cotton & Textiles	6.3%	5.3%	5.6%	5.0%	5.8%
Automobiles	3.2%	2.2%	4.4%	7.5%	4.4%
Parcel & Courier etc.	4.6%	4.6%	4.6%	3.1%	4.2%
Sand	0.8%	0.9%	2.3%	8.8%	3.1%
Food grains & Pulses	2.5%	0.0%	5.3%	3.7%	3.0%
Dairy & Perishable Products	3.0%	1.4%	2.5%	2.8%	2.7%
Fruits and Vegetables	1.8%	0.8%	4.8%	4.2%	2.7%
Plastic dana & allied	2.4%	2.8%	1.7%	2.4%	2.3%
Petroleum Products	2.0%	3.0%	2.5%	2.2%	2.2%
Livestock	3.0%	0.5%	1.3%	1.1%	2.1%
Cement	1.1%	0.5%	2.1%	3.2%	1.7%
Others	12.8%	12.9%	17.0%	8.7%	12.3%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 35 % at the toll plaza. Individually, the empty share of LCVs and 2-Axle trucks are observed to be 38% and 47% respectively. At the same time 3-Axle and MAVs have a share of nearly 26% and 30% respectively.
- Iron & Steel, Wholesale Consumer items, Cotton & textiles and Automobiles comprise more than 25% of all commodities at Dasna (Hapur).
- Major commodities transported by LCV are Parcel & Courier (10%), Wholesale Consumer items (12%) and Iron & steel (8%).
- Major Commodities transported by 2-Axle truck are Parcel & Courier (12%), Wholesale Consumer items (9%) and petroleum products (7%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such as Petroleum products (14% & 11%), Parcel & Courier (8%) and Automobiles (5% & 7%)

COMMODITY CHARACTERISTICS – TP6 – BIL AKBARPUR

6.Bil Akbarpur					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	44.4%	41.9%	34.6%	26.4%	36.1%
Parcel & Courier etc.	9.6%	9.0%	12.1%	7.8%	9.2%
Cement	2.4%	3.3%	2.4%	17.8%	8.3%
Wholesale Consumer items	9.3%	9.6%	9.4%	4.2%	7.4%
Iron & Steel	4.0%	4.4%	5.1%	8.4%	5.8%
Fruits and Vegetables	4.7%	4.2%	10.9%	5.5%	5.8%
Other construction Material	1.3%	3.8%	2.5%	6.9%	3.8%
Chemicals	3.5%	2.5%	4.5%	3.5%	3.5%
Petroleum Products	1.3%	2.1%	7.3%	3.6%	3.0%
Jute, Cotton & Textiles	2.6%	4.0%	0.0%	2.5%	2.4%
Plastic dana & allied	1.7%	1.6%	0.0%	2.9%	1.9%
Dairy & Perishable Products	2.3%	0.5%	1.3%	0.9%	1.5%
Sand	0.9%	2.5%	0.9%	2.0%	1.5%
Automobiles	1.8%	0.7%	3.5%	0.6%	1.5%
Others	10.2%	9.7%	5.6%	7.0%	8.4%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 36 % at the toll plaza.
- Individually, the empty share of LCVs and 2-Axle trucks are observed to be 44% and 42% respectively.
- At the same time 3-Axle and MAVs have a share of nearly 26% and 36% respectively.
- Parcel & Courier, Cement, Wholesale Consumer items, Iron & Steel comprise more than 25% of all commodities at Bil Akbarpur.
- Major commodities transported by LCV are Parcel & Courier (10%), Wholesale Consumer items (10%) and Fruits & vegetables (5%).
- Major Commodities transported by 2-Axle truck are Parcel & Courier (9%), Wholesale Consumer items (10%) and Iron & Steel (4.5%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such as Parcel & Courier (12% & 8%), Fruits & Vegetable (11% & 6%) and Iron & Steel (5% & 8%)

COMMODITY CHARACTERISTICS – TP7 – FATEHPUR RAMPUR

7.Fatehpur Rampur					
COMMODITY	**LCV**	**2-AXLE TRUCK**	**3-AXLE TRUCK**	**MAV**	**TOTAL**
Empty	43.8%	57.7%	40.9%	26.6%	42.1%
Other construction Material	4.3%	5.5%	7.8%	28.6%	10.0%
Iron & Steel	8.6%	4.9%	8.6%	8.6%	8.0%
Automobiles	4.0%	5.5%	4.3%	6.5%	4.8%
Petroleum Products	5.3%	2.4%	5.6%	4.4%	4.6%
Wholesale Consumer items	4.7%	4.8%	3.5%	4.0%	4.4%
Parcel & Courier etc.	4.0%	4.2%	5.8%	2.9%	3.9%
Food grains & Pulses	3.5%	5.3%	7.6%	0.4%	3.4%
Gas (Cylinders)	4.2%	1.2%	0.0%	1.8%	2.9%
Jute, Cotton & Textiles	3.4%	1.8%	0.0%	1.7%	2.5%
Fruits and Vegetables	1.9%	0.6%	2.9%	3.1%	2.0%
Plastic dana & allied	1.6%	0.6%	2.9%	2.6%	1.7%
Wood and Forest products	1.4%	1.2%	2.9%	2.4%	1.7%
Cement	1.6%	0.6%	0.0%	3.0%	1.6%
Others	7.9%	3.6%	7.2%	3.6%	6.2%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

- The overall share of empty vehicle is observed to be 42 % at the toll plaza. Individually, the empty share of LCVs and 2-Axle trucks are observed to be 44% and 58% respectively. At the same time 3-Axle and MAVs have a share of nearly 41% and 26% respectively.
- Construction Material, Iron & Steel, Automobiles, Petroleum products comprise more than 25% of all commodities at Fatehpur Rampur.
- Major commodities transported by LCV are Iron & Steel (9%), Petroleum products (6%), Wholesale Consumer items (5%)
- Major Commodities transported by 2-Axle truck are construction material (6%), Iron & Steel (5%), automobiles (5.5%).
- MAVs are observed to be majorly carrying commodities such as construction material (30%), Iron & Steel (9%).
- The high volume of Construction material at this location as this exit provides direct connectivity to the upcoming areas of Greater Noida, where rampant construction activity is being undertaken.

COMMODITY CHARACTERISTICS – TP8 - MAUJPUR

8.Maujpur					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	61.0%	60.7%	49.2%	53.2%	59.2%
Iron & Steel	9.0%	4.9%	10.8%	13.2%	9.2%
Wood and Forest products	6.1%	5.3%	13.6%	3.7%	6.2%
Wholesale Consumer items	5.2%	3.3%	3.1%	5.1%	4.9%
Fruits and Vegetables	2.3%	2.1%	3.1%	1.5%	2.2%
Electrical and Electronic Items	1.6%	6.7%	1.0%	0.9%	2.1%
Automobiles	2.0%	2.2%	0.0%	3.4%	2.1%
Dairy & Perishable Products	2.5%	1.7%	0.0%	0.0%	1.9%
Cement	1.5%	0.5%	2.4%	2.5%	1.6%
Jute, Cotton & Textiles	1.3%	1.7%	1.0%	0.9%	1.3%
Plastic dana & allied	1.0%	1.6%	2.3%	1.7%	1.2%
Medicines & Pharma products	1.1%	1.3%	1.0%	0.0%	0.9%
Heavy Machinery & Industrial Equipment	0.6%	1.6%	1.0%	1.5%	0.9%
Petroleum Products	0.4%	0.7%	4.7%	1.8%	0.9%
Others	4.4%	5.8%	6.6%	10.6%	5.5%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

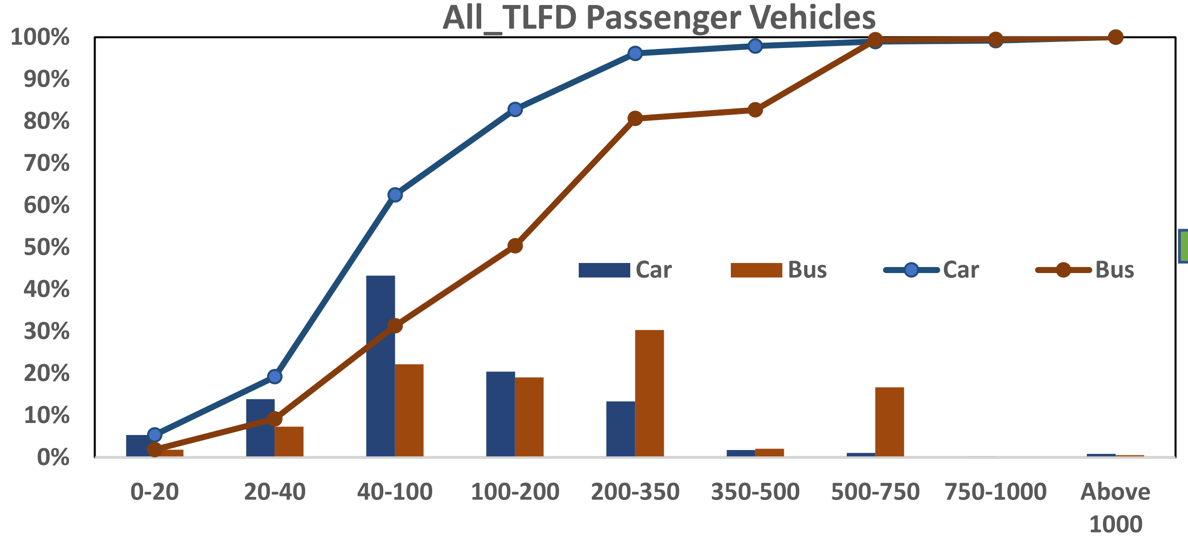
- The overall share of empty vehicle is observed to be 60 % at the toll plaza. Individually, the empty share of LCVs and 2-Axle trucks are observed to be 62% and 61% respectively. At the same time 3-Axle and MAVs have a share of nearly 50% and 53% respectively.
- Iron & Steel, Wood & Forest Products, Wholesale Consumer items, Fruits and Vegetables comprise nearly 25% of all commodities at Maujpur .
- Major commodities transported by LCV are and Iron & steel (9%), Wood & Forest products (6%) and Wholesale Consumer items (5%).
- Major Commodities transported by 2-Axle truck are Wood & Forest products (5%), Electric & Electronic Items (7%) and Iron & Steel (5%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such as Iron & Steel, Wood & Forest Products.
- The high share of empty traffic is due to proximity of generation node and consumption node.

COMMODITY CHARACTERISTICS – TP9 – CHHAJJU NAGAR

9.Chhajju Nagar					
COMMODITY	LCV	2-AXLE TRUCK	3-AXLE TRUCK	MAV	TOTAL
Empty	50.6%	39.5%	45.0%	61.0%	52.6%
Wholesale Consumer items	8.8%	5.4%	11.8%	5.1%	7.2%
Parcel & Courier etc.	7.0%	8.4%	7.8%	2.2%	5.3%
Iron & Steel	4.4%	9.6%	5.6%	4.2%	5.2%
Automobiles	3.0%	5.4%	1.6%	2.5%	2.9%
Miscellaneous items	3.3%	3.6%	2.7%	2.3%	2.8%
Fruits and Vegetables	2.7%	1.8%	2.4%	3.0%	2.7%
Plastic dana & allied	1.8%	2.4%	2.9%	2.7%	2.4%
Wood and Forest products	0.4%	4.2%	2.4%	2.2%	2.0%
Jute, Cotton & Textiles	2.0%	4.2%	2.1%	1.0%	1.9%
Electrical and Electronic Items	2.9%	1.2%	1.6%	1.3%	1.8%
Heavy Machinery & Industrial Equipment	1.3%	3.0%	1.6%	1.8%	1.8%
Dairy & Perishable Products	1.9%	2.4%	2.4%	1.0%	1.6%
Containers	0.9%	1.2%	0.5%	2.5%	1.5%
Others	9.0%	7.8%	9.4%	7.3%	8.2%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

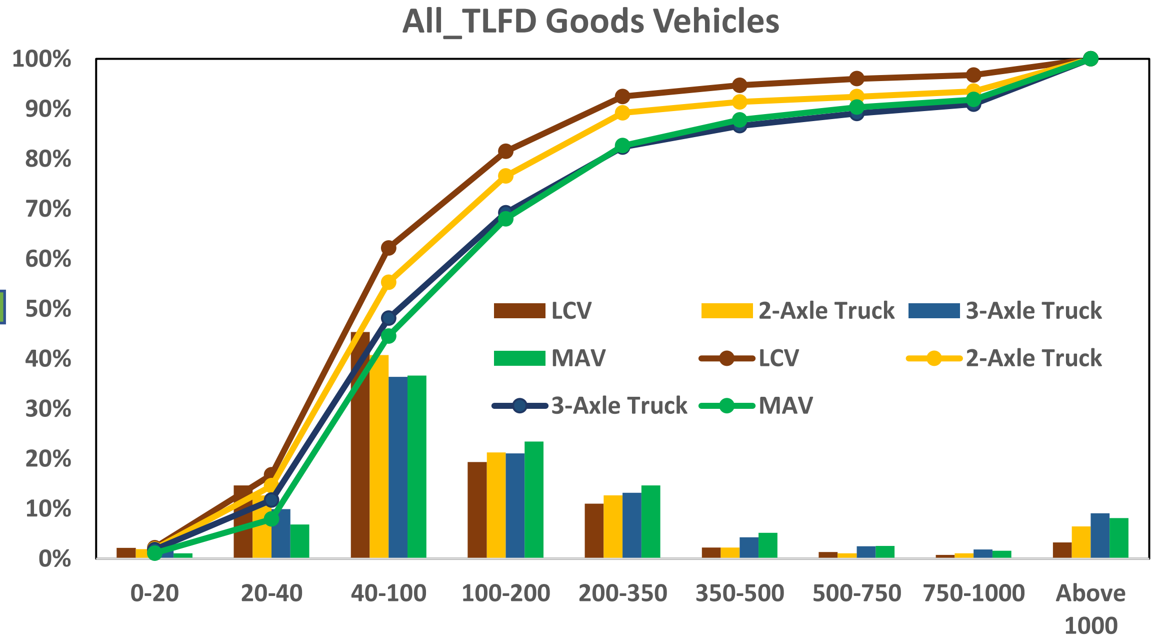
- The overall share of empty vehicle is observed to be 53 % at the toll plaza.
- Individually, the empty share of LCVs and 2-Axle trucks are observed to be 51% and 40% respectively. At the same time 3-Axle and MAVs have a share of nearly 45% and 61% respectively.
- Iron & Steel, Wholesale Consumer items, Automobiles and Misc. items comprise nearly 25% of all commodities at Chhajju Nagar
- Major commodities transported by LCV are Parcel & Courier (7%), Wholesale Consumer items (9%) and Iron & steel (4.5%).
- Major Commodities transported by 2-Axle truck are Parcel & Courier (8%), Wholesale Consumer items (5.5%) and automobiles (5%).
- 3-Axle trucks and MAVs are observed to be majorly carrying commodities such Parcel & Courier, Wholesale Consumer items, Iron & Steel commodities.

TRIP LENGTH FREQUENCY DISTRIBUTION– PROJECT CORRIDOR



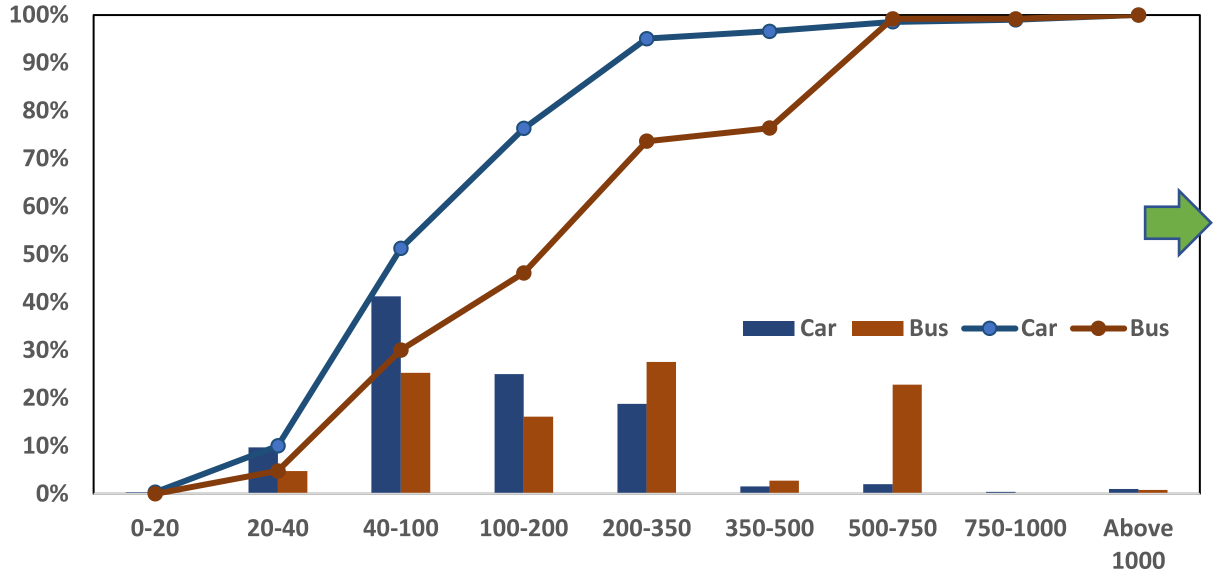
- 62% of Cars are observed to having trip lengths of less than 100 kms as the project corridor is in proximity to major urban settlements of Ghaziabad, Sonipat, Noida, Kundli, Meerut, New Delhi. With respect to buses, nearly 80% of the buses are observed to be travelling less than 350 Kms.
- Kundli – Ghaziabad, Sonipat – Ghaziabad, Ghaziabad-Sonipat, Noida – Meerut New Delhi – Sonipat are the major Passenger OD Pairs which were observed on project corridor

- Nearly 60% of the LCVs , 55% of 2 Axles are observed to be travelling within 100 Kms. Where as, nearly 45% of 3A trucks and MAVs are observed to be travelling within 100 Kms.
- This nearly high share of traffic within 100 kms is observed due to the high concentration of dense areas such as Ghaziabad, Sonipat, Delhi, Meerut, Noida, Faridabad etc. in proximity.
- Overall, 76% of goods vehicles are observed to be having a trip length of less than 200kms, which illustrates the high share of local commercial traffic on this Project corridor.



TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP1 - JAKHAULI)

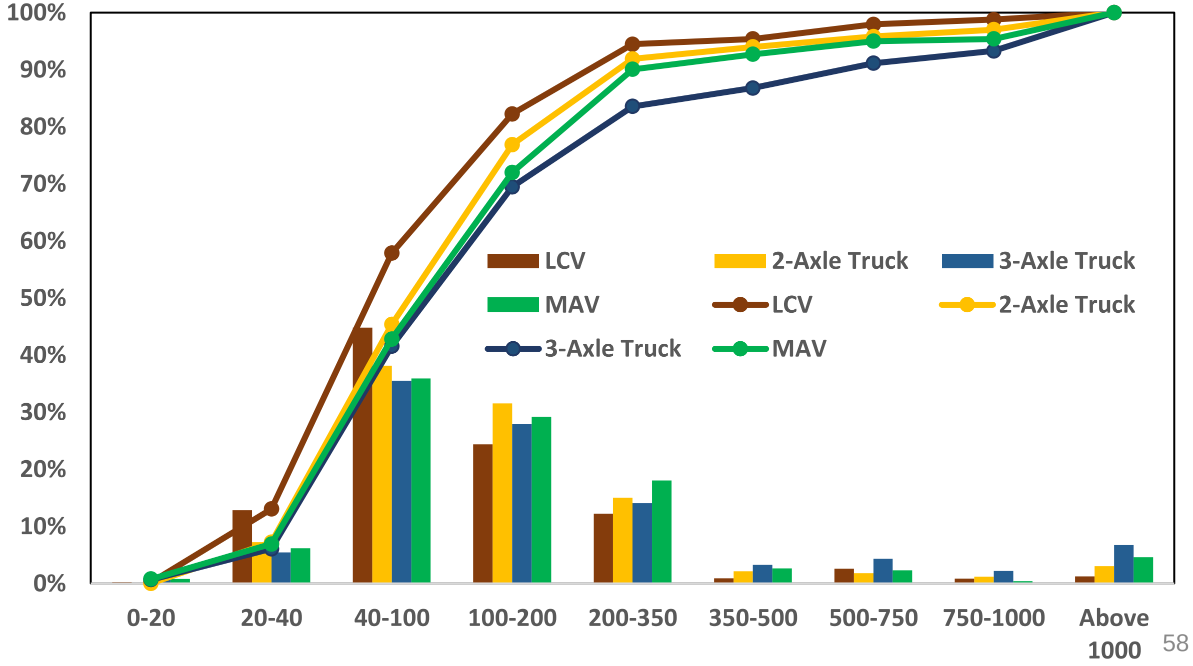
1.Jakhauli_TLFD Passenger Vehicles



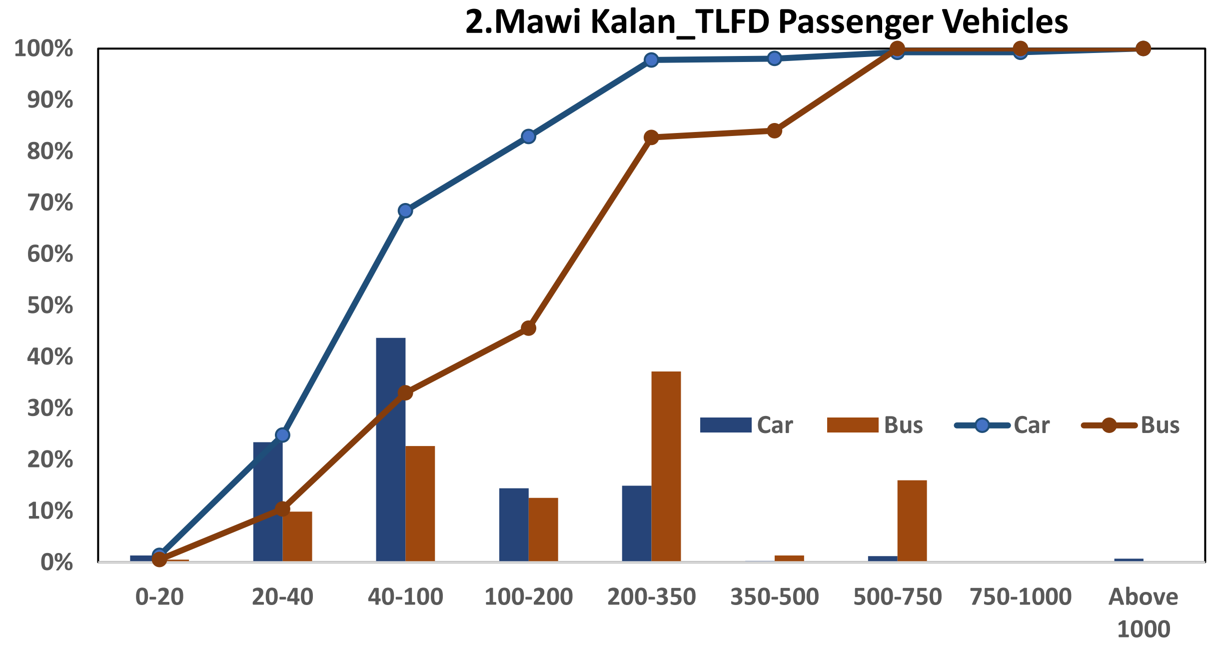
- 51% of Cars are observed to having trip lengths of less than 100 kms as the plaza is in proximity to major urban settlements of Ghaziabad, Sonipat & New Delhi. With respect to buses, nearly 70% of the buses are observed to be travelling less than 350 Kms.
- Ghaziabad-Sonipat, Ghaziabad-Panipat, Ghaziabad – Kundli , New Delhi – Sonipat are the major Passenger OD Pairs which were observed at this toll plaza.

- Nearly 60% of the LCVs are observed to be travelling within 100 Kms. Where as, nearly 40% of 2Axle, 3A trucks and MAVs are observed to be travelling within 100 Kms.
- This nearly high share of traffic within 100 kms is observed due to the high concentration of dense areas such as Ghaziabad, Sonipat, Delhi etc. in proximity.
- Overall, 77% of goods vehicles are observed to be having a trip length of less than 200kms, which illustrates the high share of local commercial traffic at this toll plaza location.

1.Jakhauli_TLFD Goods Vehicles

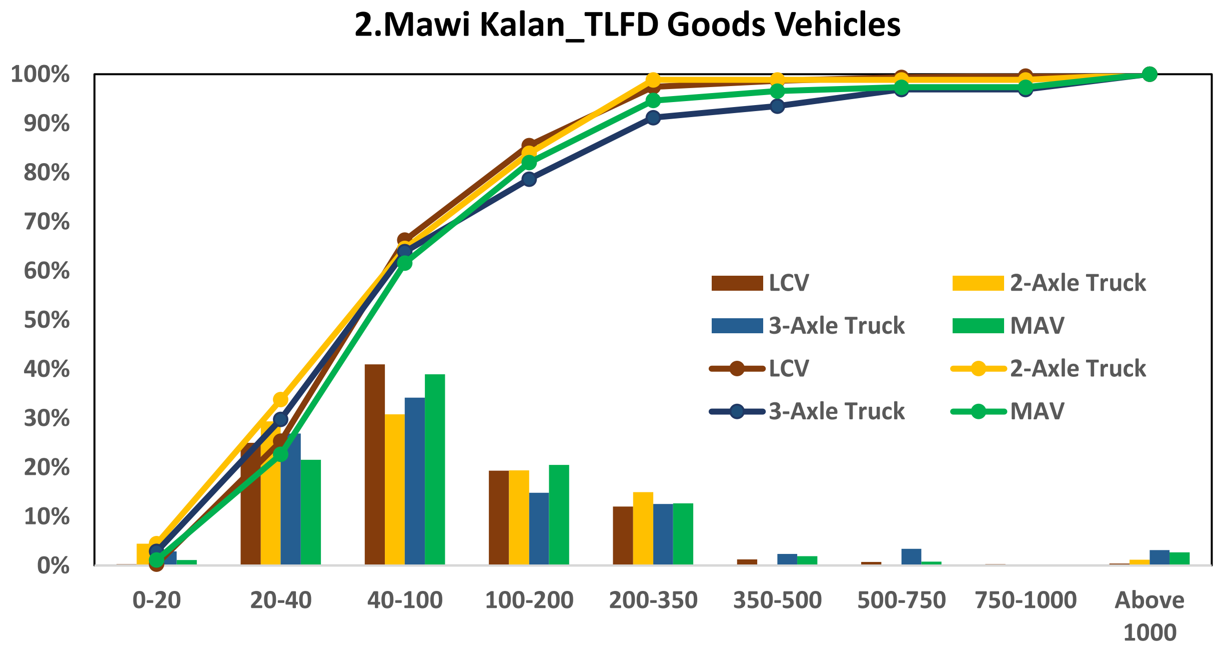


TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP2 – MAWI KALAN)

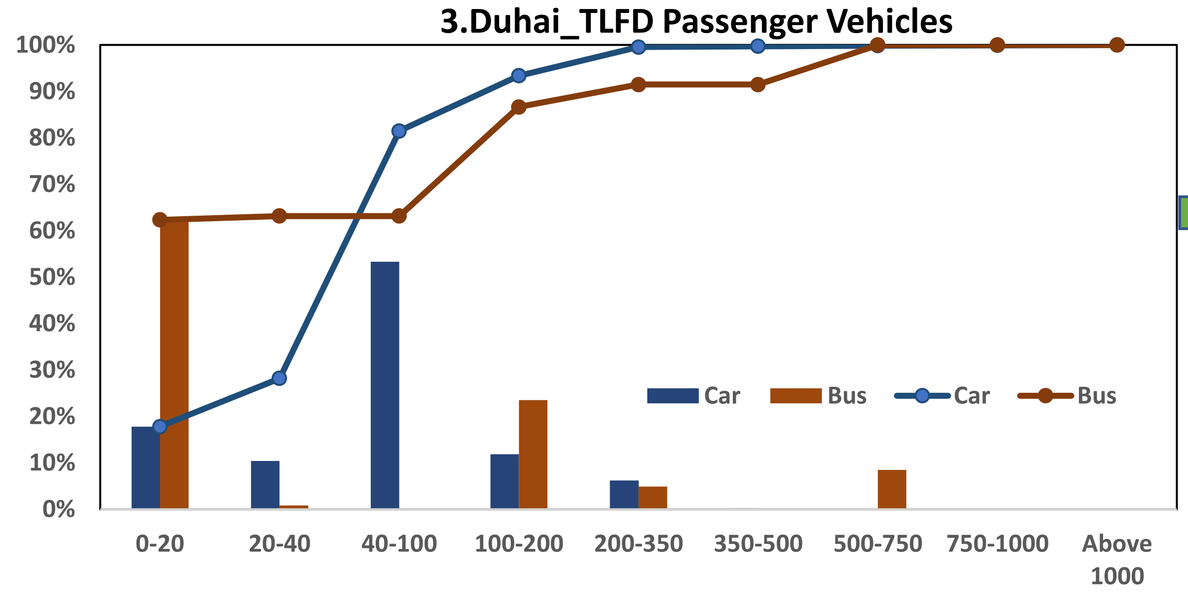


- Nearly , 70% of Cars are observed to be having trip lengths less than 100kms. Similarly, 80% of the buses are observed to be terminating within 350 Kms
- Kundli - Baghpat, Sonipat - Baghpat, Ghaziabad – Baghpat, Raj Nagar Extension – Baghpat are the major Passenger OD Pairs Which are on along the project road

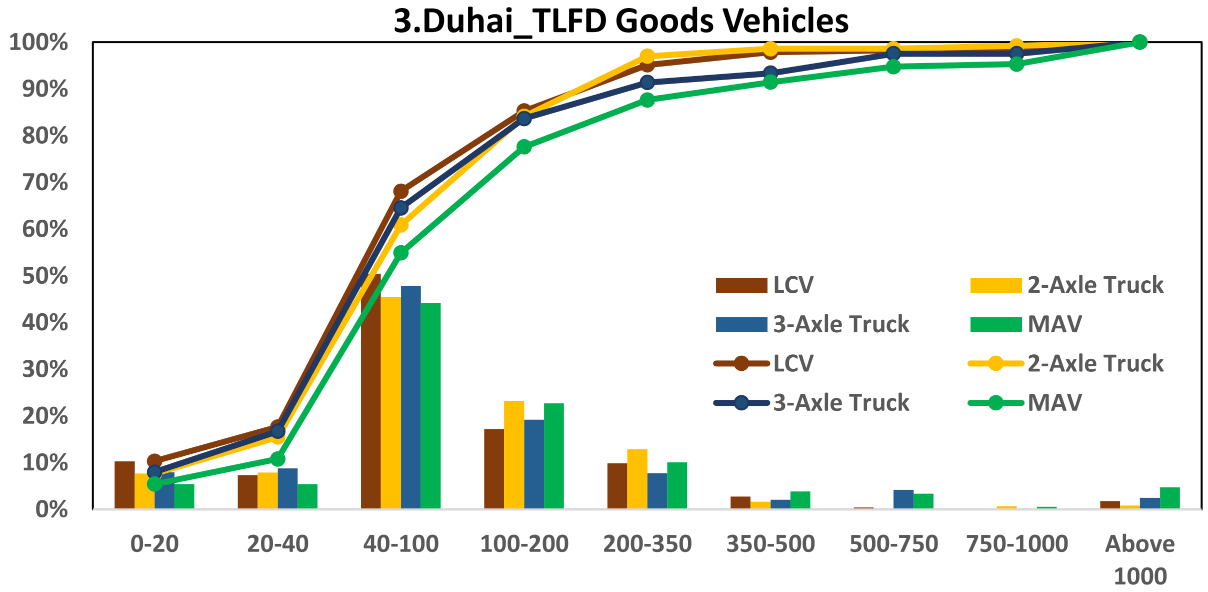
- Nearly 65% of goods vehicles are observed to be having trip lengths of less than 100kms.
- Overall, 84% of all the types of goods vehicles are having trip lengths less than 200kms, which concludes more local commercial traffic at this toll plaza.



TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP3 - DUHAI)

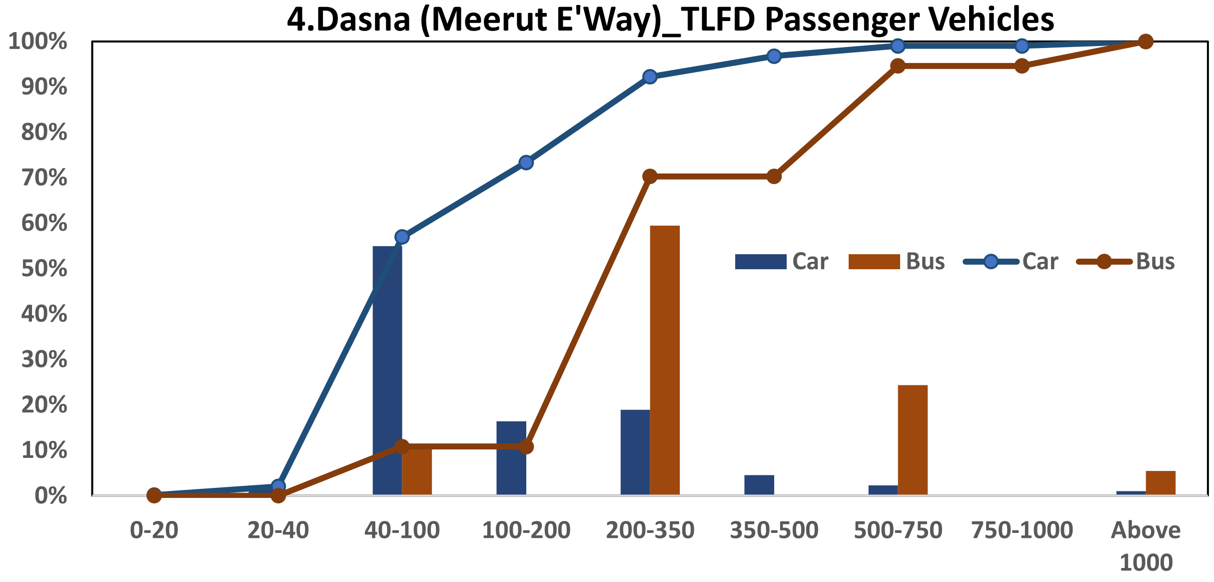


- 81 % of Cars are having Trip Lengths less than 100kms as the plaza located proximity to major urban settlements – Ghaziabad, Meerut, Hapur, Delhi, Baghpat. Similarly, majority (80%) of the buses are observed to be terminating within 100 Kms
- Kundli - Ghaziabad, Baghpat- Ghaziabad, Ghaziabad – Sonipat , Ghaziabad – Murad Nagar are the major Passenger OD Pairs Which are on along the project road, and the urban settlements falls in Project Vicinity region.

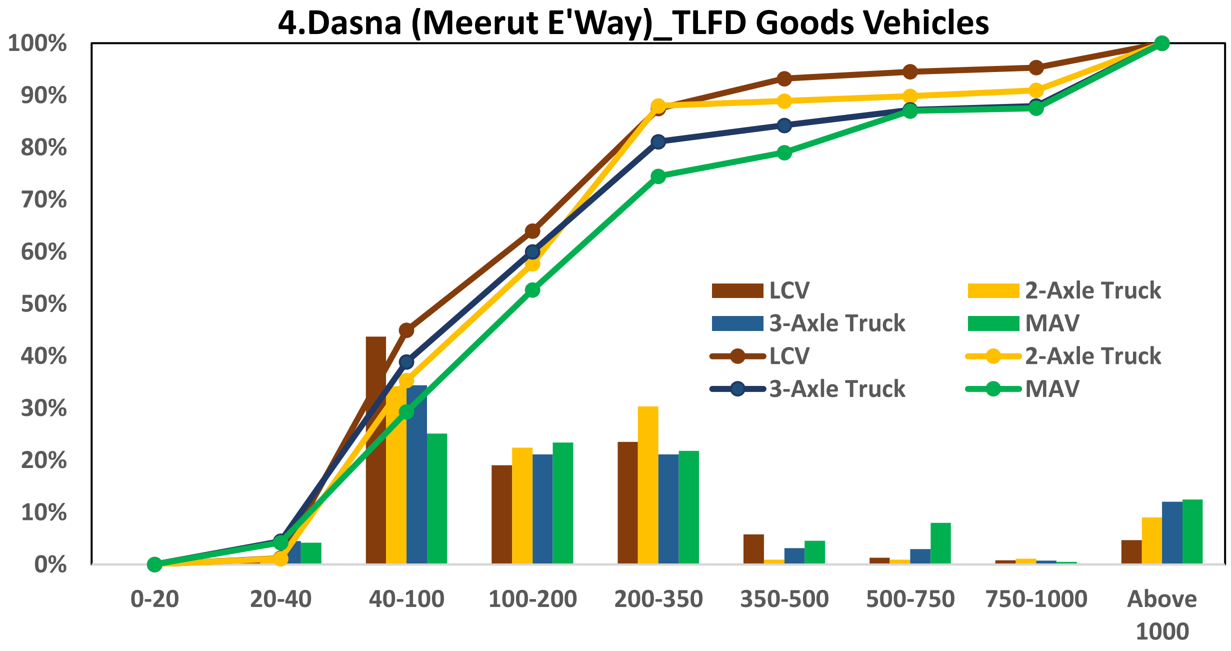


- 68% of LCVs , 61% of 2A, and 65% of 3A are observed to be having trip lengths less than 100kms.
- Similarly, 55% of MAVs are observed to be having trip lengths less than 100kms.
- Overall, 83% of goods vehicles are observed to be having trip lengths of less than 200kms, which illustrates the high share of local commercial traffic at this toll plaza.

TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP4 – MEERUT EXPRESSWAY)

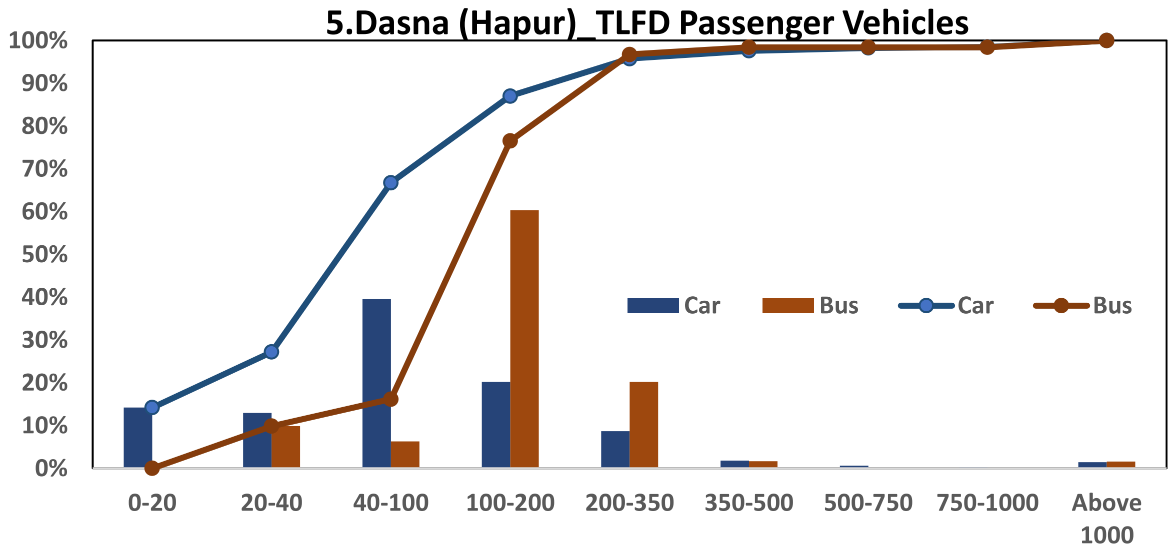


- Nearly 60% of Cars are observed to be having trip lengths less than 100 kms. Similarly, 70% of buses are observed to be terminating within 500 Kms.
- Noida -Meerut, New Delhi - Meerut, Ghaziabad – Meerut , Kundli – Meerut are the major Passenger OD Pairs Which are on along the project road, and the urban settlements falls in Project Vicinity region.



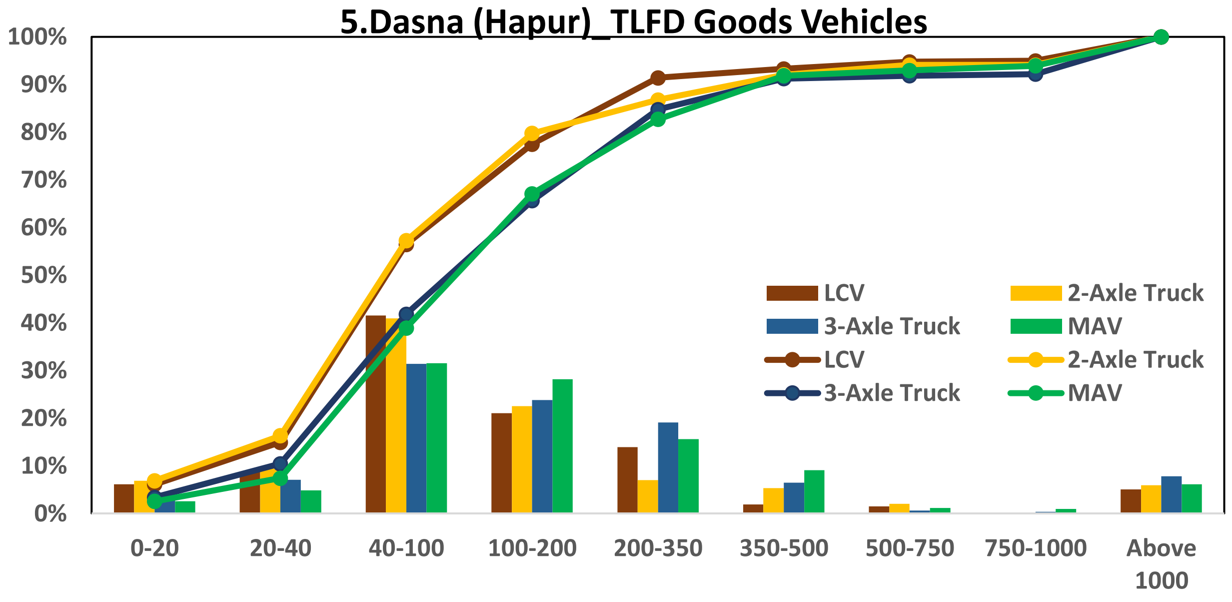
- 45% of LCVs, 35% of 2-Axle trucks, 39% of 3-Axle Trucks and 29% of MAVs are observed to be having trip lengths less than 100kms.
- Overall, nearly 60% of goods vehicles are observed to be having trip lengths less than 200kms, which concludes more local commercial traffic at this toll plaza.

TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP5 - DASNA)

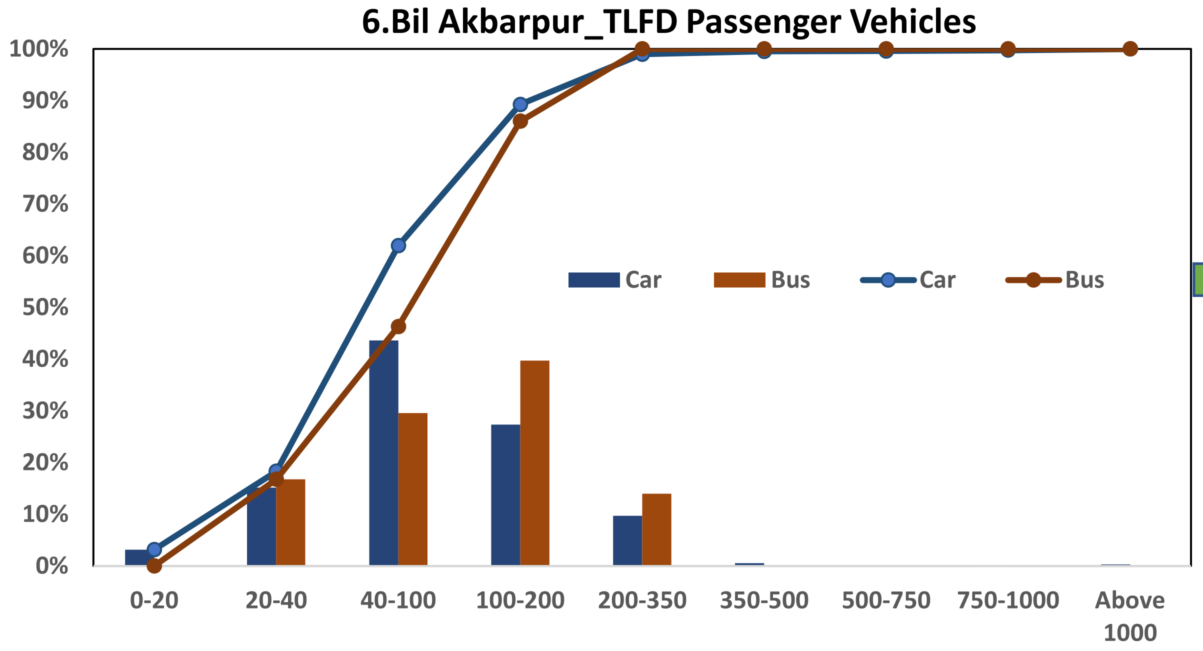


- 67% of Cars are observed to be having trip lengths less than 100kms as the plaza located proximity to major urban settlements – Ghaziabad, Hapur, Dadri, Delhi, Meerut.
- Dadri – Ghaziabad, Sonipat – Ghaziabad, Sikandrabad – Ghaziabad , Kundli – Ghaziabad are the major Passenger OD Pairs Which are on along the project road, and the urban settlements falls in Project Vicinity region.

- 39% of MAVs, 42% of 3-Axle Trucks are having trip lengths less than 100kms.
- Overall 73% of all the types of goods vehicles are having trip lengths less than 200kms, which concludes more local commercial traffic at this toll plaza location.

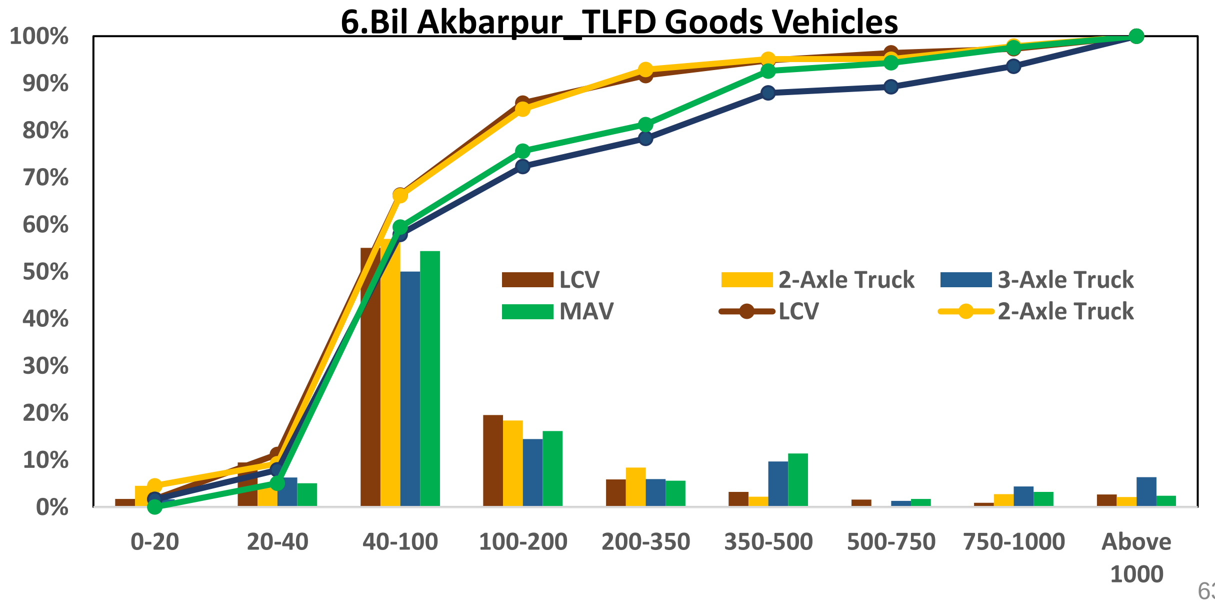


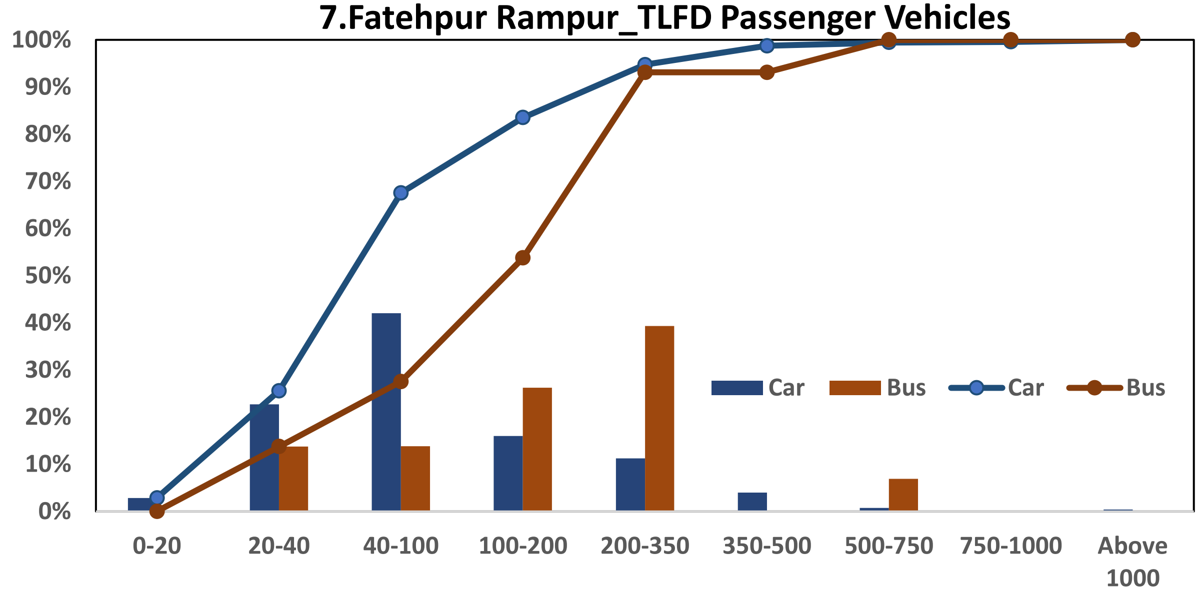
TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP6 – BIL AKBARPUR)



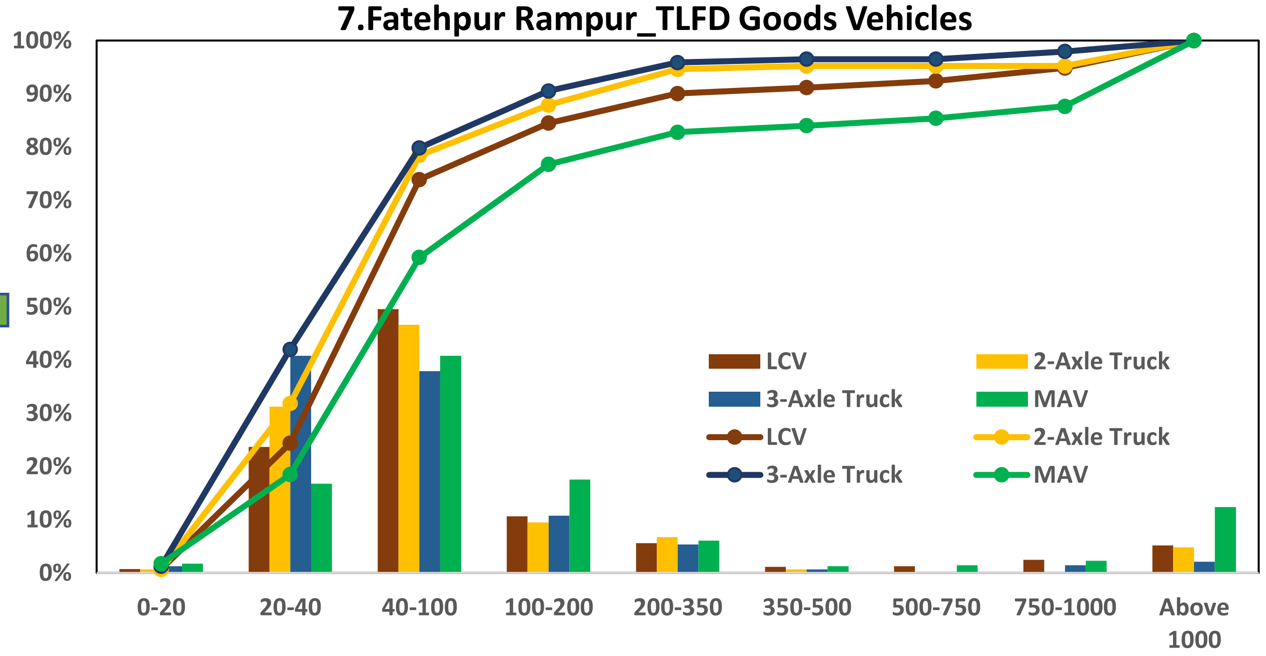
- 62% of Cars are observed to be having trip lengths less than 100kms. Similarly, 85% of the buses were observed to be terminating within 200 Kms. This is due to, the toll plaza being in proximity to major urban centers of Noida, Ghaziabad etc..
- Palwal – Noida , Meerut – Noida, Dadri – Bilaspur, Ghaziabad – Greater Noida, Bulandshahr – Noida are the major Passenger OD Pairs Which are on along the project road, and the urban settlements falls in Project Vicinity region.

- 66% of LCVs and 2-Axle trucks, 58% of 3-Axle trucks and 59% of MAVs are observed to be having trip lengths less than 100kms.
- Overall, 80% of goods vehicles are observed to be having trip lengths less than 200kms, which concludes more local commercial traffic at this toll plaza location.

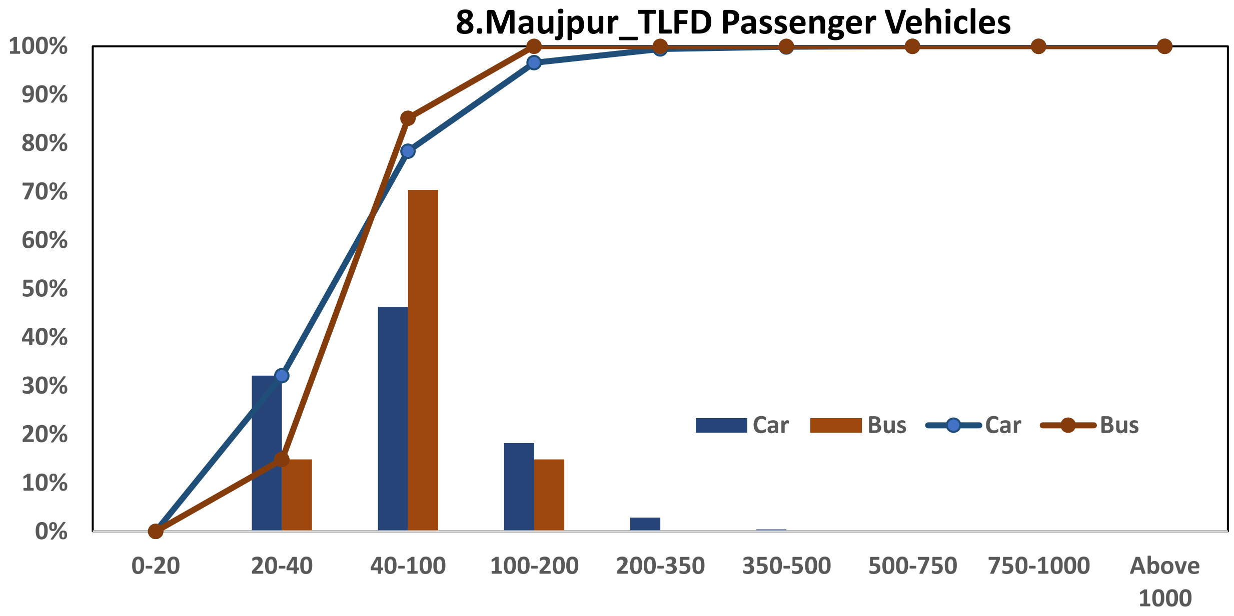




- 68% of Cars are observed to be having trip lengths less than 100kms as the plaza is in proximity to major urban settlements such as Noida, Greater Noida, Dadri, Sikandrabad, Bulandshahr.
- Bulandshahr – Ghaziabad, Western Haryana- Dadri, Greater Noida - Sikandrabad, Ghaziabad – Sikandrabad are the major Passenger OD Pairs Which are on along the project road, and the urban settlements falls in Project Vicinity region.

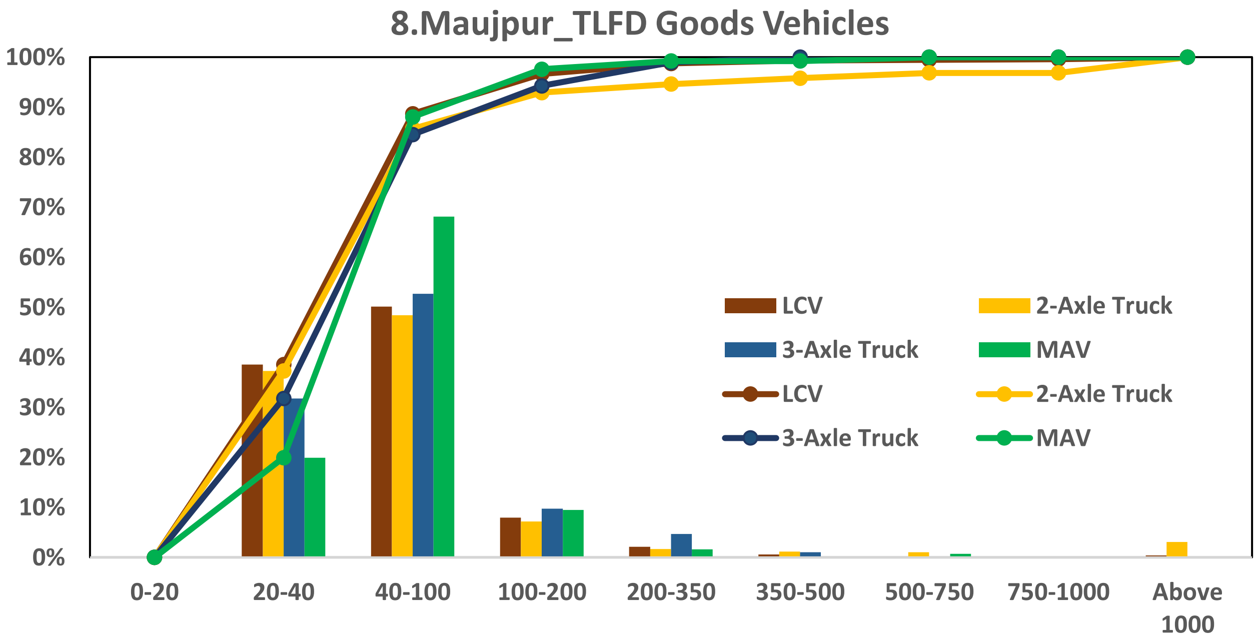


- Nearly 80% of LCVs, 2-Axle trucks and 3-Axle trucks are observed to be having trip lengths of less of 100 kms. Similarly, 59% of MAVs are observed to be having Trip Lengths less than 100kms.
- Overall, 84% of goods vehicles are observed to be having trip lengths less than 200kms, which concludes more local commercial traffic at this toll plaza location.

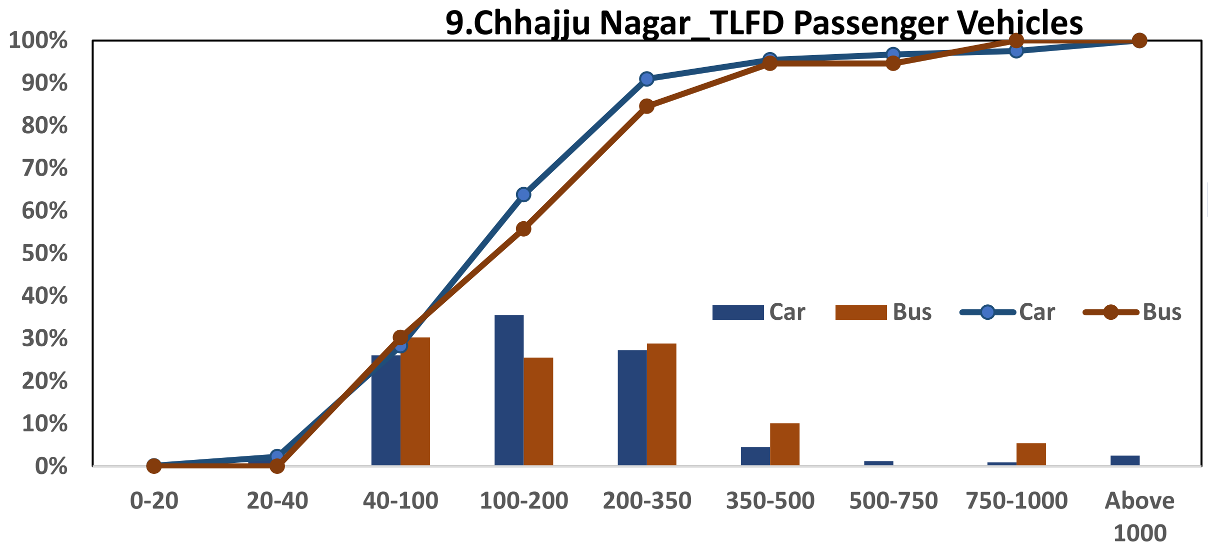


- Nearly, 80% of Cars are observed to be having trip lengths less than 100 kms as the plaza is in proximity to major urban settlements such as Faridabad, Ballabhgarh, Palwal and Noida.
- Noida-Faridabad, Faridabad – Palwal, Palwal – Ballabhgarh, Ghaziabad – Faridabad are the major Passenger OD Pairs Which are on along the project road, and the urban settlements falls in Project Vicinity region.

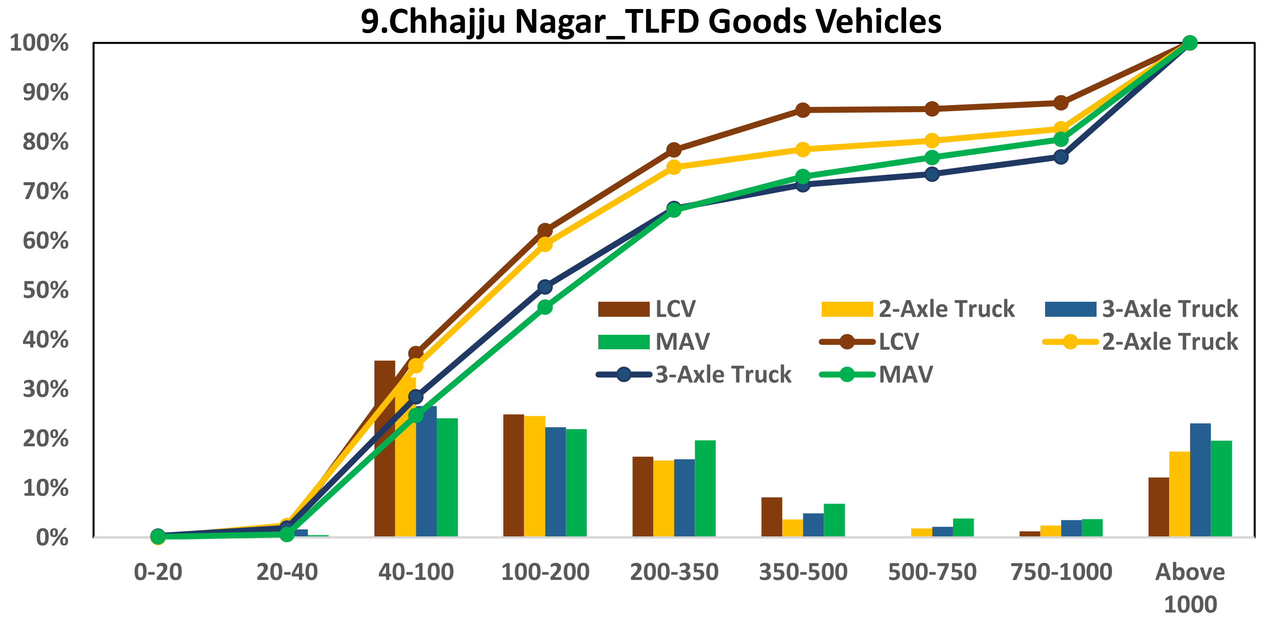
- Approximately 85% of goods vehicles are observed to be having trip lengths less than 100kms.
- Overall, 96% of goods vehicles are observed to be having trip lengths less than 200kms, which concludes more local commercial traffic at this toll plaza location.



TRIP LENGTH FREQUENCY DISTRIBUTION– TLFD (TP9 – CHHAJJU NAGAR)



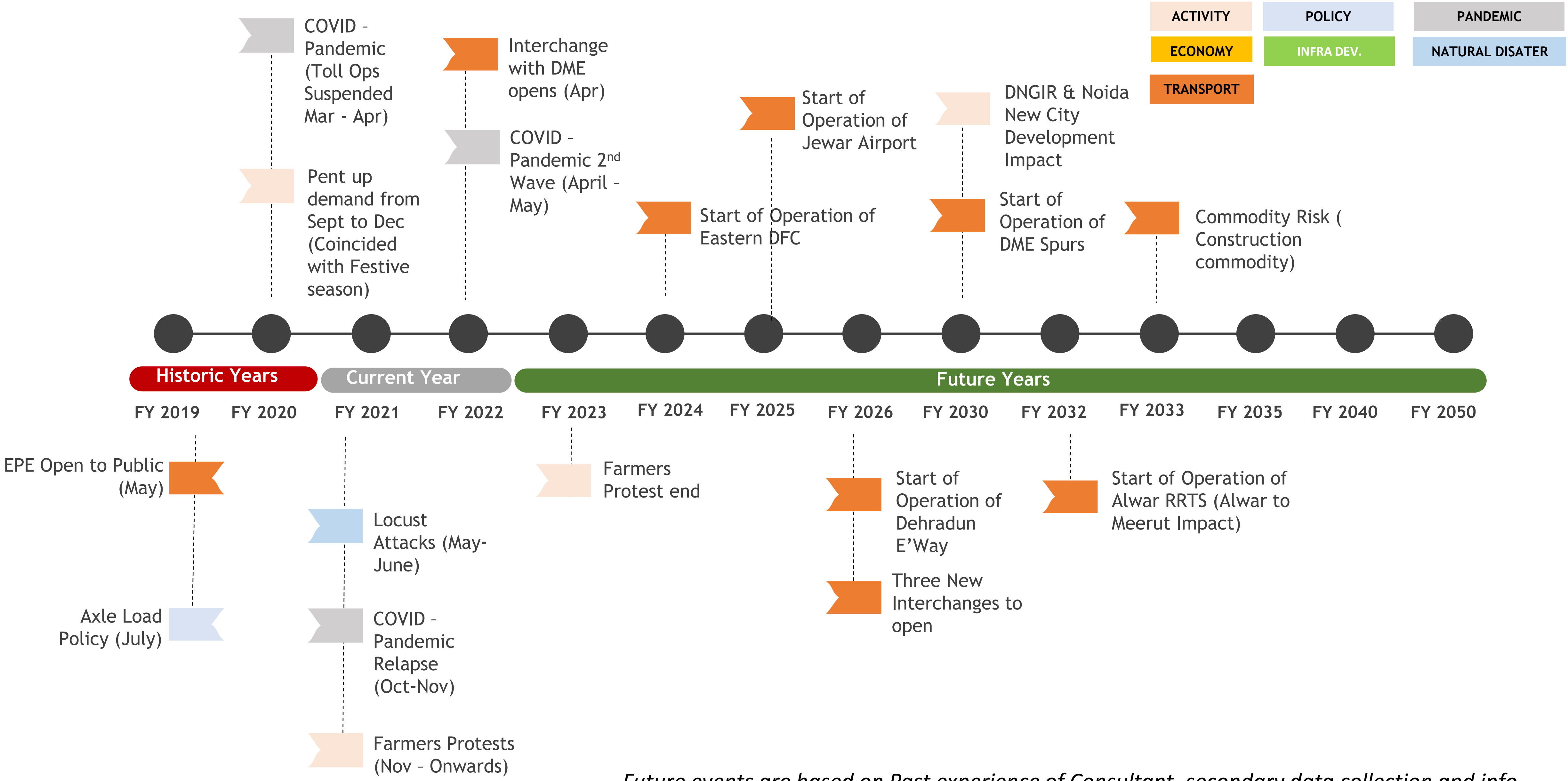
- Nearly 60% of Car and Bus traffic are observed to be having trip lengths less than 200 Kms. At this plaza, the trip lengths observed are slightly higher when compared to other plazas, because this plaza is located far from any major urban settlements.
- Ghaziabad-Palwal, Noida Palwal are the major Passenger OD Pairs.



- Overall, 54% of goods vehicles are observed to be having trip lengths less than 200kms and
- 78% of goods vehicles are observed to be having trip lengths less than 500 kms.

BASE YEAR ESTIMATES

PAST AND FUTURE EVENTS | IMPACT ON PROJECT TRAFFIC



Future events are based on Past experience of Consultant, secondary data collection and info available in public domain

STAGE 1

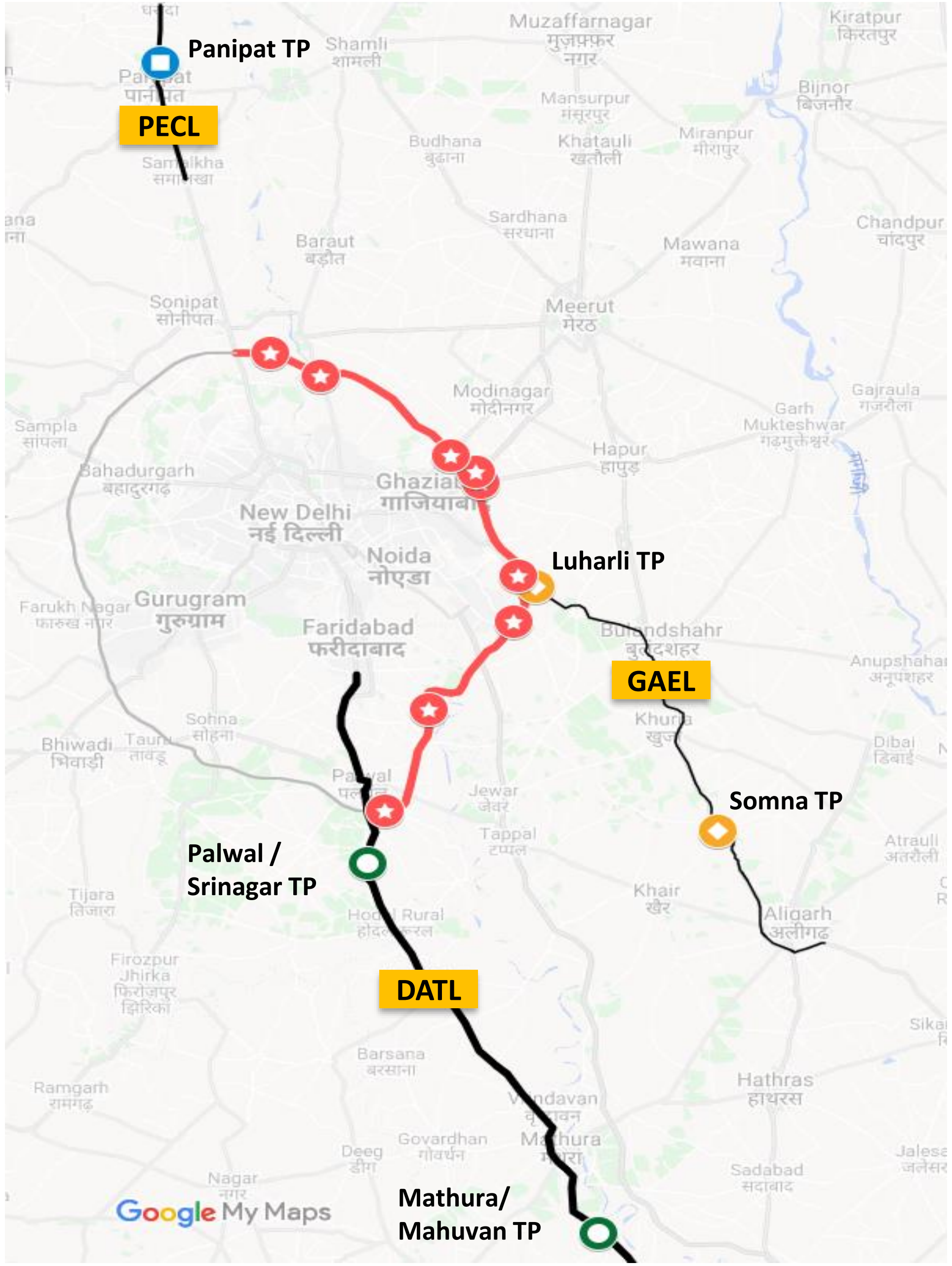
- Identification of the appropriate
  - Project roads
  - Toll plazas and
  - Stable period

STAGE 2

- Segregation of Traffic into -
  - Urban Traffic [regular]
  - Regional Traffic [seasonal]

STAGE 3

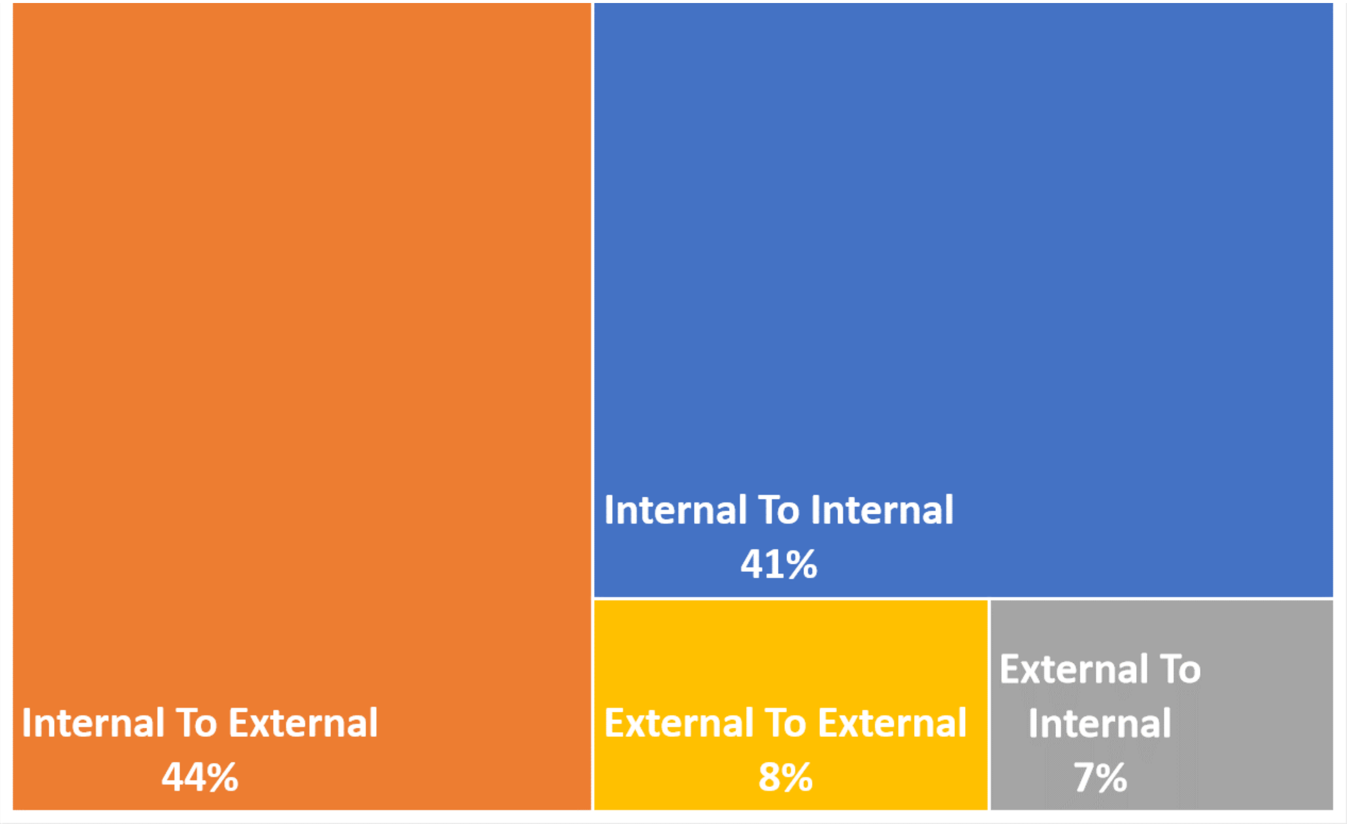
- Seasonal variation (correction) is close to 1.0 for the Urban (also regular) traffic and Consultant applied value as 1.0,
- Seasonal variation (correction) for regional traffic is arrived based on monthly trends observed on the major roads leading to EPE
- Computation of weighted average Seasonal Correction Factors to arrive at AADT on the project road



- ✓ **Identification of stretches/projects in the vicinity**
  - ✓ **North** – Panipat Elevated Corridor Limited (PECL) (1 TP)
  - ✓ **East** – Ghaziabad Aligarh Expressways Limited (GAEL) (2 TPs)
  - ✓ **South** – Delhi Agra Tollways Limited (DATL) (2 TPs)
- ✓ **Identification of Toll Plazas in the vicinity**
  - ✓ **North** – Panipat Toll Plaza
  - ✓ **East** – Luharli Toll Plaza
  - ✓ **South** – Palwal/Srinagar Toll Plaza
- ✓ **Identification of Stable Period**

FY Year	Remarks
on or before FY 2016	Too old to be considered
FY 2017	Considered
FY 2018	Considered
FY 2019	Project Started Operation in Q1 (May)
FY 2020	Covid Impact
FY 2021	Covid Impact

Peripheral Ring Road (PRR) Traffic Distribution



Peripheral Ring Roads include both EPE and WPE

- From the chart on the left side over 45% of the traffic on the project corridor is local traffic (i.e., Internal to Internal) including 10 Kms Buffer on the outer side of the peripheral ring roads (EPE & WPE), it is prudent that this traffic be treated as Urban traffic and the remaining as Regional Traffic.
- In general , the seasonal correction factors for urban traffic is considered as 1.0 due to the regular in nature in all seasons, whereas the seasonal correction factors for the regional traffic is derived from the average of the 3 data points mentioned earlier

SEASONAL CORRECTION FACTORS – REGIONAL ROADS

MONTH	CAR	LCV	BUS/TRUCK	3-AXLE	MAV
Apr	0.99	0.96	1.10	1.00	1.00
May	1.07	0.97	1.02	0.99	0.99
Jun	0.96	0.96	0.94	0.99	0.99
Jul	1.08	1.08	1.03	1.08	1.08
Aug	1.14	1.10	1.04	1.07	1.07
Sep	1.18	1.03	0.96	0.99	0.99
Oct	1.03	1.00	0.96	0.99	0.99
Nov	0.97	0.99	0.98	0.98	0.98
Dec	0.93	0.99	1.00	0.98	0.98
Jan	0.89	0.95	0.99	0.94	0.94
Feb	0.95	1.03	1.05	1.00	1.00
Mar	0.90	0.97	0.95	0.99	0.99

RECCOMENDED SEASONAL CORRECTION FACTORS FOR EPE

MONTH	CAR	LCV	BUS/TRUCK	3-AXLE	MAV
Apr	0.99	0.97	1.08	1.00	1.00
May	1.04	0.98	1.02	0.99	0.99
Jun	0.98	0.97	0.95	0.99	0.99
Jul	1.04	1.04	1.02	1.05	1.05
Aug	1.08	1.05	1.02	1.04	1.04
Sep	1.09	1.02	0.98	0.99	0.99
Oct	1.02	1.00	0.97	0.99	0.99
Nov	0.98	0.99	0.99	0.99	0.99
Dec	0.96	0.00	1.00	0.99	0.99
Jan	0.97	1.02	1.04	1.00	1.00
Feb	0.94	0.97	0.99	0.96	0.96
Mar	0.95	0.98	0.96	0.99	0.99

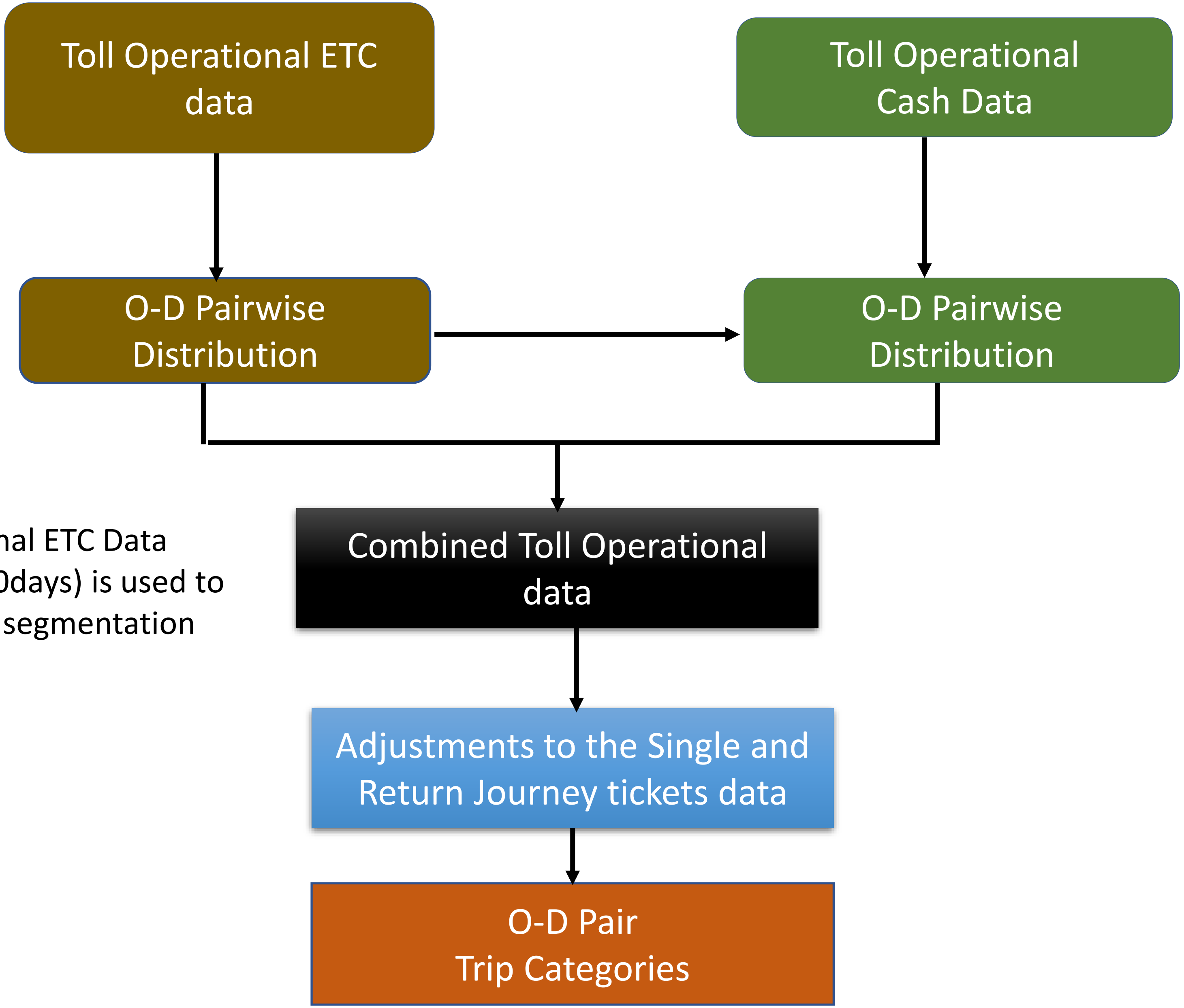
- The Recommended Seasonal correction factors are derived from the weighted average of the urban traffic and the regional traffic/roads

BASE YEAR (FY22) | RECOMMENDED AADT

VEHICLE_TYPE	1.JAKHAULI	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBARPUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	8,662	4,227	4,994	2,191	5,494	3,077	3,726	1,662	1,934
Minibus	166	53	64	17	63	38	63	39	57
Bus	568	411	43	40	94	18	58	7	42
LCV	3,002	1,101	1,221	379	1,321	750	1,132	839	988
2AT	982	213	302	284	351	307	512	261	615
3AT	773	154	220	166	425	293	196	92	508
MAV	2,345	493	531	382	979	1,003	641	217	1,492
OSV	5	1	3	2	2	2	2	4	4
VEHICLES	**16,505**	**6,654**	**7,377**	**3,462**	**8,730**	**5,487**	**6,329**	**3,121**	**5,641**
PCU	**30,963**	**10,520**	**11,018**	**5,985**	**14,597**	**10,631**	**10,708**	**5,052**	**13,732**

- AADT is Annual Average Daily Traffic which factors seasonal variation in the Average daily traffic (ADT) from the survey.
- The Average of Survey data i.e., Sep’21 and ETC data (incl Cash) of Oct’21 was used for the Estimation of AADT
- AADT mentioned above is based on the exit traffic at the toll plazas where toll fee is being collected.
- Jakhauli (27%), Dasna(13%) and Chhajju Nagar (12%) together contribute to nearly 50% of the total exit traffic on the project corridor
- As per the **Schedule B**, 3 new interchanges/toll plazas are proposed. They are EPE – Yamuna Expressway, EPE-Jewar Airport Link and EPE-NH334D (Palwal-Aligarh Rd)

TRIP CATEGORIES METHODOLOGY



Combination of Toll Operational ETC Data (7 + 7 days) and Cash Data (30days) is used to arrive at the OD Pairwise trip segmentation

TRIP CATEGORIES METHODOLOGY

IBI | CDPQ

Toll Operational Data

Details in Toll Operational Data - ETC

- Transaction Type
- Plaza Id
- Plaza Name → Exit Plaza
- Entry Plaza Id
- Entry Plaza Name → Entry Plaza
- Entry Lane Id
- Entry Lane Time
- Date
- CCH Transaction No.
- Agency Transaction No.
- Lane Transaction DateTime
- Acquirer Status
- Rejection Reason Code
- License Plate No
- Tag Id
- Tag Class Desc
- AVC Class Desc
- Mapper Class Desc → Toll Vehicle Code
- Charged Vehicle Class
- Settlement Amount
- Violation Status
- Type of Journey → Journey ticket Type

Details in Toll Operational Data - Cash

Plaza	Mode of Payment	Un-Classifi ed	Car/Jeep	LCV/MiniB us	Bus/Truck	Truck 3 Axle	MAV 4-6 Axle	OSV
Chajju Nagar	Single Journey	59	6,150	977	183	136	221	
Chajju Nagar	Exempted	18	5,614	309	83	29	13	

Exit Toll Plaza

1.Jakhauli | 2.Mawikalan | 3.Duhai | 5.Dasna | 6.Bilakbar... | 7.Fatehpur... | 8.Maujpur | 9.Chhajju ... | 4.Meerut E...

Entry Toll Plaza

1.Jakhauli | 2.Mawikalan | 3.Duhai | 4.Meerut Eway | 5.Dasna | 6.Bilakbarpur | 7.Fatehpur Rampur | 8.Maujpur | 9.Chhajju Nagar

Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
Car	69.56%	22.15%	0%	0%	0%	8.29%	0%	100.00%
Mini Bus	66.69%	32.25%	0%	0%	0%	1.07%	0%	100.00%
Bus	54.92%	44.51%	0%	0%	0%	0.57%	0%	100.00%
LCV	66.69%	32.25%	0%	0%	0%	1.07%	0%	100.00%
2AT	78.41%	21.02%	0%	0%	0%	0.57%	0%	100.00%
3AT	85.77%	13.41%	0%	0%	0%	0.82%	0%	100.00%
MAV	74.65%	25.08%	0%	0%	0%	0.27%	0%	100.00%
OSV	62.39%	30.77%	0%	0%	0%	6.84%	0%	100.00%

Trip Categories

Note:

1. The Combination of Toll Operational ETC Data (15 days) and Cash Data (30days) was used to arrive at the Pairwise toll categories

TRIP CATEGORIES METHODOLOGY | ADJUSTMENTS TO SINGLE AND RETURN JOURNEY

IBI

CDPQ

Need for Adjustments in SJ & RJ

In the Transactions data, Return journey - Onward (1^{st}) trip is considered as Single journey and Backward trip only is considered as Return journey

Date.1

2021-08-23	2021-08-24	2021-08-25
2021-08-26	2021-08-27	2021-08-28
2021-08-29	2021-08-30	2021-08-31

Plaza Name All
Entry Plaza Name All

Count of Type of Journey	Column Labels		
Row Labels	Single	RETURN	Global Exempt
Car/Jeep/Van	199034	29882	76
LCV/Mini Bus	53302	11127	
Bus	7933	2386	
Truck 2-Axle	32641	4001	
Truck 3-Axle	18322	1374	
MAV	50339	7449	
OSV	91	18	

Trip_Categores (No Adjustments)				
Vehicle_Type	Single_Journey	Return_Journey	Global Exempt	Total
Car/Jeep/Van	86.9%	13.0%	0.0%	100%
LCV/Mini Bus	82.7%	17.3%	0.0%	100%
Bus	76.9%	23.1%	0.0%	100%
Truck 2-Axle	89.1%	10.9%	0.0%	100%
Truck 3-Axle	93.0%	7.0%	0.0%	100%
MAV	87.1%	12.9%	0.0%	100%
OSV	83.5%	16.5%	0.0%	100%

Trip_Categores (With Adjustments)				
Vehicle_Type	Single_Journey	Return_Journey	Global Exempt	Total
Car/Jeep/Van	73.9%	26.1%	0.0%	100%
LCV/Mini Bus	65.5%	34.5%	0.0%	100%
Bus	53.8%	46.2%	0.0%	100%
Truck 2-Axle	78.2%	21.8%	0.0%	100%
Truck 3-Axle	86.0%	14.0%	0.0%	100%
MAV	74.2%	25.8%	0.0%	100%
OSV	67.0%	33.0%	0.0%	100%
Total Vehicles	**73.1%**	**26.9%**	**0.0%**	**100.0%**

Date.1

2021-07-31	2021-08-01	2021-08-02
2021-08-03	2021-08-04	2021-08-05
2021-08-06	2021-08-07	2021-08-08

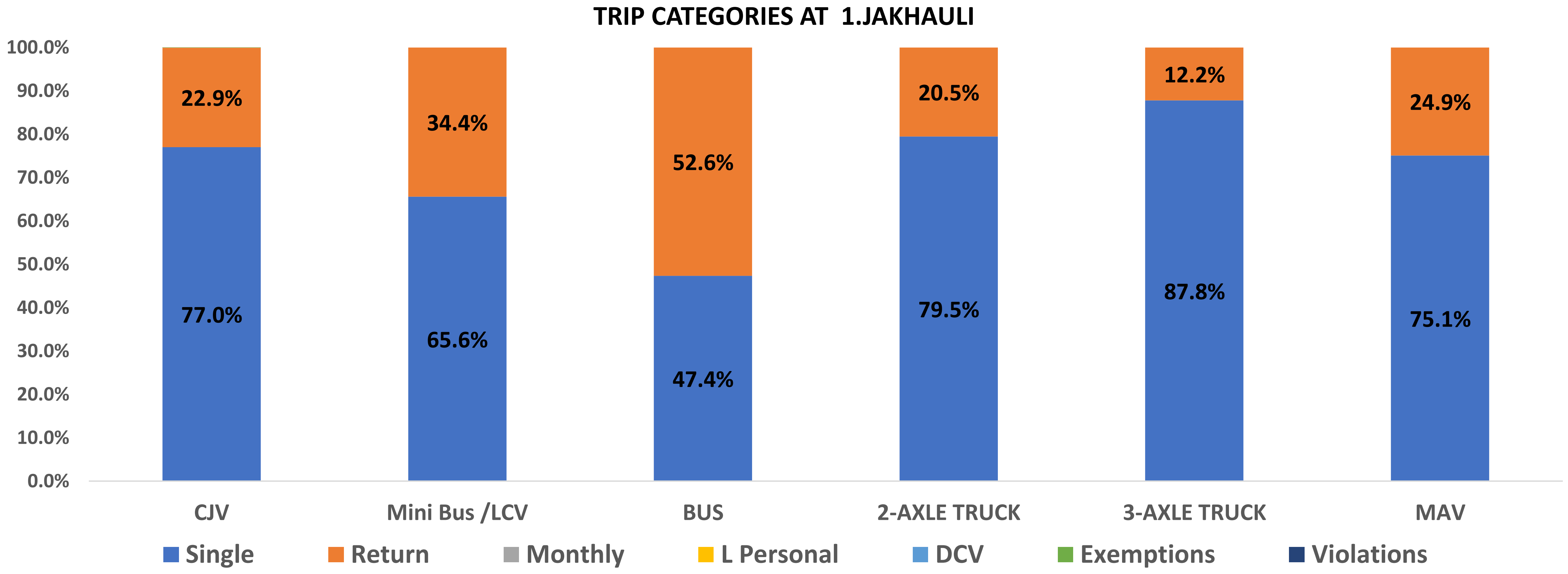
Plaza Name All
Entry Plaza Name All

Count of Type of Journey	Column Labels		
Row Labels	Single	RETURN	Global Exempt
Car/Jeep/Van	169067	28421	56
LCV/Mini Bus	45784	9401	
Bus	7536	2083	
Truck 2-Axle	28046	3003	
Truck 3-Axle	15757	1143	
MAV	41925	5215	
OSV	93	19	

Trip_Categores (No Adjustments)				
Vehicle_Type	Single_Journey	Return_Journey	Global Exempt	Total
Car/Jeep/Van	85.6%	14.4%	0.0%	86%
LCV/Mini Bus	83.0%	17.0%	0.0%	86%
Bus	78.3%	21.7%	0.0%	93%
Truck 2-Axle	90.3%	9.7%	0.0%	85%
Truck 3-Axle	93.2%	6.8%	0.0%	86%
MAV	88.9%	11.1%	0.0%	82%
OSV	83.0%	17.0%	0.0%	103%

Trip_Categores (With Adjustments)				
Vehicle_Type	Single_Journey	Return_Journey	Global Exempt	Total
Car/Jeep/Van	71.2%	28.8%	0.0%	100%
LCV/Mini Bus	65.9%	34.1%	0.0%	100%
Bus	56.7%	43.3%	0.0%	100%
Truck 2-Axle	80.7%	19.3%	0.0%	100%
Truck 3-Axle	86.5%	13.5%	0.0%	100%
MAV	77.9%	22.1%	0.0%	100%
OSV	66.1%	33.9%	0.0%	100%
Total Vehicles	**72.4%**	**27.6%**	**0.0%**	**100%**

RECOMMENDED TRIP CATEGORIES – TP1

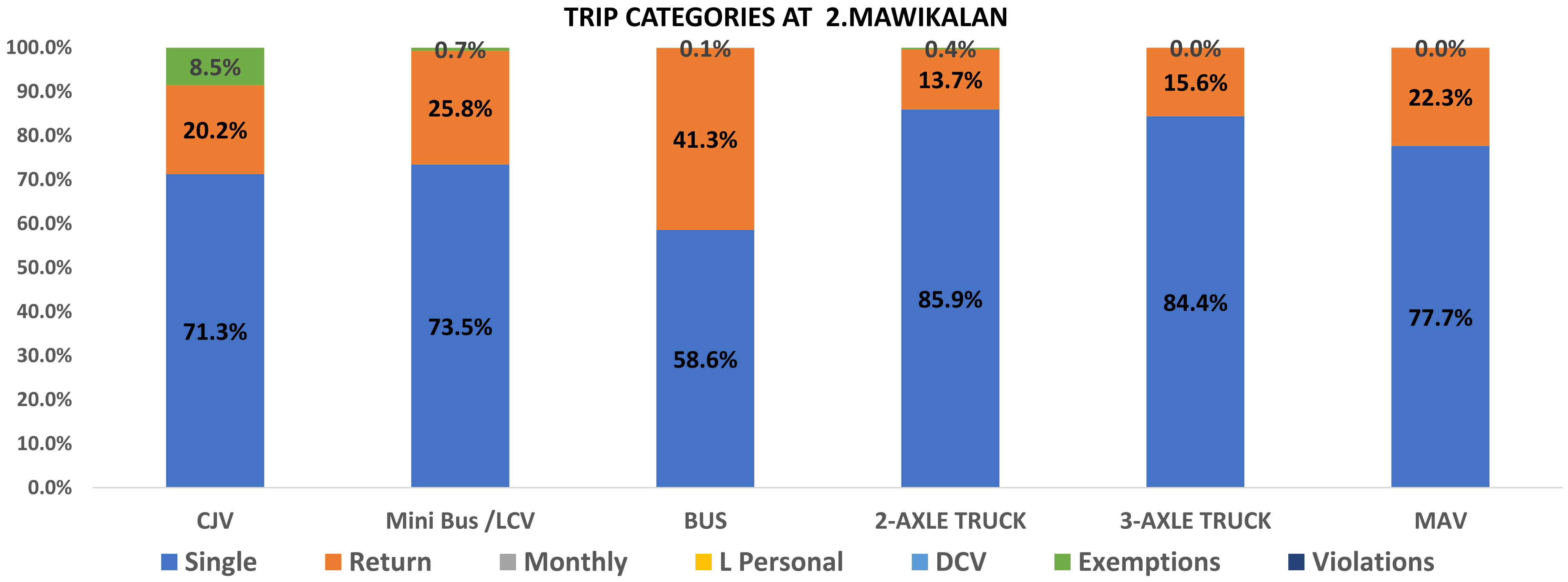


- It is observed from Trip Categories, Single Journey tickets varies between 47% and 88%. At Jakhauli toll plaza nearly 88% of 3-Axle trucks are using single journey tickets. Return Journey tickets varies between 12% to 53% and Nearly 53% of Buses are taking Return Journey tickets at Jakhauli Toll Plaza.
- Overall ,74% single Journey tickets and 26% Return Journey tickets observed at Jakhauli toll Plaza. Return Journey trips are more than 25% , which indicates the more local traffic at toll plaza location.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

O-D Wise Trip Categories >

RECOMMENDED TRIP CATEGORIES – TP2

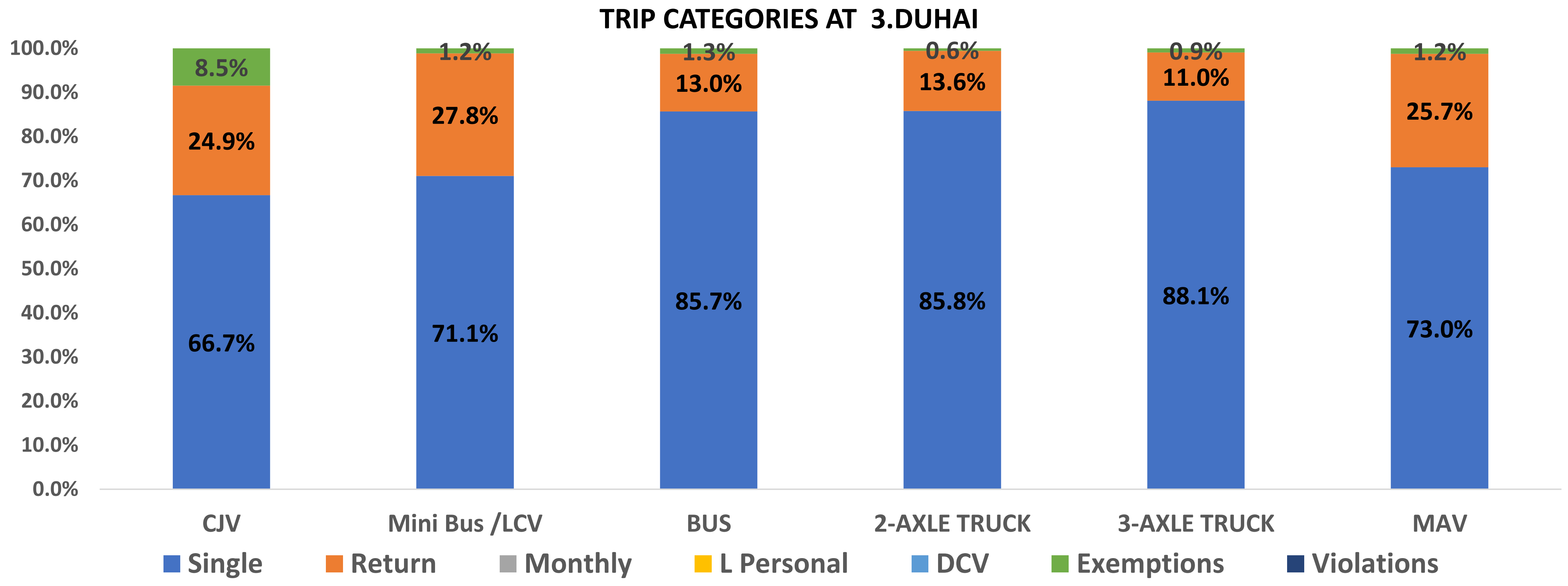


- It is observed from Trip Categories, Single Journey tickets varies between 59% and 86%. At Mawi Kalan toll plaza nearly 86% of 2-Axle trucks are using single journey tickets. Return Journey tickets varies between 14% to 41% and Nearly 41% of Buses are Using Return Journey tickets at Mawi kalan Toll Plaza.
- 8.5% Exempted traffic observed in CJV Vehicles and in other vehicles exempted traffic is less than 1%.
- Overall , 72% single Journey tickets and 22% Return Journey tickets and 6% of exempted traffic observed at Mawi Kalan Toll Plaza.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

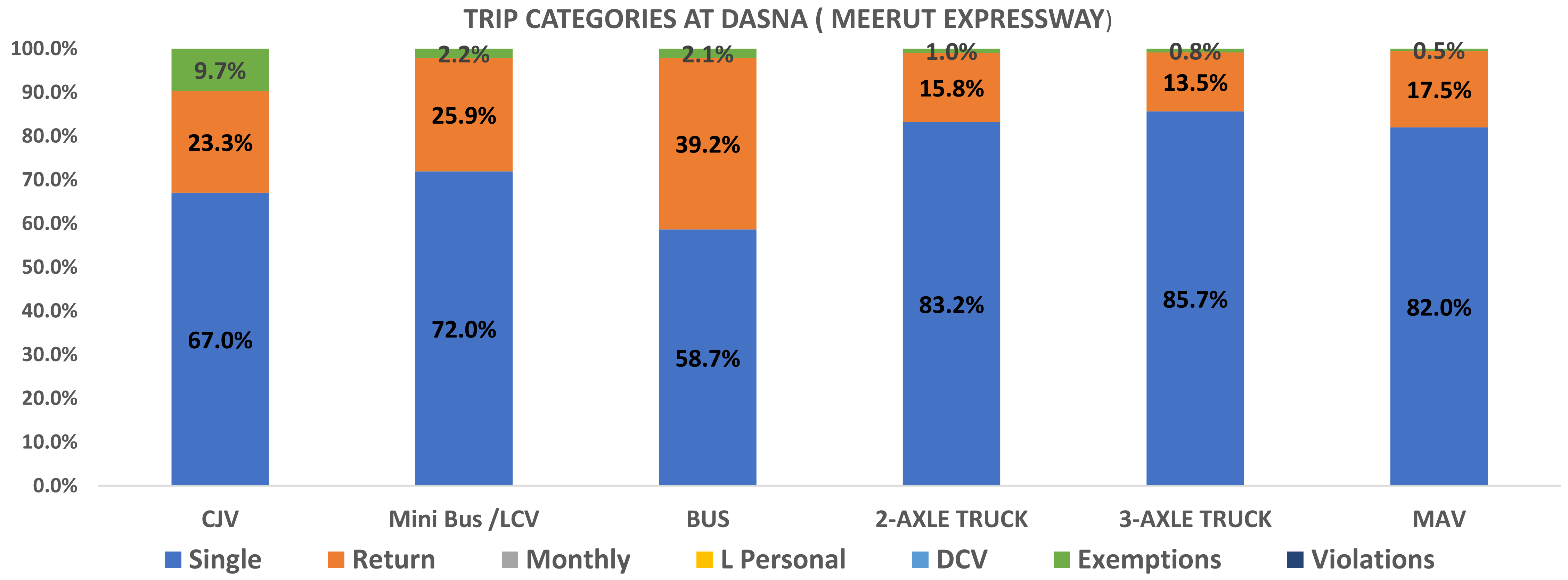
O-D Wise Trip Categories >

RECOMMENDED TRIP CATEGORIES – TP3



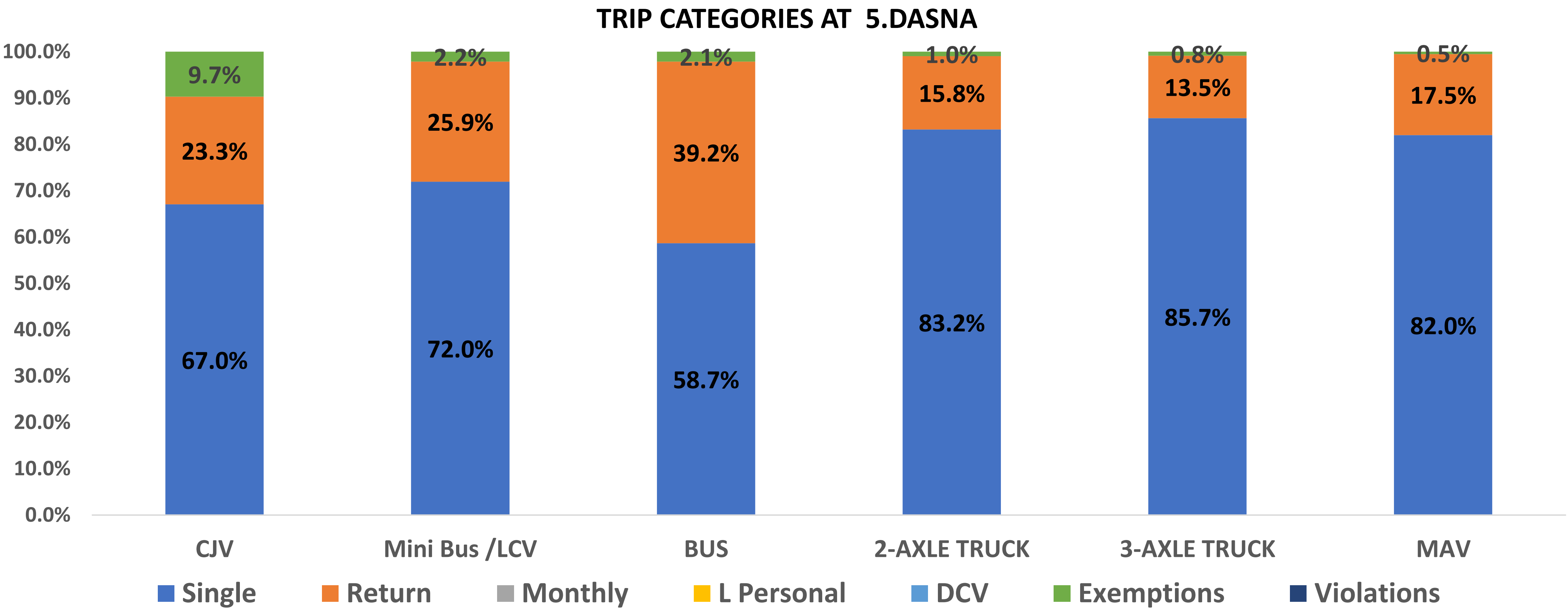
- It is observed from Trip Categories, Single Journey tickets varies between 67% and 88%. At Duhai toll plaza nearly 88% of 3-Axle trucks are using single journey tickets. Return Journey tickets varies between 11% to 28% and Nearly 26% of MAVs are Using Return Journey tickets at Duahi Toll Plaza.
- 8.5% Exempted traffic observed in CJV Vehicles and in other vehicles exempted traffic is less than 1.5%.
- Overall , 70% single Journey tickets and 24% Return Journey tickets and 6% of exempted traffic observed at Duhai Toll Plaza.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx



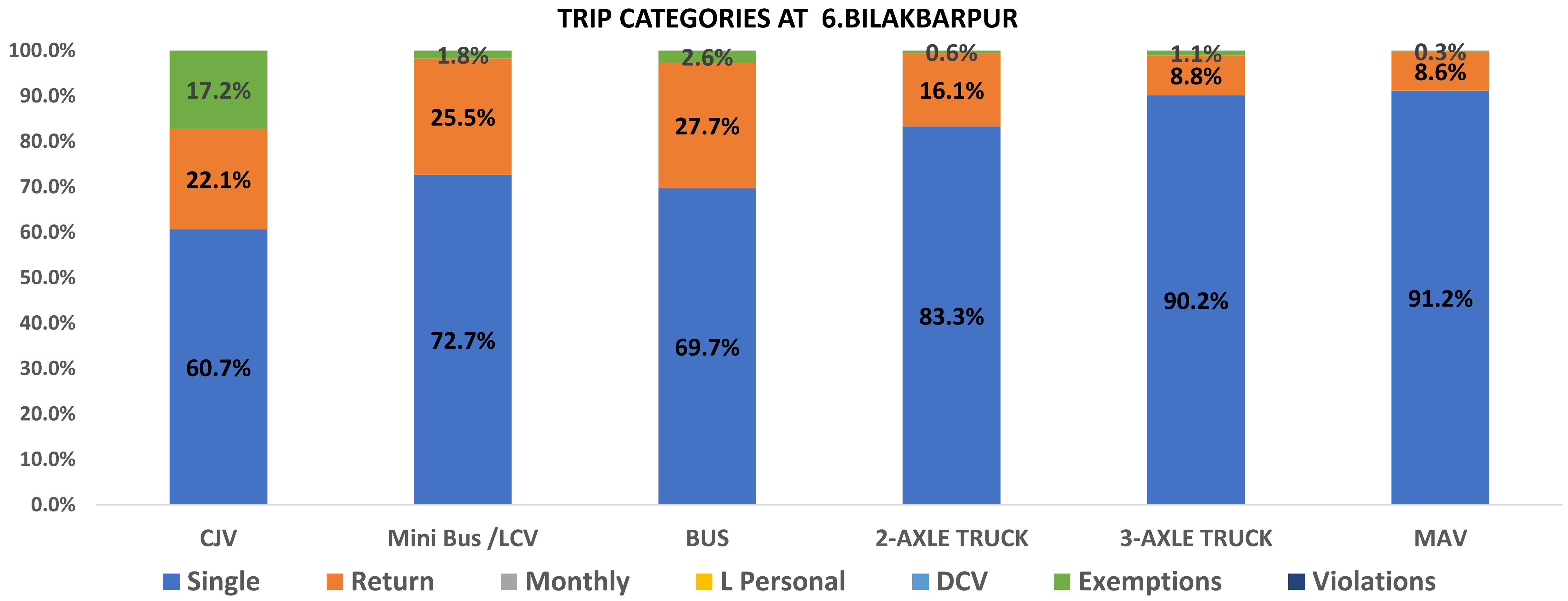
- It is observed from Trip Categories, Single Journey tickets varies between 59% and 86%. At this toll plaza nearly 86% of 3-Axle trucks are using single journey tickets. Return Journey tickets varies between 14% to 40% and Nearly 40% of Buses are Using Return Journey tickets at Dasna Toll Plaza.
- 9.7% Exempted traffic observed in CJV Vehicles and in other vehicles exempted traffic is less than 2.2%.
- Overall , 71% single Journey tickets and 22% Return Journey tickets and 7% of exempted traffic observed at Dasna Toll Plaza.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx



- It is observed from Trip Categories, Single Journey tickets varies between 59% and 86%. At Dasna toll plaza nearly 86% of 3-Axle trucks are using single journey tickets. Return Journey tickets varies between 14% to 40% and Nearly 40% of Buses are Using Return Journey tickets at Dasna Toll Plaza.
- 9.7% Exempted traffic observed in CJV Vehicles and in other vehicles exempted traffic is less than 2.2%.
- Overall , 71% single Journey tickets and 22% Return Journey tickets and 7% of exempted traffic observed at Dasna Toll Plaza.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

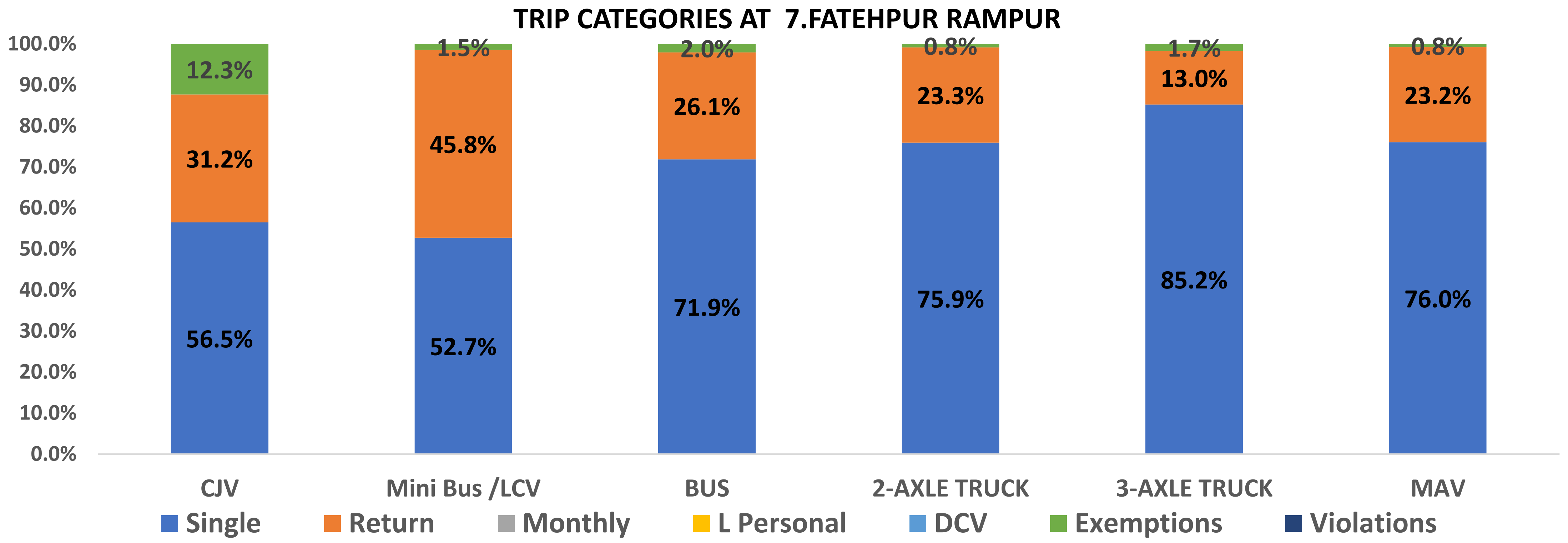


- It is observed from Trip Categories, Single Journey tickets varies between 61% and 91%. At Bilakbarpur toll plaza nearly 91% of MAVs are using single journey tickets. Return Journey tickets varies between 8.6% to 28% and Nearly 28% of Buses are Using Return Journey tickets at Bilakbarpur Toll Plaza.
- 17.2% Exempted traffic observed in CJV Vehicles and 1.8 % , 2.6% Exempted traffic observed in LVC and Bus traffic. The exempted traffic in Cars is higher compares to other plazas on this corridor. Overall , 70% single Journey tickets and 19% Return Journey tickets and 11% of exempted traffic observed at Bilakbarpur Toll Plaza.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

O-D Wise Trip Categories >

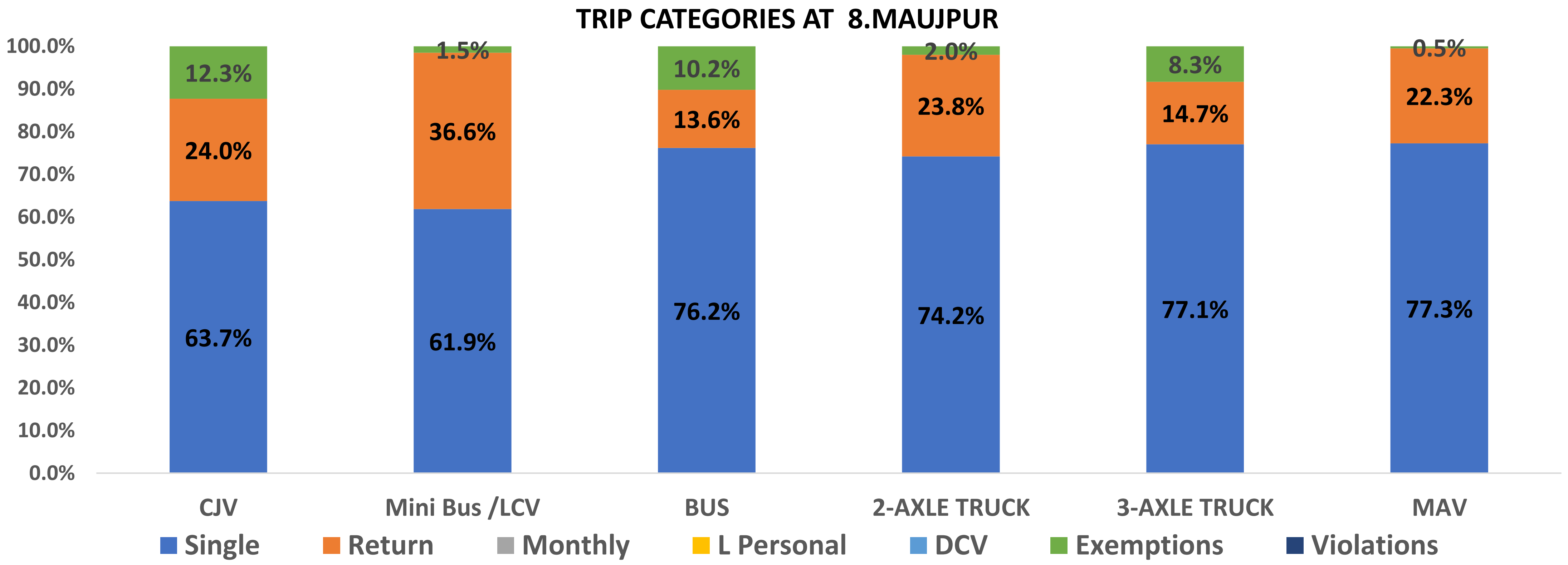
RECOMMENDED TRIP CATEGORIES – TP7



- It is observed from Trip Categories, Single Journey tickets varies between 53% and 85%. At Fatehpur Rampur toll plaza nearly 85% of 3-Axle are using single journey tickets. Return Journey tickets varies between 13% to 46 % and Nearly 46% of Mini Bus/ LCV are Using Return Journey tickets at this Toll Plaza.
- 12.3% Exempted traffic observed in CJV Vehicles and 2% , 1.7% Exempted traffic observed in Bus and 3-Axle traffic. The exempted traffic in Cars is high at this location. Overall , 61% single Journey tickets and 31% Return Journey tickets and 8% of exempted traffic observed at Fatehpur Toll Plaza. Return Journey trips are more than 31% , which indicates the more local traffic at toll plaza location.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

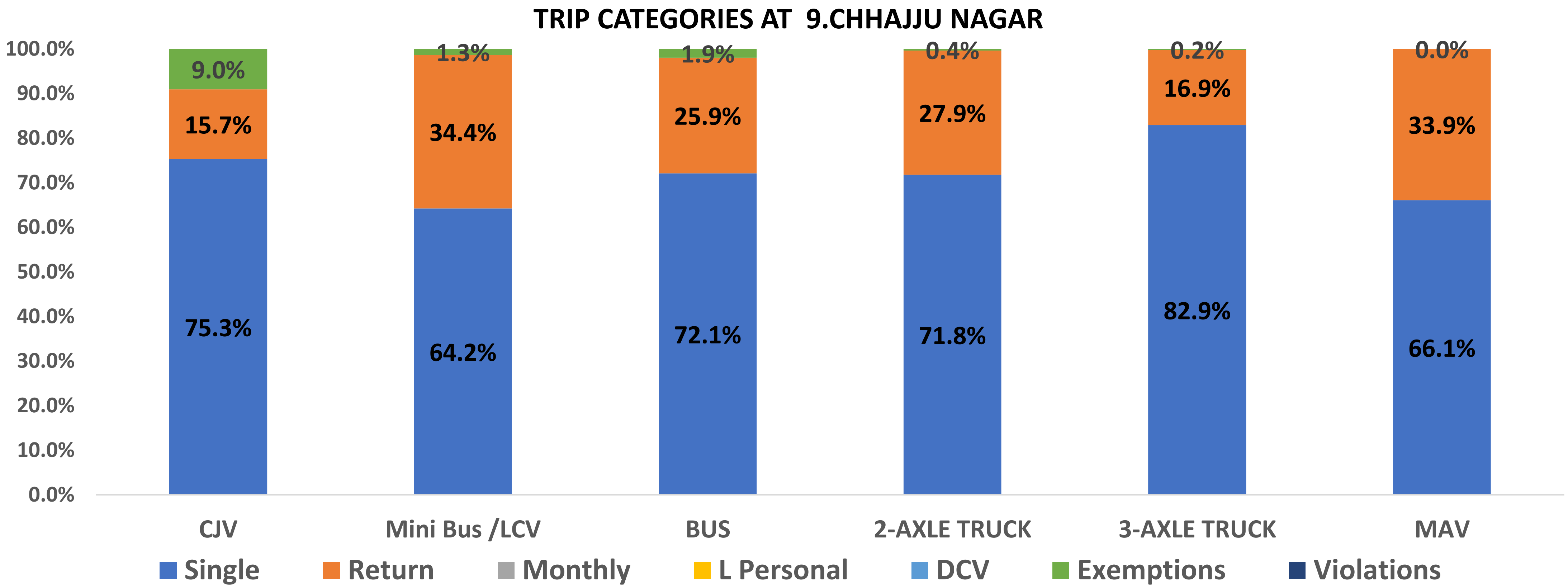
RECOMMENDED TRIP CATEGORIES – TP8



- It is observed from Trip Categories, Single Journey tickets varies between 62% and 77%. At Maujpur toll plaza nearly 77% of 3-Axle are using single journey tickets. Return Journey tickets varies between 14% to 37 % and Nearly 37% of Mini Bus/ LCV are Using Return Journey tickets at this Toll Plaza.
- 12.3% Exempted traffic observed in CJV Vehicles and 10.2% Exempted traffic observed in Bus Trips. The exempted traffic in Cars is high at this location. Overall , 66% single Journey tickets and 26% Return Journey tickets and 8% of exempted traffic observed at this location. Return Journey trips are more than 25% , which indicates the more local traffic at toll plaza location.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

RECOMMENDED TRIP CATEGORIES – TP9

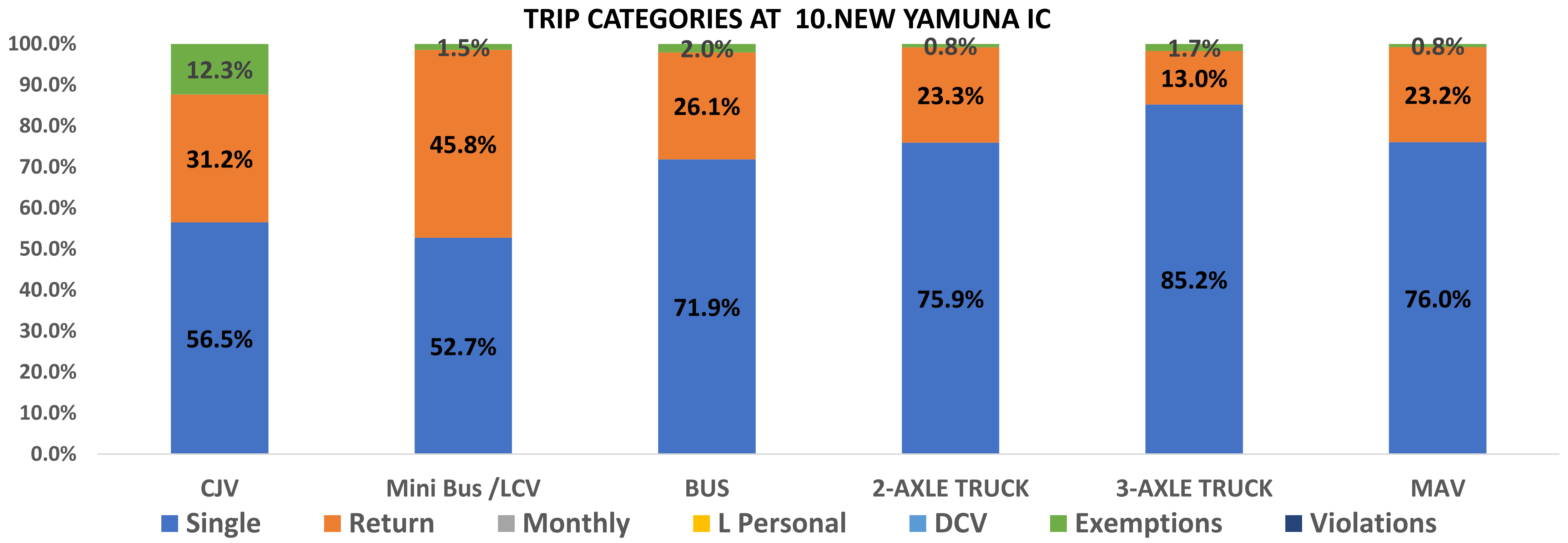


Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

- It is observed from Trip Categories, Single Journey tickets varies between 64% and 83%. At this toll plaza nearly 83% of 3-Axle are using single journey tickets. Return Journey tickets varies between 16% to 34 % and Nearly 34% of Mini Bus/ LCV are Using Return Journey tickets at this Toll Plaza.
- 9% Exempted traffic observed in CJV Vehicles and 1.3% , 1.9% Exempted traffic observed in Mini Bus/LCV and Bus traffic. Overall , 71% single Journey tickets and 25% Return Journey tickets and 4% of exempted traffic observed at Chhajju Nagar toll Plaza.
- **Apart from the above existing 9 Toll Plazas, 3 new toll plazas are proposed to come up at the intersections of the project road with Yamuna Expressway, Jewar airport link and NH344D (Palwal – Aligarh Rd)**

O-D Wise Trip Categories >

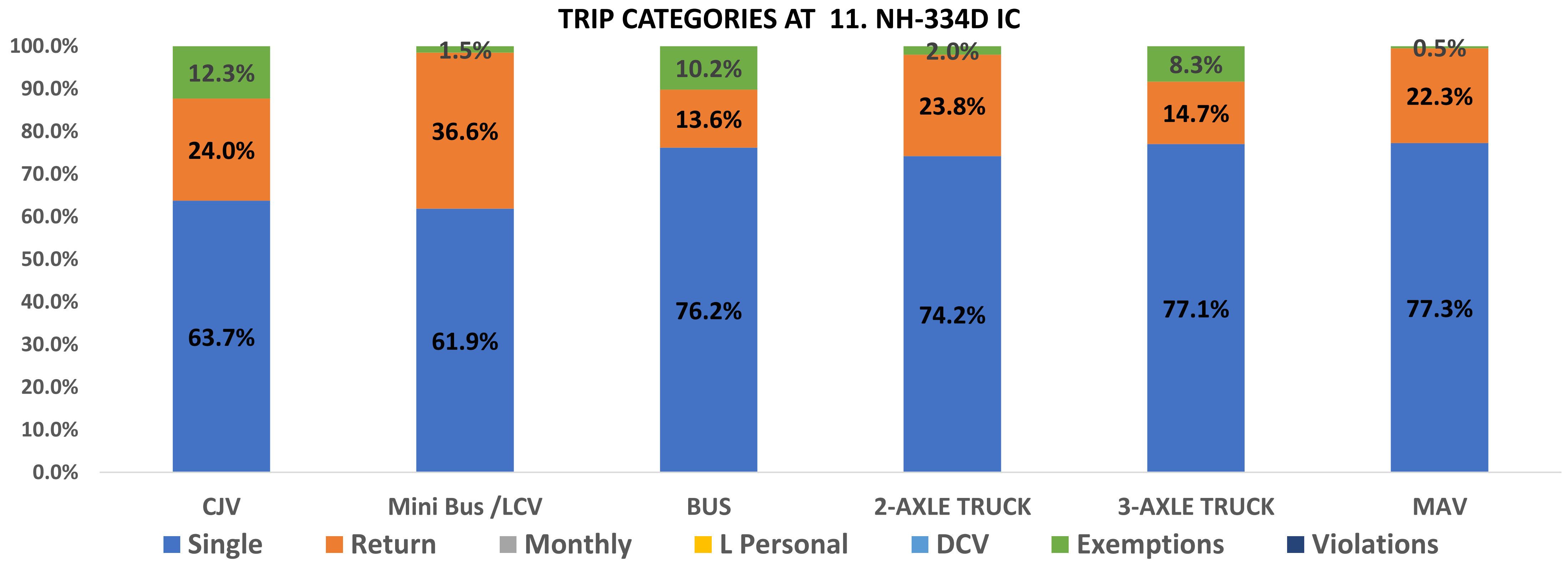
RECOMMENDED TRIP CATEGORIES – TP10



- It is observed from Trip Categories, Single Journey tickets varies between 53% and 85%. At new Yamuna toll plaza nearly 85% of 3-Axle are using single journey tickets. Return Journey tickets varies between 13% to 46 % and Nearly 46% of Mini Bus/ LCV are Using Return Journey tickets at this Toll Plaza.
- 12.3% Exempted traffic observed in CJV Vehicles and 2% , 1.7% Exempted traffic observed in Bus and 3-Axle traffic. The exempted traffic in Cars is high at this location. Overall , 61% single Journey tickets and 31% Return Journey tickets and 8% of exempted traffic observed at Yamuna Toll Plaza. Return Journey trips are more than 31% , which indicates the more local traffic at toll plaza location.

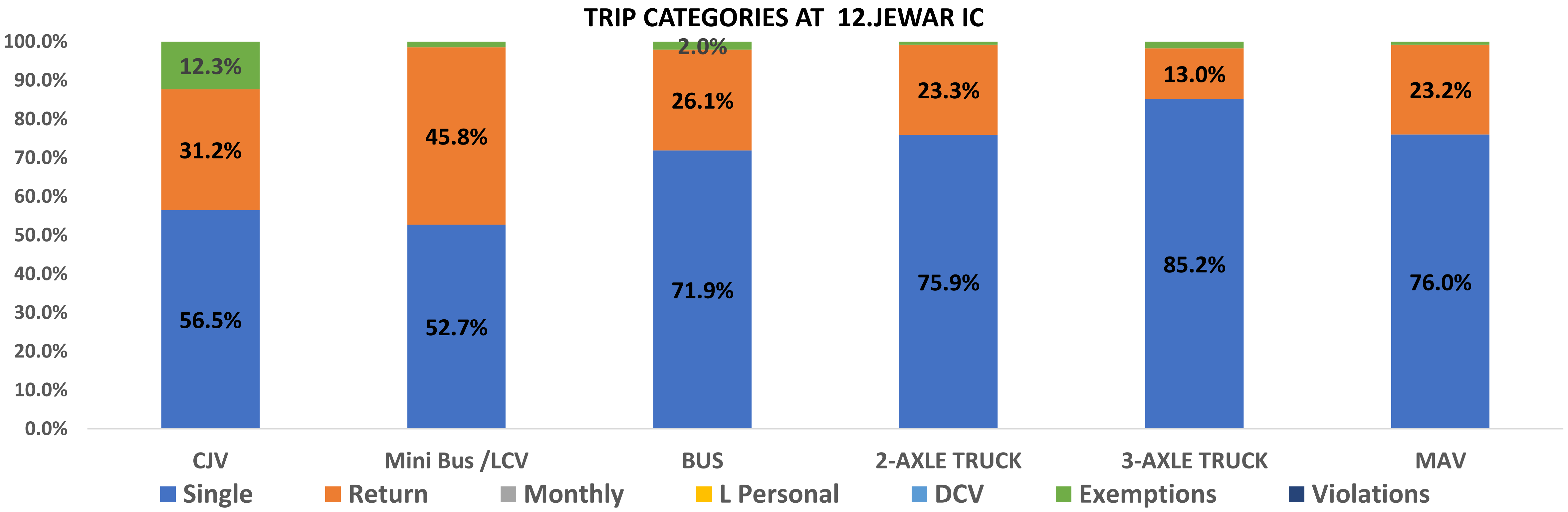
Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

RECOMMENDED TRIP CATEGORIES – TP11



- It is observed from Trip Categories, Single Journey tickets varies between 62% and 77%. At NH-334D toll plaza nearly 77% of 3-Axle are using single journey tickets. Return Journey tickets varies between 14% to 37 % and Nearly 37% of Mini Bus/ LCV are Using Return Journey tickets at this Toll Plaza.
- 12.3% Exempted traffic observed in CJV Vehicles and 10.2% Exempted traffic observed in Bus Trips. The exempted traffic in Cars is high at this location. Overall , 66% single Journey tickets and 26% Return Journey tickets and 8% of exempted traffic observed at this location. Return Journey trips are more than 25% , which indicates the more local traffic at toll plaza location.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx



- It is observed from Trip Categories, Single Journey tickets varies between 53% and 85%. At new Yamuna toll plaza nearly 85% of 3-Axle are using single journey tickets. Return Journey tickets varies between 13% to 46 % and Nearly 46% of Minibus/ LCV are Using Return Journey tickets at this Toll Plaza.
- 12.3% Exempted traffic observed in CJV Vehicles and 2% , 1.7% Exempted traffic observed in Bus and 3-Axle traffic. The exempted traffic in Cars is high at this location. Overall , 61% single Journey tickets and 31% Return Journey tickets and 8% of exempted traffic observed at Yamuna Toll Plaza. Return Journey trips are more than 31% , which indicates the more local traffic at toll plaza location.

Reference:- All TPs Fastag Data+Cash Data_ADT Trip Categories_V03.xlsx

DIVERSIONS AND DEVELOPMENTS

NETWORK DIVERSIONS CONSIDERED IN EPE TRAFFIC PROJECTIONS

S.NO	DIVERSION/ IMPACT	DESCRIPTION	IMPACT TYPE	IMPACT YEAR	MAGNITUDE OF IMAPCT
1	Farmers Protests	The recently concluded farmers protest had impacted the traffic movement on the Singhu Border (NH-44), Ghazipur Border. Though the blockage has ended, IBI is of the opinion that the situation would return to normalcy only in FY-23 The Traffic entering and exiting Delhi city are forced to take the EPE to exit the city. Hence, Post the protests the traffic is expected to return to its original route.	Negative	FY-23	High
2	Eastern DFC	The Proposed Eastern Dedicated Freight Corridor from Amritsar to Dankuni is expected to impact the long freight distance traffic	Negative	FY-24	Low/Medium
3	Meerut RRTS & Alwar RRTS	As per IBI, the Meerut RRTS and Alwar RRTS individually would not impact the traffic on the project corridor. But combinedly by connecting Alwar, Gurugram, Manesar with Ghaziabad, Meerut etc.. RRTS could impact passenger movement on the project road	Negative	FY-32	Low/Medium
4	DME Noida & Jewar Spur	DME developed at a cost of 98,000 crores, the 1380 km long Delhi Mumbai expressway will be the longest expressway in India. It will enhance connectivity between National Capital, Delhi and Financial Capital, Mumbai. The expressway will connect urban centers of Delhi through Delhi-Faridabad-Sohna section of the corridor along with a spur to Jewar Airport and Jawaharlal Nehru Port to Mumbai through a spur in Mumbai.	Negative	FY-27	Low/Medium

NETWORK DIVERSIONS CONSIDERED IN EPE TRAFFIC PROJECTIONS

S.NO	DIVERSION/ IMPACT	DESCRIPTION	IMPACT TYPE	IMPACT YEAR	MAGNITUDE OF IMAPCT
5	Dehradun E'Way (Noida & Ghaziabad Traffic)	It is estimated that the proposed Dehradun E'way that originates at Akshardham and terminates near Dehradun intersecting the project road at Mawikalan shall attract the traffic originating in Ghaziabad and Noida and terminating in the Haridwar/Dehradun region and vice versa. Also, It is expected that the current traffic exiting at Duhai (or) Meerut Expressway and travelling towards Dehradun are expected to exit at Mawikalan which facilitates transfer between the project corridor and the proposed expressway.	Positive	FY-26	Medium/High
6	Commodity Risk : Construction Material	NCR region is observed to be a real estate hub which is witnessing rapid construction activity. But IBI estimates that once the real estate activity reduces in the influence area, the flow of the commodities shall also decrease. Hence, IBI estimates that Post FY-33 there would be a significant reduction in the traffic with commodities as Sand, Cement and other construction materials. This reduction is applied at the toll plazas where the above-mentioned commodities are found to be more than 20% of the overall commodities at the toll plaza	Negative	FY-33	Medium/High

DEVELOPMENTS CONSIDERED IN EPE TRAFFIC PROJECTIONS

S.NO	DEVELOPMENTS	DESCRIPTION	IMPACT TYPE	IMPACT YEAR	MAGNITUDE OF IMAPCT
1	Dadri-Noida-Ghaziabad Investment Region (DMIC) & New Noida City	The area of the DNGIR spreads across the districts of Bulandshahr and Gautam Buddh Nagar and covers 85 villages. The site of the proposed early bird projects i.e., Multi Modal Logistics Hub near Dadri and Multi Modal Transit Hub at Boraki in Greater Noida, along with, the site for the proposed Integrated Industrial Township, Greater Noida. MRTS between DNGIR and IGI Airport Delhi is also included in the project. A new Noida City is also Planned to be developed on 20,900 Ha of land between Dadri , Sikandrabad and Khurja under DNGIR	Positive	FY-30	Low/Medium
2	Noida International Airport & UP Defense Corridor	The Proposed Noida International Airport and the Defense Industrial Corridor may result in establishment of smaller ancillary industries in the close vicinity resulting in attracting traffic to Project road	Positive	FY-25	Medium/ High
3	YEIDA Developmental Traffic	IBI expects that with the opening of the two interchanges i.e., Yamuna E'Way interchange and the NH-334D interchange there would be land base developments that would generate additional traffic apart from the redistributed traffic.	Positive	FY-26	Medium

Expected Diversions and Developments on the Project road

S.NO	Diversion / Development	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	TP9
1	Farmers Protest	Yes	Yes	NA	NA	NA	NA	NA	NA	NA
2	Eastern DFC	Yes	NA	NA	Yes	NA	NA	Yes	NA	Yes
3	RRTS (Alwar + Meerut)	Yes	NA	Yes	Yes	Yes	NA	NA	NA	Yes
4	Orbital Rail Corridor (Haryana)	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Delhi Mumbai E'Way (Noida & Jewar Spur)	NA	NA	NA	NA	Yes	Yes	Yes	Yes	Yes
6	Dehradun E'Way (Noida & Ghaziabad Traffic)	NA	Yes	NA	Yes	NA	NA	NA	NA	NA
7	Dehradun E'Way (Negative)	NA	NA	NA	Yes	NA	NA	NA	NA	Yes
8	Dehradun E'Way (Positive)	NA	Yes	NA	NA	NA	NA	Yes	NA	Yes
9	Commodity Risk (Sand)	NA	Yes	NA	NA	NA	NA	NA	NA	NA
10	Commodity Risk (Cement)	NA	NA	NA	NA	NA	Yes	Yes	NA	NA
11	Yamuna E'Way Interchange	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	NH334D Interchange	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	DNGIR & New Noida City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	Jewar Airport	NA	NA	NA	Yes	Yes	Yes	Yes	NA	NA
15	YEIDA Development	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

01 FARMERS PROTESTS

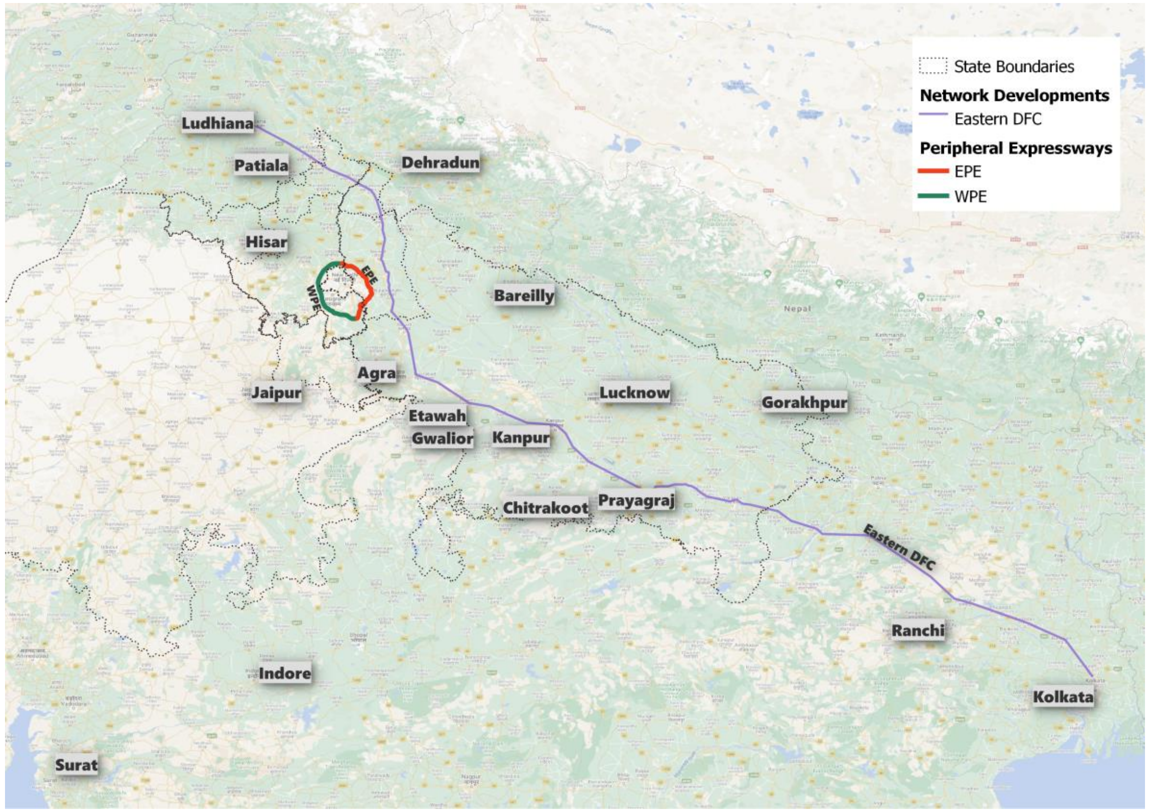
- Farmers have been protesting in Northern parts of Haryana, and in parts of Uttar Pradesh and Delhi since 2020. These Protests had impacted the traffic movement on the Singhu Border (NH-44), Ghazipur Border.
- Due to these protests, the traffic entering and exiting Delhi city forced to take EPE to exit city.
- As these protests concluded recently (early Dec'21), the traffic is expected to return to its original route in the early FY-23 only
- Impacted Toll Plazas are Jakhauli & Mawi Kalan

Impact Type

Current Status

Completed [11th Dec'21]

02 EASTERN DEDICATED FREIGHT CORRIDOR (EDFC)



- EDFC , an 1,839 Km project billed as the largest rail infrastructure being built in independent India and has been in the making since 2006.
- EDFC route has coal mines, thermal power plants and industrial cities.
- The Proposed Eastern Dedicated Freight Corridor from Ludhiana(Punjab) to Dankuni (West Bengal) is expected to impact the long-distance traffic in EPE

Impact Type

Current Status

397 Km -Operational

1,442 Km –Under Construction

Impact Year

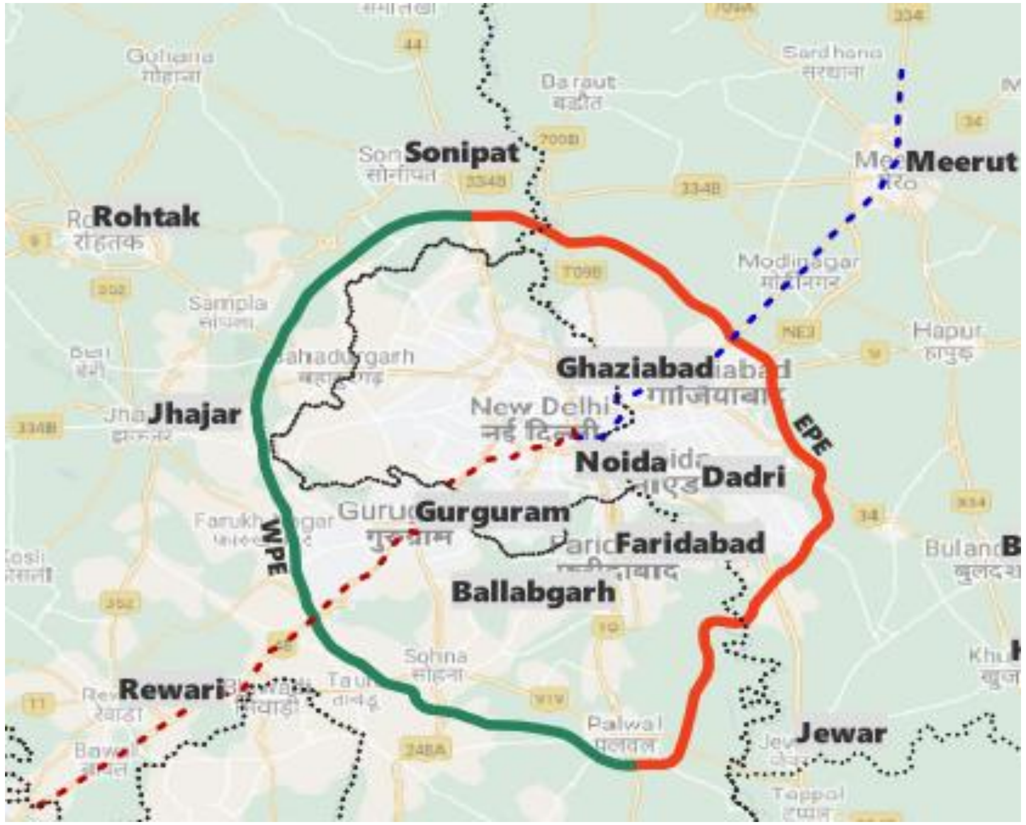
FY 2024

Distance of Development

1839

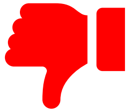
Impact assessment summary>

03 MEERUT RRTS & ALWAR RRTS



- Delhi-Ghaziabad-Meerut : 82 KM (FY '25)
- Delhi-Gurugram-SNB-Alwar : 164 KM (FY '31)
- As per IBI, the Meerut RRTS and Alwar RRTS individually would not impact the traffic on the project corridor
- Combinedly by connecting Alwar, Gurugram, Manesar with Ghaziabad, Meerut etc.. RRTS could impact passenger movement on the project road

Impact Type



Current Status

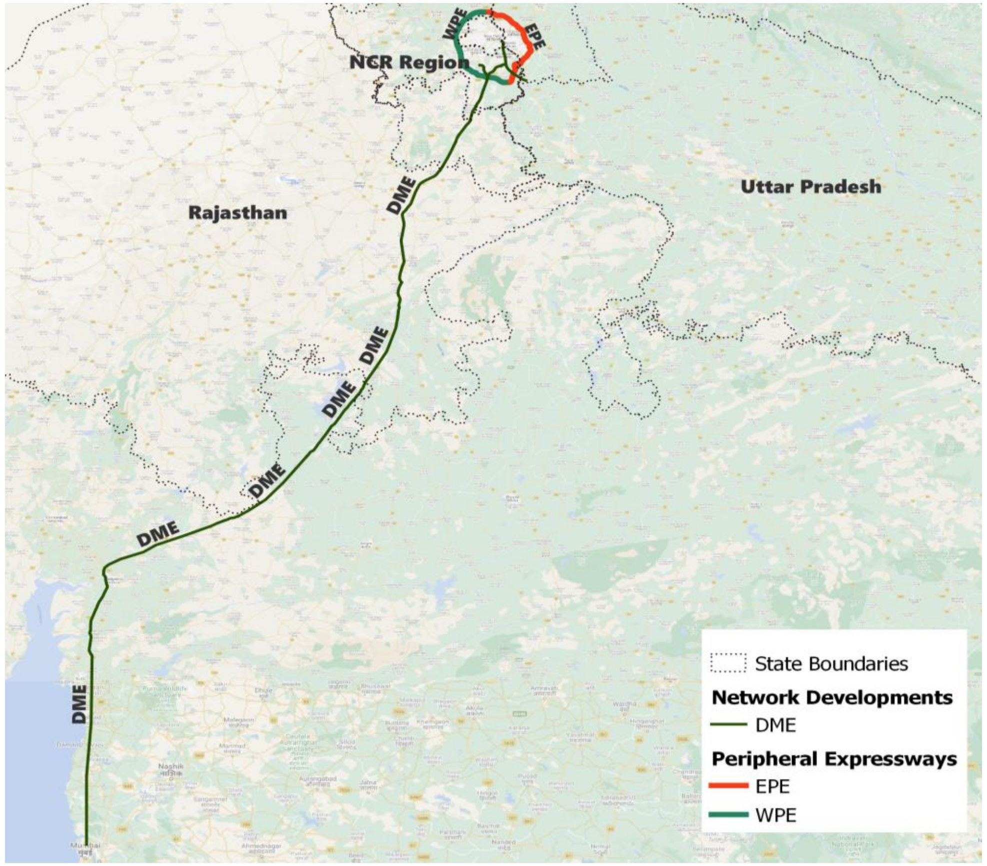
Land Allotment completed in Alwar

Impact Year

FY 2032

Impact assessment summary>

05 DME NOIDA & JEWAR SPUR

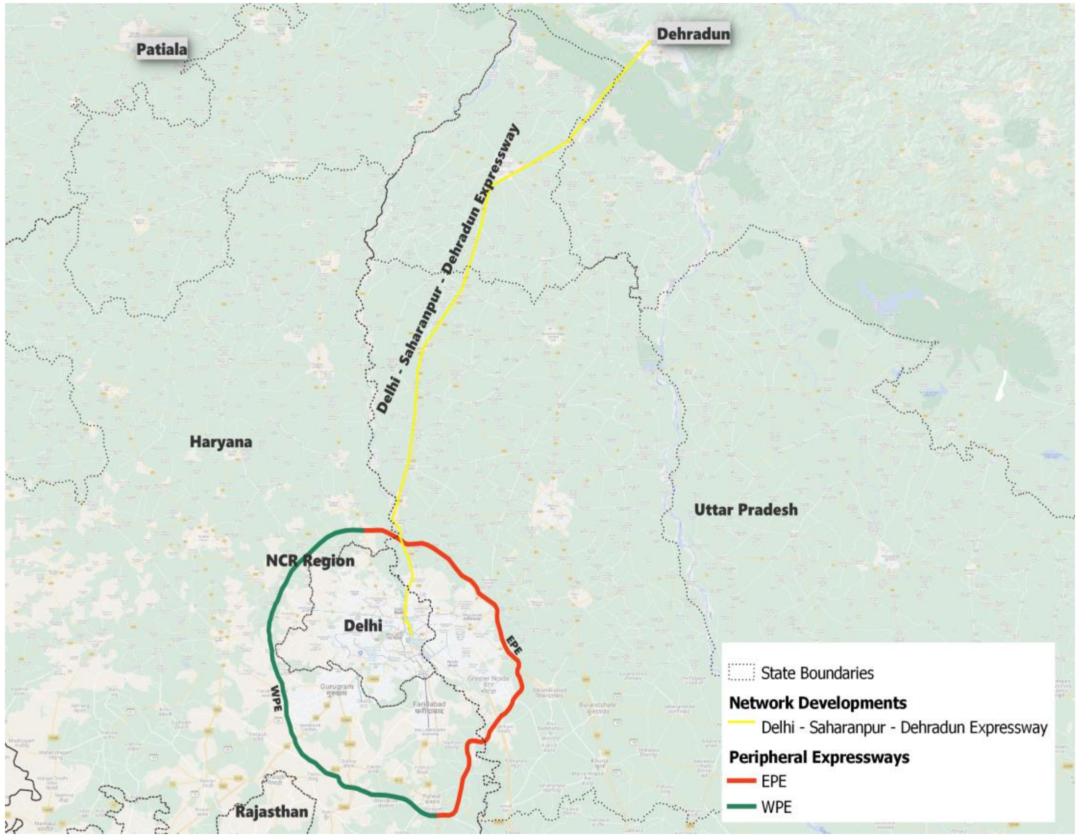


- Connects urban centers of Delhi through Delhi-Faridabad-Sohna section of the corridor along with a spur to Jewar Airport and Jawaharlal Nehru Port to Mumbai through a spur in Mumbai
- 8 lane access-controlled expressway expected to halve the commute time between Delhi and Mumbai from nearly 24 hours to 12 hours and shorten the distance by 130 km

Project Cost	Impact Type	Current Status	Impact Year	Distance of Development
₹ 98,000 Cr.		Construction Work Commenced	FY 2027	1380 Km

Impact assessment summary>

06 SAHARANPUR EXPRESSWAY/ DELHI-SAHARANPUR-DEHRADUN ECONOMIC CORRIDOR



- Six-lane project that will start at Akshardham Temple in Delhi and ends at Saharanpur in Uttar Pradesh, with a 19 km of an elevated stretch from Akshardham to the EPE intersection

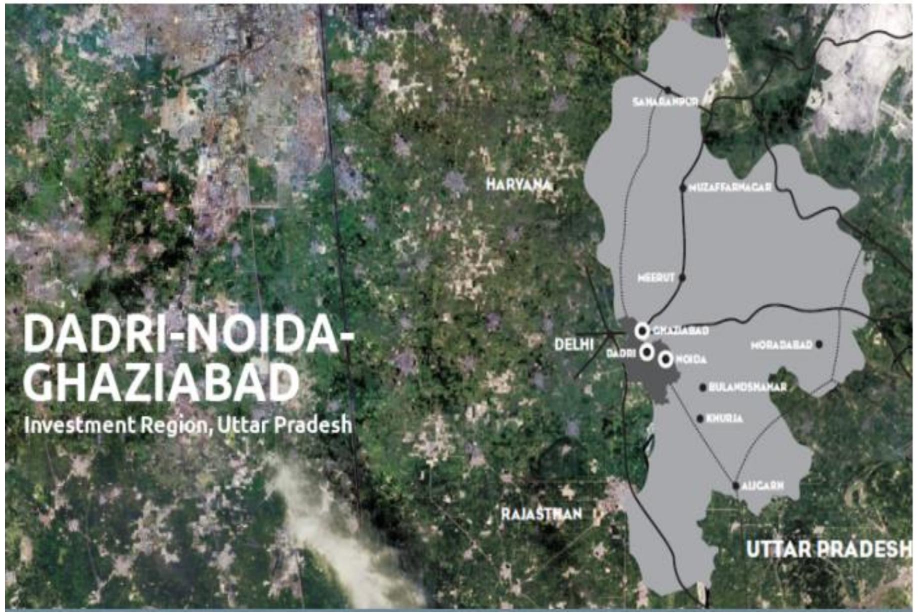
- Once completed, it reduces distance between two cities from 235 kilometers to 210 kilometers, and travel time from 6.5 hours as of now, to just 2.5 hours

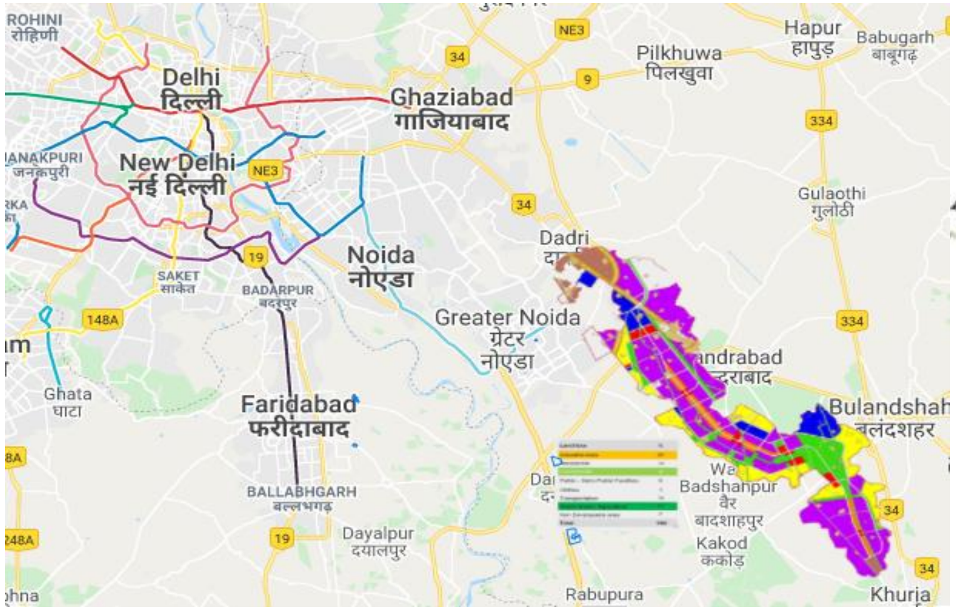
- Tendered in 4 packages:
  - Section-1 Akshardham in Delhi to Baghpat's EPE Interchange
  - Sectio-2 Baghpat's Eastern Peripheral Expressway (EPE) Interchange to Saharanpur Bypass
  - Section-3 Saharanpur to Ganeshpur
  - Section-4 Ganeshpur to Dehradun

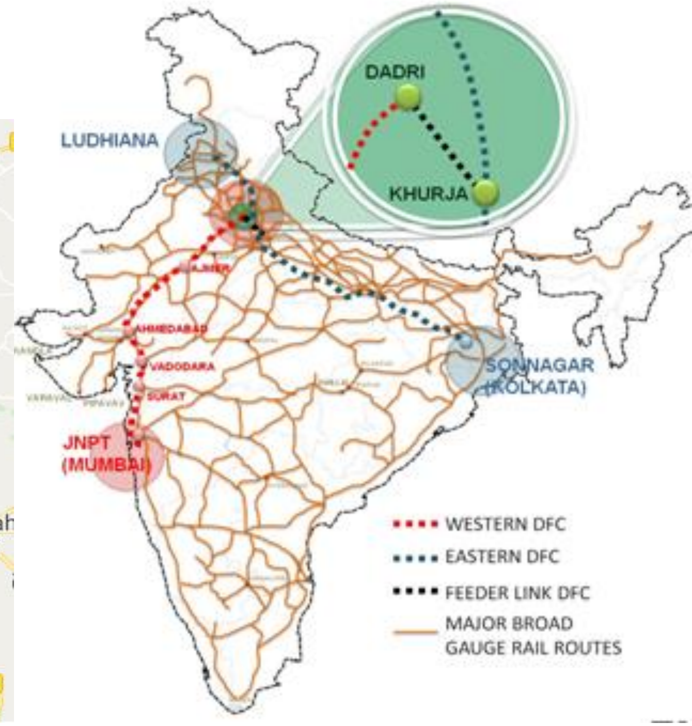
Project Cost	Impact Type	Current Status	Impact Year	Distance of Development
₹ 61,376 Cr.		Construction Commenced	FY 2026	155 Km

Impact assessment summary>

07 DADRI-GHAZIABAD-NOIDA INVESTMENT REGION







- DNGIR spreads across districts of Bulandshahr & Gautam Budha Nagar and covers 85 villages.

- Proposed early bird projects
  - **Integrated Industrial Township, Greater Noida.**
  - **Multi Modal Logistics Hub near Dadri**
  - **Multi Modal Transit Hub at Boraki in Greater Noida**
  - **New Noida City**
  - **MRTS between DNGIR and IGI Airport Delhi**

Land Use	%
Industrial	37
Residential	14
Commercial	4
Public-Semi Public space	6
Utilities	1
Transportation	14
Green Areas/ Agriculture	17
Non-Developable Areas	7
Total	**100**

Impact assessment summary>

07 DADRI-NOIDA-GHAZIABAD INVESTMENT REGION

A. Integrated Industrial Township at Greater Noida

- Approximately 35 Km's from Noida City , a world class, sustainable, safer and smarter township is planned in DNGIR region under DMIC
- Proximity to other major proposed landmark developments of the region improves both the passenger and logistics connectivity/movement to this industrial township.

B. Multi Modal Transport Hub (MMTH) at Boraki, Greater Noida

- MMTH, congregation of various transport modes - A state-of-art railway terminus , Interstate Bus Terminus [ISBT] and a Mass Rapid Transit System [MRTS].
- Spreads over an area of 412.7 Hectares
- Railway hub also encompasses a Business Centre including office complex, shopping complex and hotels.

C. Multi Modal Logistics Hub (MMLH) at Dadri

- Predominantly serves the export driven industries of Western UP
- Comprises an area of 293.8 Ha with an additional area of about between NH-91 and Eastern Peripheral Expressway (EPE) earmarked for future expansion
- One-stop destination to freight companies and customers, providing for efficient storage/transitioning of goods to/from DFC

AREA

Area of Development
303 Ha

Project Cost
5,500 Cr.

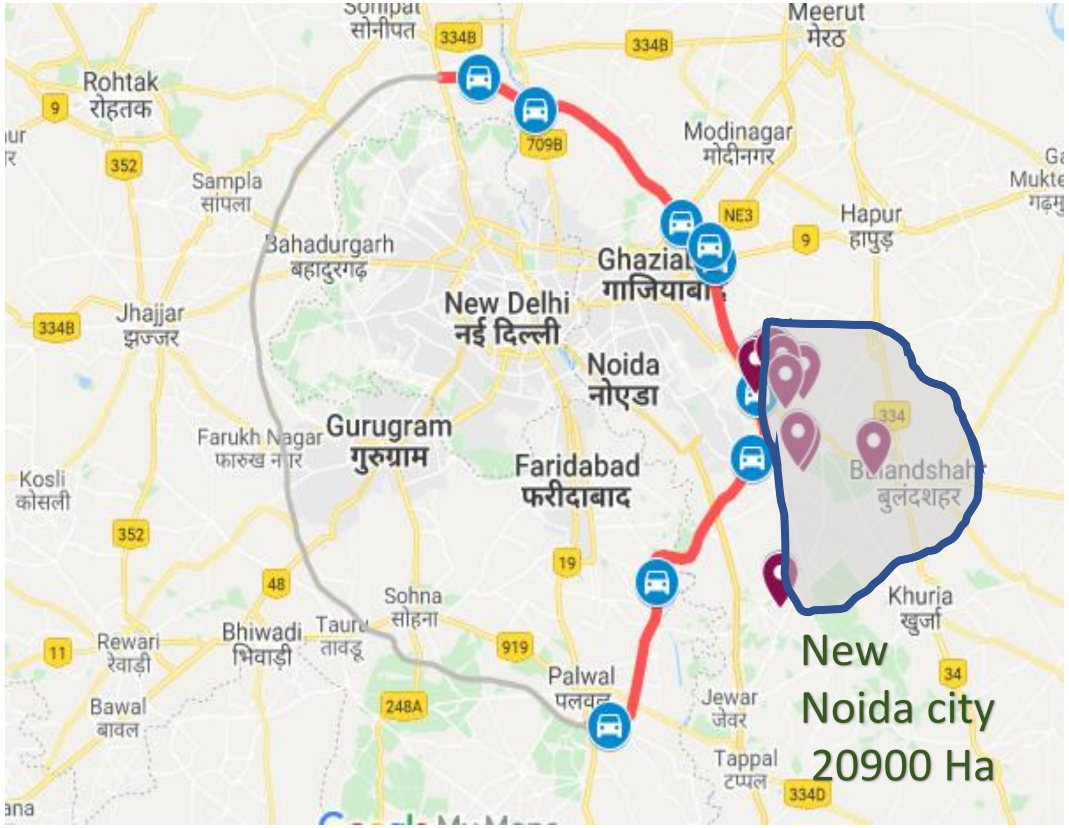
Impact Type

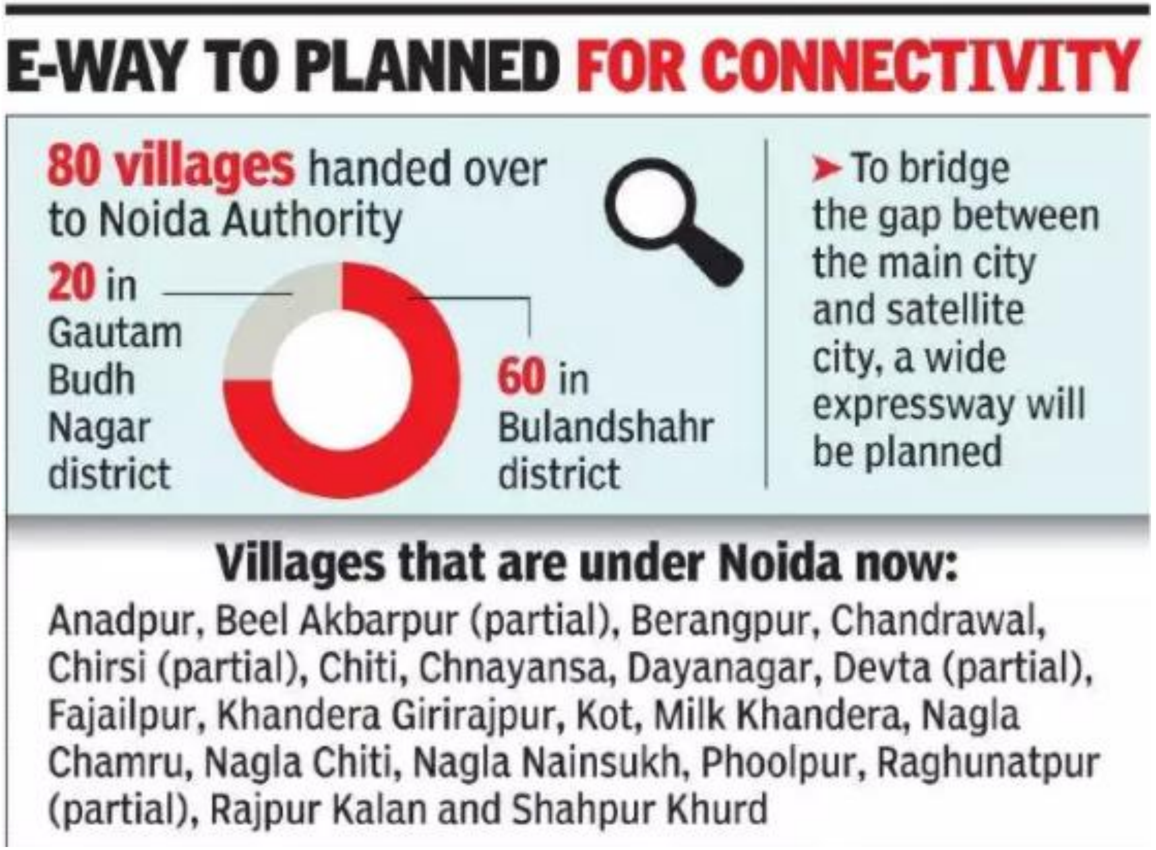
Current Status
Land Acquisition 100% Complete

Distance of Development
50 Km

Impact Year
FY 2030

08 NEW NOIDA CITY, UTTAR PRADESH





E-WAY TO PLANNED FOR CONNECTIVITY

80 villages handed over to Noida Authority

20 in Gautam Budh Nagar district

60 in Bulandshahr district

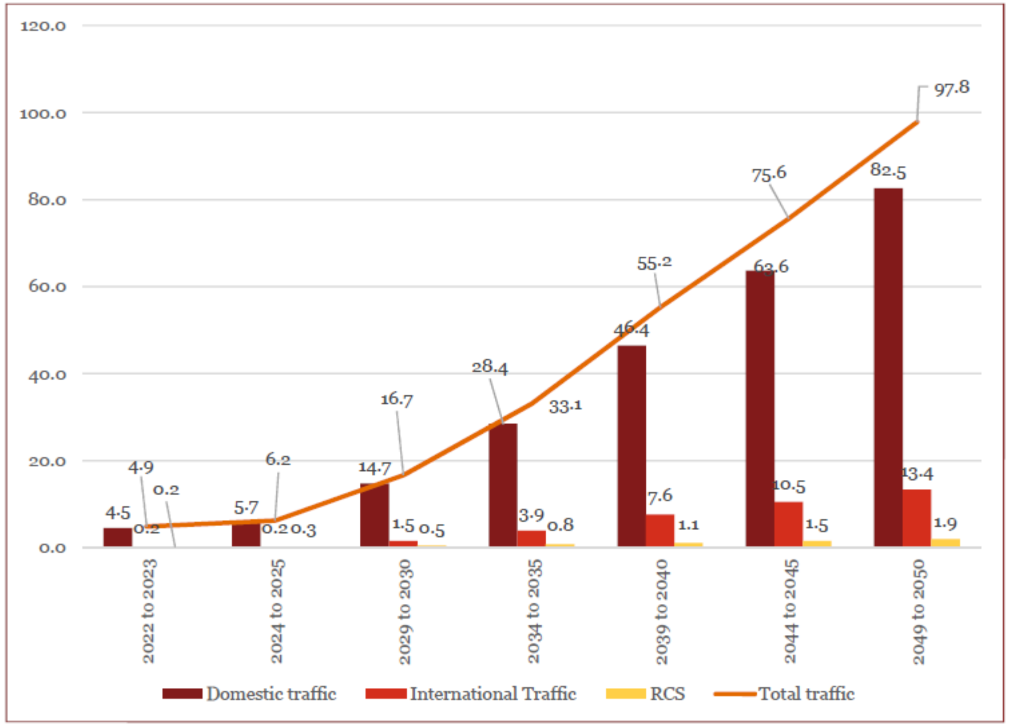
➤ To bridge the gap between the main city and satellite city, a wide expressway will be planned

Villages that are under Noida now:

Anadpur, Beel Akbarpur (partial), Berangpur, Chandrawal, Chirsi (partial), Chiti, Chnayansa, Dayanagar, Devta (partial), Fajailpur, Khandera Girirajpur, Kot, Milk Khandera, Nagla Chamru, Nagla Chiti, Nagla Nainsukh, Phoolpur, Raghunatpur (partial), Rajpur Kalan and Shahpur Khurd

Area of Development	Impact Type	Current Status	Impact Year
20,900 Ha	👍	Master Planning Stage	FY 2030

09 NOIDA INTERNATIONAL AIRPORT



Final demand for traffic at Jewar Airport

- Under-construction International airport in Jewar town, Gautam Buddh Nagar (UP)
- 72 Km's away from Indira Gandhi International Airport, Delhi
- Attracts establishment of smaller ancillary industries in the close vicinity resulting in attracting traffic to Project road(EPE)

Area of Development	Project Cost	Impact Type	Current Status	Impact Year
AREA 5000 Ha	₹ 29,560 Cr.		Construction Procedure Started	FY 2026

Impact assessment summary>

09 NOIDA INTERNATIONAL AIRPORT

A. ELECTRONIC DEVICE PARK

- To be developed in 250 acres, either in Sector 14, or Sector 10 of YEIDA near Jewar Airport.
- To house Mobile, TV and other electronic good manufacturing units of National & International Companies

B. MEDICAL DEVICE PARK

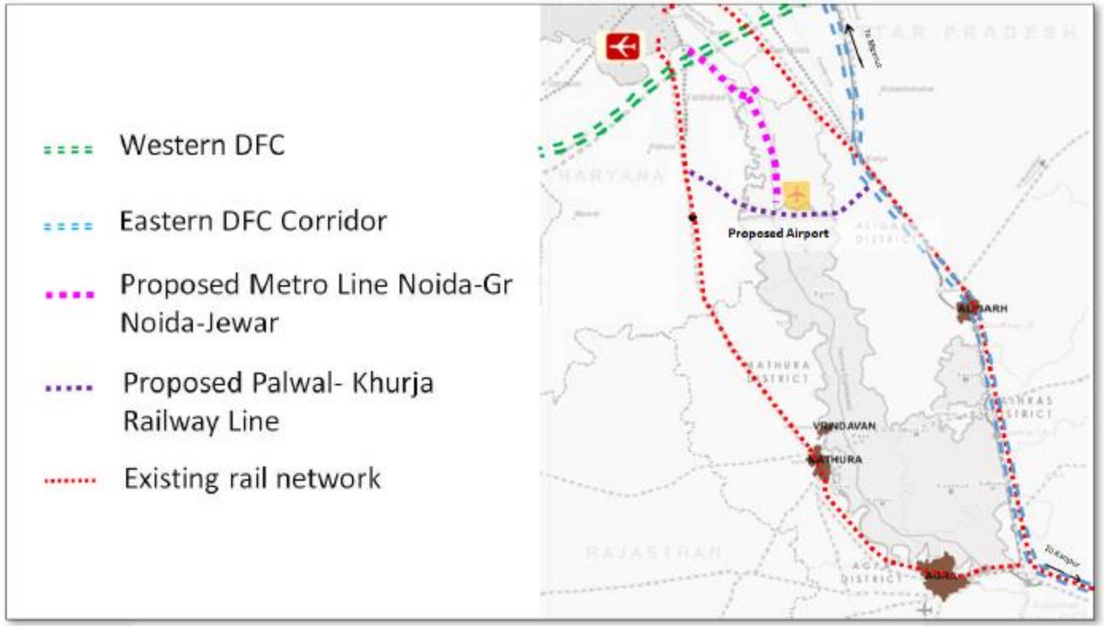
- To be developed in 350 acres
- To house Incubation Centre, Pharmaceutical Industries, Medical Device Manufacturing industries

C. FILM CITY

- India's largest film metropolis to be developed in 1000 acres Sector 21 of the airport
- Estimated Cost 6000 Crores

D. SMART CITY

- To be developed in 3sq.Km area near airport and along Yamuna E'way
- It will have biodiversity park, convention centre, green buildings, hotels, community areas and modern mandis



Railway connectivity to the proposed Airport

DIVERSION & DEVELOPMENTAL TRAFFIC ESTIMATION

Potential Divertable Traffic Estimation Methodology (Ex: Farmers Protest)

STEP – 1: Identify the Impact Toll Plazas

1. Jakhauli
2. Mawi Kalan

STEP – 2: Separate the Directional Traffic

1. North to South Traffic – Exit at Mawi Kalan (towards Delhi)
2. South to North Traffic – Exit at Jakhauli (towards Sonipat)

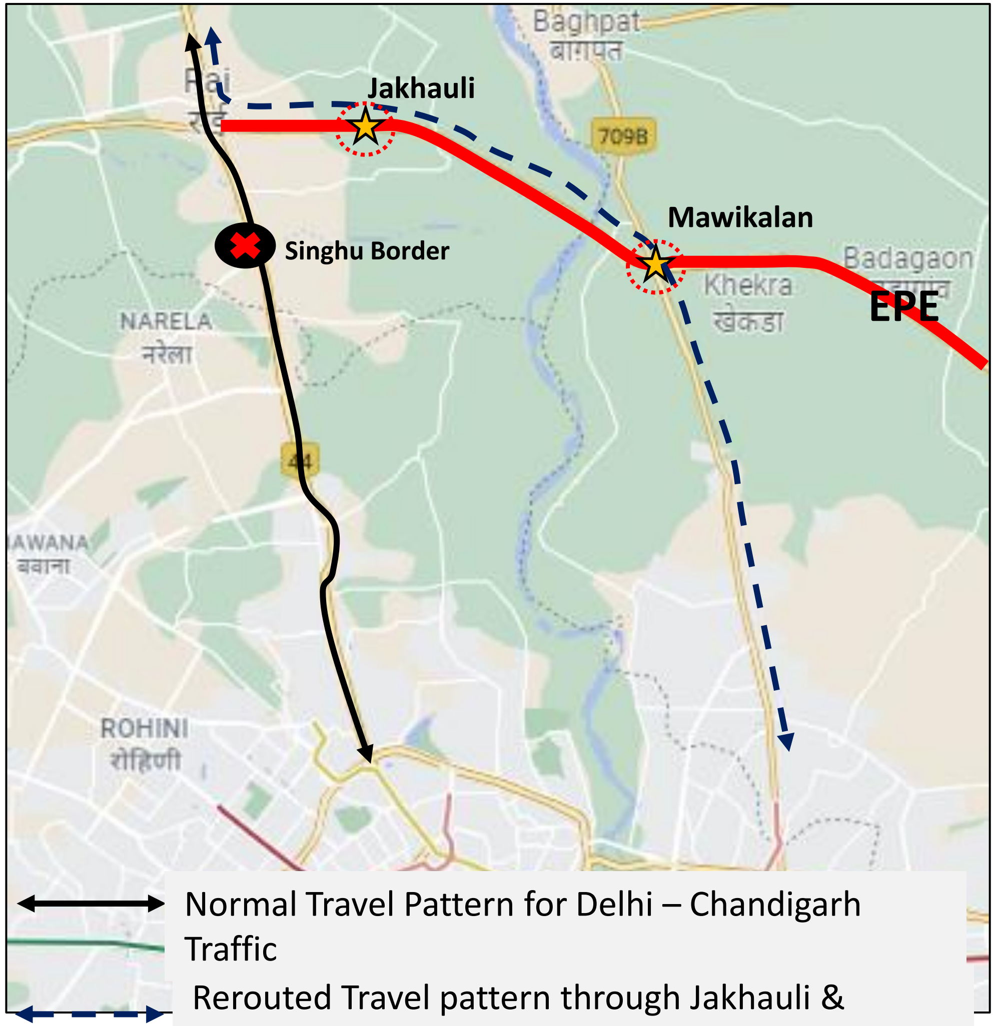
STEP – 3: Fill the Potential Divertable traffic in the respective T&R sheet

1. Jakhauli
2. Mawi Kalan

STEP – 4: Define the Potential impact share mode wise in the template

1. Jakhauli
2. Mawi Kalan

Farmers Protest Travel Re-routing Pattern

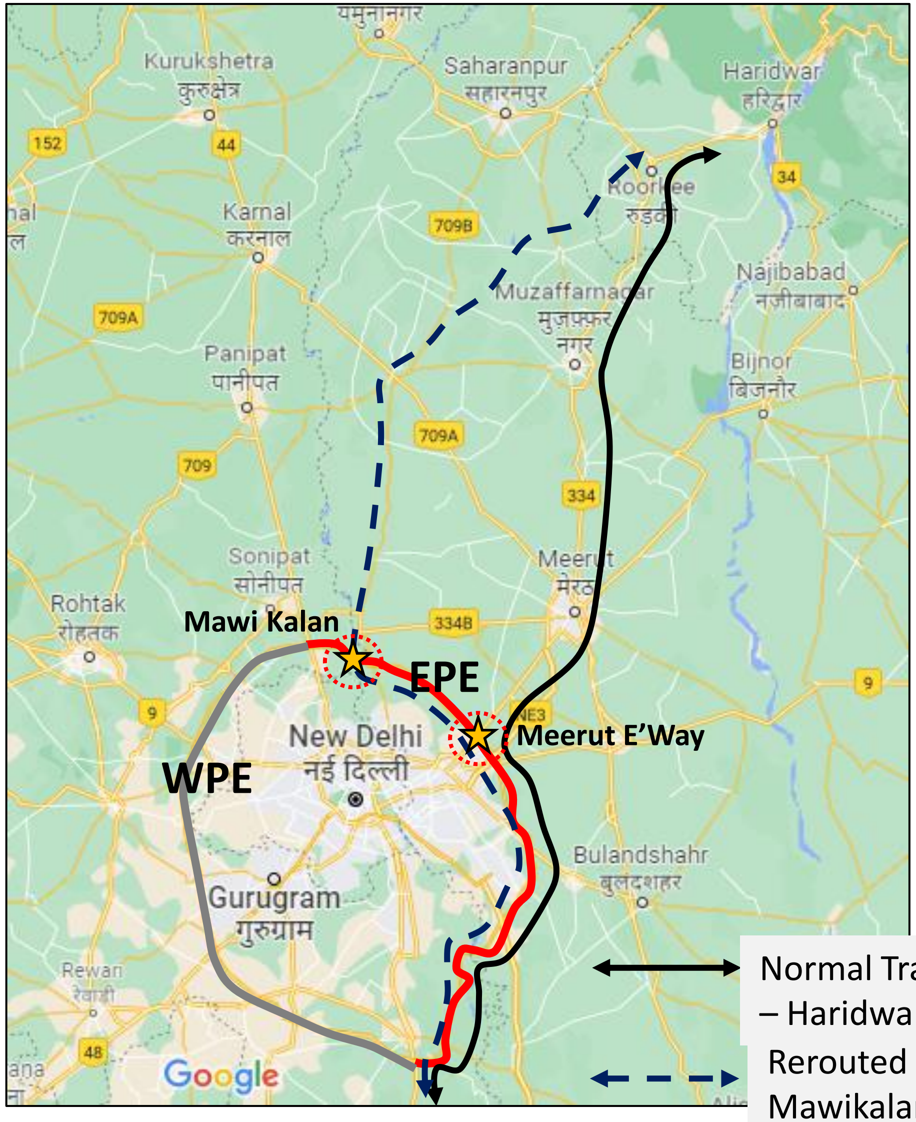


Normal Travel Pattern for Delhi – Chandigarh Traffic

Rerouted Travel pattern through Jakhauli & Mawikalan Toll Plaza due to Farmers Protest

Site of Farmers Protest

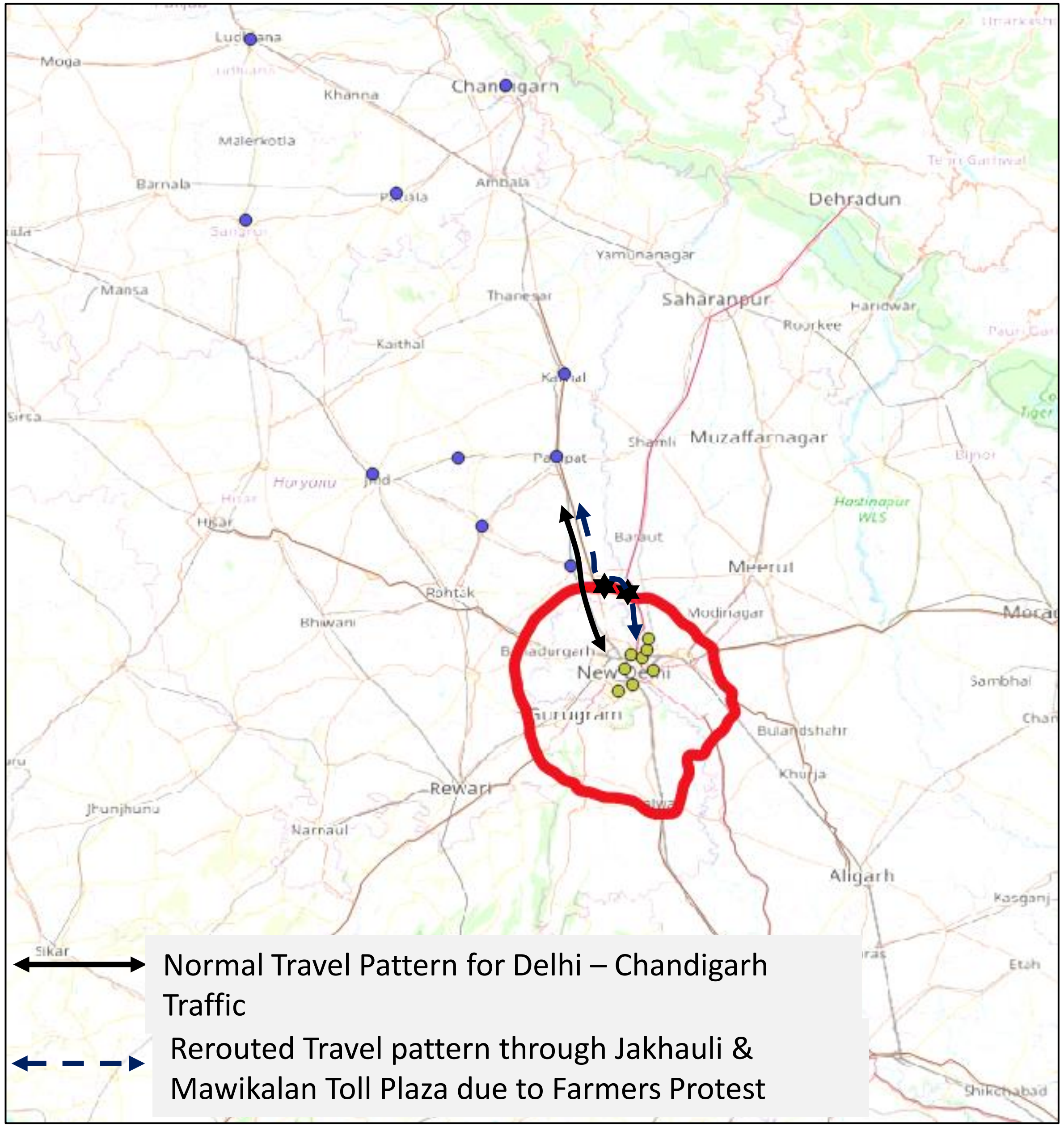
Travel Re-routing Pattern due to Dehradun Expressway



Normal Travel Pattern for Delhi – Haridwar Traffic

Rerouted Travel pattern Mawikalan Toll Plaza due to Dehradun Expressway

POTENTIAL DIVERTABLE TRAFFIC | METHODOLOGY (E.g.: Farmers Protest) (1/2)



Direction : Delhi to Panipat

At Exit Plaza	Divertable Traffic	Potential Divertable traffic share	Potential Divertable Traffic	Divertable traffic as a share of AADT
1.Jakhauli	2.Mawikalan			
Car	942	100%	942	-30%
Minibus	0	50%	0	0%
Bus	181	50%	91	-26%
LCV	101	75%	76	-8%
2AT	25	75%	19	-23%
3AT	24	75%	18	-20%
MAV	71	75%	53	-15%
OSV	0	75%	0	0%

Direction : Panipat to Delhi

At Exit Plaza	Divertable Traffic	Potential Divertable traffic share	Potential Divertable Traffic	Divertable traffic as a share of AADT
2.Mawikalan	1.Jakhauli			
Car	880	100%	880	-26%
Minibus	8	50%	4	-30%
Bus	250	50%	125	-32%
LCV	197	75%	148	-13%
2AT	22	75%	16	-15%
3AT	38	75%	29	-22%
MAV	79	75%	59	-13%
OSV	0	75%	0	0%

POTENTIAL DIVERTABLE TRAFFIC | METHODOLOGY (E.g.: Farmers Protest) (2/2)

Direction : Delhi to Panipat

Impact No	1
Impact Name	Farmers Protest
Consideration	On
Impact Type	Negative
Consideration Year (from)	2023
Consideration Year (To)	2052

At Exit Plaza:	Potential Divertable Traffic							
1.Jakhauli	2.Mavikalan	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	7.Fatehpur Rampur	8.Maujpur	9.Chhajju Nagar
Car	942							
Mini Bus								
Bus	181							
LCV	101							
2AT	25							
3AT	24							
MAV	71							
OSV								

	At Exit Plaza:	Potential Divertable Traffic							
Impact Share	1.Jakhauli	2.Mavikalan	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	7.Fatehpur Rampur	8.Maujpur	9.Chhajju Nagar
100%	Car	-30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50%	Mini Bus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50%	Bus	-26.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	LCV	-8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	2AT	-22.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	3AT	-20.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	MAV	-15.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	OSV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

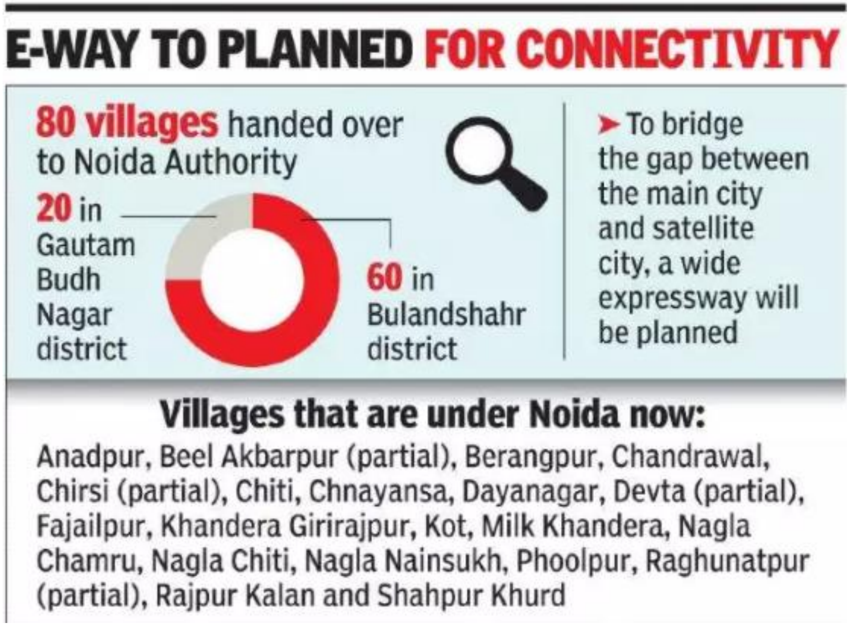
Direction : Panipat to Delhi

Impact No	1
Impact Name	Farmers Protest
Consideration	On
Impact Type	Negative
Consideration Year (from)	2023
Consideration Year (To)	2052

At Exit Plaza:	Potential Divertable Traffic							
2.Mavikalan	1.Jakhauli	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	7.Fatehpur Rampur	8.Maujpur	9.Chhajju Nagar
Car	880							
Mini Bus	8							
Bus	250							
LCV	197							
2AT	22							
3AT	38							
MAV	79							
OSV								

	At Exit Plaza:	Potential Divertable Traffic							
Impact Share	2.Mavikalan	1.Jakhauli	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	7.Fatehpur Rampur	8.Maujpur	9.Chhajju Nagar
100%	Car	-26.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50%	Mini Bus	-30.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50%	Bus	-31.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	LCV	-13.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	2AT	-15.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	3AT	-21.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	MAV	-12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	OSV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

DEVELOPMENTAL TRAFFIC ESTIMATION



Start year

FY-2030 @ 30% of Net Trip Generation

Mid year

FY-2035 @ 80% of Net Trip Generation

Fully Developed year

FY-2040 @ 100% of Net Trip Generation

S No	Location	Node type	Area (Sq. Km)
1	New Noida City	Investment region	209

Commercial / Development Area -> 50%

Likelihood of Development -> 100%

Net Trip Generation Area -> 50%

[50% X 100%]

IBI

DEVELOPMENTAL TRAFFIC ESTIMATION METHODOLOGY

CDPQ

Total Trips Generation

Road Share
Passenger:75%
Freight: 33%

Rail Share
Passenger: 25%
Freight: 67%

Interzone trips
Passenger: 50%
Freight: 90%

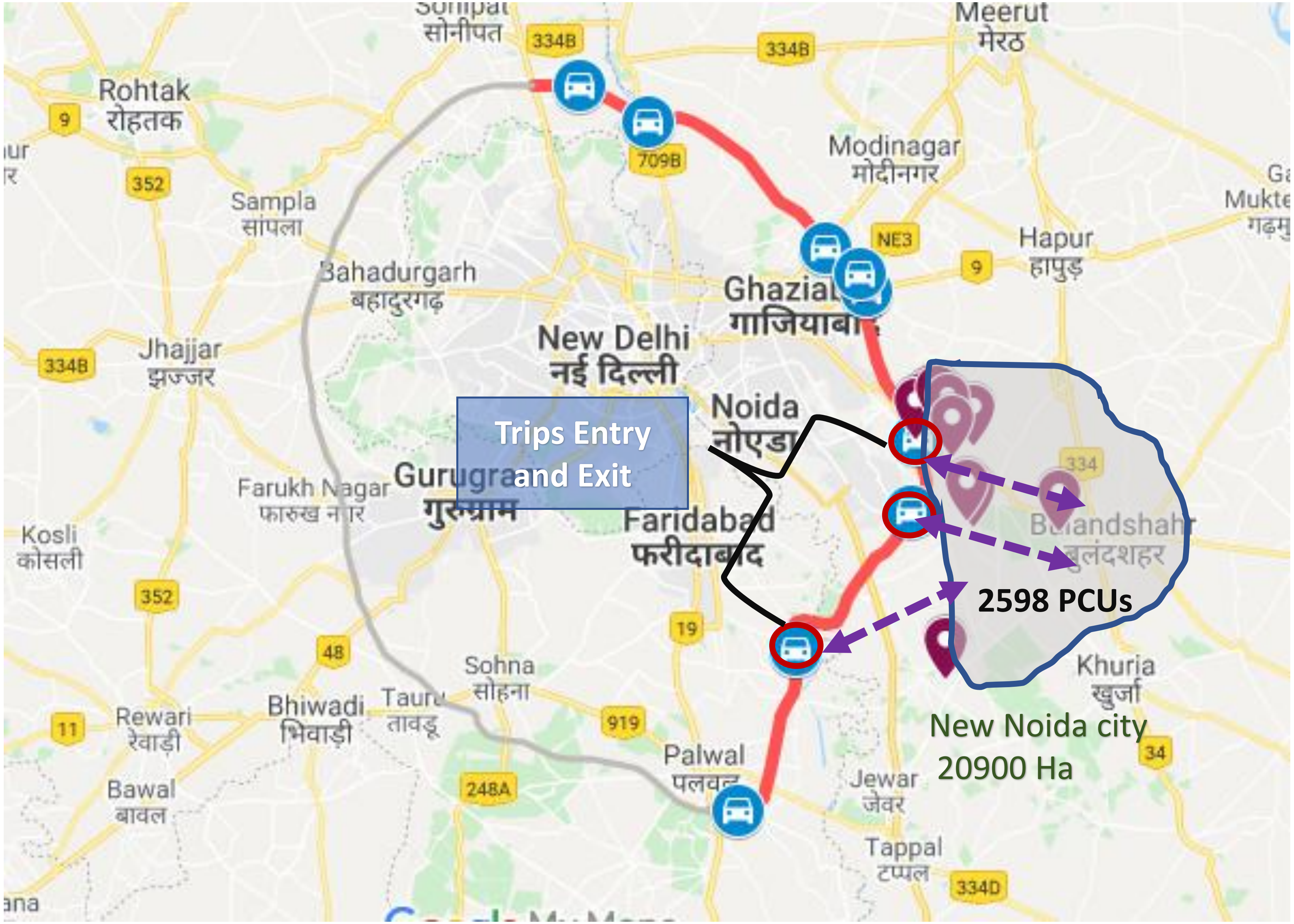
Intrazone trips
Passenger: 50%
Freight: 10%

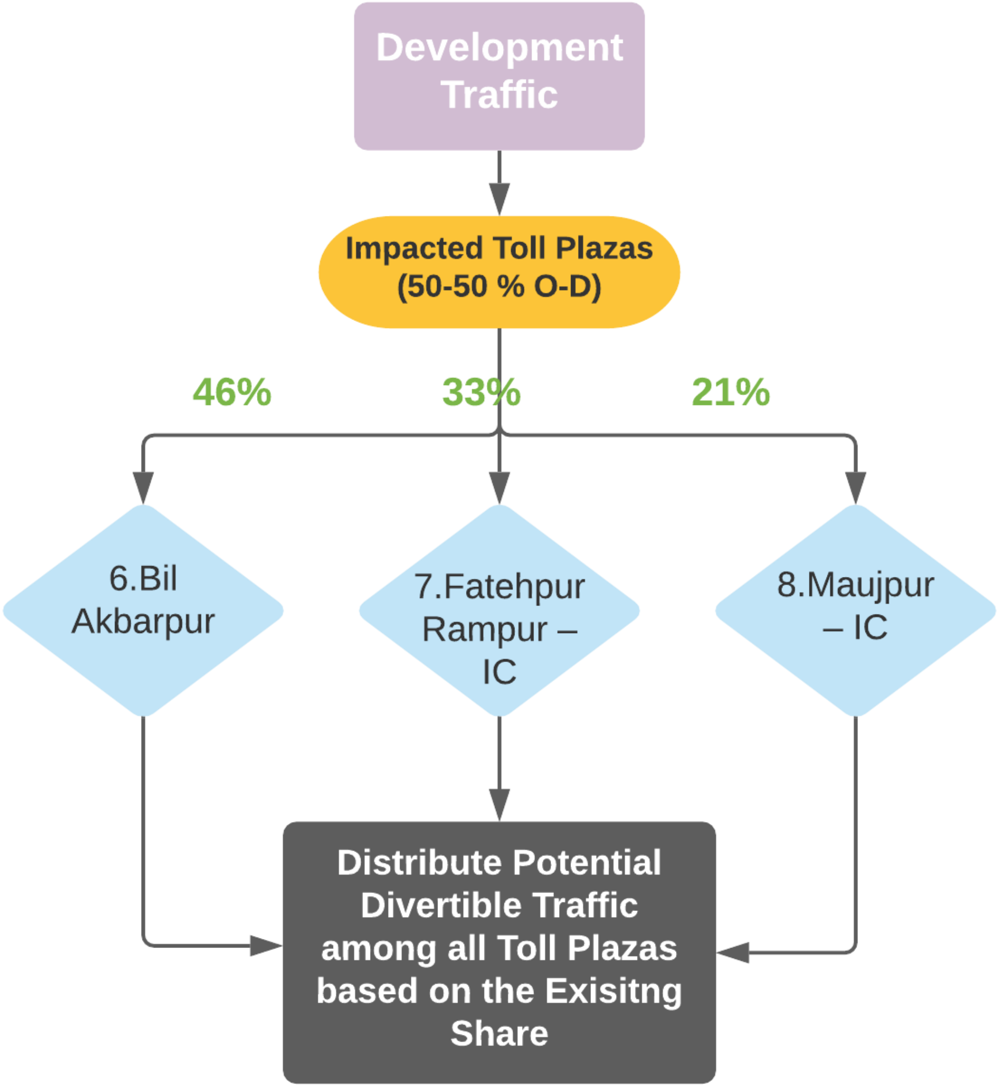
Potential for Project Influence Road Network (%)		
S No	**Location**	**Share of Vehicular trips on the Project Road**
1	New Noida City	33.0% - Passenger 50% - Goods

Freight traffic :	20	tonne/ha/day
Passenger traffic :	30-40	person trips/ha

POTENTIAL DIVERTABLE TRAFFIC

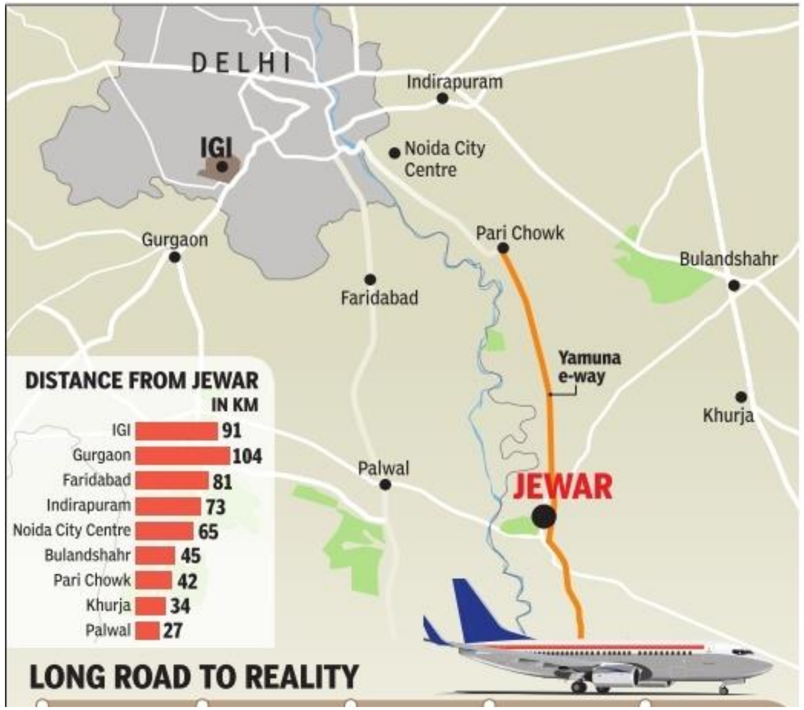
NEW NOIDA CITY DEVELOPEMT TRAFFIC								
Year	Car	Bus	LCV	2A	3A	MAV	Total	PCU
2029-2030	734	92	79	95	100	203	1303	2627
2030-2031	893	112	96	116	122	247	1586	3199
2031-2032	1086	136	117	141	148	301	1929	3891
2032-2033	1321	165	142	172	180	366	2346	4732
2033-2034	1607	201	173	209	219	445	2854	5756
2034-2035	1956	245	211	254	266	542	3475	7010
2035-2036	2045	256	221	266	279	567	3634	7331
2036-2037	2138	268	231	278	292	593	3800	7667
2037-2038	2236	280	242	291	305	620	3974	8017
2038-2039	2338	293	253	304	319	648	4155	8382
2039-2040	2445	306	264	318	333	678	4344	8763

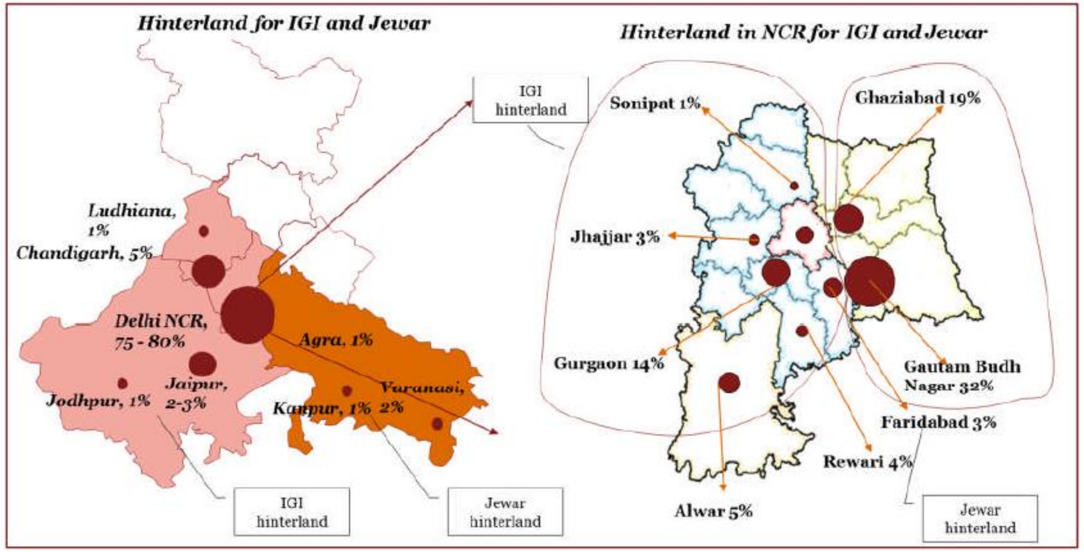

Trips Entry and Exit
2598 PCUs
New Noida city
20900 Ha
Sonipat
Meerut
Rohtak
Modinagar
Sampla
Hapur
Bahadurgarh
Ghaziabad
New Delhi
Jhajjar
Noida
Farukh Nagar
Gurugram
Faridabad
Bulandshahr
Kosli
Khurja
Sohna
Rewari
Bhiwadi
Tauru
Palwal
Bawal
Jewar
Tappal

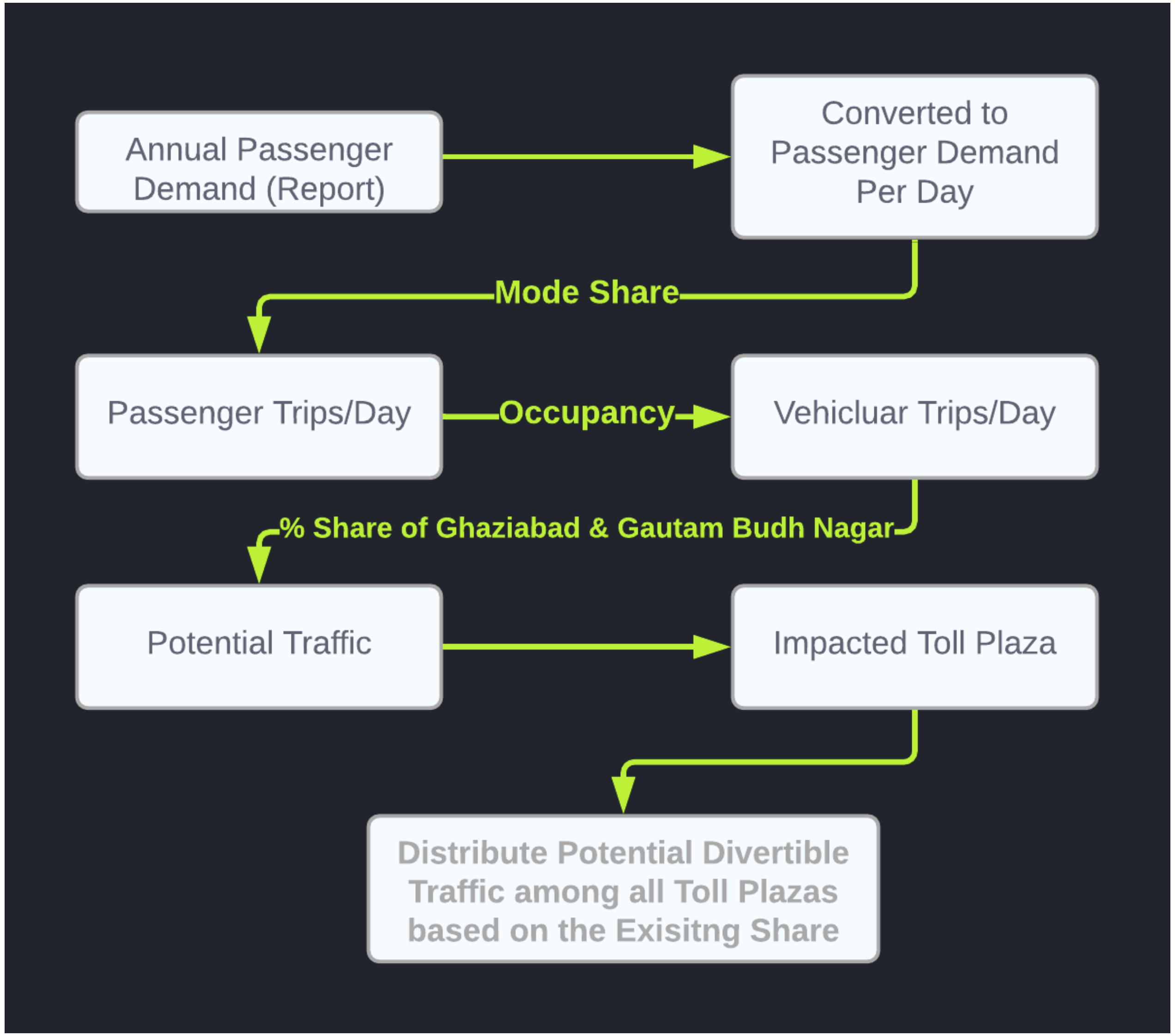


- Jewar Airport Development Traffic is arrived based on the Techno Economic Feasibility Report (TEFR), Jewar Airport
- Passenger Traffic including Meeters & Greeters are derived from the TEFR
- Airport Passenger traffic OD Pairs including potential OD pairs on EPE are arrived from the TEFR
- Passenger Traffic from Ghaziabad, Gautam buddh nagar district, Haryana and Punjab are considered as potential traffic that will ply on the Eastern Peripheral Expressway
- Based on the spatial location of the above generation points and destination at Jewar airport, traffic is majorly distributed through 3 ICs which are Bil Akbarpur, Fatehpur Rampur and Maujpur. Traffic is distributed based on the existing traffic share observed at these three interchange locations.

DEVELOPMENT TRAFFIC-NEW NOIDA INTERNATIONAL AIRPORT







KEY TRAFFIC GROWTH DRIVERS

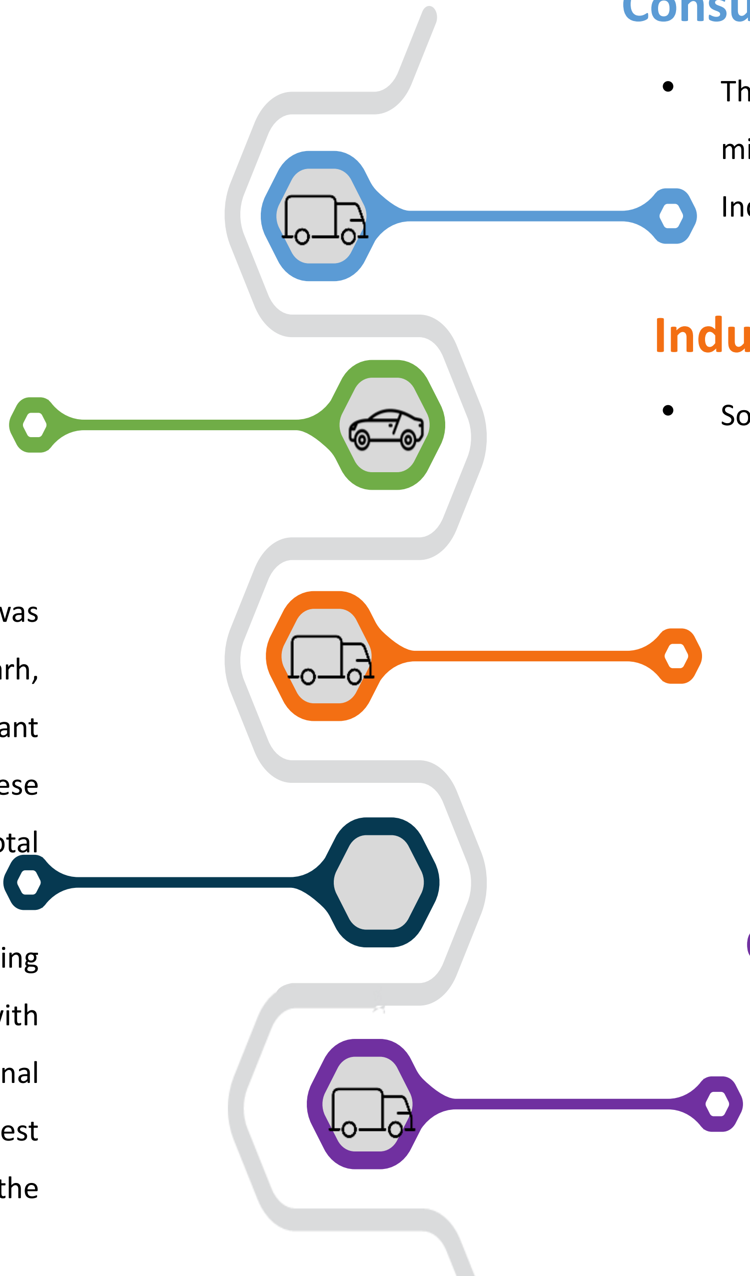
EPE | TRAFFIC GROWTH DRIVERS- CURRENT

Delhi/NCR Urban Agglomerations

- The region consists of major economic and industrial centers in India namely**, Delhi** (one of the largest urban agglomeration in the world , GDP of USD 108 Bn), **Ghaziabad** (GSDP of USD 4.3 Bn), **Bulandshahr** (GSDP of USD 3.2 Bn) and **Aligarh** (GSDP of USD 2.8 Bn)
- Region consists of one of the largest IT/industrial clusters in India (Noida, Ghaziabad, Sikandrabad, Bulandshahr)

Agriculture/Mining/Construction

- The Share of Agriculture commodity on the project road was observed to be approximately 10% (17% w/o empty) with Aligarh, Ghaziabad, Sikandrabad and Delhi areas being most predominant terminal points. On correlation it was observed that these corresponding districts were catering to nearly 5% of the total cropped area in the state
- The share of construction commodities (Cement, sand, Building Materials) was observed to be nearly 7% (12% w/o empty) with Sikandrabad, Ghaziabad, Noida, Delhi areas being major terminal points, This can be attributed to the fact that, the largest agglomerations and industrial areas are in proximity to the project corridor.



Consumption Nodes

- The NCR region along with the satellite cities home to about 40 million resident's forms one of the biggest consumption nodes in India.

Industrial/Mfg Areas

- Some of the major manufacturing industries found in the region are-
  - **Greater Noida-** Paint, Auto Parts, Automobile, Electronics, Beverages etc..
  - **Ghaziabad** -Apparel, pottery, industrial machinery, electrical and electronic goods
  - **Sikandrabad & Bulandshahr-** Chemical, metal, ceramic, sugar mills, electric and electronic goods
  - **Dadri – Noida and Ghaziabad** belt is home to some of the largest companies in India, engaged in the manufacturing of process cars, auto parts, two-wheelers, engineering products, consumer electronics, steel etc.

Connectivity

- **Project Road** – provides connectivity between Delhi/NCR , Haryana & UP State.

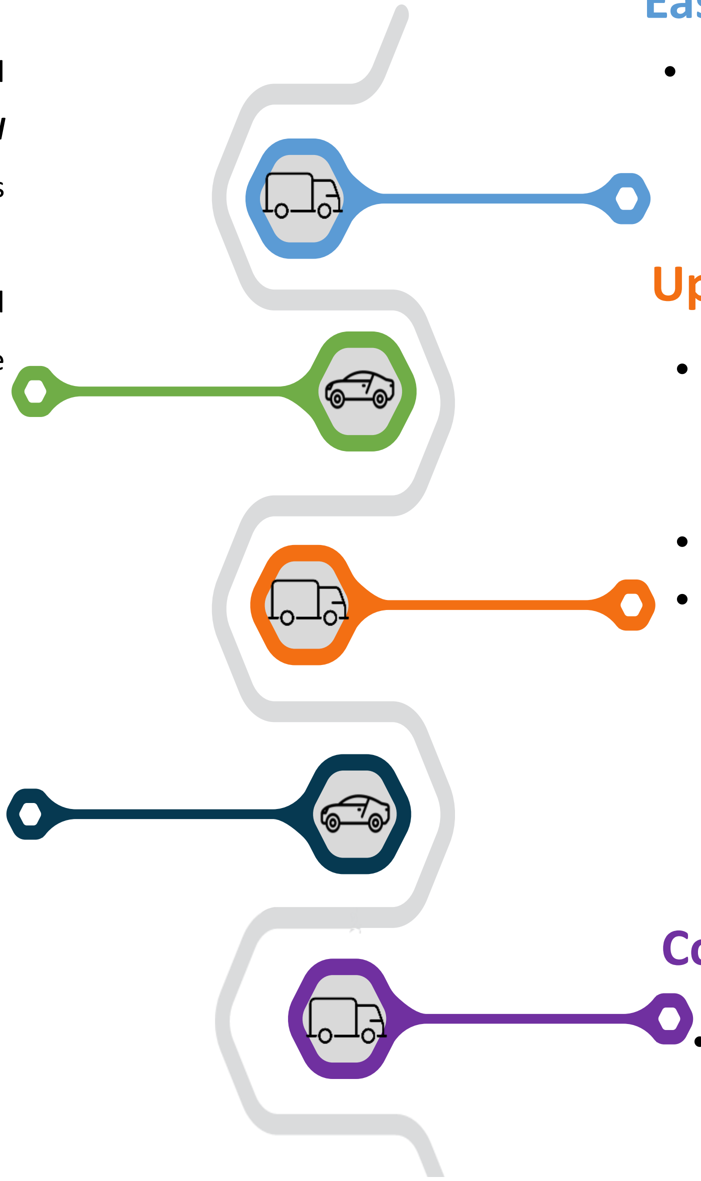
EPE | TRAFFIC GROWTH DRIVERS- FUTURE

Delhi/NCR Urban Agglomerations

- Apart from the existing clusters, the proposed Industrial Townships, Logistic Parks as part of ***Dadri Noida Ghaziabad Industrial Region*** shall provide more employment opportunities and act as major workforce attractors.
- Also, As per the latest master plan Delhi's population is projected to be 30 million by 2041 making it even more predominant in the future

Agriculture/Mining/Construction

- With the completion of UPWSRP Ph-I, and UPWSRP Ph-II completed July 2021, whose main objective is to enhance agricultural productivity and irrigation reforms, the Agri-based commodity share is expected to be more predominant in the future. *(UPWSRP is a World bank funded project aimed at water sector restructuring in UP)*
- 5000 Warehouses are being Constructed across Uttar Pradesh for storing agriculture Produce.
- Similarly, with the proposed Dadri Noida Ghaziabad Investment Region, International airport at Jewar and Eastern DFC, the construction commodity share is also expected to be more in the future.



Eastern DFC / DGNIR

- Eastern Dedicated Freight Corridor along with Dadri Noida Ghaziabad Investment Region consisting of Integrated Industrial townships, Multimodal logistic parks etc.. Are major pull factors

Upcoming Development

- New Noida city is planned to be developed in an area of 20900 Ha. With villages notified in Ghaziabad & Gautam Buddh nagar City.
- New International airport at Jewar is being developed.
- Medical Device Park & Electronic Device Park is planned to be developed at Noida

Connectivity

- **Upcoming Noida Greenfield International Airport** (approx. 20 km from the project corridor)

EPE | NCR GROWTH TRENDS

REGION	Area(sq.km.)	Population		Density (persons per sq.km.)	
		2001	2011	2001	2011
NCT Delhi	1,483	13,850,507	16,787,941	9,340	11,320
Uttar Pradesh	25,327	15,110,452	18,719,180	1,019	1,263
Haryana	14,826	15,110,452	16,427,524	529	649
Rajasthan	13,447	15,110,452	6,222,641	379	463
NCR	**55,083**	**15,110,452**	**58,157,286**	**861**	**1,056**

REGION	POPULATION DENSITY (persons per sq.km) (2011)	VEHICLE REGISTRATION (in Lakh) (2021)	POPULATION (in Lakh) (2021)	VEHICLE PER 1000 POPUALTION
NCT Delhi	11,320	132.5	193.01	690
Baghpat	986	1.91	15.09	130
Ghaziabad	3,971	12.47	54.24	230
Meerut	1,346	9.57	39.89	240
Bulandshahr	776	6.38	40.54	160
Gautam Buddh Nagar	1,286	9.13 (Noida RTO)	19.09	480
Aligarh	1,007	8.71	42.57	200
Muzaffarnagar	1,034	5.31	48.01	110

- Average population density of the NCR about 1,056 persons per sq. km., which is about three times higher than the all-India average of 382 persons per sq.km. as per 2011 Census
- Sub-region wise analysis indicates NCT of Delhi has the highest population density of 11,320 persons per sq.km. followed by Uttar Pradesh and Rajasthan
- With the introduction of New Electronics Manufacturing Policy, 2020 and Uttar Pradesh Start-up Policy, 2020, to promote the local manufacturing and new start-ups in the state, and the proximity to National capital, towns such as Baghpat, Meerut and Gautam Buddh Nagar have become the potential areas for investors to set up micro, small, medium and large-scale industries (both service and resource-based).
- Delhi has the highest vehicle per 1000 population, making it the most congested city with highest vehicular density
- Low vehicle registration in satellite towns/ regions around the project road implies low vehicle ownership indicating regions are more inclined or has the potential for future growth and development
- Delhi must undergo transformation or redevelopment to sustain its population to meet the livability standards. This challenge gives scope for Urban sprawling beyond the NCR region

DMIC- Manesar-Bawal Investment Region

The designed site covers an area of about 402sq km includes existing Bawal Industrial Town and borders Rajasthan. The MBIR is the first investment region to be designated under the proposed Delhi – Mumbai Industrial Corridor project (DMIC), an initiative to create a linear zone of development along a Dedicated Freight Corridor (DFC) railway line.

1. **Global City project, Haryana**
   - Spread over an area of **1100** acres close to Gurgaon
   - Has the potential to generate **25%** more GDP than that of Gurgaon
   - Will generate over to **200000** jobs

2. **Multi Modal Logistics City at Rewari**
   - Strategically located at intersection of National Highway 8 and DFC
   - Capacity: >**1.39 Mn** TEUs per yr. plus Automobile traffic
   - Site: ~ **900 acres**

3. **MRTS: Delhi IGI – Bawal**
   - Total route length ~120 km

DMIC- Bhiwadi Neemrana Investment Region

- Total Area: 920 Sq. km
- Developable Area: 567.39 Sq. Km

Early Bird Projects:

- Aerotropolis
- Knowledge city
- Neemrana - Bhiwadi Road link (50 km)

The Khushkhera- Bhiwadi- Neemrana Investment Region is to be developed in an identified area of around 165.6 square kilometers. The objective is to create a world-class city—in this area, with industry as the main driver of economic development and employment with non-industrial/non-processing uses.

Investment Region target industries - Electronic, Automotive, Pharmaceuticals, Bio- tech and ICT

1. **Aerotropolis**

- Strategically located between Delhi and Jaipur , south of Bhiwadi Master Plan Area
- **Components:**
  - Passenger & Cargo traffic handling
  - Non aviation - Business Parks, Hotels, Distribution centers etc.
  - Maintenance Repair Overhaul (MRO)

OTHER DEVELOPMENTS IN NATIONAL CAPITAL REGION (NCR)

Sr. No.	Type (Sector)	Project Name	Project Detail	Development Cost (INR)	Location	Area /Length	Stakeholder	Estimation time to complete (Years)
1	Urban Infrastructure	Gurgaon 2.0 (New Gurgaon)	Commercial and Industrial hub developing near KMP Expressway, Dwarka Expressway and NH-8	NA	Outskirts of Gurgaon	50000 Hectares	Multiple private companies	2040
2	Urban Infrastructure	Gurgaon Metro New Route	5 New Metro Proposed Line. The daily ridership on the study corridor for years 2025, 2031 and 2041 is expected to be 5.34 lakh passenger trips, 7.26 lakh passenger trips and 8.81 passenger trips respectively. A. Gurgaon - Manesar, B. Gurgaon - Faridabad, C. Gurgaon - Dwarka, D. Gurgaon - Vatika	6,400 Cr	Gurgaon (Sector 45, Cyber Park, District Shopping Centre, Sector 47, Subhash Chowk, Sector 48, Sector 72 A, Hero Honda Chowk, Udyog Vihar Phase 6, Sector 10, Sector 37, Basai village, Sector 9, Sector 7, Sector 4, Sector 5, Ashok Vihar, Sector 3, Bajghera Road, Palam Vihar Extension, Palam Vihar, Sector 23 A, Sector 22, Udyog Vihar Phase 4, Udyog Vihar Phase 5), Manesar, faridabad, Dwarka	282 Kms	Haryana Mass Rapid Transport Corporation (HMRTC), Delhi Metro Rail Corporation (DMRC), HSVP	2025
3	Infrastructure	Gurugram-Bawal MRTS Project	Industrial township in the influence area of Delhi Mumbai Industrial Corridor	17328 Cr	NCR	99336 acres, Phase I - 82 Kms	Manesar Bawal Investment Region (MBIR), Haryana Mass Rapid Transport Corporation (HMRTC)	2025
4	Infrastructure	Regional Rapid Transit System (RRTS) Corridor	RRTS will pass through the NCR, connecting Delhi to Meerut in the state of Uttar Pradesh. Provide safe, reliable, and high-capacity commuter transit services. The investment project will finance rail track, signaling, station buildings, and maintenance facilities	30,724 Cr	Delhi-Ghaziabad-Meerut RRTS corridor from Sarai Kale Khan in Delhi till Modipuram in Meerut	82 Kms	National Capital Region Transport Corporation (NCRTC), a joint venture company of the Government of India and states of Delhi, Haryana, Rajasthan and Uttar Pradesh	2025
5	Infrastructure	Regional Rapid Transit System (RRTS)	first phase of the project, there were three identified RRTS corridors, which were the Delhi-Meerut smart Line, Delhi-Panipat smart Line, and Delhi-Alwar smart line	21,627 Cr	Panipat- Delhi, Meerut- Delhi, Delhi - Alwar	380 Kms	National Capital Region Transport Corporation (NCRTC), National Capital Region Planning Board	2028

OTHER DEVELOPMENTS IN NATIONAL CAPITAL REGION (NCR)

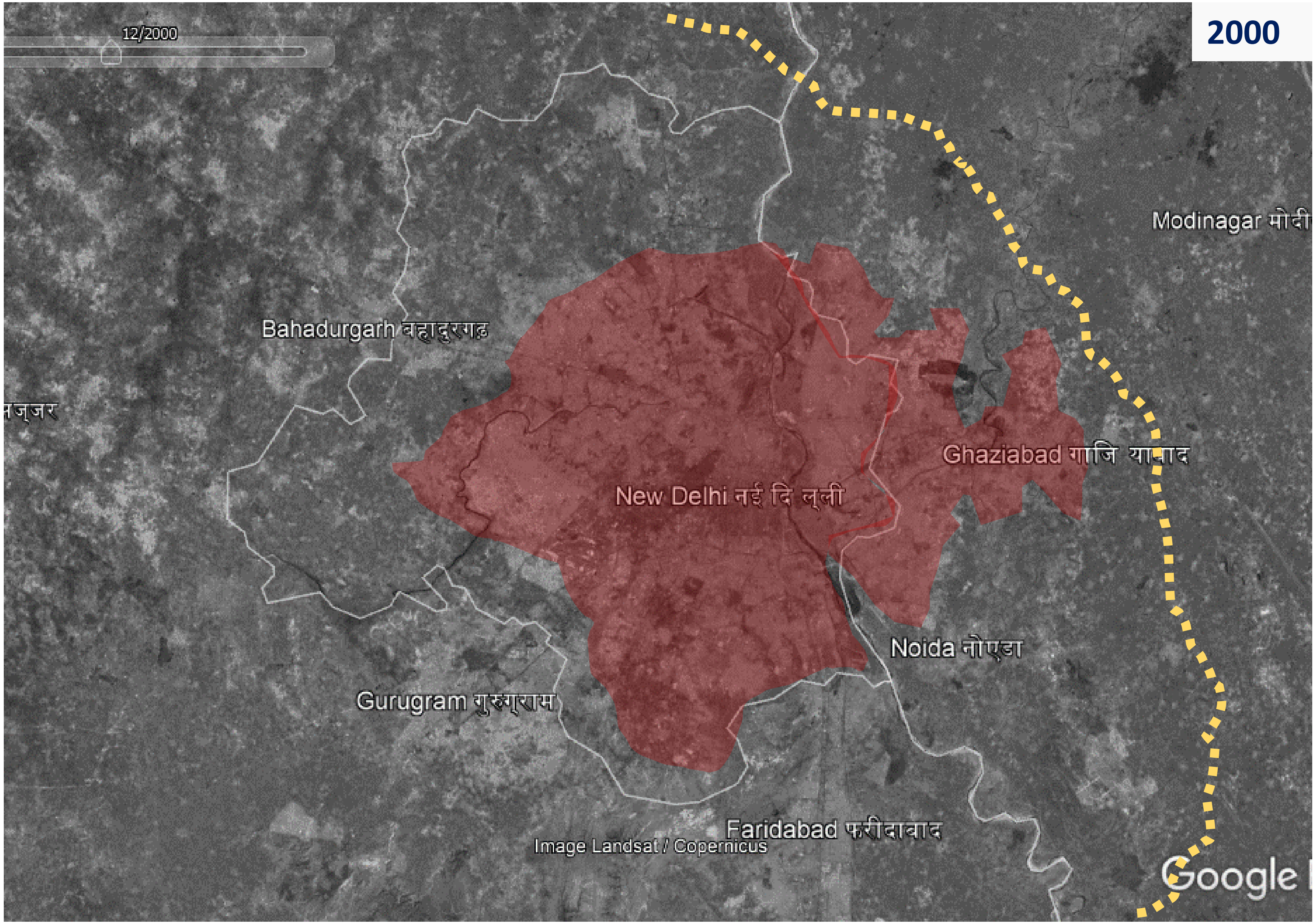
Sr. No.	Type (Sector)	Project Name	Project Detail	Development Cost (INR)	Location	Area /Length	Stakeholder	Estimation time to complete (Years)
6	Infrastructure	Haryana Orbital Rail Corridor	Semi high-speed rail line connecting Haryana Kalan (Sonipat) and Asaoti (Palwal) in Haryana through 17 stations along the Kundli – Manesar – Palwal (KMP) / Western Peripheral Expressway. The new traffic generation points along the corridor are IMT Faridabad, Sohna, Manesar, Rohtak and SEZ at Farukhnagar.	3786 Cr	Sonipat - Palwal	121.7 Kms	HRIDC Haryana Rail Infrastructure Development Corporation Limited (45%), GMDA (10%), HSIIDC (15%) and Consultant (GC) RITES – SMEC JV, GMDA, Maruti Suzuki India Ltd. (MSIL), All cargo Logistics (ACL) & J.M. Baxi Grp	2026
7	Urban Infrastructure	Development of Panchgram region	Developing five new cities over an area of 50,000 hectares on each side of the Kundli-Manesar-Palwal (KMP) expressway. New urban centres open up tremendous opportunities or trade and housing.	NA	Sonipat, Rohtak, Jhajjar, Gurugram, Rewari, Mewat, Faridabad and Palwal	50,000 Hectares	Haryana State Industrial and Infrastructure Development Corporation(HSIIDC), Panchgram Development Authority (PDA)	NA
8	Urban Infrastructure	Sohna Master Plan 2031	The Sohna Master Plan 2031 comprises of 45 controlled areas	NA	Sohna	5600 Hectares	HSIIDC, HUDA, Haryana Govt	2031
9	Infrastructure	Dwarka Expressway	This expressway through new Gurgaon has led to the creation of many new housing/residential real estate projects	9500 Cr	Dwarka to Gurgaon	29 Kms	NHAI, L&T ECC, AAI	2022 September
10	Infrastructure	Dedicated freight corridor (DFC) East and West	The Ministry of Railways, under the direction of the Indian Government, had taken up the dedicated freight corridor (DFC) project. The project involves the construction of six freight corridors traversing the entire country. The purpose of the project is to provide a safe and efficient freight transportation system.	$11.38 Bn	Western DFC - Haryana and Maharashtra, Eastern DFC - Punjab and West Bengal	2843 Kms	Dedicated Freight Corridor Corporation of India Ltd (DFCCIL), JICA	2022 March

OTHER DEVELOPMENTS IN NATIONAL CAPITAL REGION (NCR)

Sr. No.	Type (Sector)	Project Name	Project Detail	Development Cost (INR)	Location	Area /Length	Stakeholder	Estimation time to complete (Years)
11	Infrastructure	Delhi Mumbai Industrial Corridor	Delhi-Mumbai Industrial Corridor is a mega infra-structure project of USD 90 billion with the financial & technical aids from Japan, covering an overall length of 1483 KMs between the political capital and the business capital of India, i.e. Delhi and Mumbai.	NA		1483 Kms		
12	Urban Infrastructure	Industrial Model Township (IMT) Faridabad	The Haryana State Industrial and Infrastructure Development Corporation (HSIIDC) has proposed development of Industrial Model Township (IMT) Sohna, spread across 1,292 acres of land, through the PPP (public-private partnership) mode. The proposed IMT will span around to the north of Kundli-Manesar-Palwal Expressway in Mewat region.	NA	north of Kundli Manesar Palwal (KMP) Expressway near Nuh district	1292 acres	DSIIDC	12 years from starting date
13	Urban Infrastructure	special economic zones (SEZs) for IT sector	special economic zones (SEZs) for IT sector in Haryana and Uttar Pradesh	2433 Cr	Haryana and U.P	20 Hectares	TCS, DLF, Haryana Govt and UP Govt	NA
14	Urban Infrastructure	2 new cities along with Yamuna Expressway	one in Vrindavan spread over 4,000 hectares, and the other in Agra spread over 2,500 hectares		Vrindavan and Agra	6500 Hectares	Yamuna Expressway Industrial Development Authority (YEIDA)	NA
15	Infrastructure	Jewar International Airport	Upcoming International Airport with latest technology and world class design will boost the economy and provides employment	29,560 Cr	Jewar	5,000 Hectares	Yamuna Expressway industrial development authority (Yeida) Noida International Airport Limited (NIAL)	2021 September

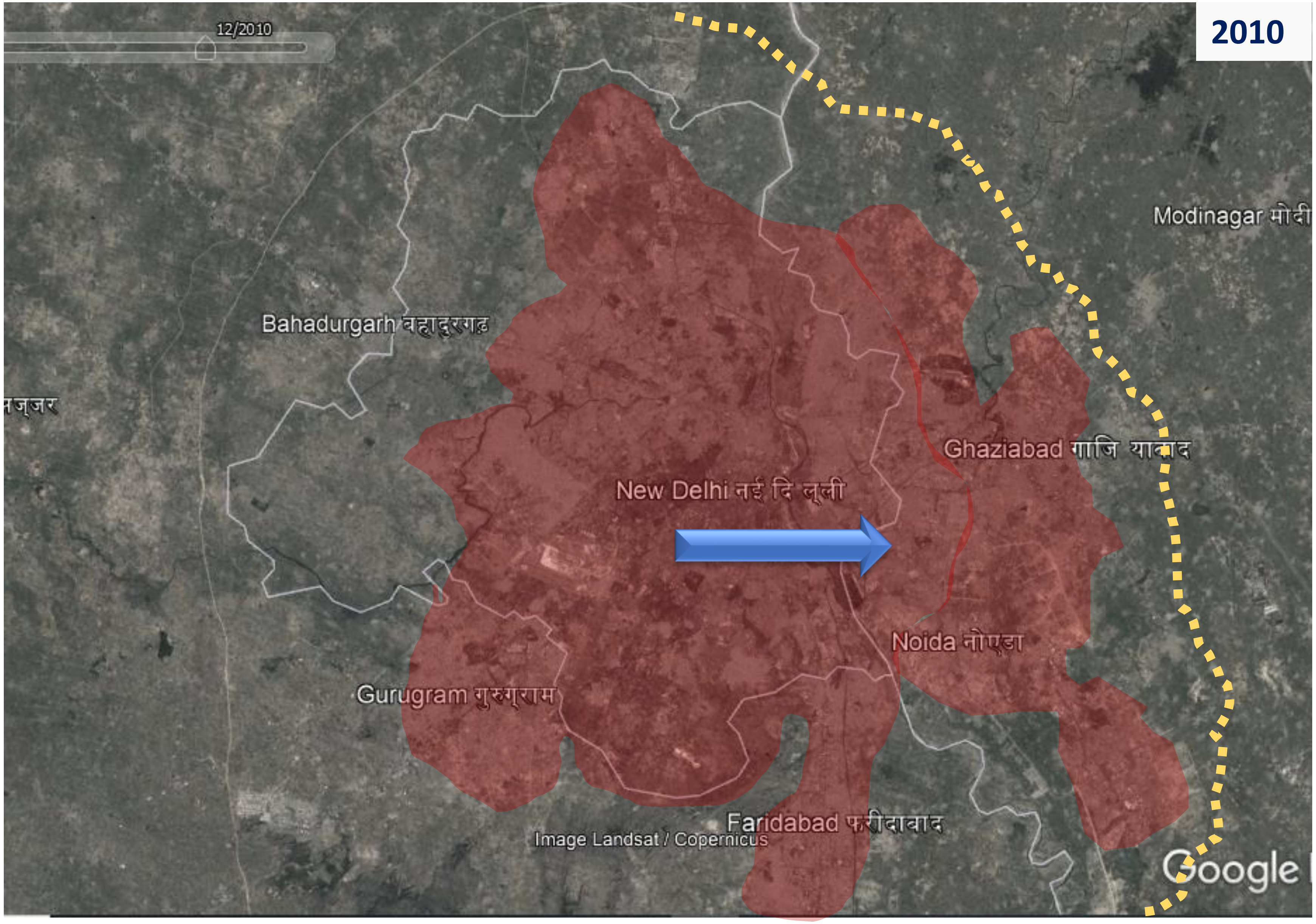
FORECASTS

TREND OF URBAN AGGLOMERATION IN THE NCR – YEAR 2000



- In the early decade of this century, Urban agglomeration is majorly concentrated in National capital region, Delhi and some areas of Noida, Gurgaon.
- Peripheral roads including Eastern Peripheral Expressway was not even planned.

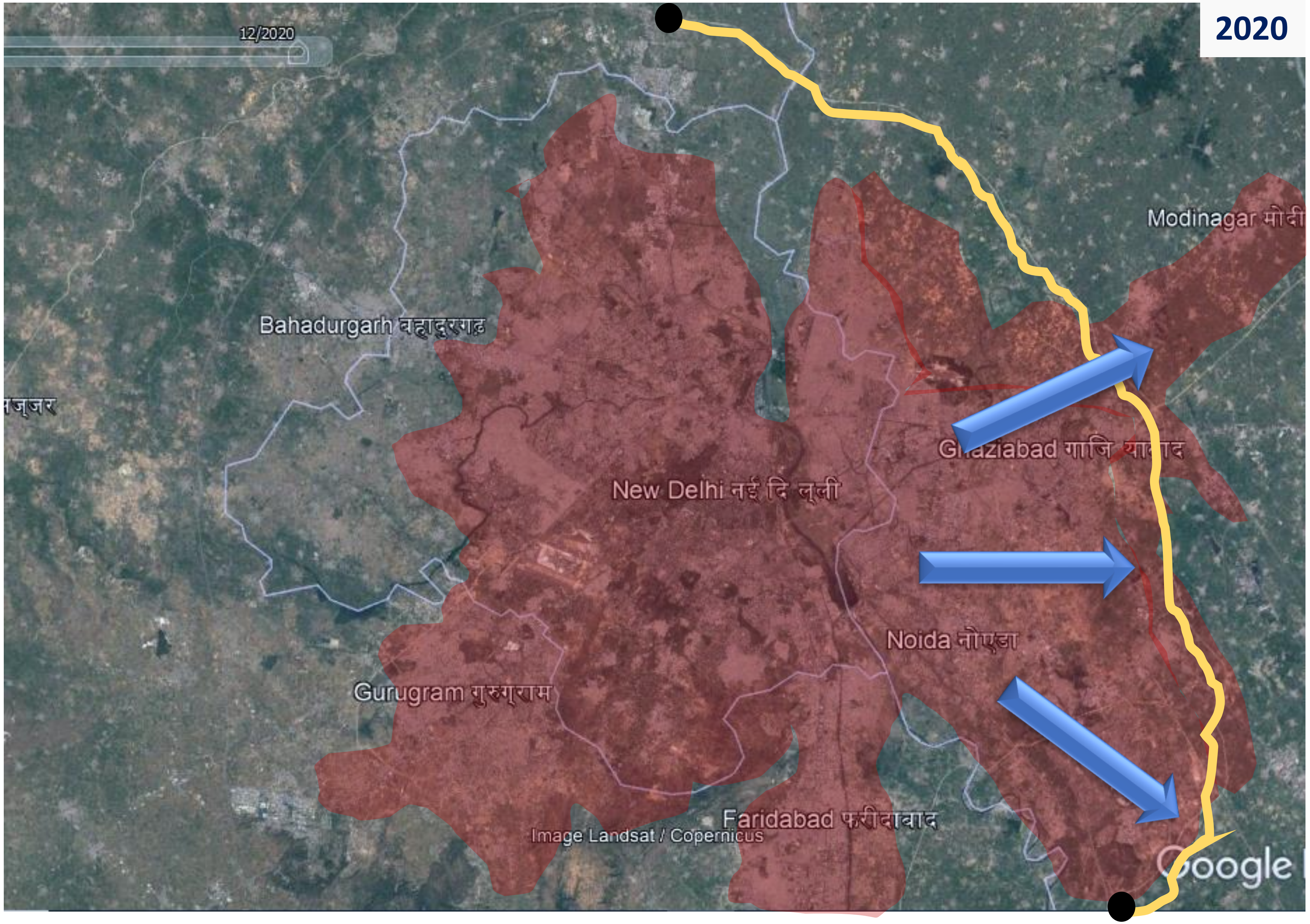
TREND OF URBAN AGGLOMERATION IN THE NCR – YEAR 2010



- In the early decade of this century, Urban agglomeration is majorly concentrated in National capital region, Delhi and spread over core NCR area of Gurgaon, Noida, Faridabad, Ghaziabad, Sonipat.

- Peripheral roads including Eastern Peripheral Expressway was planned.

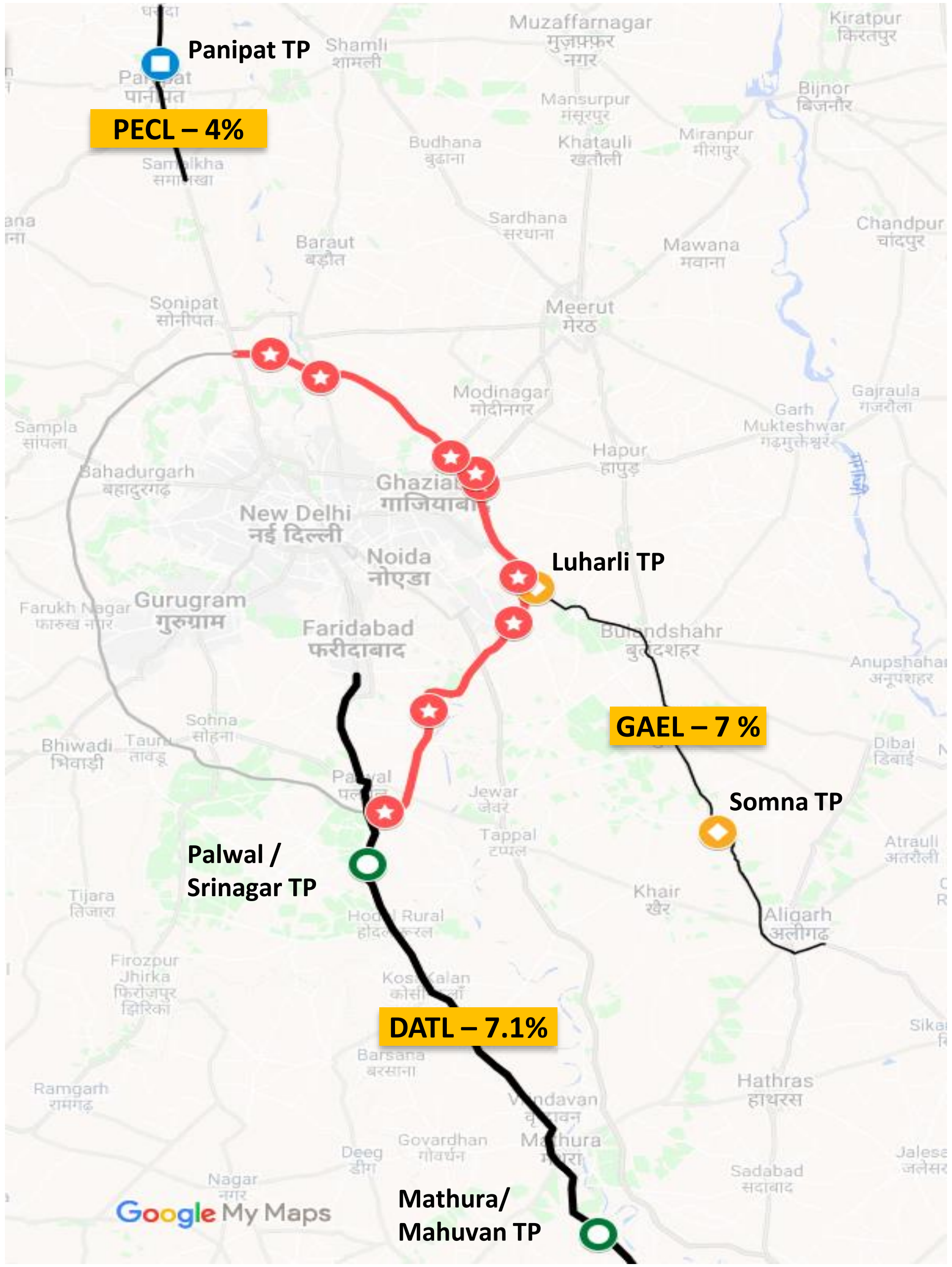
TREND OF URBAN AGGLOMERATION IN THE NCR – YEAR 2020



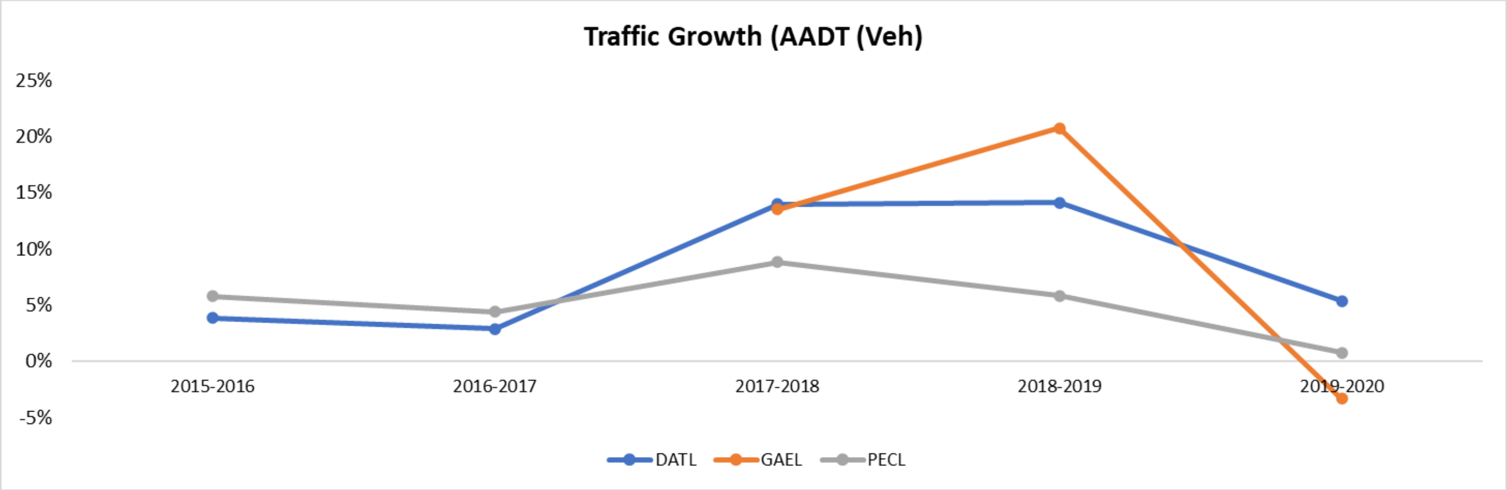
- In the early decade of this century, Urban agglomeration is majorly concentrated in National capital region, Delhi and spread over core NCR area of Gurgaon, Noida, Faridabad, Ghaziabad, Sonipat and moved much close and beyond the Peripheral roads of EPE and WPE.

- Peripheral roads including Eastern Peripheral Expressway are constructed and fully functional.

TRAFFIC GROWTH ON NEIGHBORHOOD STRETCHES



- ✓ **Identification of stretches/projects in the vicinity**
  - ✓ **North** – Panipat Elevated Corridor Limited (PECL) (1 TP)
  - ✓ **East** – Ghaziabad Aligarh Expressways Limited (GAEL) (2 TPs)
  - ✓ **South** – Delhi Agra Tollways Limited (DATL) (2 TPs)
- ✓ **Identification of Toll Plazas in the vicinity**
  - ✓ **North** – Panipat Toll Plaza
  - ✓ **East** – Luharli Toll Plaza
  - ✓ **South** – Palwal/Srinagar Toll Plaza



On the detailed analysis of the surrounding projects, it is observed that GAEL, DATL and PECL are observed to be growing at a CAGR of 7% , 7.1% and 4 % respectively in the last 5 years

TRAFFIC GROWTH ON NEIGHBORHOOD STRETCHES

- As discussed earlier the historic data of 3 surrounding stretches have been analyzed. Illustrated below please find the historic traffic growth in terms of Vehicles and PCU

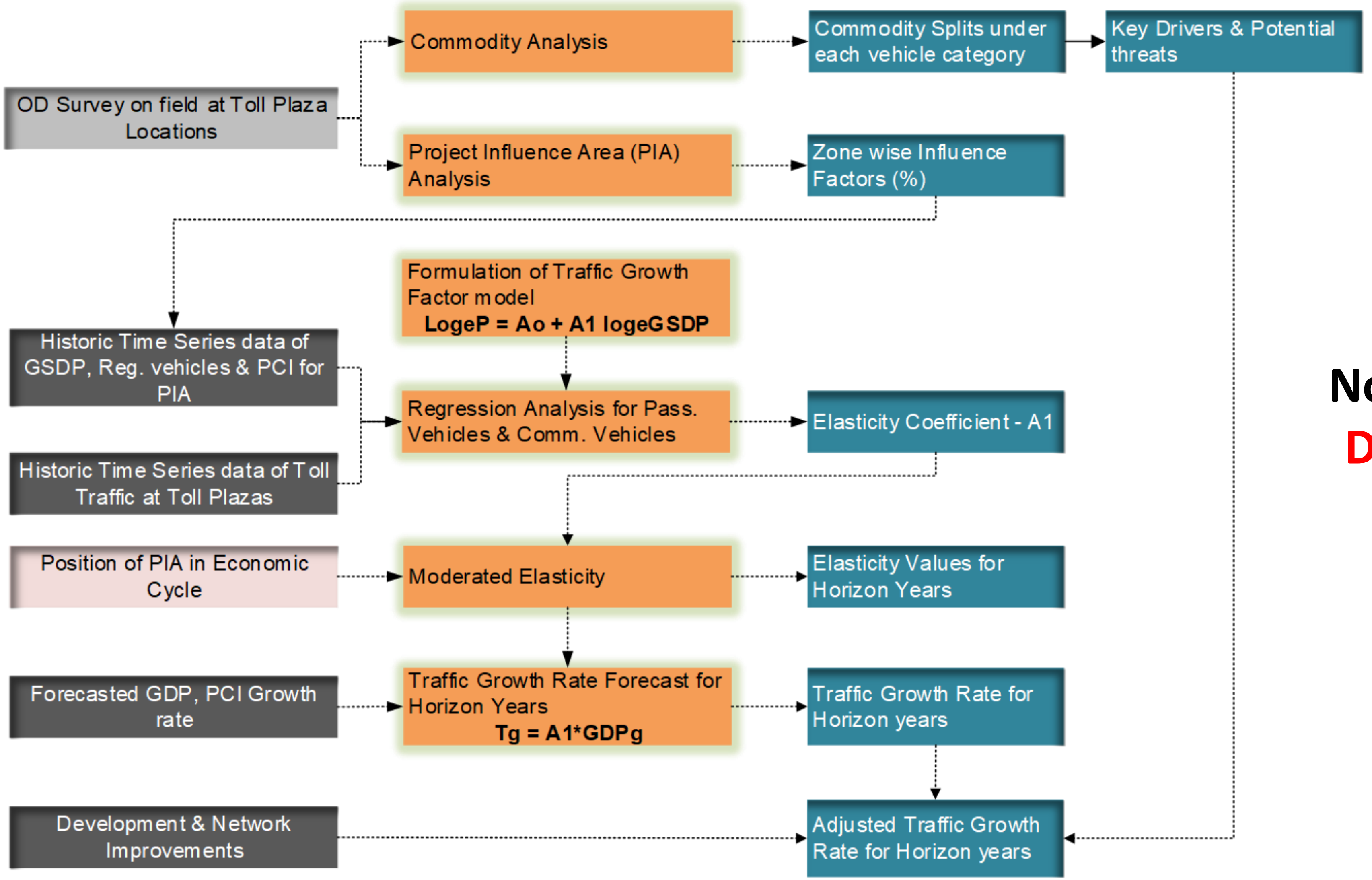
Delhi Agra Tollways Limited												
Mode	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	CAGR
CJV	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	-0.3%	6.6%	1.5%	13.3%	13.8%	2.6%	5.2%
LCV/MB	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	-3.5%	0.4%	1.7%	-6.1%	4.3%	-6.9%	-1.5%
Bus/Truck	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	-5.5%	-7.2%	3.7%	28.4%	16.6%	11.5%	6.2%
MAV	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	6.2%	5.7%	6.8%	17.8%	17.1%	12.5%	9.3%
Total (Veh)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	-0.2%	3.8%	2.9%	14.0%	14.1%	5.4%	5.6%

Ghaziabad – Aligarh Expressways Limited												
Mode	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	**CAGR**
CJV	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	11.9%	37.5%	-2.9%	10.6%
LCV/MB	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	9.2%	6.6%	-11.0%	0.9%
Bus/Truck	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	19.0%	-7.7%	6.3%	3.9%
MAV	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	17.4%	1.2%	-7.7%	-7.5%
Total (Veh)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	13.5%	20.7%	-3.3%	7.0%

Panipat Elevated Corridor Limited												
Mode	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	**CAGR**
CJV	[redacted]	6.6%	-3.1%	7.0%	8.4%	12.2%	10.7%	8.0%	9.8%	6.0%	0.0%	5.8%
LCV/MB	[redacted]	5.8%	2.5%	3.8%	6.8%	1.7%	-22.1%	-51.2%	3.3%	3.5%	11.6%	-5.2%
Bus	[redacted]	4.4%	-1.1%	2.3%	-4.0%	3.1%	-2.6%	5.6%	7.2%	12.4%	-4.6%	2.0%
MGV+HGV	[redacted]	2.3%	-6.4%	-8.3%	5.3%	-2.4%	10.0%	19.5%	7.0%	3.8%	2.8%	2.8%
Total (Veh)	[redacted]	5.4%	-3.0%	3.2%	6.9%	7.7%	5.8%	4.4%	8.8%	5.8%	0.7%	4.1%

PCU Factors: CJV -1, LCV/MB -1.5, Bus -3 , MAV & MGV + HGV – 4.5

TRAFFIC GROWTH METHODOLOGY



Future Traffic

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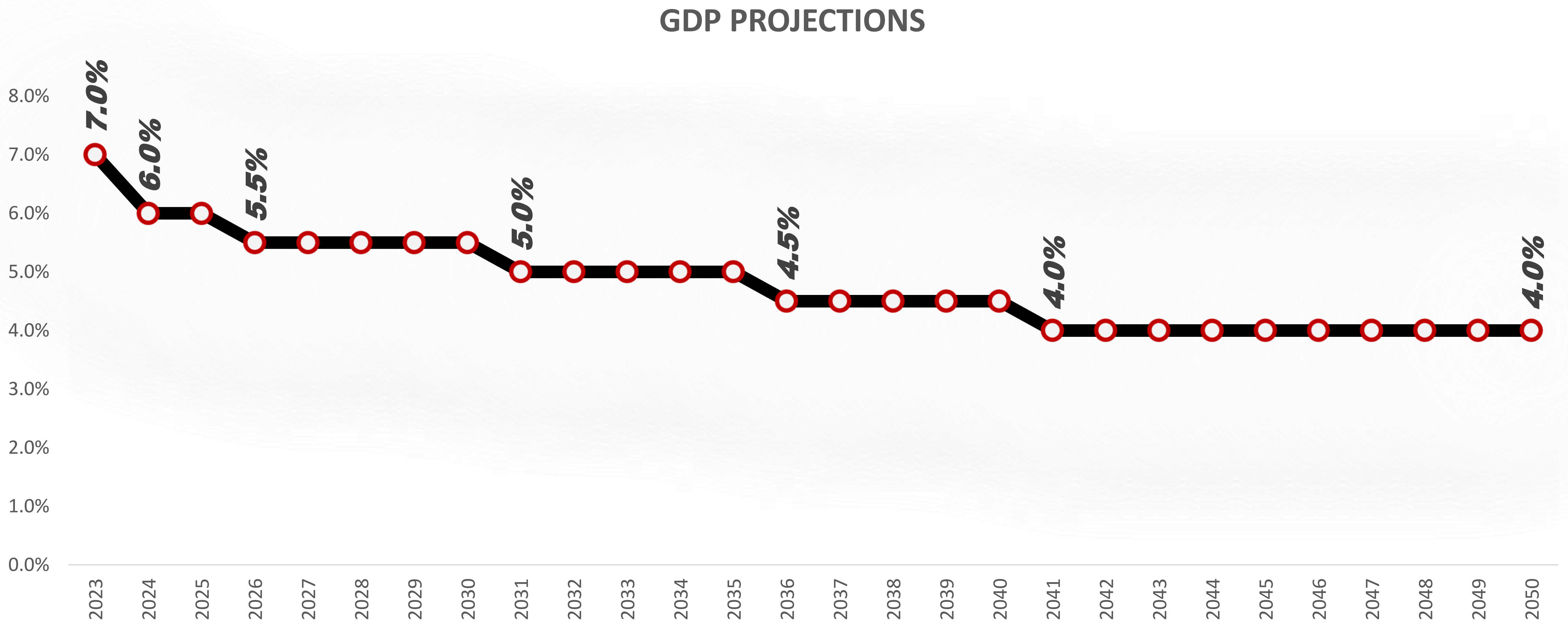
Normal Traffic Projections – Diversions + Development Traffic

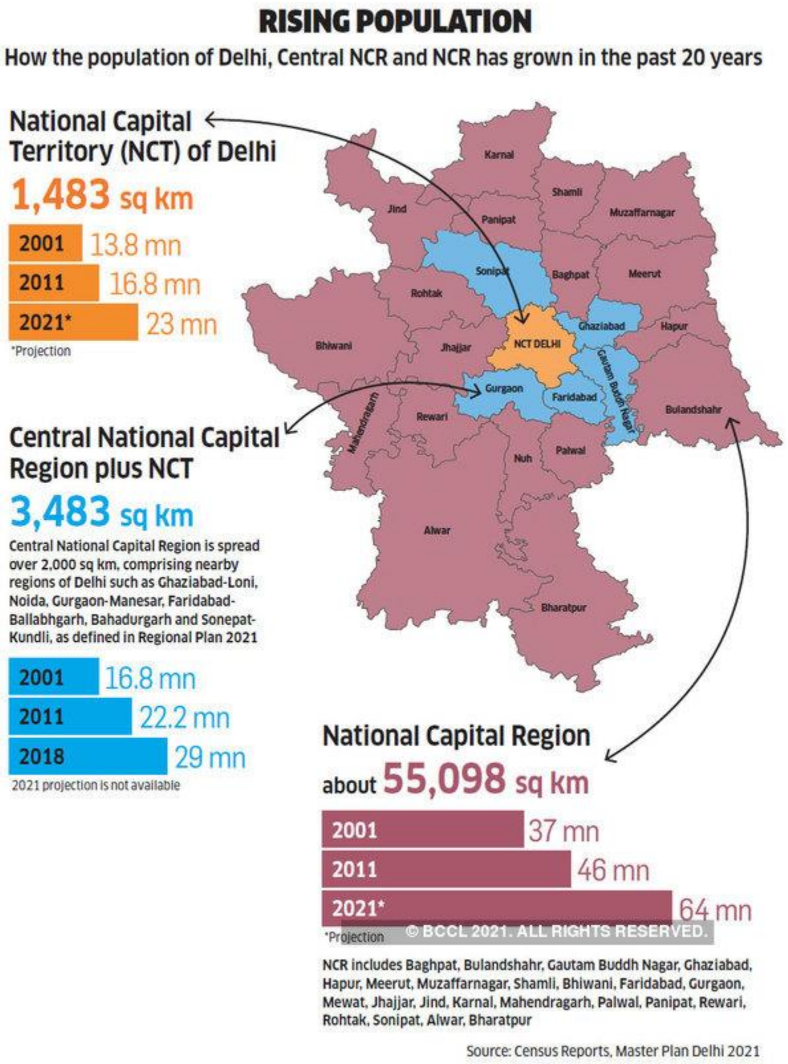


Long term GDP Projections are sourced from 1. OECD, 2. EIU, 3. PWC
Short term GDP Projections are sourced from 1. IMF, Moody's, S&P, Fitch, World Bank, ADB, RBI / Finance Ministry, India Ratings and Research, Care Ratings, NCAER, Goldman Sachs, OECD, EIU,PWC, ICRA.

FUTURE ECONOMIC GROWTH – GDP (MOST LIKELY)

FY	INDIA	UTTAR PRADESH	HARYANA	PUNJAB	DELHI	CHANDIGARH	RAJASTHAN	UTTARAKHAND	GUJARAT
FY 23	7.0%	7.7%	8.5%	6.0%	8.0%	7.0%	6.6%	7.5%	9.5%
FY 24	6.0%	6.6%	7.2%	5.1%	6.8%	6.0%	5.6%	6.5%	8.1%
FY 25	6.0%	7.6%	6.9%	5.7%	6.6%	6.0%	6.3%	6.9%	7.5%
FY 26	5.5%	7.0%	6.4%	5.2%	6.1%	5.5%	5.8%	6.3%	6.9%
FY 27	5.5%	7.0%	6.4%	5.2%	6.1%	5.5%	5.8%	6.3%	6.9%
FY 28	5.5%	7.0%	6.4%	5.2%	6.1%	5.5%	5.8%	6.3%	6.9%
FY 29	5.5%	7.0%	6.4%	5.2%	6.1%	5.5%	5.8%	6.3%	6.9%
FY 30	5.5%	6.7%	6.4%	5.2%	6.1%	5.5%	5.8%	6.1%	6.9%
FY 31	5.0%	6.1%	5.8%	4.8%	5.5%	5.0%	5.3%	5.5%	6.3%
FY 32	5.0%	6.1%	5.8%	4.8%	5.5%	5.0%	5.3%	5.5%	6.3%
FY 33	5.0%	5.8%	5.8%	4.8%	5.5%	5.0%	5.3%	5.5%	6.3%
FY 34	5.0%	5.8%	5.8%	4.8%	5.5%	5.0%	5.3%	5.5%	6.3%
FY 35	5.0%	5.8%	5.8%	4.8%	5.5%	5.0%	5.3%	5.5%	6.3%
FY 36	4.5%	5.2%	5.2%	4.3%	5.0%	4.5%	4.7%	5.0%	5.6%
FY 37	4.5%	5.2%	5.2%	4.3%	5.0%	4.5%	4.7%	5.0%	5.6%
FY 38	4.5%	5.2%	5.2%	4.3%	5.0%	4.5%	4.7%	5.0%	5.6%
FY 39	4.5%	5.2%	5.2%	4.3%	5.0%	4.5%	4.7%	5.0%	5.6%
FY 40	4.5%	5.0%	5.0%	3.8%	4.7%	4.5%	4.3%	4.7%	5.4%
FY 41	4.0%	4.4%	4.4%	3.4%	4.2%	4.0%	3.8%	4.2%	4.8%
FY 42	4.0%	4.4%	4.4%	3.4%	4.2%	4.0%	3.8%	4.2%	4.8%

DELHI VS CENTRAL NCR VS OVERALL NCR



National Capital Region (NCR) is expected to grow in Population from 64 millions in 2021 to 113 millions in 2041 with a CAGR of around 3%.

Delhi Metropolitan Area is expected to overtake Tokyo projected to be the world's largest metropolis by 2030

NCR region including Central NCR is expected to grow faster than the overall state economy due to the potential better employment and population growth coupled with improved social and physical infrastructure in the region

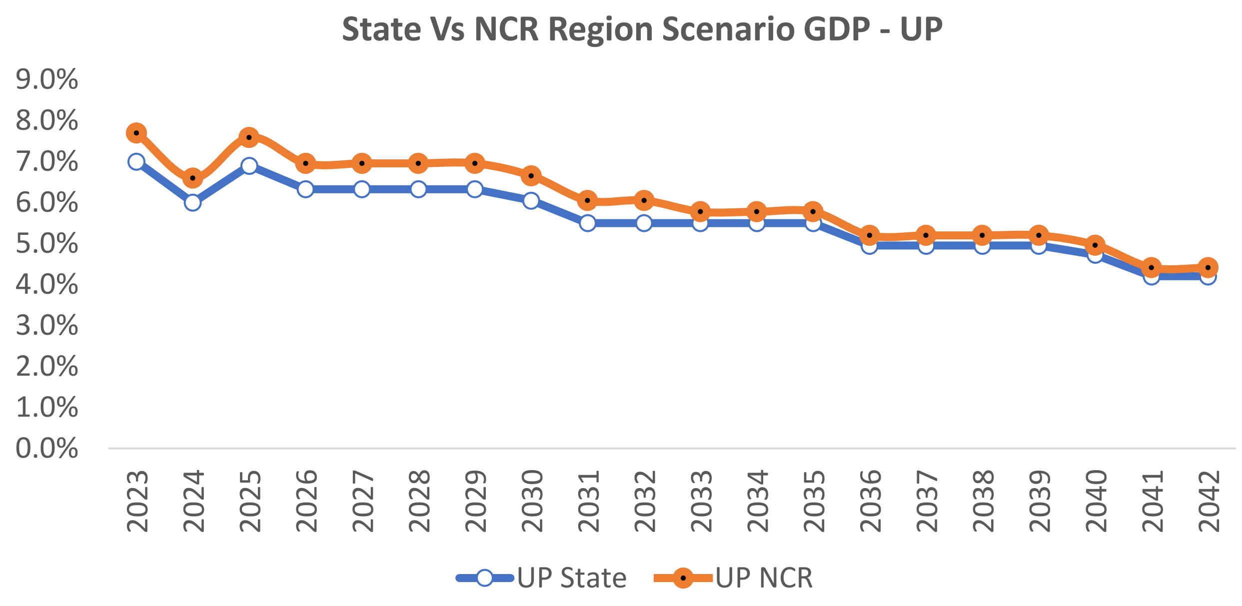
Urbanization level in NCR has increased from 50% in 1991 to 56% in 2001 and further increased to 62.6% in 2011 of the then NCR.

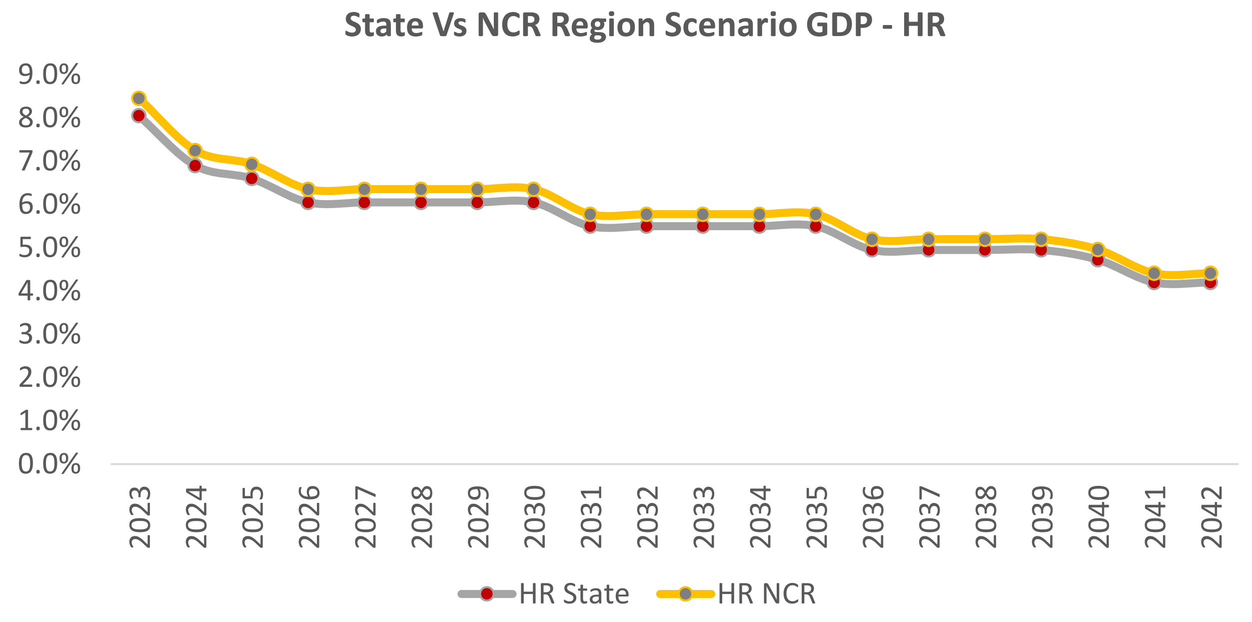
With the rapid growth of Central NCR (CNCR) area, Metro Centres & Regional Centres, proposed Delhi-Mumbai Industrial Corridor (DMIC) and Dedicated Freight Corridors (DFC), urbanization level of NCR is expected to increase to about 68% by 2041 of the current NCR.

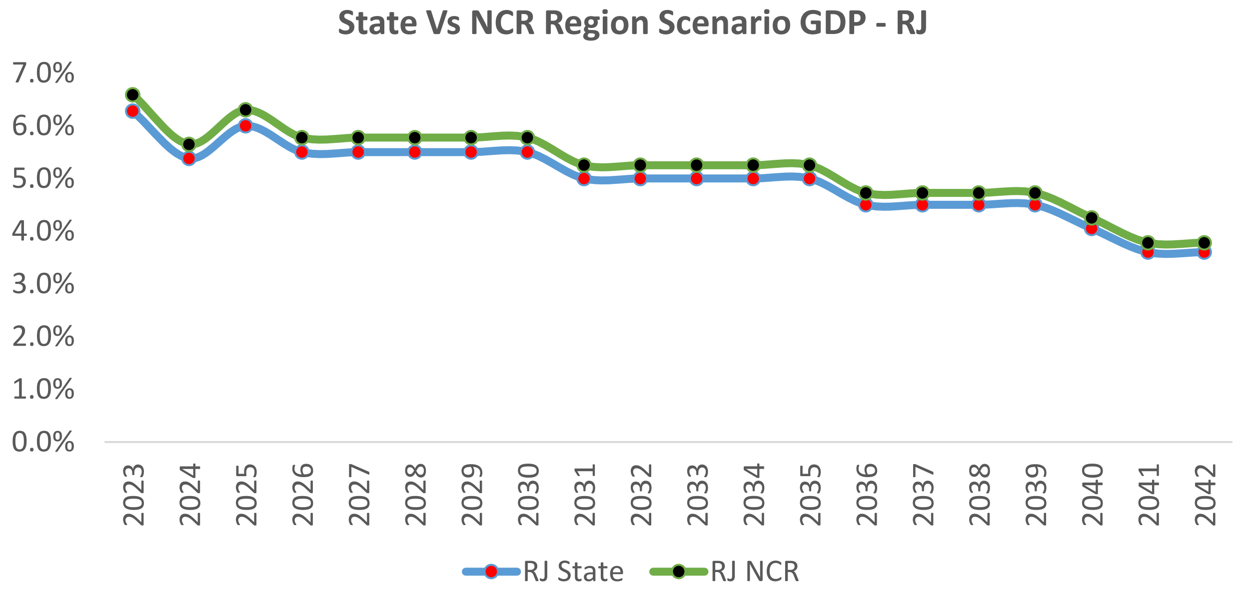
Commuting across NCR is expected to improve on the backdrop of faster mobility projects in both road and rail like RRTS, Expressways etc.

New townships like YEIDA in Uttar Pradesh and Panchgram being envisaged by Haryana, will call for massive investments in physical and social infrastructure.

STATE VS NCR REGION GDP GROWTH







- The National Capital Region (NCR) is a planning region centered upon the National Capital Territory of Delhi in India. It encompasses Delhi and several districts surrounding it from the states of Haryana, Uttar Pradesh and Rajasthan.
- Consultant has Proposed different GDP projections for the project influence area in NCR compared to the states of the NCR.
- Higher GDP Factors Applied for PIA area states which are Uttar Pradesh, Haryana and Rajasthan

PROJECT	REGISTERED VEH - ELASTICITY			HISTORIC TRAFFIC - ELASTICITY			RELATION		
	CAR	BUS	TRUCK	CAR	BUS	TRUCK	CAR	BUS	TRUCK
Gujarat/Rajasthan	1.81	0.70	0.73	1.13	0.17	0.82	0.62	0.24	1.12
Maharashtra	1.66	0.48	1.00	1.13	0.67	0.79	0.68	1.38	0.79
West Bengal	1.31	1.35	2.39	1.37	1.10	1.27	1.05	0.81	0.53
Chhattisgarh	2.42	0.98	1.07	1.65	2.29	0.69	0.68	2.35	0.64
Madhya Pradesh	1.67	0.79	0.91	1.84	0.63	0.99	1.10	0.79	1.09
Gujarat/Rajasthan	1.50	0.63	0.67	0.95	0.15	0.80	0.64	0.24	1.19
UP/MP	1.75	0.75	1.21	1.39	0.89	0.74	0.79	1.17	0.61
Odisha	1.62	0.75	1.16	0.93	1.66	1.61	0.58	2.21	1.39
Andhra Pradesh	1.13	0.58	0.61	0.96	0.87	0.29	0.85	1.50	0.47
Andhra Pradesh	1.17	0.52	0.54	1.34	-0.77	0.19	1.15	-1.48	0.36
Haryana	1.46	1.16	0.88	1.49	2.41	0.82	1.02	2.08	0.94
Average	1.59	0.79	1.02	1.29	0.91	0.82	**0.81**	**1.16**	**0.81**
Adopted Relation [multiplication factor]							**0.8**	**1.1**	**0.8**

Due to unavailability of Historic data of Project road (toll operations started in 2018 only), Consultant has created relation (multiplication factor) to the elasticities arrived from the regression analysis based on the Registration vehicles data in the PIA. Multiplication factors arrived based on the relation between elasticities from Registered vehicles and Historic traffic of the projects considered from across India.

Base Year Traffic | **Traffic Growth Rates** | Toll Revenue Estimation

Table 2. 4
Passenger Traffic Elasticities with Respect to GDP

YEARS	1950-51 TO 1970-71	1970-71 TO 1990-91	1990-91 TO 2006-07	1950-51 TO 2006-07	2006-07 TO 2011-12
Rail Passenger Elasticity	0.75	1.12	0.87	0.92	1.1[A]
Road Passenger Elasticity	2.64	2.01	1.54	2.0	1.9[E]
Total Passenger Elasticity	1.64	1.75	1.42	1.59	1.8[E]

Source: NTDPC Research.
Note: [A] Actual (from Planning Commission [2013]).
[E] Estimated (based on NTDPC research).

Elasticity reduces gradually over the time

Road freight traffic elasticity reduced historically by around 2% per annum

Considering lower value of the elasticities in the base year, going forward it is assumed that a decrease of value by 1% per annum is reasonable

Table 2.1
Freight Elasticities with respect to GDP

YEARS	1950-51 TO 1970-71	1970-71 TO 1990-91	1990-91 TO 2004-05	1950-51 TO 2004-05	2004-05 TO 2011-12
Rail Freight Traffic Elasticity	1.43	0.8	0.64	0.9	0.9[A]
Road Freight Traffic Elasticity	3.13	1.98	1.05	2.0	1.4[E]
Total Freight Traffic Elasticity	1.77	1.29	0.87	1.3	1.2[E]

Source: NTDPC Research.
Note: The traffic figures for the years 1990-91 and 2011-12 are based on NTDPC research.
[A] Actual Elasticity.
[E] Estimated Elasticity.

REGRESSION ANALYSIS – EPE – 3/5

REGRESSION ANALYSIS - ARRIVED ELASTICITIES [Past Period]											
VEHICLE TYPE	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
Car	Registered Vehicles	PCI	1.91	1.99	2.22	2.31	2.19	2.35	2.32	1.88	2.12
		GSDP	1.56	1.62	1.86	1.97	1.84	1.98	1.97	1.69	1.86
		GSDP Tertiary sector	1.45	1.51	1.73	1.82	1.71	1.84	1.83	1.55	1.72
Bus		PCI	1.68	1.78	0.97	0.81	0.87	0.80	0.83	0.89	0.87
		GSDP	1.14	1.25	0.72	0.70	0.72	0.67	0.70	0.79	0.75
		Population	4.76	4.99	3.25	3.29	3.32	3.12	3.19	3.76	3.39
Trucks		GSDP	1.09	1.13	1.26	1.27	1.24	1.24	1.26	1.01	1.12
		Secondary Sector GSDP	0.93	0.96	1.02	1.03	1.01	1.00	1.02	0.88	0.96

Adopted Elasticity values for the Past period are arrived by applying relation (multiplication factors) on the Regression analysis Elasticity values

REGRESSION ANALYSIS - ADOPTED ELASTICITIES [Past Period]											
VEHICLE TYPE	DEPENDENT VARIABLE	INDEPENDENT VARIABLE	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
Car	Reg Veh	PCI	1.53	1.60	1.78	1.85	1.76	1.89	1.87	1.51	1.70
Bus		GSDP	1.26	1.38	0.79	0.77	0.80	0.74	0.77	0.87	0.82
Trucks		GSDP	0.87	0.91	1.01	1.02	0.99	0.99	1.01	0.81	0.90

REGRESSION ANALYSIS – UPEER AND LOWER LIMITS – 4/5

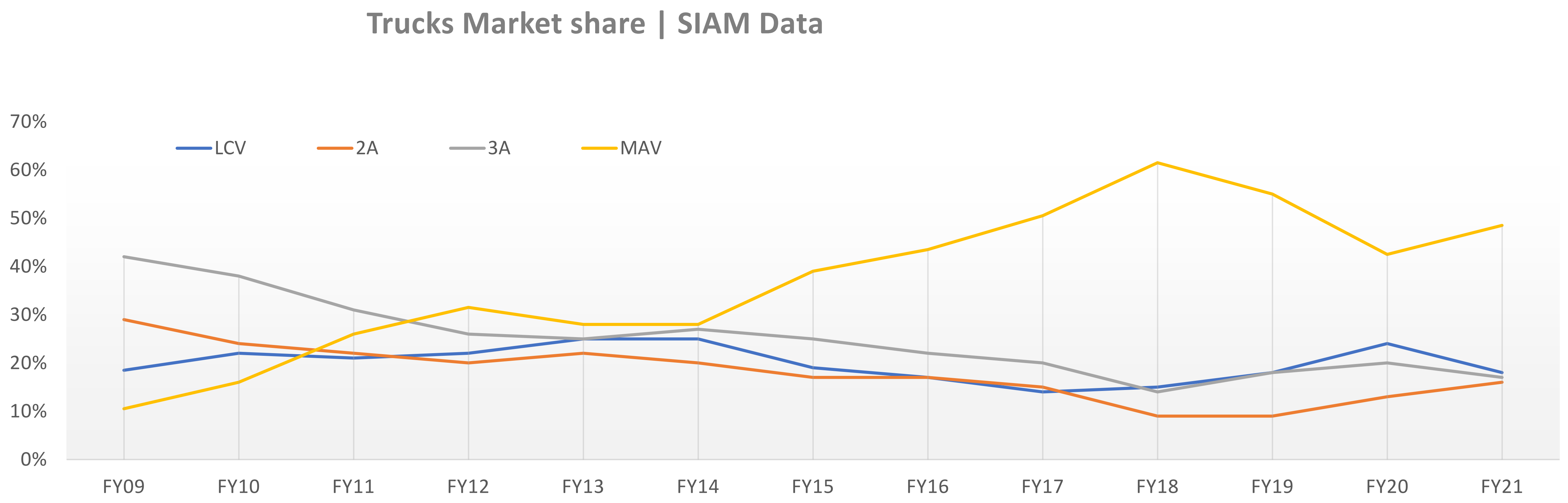
REGRESSION ANALYSIS – UPPER AND LOWER LIMITS				
VEHICLE TYPE	**DEPENDENT VARIABLE**	**INDEPENDENT VARIABLE**	**UPPER LIMIT**	**LOWER LIMIT**
Car	Reg Veh	**PCI**	1.30	1.00
Bus		**GSDP**	0.60	0.40
Trucks		**GSDP**	1.00	0.70

- Consultant arrived the limits based on the past project studies conducted across India based on the regression model
- Higher values of elasticities are kept for passenger vehicles due to rising income & aspiration of people especially in urban areas
- Trucks (Tonnage) trends follow majorly economy and its structure like increase of share in Secondary and Tertiary sectors
- The above elasticity value limits are considered for all the Toll Plazas on the project road

REGRESSION ANALYSIS – FUTURE ELASTICITIES – 5/5

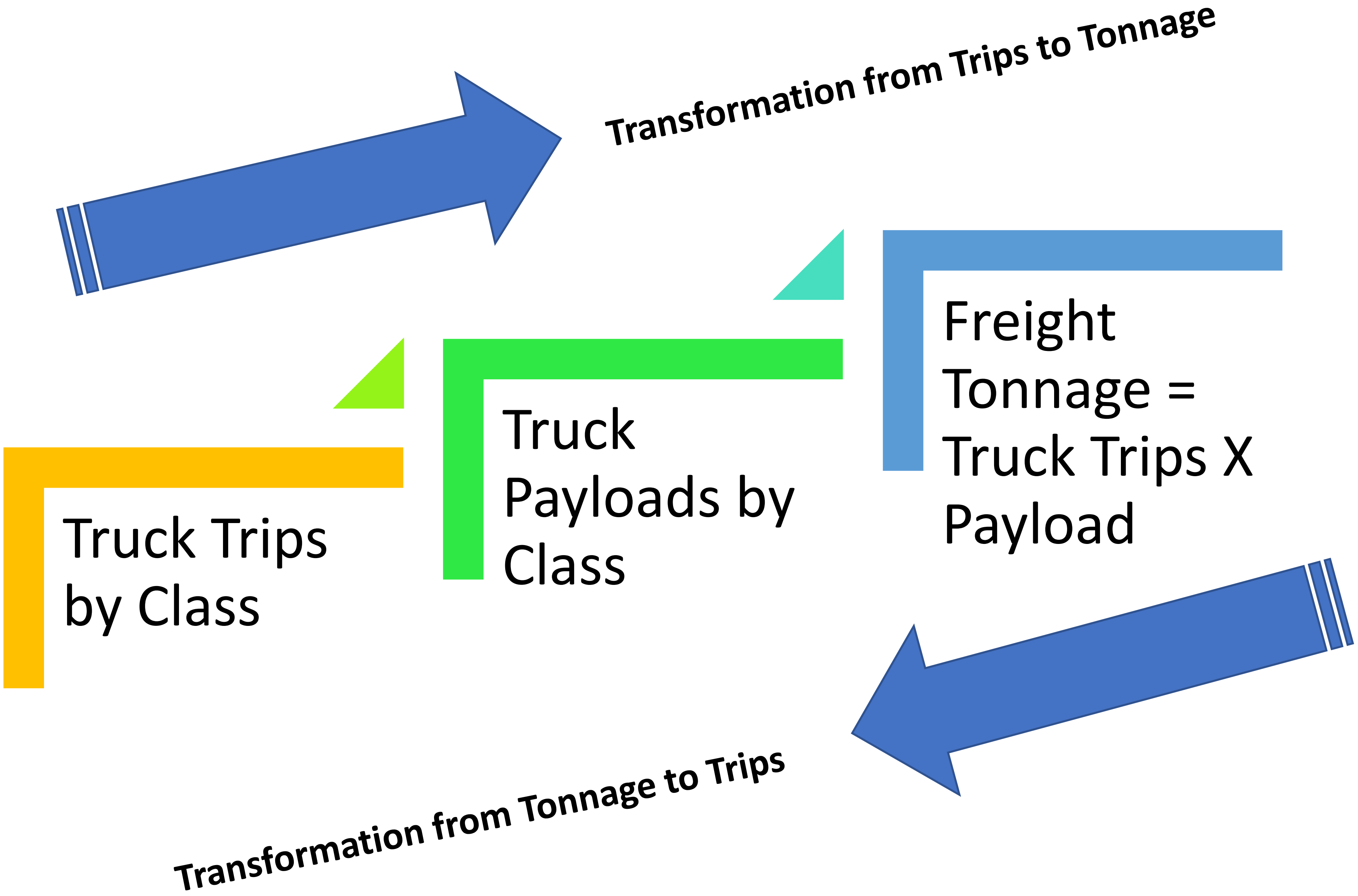
REGRESSION ANALYSIS - FUTURE ELASTICITIES										
VEHICLE TYPE	FY	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
Car	FY 23 – FY 32	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	FY 33 – FY 42	1.23	1.28	1.30	1.30	1.30	1.30	1.30	1.21	1.30
	FY 43 – FY 52	1.15	1.20	1.30	1.30	1.30	1.30	1.30	1.14	1.28
Bus	FY 23 – FY 32	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	FY 33 – FY 42	0.60	0.60	0.60	0.60	0.60	0.59	0.60	0.60	0.60
	FY 43 – FY 52	0.60	0.60	0.60	0.58	0.60	0.55	0.57	0.60	0.60
Trucks [tonnage]	FY 23 – FY 32	0.78	0.82	0.91	0.91	0.89	0.89	0.91	0.72	0.81
	FY 33 – FY 42	0.70	0.73	0.80	0.81	0.79	0.79	0.81	0.70	0.72
	FY 43 – FY 52	0.70	0.70	0.75	0.76	0.74	0.74	0.76	0.70	0.70

- Future Elasticity values are moderated which are based on the Elasticity vales arrived from Past period and considering the Upper and Lower limits of the elasticity values observed across the projects in India.
- For Car, the upper elasticity has been Considered 1.30 and for first 10 years 90% of Calculated elasticity has Considered and later for next 10 years it further toned down to 80%.
- Future year elasticities at some of the locations are not changing since recommended elasticities for the base year was higher than the upper limits of the elasticity values for the individual modes.
- For Buses, 0.60 is the upper limit and lower limit is 0.40. buses has also moderated for every decade from the arrived elasticity as same as cars.
- For Trucks, Upper elasticity has considered 1.0 and it further toned down for every decade like 90%, 80% and 75%.
- High elasticity values observed at TP 3, TP 4 and TP 5, which is proximity to urban Agglomerations like Ghaziabad and Noida.



- For freight vehicles, the overall tonnage on the project road is projected. The existing market share of different category of goods vehicles are then adjusted for the future years based on the market share of the tonnage carried by different truck categories.

- The future truck market share is assumed usually through two sources
    - Observing Trends in Historic truck sales data from SIAM
    - Project reference method by assuming how much industrial development can happen say in next 20 years to the level of highly industrialized highway section.



Future Modal Split in Commercial Vehicles is based on past trends and expected mode significance (reference method), vehicle sales etc.

An example is shown in the next slide

FUTURE MARKET SHARE OF FREIGHT VEHICLES | JAKHAULI

1. The Base year tonnage is arrived based on the Goods vehicles AADT and respective payloads for each vehicle type. (refer table for mode wise payloads)
2. Base year Tonnage is Projected to future years based on GDP of PIA and elasticity .
3. Projected Tonnage is divided with the payloads to arrive the Vehicles growth for every year.
4. Based on Current vehicle share on Project road, the share of LCVs , 2As and 3As are gradually reduced and MAV share is increased due to higher utility of bigger vehicles rather than the lesser axle vehicles in the future.

VEHICLE	PAYLOAD (tonnes)
LCV	5
2A	11.1
3A	17.1
MAV	28.5

Tonnage Share					
Year	LCV	2A	3A	MAV	Total
2022	17.8%	5.9%	12.4%	63.8%	100.0%
2023-2027	16.3%	5.2%	11.1%	67.3%	100.0%
2028-2032	14.8%	4.4%	9.9%	70.8%	100.0%
2033-2042	12.3%	3.3%	8.0%	76.3%	100.0%

TRAFFIC PROJECTIONS - 9 TOLL PLAZAS CONFIGURATION

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – JAKHAULI TP

IBI

CDPQ

JAKHAULI TP 1 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.3%	4.8%	4.8%	4.3%	3.4%	4.0%	7.4%
2024	6.8%	4.1%	4.1%	3.5%	2.5%	3.1%	6.5%
2025	6.7%	4.2%	4.2%	3.9%	2.9%	3.5%	6.9%
2026	6.0%	3.8%	3.8%	3.4%	2.5%	3.1%	6.4%
2027	6.0%	3.8%	3.8%	3.4%	2.5%	3.1%	6.3%
2028	6.0%	3.8%	3.8%	3.3%	2.0%	2.8%	6.4%
2029	6.0%	3.8%	3.8%	3.3%	2.0%	2.8%	6.4%
2030	6.0%	3.8%	3.8%	3.1%	1.9%	2.6%	6.2%
2035	5.1%	3.4%	3.4%	2.1%	1.1%	1.8%	4.9%
2040	4.2%	2.9%	2.9%	1.6%	0.6%	1.3%	4.2%
2042	3.5%	2.6%	2.6%	1.2%	0.2%	0.9%	3.7%
JAKHAULI TP 1 – EFFECTIVE PROJECTIONS							
2023	-3.5%	5.2%	-11.9%	1.7%	1.4%	1.7%	5.0%
2024	6.8%	4.1%	4.1%	3.4%	2.4%	2.9%	5.9%
2025	6.7%	4.2%	4.2%	3.9%	3.0%	3.5%	6.9%
2026	6.0%	3.8%	3.8%	3.5%	2.4%	3.0%	6.4%
2027	6.0%	3.8%	3.8%	3.4%	2.5%	3.2%	6.4%
2028	6.0%	3.8%	3.8%	3.2%	2.0%	2.7%	6.4%
2029	6.0%	3.8%	3.8%	3.3%	2.0%	2.9%	6.4%
2030	6.2%	3.8%	3.8%	3.3%	2.7%	3.7%	6.9%
2035	5.2%	3.4%	3.4%	2.2%	1.2%	2.2%	5.1%
2040	4.2%	2.9%	2.9%	1.6%	0.5%	1.3%	4.2%
2042	3.5%	2.6%	2.6%	1.2%	0.4%	1.1%	3.7%

Reference
Work Book
1.Jakhauli_EPE_Fin Input and Rev 4.xlsx
Sheet
1.JA Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
1.JA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Jakhauli Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – MAWIKALAN TP

MAWIKALAN TP 2 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.1%	4.8%	4.8%	5.1%	3.3%	3.9%	7.8%
2024	6.6%	4.1%	4.1%	4.2%	2.4%	3.0%	6.8%
2025	6.7%	4.1%	4.1%	4.7%	2.8%	3.5%	7.2%
2026	6.0%	3.8%	3.8%	4.2%	2.4%	3.0%	6.7%
2027	6.0%	3.8%	3.8%	4.2%	2.4%	3.0%	6.7%
2028	6.0%	3.8%	3.8%	4.2%	1.8%	2.7%	6.7%
2029	6.0%	3.8%	3.8%	4.2%	1.8%	2.7%	6.7%
2030	5.9%	3.7%	3.7%	4.0%	1.7%	2.5%	6.5%
2035	5.3%	3.4%	3.4%	2.8%	1.1%	1.9%	5.1%
2040	4.3%	2.9%	2.9%	2.3%	0.5%	1.3%	4.4%
2042	3.6%	2.6%	2.6%	1.9%	0.2%	0.9%	3.9%
MAWIKALAN TP 2 – EFFECTIVE PROJECTIONS							
2023	-14.4%	-3.3%	-27.1%	-8.9%	-4.7%	-16.1%	-5.5%
2024	6.6%	4.1%	4.1%	4.1%	1.8%	3.9%	7.0%
2025	6.7%	4.1%	4.1%	4.8%	3.2%	4.5%	7.2%
2026	8.6%	3.8%	3.8%	5.3%	4.3%	4.8%	7.9%
2027	6.0%	3.8%	3.8%	4.1%	2.0%	2.7%	7.1%
2028	6.0%	3.8%	3.8%	4.2%	1.6%	3.0%	6.5%
2029	6.0%	3.8%	3.8%	4.1%	2.4%	2.8%	6.3%
2030	6.3%	3.7%	3.7%	4.0%	2.4%	1.9%	7.0%
2035	5.3%	3.4%	3.4%	2.8%	0.7%	1.8%	5.1%
2040	4.2%	2.9%	2.9%	2.3%	0.3%	1.4%	4.4%
2042	3.6%	2.6%	2.6%	1.8%	0.3%	0.7%	3.9%

Reference
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Sheet
2.MA Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
2.MA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Mawikalan Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – DUHAI TP

DUHAI TP 3 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.3%	4.6%	4.6%	5.9%	4.8%	5.2%	8.6%
2024	6.9%	4.0%	4.0%	4.9%	3.8%	4.2%	7.5%
2025	7.2%	4.5%	4.5%	5.5%	4.5%	4.9%	8.2%
2026	6.4%	4.1%	4.1%	5.0%	3.9%	4.3%	7.6%
2027	6.5%	4.1%	4.1%	5.0%	3.9%	4.3%	7.5%
2028	6.5%	4.1%	4.1%	4.9%	3.7%	4.2%	7.6%
2029	6.5%	4.1%	4.1%	4.9%	3.7%	4.2%	7.6%
2030	6.3%	4.0%	4.0%	4.7%	3.4%	3.9%	7.3%
2035	5.6%	3.4%	3.4%	3.5%	2.4%	3.0%	5.7%
2040	4.6%	3.0%	3.0%	2.9%	1.7%	2.3%	4.9%
2042	3.9%	2.6%	2.6%	2.4%	1.3%	1.9%	4.4%
DUHAI TP 3 – EFFECTIVE PROJECTIONS							
2023	8.4%	5.3%	3.9%	5.9%	4.9%	5.1%	8.3%
2024	6.8%	4.0%	4.0%	4.9%	3.8%	3.9%	7.7%
2025	7.2%	4.5%	4.5%	5.5%	4.3%	5.8%	8.6%
2026	6.5%	4.1%	4.1%	5.0%	3.5%	3.5%	7.3%
2027	6.4%	4.1%	4.1%	4.9%	4.8%	4.6%	7.6%
2028	6.5%	4.1%	4.1%	4.9%	3.2%	4.0%	7.3%
2029	6.4%	4.1%	4.1%	5.0%	3.9%	4.5%	7.8%
2030	6.4%	4.0%	4.0%	4.8%	3.4%	4.3%	7.4%
2035	5.6%	3.4%	3.4%	3.6%	2.7%	3.6%	5.7%
2040	4.6%	3.0%	3.0%	2.9%	1.6%	2.5%	4.9%
2042	3.9%	2.6%	2.6%	2.5%	1.3%	1.7%	4.3%

Reference
Work Book
3.Duhai_EPE_Fin Input and Rev 4.xlsx
Sheet
3.DU Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
3.DA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the DuhaiToll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – MEERUT EW TP

MEERUT EWAY TP 4 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.4%	4.5%	4.5%	6.0%	4.5%	5.4%	8.5%
2024	7.0%	3.9%	3.9%	5.0%	3.5%	4.4%	7.4%
2025	7.6%	4.3%	4.3%	5.7%	4.2%	5.1%	8.1%
2026	6.8%	3.9%	3.9%	5.1%	3.7%	4.5%	7.5%
2027	6.8%	3.9%	3.9%	5.1%	3.7%	4.5%	7.4%
2028	6.8%	3.9%	3.9%	5.1%	3.3%	4.4%	7.5%
2029	6.8%	3.9%	3.9%	5.1%	3.3%	4.4%	7.5%
2030	6.5%	3.8%	3.8%	4.8%	3.1%	4.2%	7.2%
2035	5.8%	3.4%	3.4%	3.8%	2.1%	2.8%	5.6%
2040	4.8%	2.9%	2.9%	3.2%	1.4%	2.2%	4.8%
2042	4.1%	2.6%	2.6%	2.7%	1.0%	1.7%	4.3%
MEERUT EWAY TP 4 – EFFECTIVE PROJECTIONS							
2023	8.4%	5.3%	3.7%	5.6%	4.7%	5.3%	8.1%
2024	6.9%	3.9%	3.9%	5.3%	3.4%	3.9%	7.7%
2025	10.4%	4.3%	4.3%	5.7%	4.2%	4.4%	8.3%
2026	3.0%	3.9%	3.9%	2.8%	2.5%	4.6%	5.9%
2027	7.0%	3.9%	3.9%	5.0%	3.7%	3.5%	7.4%
2028	6.9%	3.9%	3.9%	5.0%	2.9%	4.4%	7.4%
2029	7.0%	3.9%	3.9%	5.2%	3.4%	4.1%	7.8%
2030	7.3%	3.8%	3.8%	5.0%	4.5%	5.1%	7.3%
2035	6.2%	3.4%	3.4%	3.9%	2.6%	2.6%	5.9%
2040	4.8%	2.9%	2.9%	3.4%	1.4%	3.0%	4.7%
2042	4.2%	2.6%	2.6%	2.5%	0.7%	1.9%	4.3%

Reference
Work Book
4.Meerut Eway_EPE_Fin Input and Rev 4.xlsx
Sheet
4.ME Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
4.ME Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Meerut E'Way Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – DASNA TP

FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
DASNA TP 5 – NORMAL PROJECTIONS							
2023	8.3%	4.6%	4.6%	5.6%	4.4%	5.0%	8.3%
2024	6.9%	4.0%	4.0%	4.6%	3.4%	4.0%	7.3%
2025	7.2%	4.5%	4.5%	5.3%	4.0%	4.6%	7.9%
2026	6.4%	4.1%	4.1%	4.8%	3.5%	4.1%	7.3%
2027	6.4%	4.1%	4.1%	4.8%	3.5%	4.1%	7.3%
2028	6.4%	4.1%	4.1%	4.7%	3.1%	3.9%	7.4%
2029	6.4%	4.1%	4.1%	4.7%	3.1%	3.9%	7.3%
2030	6.3%	3.9%	3.9%	4.5%	2.9%	3.7%	7.1%
2035	5.6%	3.4%	3.4%	3.2%	1.8%	2.8%	5.5%
2040	4.6%	3.0%	3.0%	2.5%	1.2%	2.2%	4.7%
2042	3.9%	2.6%	2.6%	2.1%	0.8%	1.8%	4.3%
DASNA TP 5 – EFFECTIVE PROJECTIONS							
2023	8.3%	4.9%	4.8%	5.7%	4.4%	4.8%	8.3%
2024	6.9%	4.0%	4.0%	4.7%	3.6%	4.0%	7.3%
2025	8.5%	4.5%	4.5%	5.2%	3.7%	4.5%	8.1%
2026	6.5%	4.1%	4.1%	4.8%	3.6%	4.3%	7.2%
2027	6.5%	4.1%	4.1%	4.7%	3.4%	4.0%	7.2%
2028	6.5%	4.1%	4.1%	4.6%	3.3%	4.0%	7.4%
2029	6.5%	4.1%	4.1%	4.7%	3.2%	3.8%	7.3%
2030	7.4%	3.9%	3.9%	4.6%	3.3%	4.1%	7.6%
2035	6.0%	3.4%	3.4%	3.2%	1.8%	2.9%	5.6%
2040	4.6%	3.0%	3.0%	2.6%	1.1%	1.8%	4.8%
2042	3.9%	2.6%	2.6%	2.1%	0.9%	1.9%	4.2%

Reference
Work Book
5.Dasna_EPE_Financial Input and Revenue4.xlsx
Sheet
5.DA Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
5.DA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the DasnaToll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – BIL AKBAR TP

BIL AKBARPUR TP 6 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.5%	4.6%	4.6%	5.7%	4.2%	3.7%	8.1%
2024	7.0%	4.0%	4.0%	4.7%	3.3%	2.7%	7.1%
2025	7.6%	4.5%	4.5%	5.3%	3.9%	3.4%	7.7%
2026	6.9%	4.2%	4.2%	4.8%	3.4%	2.8%	7.1%
2027	6.9%	4.2%	4.2%	4.8%	3.4%	2.8%	7.1%
2028	6.9%	4.2%	4.2%	4.7%	3.0%	2.2%	7.2%
2029	6.9%	4.2%	4.2%	4.7%	3.0%	2.2%	7.1%
2030	6.6%	4.0%	4.0%	4.5%	2.8%	2.0%	6.9%
2035	5.8%	3.4%	3.4%	3.3%	2.0%	1.3%	5.3%
2040	4.8%	2.9%	2.9%	2.7%	1.4%	0.6%	4.5%
2042	4.1%	2.6%	2.6%	2.3%	1.0%	0.2%	4.1%
BIL AKBARPUR TP 6 – EFFECTIVE PROJECTIONS							
2023	8.5%	1.3%	5.2%	5.6%	4.2%	3.8%	8.2%
2024	7.0%	4.0%	4.0%	4.9%	3.1%	2.6%	7.0%
2025	9.4%	4.5%	4.5%	5.1%	3.9%	3.2%	7.7%
2026	7.0%	4.2%	4.2%	4.9%	3.2%	2.8%	7.2%
2027	6.9%	4.2%	4.2%	4.7%	3.7%	3.3%	6.9%
2028	6.9%	4.2%	4.2%	4.6%	2.5%	1.8%	7.3%
2029	7.0%	4.2%	4.2%	4.9%	3.5%	2.6%	7.2%
2030	11.1%	4.0%	4.0%	6.1%	8.6%	8.3%	9.7%
2035	7.0%	3.4%	3.4%	3.7%	4.1%	3.8%	6.1%
2040	4.8%	2.9%	2.9%	2.7%	1.7%	1.1%	4.5%
2042	4.0%	2.6%	2.6%	2.0%	1.2%	0.5%	3.9%

Reference
Work Book
6.Bilakbarpur_EPE_Fin Input and Rev 4xlsx
Sheet
6.BI Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
6.BI Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Bil Akbarpur Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – FATHEPUR TP

FATHEPUR RAMPUR TP 7 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.5%	4.6%	4.6%	5.8%	5.2%	5.4%	8.6%
2024	7.0%	4.0%	4.0%	4.8%	4.2%	4.4%	7.5%
2025	7.6%	4.5%	4.5%	5.5%	4.9%	5.1%	8.2%
2026	6.8%	4.1%	4.1%	4.9%	4.3%	4.5%	7.6%
2027	6.8%	4.1%	4.1%	4.9%	4.3%	4.5%	7.5%
2028	6.8%	4.1%	4.1%	4.8%	4.1%	4.4%	7.6%
2029	6.8%	4.1%	4.1%	4.8%	4.1%	4.4%	7.6%
2030	6.6%	4.0%	4.0%	4.6%	3.9%	4.1%	7.3%
2035	5.8%	3.5%	3.5%	3.5%	2.9%	2.9%	5.7%
2040	4.8%	3.0%	3.0%	2.8%	2.3%	2.3%	4.9%
2042	4.1%	2.6%	2.6%	2.4%	1.8%	1.9%	4.4%
FATHEPUR RAMPUR TP 7 – EFFECTIVE PROJECTIONS							
2023	8.5%	5.5%	4.7%	5.8%	5.3%	5.6%	8.6%
2024	7.1%	4.0%	4.0%	4.5%	4.1%	4.3%	7.4%
2025	12.8%	4.5%	4.5%	5.6%	5.0%	5.1%	8.1%
2026	7.1%	4.1%	4.1%	4.9%	4.2%	3.5%	7.7%
2027	7.1%	4.1%	4.1%	4.8%	4.2%	5.1%	6.6%
2028	7.1%	4.1%	4.1%	4.8%	4.2%	4.0%	7.8%
2029	7.1%	4.1%	4.1%	4.8%	4.0%	5.1%	7.5%
2030	9.8%	4.0%	4.0%	5.5%	6.8%	12.3%	11.5%
2035	6.9%	3.5%	3.5%	3.8%	3.8%	4.8%	6.4%
2040	4.9%	3.0%	3.0%	2.9%	2.6%	2.4%	4.7%
2042	4.1%	2.6%	2.6%	2.4%	1.7%	1.7%	4.0%

Reference
Work Book
7.Fatehpur_EPE_Fin Input and Rev 4.xlsx
Sheet
7.FA Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
7.FA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Fatehpur Rampur Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – MAUJPUR TP

MAUJPUR TP 8 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	9.0%	4.8%	4.8%	4.9%	3.8%	4.4%	7.8%
2024	7.5%	4.1%	4.1%	4.1%	3.0%	3.6%	6.9%
2025	7.3%	4.4%	4.4%	4.4%	3.3%	3.9%	7.2%
2026	6.6%	4.1%	4.1%	4.0%	2.9%	3.5%	6.7%
2027	6.6%	4.1%	4.1%	4.0%	2.9%	3.5%	6.6%
2028	6.6%	4.1%	4.1%	4.0%	2.7%	3.4%	6.7%
2029	6.6%	4.1%	4.1%	4.0%	2.7%	3.4%	6.7%
2030	6.5%	3.9%	3.9%	3.8%	2.6%	3.3%	6.5%
2035	5.5%	3.5%	3.5%	3.2%	2.2%	2.9%	5.3%
2040	4.5%	3.0%	3.0%	2.7%	1.6%	2.3%	4.6%
2042	3.9%	2.6%	2.6%	2.3%	1.2%	1.9%	4.2%
MAUJPUR TP 8 – EFFECTIVE PROJECTIONS							
2023	9.0%	5.9%	1.4%	4.7%	3.6%	3.4%	7.9%
2024	7.5%	4.1%	4.1%	4.2%	3.0%	3.2%	6.4%
2025	7.3%	4.4%	4.4%	4.7%	4.0%	6.1%	7.2%
2026	6.6%	4.1%	4.1%	3.8%	2.4%	1.9%	7.1%
2027	6.6%	4.1%	4.1%	2.5%	2.8%	4.1%	6.1%
2028	6.7%	4.1%	4.1%	4.2%	2.3%	2.7%	6.6%
2029	6.6%	4.1%	4.1%	4.0%	3.2%	3.5%	6.5%
2030	10.3%	3.9%	3.9%	5.0%	6.7%	12.7%	13.2%
2035	6.5%	3.5%	3.5%	3.7%	3.7%	5.4%	6.6%
2040	4.5%	3.0%	3.0%	2.8%	1.8%	2.1%	5.1%
2042	3.7%	2.6%	2.6%	2.3%	1.4%	2.3%	3.9%

Reference
Work Book
8.Maujpur_EPE_Fin Input and Rev 4.xlsx
Sheet
8.MA Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
8.MA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Maujpur Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – CHHAJJU TP

IBI CDPQ

CHAJJUNAGAR TP 9 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.6%	4.6%	4.6%	4.1%	3.8%	3.8%	7.5%
2024	7.2%	3.9%	3.9%	3.2%	2.9%	3.0%	6.5%
2025	7.4%	4.4%	4.4%	3.7%	3.4%	3.5%	7.0%
2026	6.6%	4.0%	4.0%	3.2%	2.9%	3.0%	6.5%
2027	6.6%	4.0%	4.0%	3.3%	2.9%	3.0%	6.4%
2028	6.6%	4.0%	4.0%	3.0%	2.6%	2.6%	6.5%
2029	6.6%	4.0%	4.0%	3.0%	2.6%	2.6%	6.5%
2030	6.5%	3.9%	3.9%	2.8%	2.4%	2.5%	6.3%
2035	5.8%	3.4%	3.4%	1.7%	1.5%	1.5%	4.9%
2040	4.8%	2.9%	2.9%	1.1%	1.0%	0.9%	4.2%
2042	4.1%	2.6%	2.6%	0.8%	0.6%	0.5%	3.8%
CHHAJJUNAGAR TP 9 – EFFECTIVE PROJECTIONS							
2023	8.6%	4.7%	3.7%	4.1%	3.6%	3.7%	7.5%
2024	7.2%	3.9%	3.9%	3.2%	2.9%	2.7%	6.4%
2025	7.3%	4.4%	4.4%	3.7%	3.5%	3.5%	7.0%
2026	6.6%	4.0%	4.0%	3.2%	2.8%	2.9%	6.4%
2027	1.4%	4.0%	4.0%	1.3%	0.3%	0.2%	4.1%
2028	6.6%	4.0%	4.0%	3.2%	2.8%	2.7%	6.5%
2029	6.6%	4.0%	4.0%	3.0%	2.4%	2.6%	6.4%
2030	8.1%	3.9%	3.9%	3.7%	5.5%	6.5%	8.5%
2035	6.2%	3.4%	3.4%	2.0%	2.5%	2.9%	5.5%
2040	4.8%	2.9%	2.9%	1.2%	1.3%	1.4%	4.2%
2042	4.0%	2.6%	2.6%	0.8%	0.8%	0.6%	3.7%

Reference
Work Book
9.Chhajju Nagar_EPE_Fin Input and Rev 4.xlsx
Sheet
9.CH Traffic-Normal

Reference
Work Book
ToT_7_EPE_9 Plazas.Xlsx
Sheet
9.CH Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Chajjunagar Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC COMPARISON PLAZA WISE - NORMAL

Year	NORMAL TRAFFIC - PCU								
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
2022	30,963	10,520	11,018	5,985	14,597	10,631	10,708	5,052	13,732
2023	32,943	11,221	11,836	6,421	15,661	11,399	11,496	5,388	14,603
2024	34,714	11,848	12,573	6,815	16,623	12,095	12,209	5,689	15,388
2025	36,679	12,540	13,422	7,280	17,731	12,913	13,046	6,019	16,288
2026	38,561	13,202	14,242	7,730	18,802	13,707	13,858	6,336	17,156
2027	40,544	13,900	15,113	8,209	19,940	14,552	14,722	6,670	18,072
2028	42,620	14,633	16,036	8,717	21,145	15,446	15,638	7,022	19,032
2029	44,808	15,407	17,017	9,256	22,424	16,397	16,612	7,393	20,045
2030	47,060	16,206	18,025	9,808	23,739	17,371	17,611	7,776	21,083
2031	49,179	16,956	18,981	10,333	24,987	18,299	18,561	8,139	22,067
2032	51,398	17,742	19,988	10,886	26,302	19,277	19,564	8,518	23,098
2033	53,503	18,519	21,010	11,422	27,577	20,210	20,530	8,895	24,059
2034	55,700	19,332	22,050	11,986	28,915	21,188	21,545	9,290	25,062
2035	57,994	20,183	23,144	12,578	30,320	22,216	22,612	9,703	26,110
2036	60,105	20,964	24,157	13,129	31,624	23,173	23,605	10,085	27,083
2037	62,299	21,778	25,216	13,704	32,986	24,173	24,642	10,483	28,094
2038	64,578	22,625	26,322	14,306	34,408	25,217	25,727	10,898	29,145
2039	66,947	23,507	27,478	14,935	35,894	26,307	26,860	11,329	30,238
2040	69,271	24,371	28,619	15,557	37,360	27,386	27,980	11,754	31,312
2041	71,357	25,142	29,646	16,120	38,686	28,367	28,996	12,138	32,286
2042	73,510	25,939	30,710	16,705	40,060	29,383	30,050	12,534	33,293

*Reference:- Refer to “**Plaza Name**” Traffic-Normal in respective individual toll plaza Workbooks.*

The above table illustrates the Plaza wise Traffic (Normal) in PCU terms till the end of the concession period (FY-2042)

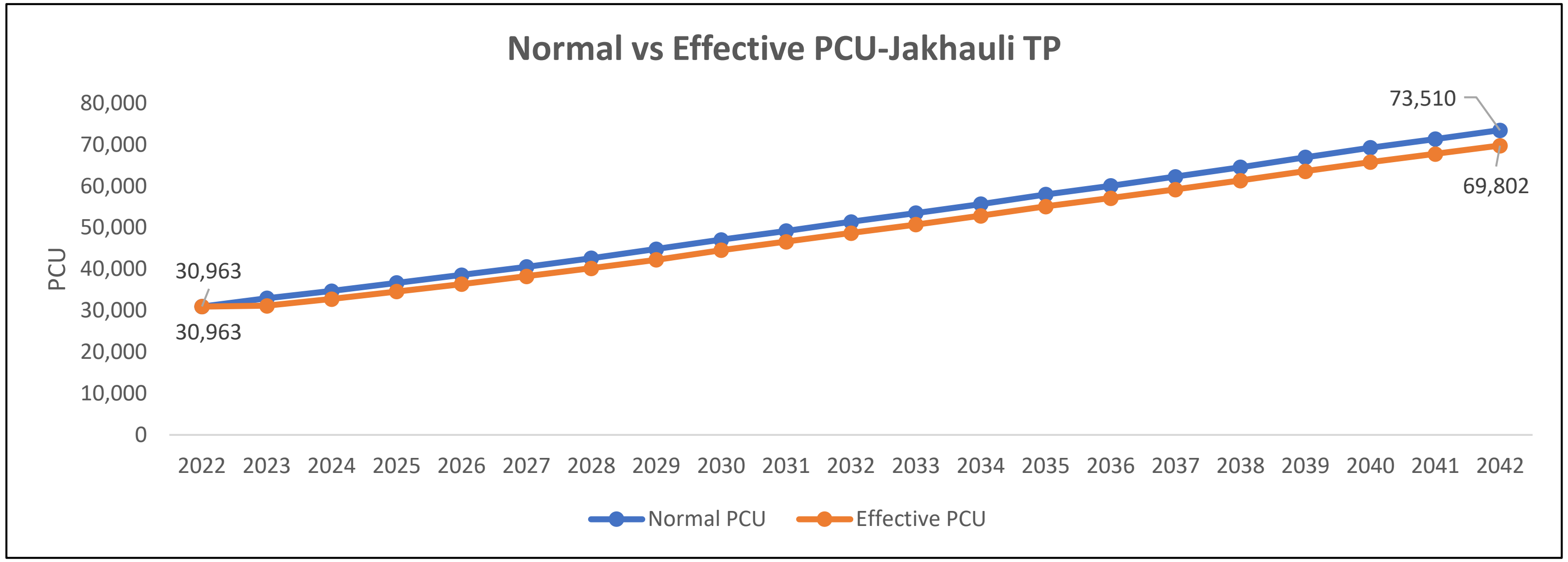
TRAFFIC COMPARISON PLAZA WISE - EFFECTIVE

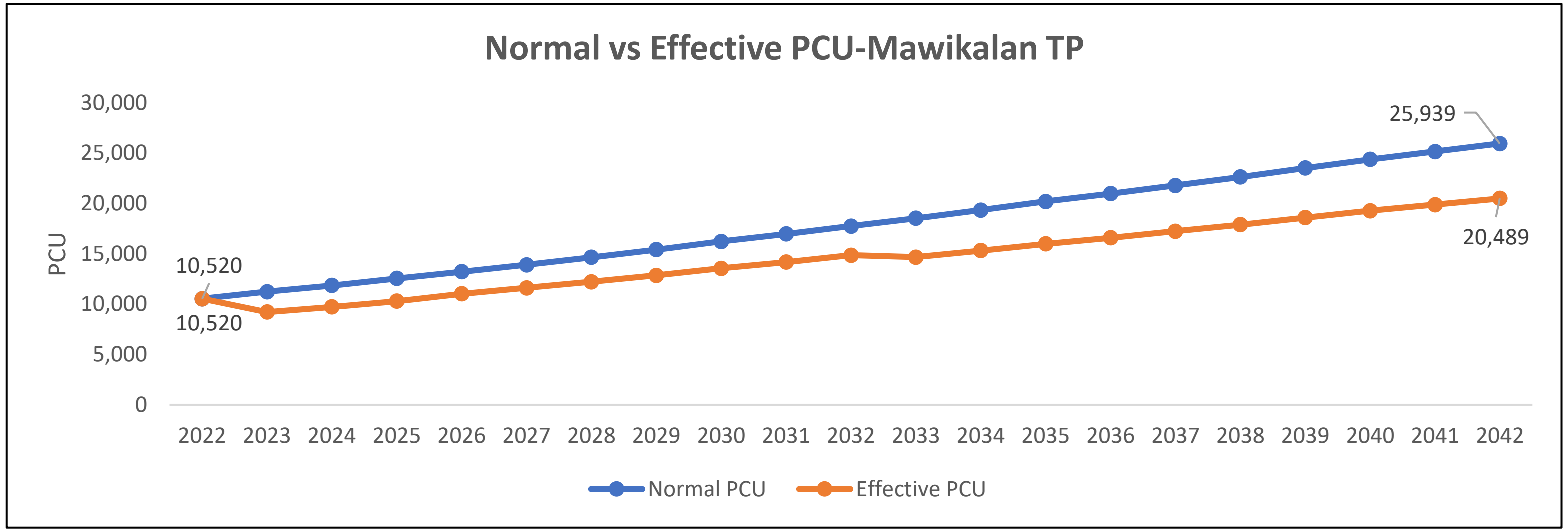
Year	EFFECTIVE TRAFFIC - PCU								
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
2022	30,963	10,520	11,018	5,985	14,597	10,631	10,708	5,052	13,732
2023	31,162	9,200	11,831	6,414	15,661	11,403	11,501	5,382	14,597
2024	32,753	9,715	12,567	6,812	16,622	12,096	12,205	5,677	15,369
2025	34,599	10,291	13,431	7,349	17,815	12,969	13,266	6,021	16,263
2026	36,369	11,009	14,236	7,637	18,899	13,778	14,100	6,331	17,121
2027	38,240	11,599	15,115	8,108	20,039	14,627	14,955	6,636	17,556
2028	40,183	12,207	16,025	8,605	21,263	15,527	15,907	6,983	18,492
2029	42,246	12,844	17,018	9,152	22,554	16,501	16,920	7,354	19,465
2030	44,566	13,550	18,043	9,748	24,032	18,079	18,495	8,038	20,907
2031	46,616	14,170	19,010	10,293	25,322	19,146	19,593	8,481	21,953
2032	48,694	14,840	19,920	10,815	26,609	20,296	20,789	8,934	22,901
2033	50,732	14,652	20,931	11,382	27,961	20,694	21,048	9,424	23,962
2034	52,873	15,303	21,969	11,963	29,374	21,900	22,315	9,925	25,104
2035	55,117	15,976	23,074	12,589	30,864	23,191	23,622	10,474	26,307
2036	57,112	16,583	24,088	13,146	32,229	24,200	24,704	10,908	27,275
2037	59,193	17,228	25,133	13,746	33,632	25,266	25,877	11,336	28,308
2038	61,350	17,885	26,238	14,347	35,085	26,363	27,019	11,793	29,358
2039	63,592	18,586	27,395	14,991	36,612	27,518	28,198	12,265	30,488
2040	65,798	19,264	28,529	15,620	38,110	28,651	29,386	12,745	31,572
2041	67,760	19,870	29,559	16,190	39,463	29,656	30,476	13,141	32,523
2042	69,802	20,489	30,608	16,775	40,871	30,684	31,547	13,561	33,515

*Reference:- Refer to “**Plaza Name**” Traffic in respective individual toll plaza in ToT_7_EPE_9 Plazas.Xlsx*

The above table illustrates the Plaza wise Traffic (Effective) in PCU terms till the end of the concession period (FY-2042)

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 1/5



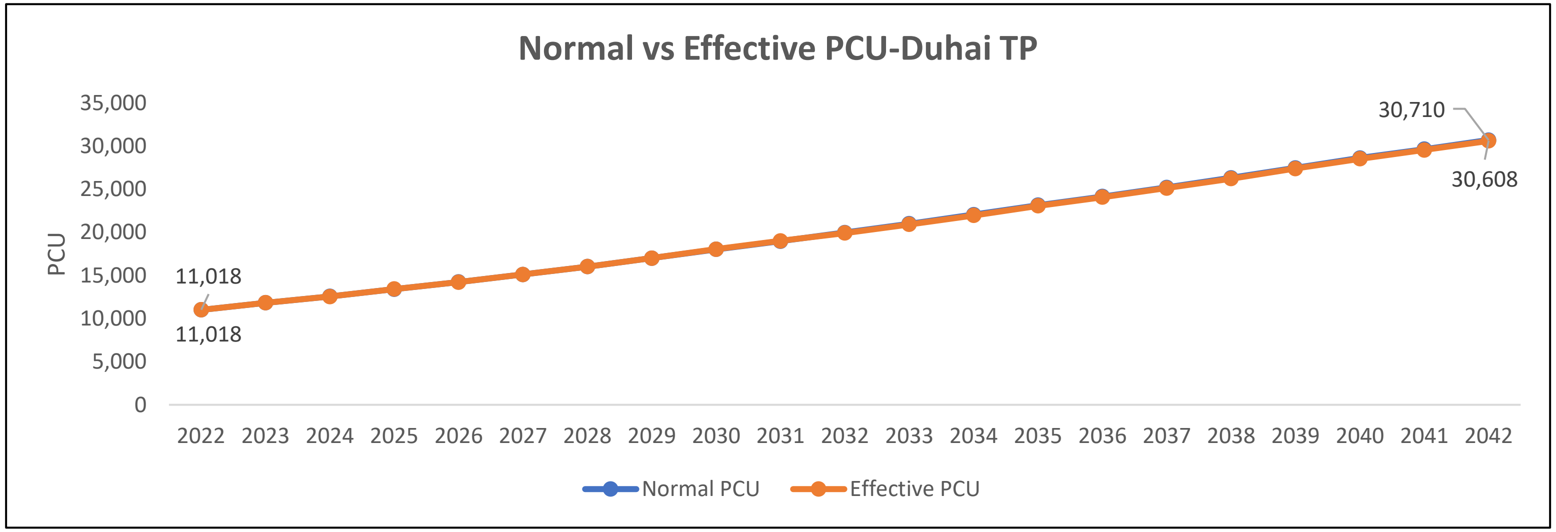


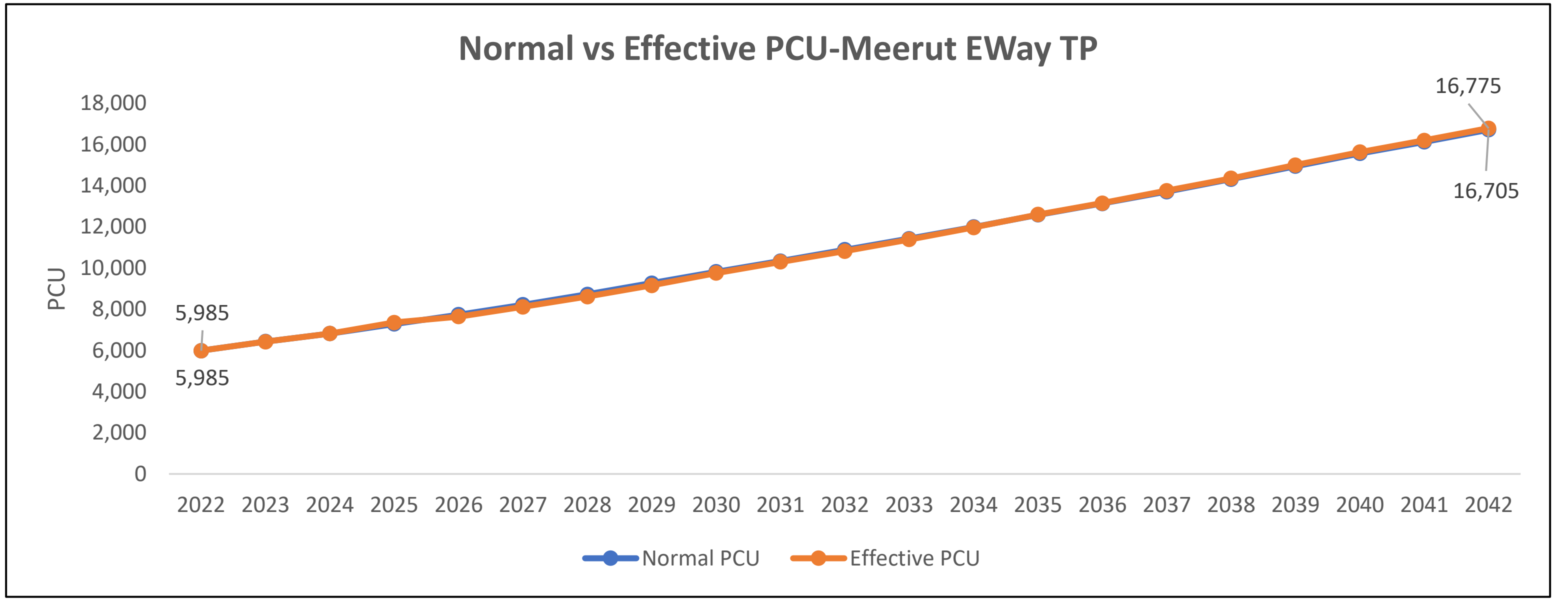
IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Jakhauli TP	Farmers Protest	2023
	Eastern DFC	2024
	RRTS (Alwar + Meerut)	2032
	DNGIR & New Noida City	2030
Mawikalan TP	Farmers Protest	2023
	Dehradun E'Way (Noida & Ghaziabad Traffic)	2026
	Dehradun E'Way	2026
	Commodity Risk (Sand)	2030
	DNGIR & New Noida City	2030

The above graphs provide a comparison between the normal and effective traffic in PCU terms for the respective Toll Plazas till the end of the Concession period. (the list of impacts and the year of impacts are mentioned in the tables)

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 2/5



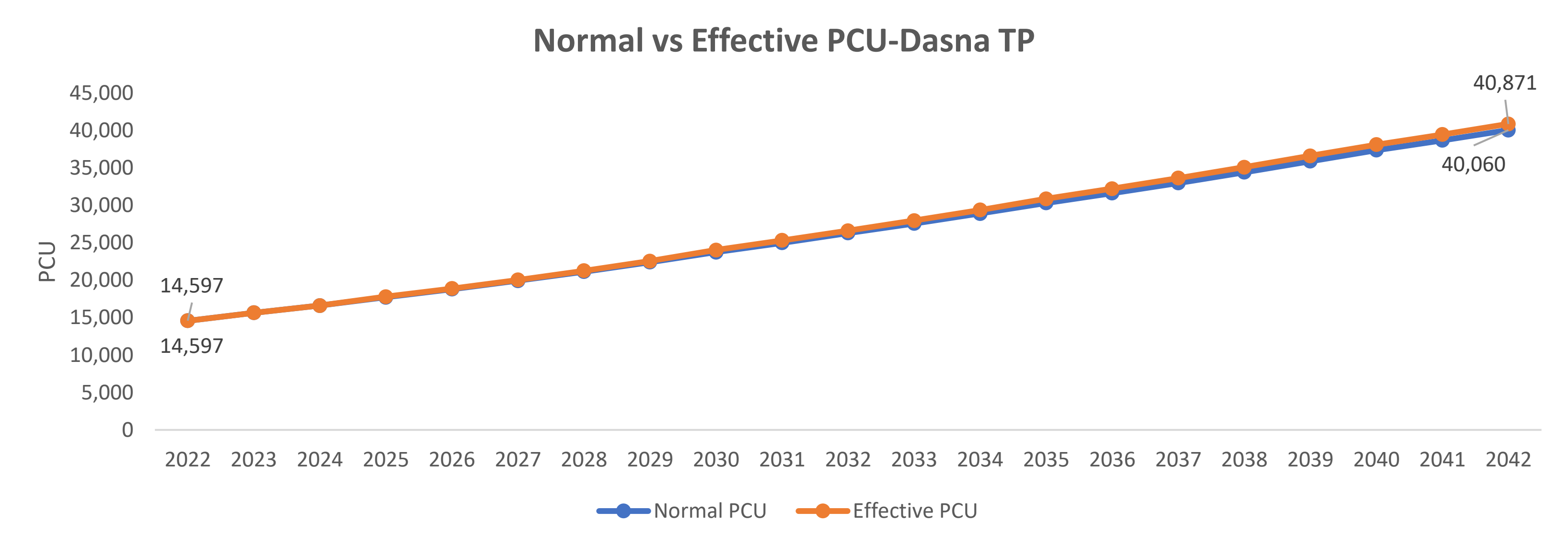


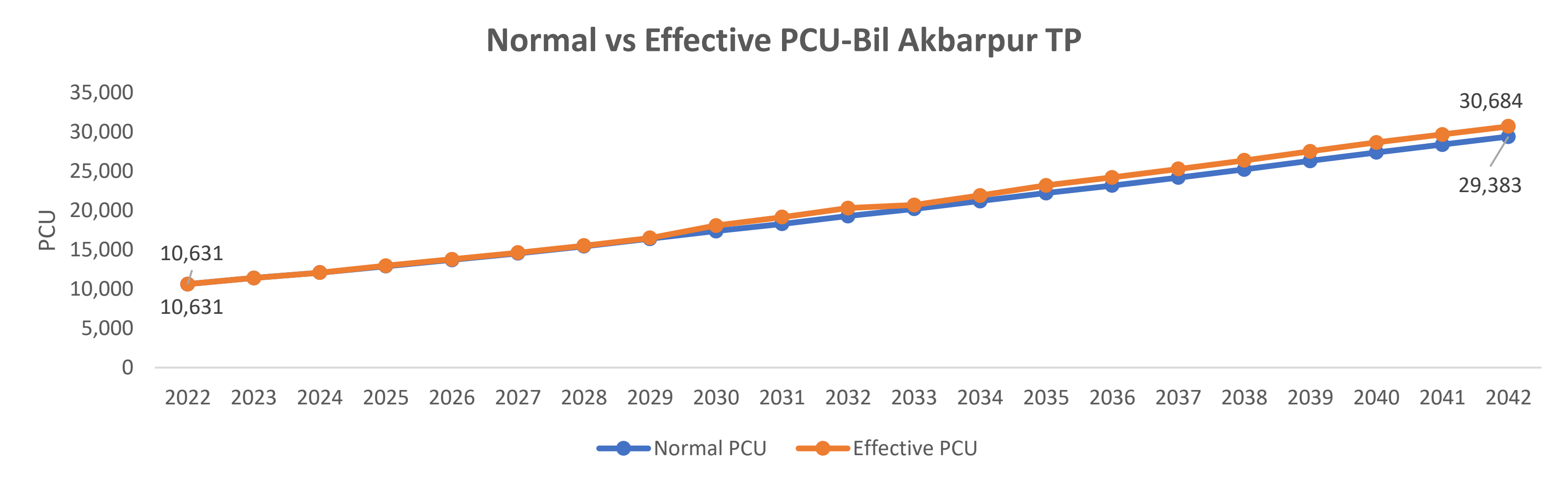
IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Duhai TP	RRTS (Alwar + Meerut)	2032
	DNGIR & New Noida City	2030
Meerut E'way	Eastern DFC	2024
	RRTS (Alwar + Meerut)	2032
	Dehradun E'Way (Noida & Ghaziabad Traffic)	2026
	Dehradun E'Way	2026
	DNGIR & New Noida City	2030
	Jewar Airport	2025

The above graphs provide a comparison between the normal and effective traffic in PCU terms for the respective Toll Plazas till the end of the Concession period. (the list of impacts and the year of impacts are mentioned in the tables)

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 3/5



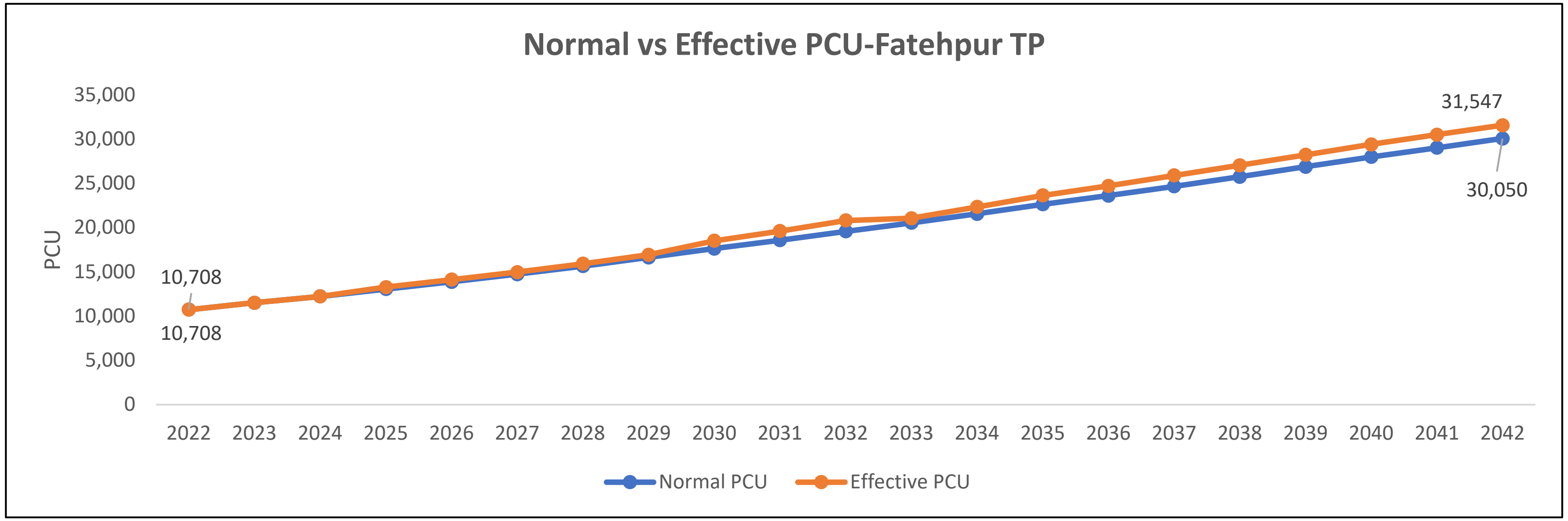


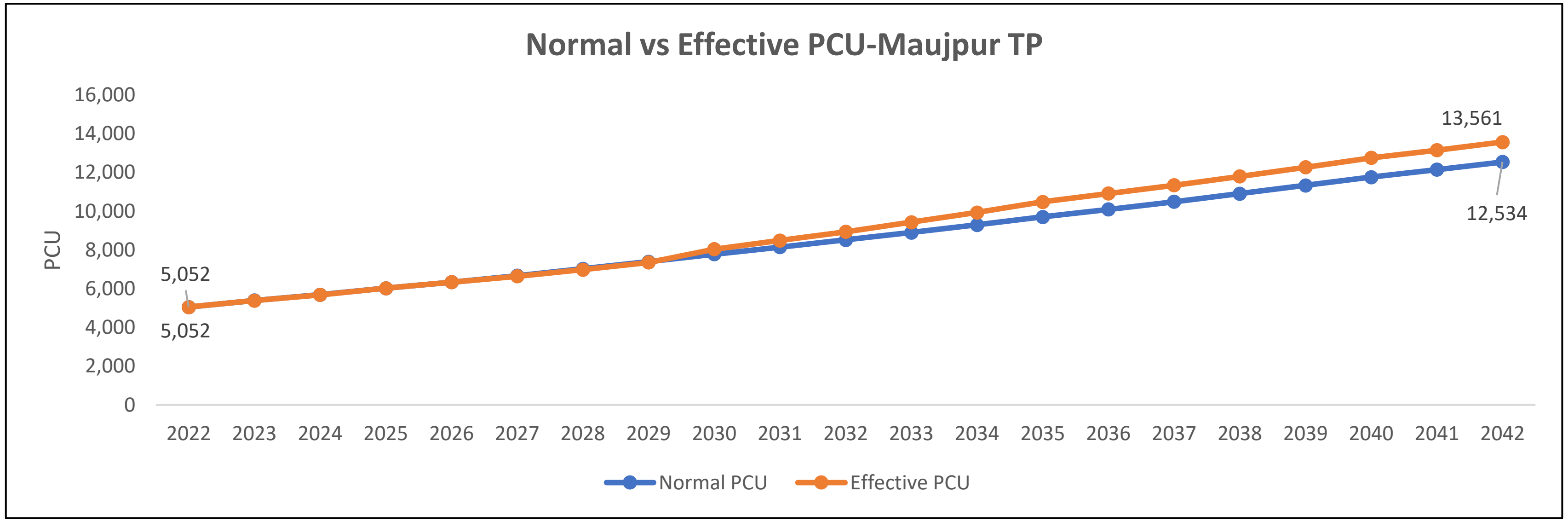
The above graphs provide a comparison between the normal and effective traffic in PCU terms for the respective Toll Plazas till the end of the Concession period. (the list of impacts and the year of impacts are mentioned in the tables)

IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Dasna TP	RRTS (Alwar + Meerut)	2032
	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	DNGIR & New Noida City	2030
	Jewar Airport	2025
Bilakbarpur TP	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	Commodity Risk (Cement)	2033
	DNGIR & New Noida City	2040
	Jewar Airport	2025

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 4/5



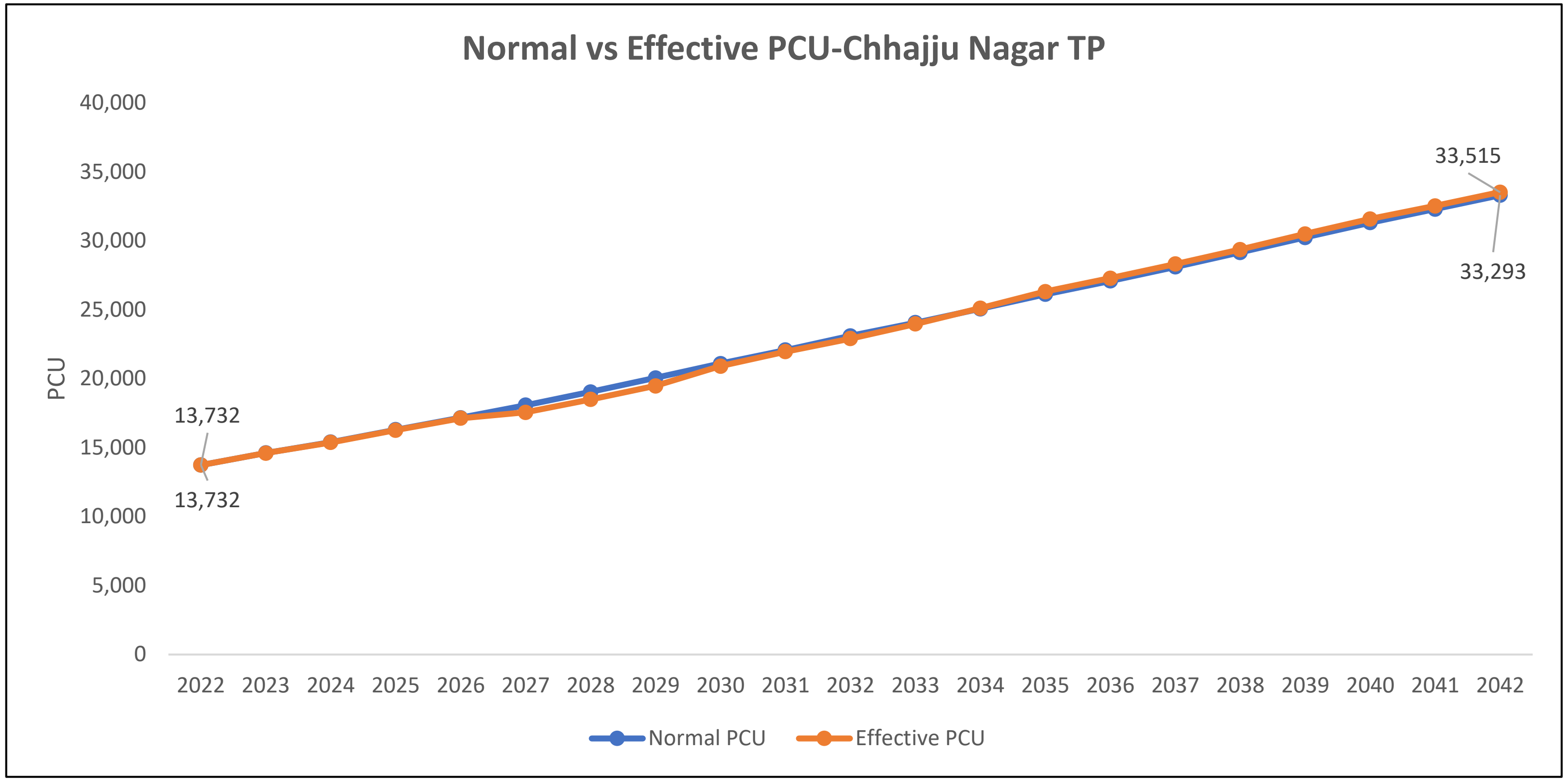


IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Fatehpur TP	Eastern DFC	2024
	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	Dehradun E'Way	2026
	Commodity Risk (Const. & Cement)	2033
	DNGIR & New Noida City	2040
	Jewar Airport	2025
Maujpur TP	Delhi Mumbai E'Way (Noida & Jewar Spur)	2023
	DNGIR & New Noida City	2030

The above graphs provide a comparison between the normal and effective traffic in PCU terms for the respective Toll Plazas till the end of the Concession period. (the list of impacts and the year of impacts are mentioned in the tables)

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 5/5



IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Chhajju Nagar TP	Eastern DFC	2024
	RRTS (Alwar + Meerut)	2032
	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	Dehradun E'Way	2026
	DNGIR & New Noida City	2030

The above graphs provide a comparison between the normal and effective traffic in PCU terms for the respective Toll Plaza till the end of the Concession period. (the list of impacts and the year of impacts are mentioned in the tables)

IBI

TRAFFIC COMPARISON LINK WISE – EFFECTIVE [NORMAL + DIVERSIONS + DEVELOPMENTS]

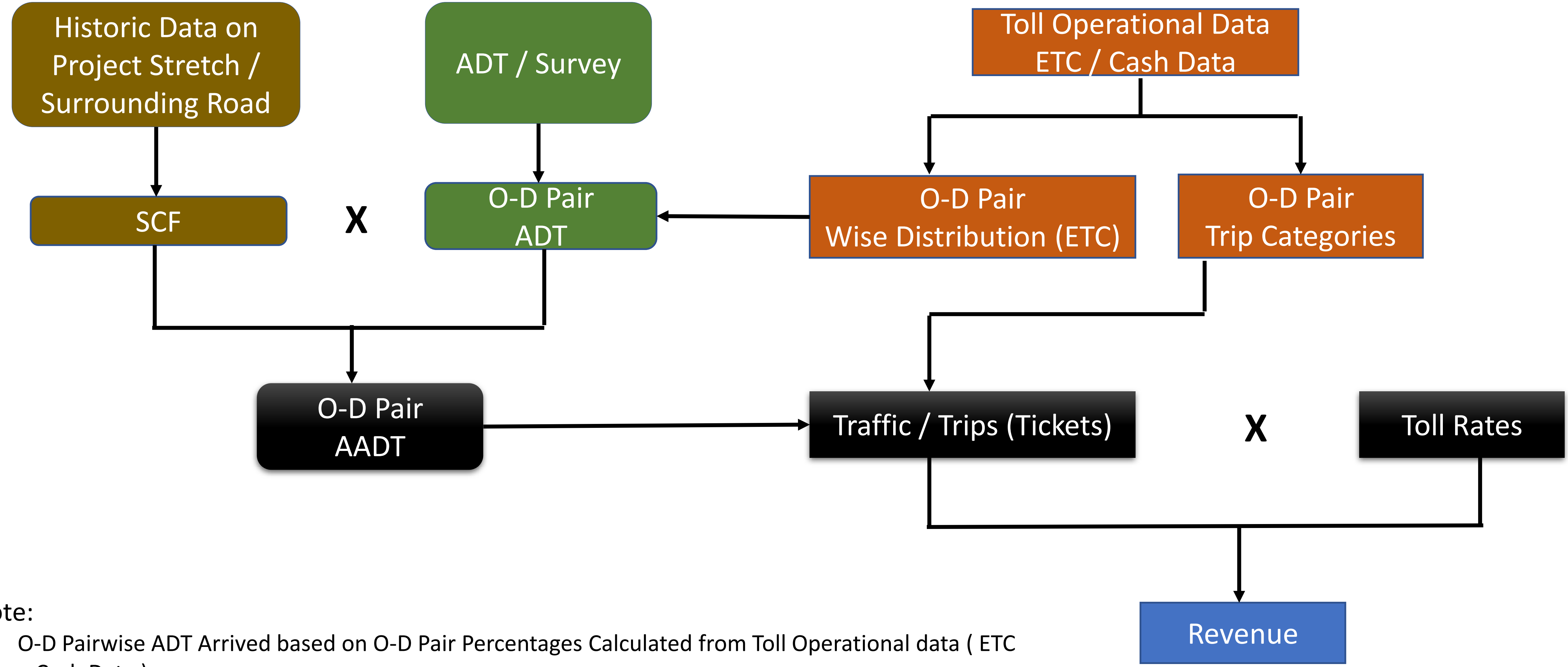
CDPQ

Year	EFFECTIVE TRAFFIC - PCU									
	LINK 1	LINK 2	LINK 3	LINK 4	LINK 5	LINK 6	LINK 7	LINK 8	AVERAGE - EPE	YOY(%)
2022	61,246	49,334	42,084	39,372	33,566	33,452	35,944	28,539	40,442	
2023	61,960	51,047	44,008	41,318	35,444	35,453	38,149	30,325	42,213	**4.4%**
2024	65,354	53,877	46,454	43,631	37,463	37,492	40,274	32,030	44,572	**5.6%**
2025	69,379	57,279	49,466	46,502	40,003	40,099	42,871	34,075	47,459	**6.5%**
2026	73,221	60,430	52,152	49,072	42,236	42,373	45,243	35,986	50,089	**5.5%**
2027	77,166	63,731	54,985	51,699	44,417	44,505	47,307	37,531	52,668	**5.1%**
2028	81,349	67,255	58,053	54,609	46,960	47,083	49,976	39,678	55,620	**5.6%**
2029	85,811	71,025	61,327	57,712	49,672	49,828	52,803	41,944	58,765	**5.7%**
2030	91,051	75,500	65,350	61,657	53,351	53,706	56,946	45,204	62,845	**6.9%**
2031	95,528	79,300	68,678	64,842	56,191	56,622	59,977	47,619	66,094	**5.2%**
2032	100,082	83,127	72,017	68,046	59,057	59,581	63,050	50,009	69,371	**5.0%**
2033	103,546	86,496	74,946	70,821	61,450	61,990	65,053	51,516	71,977	**3.8%**
2034	108,280	90,537	78,525	74,272	64,571	65,218	68,347	54,122	75,484	**4.9%**
2035	113,266	94,803	82,310	77,925	67,881	68,646	71,813	56,849	79,187	**4.9%**
2036	117,667	98,560	85,614	81,083	70,684	71,518	74,668	59,101	82,362	**4.0%**
2037	122,263	102,474	89,060	84,379	73,621	74,530	77,682	61,501	85,689	**4.0%**
2038	127,011	106,527	92,610	87,771	76,629	77,606	80,750	63,936	89,105	**4.0%**
2039	131,990	110,772	96,337	91,332	79,797	80,847	83,982	66,509	92,696	**4.0%**
2040	136,873	114,941	99,996	94,829	82,908	84,035	87,159	69,028	96,221	**3.8%**
2041	141,247	118,678	103,267	97,952	85,679	86,865	89,994	71,297	99,372	**3.3%**
2042	145,757	122,532	106,648	101,179	88,537	89,786	92,887	73,607	102,617	**3.3%**

Traffic-PCU **CAGR of 4.7%** over 20-year period is estimated for the EPE

Reference	
Work Book	*ToT_7_EPE_9 Plazas.Xlsx*
Sheet	*Link Volumes*

REVENUE COMPUTATION METHODOLOGY



Note:

1. O-D Pairwise ADT Arrived based on O-D Pair Percentages Calculated from Toll Operational data (ETC + Cash Data)
2. Trips = (Trip Categories X AADT) / Trip Rates)
3. Revenue = Trips X Toll Rates
4. ADT and Toll Operational Data is considered only for Exit Toll Plaza which is the transaction point

TOLL CONTROL LENGTHS – EXISTING SETUP [9 TPs]

	To	Main Plaza	Mawikalan	Duhai	NE3	Dasna	Bilakbarpur	Fatehpur Rampur	Maujpur	Main Plaza
From	Km	5.5	15.36	44.512	49.96	52.192	72.724	83.005	108.57	132.085
Main Plaza	5.5	0.000	19.760	52.260	58.608	61.967	83.147	94.779	126.824	156.090
Mawikalan	15.36	19.760	0.000	32.500	38.848	42.207	63.387	75.019	107.064	136.330
Duhai	44.512	52.260	32.500	0.000	6.348	9.707	30.887	42.519	74.564	103.830
NE3	49.96	58.608	38.848	6.348	0.000	3.359	24.539	36.171	68.216	97.482
Dasna	52.192	61.967	42.207	9.707	3.359	0.000	21.180	32.813	64.858	94.124
Bil Akbarpur	72.724	83.147	63.387	30.887	24.539	21.180	0.000	11.633	43.678	72.944
Fatehpur Rampur	83.005	94.779	75.019	42.519	36.171	32.813	11.633	0.000	32.045	61.311
Maujpur	108.57	126.824	107.064	74.564	68.216	64.858	43.678	32.045	0.000	29.266
Main Plaza	132.085	156.090	136.330	103.830	97.482	94.124	72.944	61.311	29.266	0.000

* Above given lengths are equivalent Control Lengths and structures lengths are included in these lengths.

REVENUE COMPARISON PLAZA WISE

Year	REVENUE IN CR										
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TOTAL	YOY(%)
2022	109	16	27	18	45	36	30	16	70	367	
2023	123	16	32	22	53	42	35	19	82	423	**15.1%**
2024	135	18	35	24	59	47	39	21	91	470	**11.1%**
2025	149	19	40	27	66	52	44	23	100	520	**10.8%**
2026	163	22	43	30	73	58	49	26	110	573	**10.2%**
2027	179	24	48	33	81	64	54	28	118	630	**9.9%**
2028	197	26	53	36	90	71	60	31	130	695	**10.4%**
2029	216	29	59	40	99	79	67	34	143	766	**10.1%**
2030	238	31	65	45	111	90	76	39	160	855	**11.7%**
2031	260	34	72	49	122	99	85	43	176	940	**9.9%**
2032	285	38	79	54	134	110	94	47	192	1,033	**9.8%**
2033	309	38	87	60	146	116	97	51	210	1,114	**7.9%**
2034	336	42	95	65	160	127	108	57	229	1,219	**9.5%**
2035	366	45	104	72	176	141	119	62	251	1,337	**9.6%**
2036	398	50	114	78	192	154	130	68	273	1,456	**8.9%**
2037	428	53	123	85	209	166	142	74	295	1,575	**8.2%**
2038	464	58	134	93	228	182	155	80	319	1,712	**8.7%**
2039	503	63	146	101	249	198	168	87	346	1,862	**8.7%**
2040	545	68	160	110	271	216	184	95	376	2,024	**8.7%**
2041	585	74	172	119	292	232	199	102	403	2,176	**7.5%**
2042	631	80	186	129	317	251	215	110	434	2,351	**8.0%**
2043	677	85	201	139	341	271	232	118	467	2,532	**7.7%**

.A revenue CAGR of ***9.6% over a 21-year period*** is estimated for the project road

CONCESSION PROFILE

S.NO.	ITEM	DESCRIPTION
1	Client	NHAI
2	Concession period (Years)	20
3	Concession end date year - Original	2042
4	Tolling Length (in Km)	135
5	No. of Lanes (Upgradation)	6 Lanes
6	Target Revenue Point-1: (million INR) Target Revenue Point-2:(million INR)	Target Revenue Point-1: 643.4 (Mar’29) Target Revenue Point-2: 1304.1 (Mar’36)
7	Design Capacity (PCU)	130,000 PCUs for 6 lane expressway at 6% PHF
8	Annual Increase in Toll Rate As per CA	As Per Dec WPI

IMPORTANT CLAUSES RELATED TO TRAFFIC IN CA

Sl. No	CLAUSE REF.	DESCRIPTION
1	Schedule B	Two new Interchange are proposed one at intersection of EPE and Yamuna Expressway at Km 91+875 and the other at the intersection of EPE and Palwal – Aligarh Highway. As per the schedule, the execution at the former location lies with the YEIDA (Yamuna Expressway Industrial Development Authority) and scope of maintenance shall be considered in the agreement. Whereas, with the latter, the construction and maintenance of the interchange shall be in the scope of the TOT B7 agreement. No further details, pertaining to the design and configuration of the proposed interchanges have not been provided. The fee collection Points have also not been defined in Schedule 'M'.
3	Effect of variation in traffic growth (Article 24)	24.5.1 Subject to the provisions of Clause 24.2 and Clause 3.1, in the event Actual Fee 1 shall have fallen short of or exceeded the Target Fee 1: 643.4 million INR by more than 20% (twenty percent), then for every 1% (one percent) shortfall or increase as compared to the Target Fee 1, the Concession Period, subject to fulfilment of terms of this Agreement, shall be increased by 1.5% (one and a half percent) or decreased by 0.75% (point seven five percent) thereof; provided that such increase or decrease in Concession Period shall not in any case exceed not more than limits specified in Clause 3.1. For the avoidance of doubt, and by way of illustration, it is agreed that in the event of a shortfall or increase by 30% (thirty percent) in Target Fee 1, the Concession Period shall be increased by 15% (fifteen percent) or decreased by 7.5% (seven and a half percent) thereof. 24.5.2 Subject to the provisions of Clause 24.3 and Clause 3.1, in the event Actual Fee 2 shall have fallen short of or exceeded the Target Fee 2 : 1304.1 million INR by more than 30% (thirty percent), then for every 1% (one percent) shortfall or increase as compared to the Target Fee 2, the Concession Period, subject to fulfilment of terms of this Agreement, shall be increased by 1.5% (one and a half percent) or decreased by 0.75% (point seven five percent) thereof; provided that such increase or decrease in Concession Period shall not in any case exceed not more than limits specified in Clause 3.1. For the avoidance of doubt, and by way of illustration, it is agreed that in the event of a shortfall or increase by 40% (forty percent) in Target Fee 2, the Concession Period shall be increased by 15% (fifteen percent) or decreased by 7.5% (seven and a half percent) thereof. Subject to the provisions of this Article 24 and clause 3.1, the effect of change in Concession Period due to Target Fee 1 and 2 be additive in nature.
4	Capacity Augmentation (Article 14)	The Authority may, notwithstanding anything to the contrary contained in this Agreement, require the capacity augmentation of the Project Highway in case the average daily traffic of PCUs in any Accounting Year shall exceed the designed capacity of 130,000* PCU ("Target Traffic") for Project Highway and shall continue to exceed the designed capacity for 3 (three) consecutive Accounting Years following thereafter ("Capacity Augmentation"). Any such Capacity Augmentation shall be made in accordance with the provisions of this Article 14.

Note: The 1,30,000 PCU was arrived at based on the IRC:SP: 99 – 2013 which defines the capacity based on the peak hour factor. The peak hour factor for the project road was observed to be 5.2% for which the code specifies the Capacity as 1,30,000 PCU

REFERENCES

SL. NO.	REFERENCE	DATA/INPUT
1	IRC 108 – 2015 : Traffic Forecast on Highways	Growth Forecast Methodology, PCU Factors
2	Toll Fee Notifications	Toll Fee Rates
3	IRC SP 84 – 2014 : Manual of Specifications & Standards for 4 Laning of Highways	Highway Capacity
4	Concession Agreement	Capacity Augmentation & Additional Toll way
5	SIAM	Market share trends of Truck categories
6	Directorate of Economics & Statistics	Socio Economic Data

60+ GLOBAL OFFICES

2,500 DIFFERENCE-MAKERS
AND COUNTING

CANADA
CALGARY
EDMONTON
FORT MCMURRAY
HALIFAX
HAMILTON
KINGSTON
LONDON
OTTAWA
RICHMOND HILL
TORONTO
TORONTO WEST
VANCOUVER
WATERLOO

UNITED STATES
ALBANY
ALEXANDRIA
BAKERSFIELD
BINGHAMTON
BOSTON
CANTON
CINCINNATI
DENVER
HOUSTON
IRVINE
KNOXVILLE
LOS ANGELES
NEW LEXINGTON
NEW YORK CITY
POMPANO BEACH
PORTLAND
RALEIGH
SALT LAKE CITY
SAN DIEGO
SAN FRANCISCO
SAN JOSE
SAN LUIS OBISPO
SEATTLE
SOUTHFIELD
WESTERVILLE

UNITED KINGDOM / IRELAND
BIRMINGHAM
BRIGHTON
CARDIFF
DUBLIN
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LIVERPOOL
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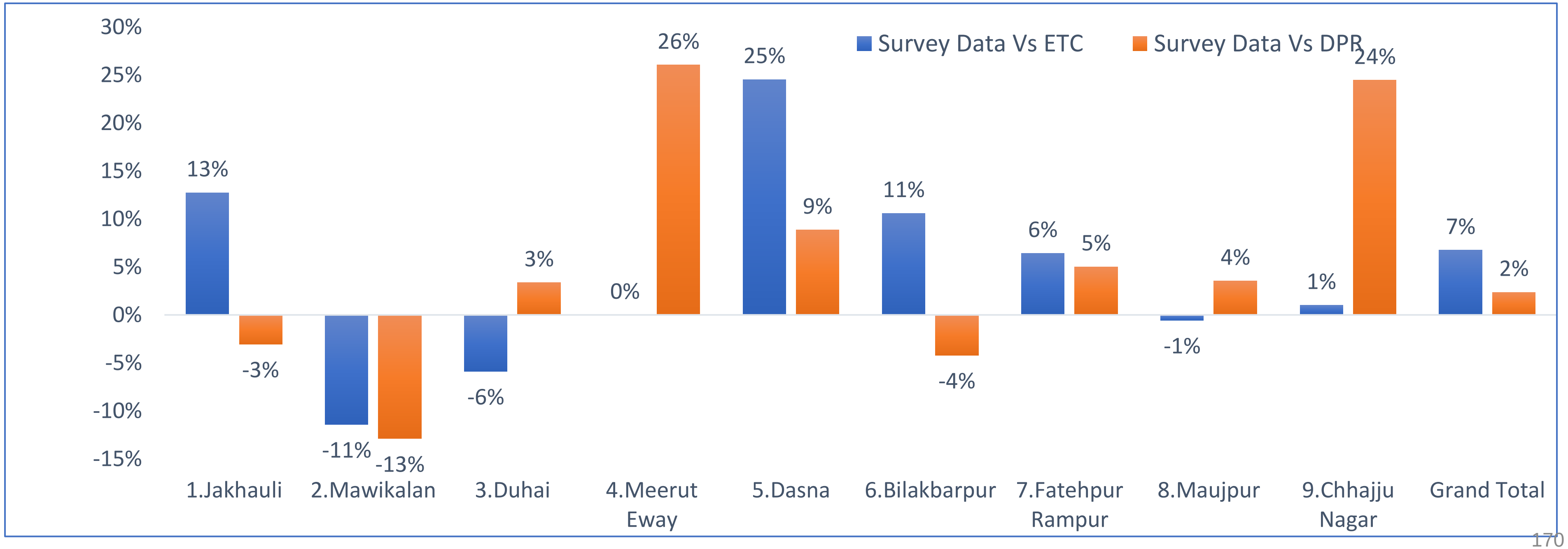
ANNEXURES

DATA COMPARISON SURVEY VS ETC VS DPR

ADT DATA COMPARISON (TOLL OPERATIONAL VS SURVEY DATA VS DPR)

Toll Plaza	ADT (Vehicles)			Data Comparison	
	ETC	Survey data	DPR Data	Survey Data Vs ETC	Survey Data Vs DPR
1.Jakhauli	13,807	15,567	16,057	13%	-3%
2.Mawikalan	7,994	7,082	8,130	-11%	-13%
3.Duhai	6,868	6,464	6,253	-6%	3%
4.Meerut E'way	-	3,645	2,892		26%
5.Dasna	10,461	9,384	8,620	25%	9%
6.Bilakbarpur	4,987	5,515	5,757	11%	-4%
7.Fatehpur Rampur	5,670	6,034	5,745	6%	5%
8.Maujpur	3,088	3,070	2,965	-1%	4%
9.Chhajju Nagar	5,579	5,636	4,528	1%	24%
Grand Total	58,453	62,398	60,947	7%	2%

*Jakhauli TP doesn't have Cash data (as part of ETC)



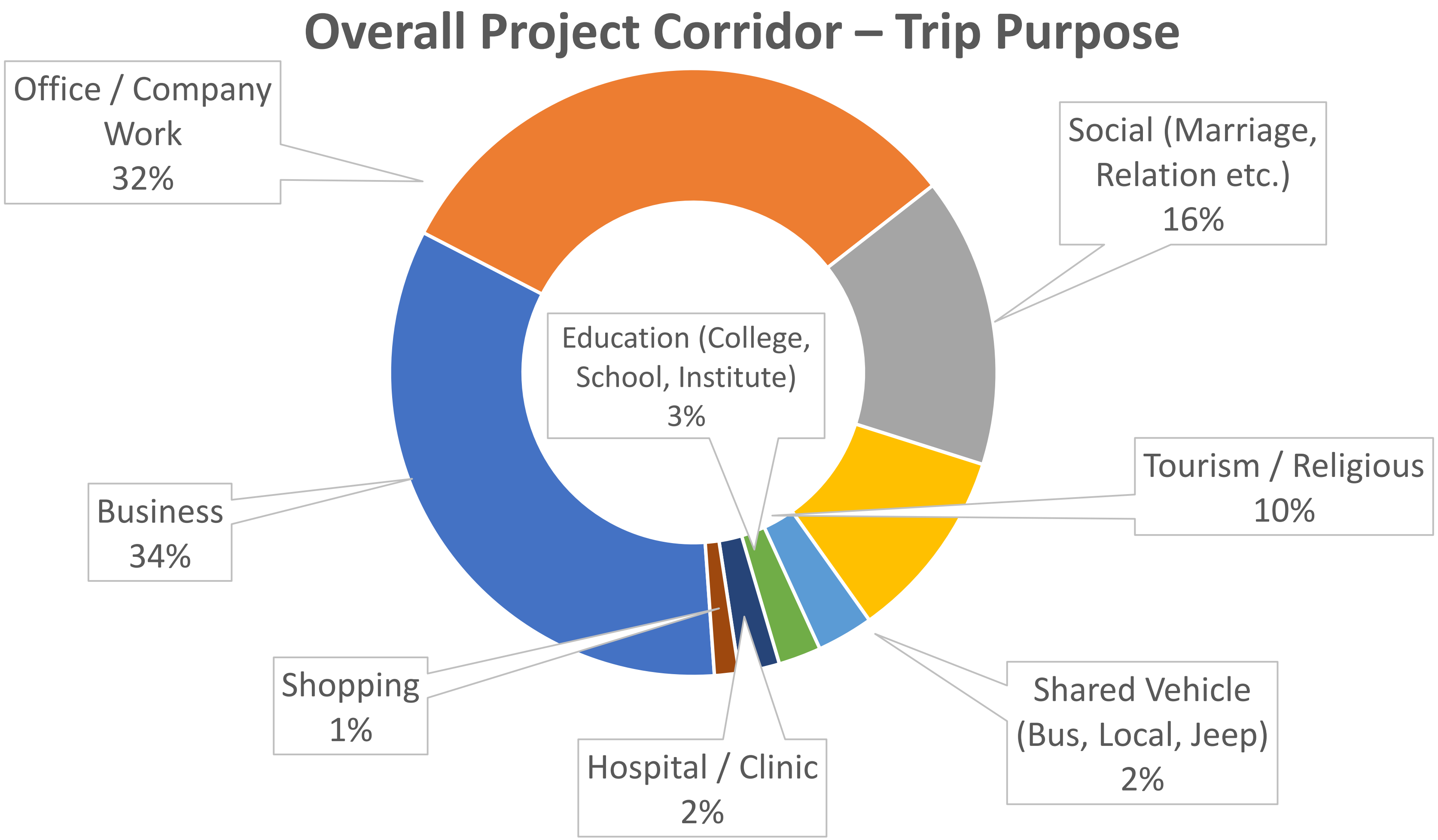
SURVEY DATES

Survey Dates – NHAI DPR

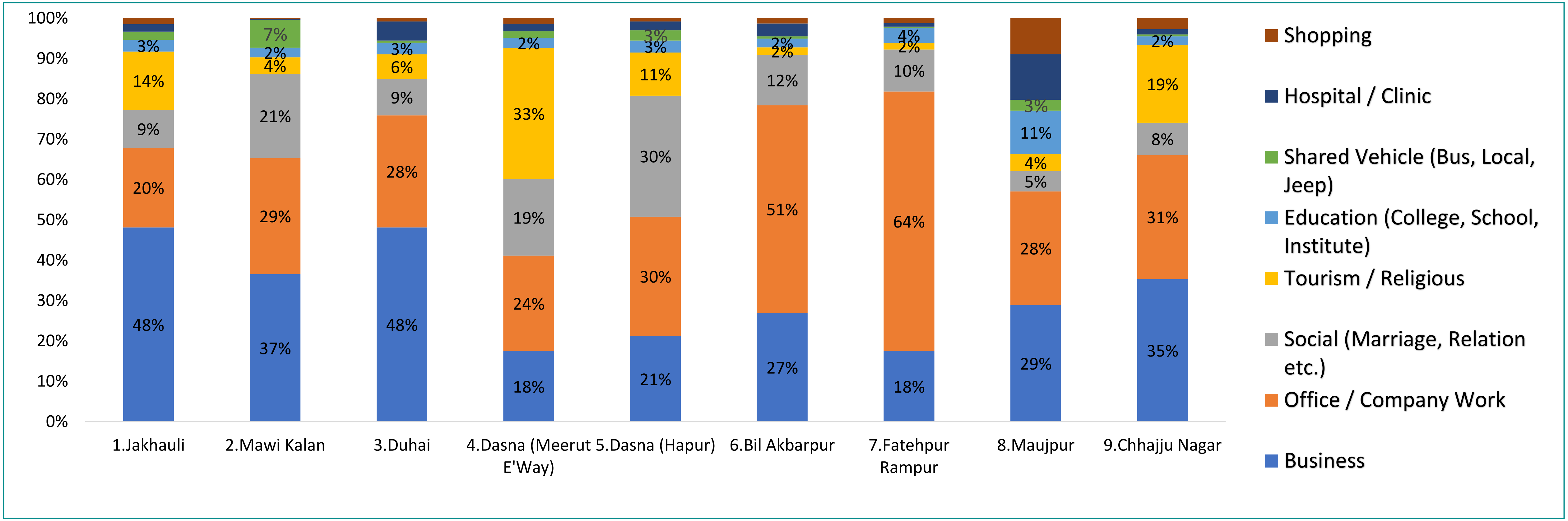
Survey Location	Classified Traffic Volume Count Survey (TVC)		Origin-Destination Survey (O-D)
	Survey Start Date	Survey End Date	Survey Date
TP-1 (Sonipat Toll Plaza)	17-07-2021	24-07-2021	22-07-2021
IC-1 (Mawikalan)	17-07-2021	24-07-2021	23-07-2021
IC-2 (Duhai)	24-07-2021	31-07-2021	27-07-2021
IC-3 (Dasna)	25-07-2021	01-08-2021	28-07-2021
IC-4 (Dasna)	26-07-2021	02-08-2021	29-07-2021
IC-5 (Anandpur)	25-07-2021	01-08-2021	27-07-2021
IC-6 (Fatehpur Rampur)	19-07-2021	26-07-2021	24-07-2021
IC-7 (Maujpur)	18-07-2021	25-07-2021	23-07-2021
TP-2 (Palwal Toll Plaza)	18-07-2021	25-07-2021	26-07-2021

TRIP PURPOSE

TRIP PURPOSE – PROJECT CORRIDOR



- As the project corridor encompasses the biggest urban agglomerations in the northern region, nearly 65% 0f the passenger trips are observed to be office/company and business-related trips on the project corridor.



- As the project corridor encompasses the biggest urban agglomerations in the northern region, nearly 60% 0f the passenger trips are observed to be office/company and business-related trips at all the toll plazas.
- Jakhauli, Duhai, Mawi Kalan and Chhajju Nagar with shares of 48%,48%,37% and 35% respectively have the largest share of the business-oriented passenger traffic.
- Fatehpur Rampur, Bil Akbarpur, Chhajju Nagar and Dasna (Hapur) with shares of 64%,51%,31% and 30% respectively have the largest share of office/company-oriented passenger traffic.
- High share of Social oriented passenger traffic is observed at Dasna (Hapur) (30%) and Dasna (Meerut E'way) (19%). Similarly, high share of tourism traffic is observed at Dasna(Meerut E'way) (33%) and Chhajju Nagar (19%) respectively.

ANNUAL AVERAGE DAILY TRAFFIC (BASE - AADT) (NHAI AND ETC)

BASE YEAR (FY22) | AADT | NHAI DPR

VEHICLE_TYPE	1.JAKHAULI	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBARPUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	9,716	5,597	4,587	2,041	5,912	3,759	3,580	1,724	2,026
Minibus	52	16	9	5	18	18	21	4	18
Bus	679	589	8	12	63	7	88	1	13
LCV	3,241	1,076	1,212	425	1,623	900	1,226	1,020	688
2AT	488	523	220	88	223	281	414	139	481
3AT	657	168	183	146	285	289	193	83	348
MAV	1,911	496	303	301	871	752	463	116	1,146
OSV	0	0	0	0	0	1	0	2	0
VEHICLES	**16,744**	**8,464**	**6,522**	**3,019**	**8,995**	**6,007**	**5,986**	**3,089**	**4,721**
PCU	**28,729**	**13,305**	**9,013**	**4,779**	**14,008**	**10,256**	**9,621**	**4,460**	**10,772**

SCF of July has been adopted since the study was conducted in July

IBI

BASE YEAR (FY22) | AADT | ETC

CDPQ

VEHICLE_TYPE	1.JAKHAULI	2.MAWIKALAN	3.DUHAI	4.MEERUT EWAY	5.DASNA	6.BILAKBARPUR	7.FATEHPUR RAMPUR	8.MAUJPUR	9.CHHAJJU NAGAR
Car	7,774	5,522	4,912	0	7,275	3,101	3,618	1,844	2,247
Minibus	230	121	112	0	136	65	101	69	81
Bus	602	508	47	0	85	26	61	21	37
LCV	2,041	1,071	993	0	1,209	578	898	617	716
2AT	1,223	449	406	0	693	423	593	395	689
3AT	669	202	233	0	502	282	180	100	496
MAV	2,073	626	604	0	1,221	812	564	224	1,606
OSV	4	0	3	0	3	1	1	2	1
VEHICLES	**14,616**	**8,499**	**7,309**	**0**	**11,124**	**5,289**	**6,016**	**3,272**	**5,873**
PCU	**28,011**	**13,606**	**11,356**	**0**	**18,639**	**9,920**	**10,162**	**5,436**	**14,344**

SCF of August has been adopted since the data pertains to the month of August

HISTORIC TRAFFIC GROWTH SURROUNDING STRETCHES

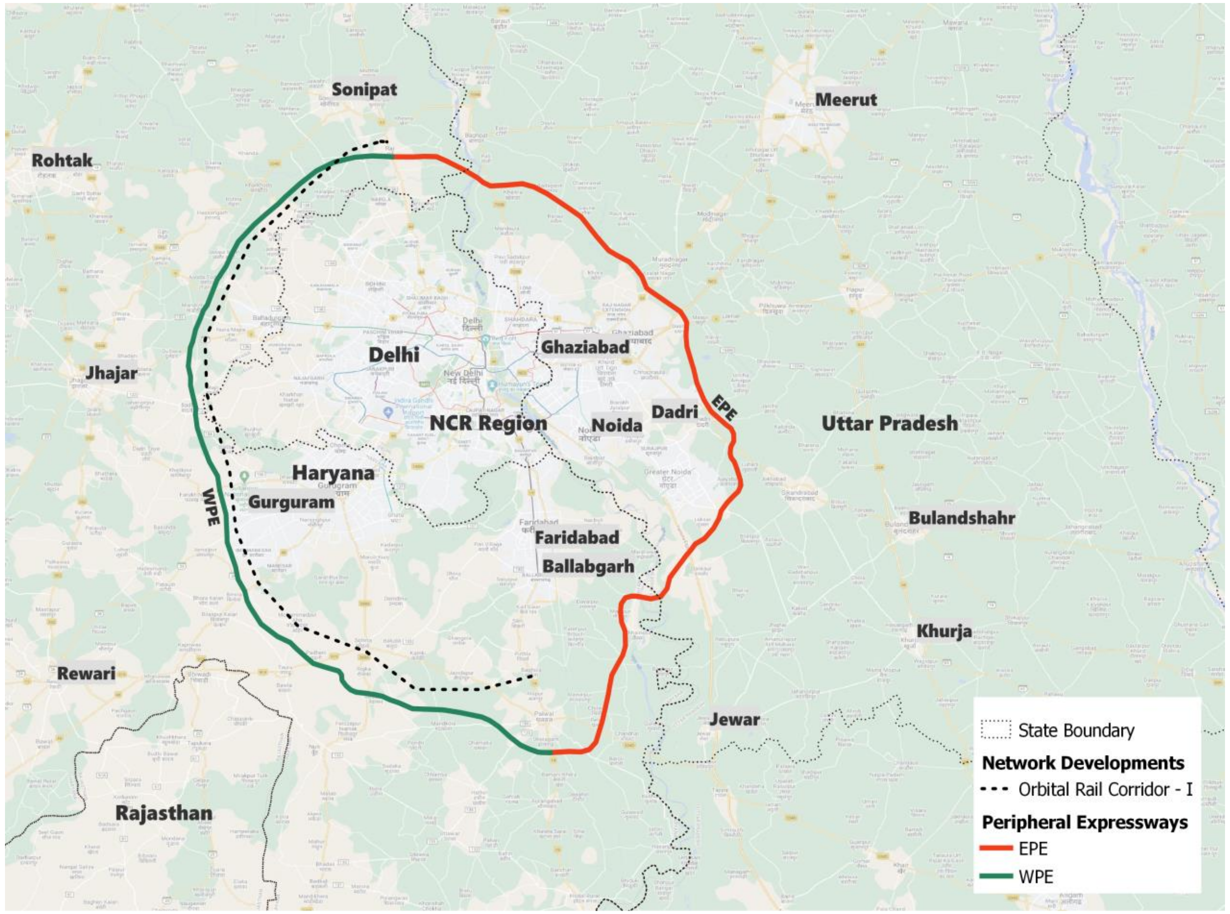
HISTORIC TRAFFIC GROWTH IN SURROUNDING STRETCHES

Panipat Elevated Corridor Limited												
Mode	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
CJV	[redacted]	19,632	20,922	20,269	21,695	23,517	26,381	29,197	31,532	34,607	36,680	[redacted]
LCV/MB	[redacted]	4,023	4,255	4,360	4,525	4,834	4,918	3,830	1,870	1,931	1,999	[redacted]
Bus	[redacted]	2,087	2,179	2,155	2,203	2,116	2,182	2,126	2,244	2,407	2,705	[redacted]
MGV+HGV	[redacted]	7,038	7,201	6,743	6,184	6,511	6,353	6,986	8,350	8,931	9,275	[redacted]
Total (Veh)	[redacted]	**32,780**	**34,557**	**33,527**	**34,607**	**36,979**	**39,835**	**42,139**	**43,995**	**47,875**	**50,659**	[redacted]
Total (PCU)	[redacted]	**63,597**	**66,246**	**63,617**	**62,918**	**66,418**	**68,895**	**72,756**	**78,642**	**84,914**	**89,530**	[redacted]

PCU Factors: CJV -1, LCV/MB -1.5, Bus -3 , MGV + HGC – 4.5

DIVERSIONS AND DEVELOPMENTS IMPACT ASSESSMENT

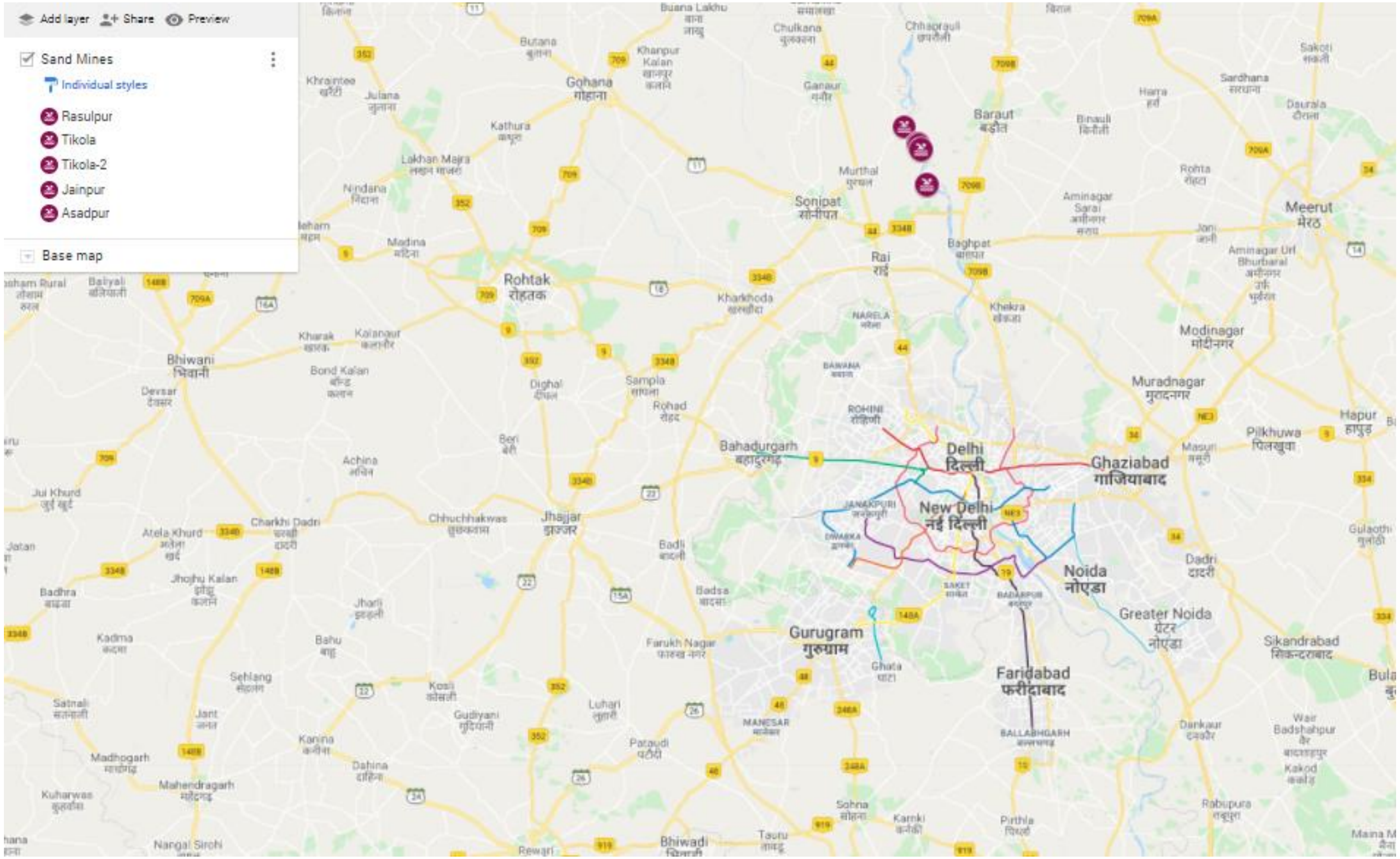
04 ORBITAL CORRIDOR, HARYANA



- Haryana Orbital Rail Corridor (HORC) from Palwal to Sonipat in the State of Haryana, bypassing Delhi
- Running parallel to WPE/KMP Expressway, Freight traffic not meant for Delhi will get diverted and will help in developing Multi Modal Hubs in NCR region of Haryana
- Serves open unserved areas of the state of Haryana, thereby enhancing economic and social activity of the Haryana sub-region of NCR.
- Connectivity to Maruti Suzuki, MET/Reliance, All Cargo and other Logistic Hubs in the region.

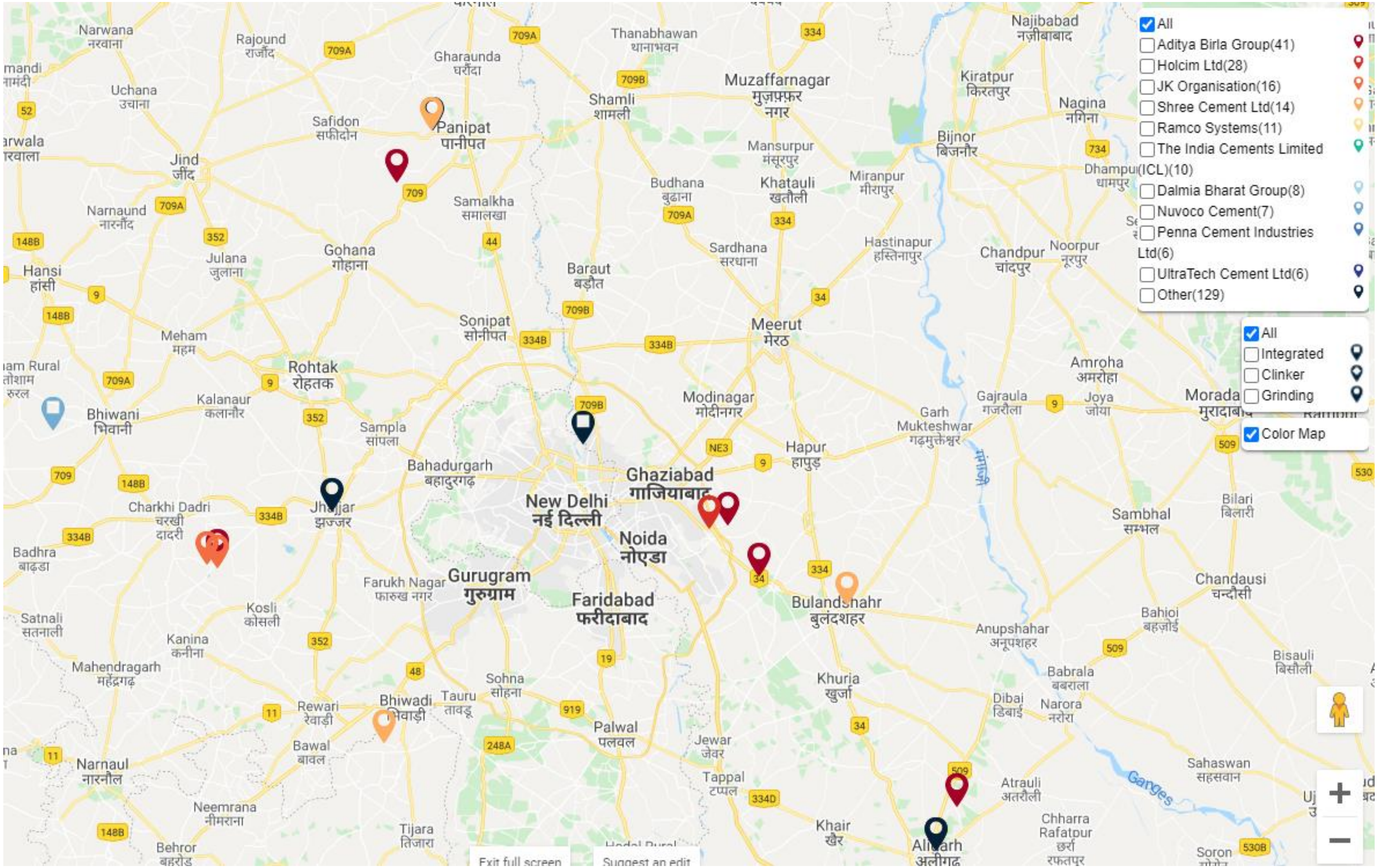
Project Cost	Impact Type	Current Status	Impact Year	Distance of Development
₹ 5600 Cr.	NA	PRELIMINARY STAGE	FY 2030	121.7 Km

SAND MINES IN HARYANA NEAR NCR



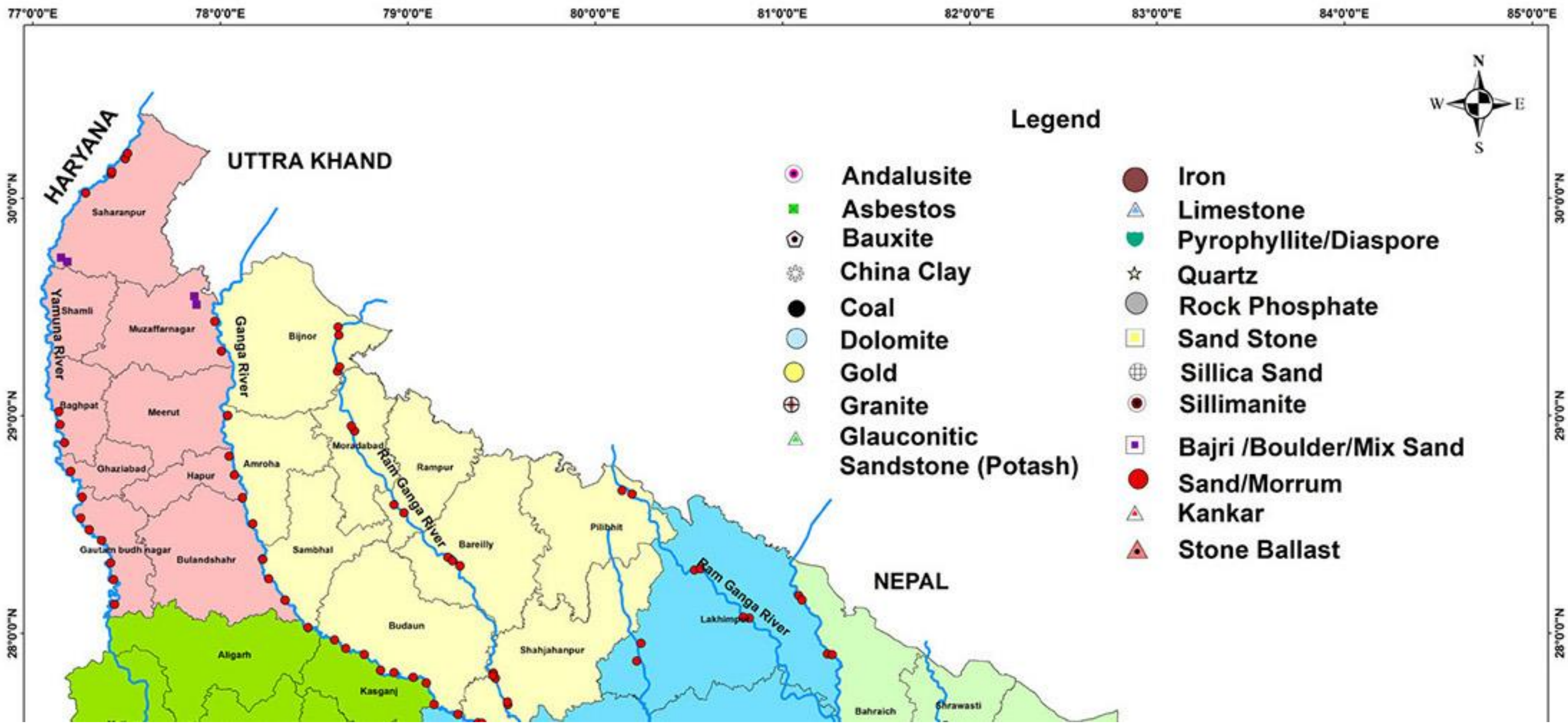
- There are about 97 & 117 stone crusher in Faridabad & Gurugram Districts

CEMENT PLANTS IN & AROUND NCR REGION



- There are about 5 Plants Close Proximity to EPE.

SAND MINES IN UTTARPRADESH



- All Sand Mines close to EPE are along the Yamuna River Bank.

DEVELOPMENT TRAFFIC-NEW NOIDA INTERNATIONAL AIRPORT

Final Passenger Projected in COD	Per day Demand
7488000	20515

Mode	Mode %	Passenger Trips per day	Occupancy	Vehicle Trips per day	Ghaziabad	Gautam Buddh Nagar
2W	2%	410	1.1	373	75	30
Auto	15%	3077	1.8	1758	352	141
Car	30%	6155	2.1	2980	596	238
Taxi	35%	7180	2.1	3355	671	268
MB	5%	1026	9.0	114	23	9
BUS	13%	2667	15.0	178	36	14
Rail/Metro	0%	0				
	100%	20515		8759	1752	701

Gautam Buddh	8%
Ghaziabad	20%

Mode	Ghaziabad	Gautam Buddh Nagar
2W	19	7
Auto	88	35
Car	149	60
Taxi	168	67
MB	6	2
BUS	9	4
Rail/Metro	0	0

PLAZA WISE DIVERSIONS IMPACT

TP-1: JAKHAULI								
Impact Year	Diversion Impact Name	Car	Minibus	Bus	LCV	2AT	3AT	MAV
2023	Farmers Protest	-10.5%		-16.4%	-2.2%	-3.6%	-2.6%	-2.5%
2024	Eastern DFC				-0.1%	-0.2%		-0.5%
2030	New Noida City	0.2%			0.2%	1.2%	1.1%	0.7%
2032	RRTS (Alwar + Meerut)	-0.5%						

TP-2: MAWI KALAN								
Impact Year	Diversion Impact Name	Car	Minibus	Bus	LCV	2AT	3AT	MAV
2023	Farmers Protest	-18.4%	-24.7%	-27.9%	-10.5%	-12.6%	-16.1%	-11.0%
2026	Dehradun E'Way (Noida & Ghaziabad Traffic)	0.7%			0.6%	2.7%	1.2%	0.7%
2026	Dehradun E’Way (Positive)	1.1%					0.3%	0.1%
2030	New Noida City	0.2%						
2033	Commodity Risk (Sand)				-0.9%	-6.3%	-7.4%	-14.9%

TP-3: DUHAI								
Impact Year	Diversion Impact Name	Car	Minibus	Bus	LCV	2AT	3AT	MAV
2030	New Noida City	0.3%			3.5%		0.8%	0.6%
2032	RRTS (Alwar + Meerut)	-1.3%						

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PLAZA WISE DIVERSIONS IMPACT

TP-4: MEERUT E'WAY								
Impact Year	Diversion Impact Name	Car	Minibus	Bus	LCV	2AT	3AT	MAV
2024	Eastern DFC						-0.6%	
2025	Jewar Airport	2.2%						
2026	Dehradun E'Way (Noida & Ghaziabad Traffic)	-1.2%			-1.8%	-1.8%	-1.3%	-1.2%
2026	Dehradun E'Way (Negative)	-1.9%					-0.3%	-0.2%
2030	New Noida City	0.4%			0.2%	1.7%	1.1%	0.3%
2032	RRTS (Alwar + Meerut)	-2.4%						

TP-5: DASNA								
Impact Year	Diversion Impact Name	Car	Minibus	Bus	LCV	2AT	3AT	MAV
2025	Jewar Airport	1.0%						
2027	Delhi Mumbai E'Way (Noida & Jewar Spur)					-0.1%		-0.1%
2030	New Noida City	0.8%			0.1%	0.6%	0.5%	0.5%
2032	RRTS (Alwar + Meerut)	-0.6%						

TP-6: BILAKBARPUR								
Impact Year	Diversion Impact Name	Car	Minibus	Bus	LCV	2AT	3AT	MAV
2025	Jewar Airport	1.5%						
2027	Delhi Mumbai E'Way (Noida & Jewar Spur)							-0.03%
2030	New Noida City	3.8%			1.3%	7.9%	6.5%	3.1%
2033	Commodity Risk (Cement)				-1.2%	-1.8%	-1.9%	-8.3%

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PLAZA WISE DIVERSIONS IMPACT

TP-7: FATEHPUR RAMPUR								
Impact Year	**Diversion Impact Name**	**Car**	**Minibus**	**Bus**	**LCV**	**2AT**	**3AT**	**MAV**
2024	Eastern DFC				-0.2%			-0.2%
2025	Jewar Airport	4.5%						
2026	Dehradun E'Way (Positive)	1.0%					0.3%	
2026	Dehradun E'Way (Negative)	-1.0%					-0.3%	
2027	Delhi Mumbai E'Way (Noida & Jewar Spur)							-0.8%
2030	New Noida City	2.7%			0.8%	3.9%	8.2%	4.7%
2033	Commodity Risk (Const. & Cement)				-2.1%	-2.6%	-3.9%	-15.5%

TP-8: MAUJPUR								
Impact Year	**Diversion Impact Name**	**Car**	**Minibus**	**Bus**	**LCV**	**2AT**	**3AT**	**MAV**
2027	Delhi Mumbai E'Way (Noida & Jewar Spur)				-1.1%	-0.8%	-0.5%	-0.5%
2030	New Noida City	3.6%			0.9%	6.8%	8.7%	7.2%

TP-9: CHHAJJU NAGAR								
Impact Year	**Diversion Impact Name**	**Car**	**Minibus**	**Bus**	**LCV**	**2AT**	**3AT**	**MAV**
2024	Eastern DFC				-0.1%	-0.3%	-0.3%	-0.1%
2026	Dehradun E'Way (Negative)	-0.5%			-0.1%	-0.2%	-0.2%	-0.3%
2026	Dehradun E'Way (Positive)	0.5%			0.1%	0.2%	0.2%	0.3%
2027	Delhi Mumbai E'Way (Noida & Jewar Spur)	-4.4%	-12.9%		-1.7%	-3.0%	-2.8%	-2.5%
2030	New Noida City	1.3%			0.7%	3.4%	3.7%	2.1%
2032	RRTS (Alwar + Meerut)	-3.7%						

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TRIP RATES

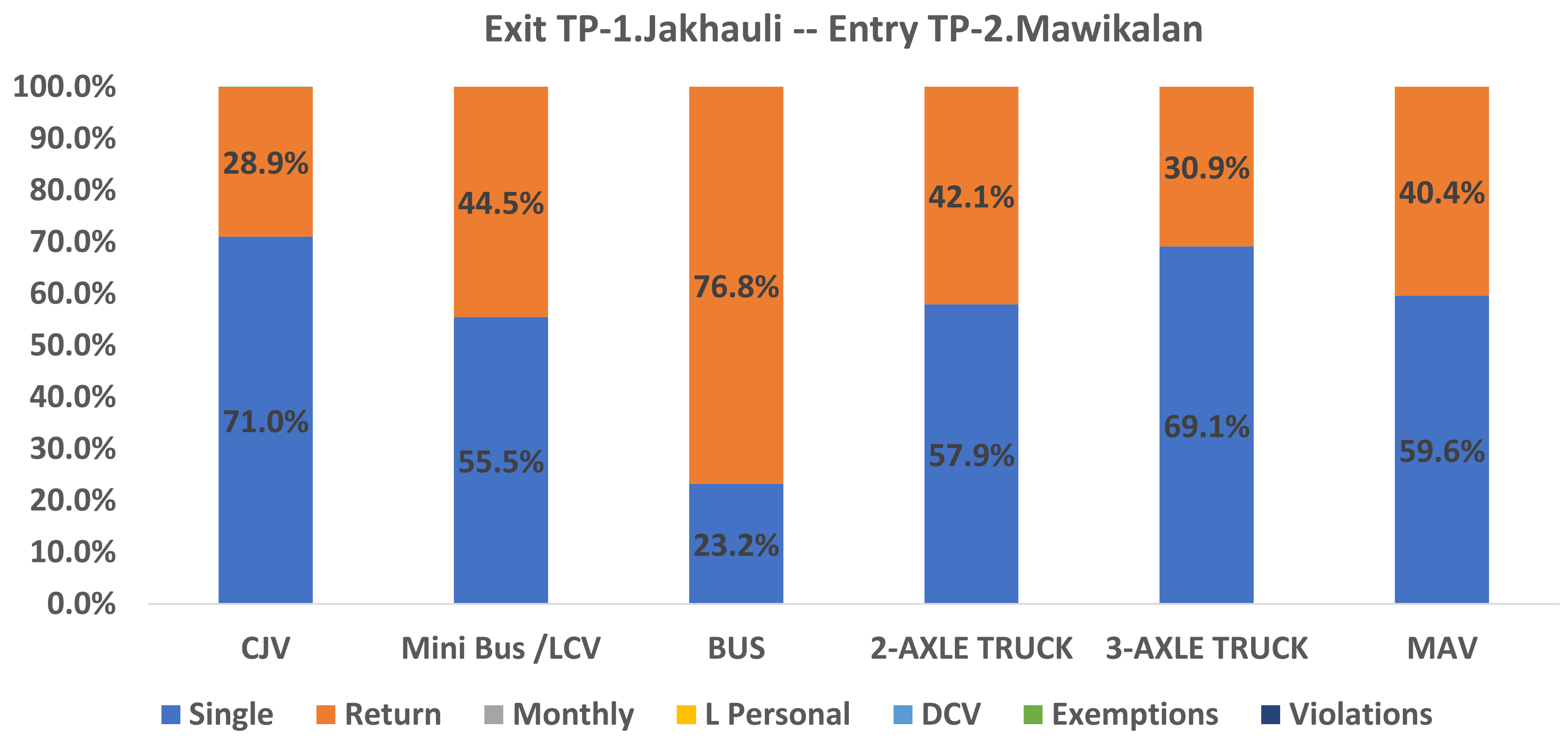
ALL TOLL PLAZAS							
MODE	SINGLE JOURNEY	RETURN JOURNEY	MONTHLY PASS	LOCAL PERSONAL	DCV	EXEMPTION	VIOLATION
Car	1.00	2.00	50.0	50.0	1.00	1.00	1.00
Minibus	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00
Bus	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00
LCV	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00
2AT	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00
3AT	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00
MAV	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00
OSV	1.00	2.00	50.0	[redacted]	1.00	1.00	1.00

- Since the Share of Fastag on the project Corridor was observed to be more than 95%, the trip rates shall be like the trip category.

TRIP CATEGORIES – OD PAIRWISE

RECOMMENDED TRIP CATEGORIES – TP1

Exit TP-1.Jakhauli -- Entry TP-2.Mawikalan								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	71.0%	28.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	55.5%	44.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	23.2%	76.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	57.9%	42.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	69.1%	30.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	59.6%	40.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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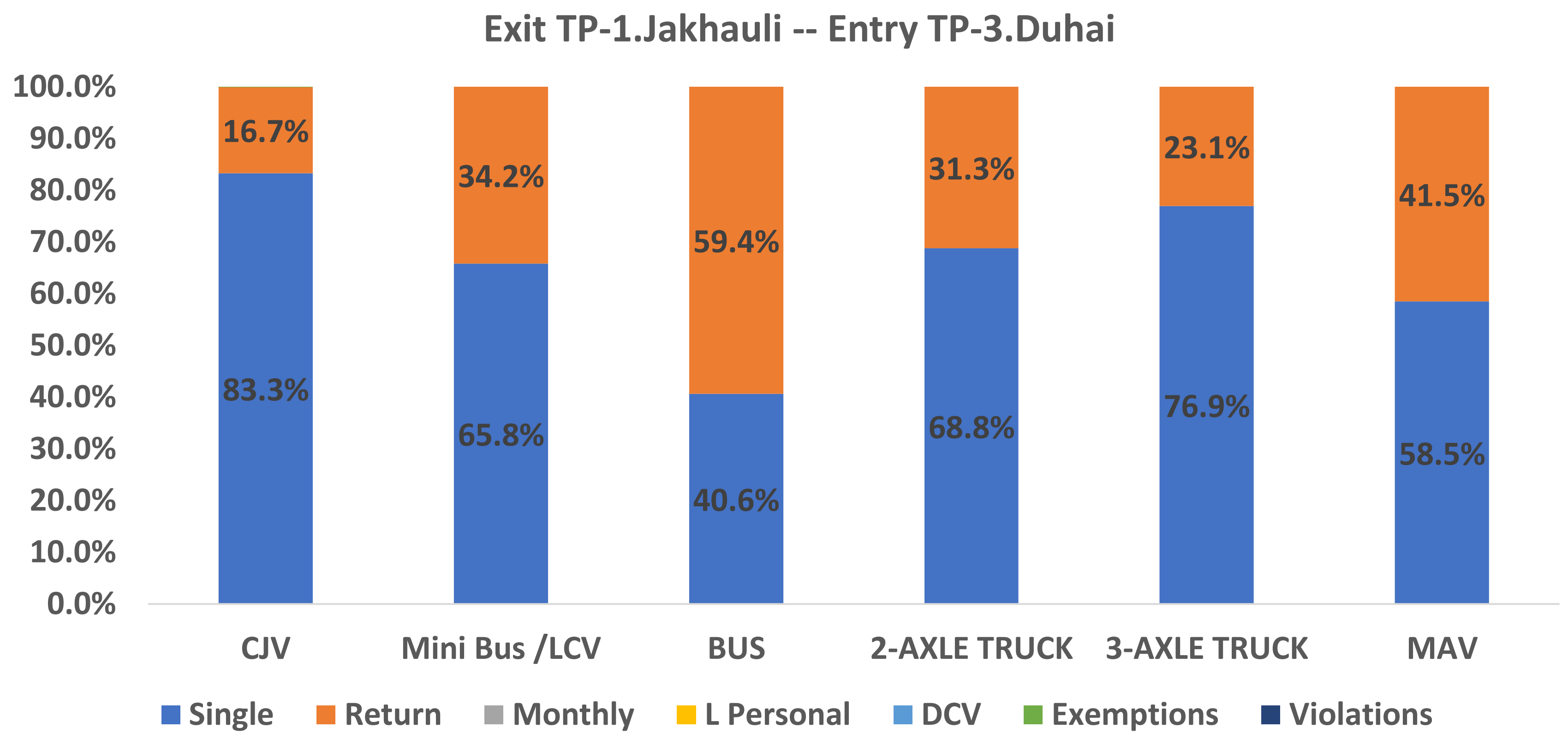
RECOMMENDED TRIP CATEGORIES – TP1

Exit TP-1.Jakhauli -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	83.3%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	65.8%	34.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	40.6%	59.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	68.8%	31.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	76.9%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	58.5%	41.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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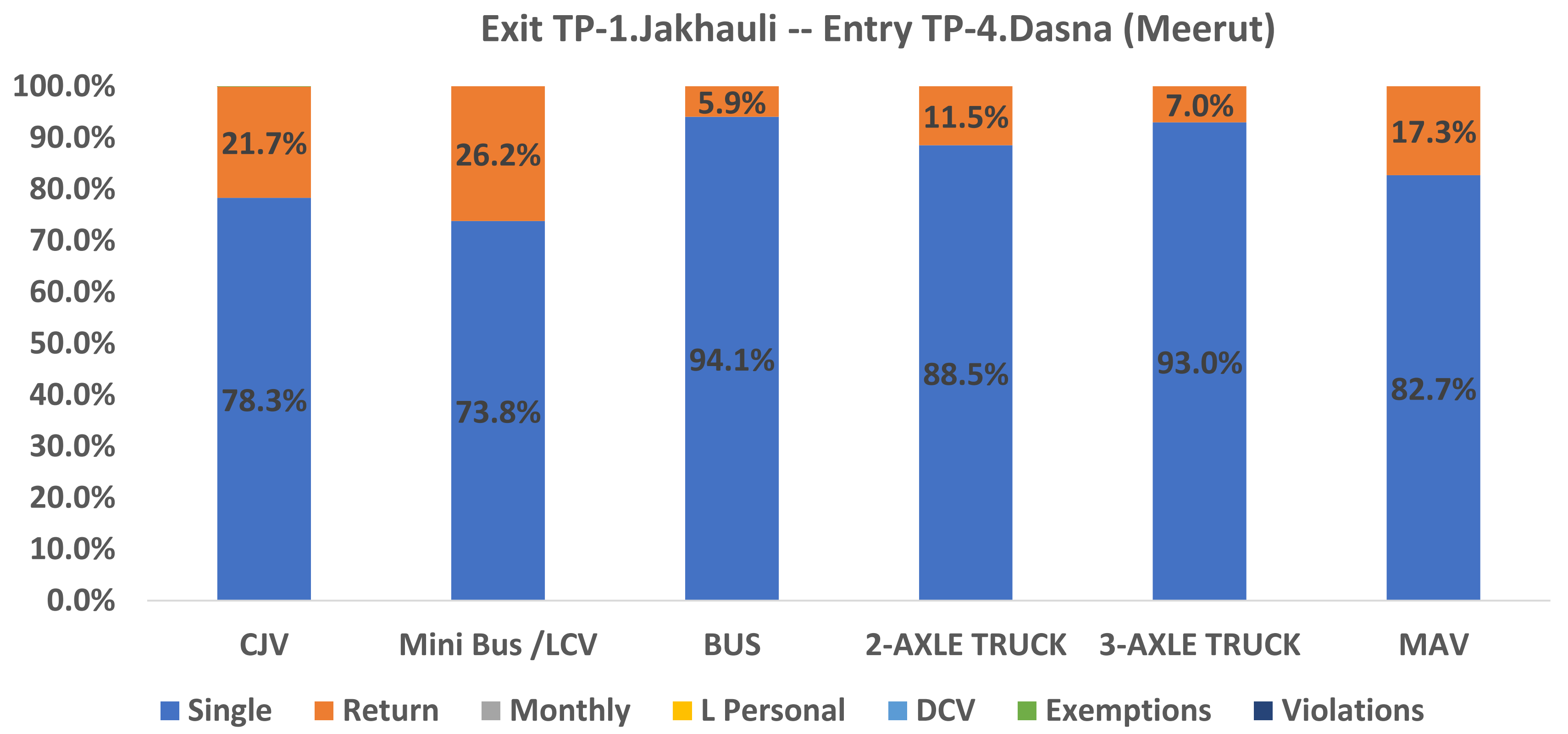
RECOMMENDED TRIP CATEGORIES – TP1

Exit TP-1.Jakhauli -- Entry TP-4.Dasna (Meerut)								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	78.3%	21.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	73.8%	26.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	94.1%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	88.5%	11.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	93.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	82.7%	17.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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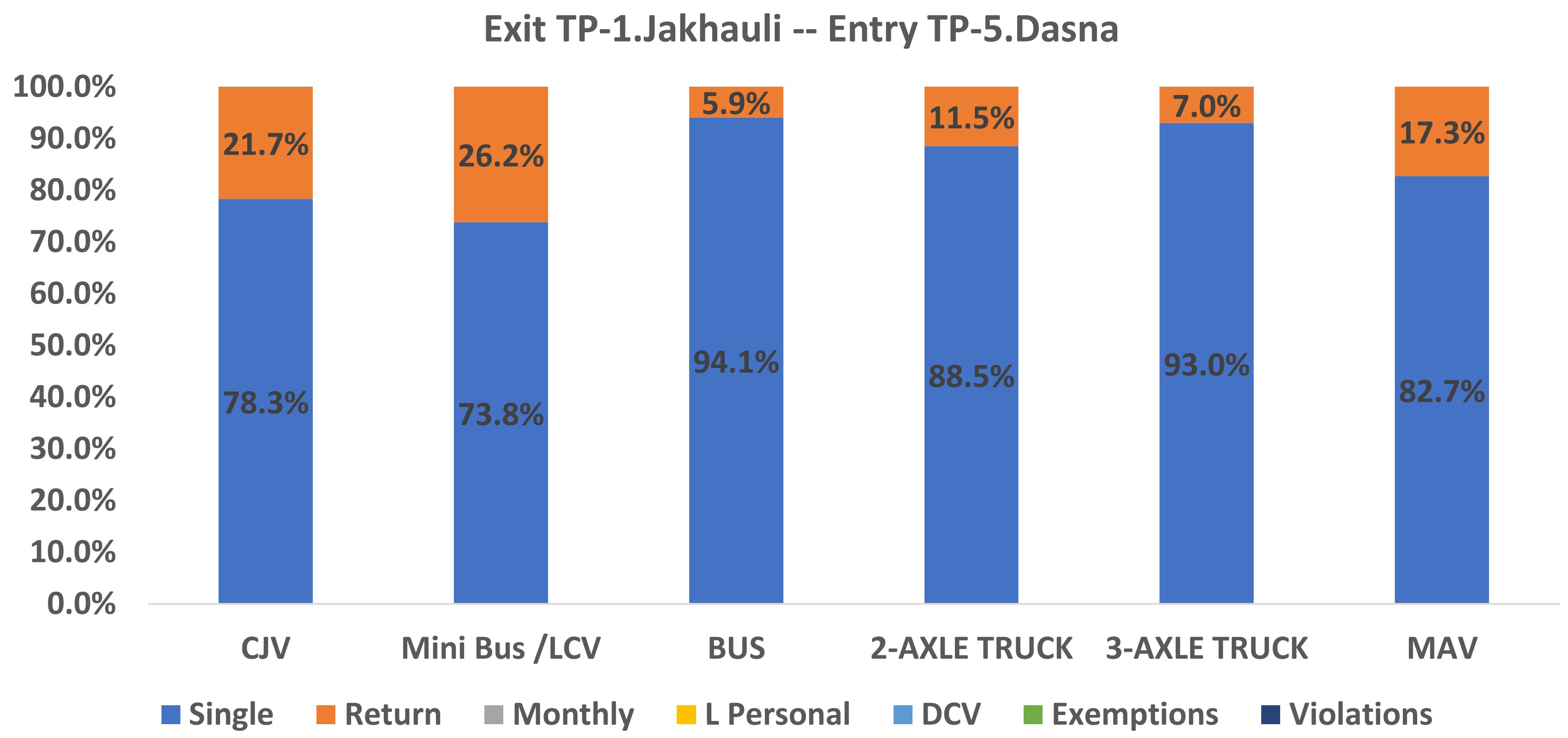
Exit TP-1.Jakhauli -- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	78.3%	21.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	73.8%	26.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	94.1%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	88.5%	11.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	93.0%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	82.7%	17.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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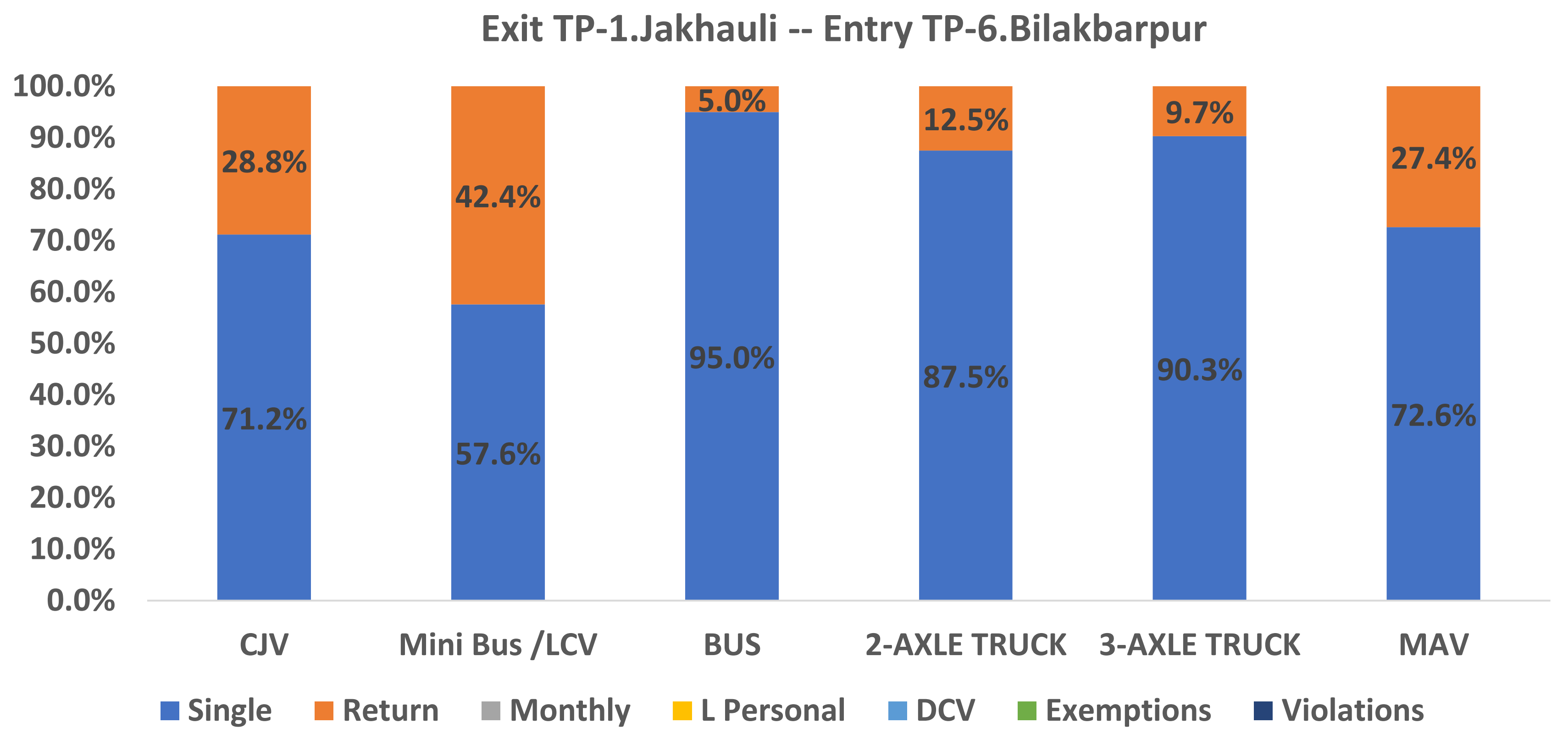
Exit TP-1.Jakhauli -- Entry TP-6.Bilakbarpur								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	71.2%	28.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	57.6%	42.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	95.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	87.5%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	90.3%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	72.6%	27.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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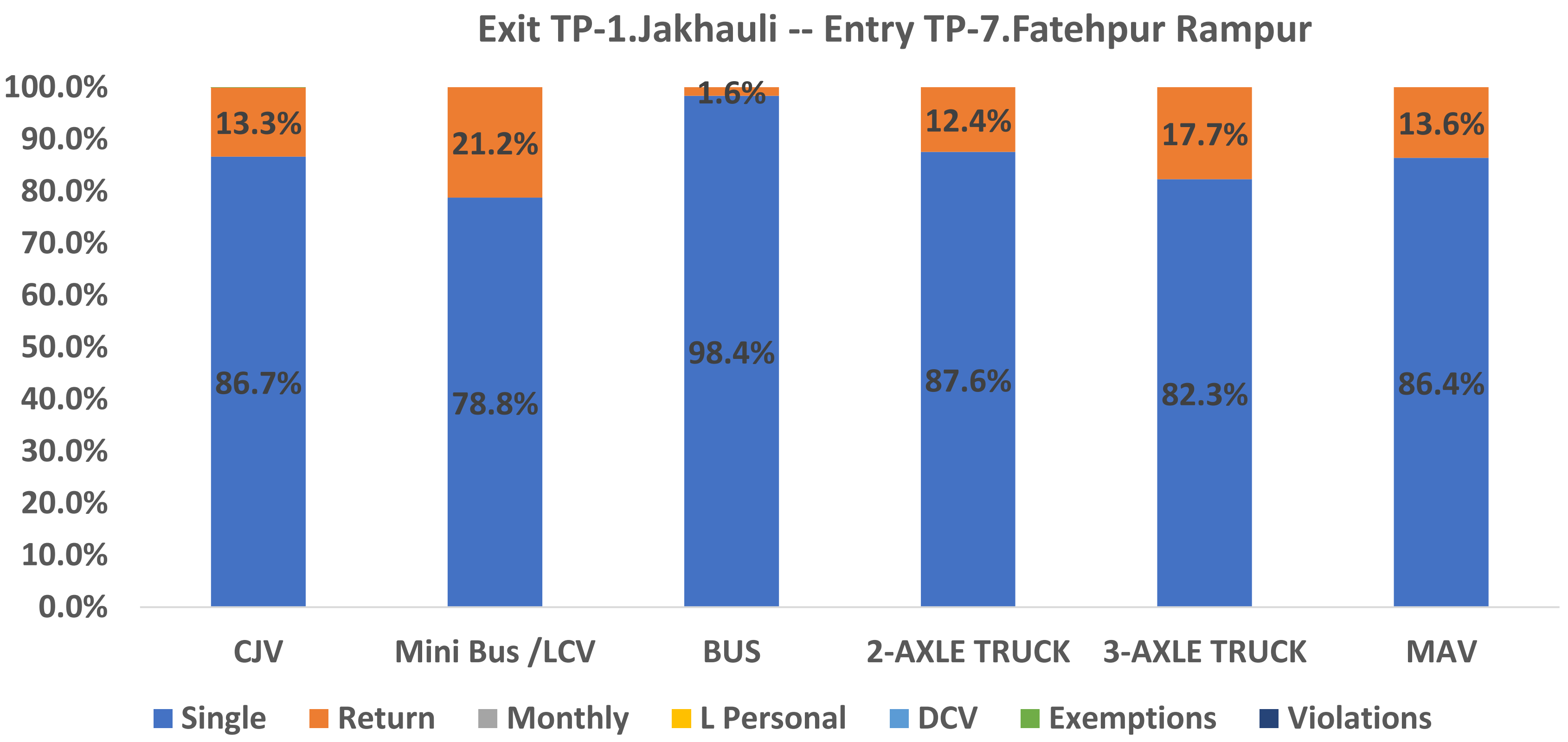
Exit TP-1.Jakhauli -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	86.7%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	78.8%	21.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	98.4%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	87.6%	12.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	82.3%	17.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	86.4%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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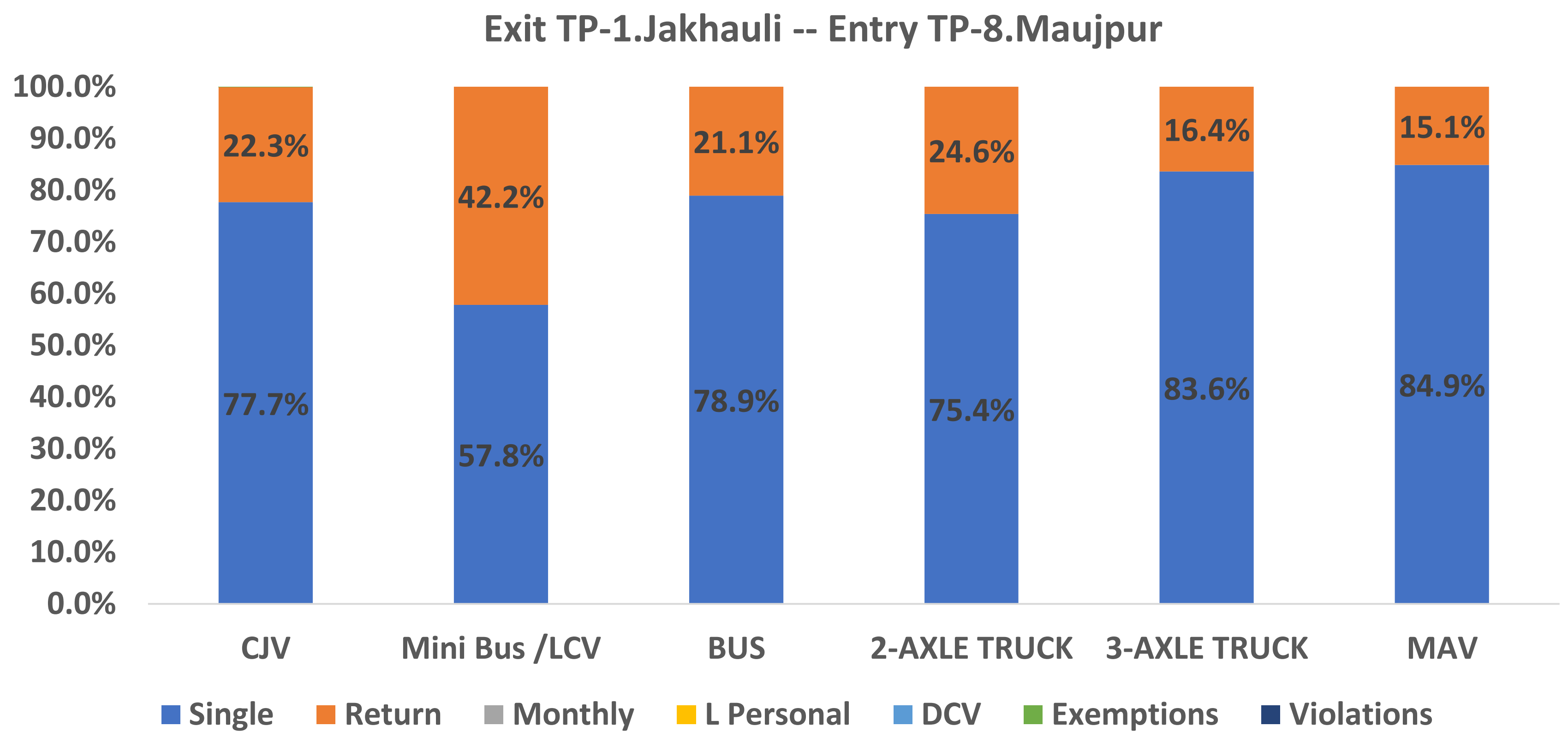
IBI CDPQ

Exit TP-1.Jakhauli -- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	77.7%	22.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	57.8%	42.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	78.9%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	75.4%	24.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	83.6%	16.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	84.9%	15.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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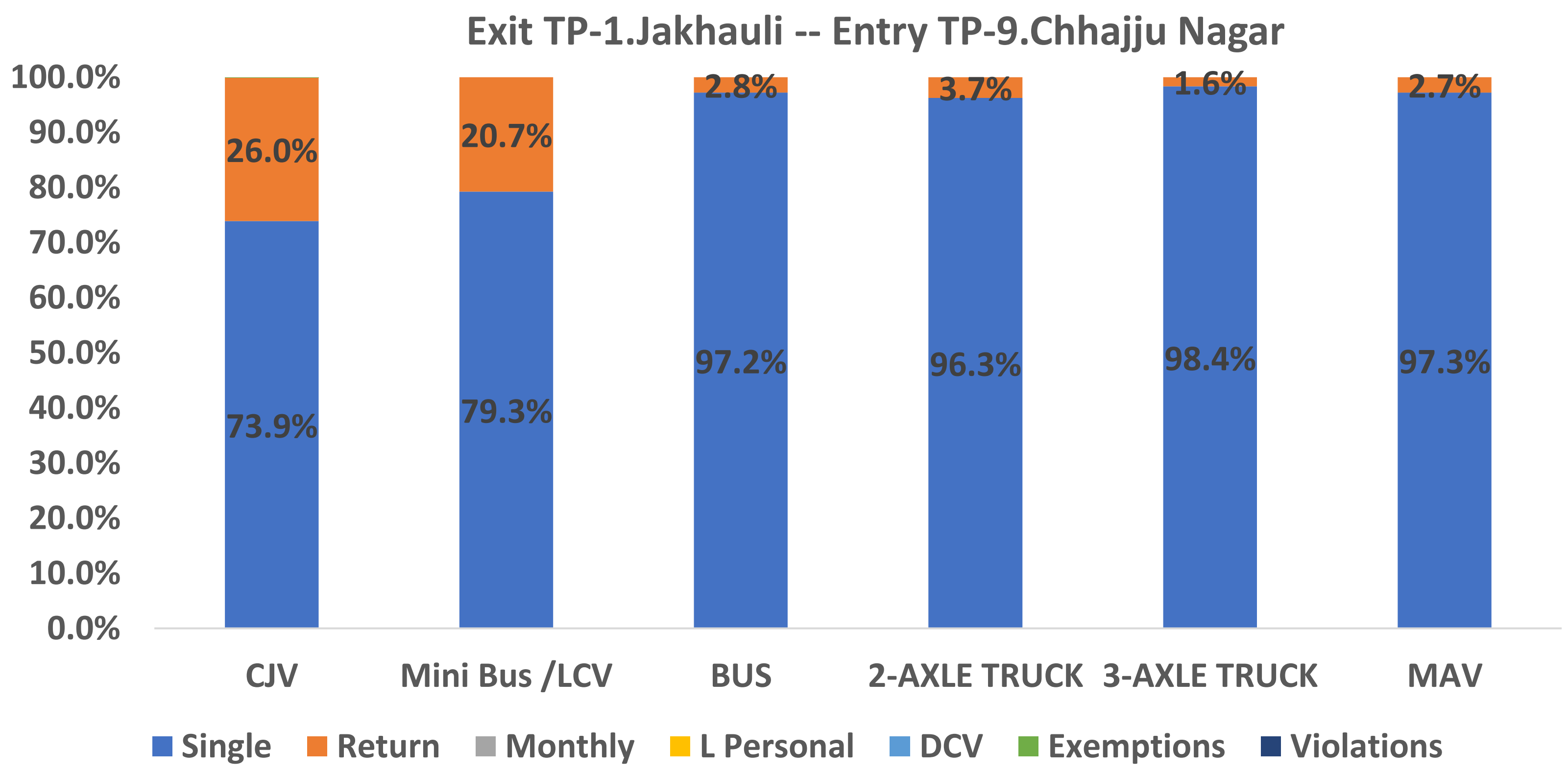
RECOMMENDED TRIP CATEGORIES – TP1

Exit TP-1.Jakhauli -- Entry TP-9.Chhajju Nagar								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	73.9%	26.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	79.3%	20.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	97.2%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	96.3%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	98.4%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	97.3%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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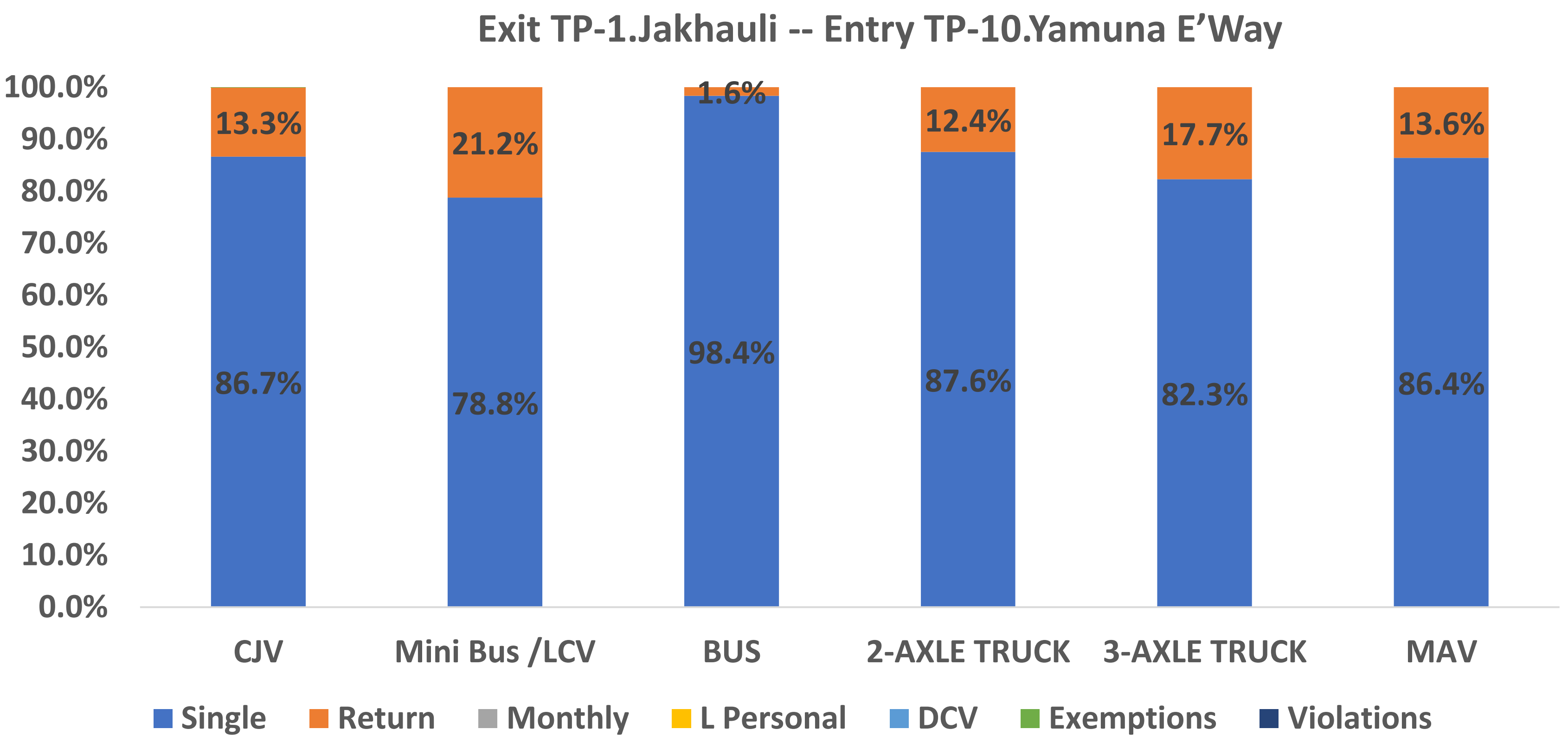
Exit TP-1.Jakhauli -- Entry TP-10.Yamun E'Way								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	86.7%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	78.8%	21.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	98.4%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	87.6%	12.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	82.3%	17.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	86.4%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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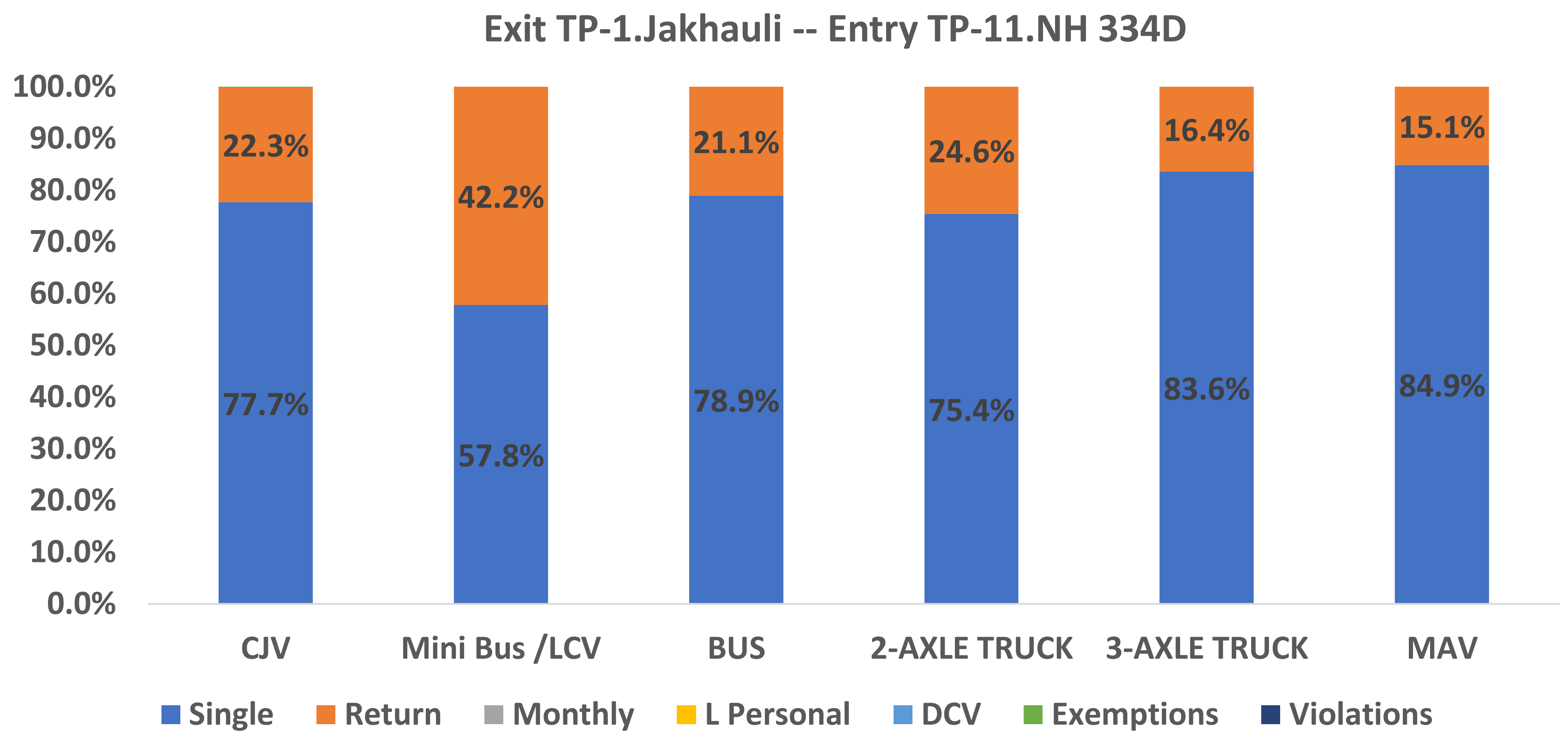
RECOMMENDED TRIP CATEGORIES – TP1

CDPQ

Exit TP-1.Jakhauli -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	77.7%	22.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	57.8%	42.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	78.9%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	75.4%	24.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	83.6%	16.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	84.9%	15.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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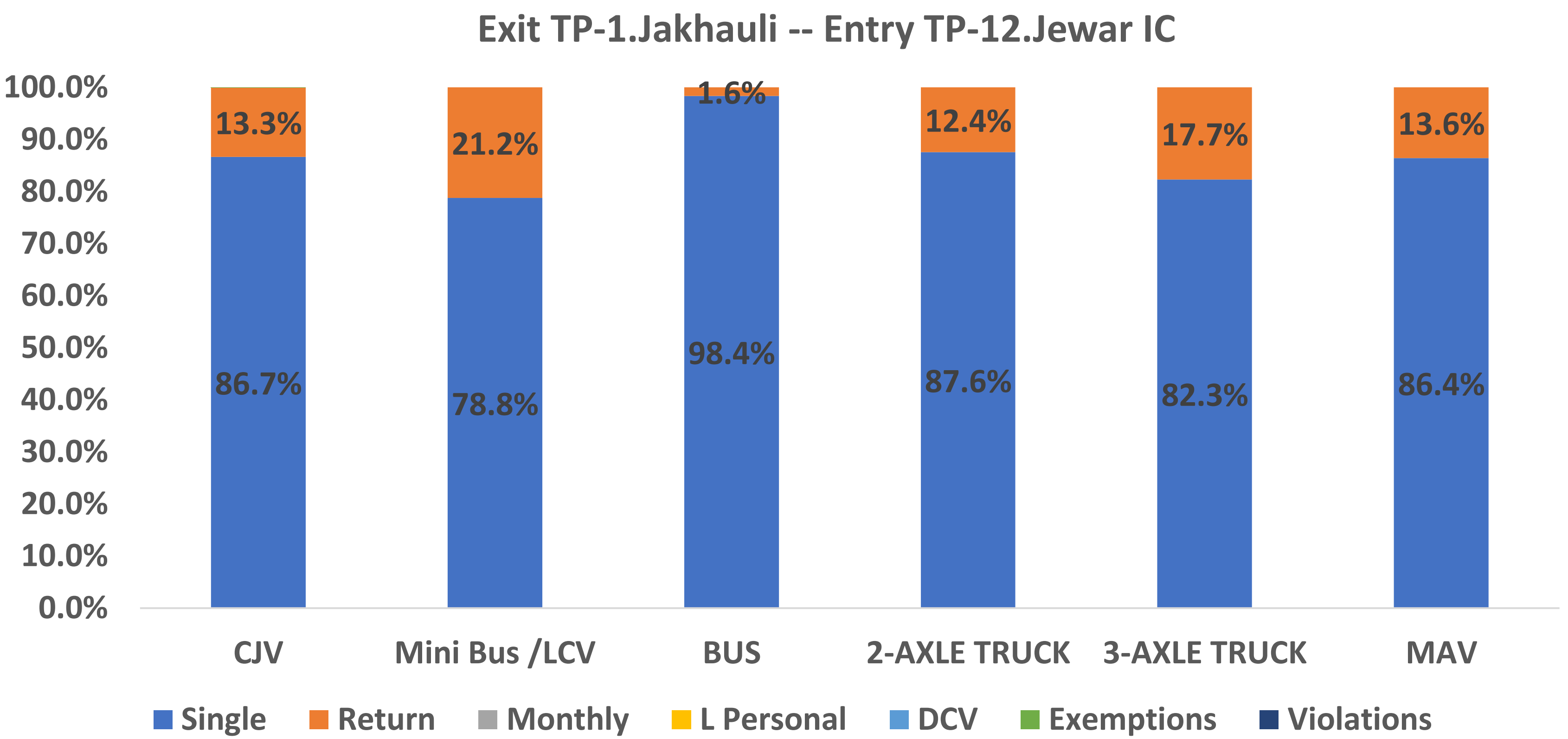
RECOMMENDED TRIP CATEGORIES – TP1

Exit TP-1.Jakhauli -- Entry TP-12. Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	86.7%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Minibus /LCV	78.8%	21.2%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
BUS	98.4%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	87.6%	12.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3-AXLE TRUCK	82.3%	17.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	86.4%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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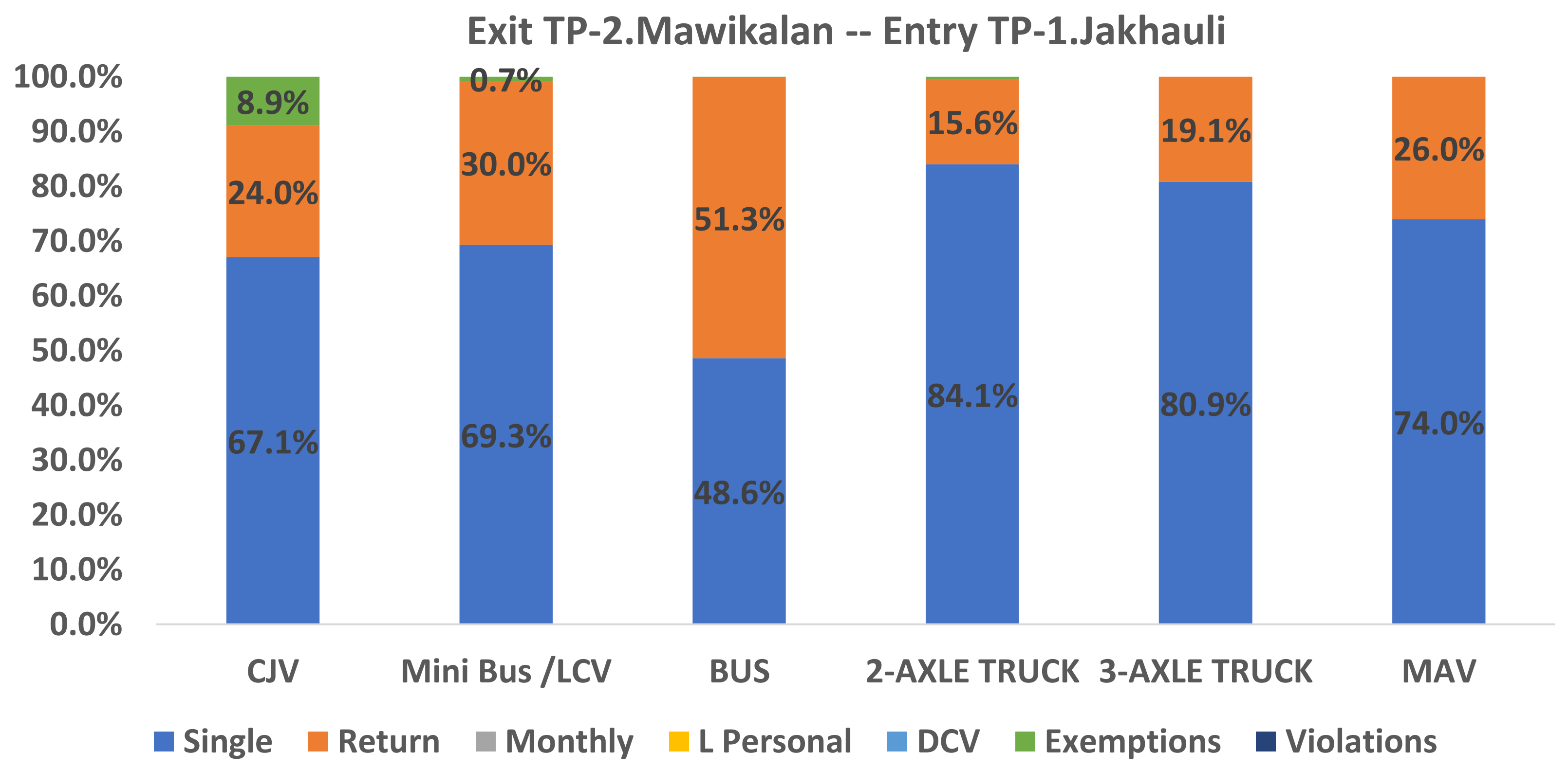
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-1.Jakhauli								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.1%	24.0%	0.0%	0.0%	0.0%	8.9%	0.0%	100.0%
Minibus /LCV	69.3%	30.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
BUS	48.6%	51.3%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
2-AXLE TRUCK	84.1%	15.6%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	80.9%	19.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	74.0%	26.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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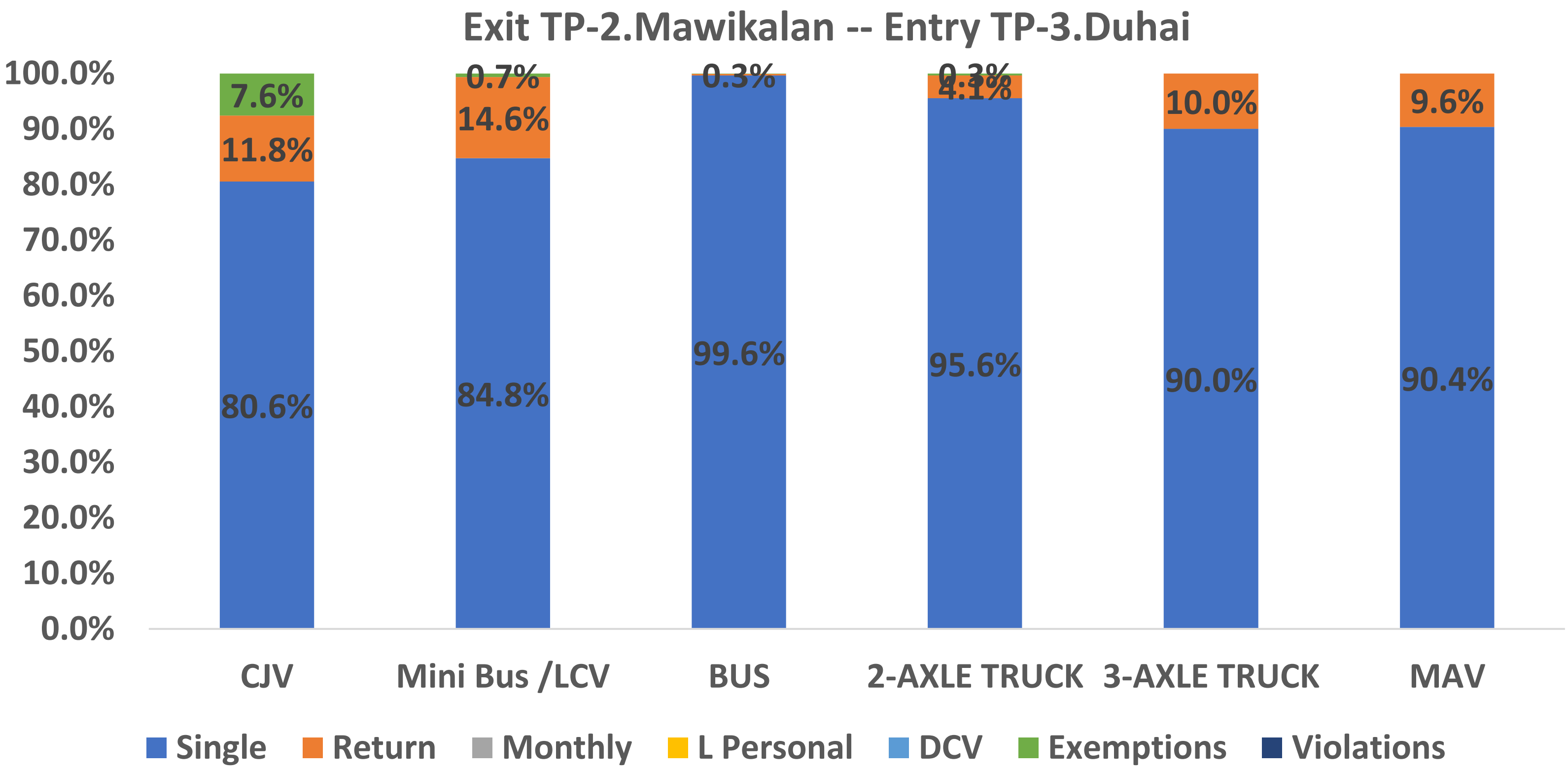
Exit TP-2.Mawikalan -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	80.6%	11.8%	0.0%	0.0%	0.0%	7.6%	0.0%	100.0%
Minibus /LCV	84.8%	14.6%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
BUS	99.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	95.6%	4.1%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	90.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	90.4%	9.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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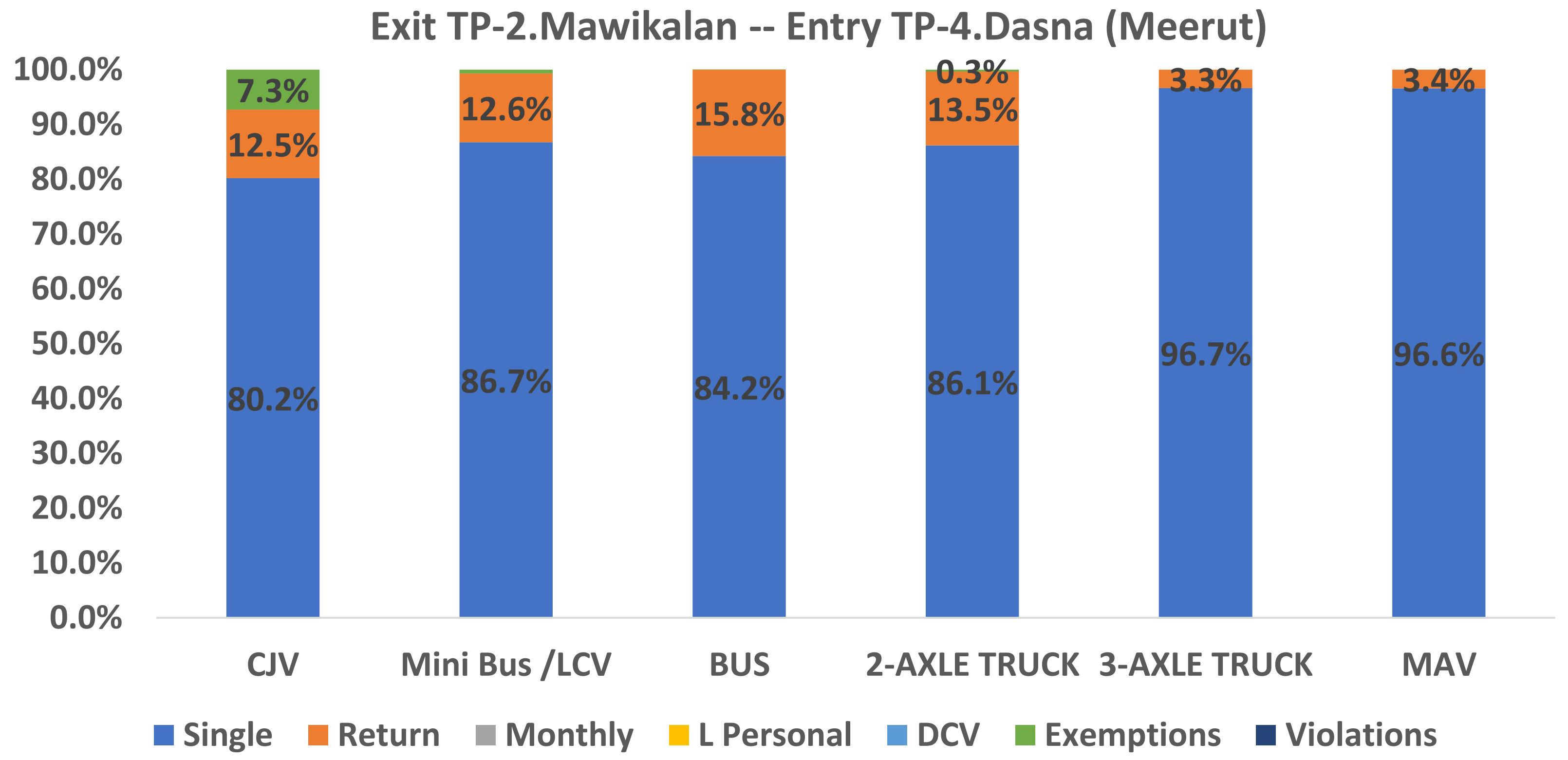
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-4.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	80.2%	12.5%	0.0%	0.0%	0.0%	7.3%	0.0%	100.0%
Minibus /LCV	86.7%	12.6%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
BUS	84.2%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	86.1%	13.5%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	96.7%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	96.6%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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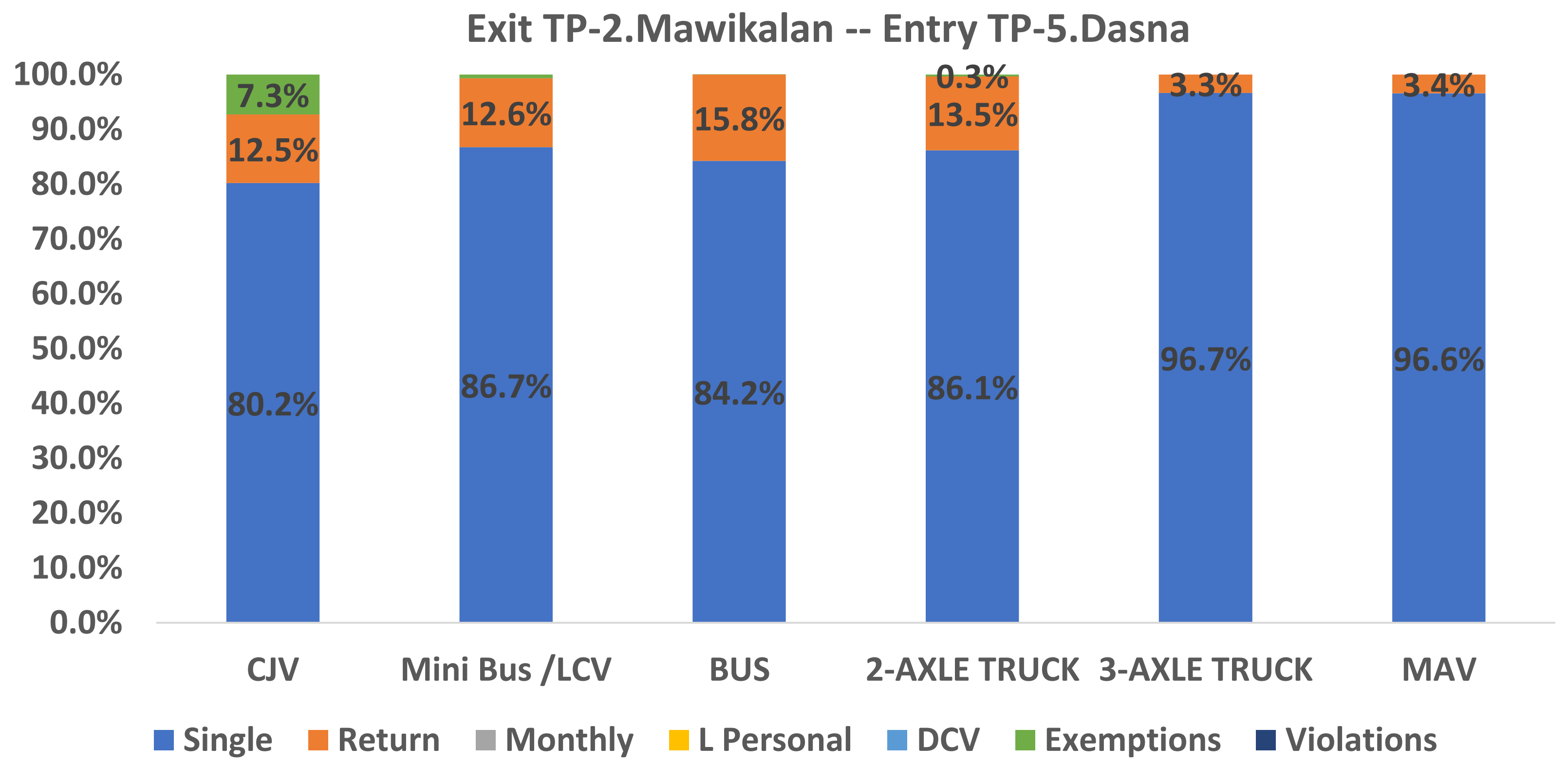
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-5.Dasna								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	80.2%	12.5%	0.0%	0.0%	0.0%	7.3%	0.0%	100.0%
Minibus /LCV	86.7%	12.6%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
BUS	84.2%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	86.1%	13.5%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	96.7%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	96.6%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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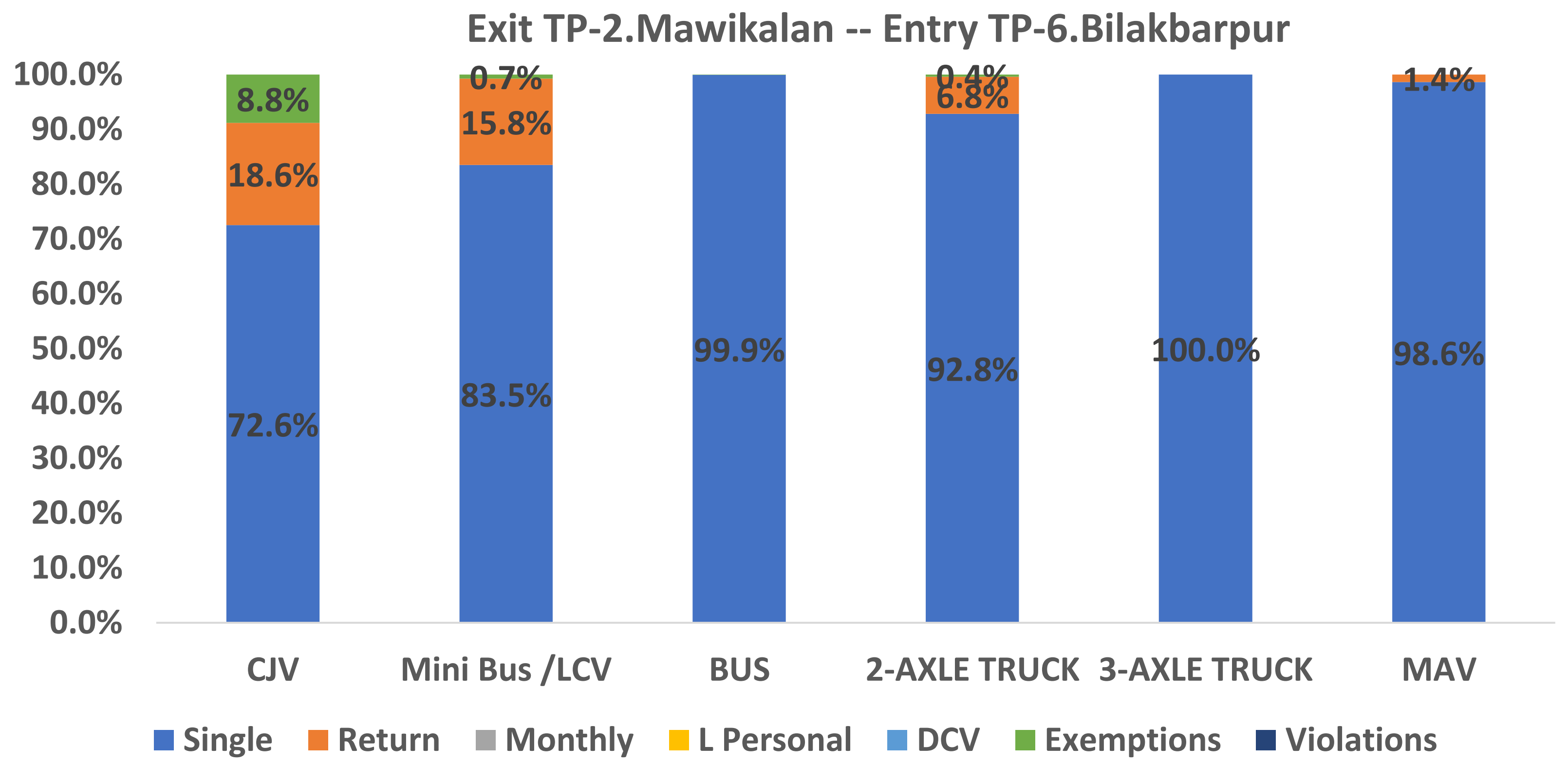
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	72.6%	18.6%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	83.5%	15.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
BUS	99.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
2-AXLE TRUCK	92.8%	6.8%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	98.6%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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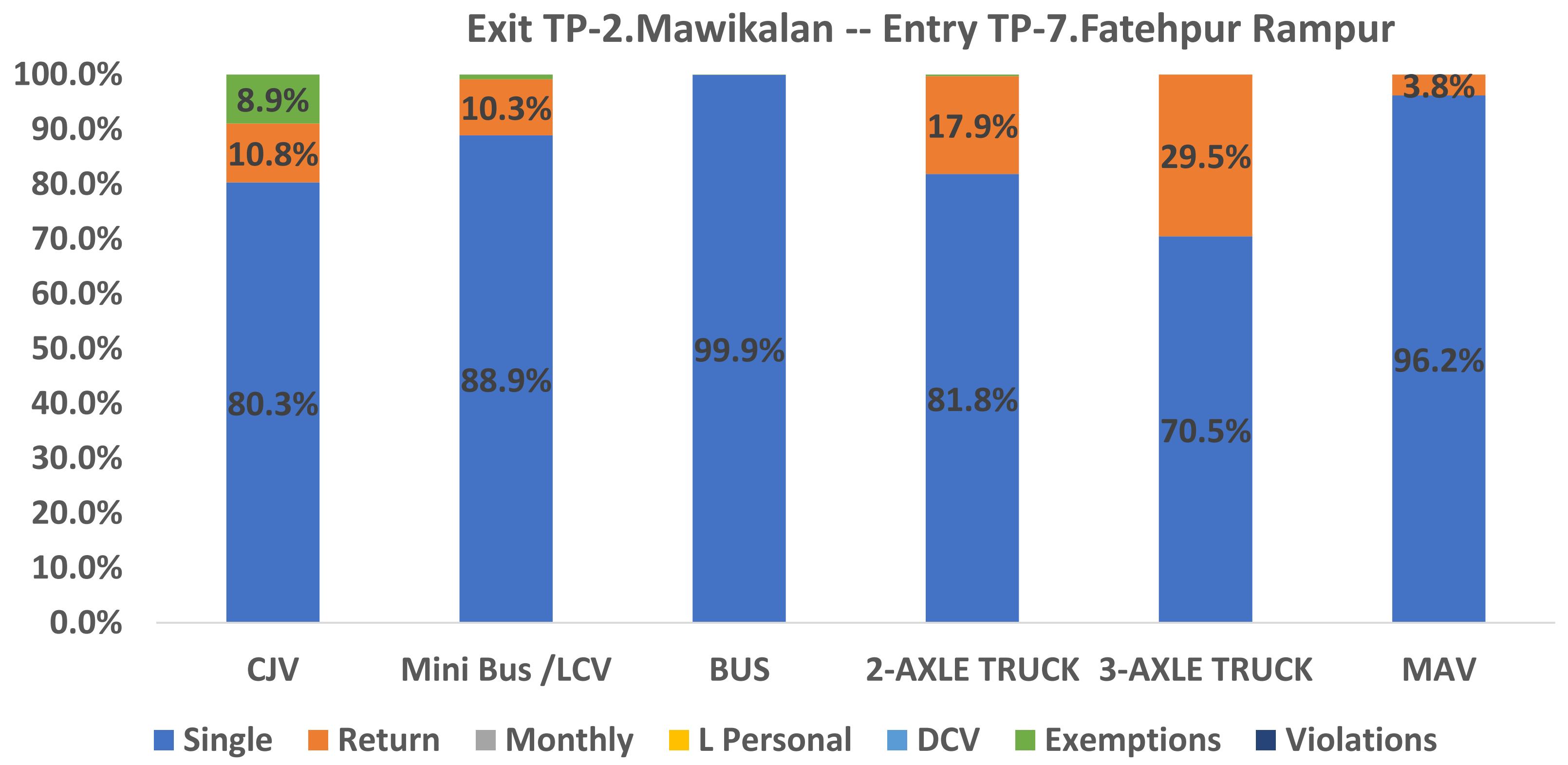
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	80.3%	10.8%	0.0%	0.0%	0.0%	8.9%	0.0%	100.0%
Minibus /LCV	88.9%	10.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
BUS	99.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
2-AXLE TRUCK	81.8%	17.9%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	70.5%	29.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	96.2%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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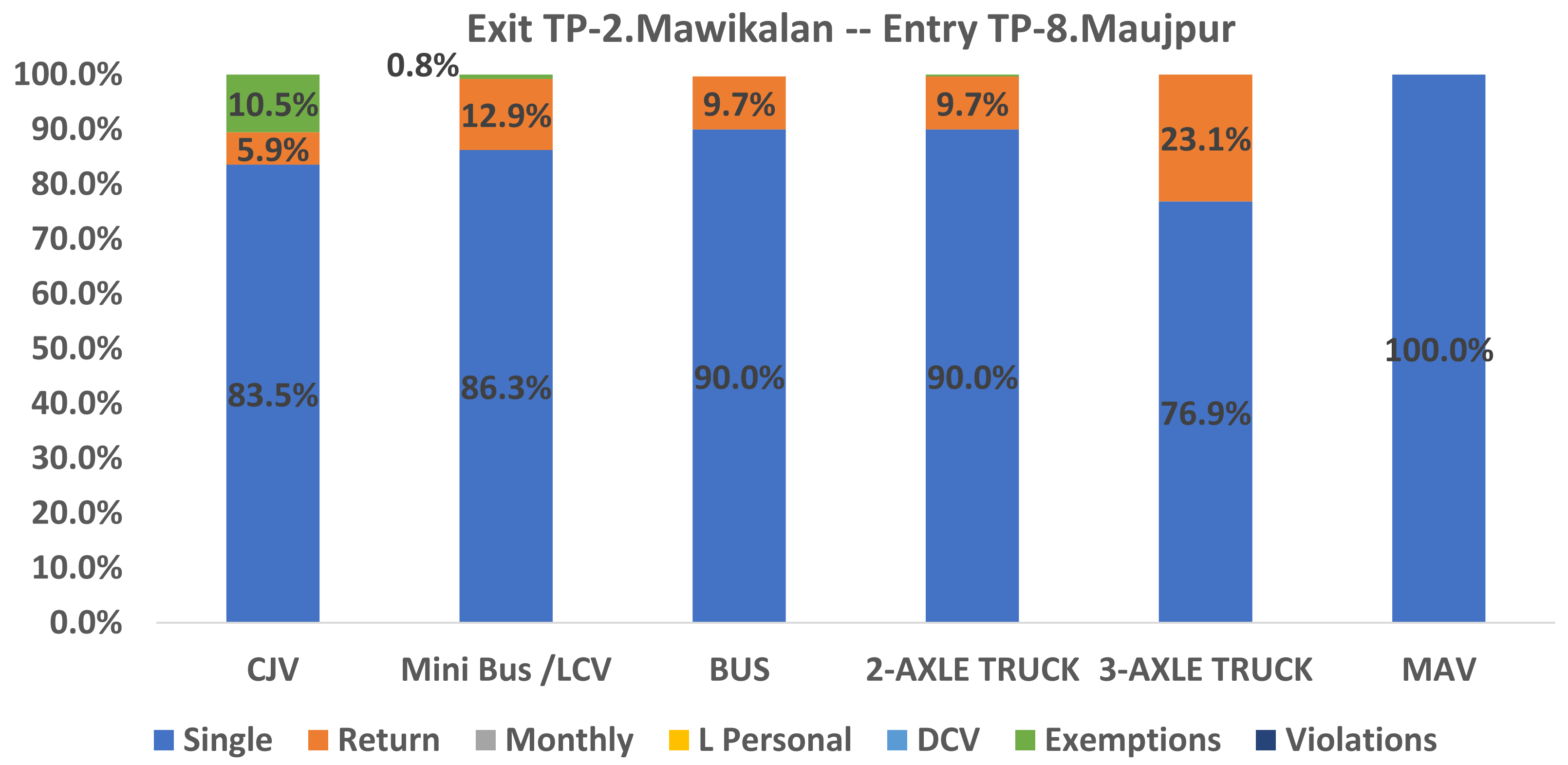
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	83.5%	5.9%	0.0%	0.0%	0.0%	10.5%	0.0%	100.0%
Minibus /LCV	86.3%	12.9%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
BUS	90.0%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	99.6%
2-AXLE TRUCK	90.0%	9.7%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	76.9%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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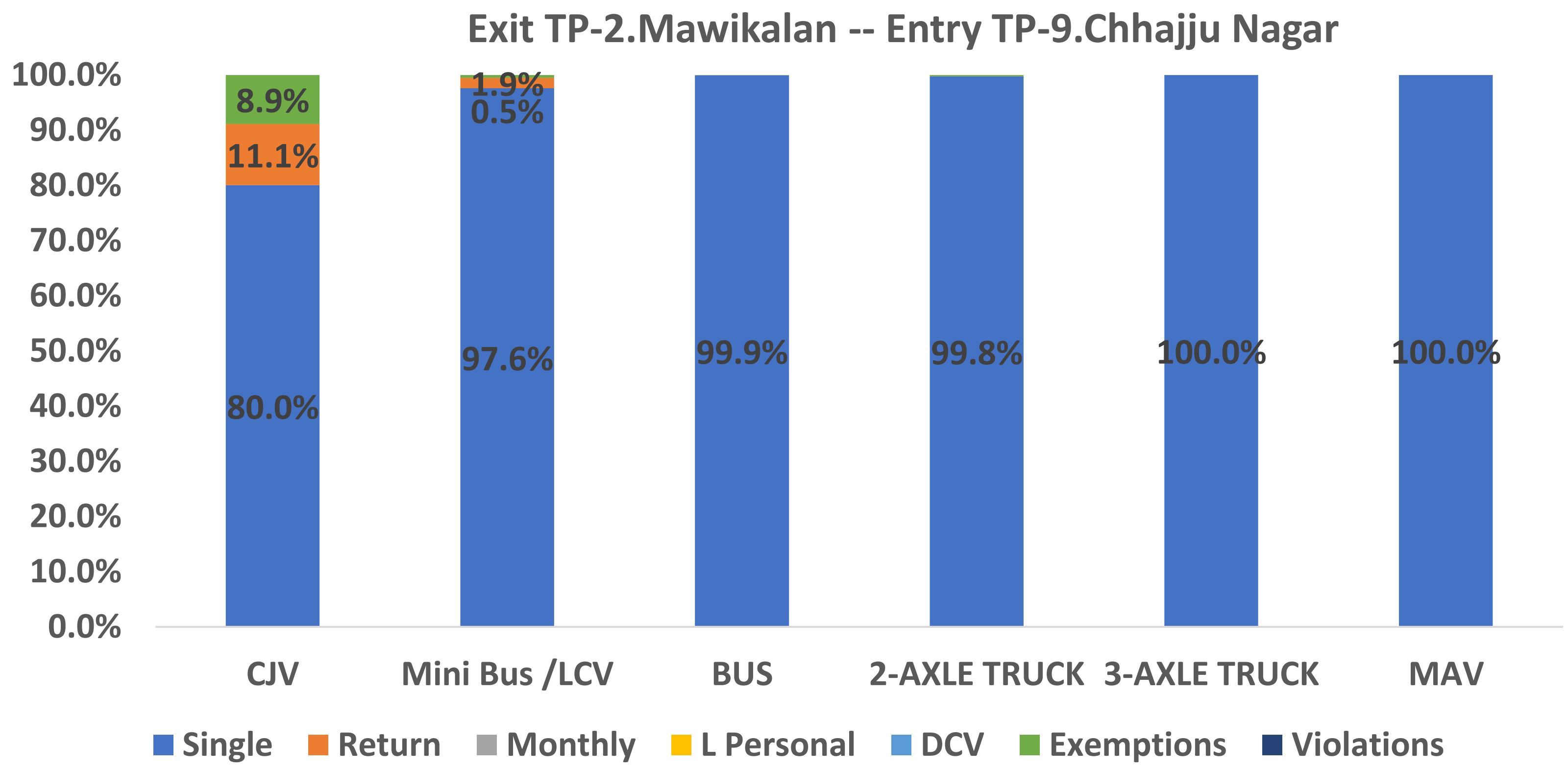
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-9.Chhajju Nagar								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	80.0%	11.1%	0.0%	0.0%	0.0%	8.9%	0.0%	100.0%
Minibus /LCV	97.6%	1.9%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
BUS	99.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
2-AXLE TRUCK	99.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
3-AXLE TRUCK	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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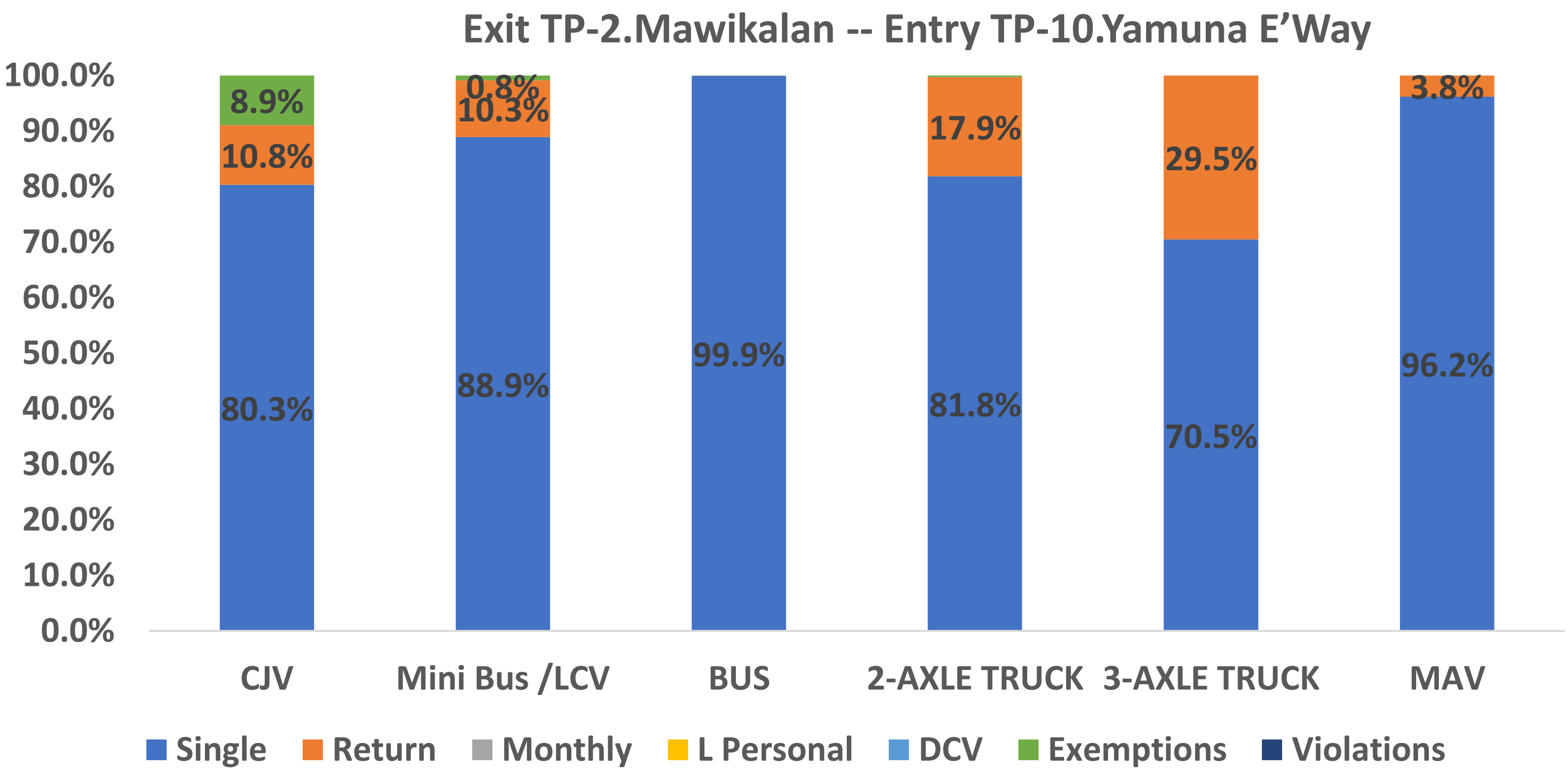
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	80.3%	10.8%	0.0%	0.0%	0.0%	8.9%	0.0%	100.0%
Minibus /LCV	88.9%	10.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
BUS	99.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
2-AXLE TRUCK	81.8%	17.9%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	70.5%	29.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	96.2%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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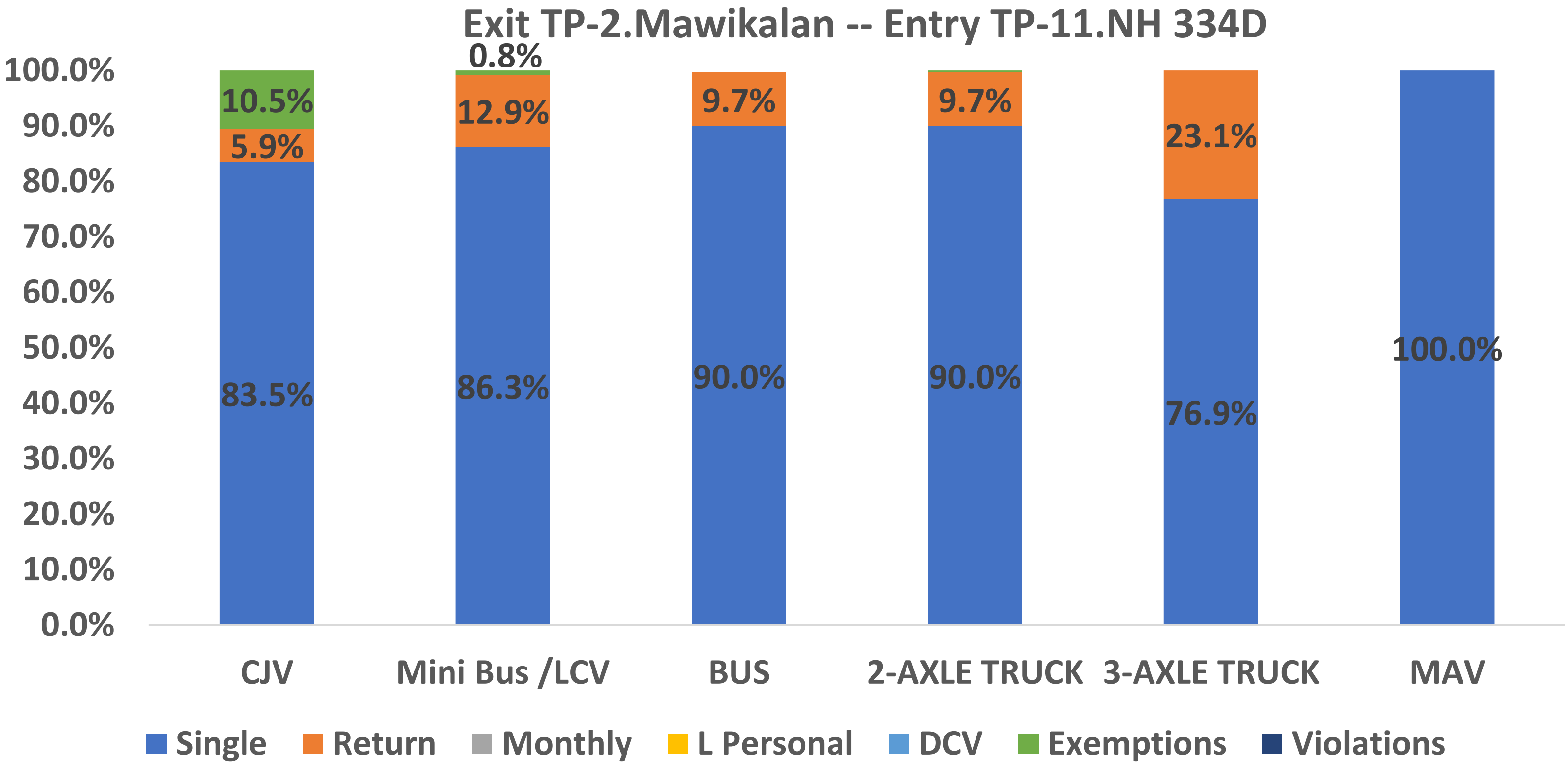
RECOMMENDED TRIP CATEGORIES – TP2

Exit TP-2.Mawikalan -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	83.5%	5.9%	0.0%	0.0%	0.0%	10.5%	0.0%	100.0%
Minibus /LCV	86.3%	12.9%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
BUS	90.0%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	99.6%
2-AXLE TRUCK	90.0%	9.7%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	76.9%	23.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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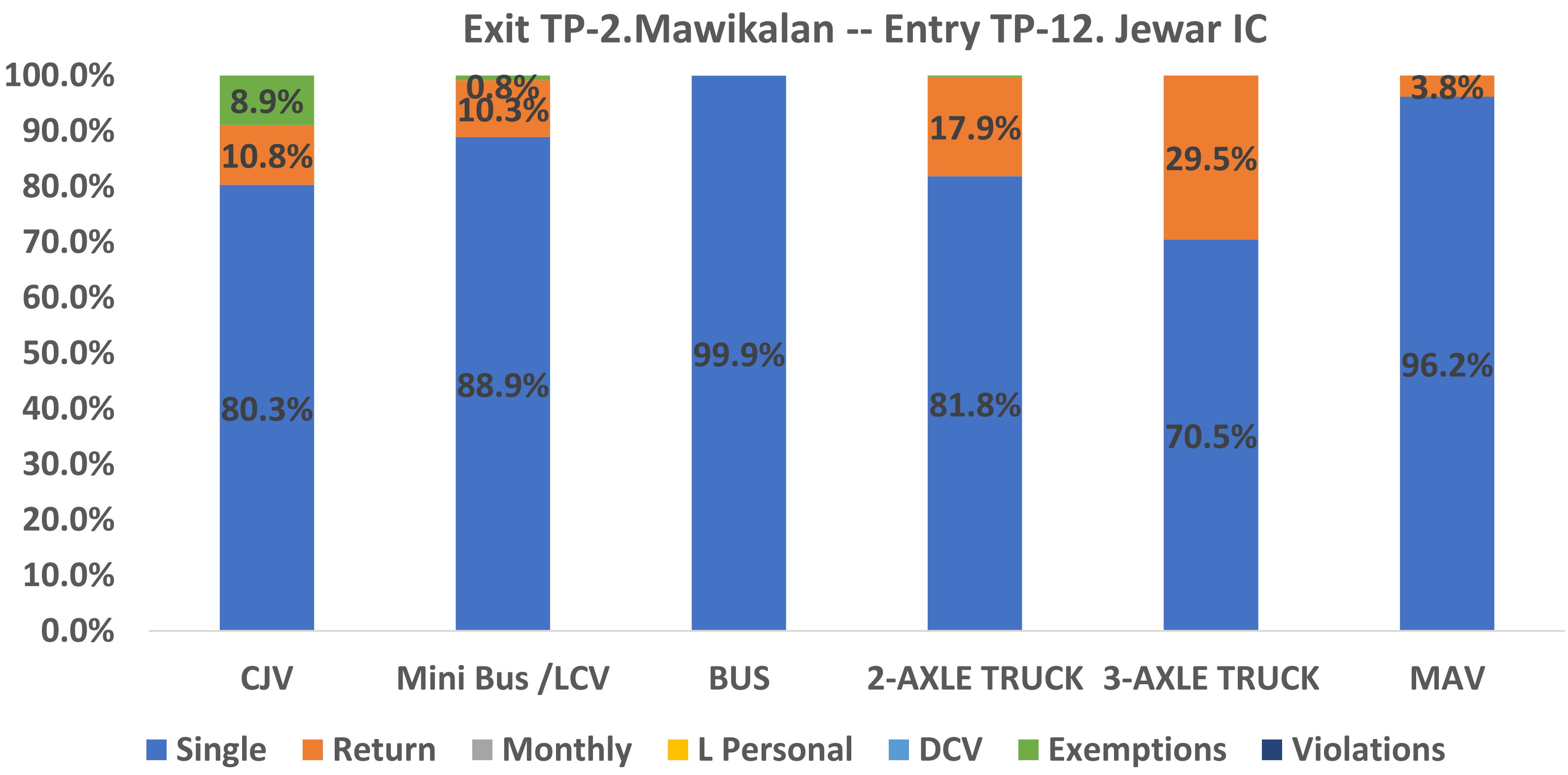
Exit TP-2.Mawikalan -- Entry TP-12. Jewar IC								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	80.3%	10.8%	0.0%	0.0%	0.0%	8.9%	0.0%	100.0%
Minibus /LCV	88.9%	10.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
BUS	99.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
2-AXLE TRUCK	81.8%	17.9%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	70.5%	29.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
MAV	96.2%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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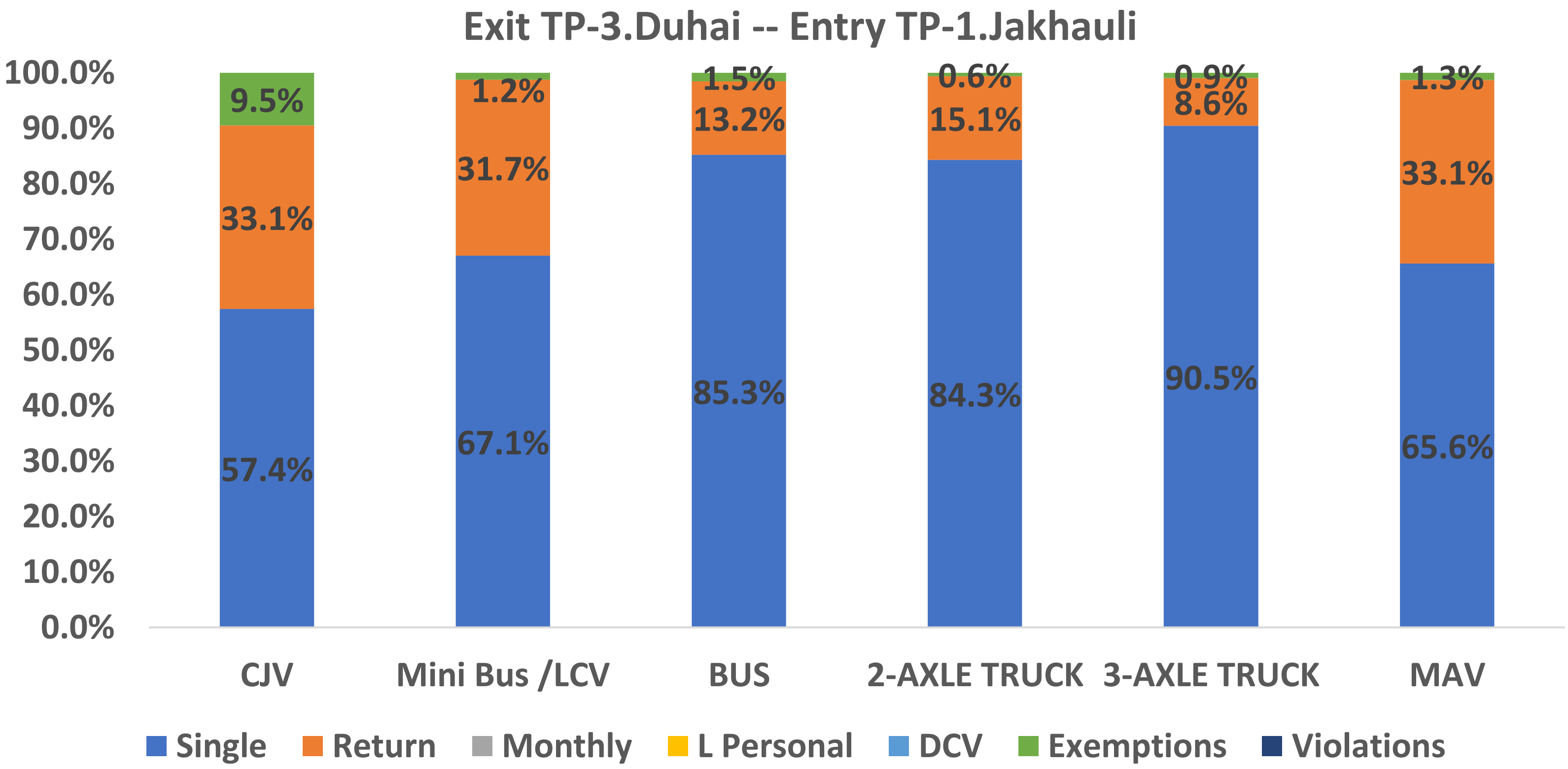
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-1.Jakhauli								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	57.4%	33.1%	0.0%	0.0%	0.0%	9.5%	0.0%	100.0%
Minibus /LCV	67.1%	31.7%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
BUS	85.3%	13.2%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
2-AXLE TRUCK	84.3%	15.1%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	90.5%	8.6%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	65.6%	33.1%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%



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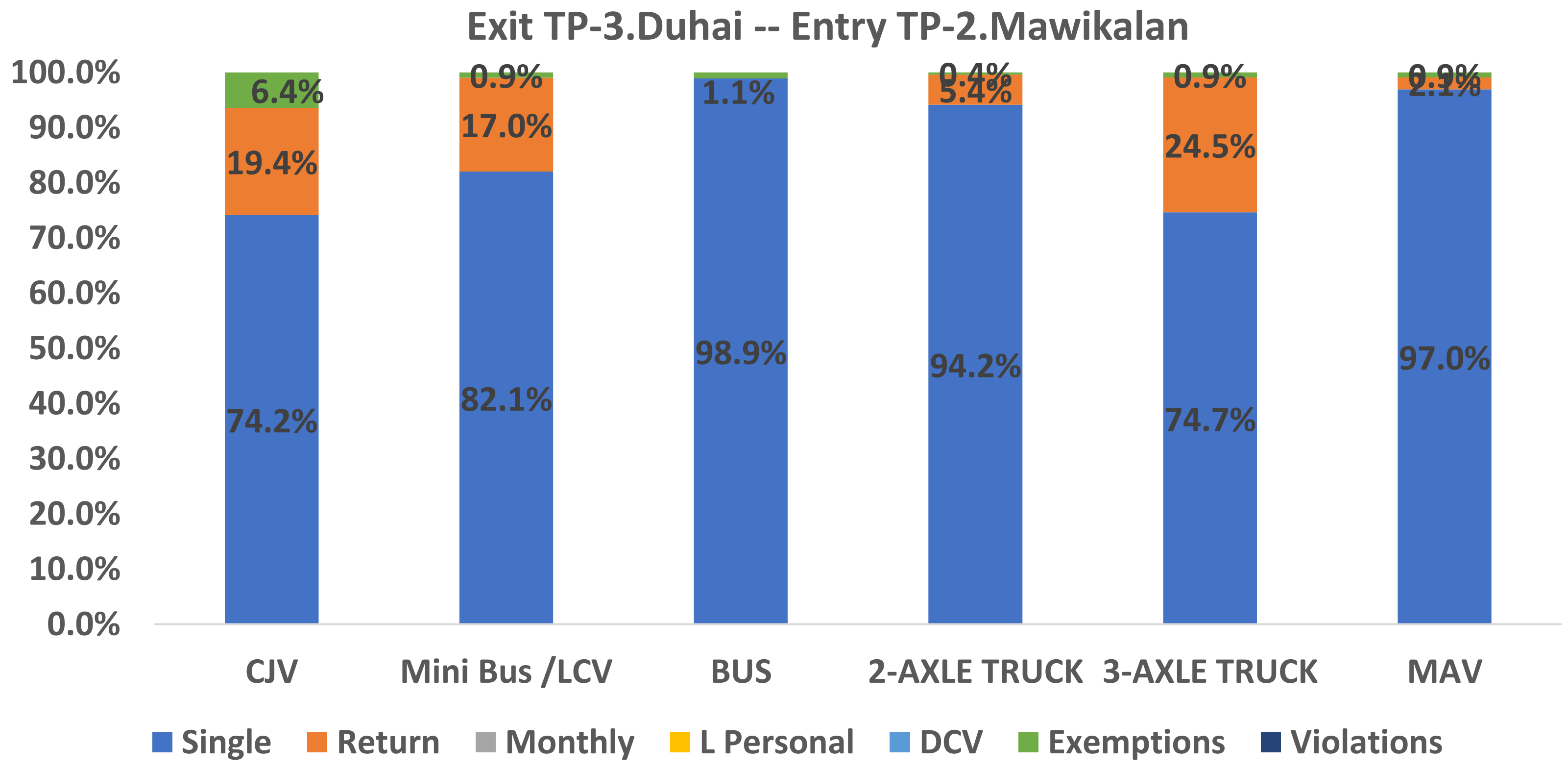
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-2.Mawikalan								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	74.2%	19.4%	0.0%	0.0%	0.0%	6.4%	0.0%	100.0%
Minibus /LCV	82.1%	17.0%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
BUS	98.9%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
2-AXLE TRUCK	94.2%	5.4%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	74.7%	24.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	97.0%	2.1%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%



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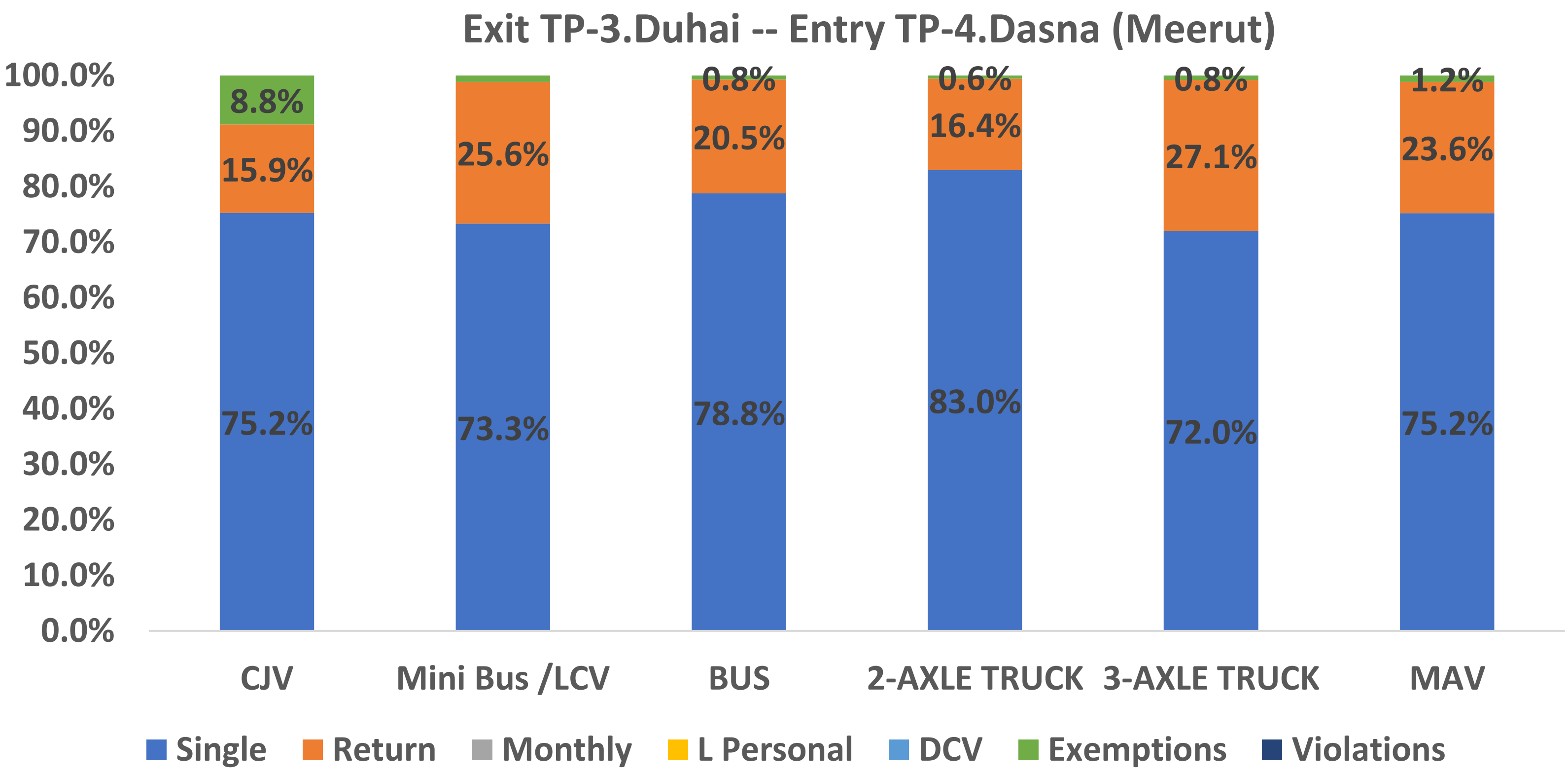
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-4.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	75.2%	15.9%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	73.3%	25.6%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
BUS	78.8%	20.5%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
2-AXLE TRUCK	83.0%	16.4%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	72.0%	27.1%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	75.2%	23.6%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%



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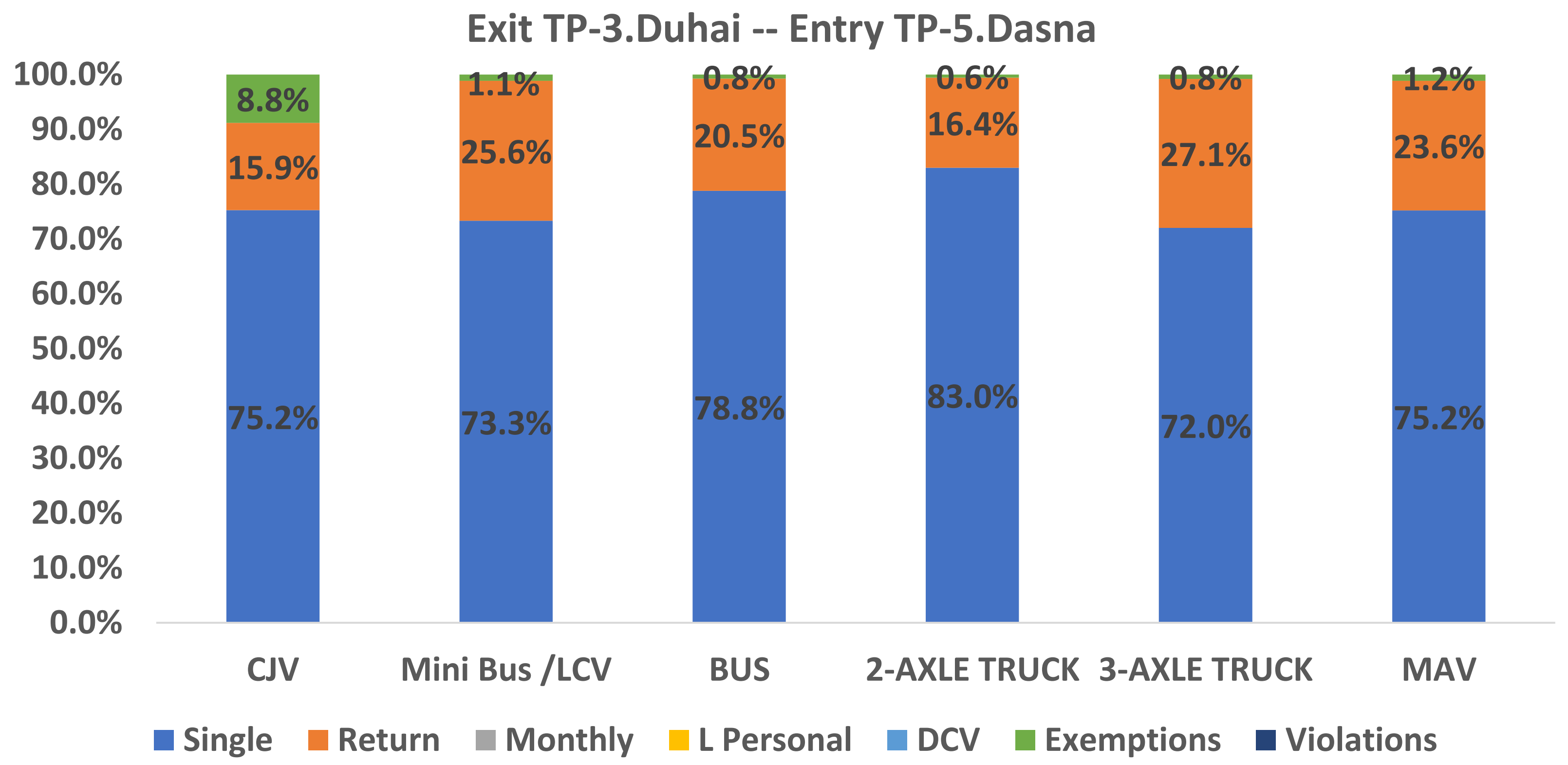
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	75.2%	15.9%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	73.3%	25.6%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
BUS	78.8%	20.5%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
2-AXLE TRUCK	83.0%	16.4%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	72.0%	27.1%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	75.2%	23.6%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%



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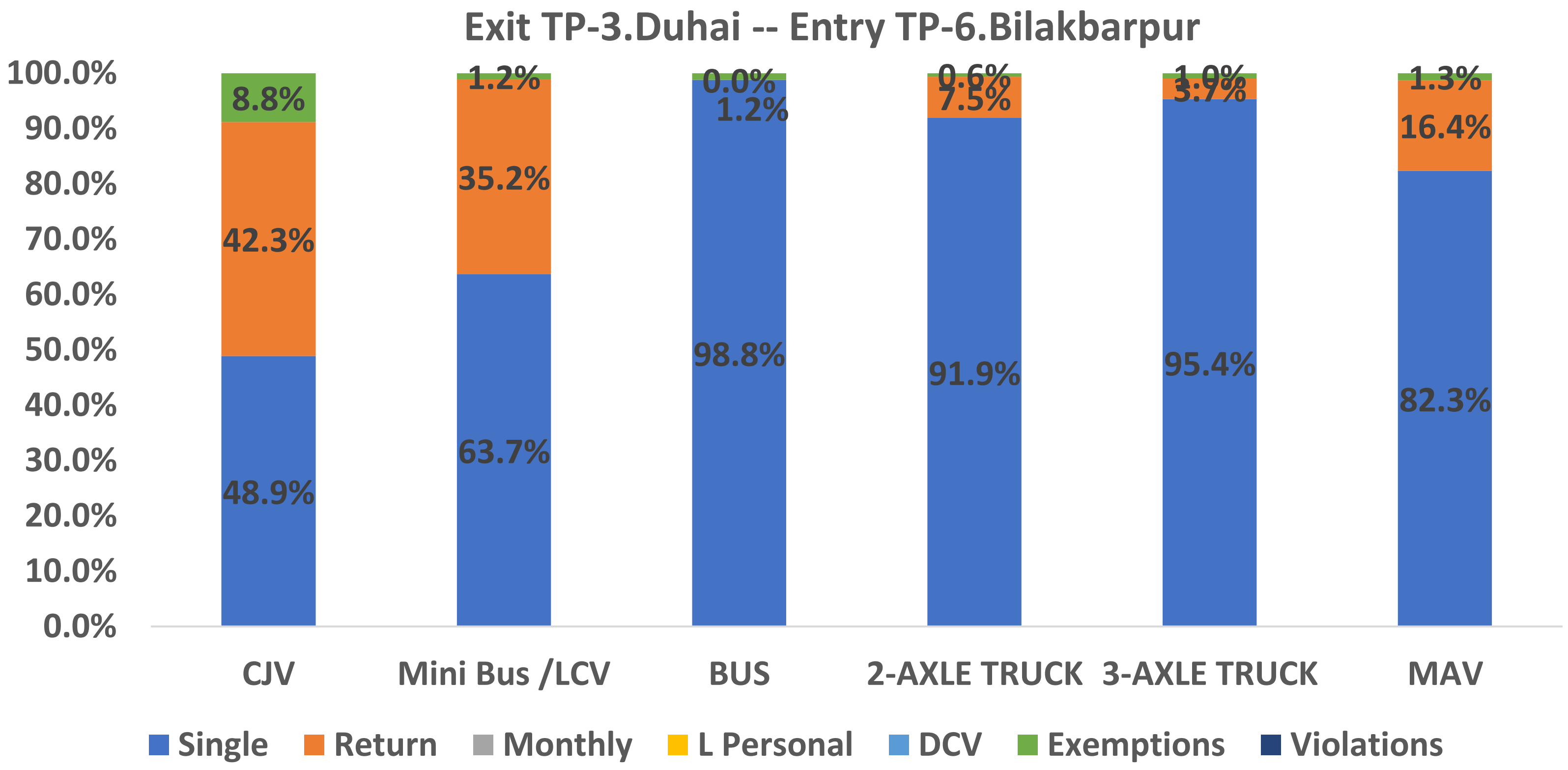
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	48.9%	42.3%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	63.7%	35.2%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
BUS	98.8%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
2-AXLE TRUCK	91.9%	7.5%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	95.4%	3.7%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	82.3%	16.4%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%



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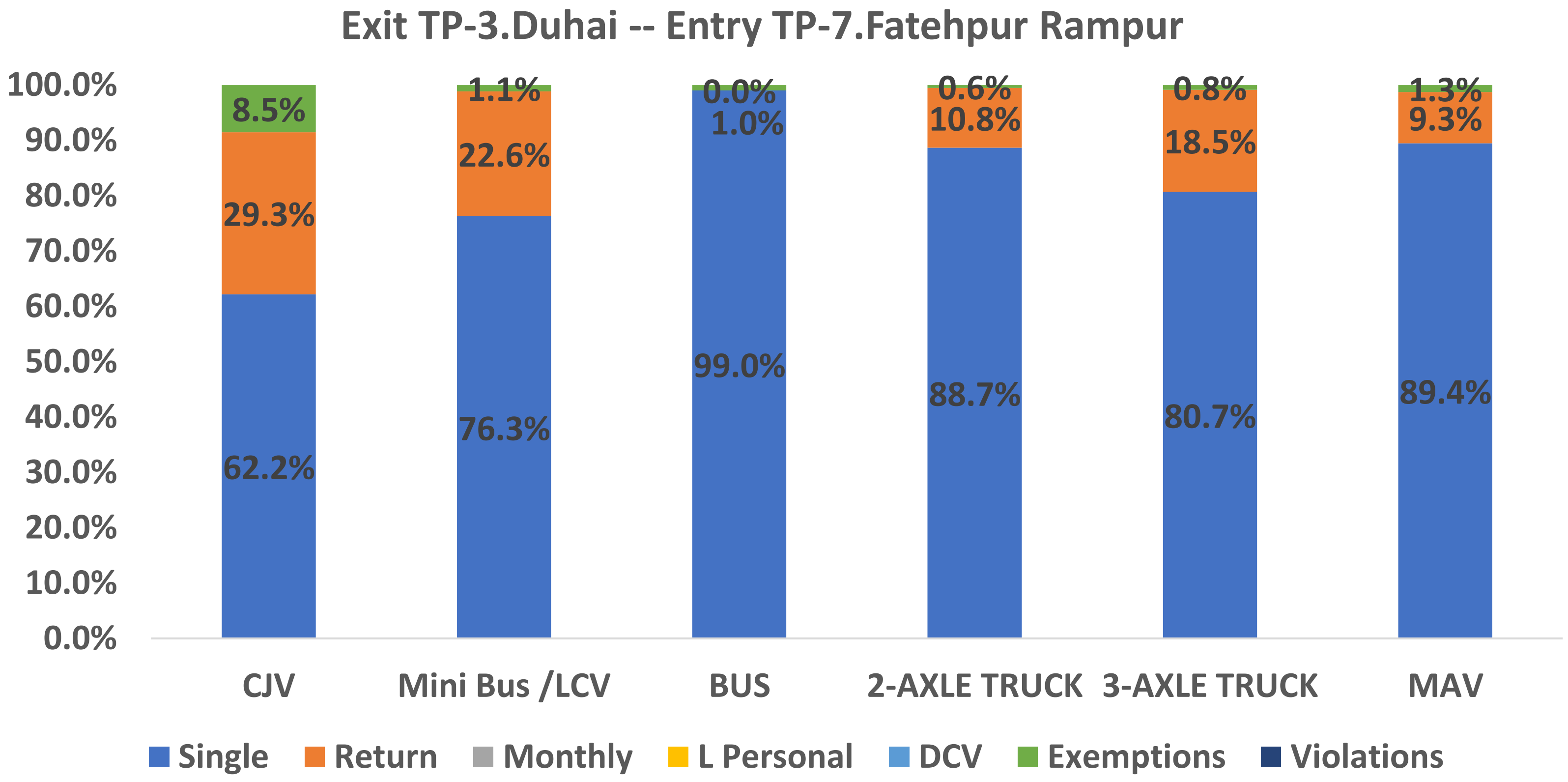
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	62.2%	29.3%	0.0%	0.0%	0.0%	8.5%	0.0%	100.0%
Minibus /LCV	76.3%	22.6%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
BUS	99.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
2-AXLE TRUCK	88.7%	10.8%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	80.7%	18.5%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	89.4%	9.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%



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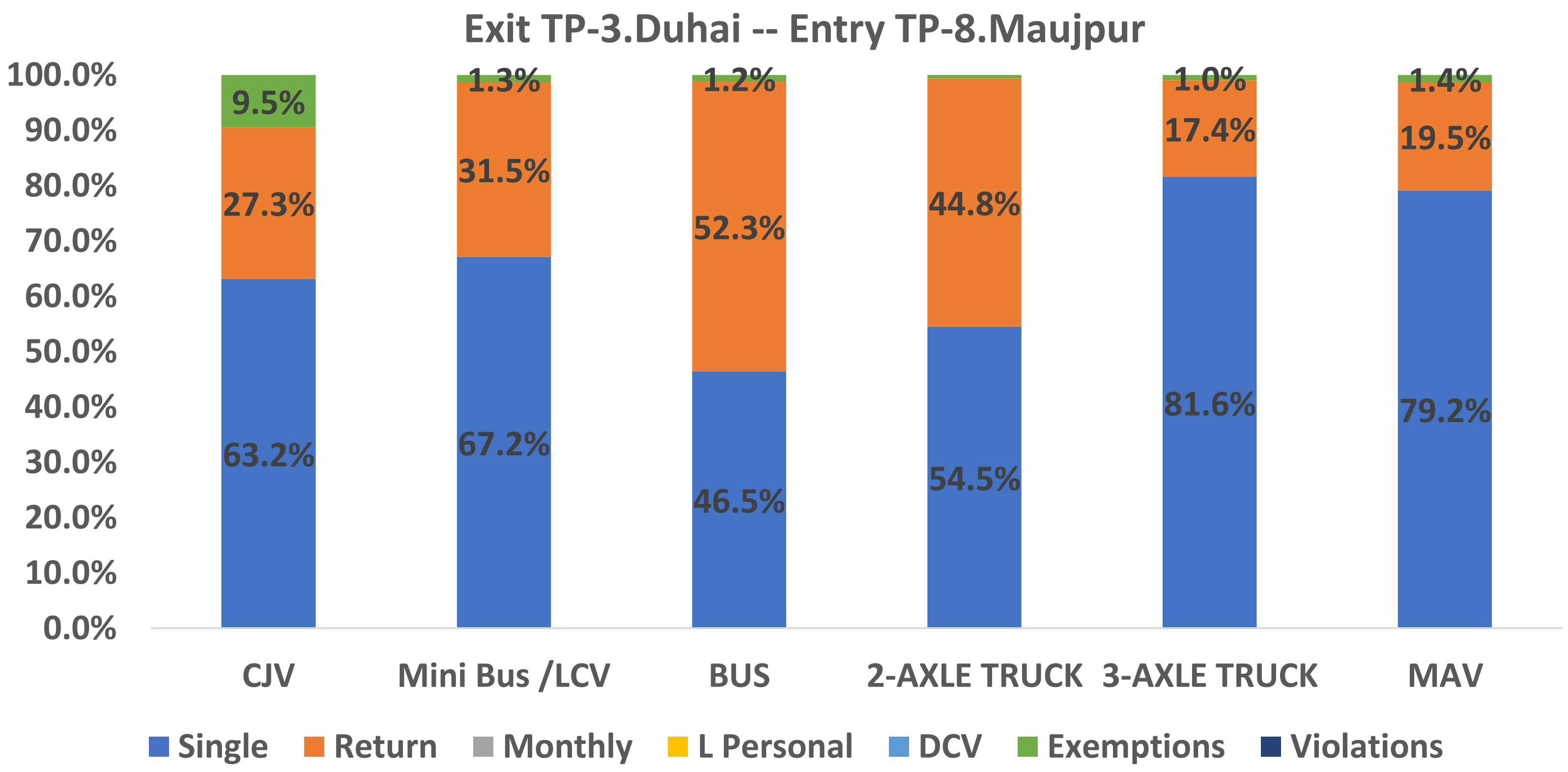
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	63.2%	27.3%	0.0%	0.0%	0.0%	9.5%	0.0%	100.0%
Minibus /LCV	67.2%	31.5%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	46.5%	52.3%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
2-AXLE TRUCK	54.5%	44.8%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	81.6%	17.4%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	79.2%	19.5%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%



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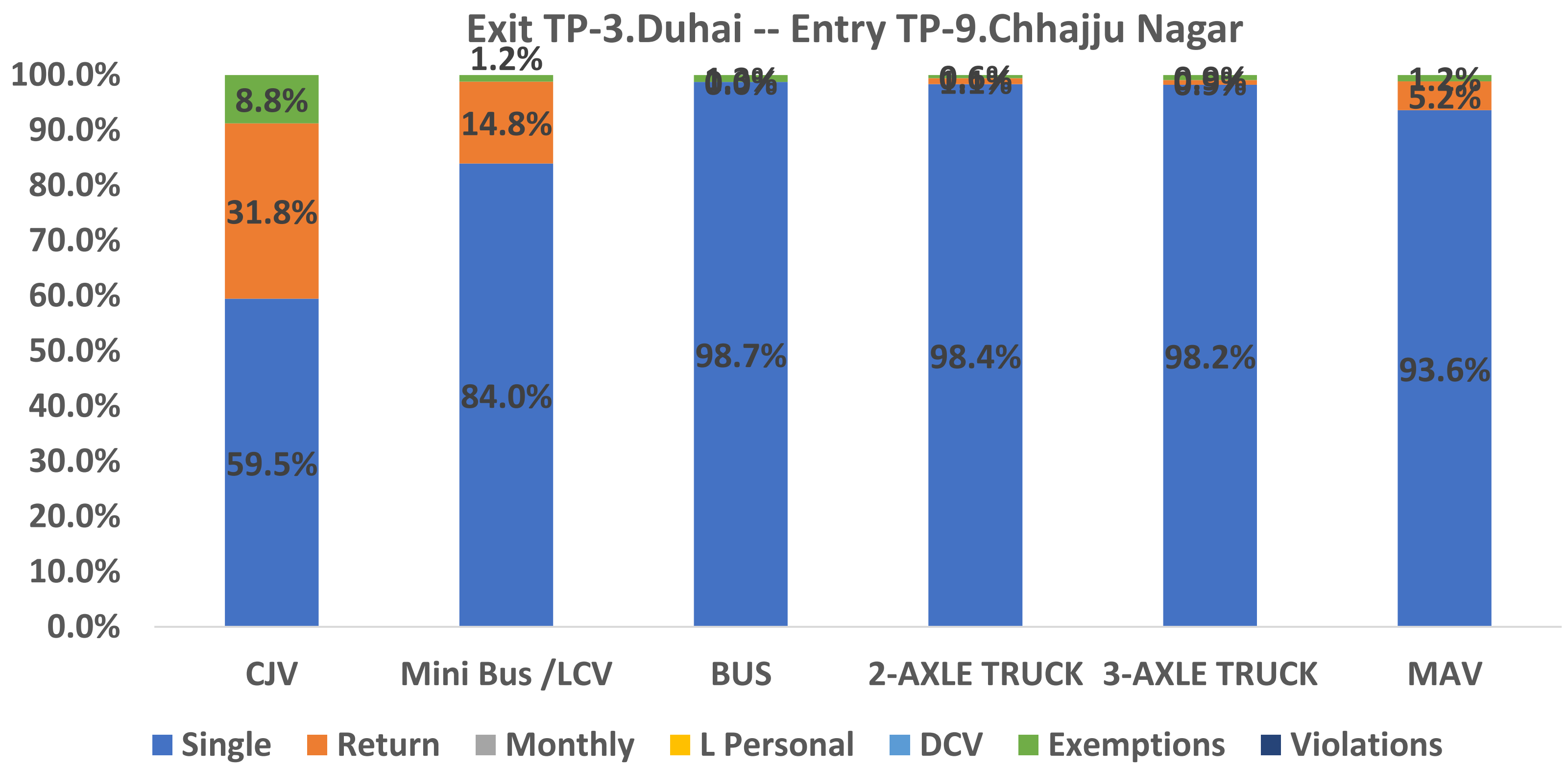
Exit TP-3.Duhai -- Entry TP-9.Chhajju Nagar								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	59.5%	31.8%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	84.0%	14.8%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
BUS	98.7%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
2-AXLE TRUCK	98.4%	1.1%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	98.2%	0.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	93.6%	5.2%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%



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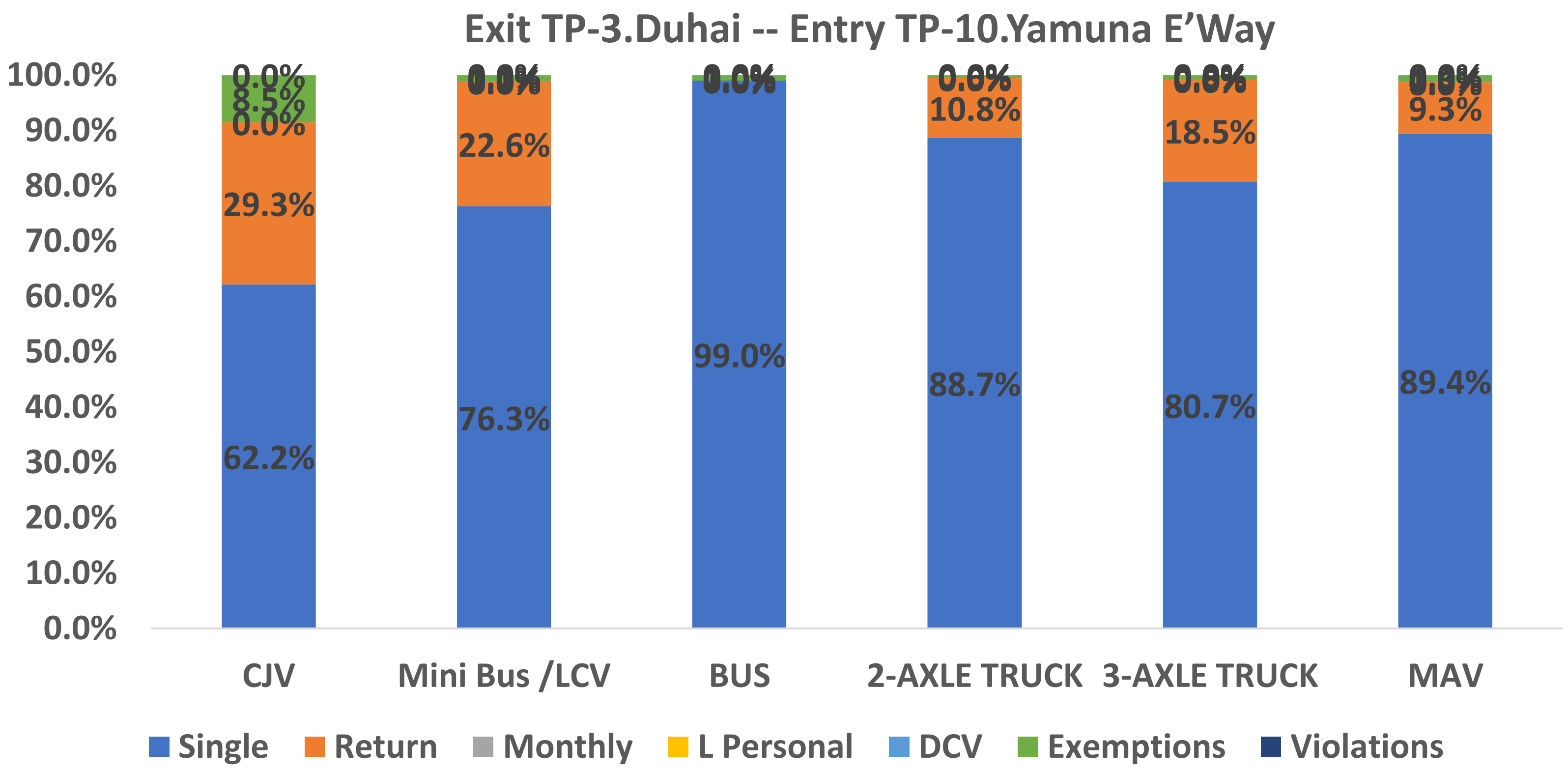
RECOMMENDED TRIP CATEGORIES – TP3

Exit TP-3.Duhai -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	62.2%	29.3%	0.0%	0.0%	0.0%	8.5%	0.0%	100.0%
Minibus /LCV	76.3%	22.6%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
BUS	99.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
2-AXLE TRUCK	88.7%	10.8%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	80.7%	18.5%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	89.4%	9.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%



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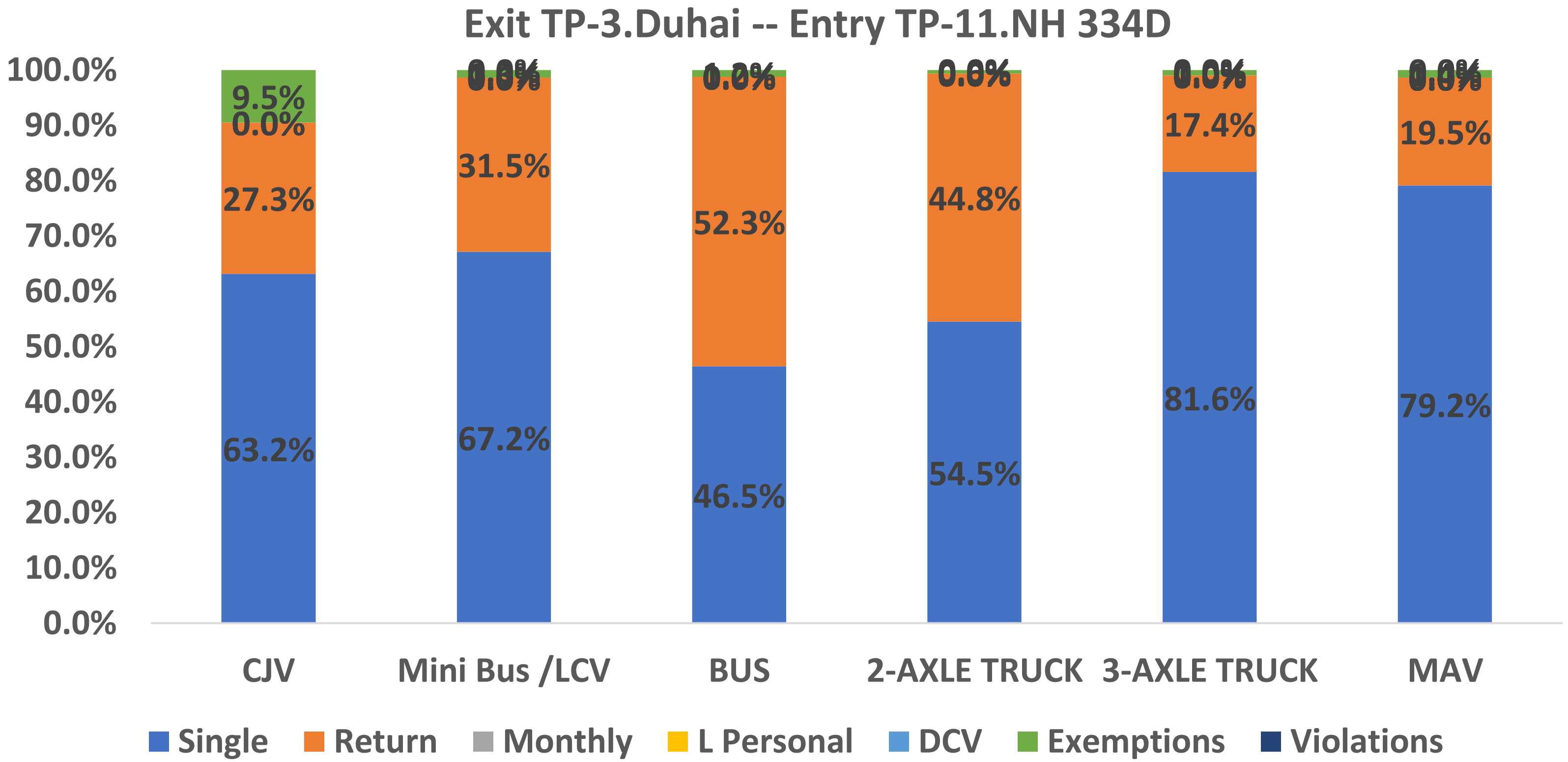
Exit TP-3.Duhai -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	63.2%	27.3%	0.0%	0.0%	0.0%	9.5%	0.0%	100.0%
Minibus /LCV	67.2%	31.5%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	46.5%	52.3%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
2-AXLE TRUCK	54.5%	44.8%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	81.6%	17.4%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	79.2%	19.5%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%



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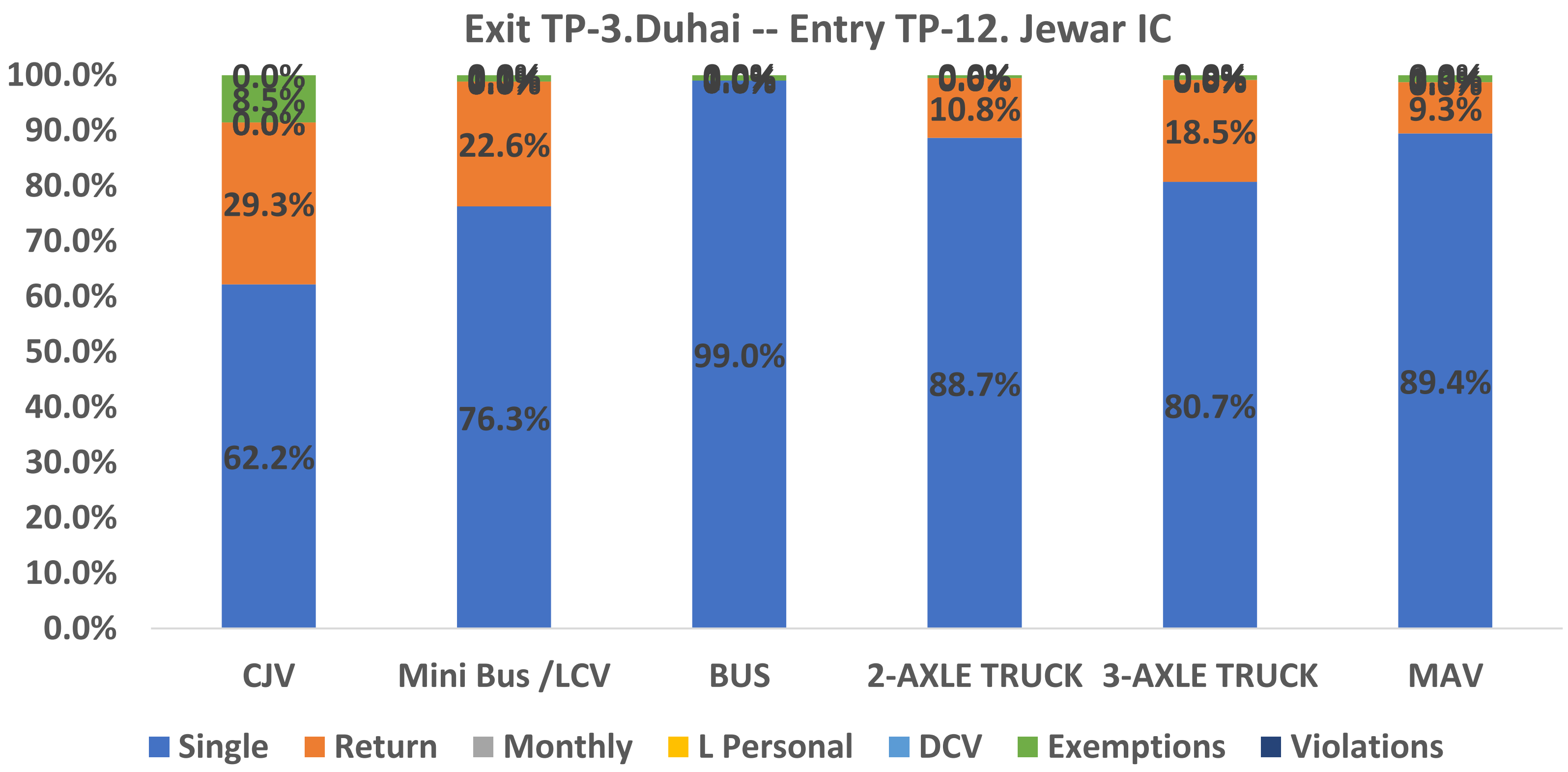
Exit TP-3.Duhai -- Entry TP-12. Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	62.2%	29.3%	0.0%	0.0%	0.0%	8.5%	0.0%	100.0%
Minibus /LCV	76.3%	22.6%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
BUS	99.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
2-AXLE TRUCK	88.7%	10.8%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	80.7%	18.5%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	89.4%	9.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%



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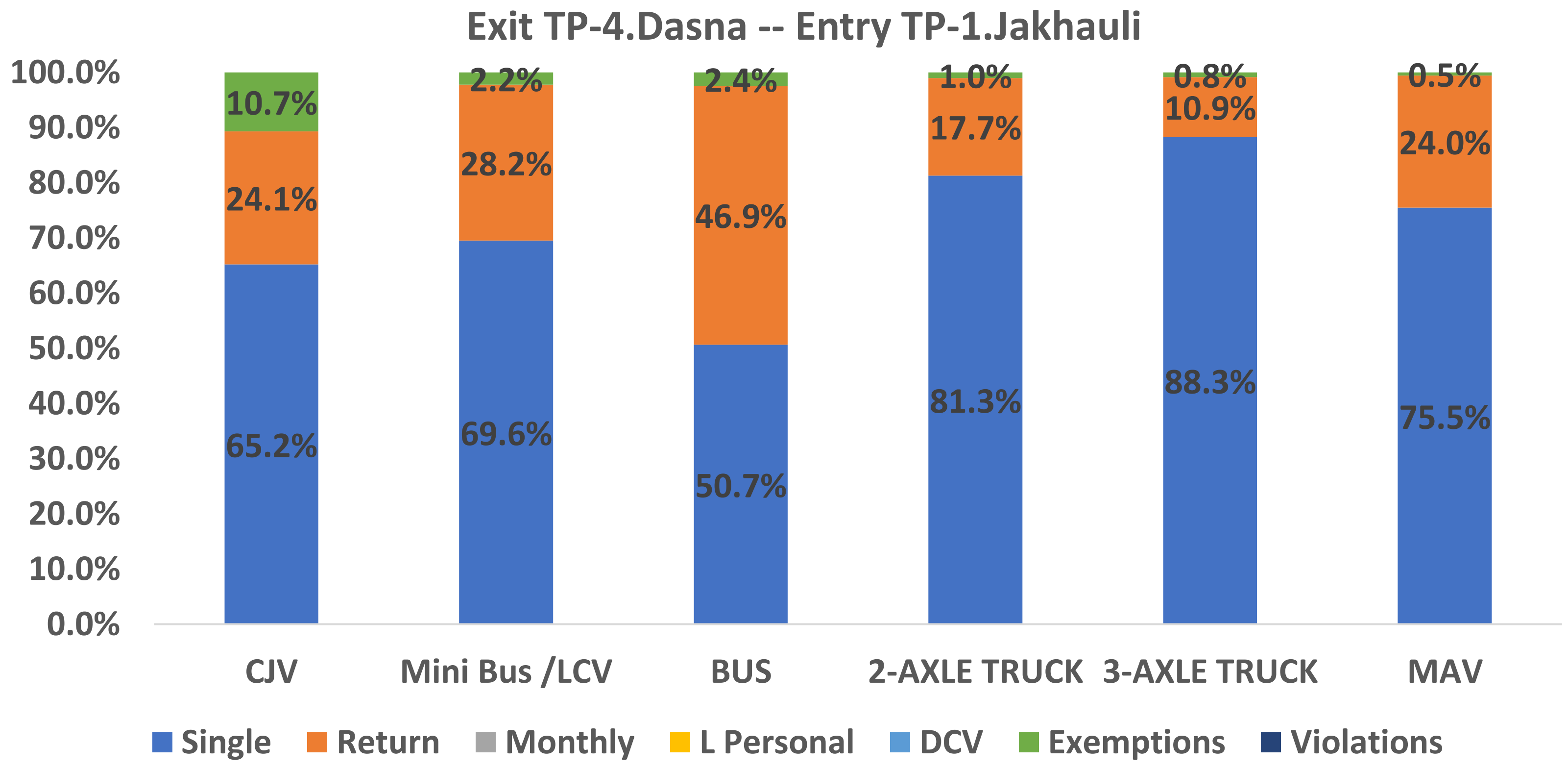
RECOMMENDED TRIP CATEGORIES – TP4

Exit TP-4. Meerut E'Way -- Entry TP-1.Jakhauli								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	65.2%	24.1%	0.0%	0.0%	0.0%	10.7%	0.0%	100.0%
Minibus /LCV	69.6%	28.2%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
BUS	50.7%	46.9%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	81.3%	17.7%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
3-AXLE TRUCK	88.3%	10.9%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	75.5%	24.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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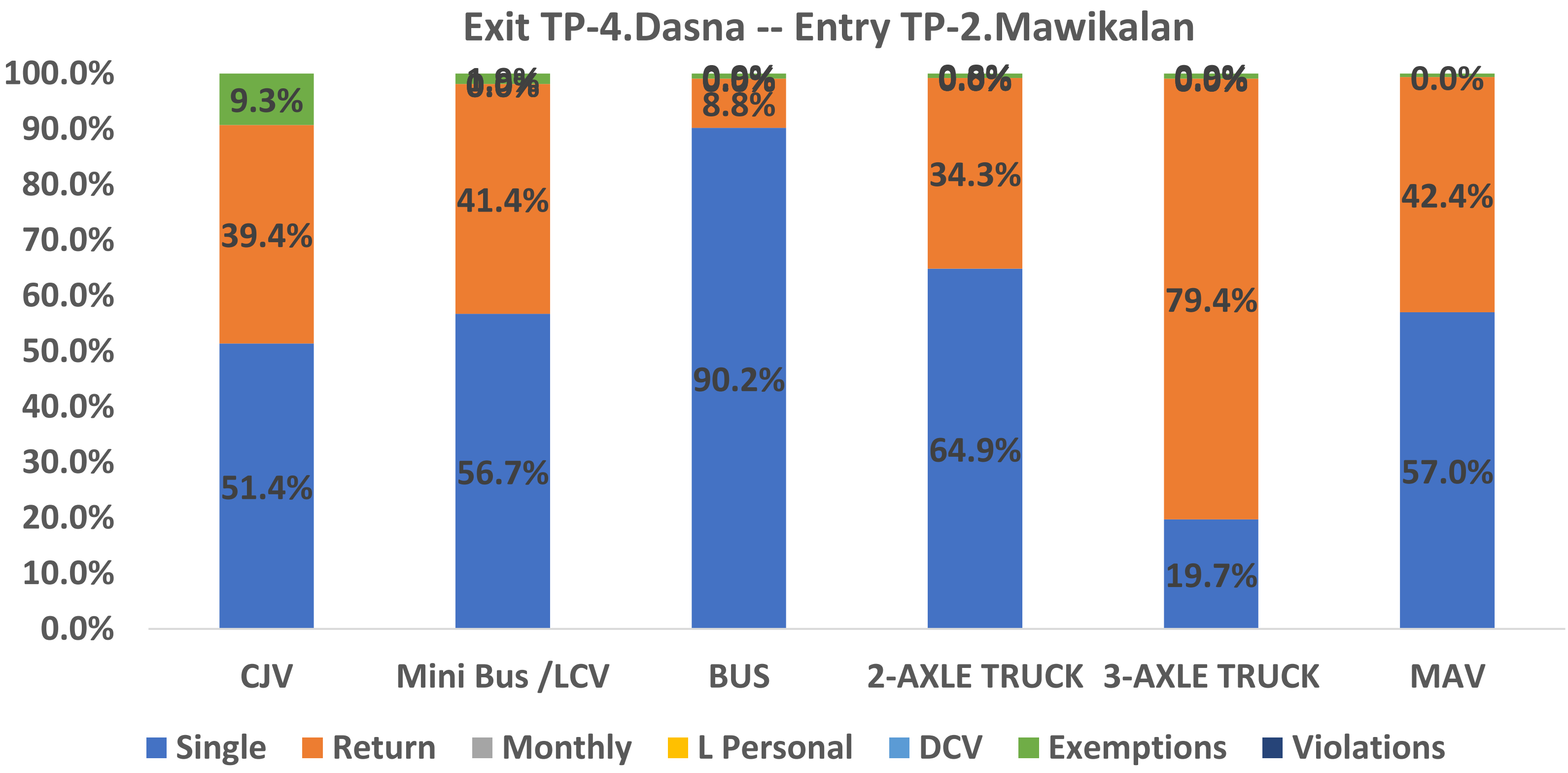
RECOMMENDED TRIP CATEGORIES – TP4

Exit TP-4. Meerut E'Way -- Entry TP-2.Mawikalan								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	51.4%	39.4%	0.0%	0.0%	0.0%	9.3%	0.0%	100.0%
Minibus /LCV	56.7%	41.4%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
BUS	90.2%	8.8%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
2-AXLE TRUCK	64.9%	34.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	19.7%	79.4%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	57.0%	42.4%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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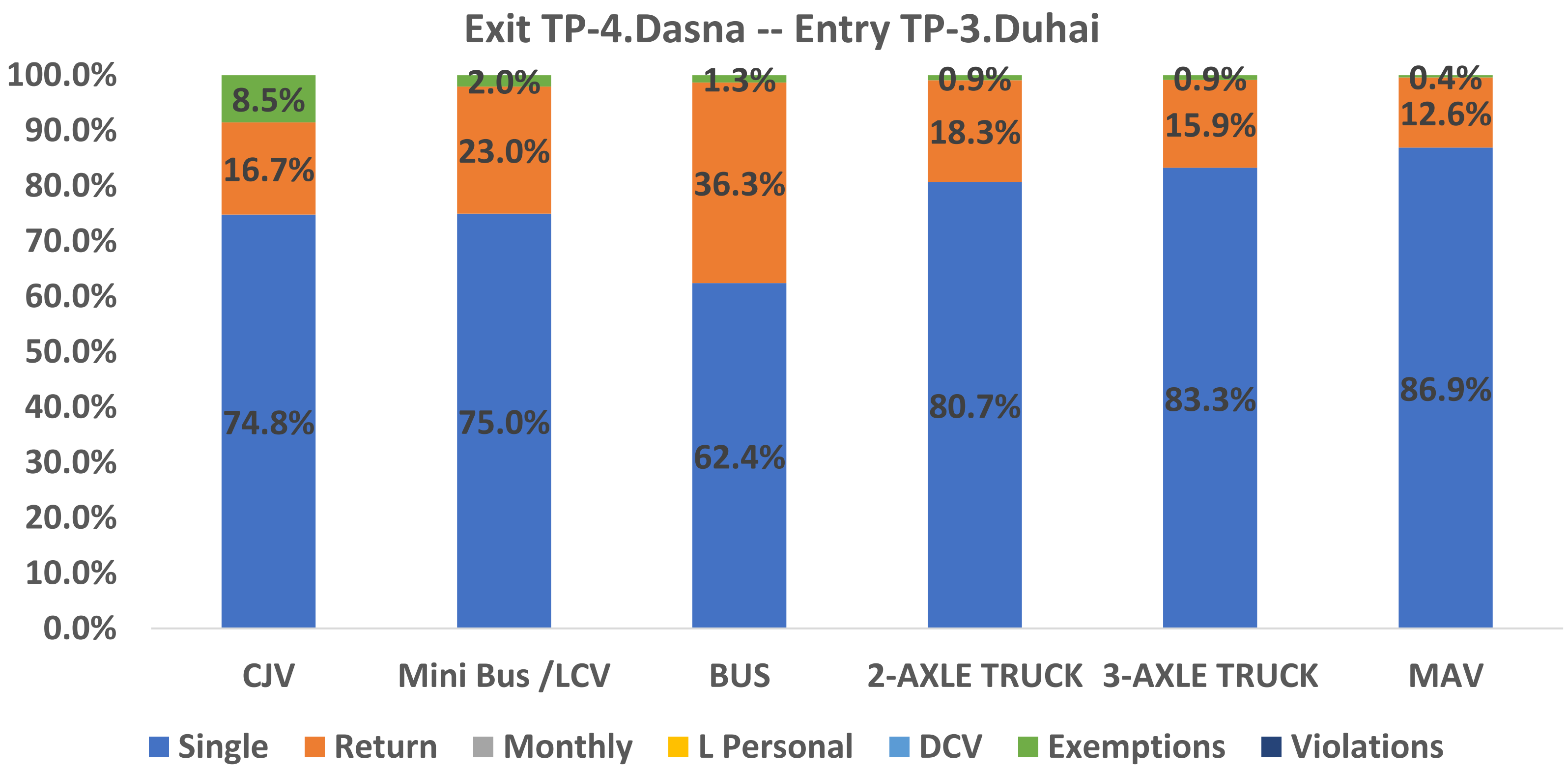
RECOMMENDED TRIP CATEGORIES – TP4

Exit TP-4. Meerut E'Way -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	74.8%	16.7%	0.0%	0.0%	0.0%	8.5%	0.0%	100.0%
Minibus /LCV	75.0%	23.0%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
BUS	62.4%	36.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
2-AXLE TRUCK	80.7%	18.3%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	83.3%	15.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	86.9%	12.6%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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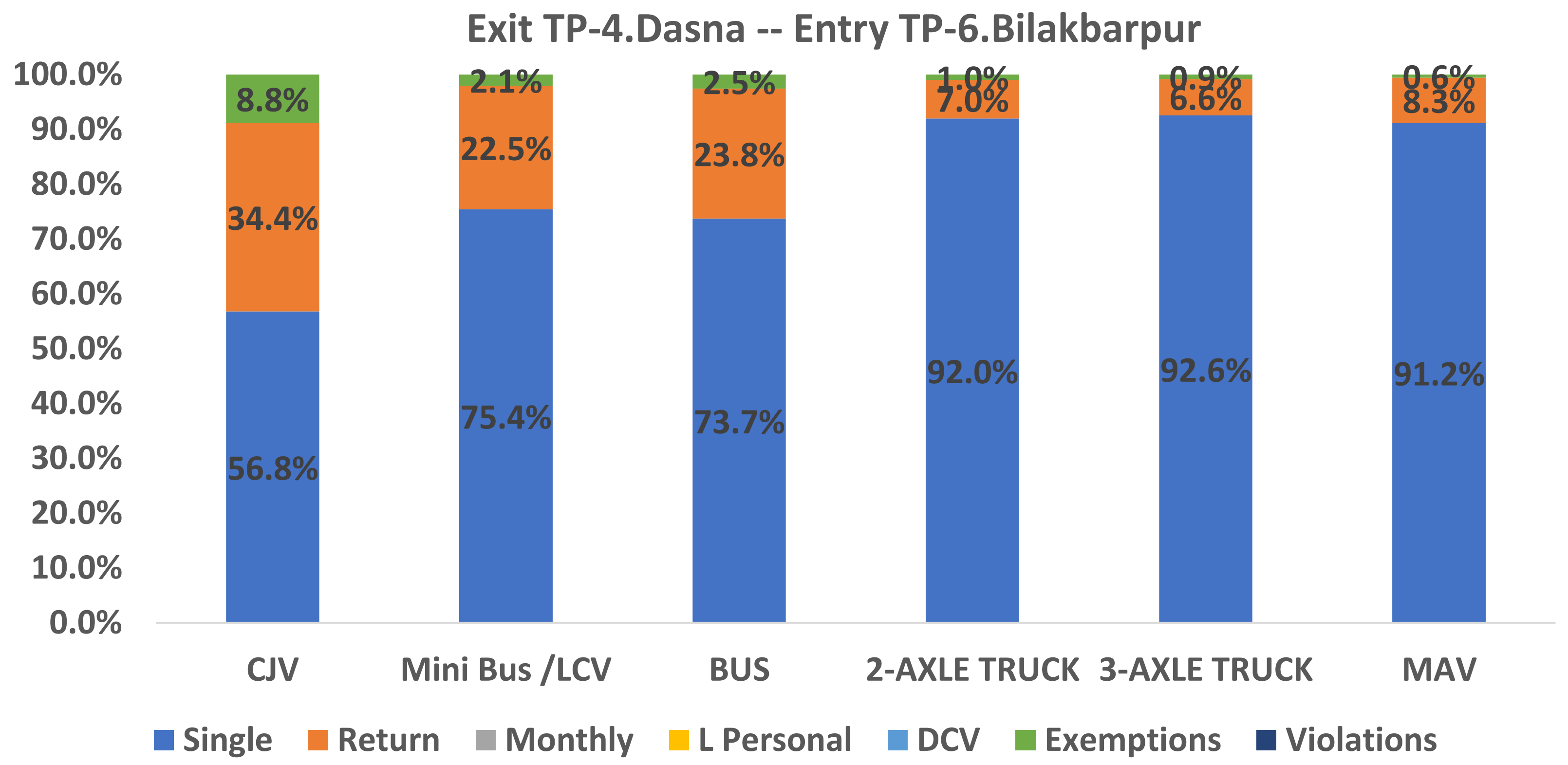
Exit TP-4. Meerut E'Way -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	56.8%	34.4%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	75.4%	22.5%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
BUS	73.7%	23.8%	0.0%	0.0%	0.0%	2.5%	0.0%	100.0%
2-AXLE TRUCK	92.0%	7.0%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
3-AXLE TRUCK	92.6%	6.6%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	91.2%	8.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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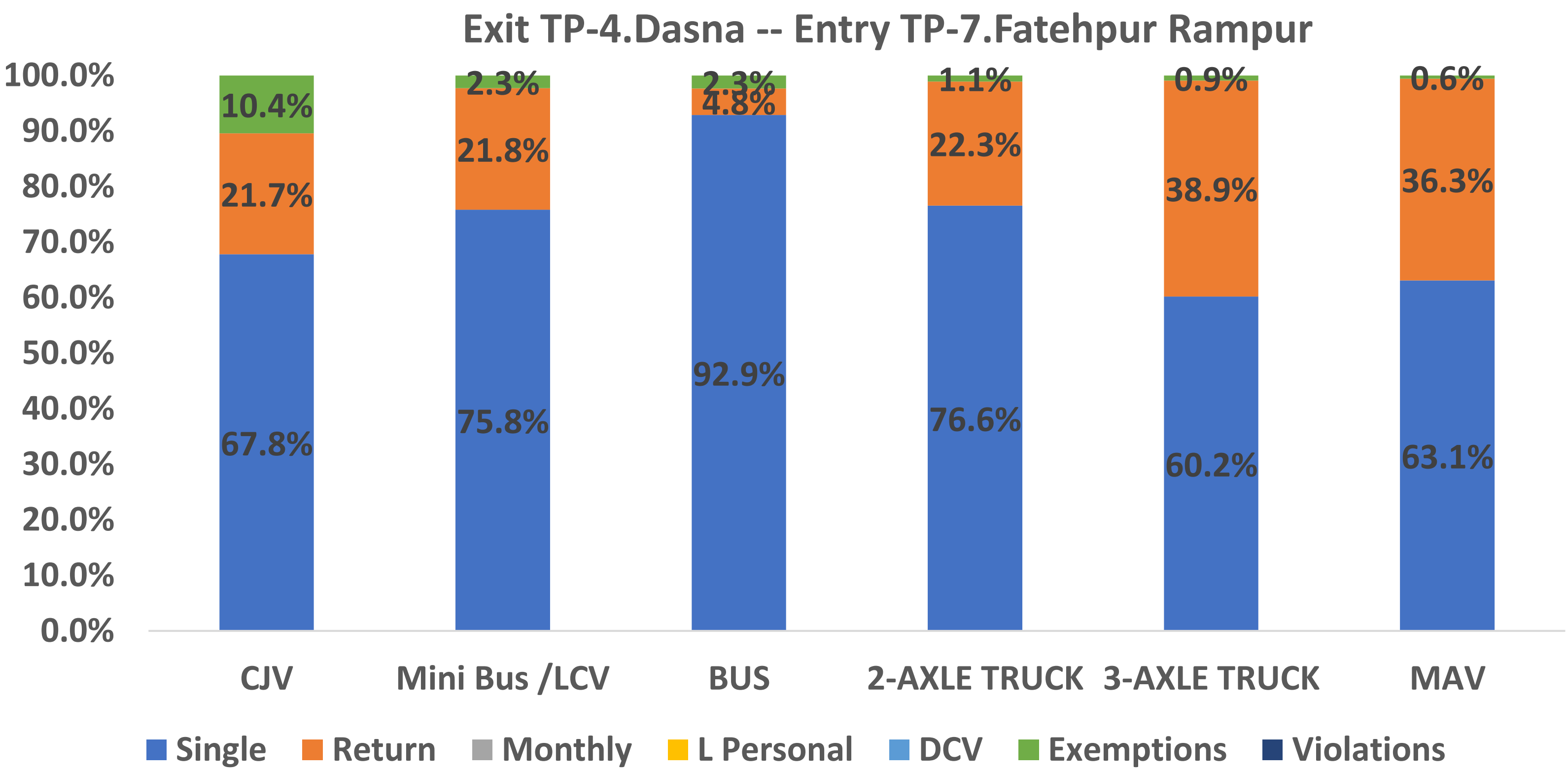
RECOMMENDED TRIP CATEGORIES – TP4

Exit TP-4. Meerut E'Way -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.8%	21.7%	0.0%	0.0%	0.0%	10.4%	0.0%	100.0%
Minibus /LCV	75.8%	21.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
BUS	92.9%	4.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	76.6%	22.3%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	60.2%	38.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	63.1%	36.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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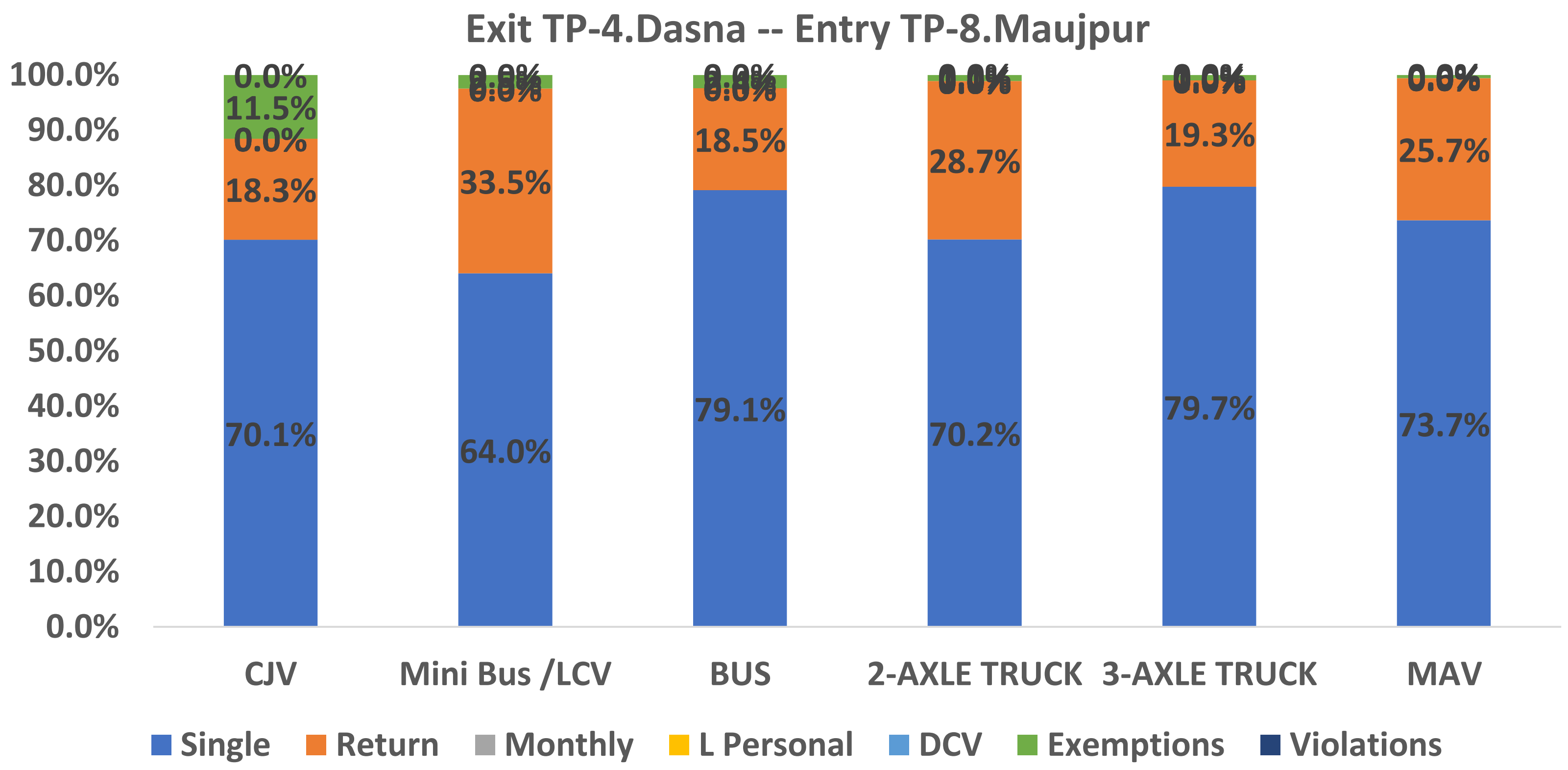
Exit TP-4. Meerut E'Way -- Entry TP-8.Maujpur								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	70.1%	18.3%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	64.0%	33.5%	0.0%	0.0%	0.0%	2.5%	0.0%	100.0%
BUS	79.1%	18.5%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	70.2%	28.7%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	79.7%	19.3%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	73.7%	25.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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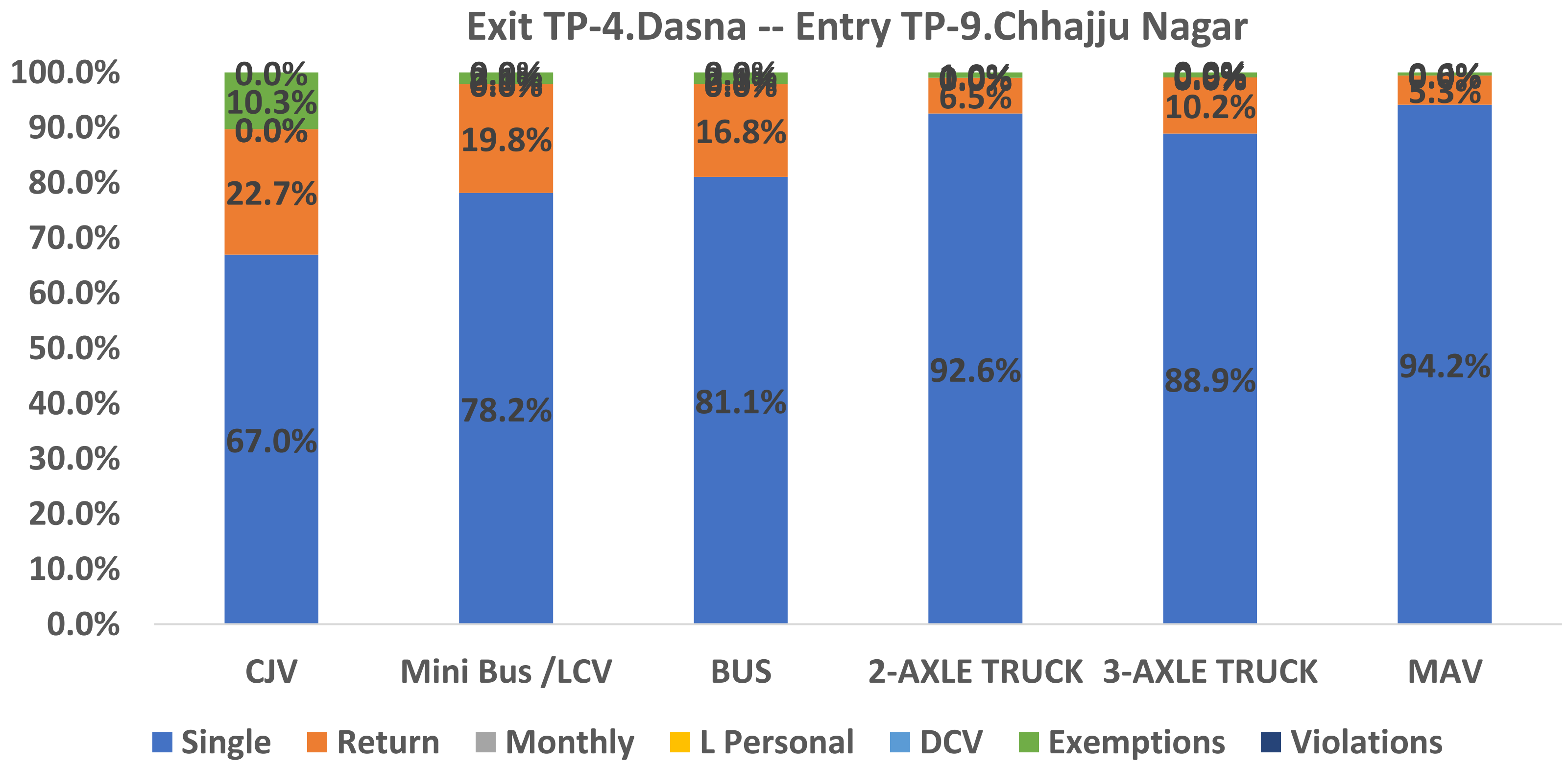
Exit TP-4. Meerut E'Way -- Entry TP-9.Chhajju Nagar								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.0%	22.7%	0.0%	0.0%	0.0%	10.3%	0.0%	100.0%
Minibus /LCV	78.2%	19.8%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
2-AXLE TRUCK	92.6%	6.5%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
3-AXLE TRUCK	88.9%	10.2%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	94.2%	5.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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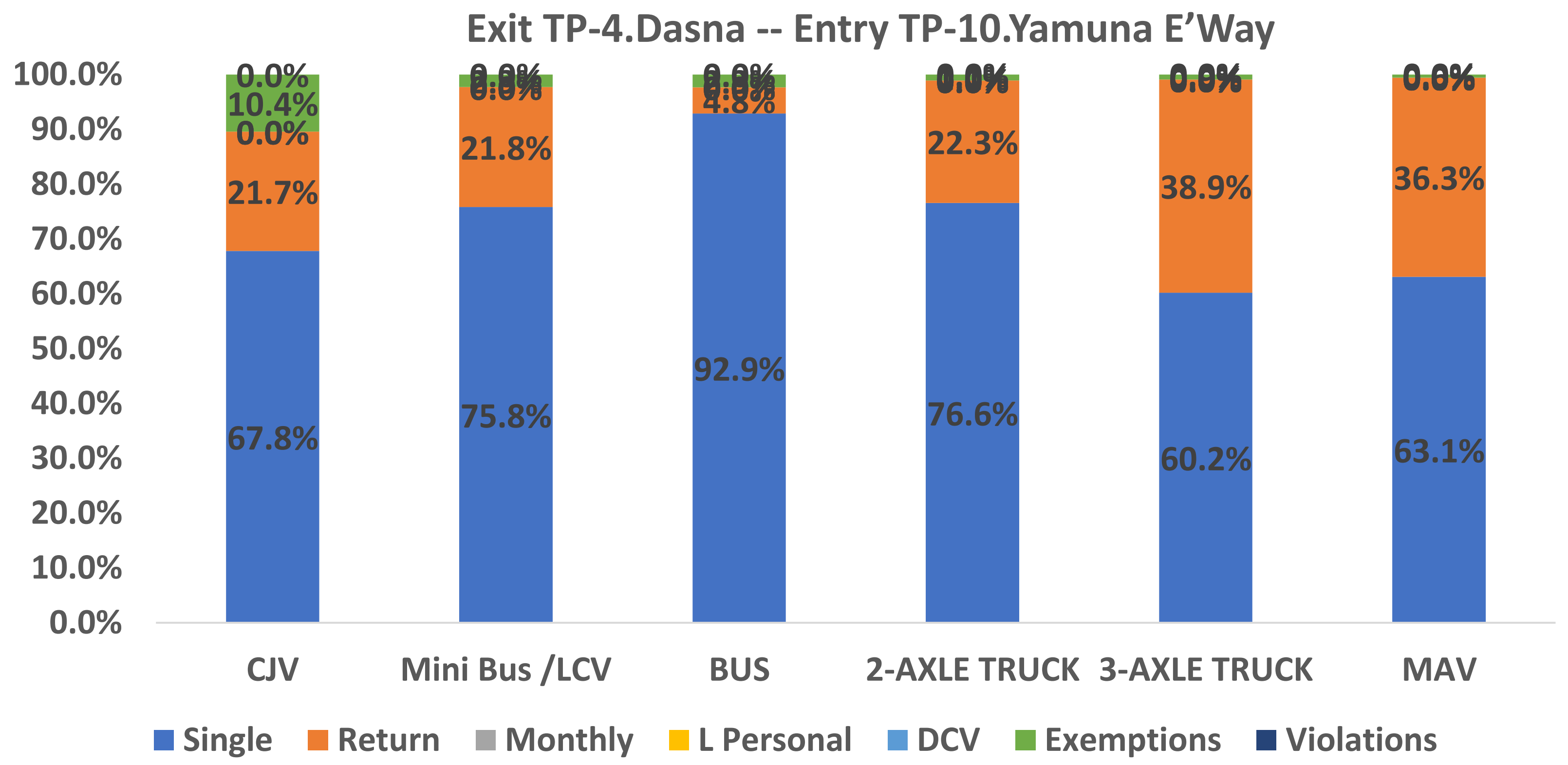
Exit TP-4. Meerut E'Way -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.8%	21.7%	0.0%	0.0%	0.0%	10.4%	0.0%	100.0%
Minibus /LCV	75.8%	21.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
BUS	92.9%	4.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	76.6%	22.3%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	60.2%	38.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	63.1%	36.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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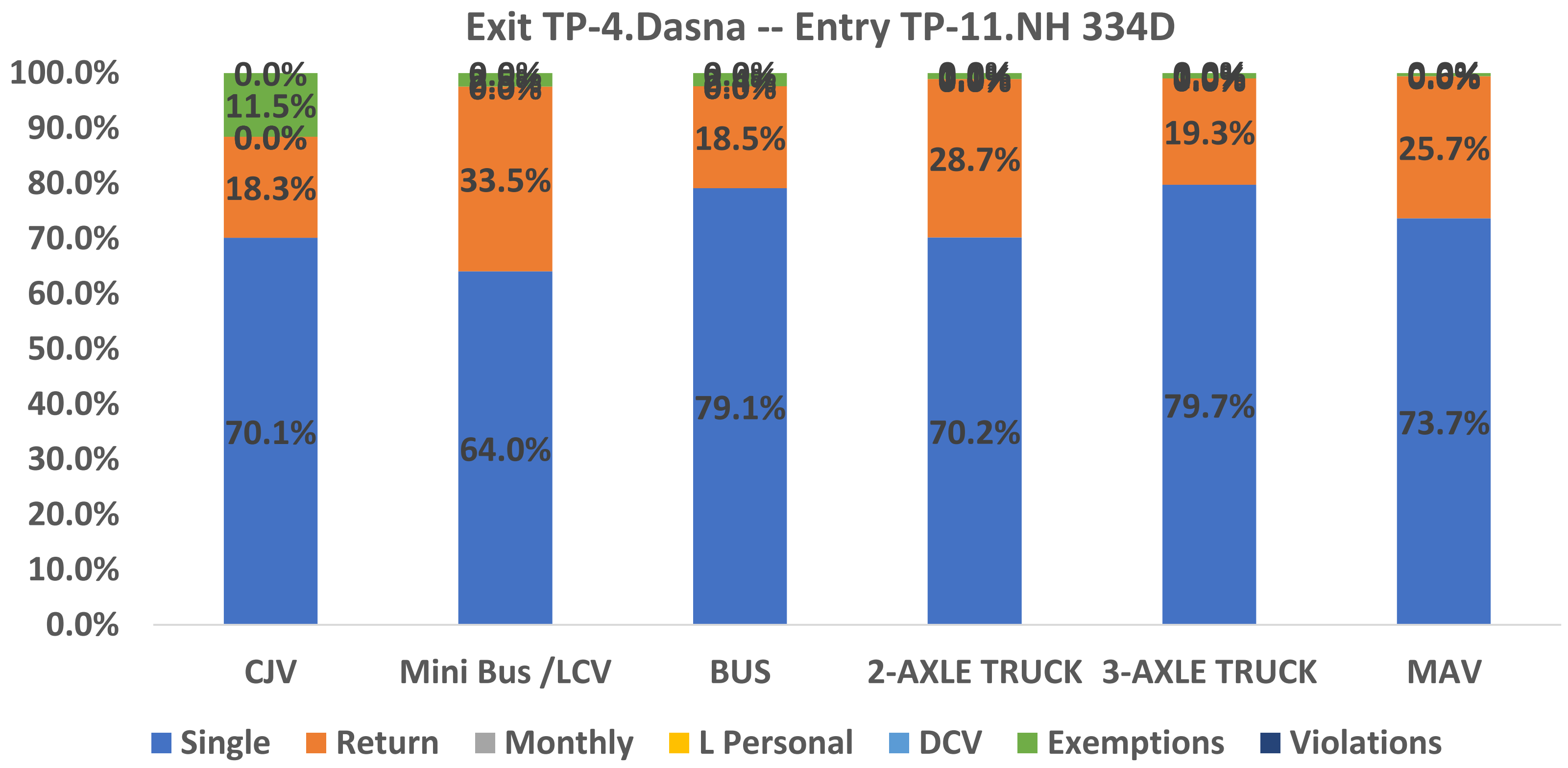
RECOMMENDED TRIP CATEGORIES – TP4

Exit TP-4. Meerut E'Way -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	70.1%	18.3%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	64.0%	33.5%	0.0%	0.0%	0.0%	2.5%	0.0%	100.0%
BUS	79.1%	18.5%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	70.2%	28.7%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	79.7%	19.3%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	73.7%	25.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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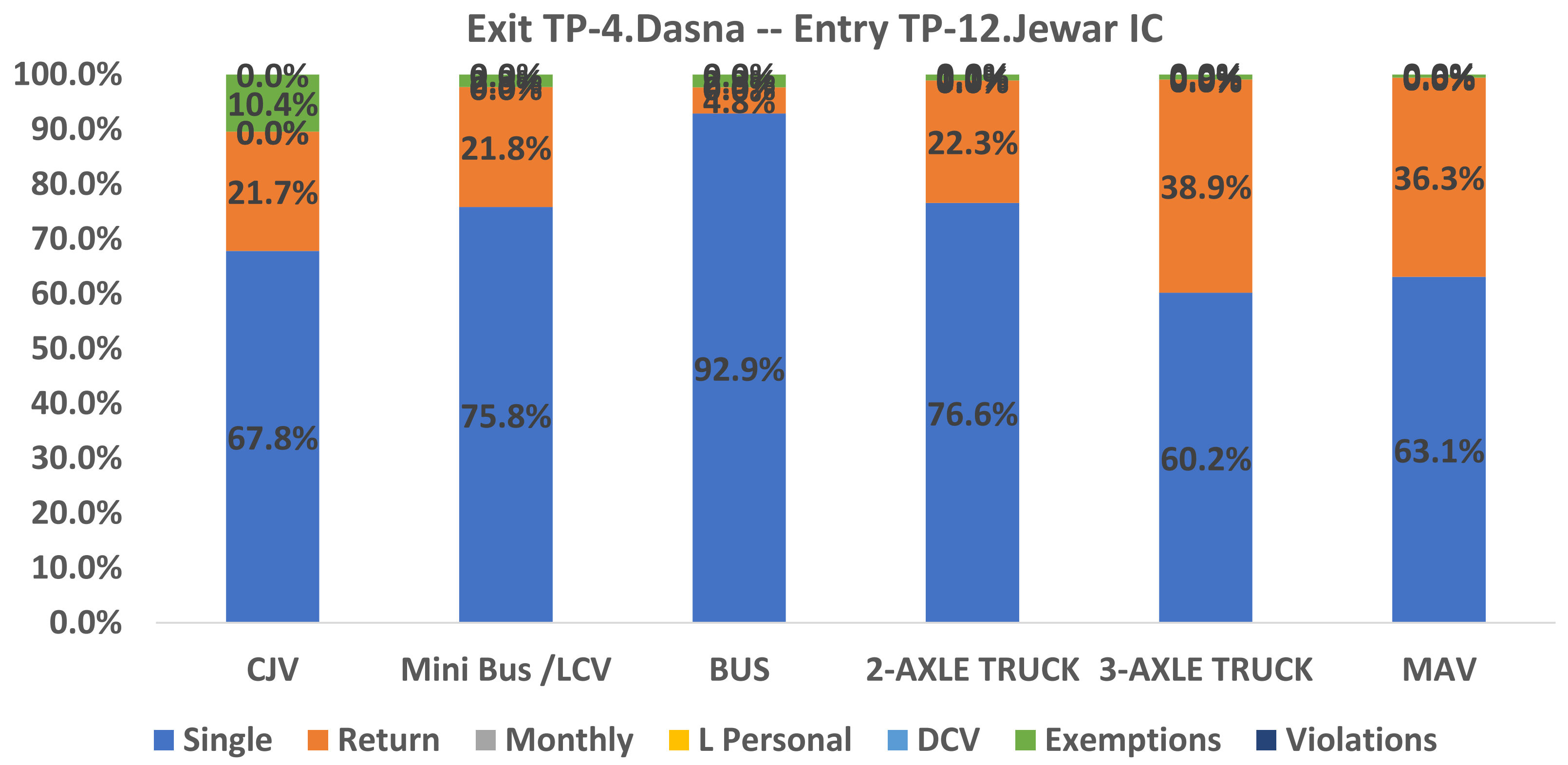
Exit TP-4. Meerut E'Way -- Entry TP-12. Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.8%	21.7%	0.0%	0.0%	0.0%	10.4%	0.0%	100.0%
Minibus /LCV	75.8%	21.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
BUS	92.9%	4.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	76.6%	22.3%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	60.2%	38.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	63.1%	36.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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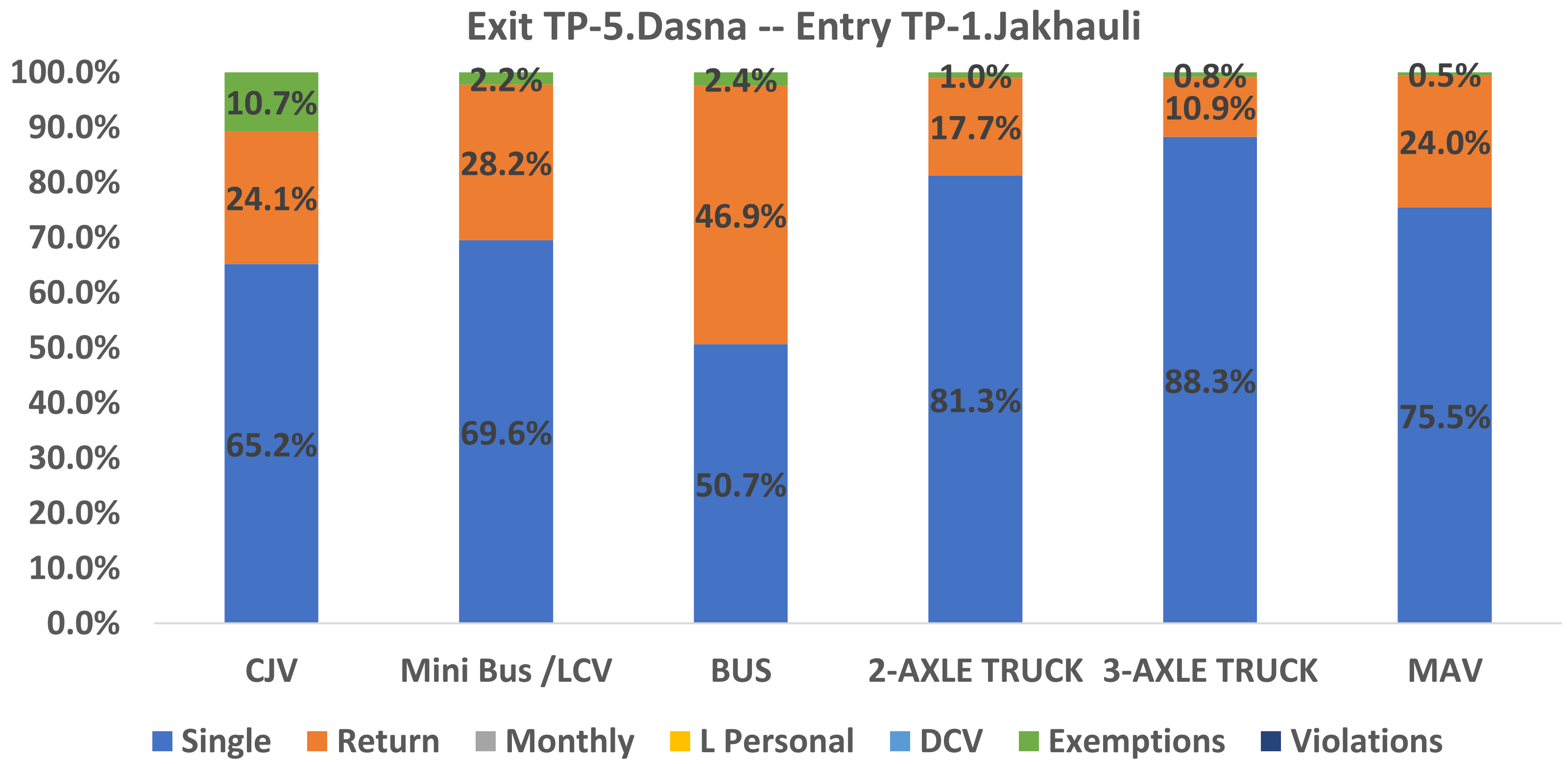
Exit TP-5.Dasna -- Entry TP-1.Jakhauli								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	65.2%	24.1%	0.0%	0.0%	0.0%	10.7%	0.0%	100.0%
Minibus /LCV	69.6%	28.2%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
BUS	50.7%	46.9%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	81.3%	17.7%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
3-AXLE TRUCK	88.3%	10.9%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
MAV	75.5%	24.0%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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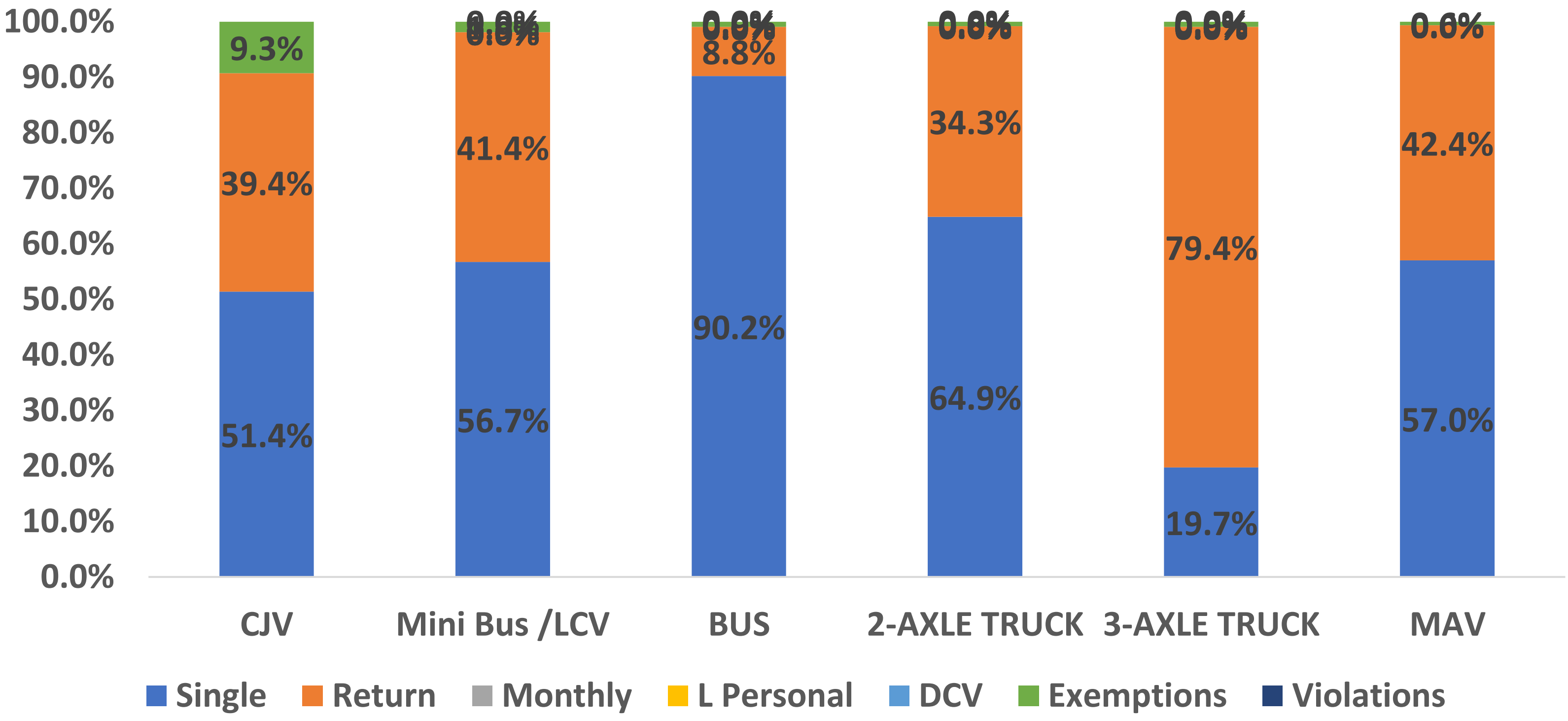
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-2.Mawikalan								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	51.4%	39.4%	0.0%	0.0%	0.0%	9.3%	0.0%	100.0%
Minibus /LCV	56.7%	41.4%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
BUS	90.2%	8.8%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
2-AXLE TRUCK	64.9%	34.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	19.7%	79.4%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	57.0%	42.4%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%

Exit TP-5.Dasna -- Entry TP-2.Mawikalan



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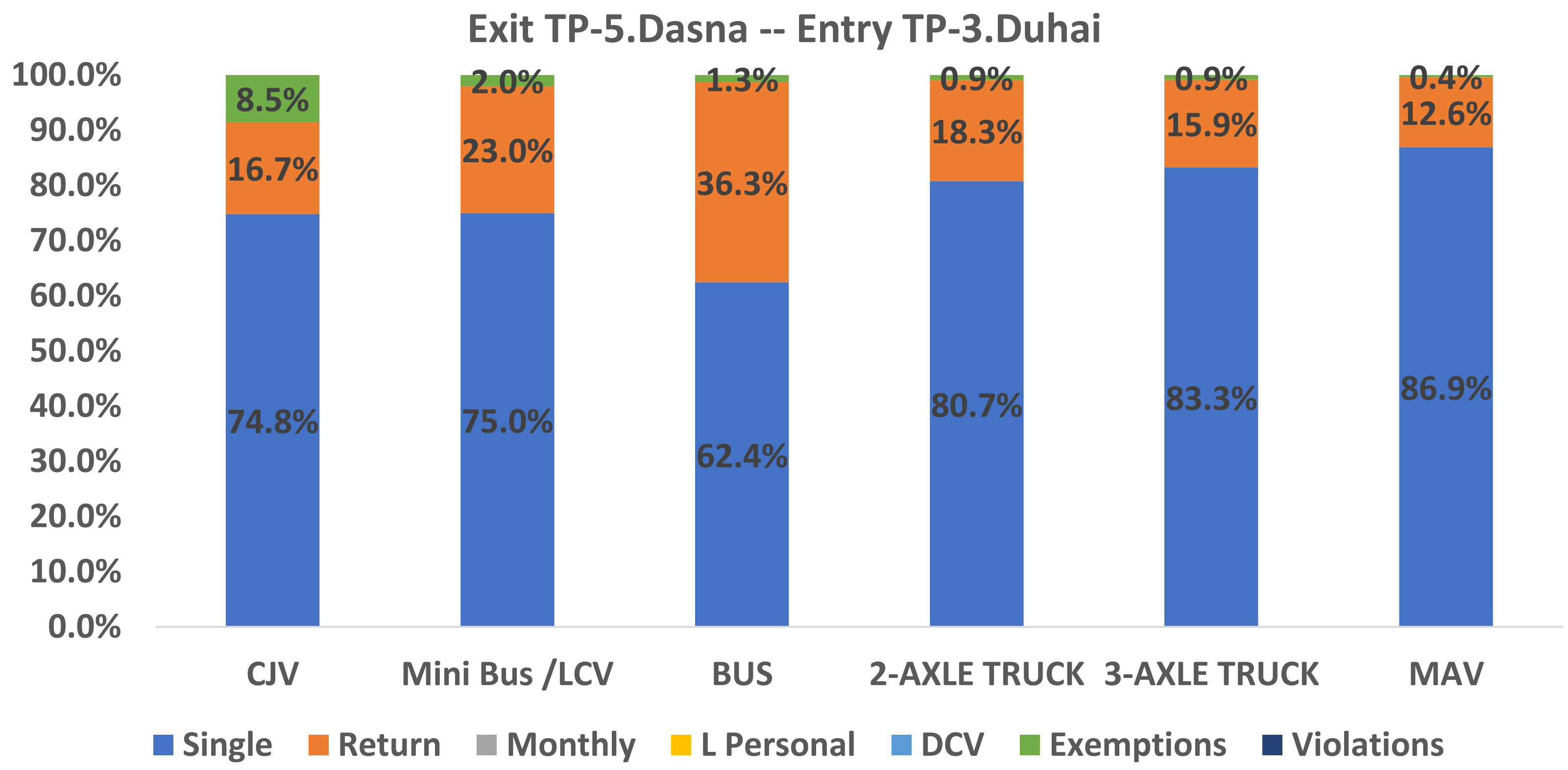
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	74.8%	16.7%	0.0%	0.0%	0.0%	8.5%	0.0%	100.0%
Minibus /LCV	75.0%	23.0%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
BUS	62.4%	36.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
2-AXLE TRUCK	80.7%	18.3%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	83.3%	15.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	86.9%	12.6%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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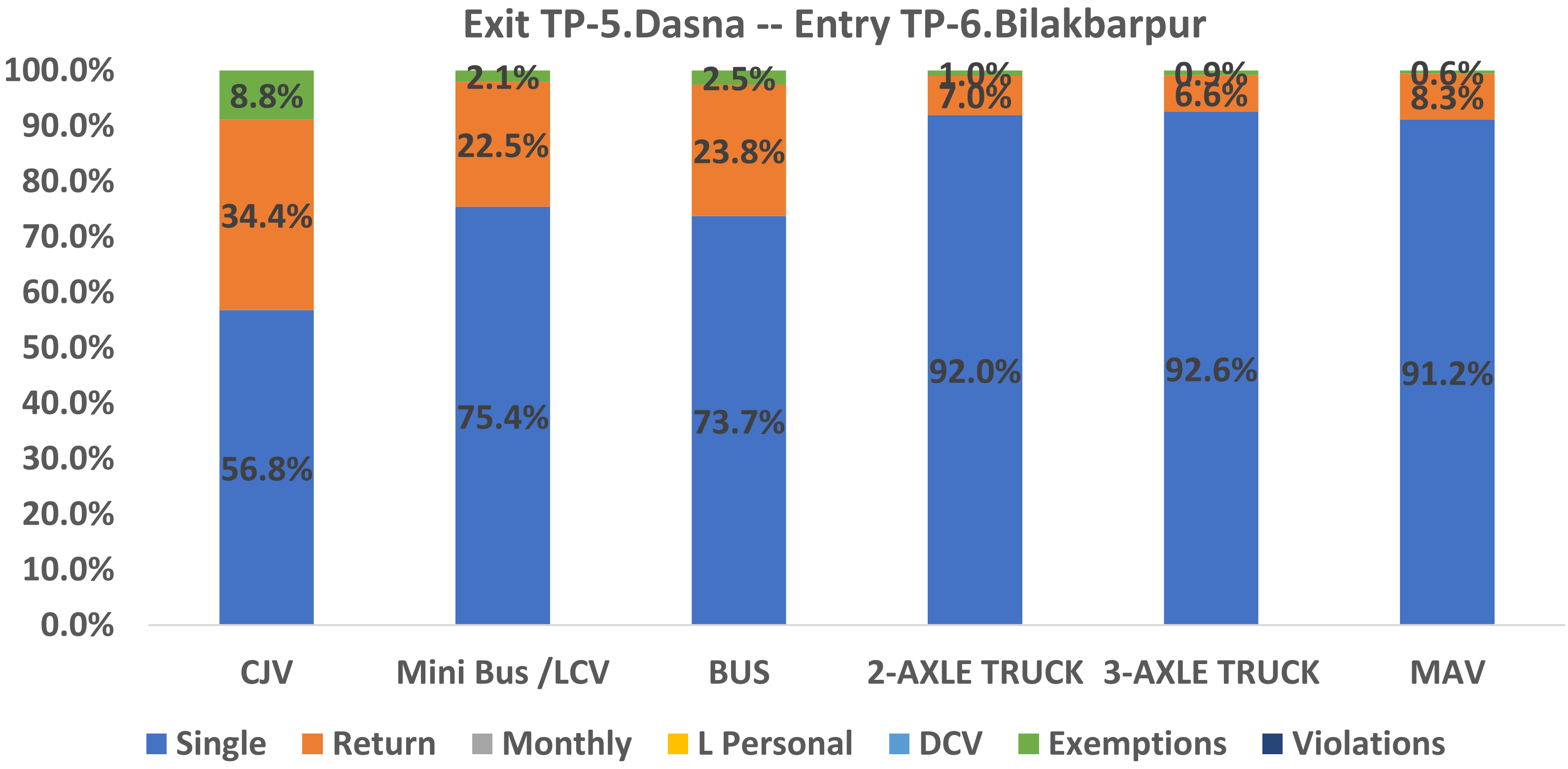
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	56.8%	34.4%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
Minibus /LCV	75.4%	22.5%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
BUS	73.7%	23.8%	0.0%	0.0%	0.0%	2.5%	0.0%	100.0%
2-AXLE TRUCK	92.0%	7.0%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
3-AXLE TRUCK	92.6%	6.6%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	91.2%	8.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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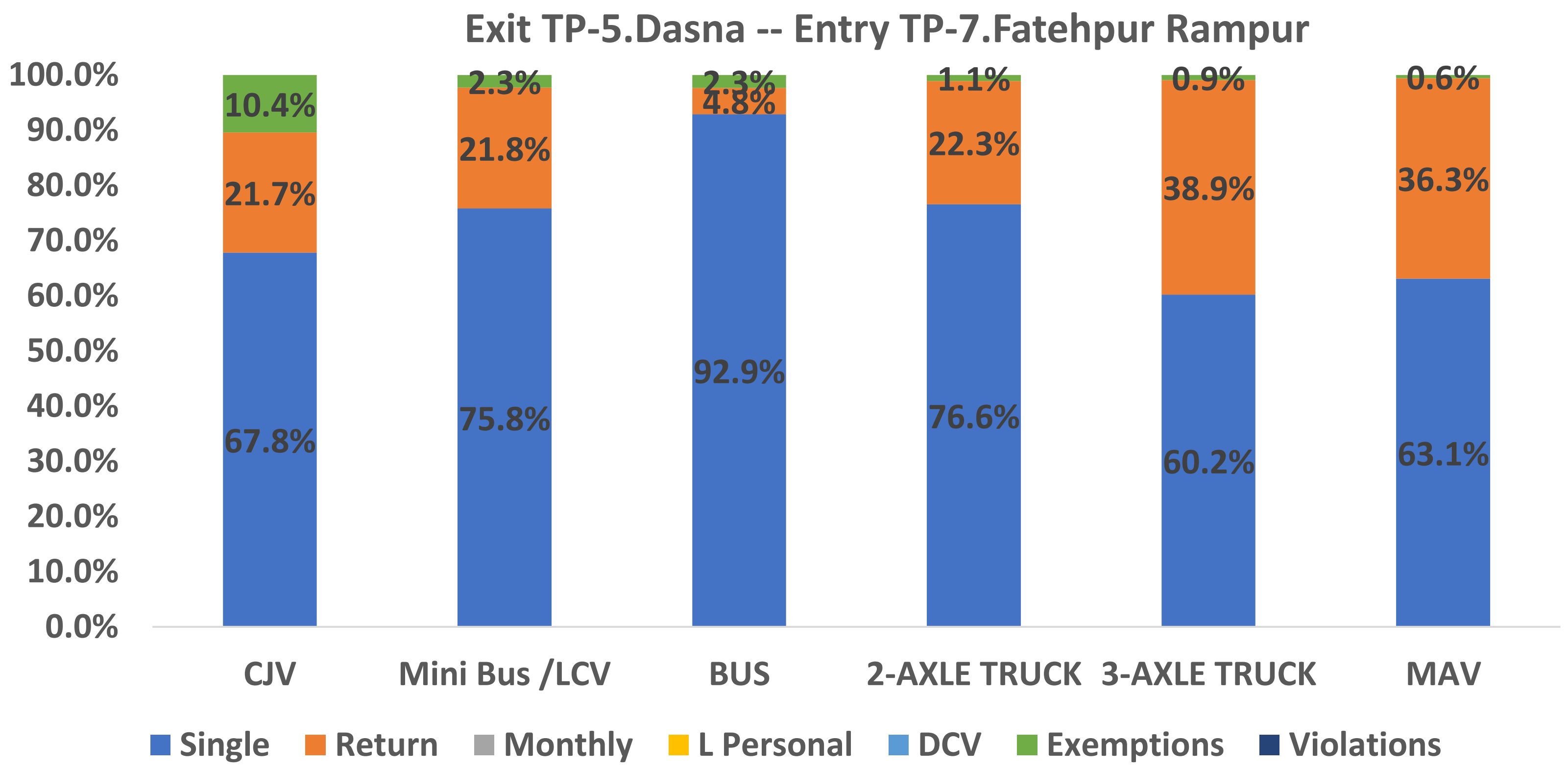
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.8%	21.7%	0.0%	0.0%	0.0%	10.4%	0.0%	100.0%
Minibus /LCV	75.8%	21.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
BUS	92.9%	4.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	76.6%	22.3%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	60.2%	38.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	63.1%	36.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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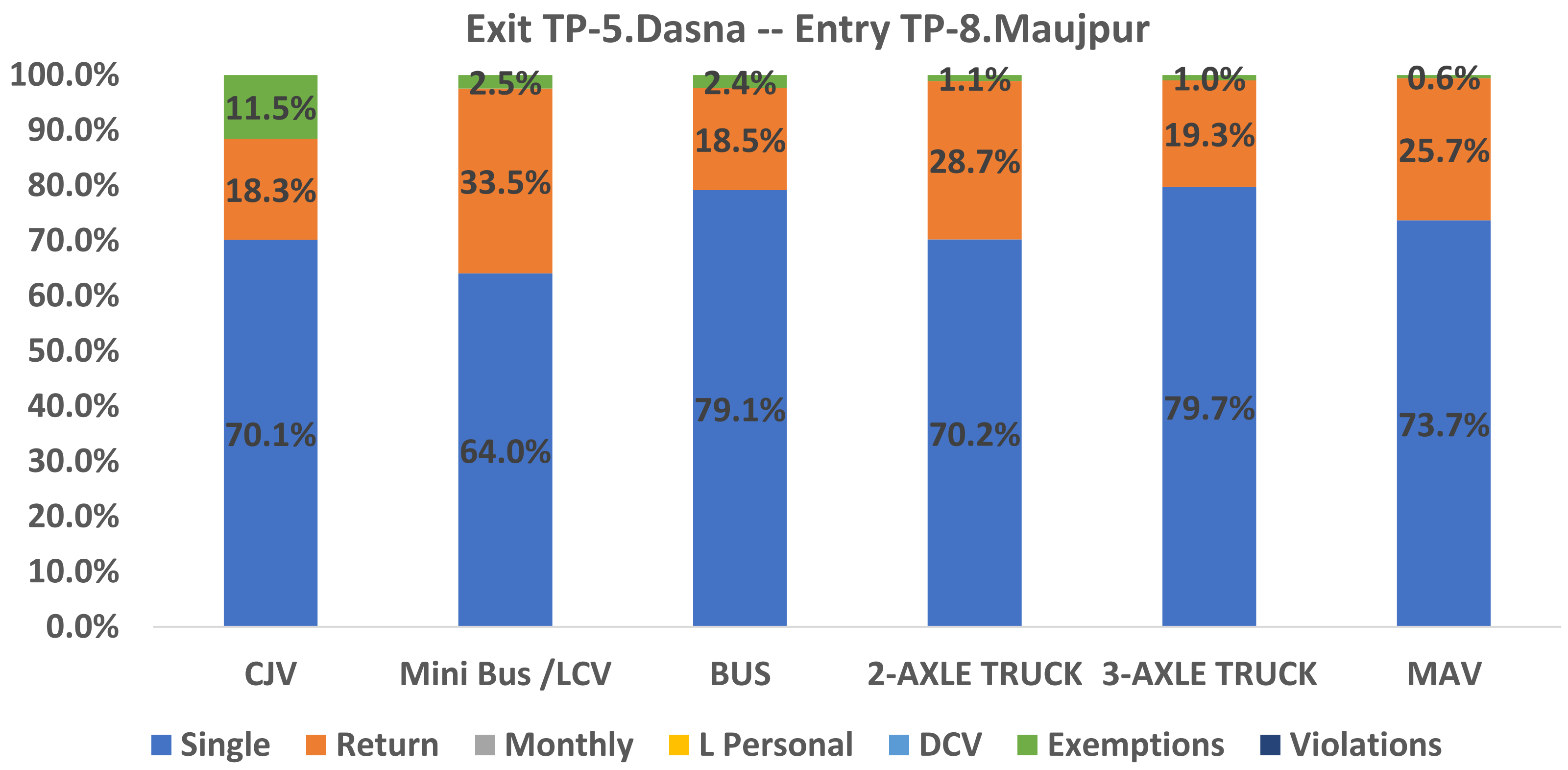
Exit TP-5. Dasna -- Entry TP-8.Maujpur								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	70.1%	18.3%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	64.0%	33.5%	0.0%	0.0%	0.0%	2.5%	0.0%	100.0%
BUS	79.1%	18.5%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	70.2%	28.7%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	79.7%	19.3%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	73.7%	25.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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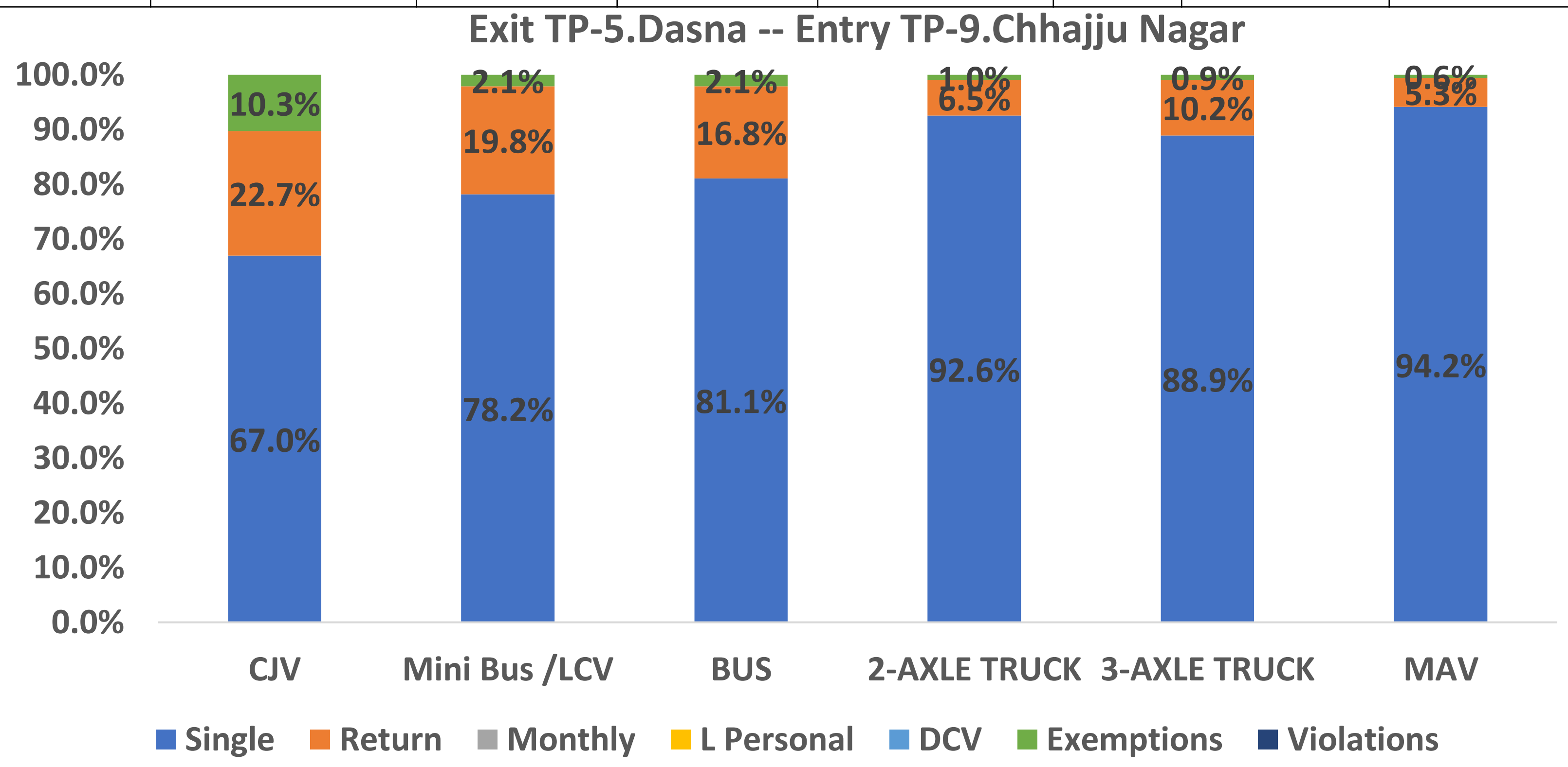
Exit TP-5. Dasna -- Entry TP-9.Chhajju Nagar								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	67.0%	22.7%	0.0%	0.0%	0.0%	10.3%	0.0%	100.0%
Minibus /LCV	78.2%	19.8%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
2-AXLE TRUCK	92.6%	6.5%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
3-AXLE TRUCK	88.9%	10.2%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	94.2%	5.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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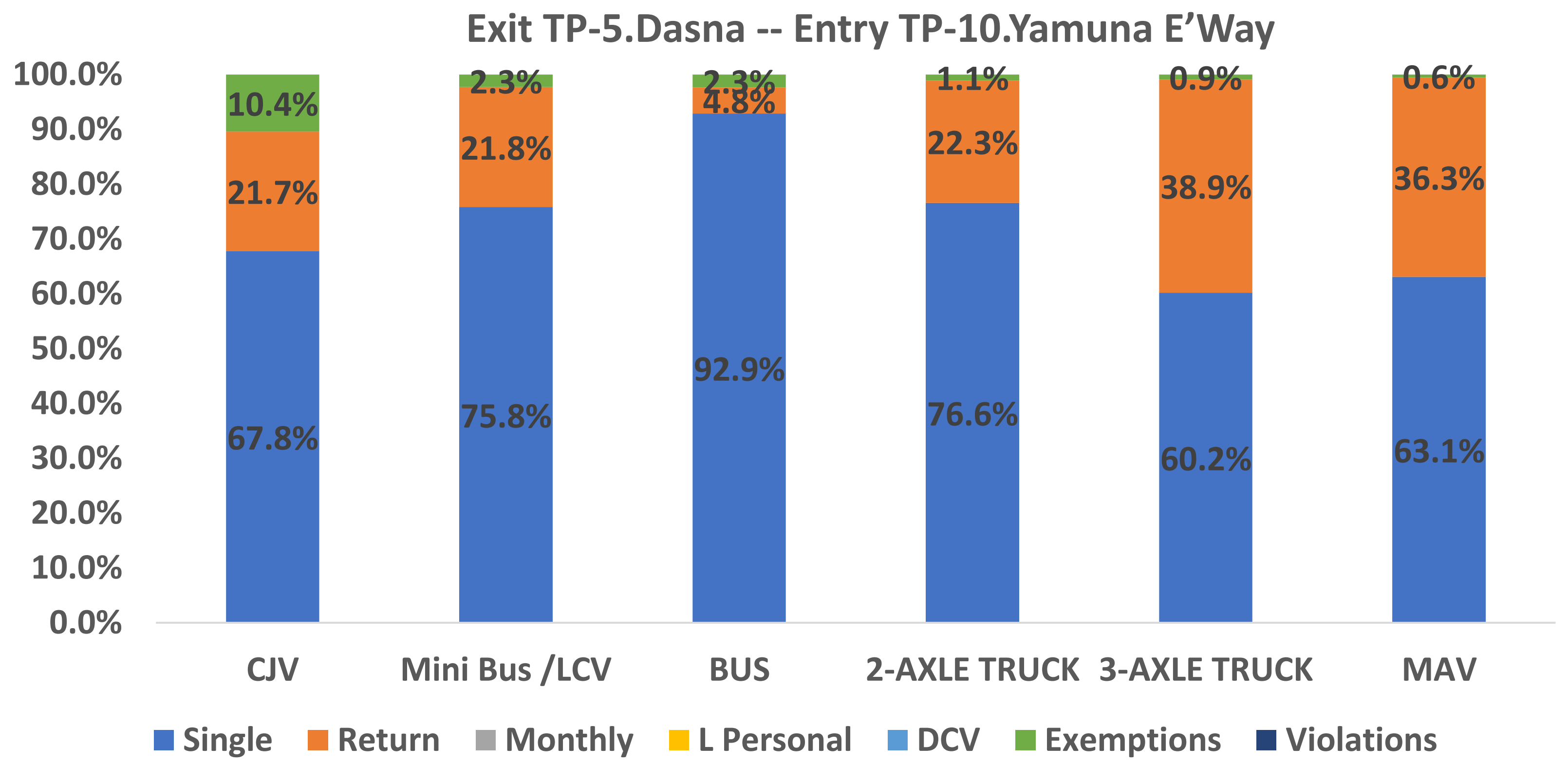
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.8%	21.7%	0.0%	0.0%	0.0%	10.4%	0.0%	100.0%
Minibus /LCV	75.8%	21.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
BUS	92.9%	4.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	76.6%	22.3%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	60.2%	38.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	63.1%	36.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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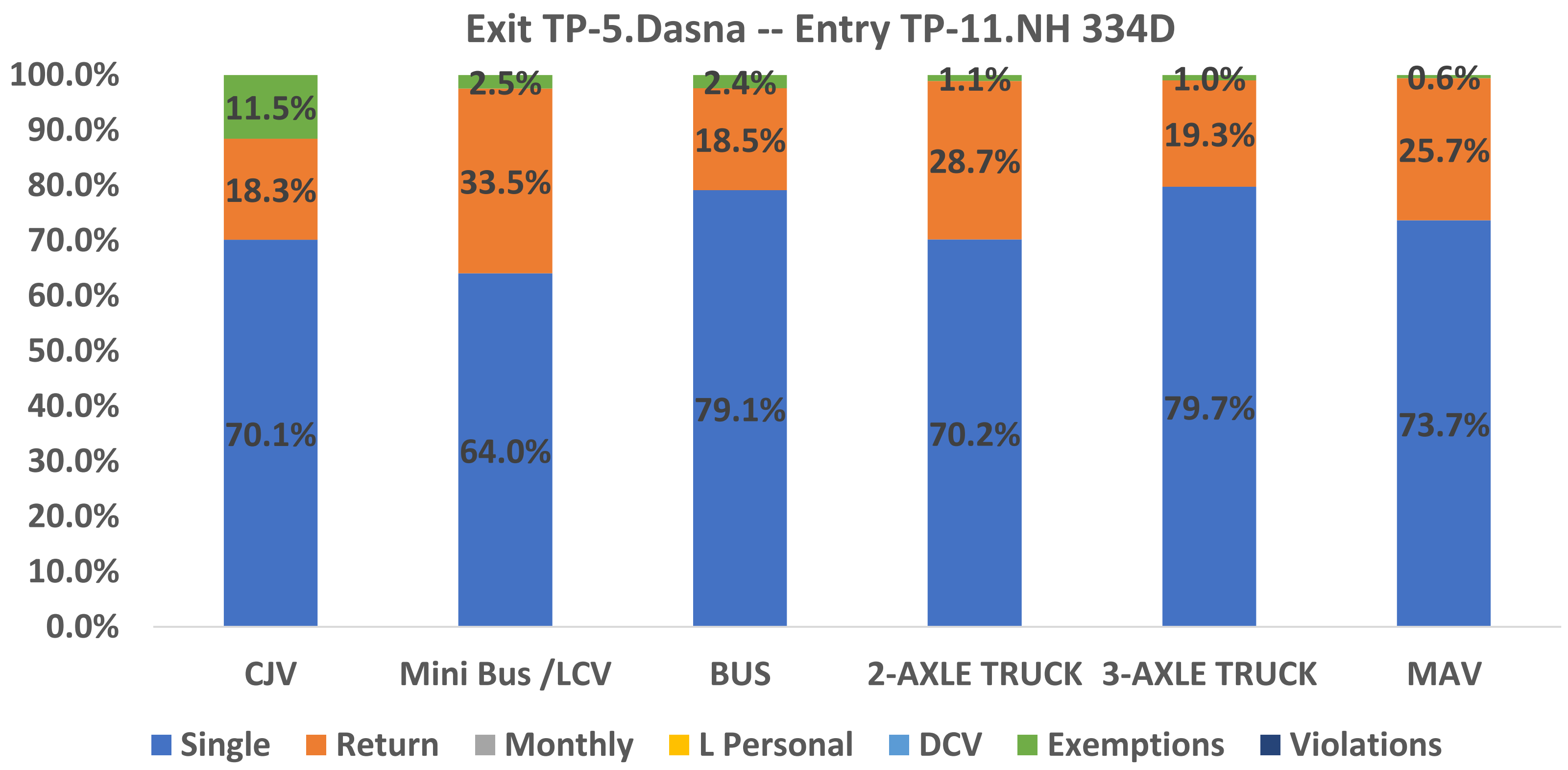
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	70.1%	18.3%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	64.0%	33.5%	0.0%	0.0%	0.0%	2.5%	0.0%	100.0%
BUS	79.1%	18.5%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	70.2%	28.7%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	79.7%	19.3%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	73.7%	25.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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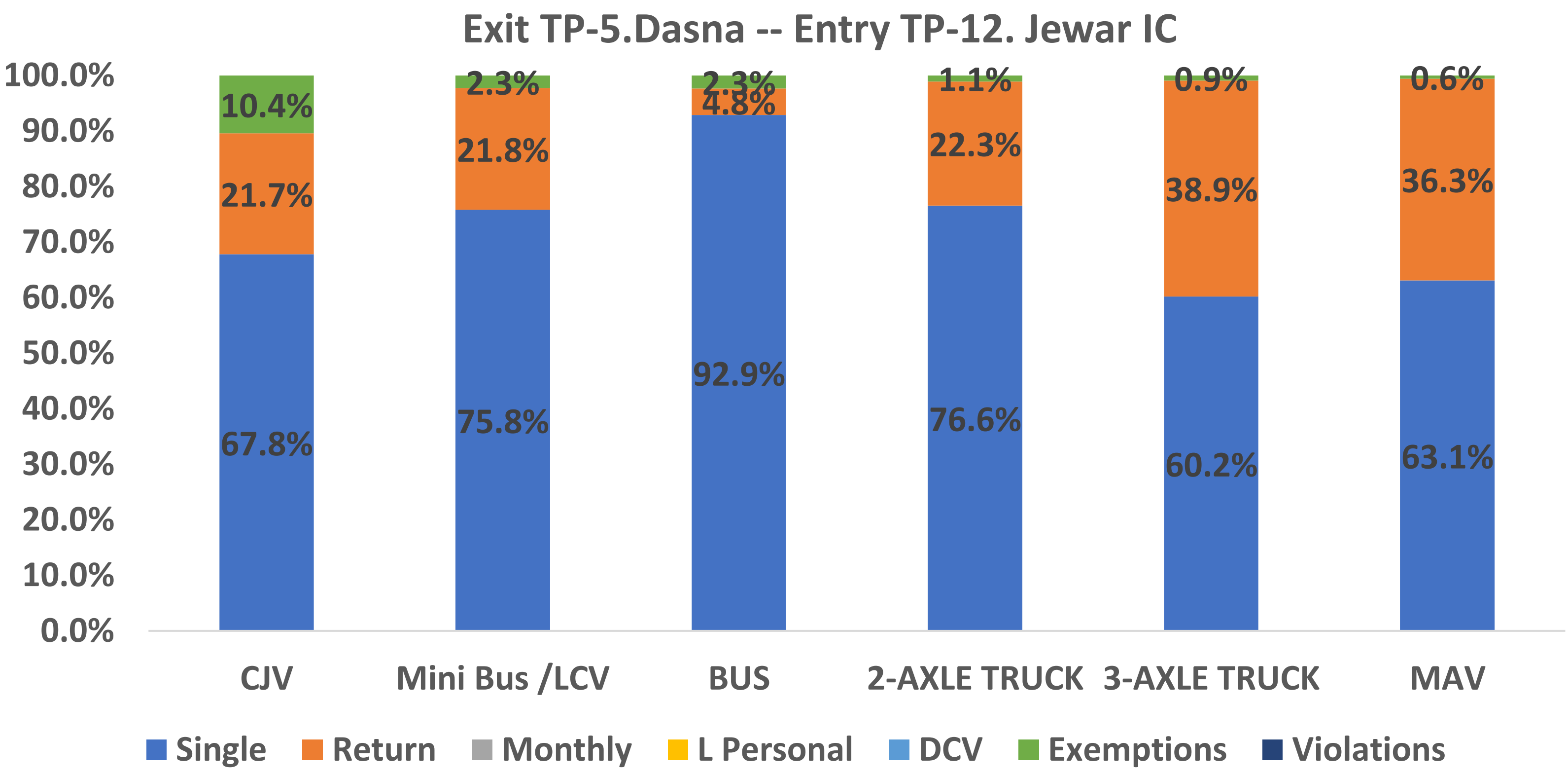
RECOMMENDED TRIP CATEGORIES – TP5

Exit TP-5. Dasna -- Entry TP-12. Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.8%	21.7%	0.0%	0.0%	0.0%	10.4%	0.0%	100.0%
Minibus /LCV	75.8%	21.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
BUS	92.9%	4.8%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	76.6%	22.3%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
3-AXLE TRUCK	60.2%	38.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	63.1%	36.3%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%



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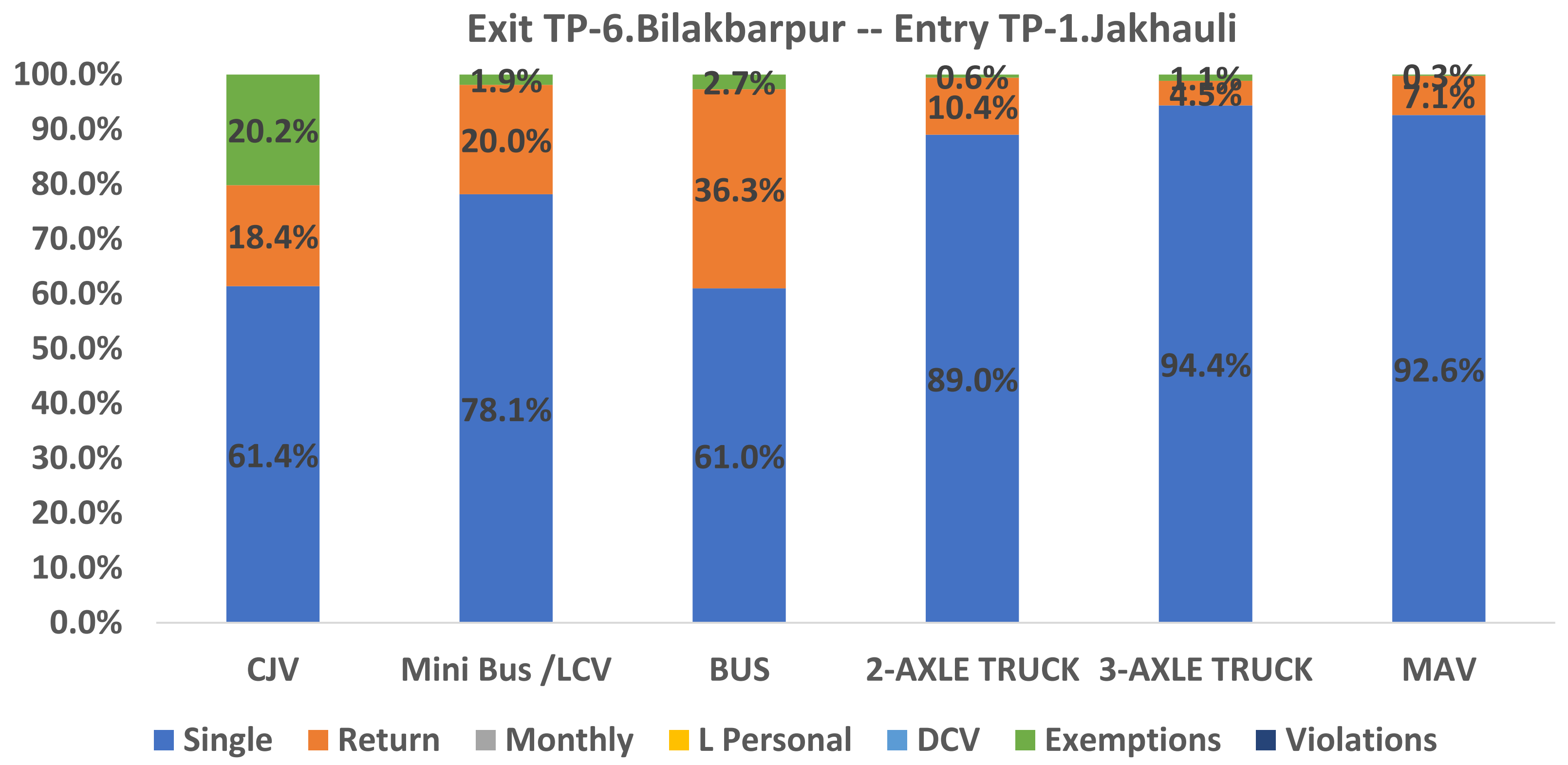
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-1.Jakhauli								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	61.4%	18.4%	0.0%	0.0%	0.0%	20.2%	0.0%	100.0%
Minibus /LCV	78.1%	20.0%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
BUS	61.0%	36.3%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	89.0%	10.4%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	94.4%	4.5%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
MAV	92.6%	7.1%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%



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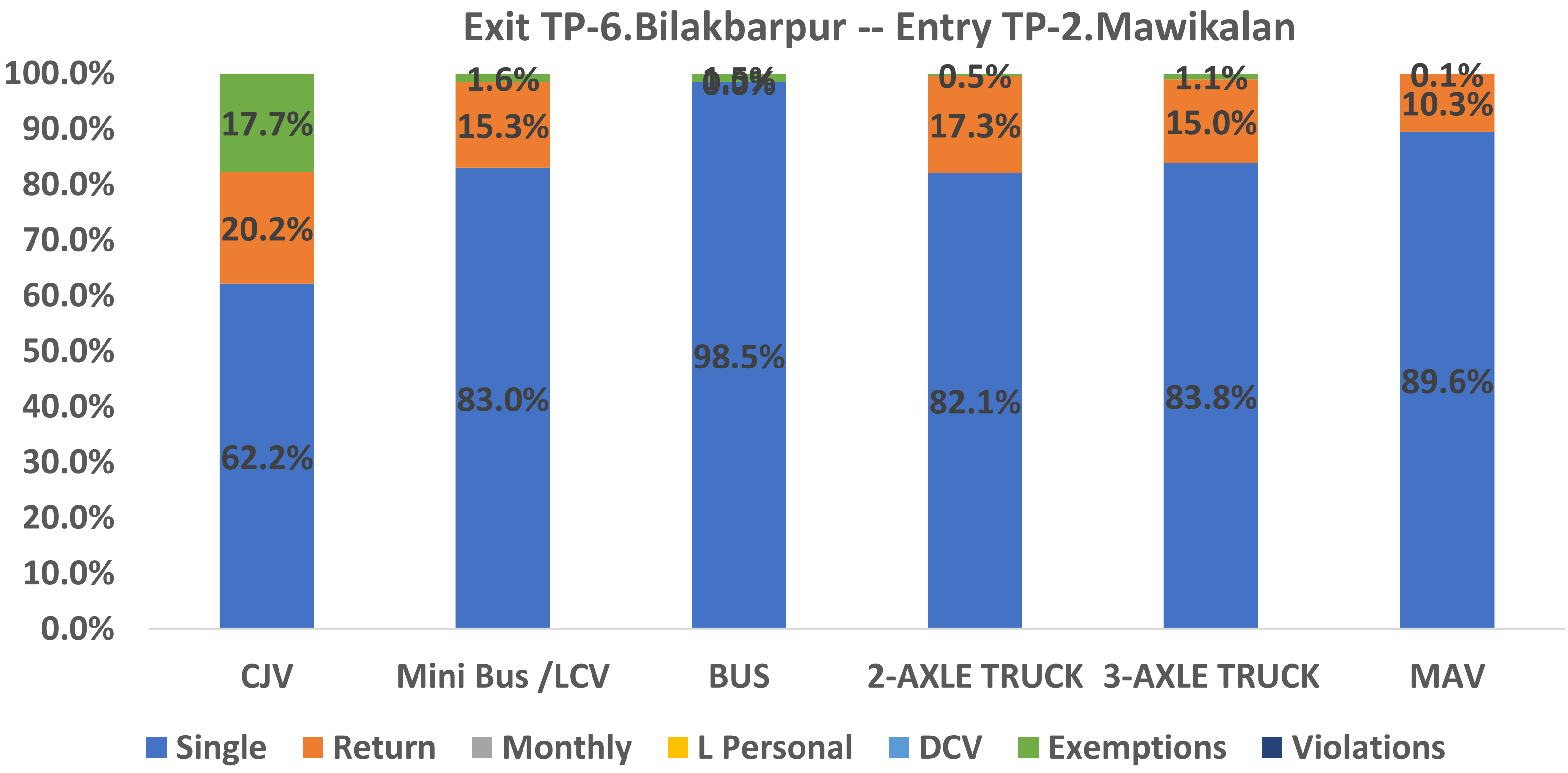
Exit TP-6.Bilakbarpur -- Entry TP-2.Mawikalan								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	62.2%	20.2%	0.0%	0.0%	0.0%	17.7%	0.0%	100.0%
Minibus /LCV	83.0%	15.3%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	98.5%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
2-AXLE TRUCK	82.1%	17.3%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	83.8%	15.0%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
MAV	89.6%	10.3%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%



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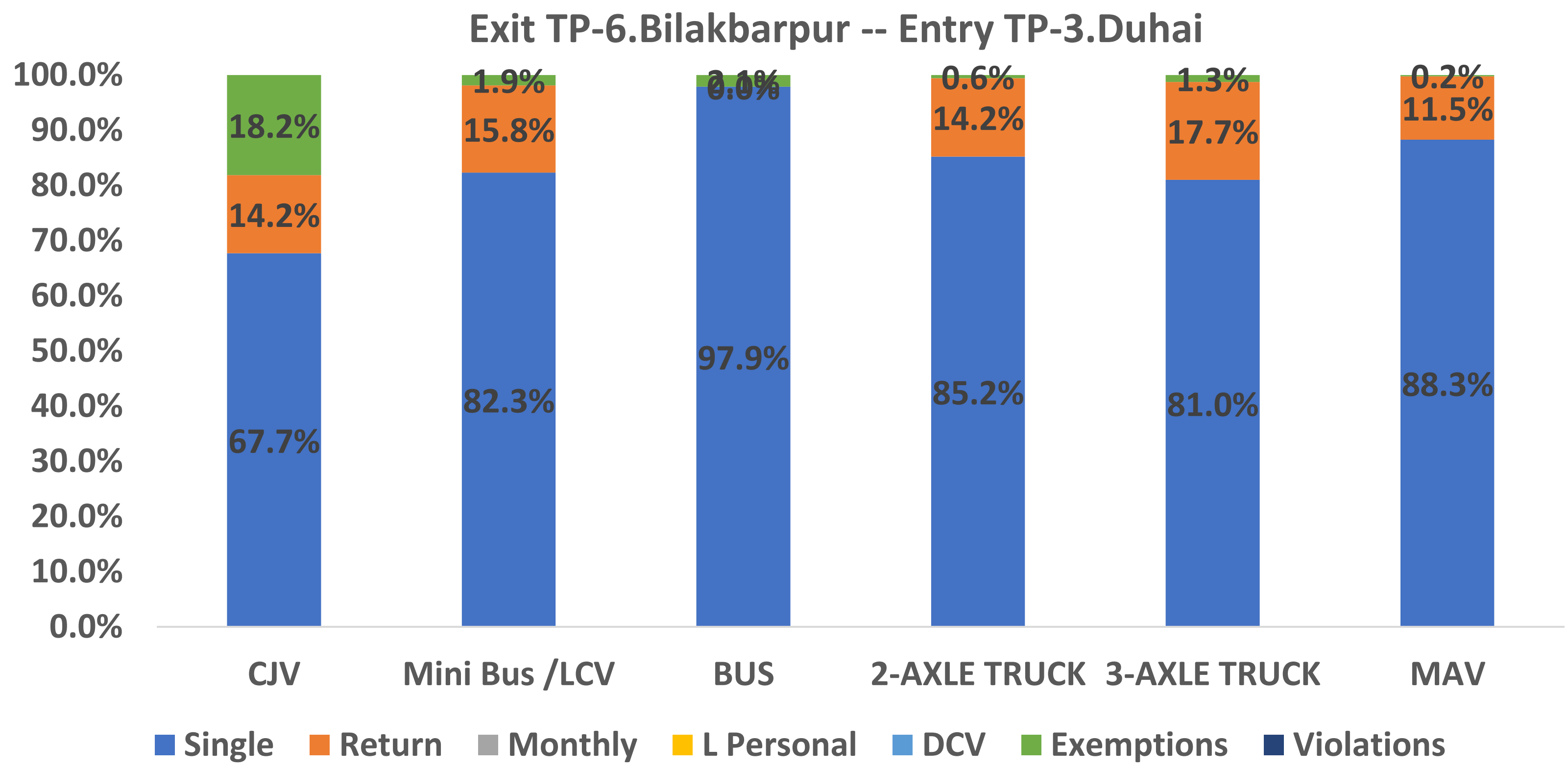
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.7%	14.2%	0.0%	0.0%	0.0%	18.2%	0.0%	100.0%
Minibus /LCV	82.3%	15.8%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
BUS	97.9%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
2-AXLE TRUCK	85.2%	14.2%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	81.0%	17.7%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
MAV	88.3%	11.5%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%



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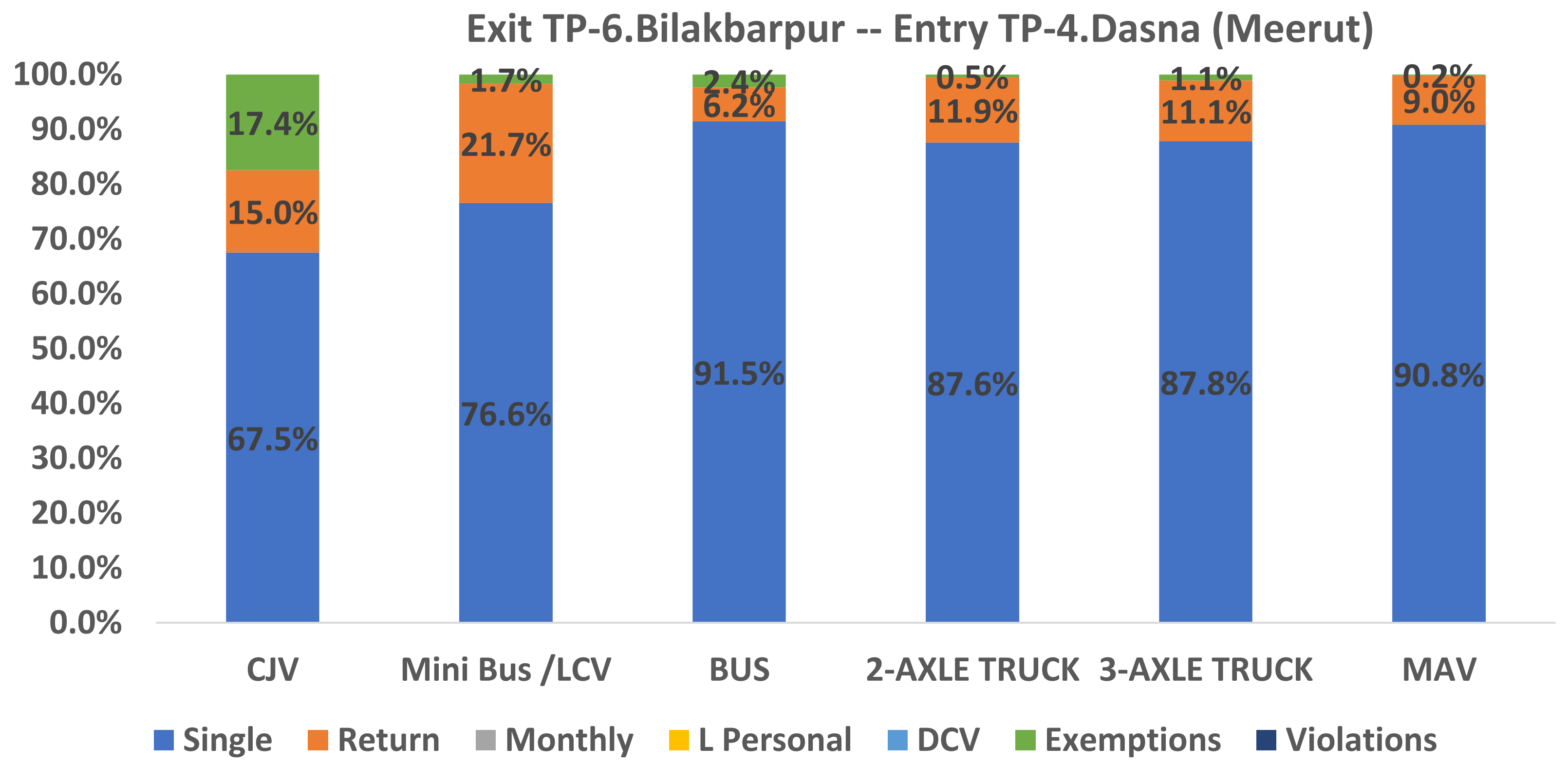
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-4.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.5%	15.0%	0.0%	0.0%	0.0%	17.4%	0.0%	100.0%
Minibus /LCV	76.6%	21.7%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
BUS	91.5%	6.2%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	87.6%	11.9%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	87.8%	11.1%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
MAV	90.8%	9.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%



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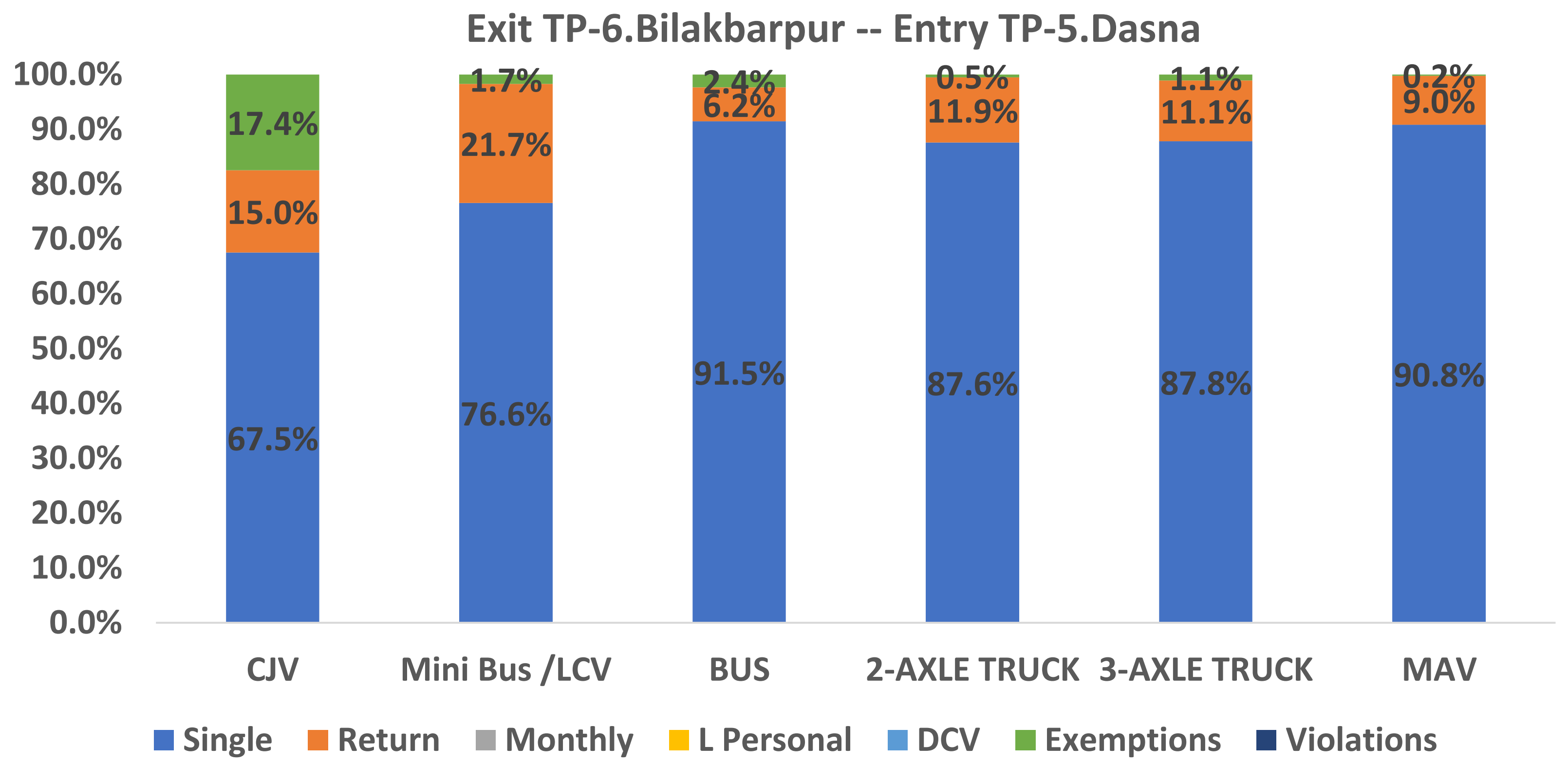
Exit TP-6.Bilakbarpur -- Entry TP-5.Dasna								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	67.5%	15.0%	0.0%	0.0%	0.0%	17.4%	0.0%	100.0%
Minibus /LCV	76.6%	21.7%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
BUS	91.5%	6.2%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	87.6%	11.9%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	87.8%	11.1%	0.0%	0.0%	0.0%	1.1%	0.0%	100.0%
MAV	90.8%	9.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%



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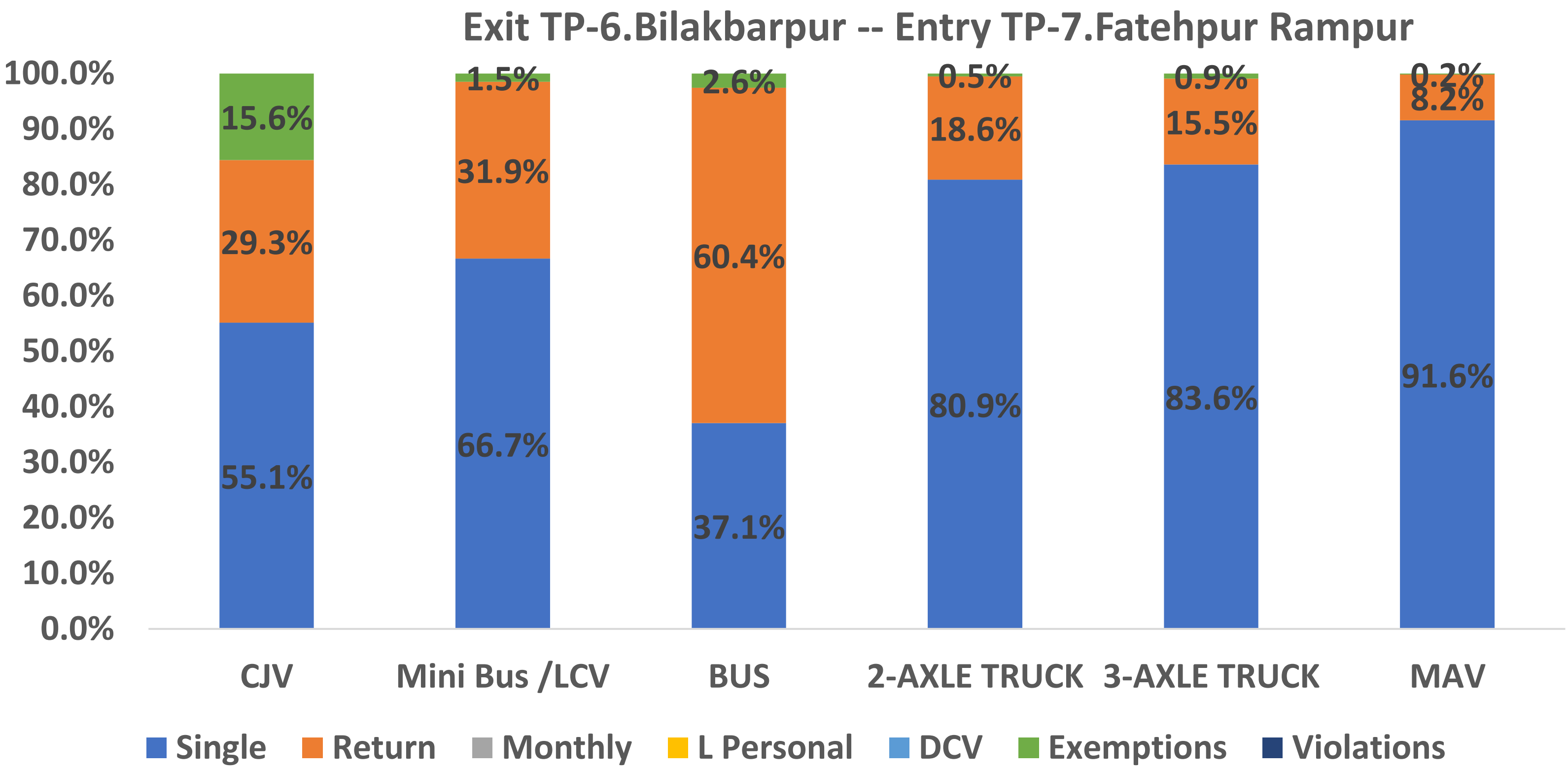
RECOMMENDED TRIP CATEGORIES – TP6

CDPQ

Exit TP-6.Bilakbarpur -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	55.1%	29.3%	0.0%	0.0%	0.0%	15.6%	0.0%	100.0%
Minibus /LCV	66.7%	31.9%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	37.1%	60.4%	0.0%	0.0%	0.0%	2.6%	0.0%	100.0%
2-AXLE TRUCK	80.9%	18.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	83.6%	15.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	91.6%	8.2%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%



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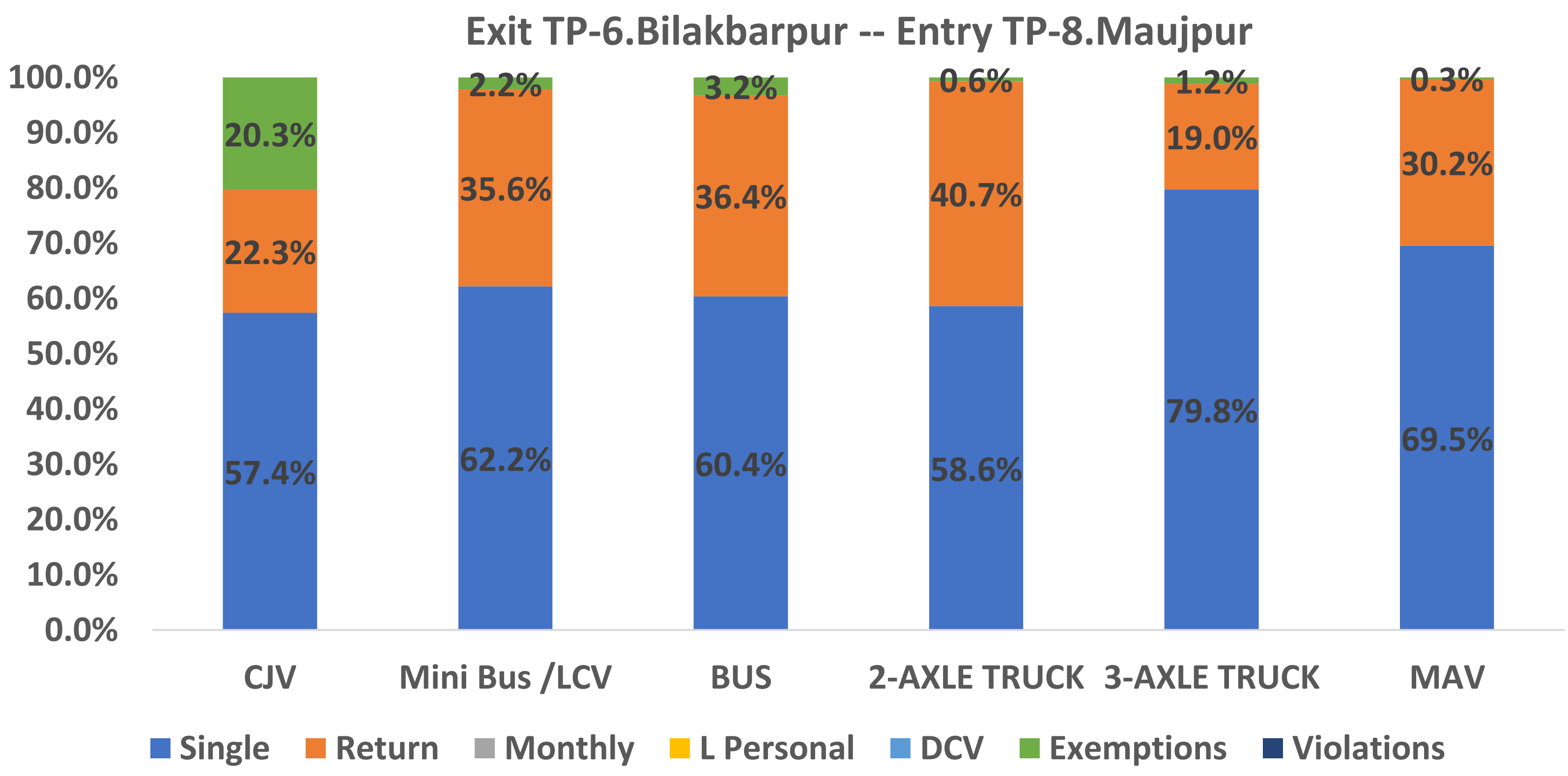
Exit TP-6.Bilakbarpur -- Entry TP-8.Maujpur								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	57.4%	22.3%	0.0%	0.0%	0.0%	20.3%	0.0%	100.0%
Minibus /LCV	62.2%	35.6%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
BUS	60.4%	36.4%	0.0%	0.0%	0.0%	3.2%	0.0%	100.0%
2-AXLE TRUCK	58.6%	40.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	79.8%	19.0%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
MAV	69.5%	30.2%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%



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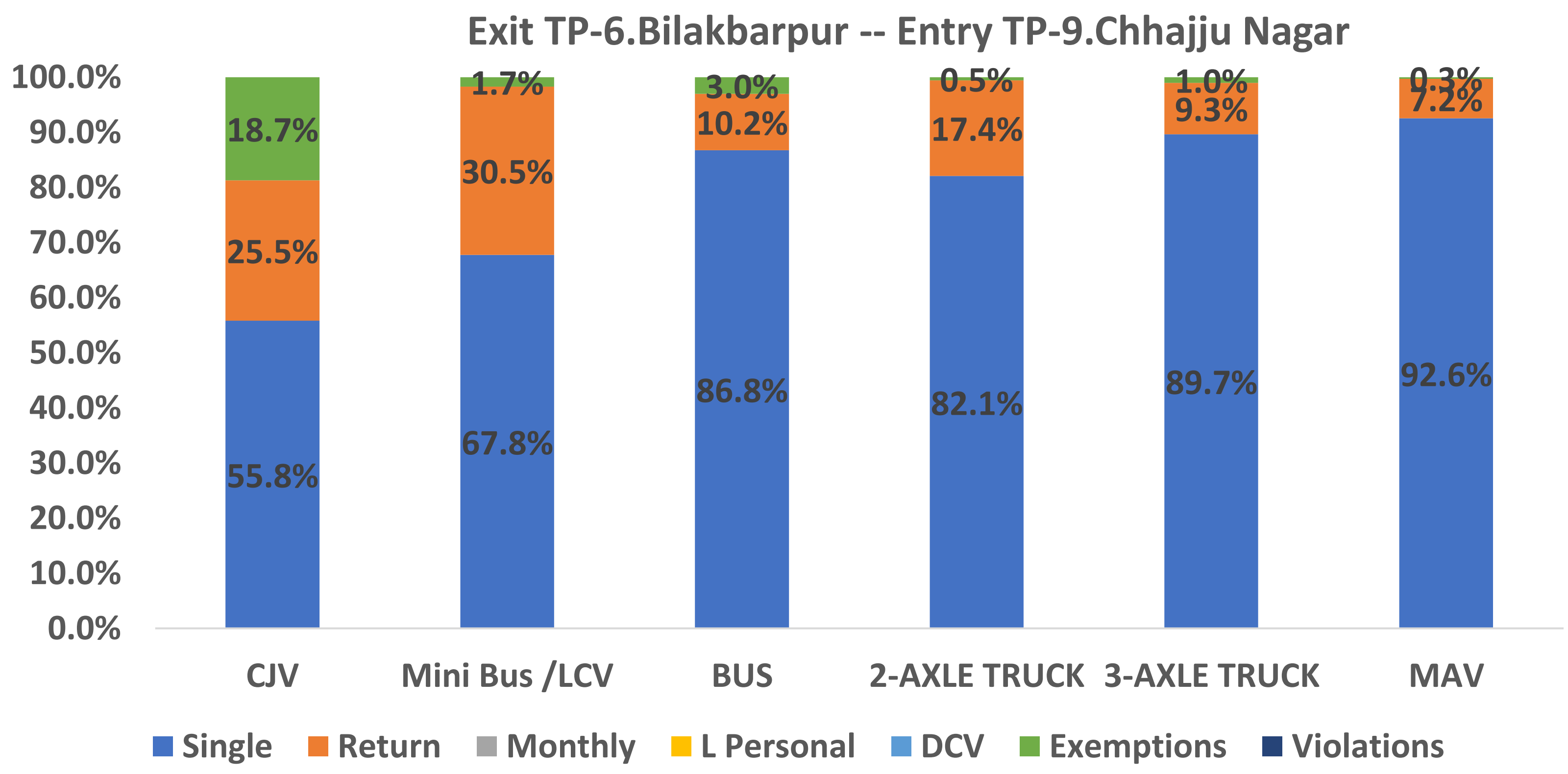
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-9.Chhajju Nagar								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	55.8%	25.5%	0.0%	0.0%	0.0%	18.7%	0.0%	100.0%
Minibus /LCV	67.8%	30.5%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
BUS	86.8%	10.2%	0.0%	0.0%	0.0%	3.0%	0.0%	100.0%
2-AXLE TRUCK	82.1%	17.4%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	89.7%	9.3%	0.0%	0.0%	0.0%	1.0%	0.0%	100.0%
MAV	92.6%	7.2%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%



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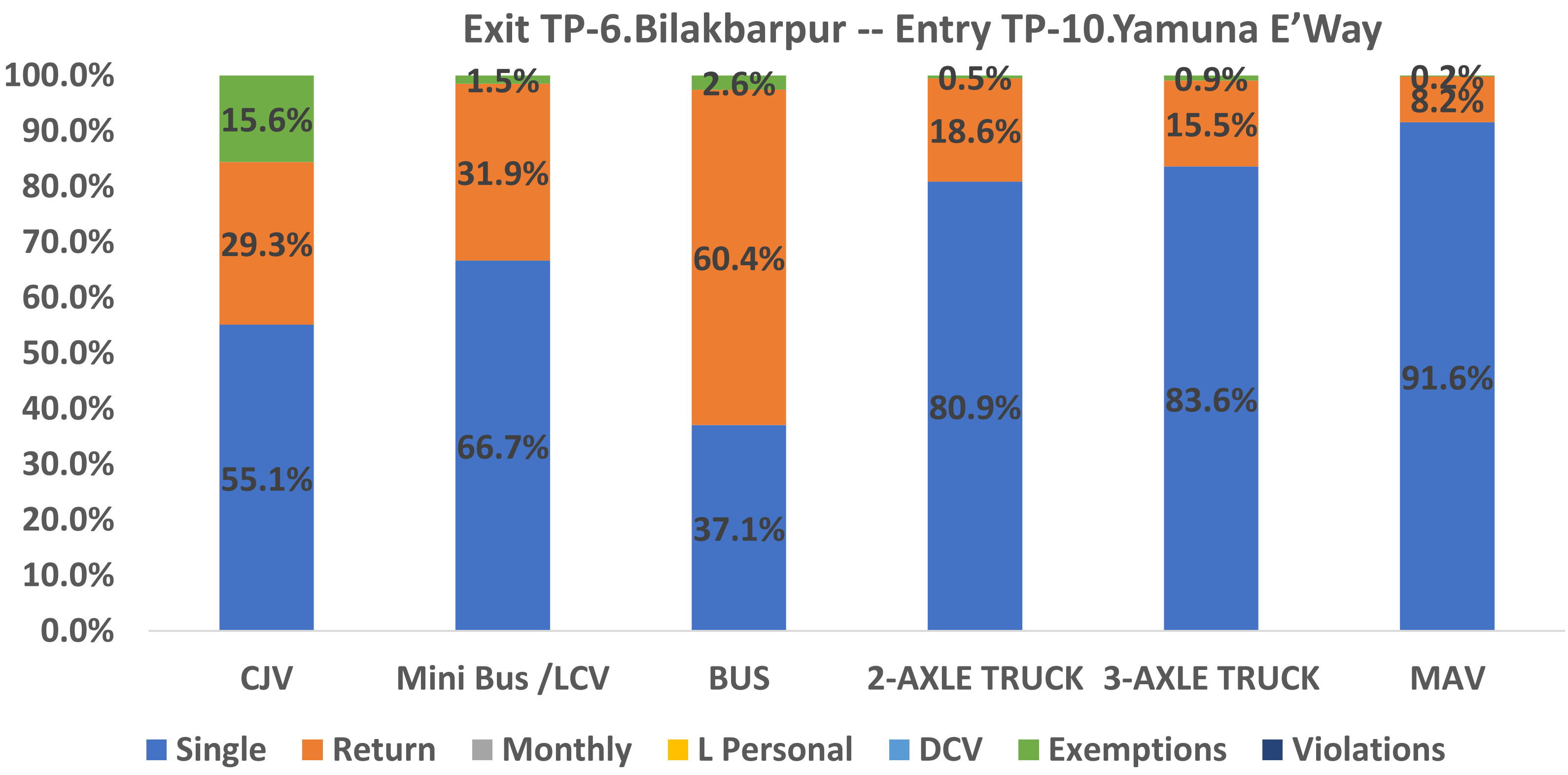
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	55.1%	29.3%	0.0%	0.0%	0.0%	15.6%	0.0%	100.0%
Minibus /LCV	66.7%	31.9%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	37.1%	60.4%	0.0%	0.0%	0.0%	2.6%	0.0%	100.0%
2-AXLE TRUCK	80.9%	18.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	83.6%	15.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	91.6%	8.2%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%



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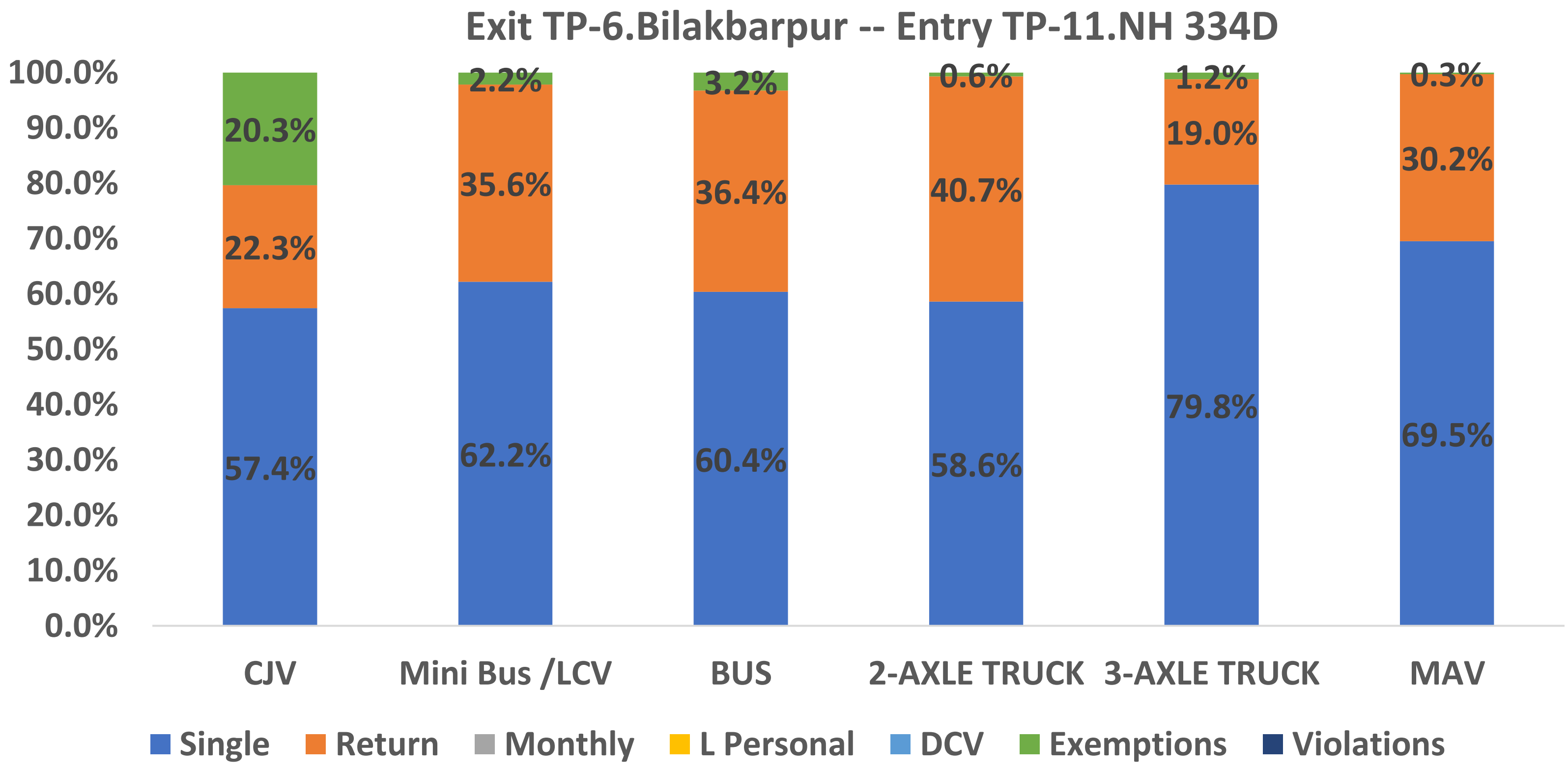
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-11.NH 334D								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	57.4%	22.3%	0.0%	0.0%	0.0%	20.3%	0.0%	100.0%
Minibus /LCV	62.2%	35.6%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
BUS	60.4%	36.4%	0.0%	0.0%	0.0%	3.2%	0.0%	100.0%
2-AXLE TRUCK	58.6%	40.7%	0.0%	0.0%	0.0%	0.6%	0.0%	100.0%
3-AXLE TRUCK	79.8%	19.0%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
MAV	69.5%	30.2%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%



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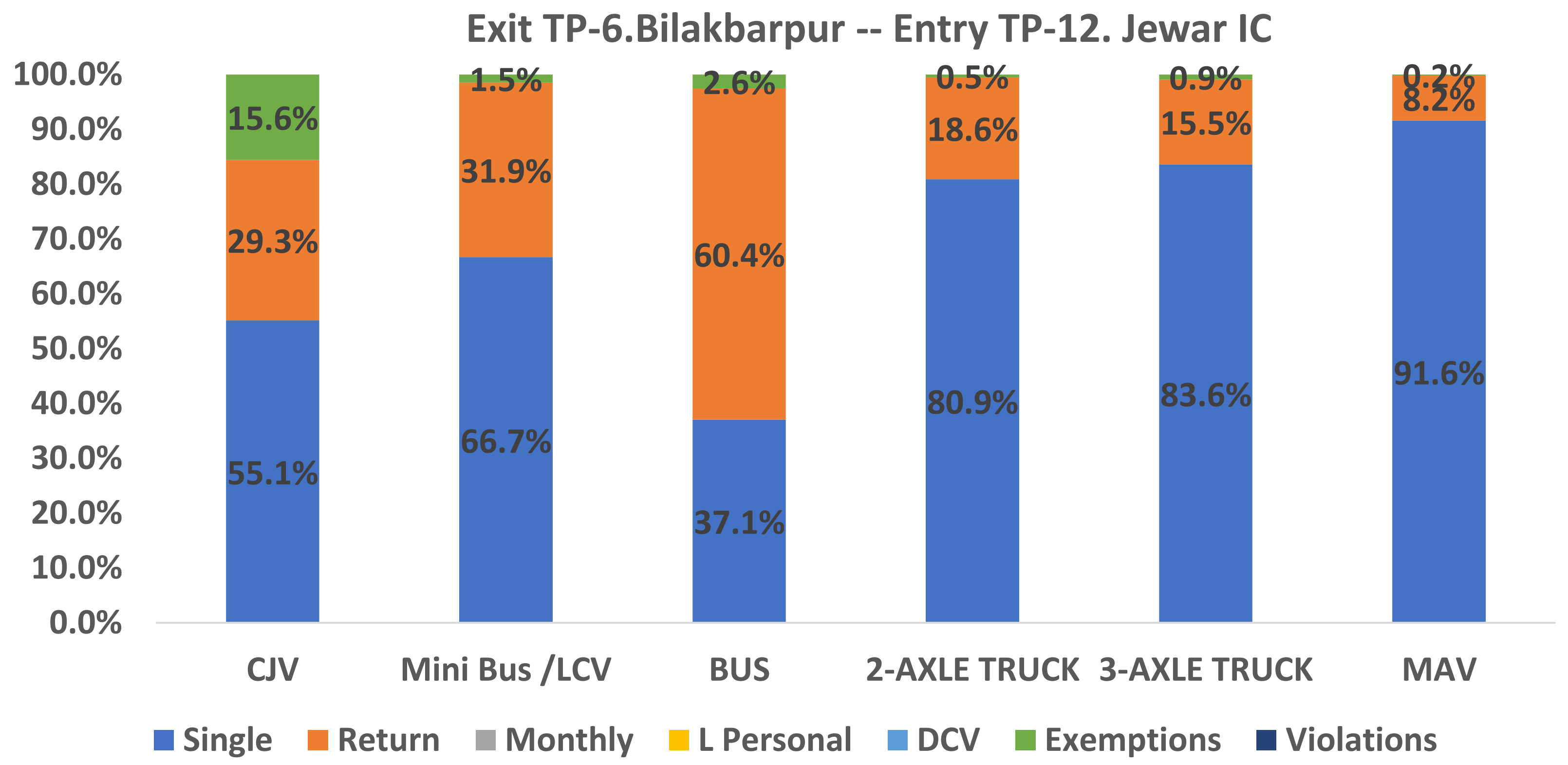
RECOMMENDED TRIP CATEGORIES – TP6

Exit TP-6.Bilakbarpur -- Entry TP-12. Jewar IC								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	55.1%	29.3%	0.0%	0.0%	0.0%	15.6%	0.0%	100.0%
Minibus /LCV	66.7%	31.9%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	37.1%	60.4%	0.0%	0.0%	0.0%	2.6%	0.0%	100.0%
2-AXLE TRUCK	80.9%	18.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%
3-AXLE TRUCK	83.6%	15.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
MAV	91.6%	8.2%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%



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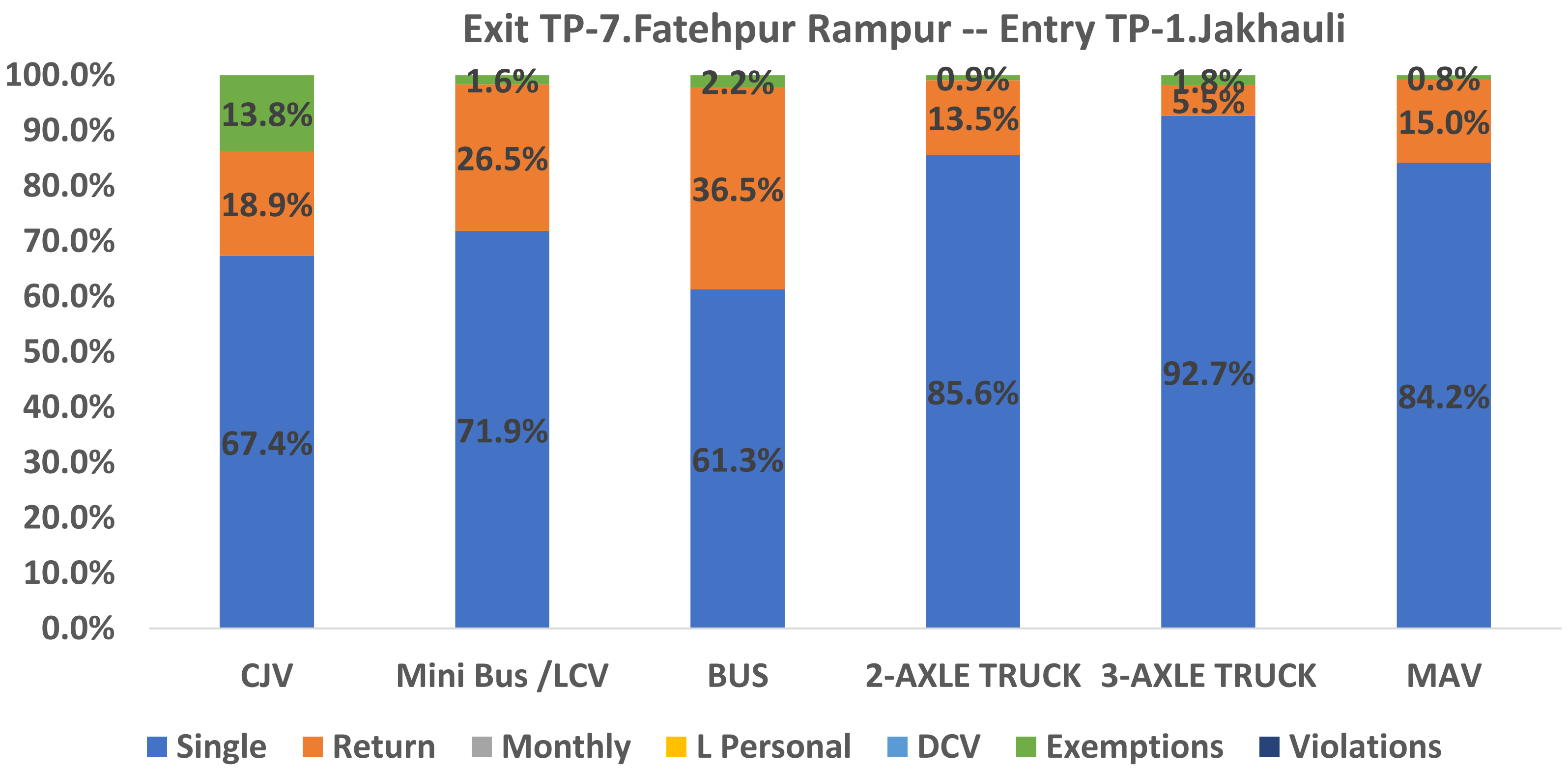
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-1.Jakhauli								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	67.4%	18.9%	0.0%	0.0%	0.0%	13.8%	0.0%	100.0%
Minibus /LCV	71.9%	26.5%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	61.3%	36.5%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
2-AXLE TRUCK	85.6%	13.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	92.7%	5.5%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%
MAV	84.2%	15.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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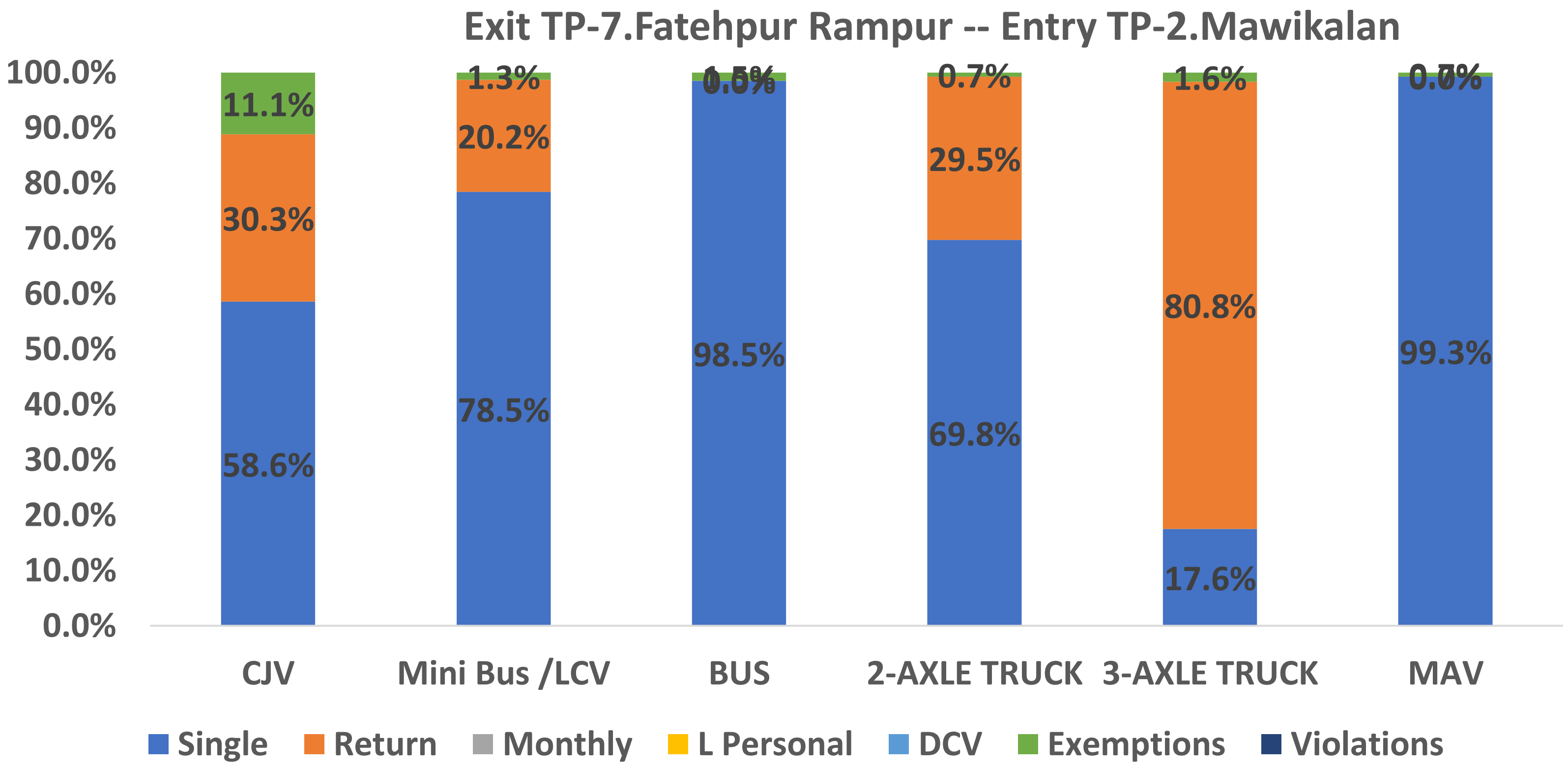
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-2.Mawikalan								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	58.6%	30.3%	0.0%	0.0%	0.0%	11.1%	0.0%	100.0%
Minibus /LCV	78.5%	20.2%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	98.5%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
2-AXLE TRUCK	69.8%	29.5%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	17.6%	80.8%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
MAV	99.3%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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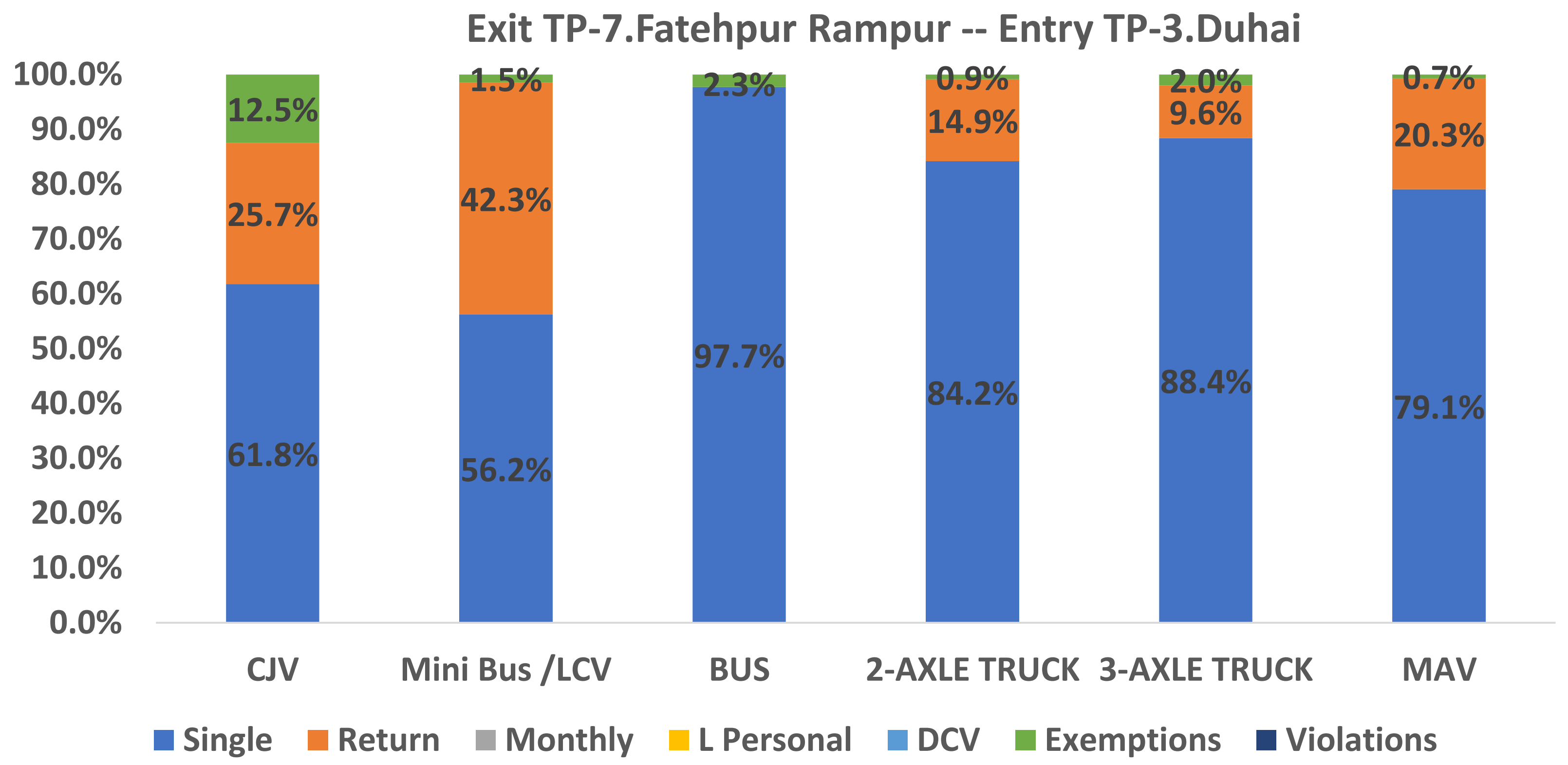
Exit TP-7.Fatehpur Rampur -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	61.8%	25.7%	0.0%	0.0%	0.0%	12.5%	0.0%	100.0%
Minibus /LCV	56.2%	42.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	97.7%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	84.2%	14.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	88.4%	9.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
MAV	79.1%	20.3%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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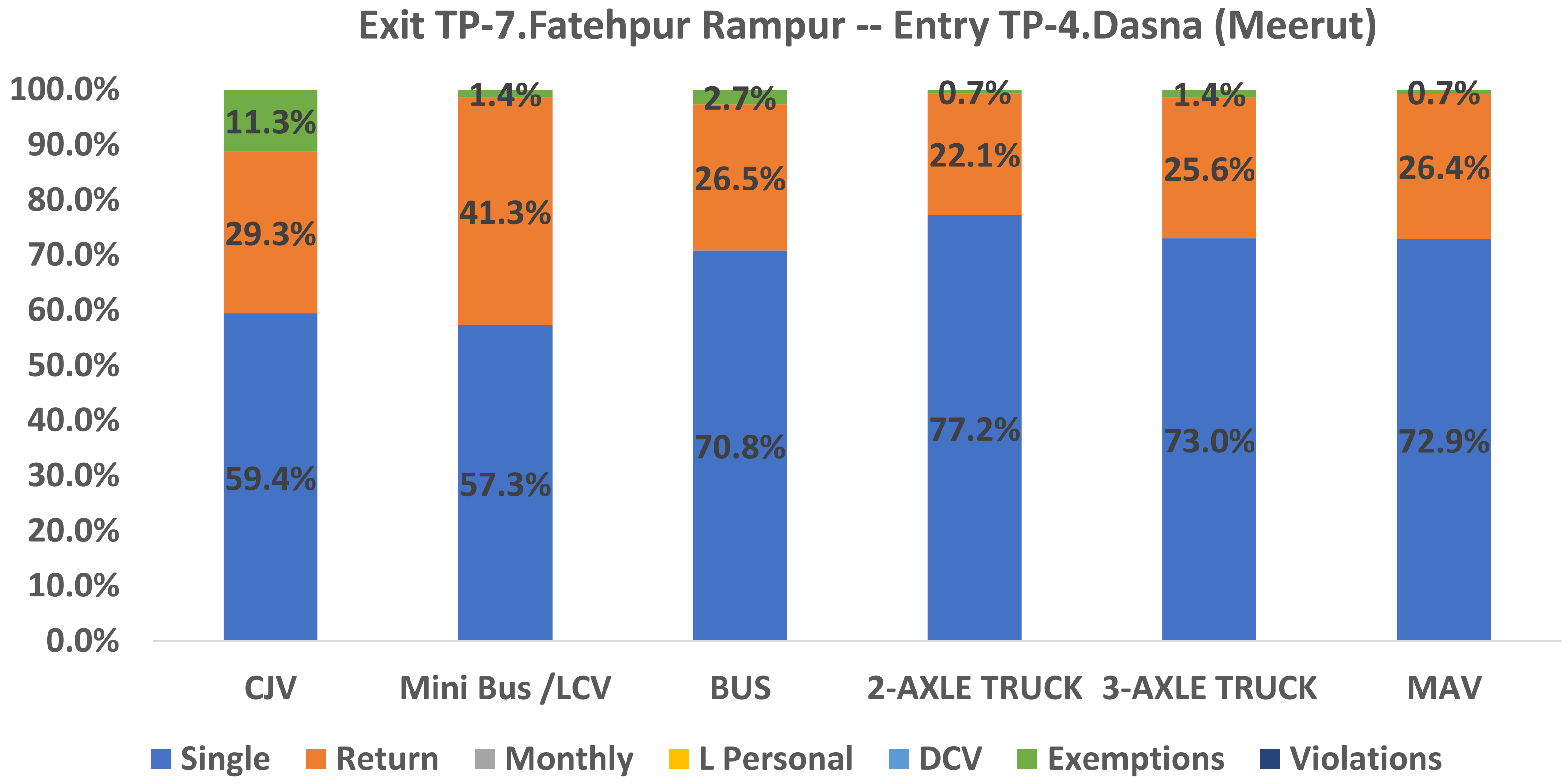
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-4.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	59.4%	29.3%	0.0%	0.0%	0.0%	11.3%	0.0%	100.0%
Minibus /LCV	57.3%	41.3%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	70.8%	26.5%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	77.2%	22.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	73.0%	25.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
MAV	72.9%	26.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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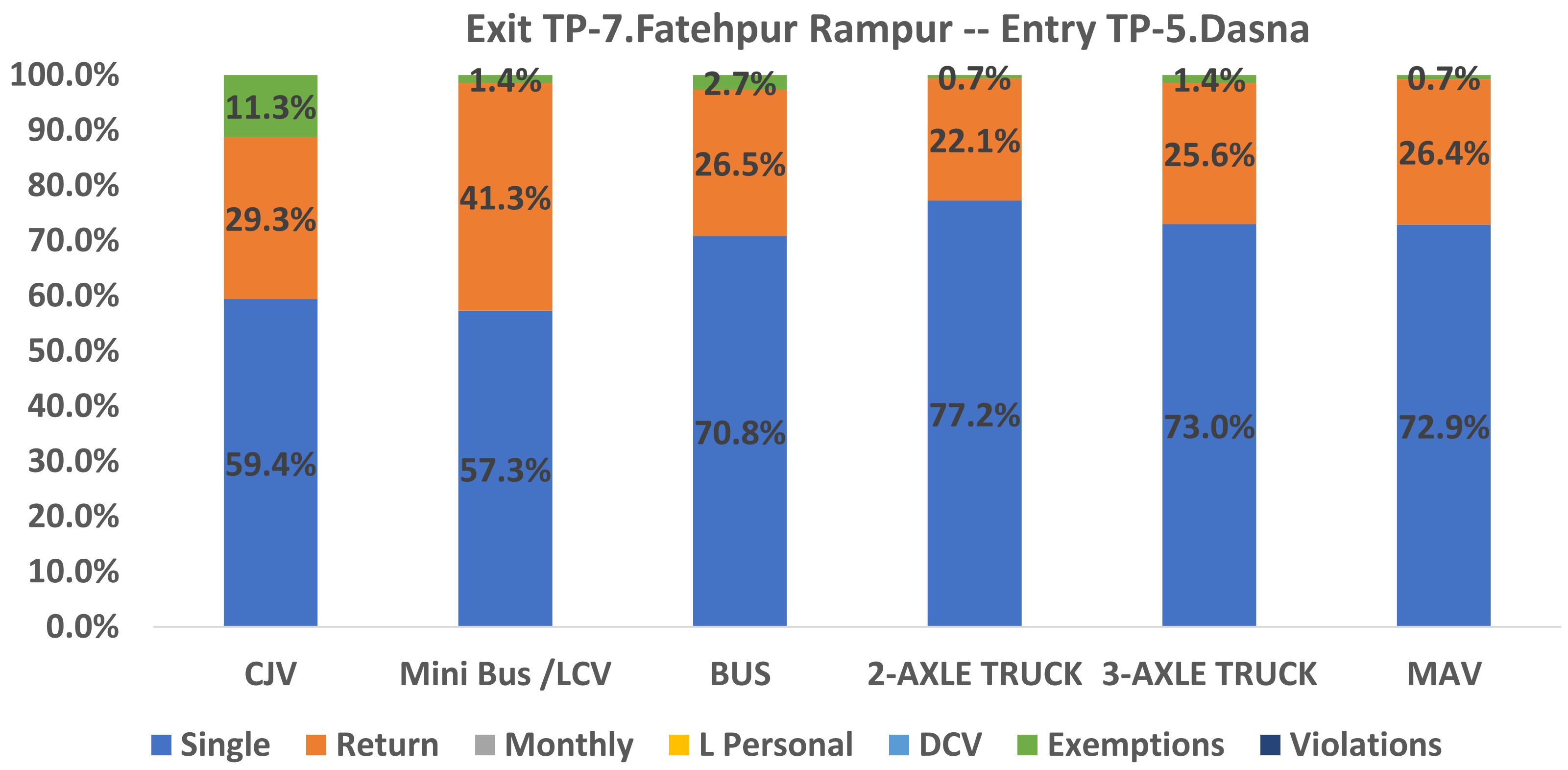
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	59.4%	29.3%	0.0%	0.0%	0.0%	11.3%	0.0%	100.0%
Minibus /LCV	57.3%	41.3%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	70.8%	26.5%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	77.2%	22.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	73.0%	25.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
MAV	72.9%	26.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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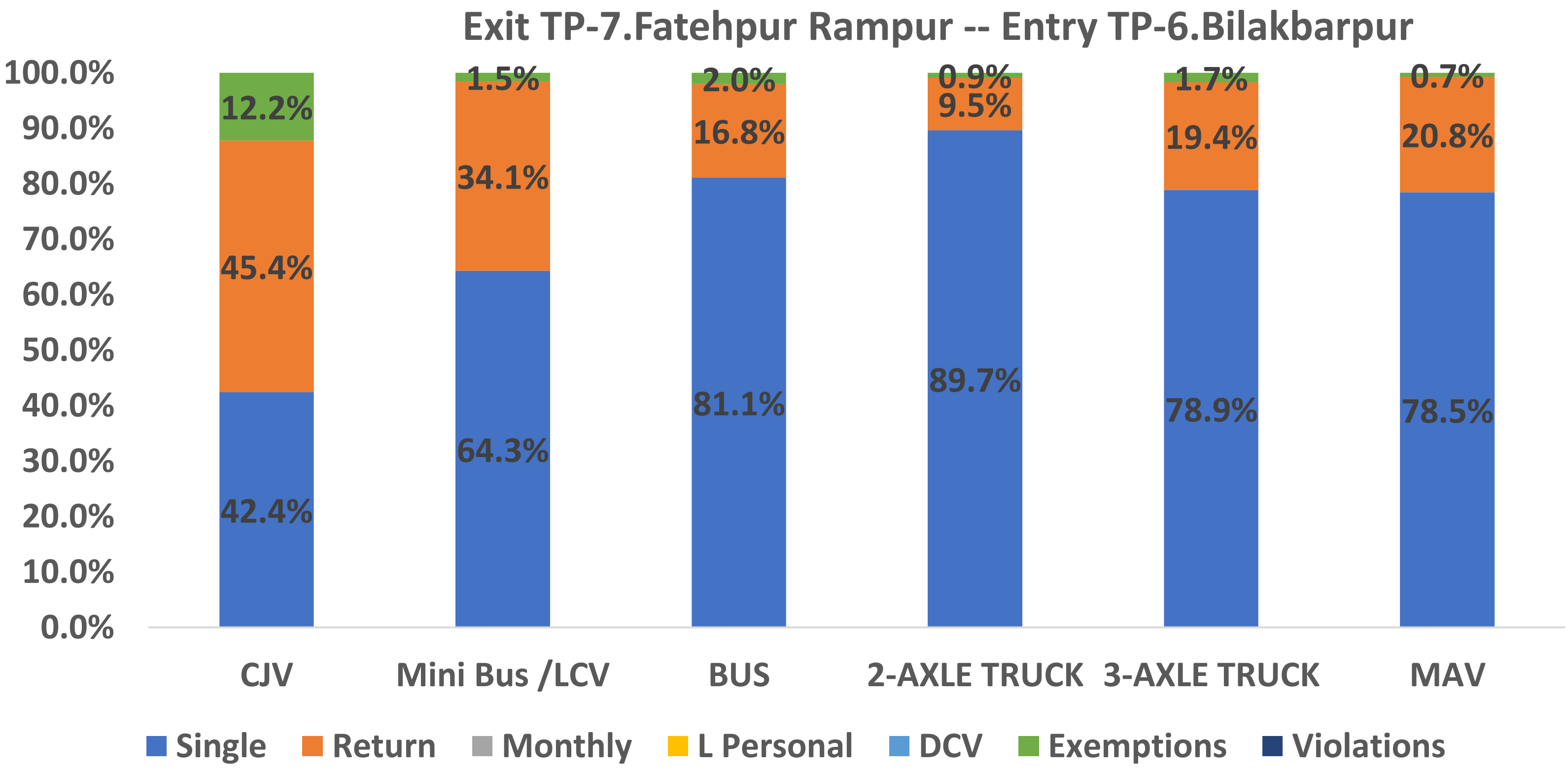
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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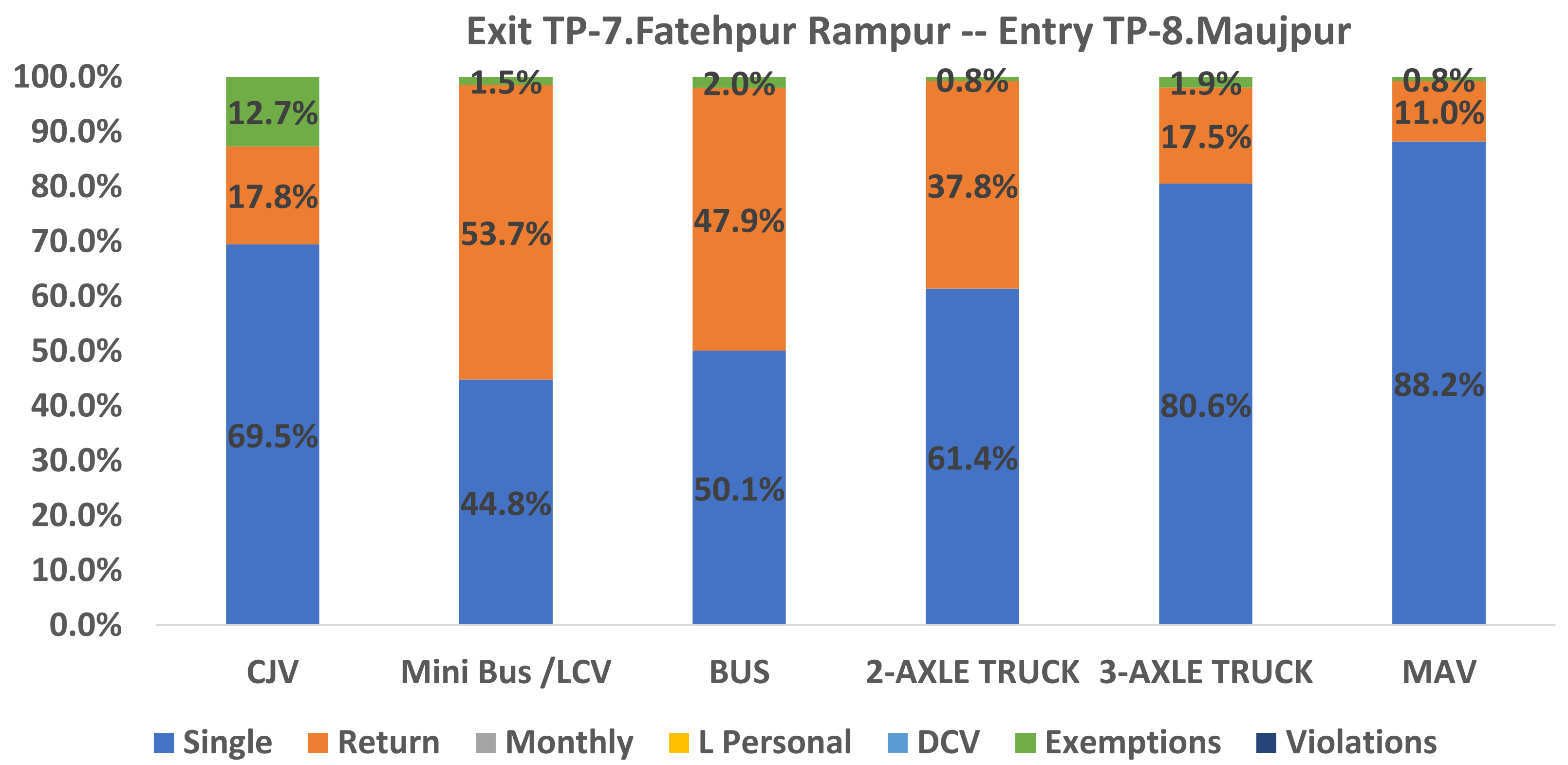
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.5%	17.8%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	44.8%	53.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	50.1%	47.9%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	61.4%	37.8%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	80.6%	17.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
MAV	88.2%	11.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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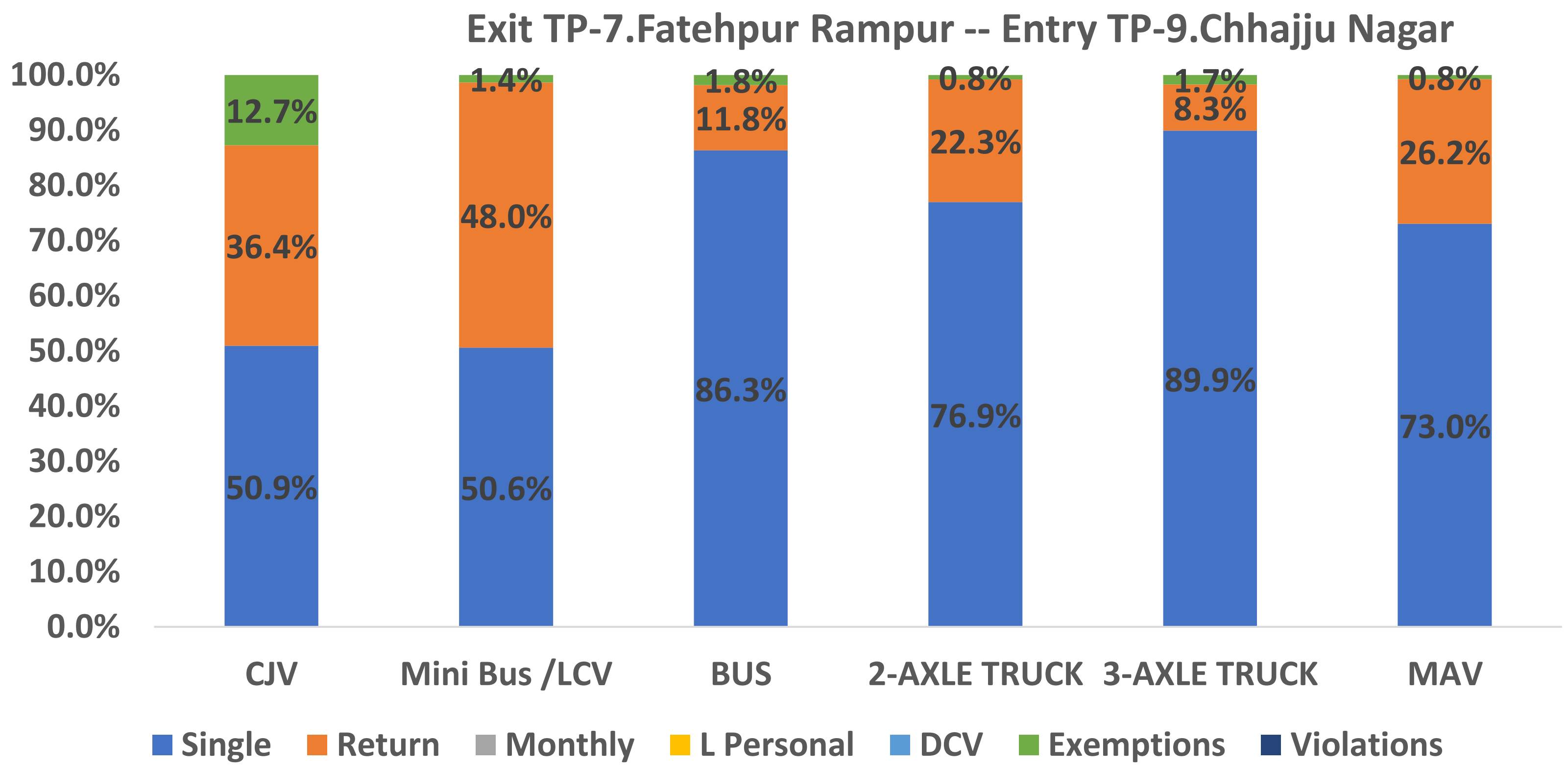
Exit TP-7.Fatehpur Rampur -- Entry TP-9.Chhajju Nagar								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	50.9%	36.4%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	50.6%	48.0%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	86.3%	11.8%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%
2-AXLE TRUCK	76.9%	22.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	89.9%	8.3%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	73.0%	26.2%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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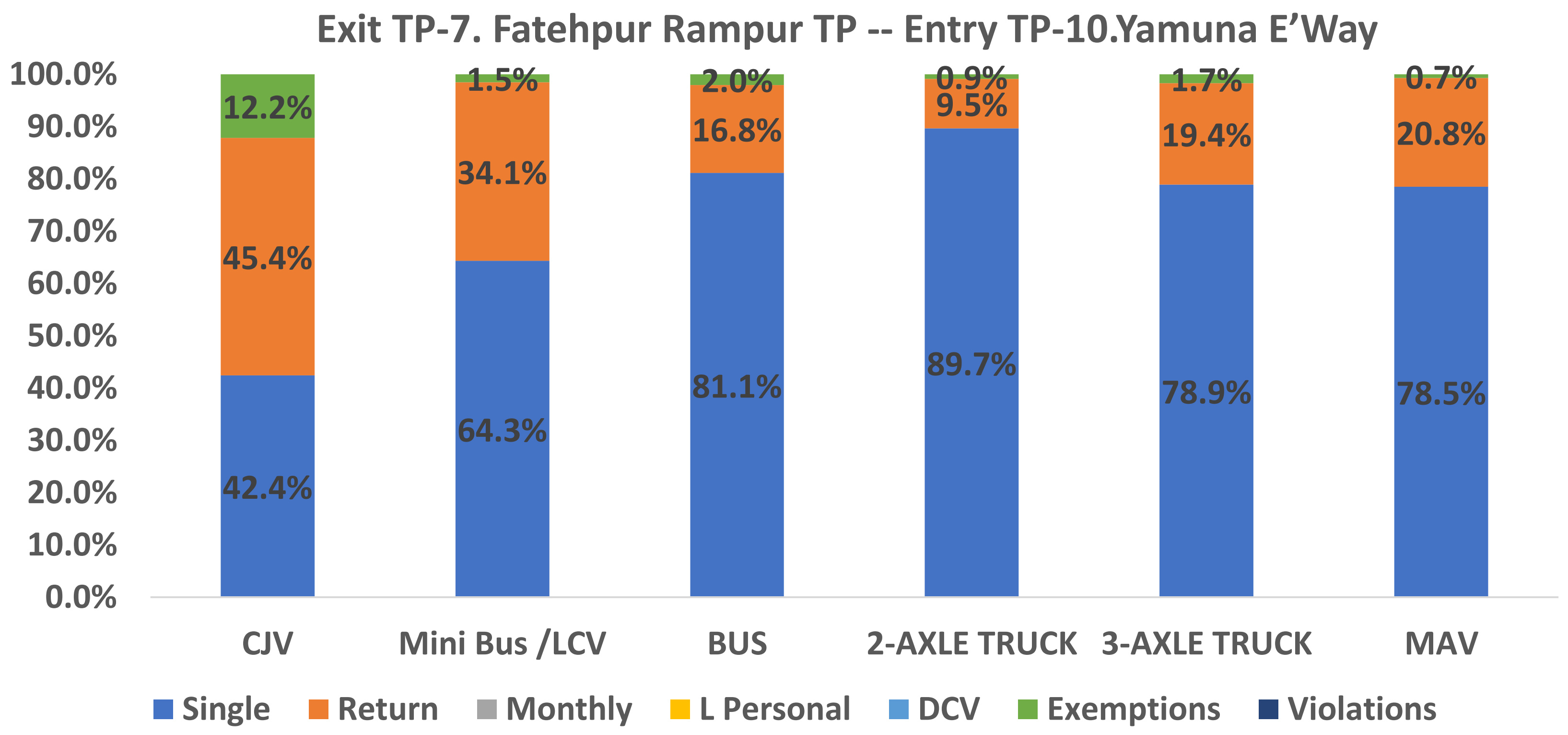
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-10.Yamuna E'Way								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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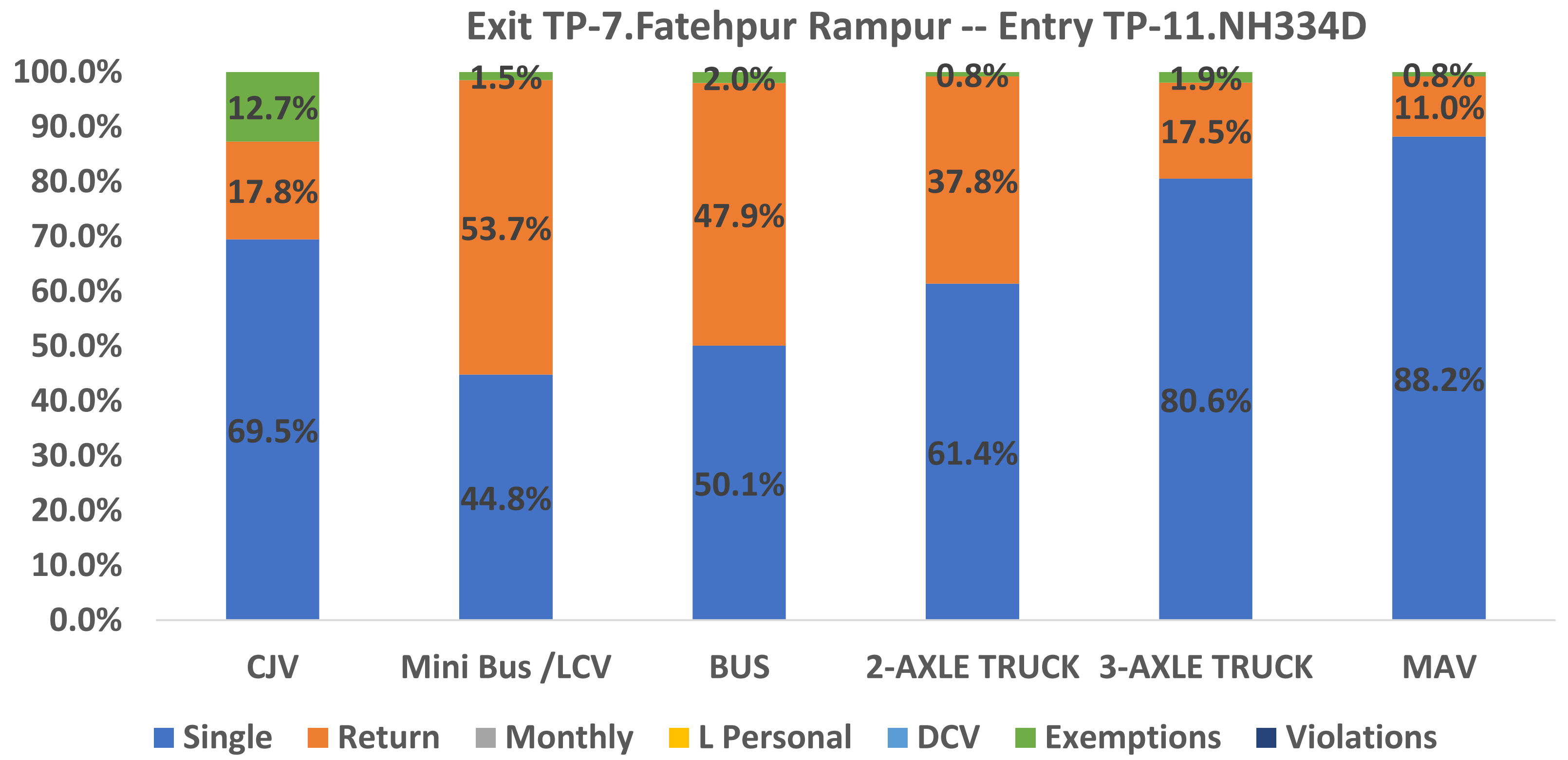
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-11.NH334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.5%	17.8%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	44.8%	53.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	50.1%	47.9%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	61.4%	37.8%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	80.6%	17.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
MAV	88.2%	11.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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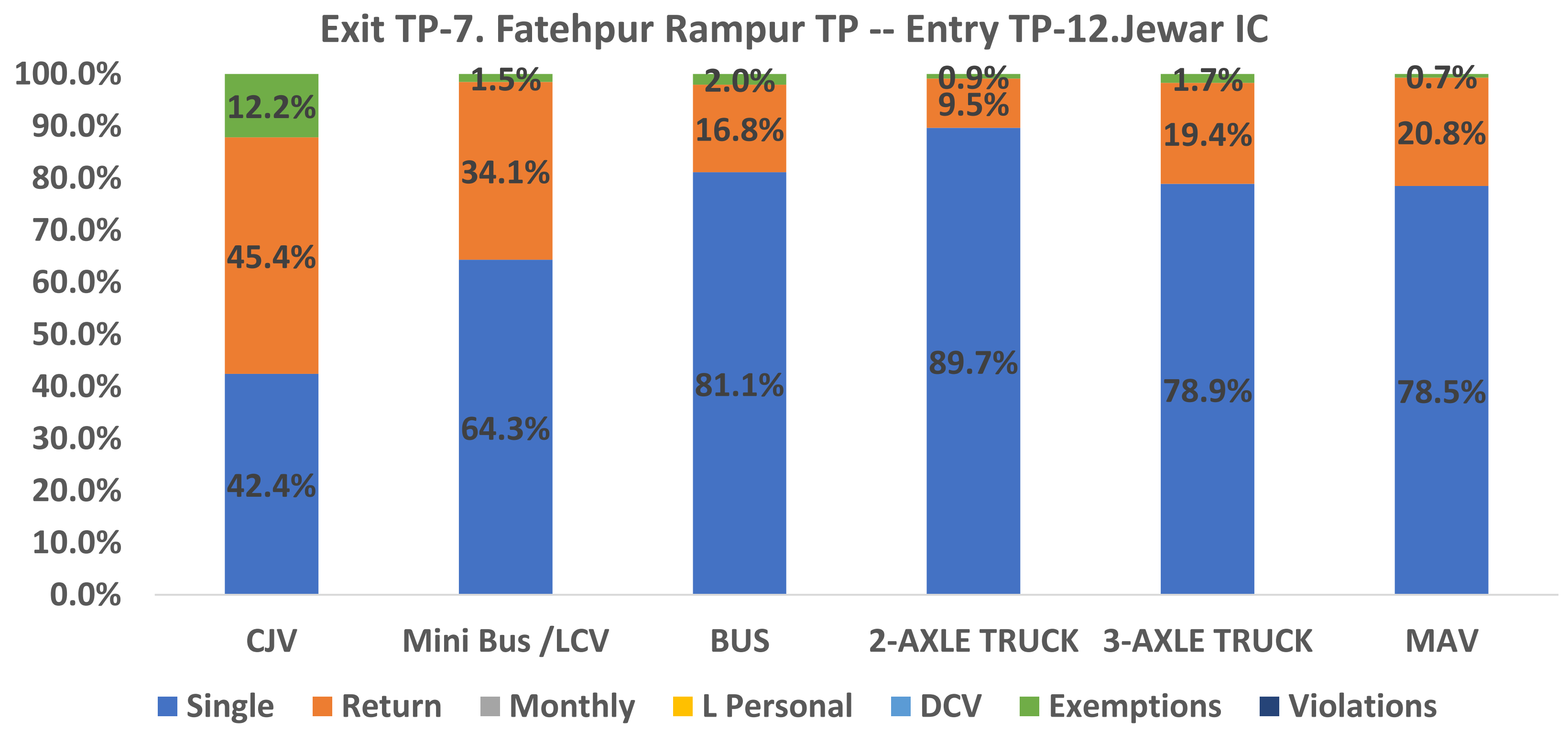
RECOMMENDED TRIP CATEGORIES – TP7

Exit TP-7.Fatehpur Rampur -- Entry TP-12.Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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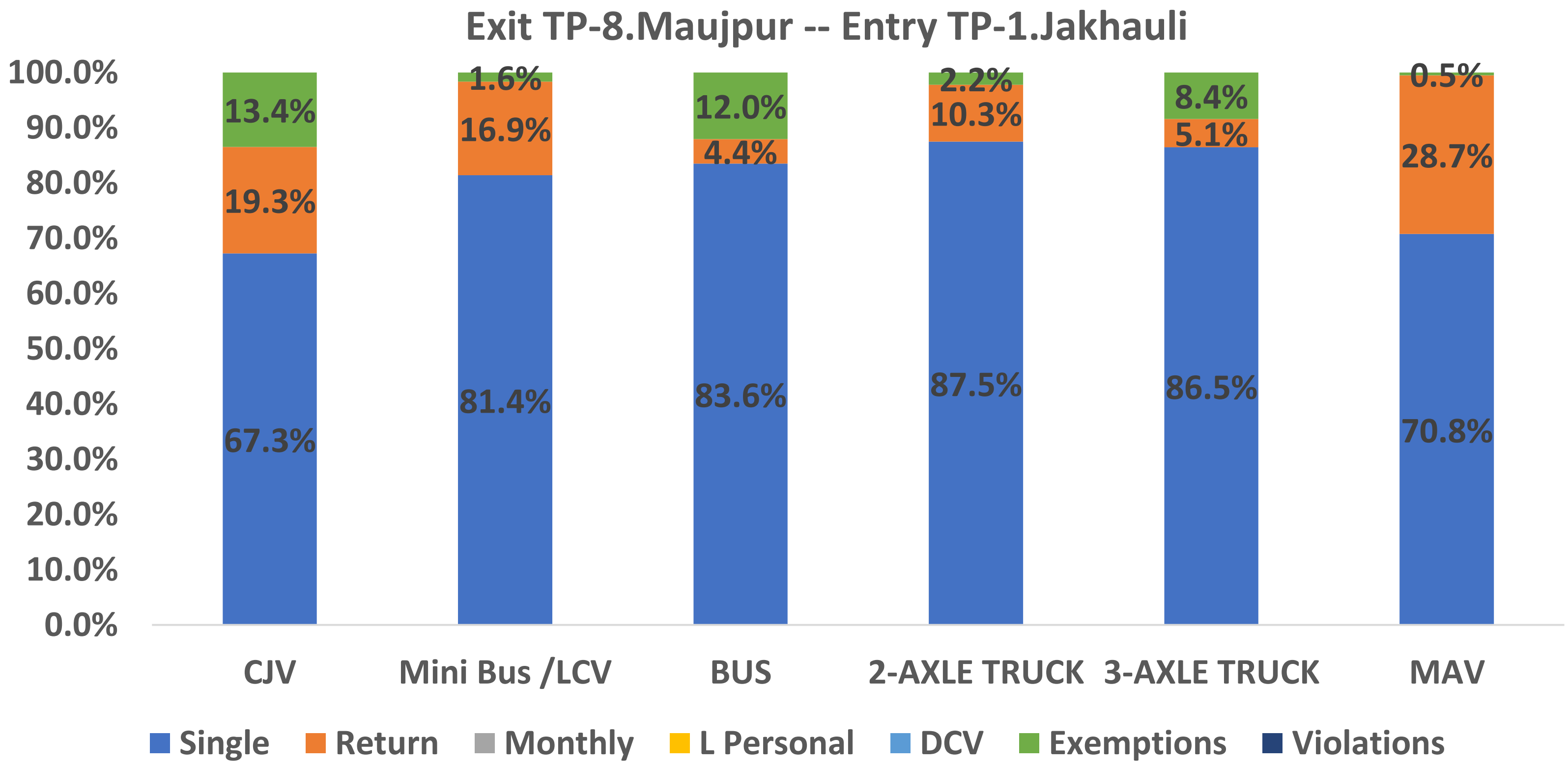
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-1.Jakhauli								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	67.3%	19.3%	0.0%	0.0%	0.0%	13.4%	0.0%	100.0%
Minibus /LCV	81.4%	16.9%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	83.6%	4.4%	0.0%	0.0%	0.0%	12.0%	0.0%	100.0%
2-AXLE TRUCK	87.5%	10.3%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
3-AXLE TRUCK	86.5%	5.1%	0.0%	0.0%	0.0%	8.4%	0.0%	100.0%
MAV	70.8%	28.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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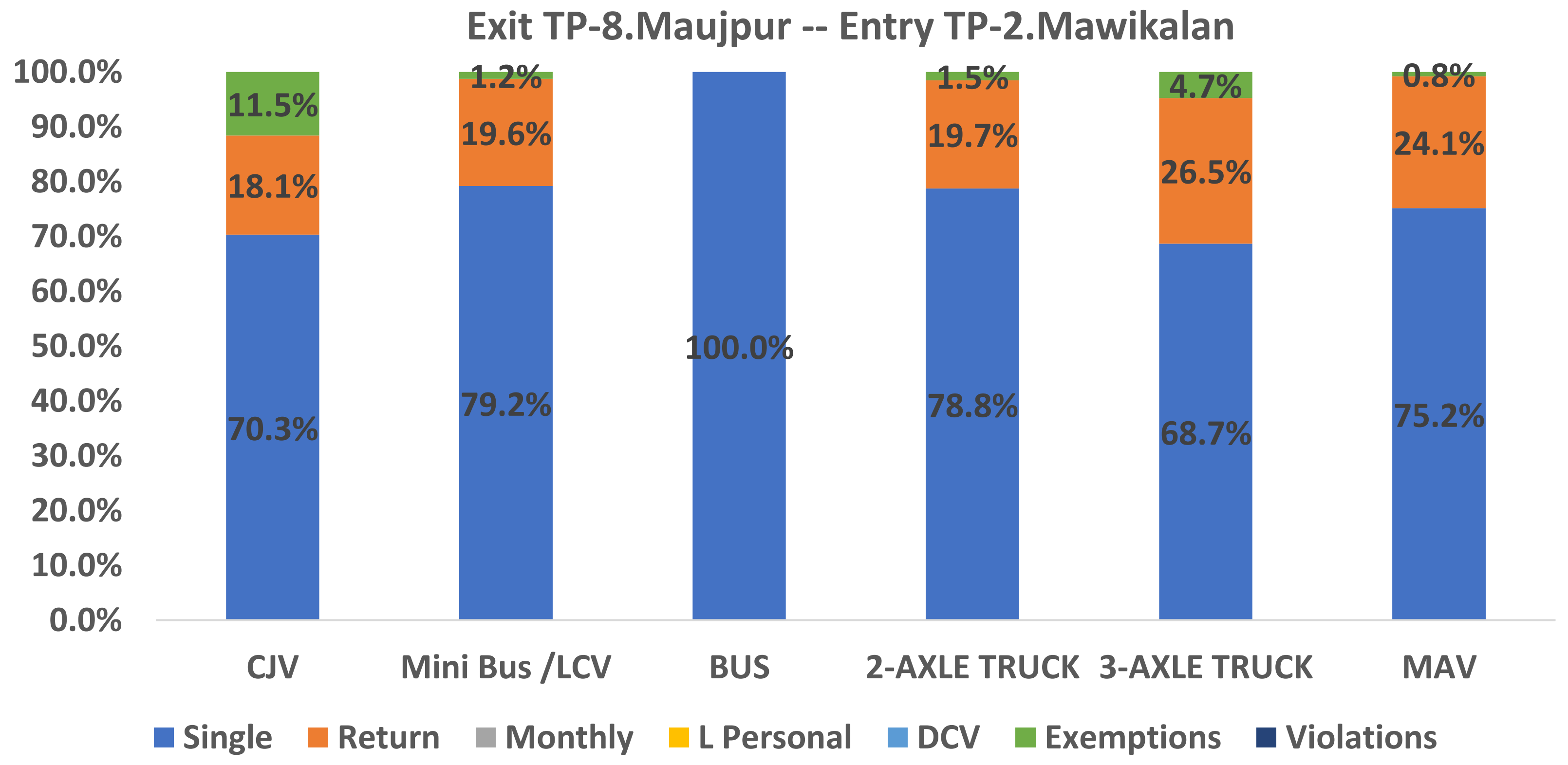
Exit TP-8.Maujpur -- Entry TP-2.Mawikalan								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	70.3%	18.1%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	79.2%	19.6%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
BUS	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	78.8%	19.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
3-AXLE TRUCK	68.7%	26.5%	0.0%	0.0%	0.0%	4.7%	0.0%	100.0%
MAV	75.2%	24.1%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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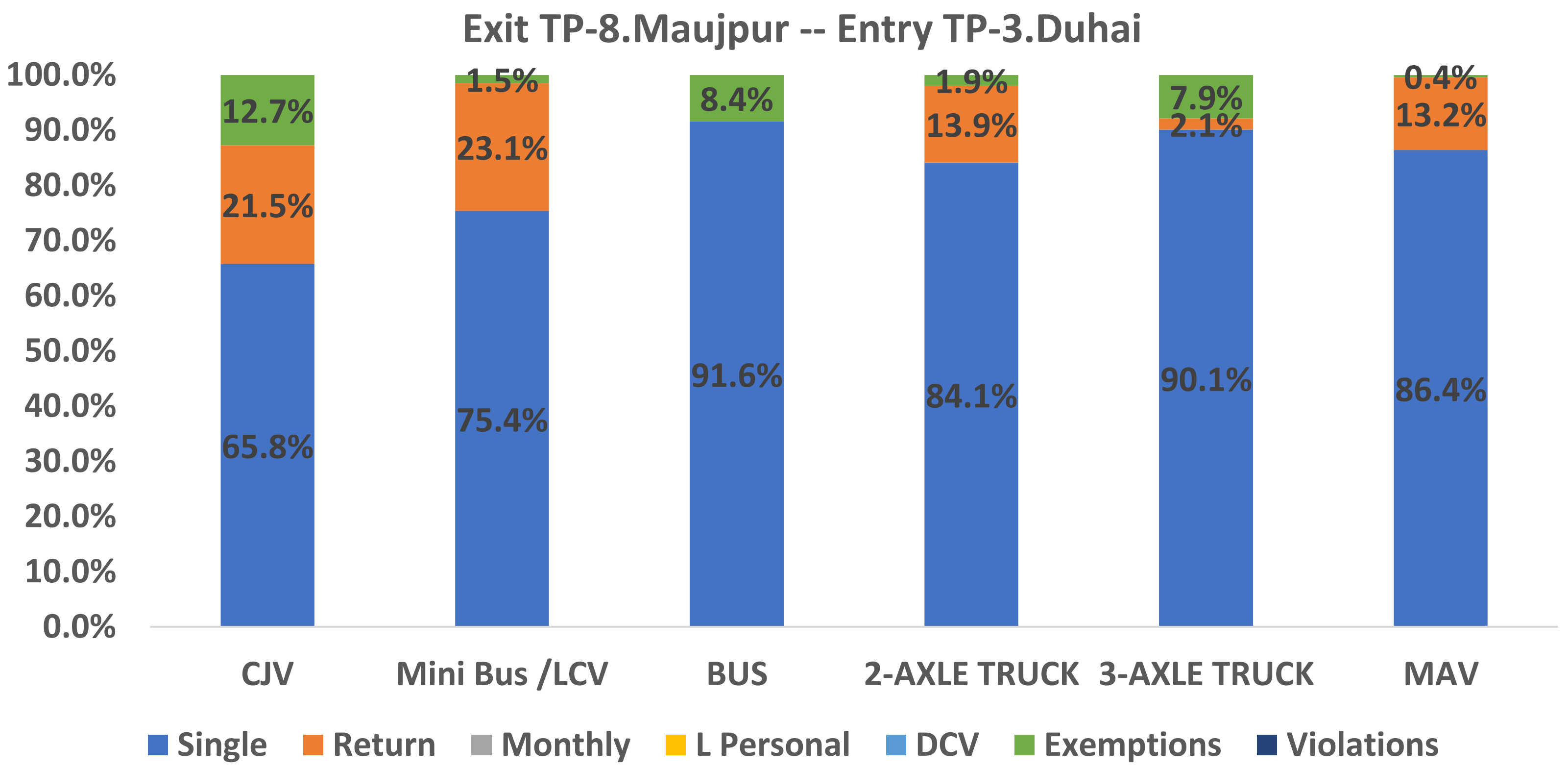
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-3.Duhai								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	65.8%	21.5%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	75.4%	23.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	91.6%	0.0%	0.0%	0.0%	0.0%	8.4%	0.0%	100.0%
2-AXLE TRUCK	84.1%	13.9%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
3-AXLE TRUCK	90.1%	2.1%	0.0%	0.0%	0.0%	7.9%	0.0%	100.0%
MAV	86.4%	13.2%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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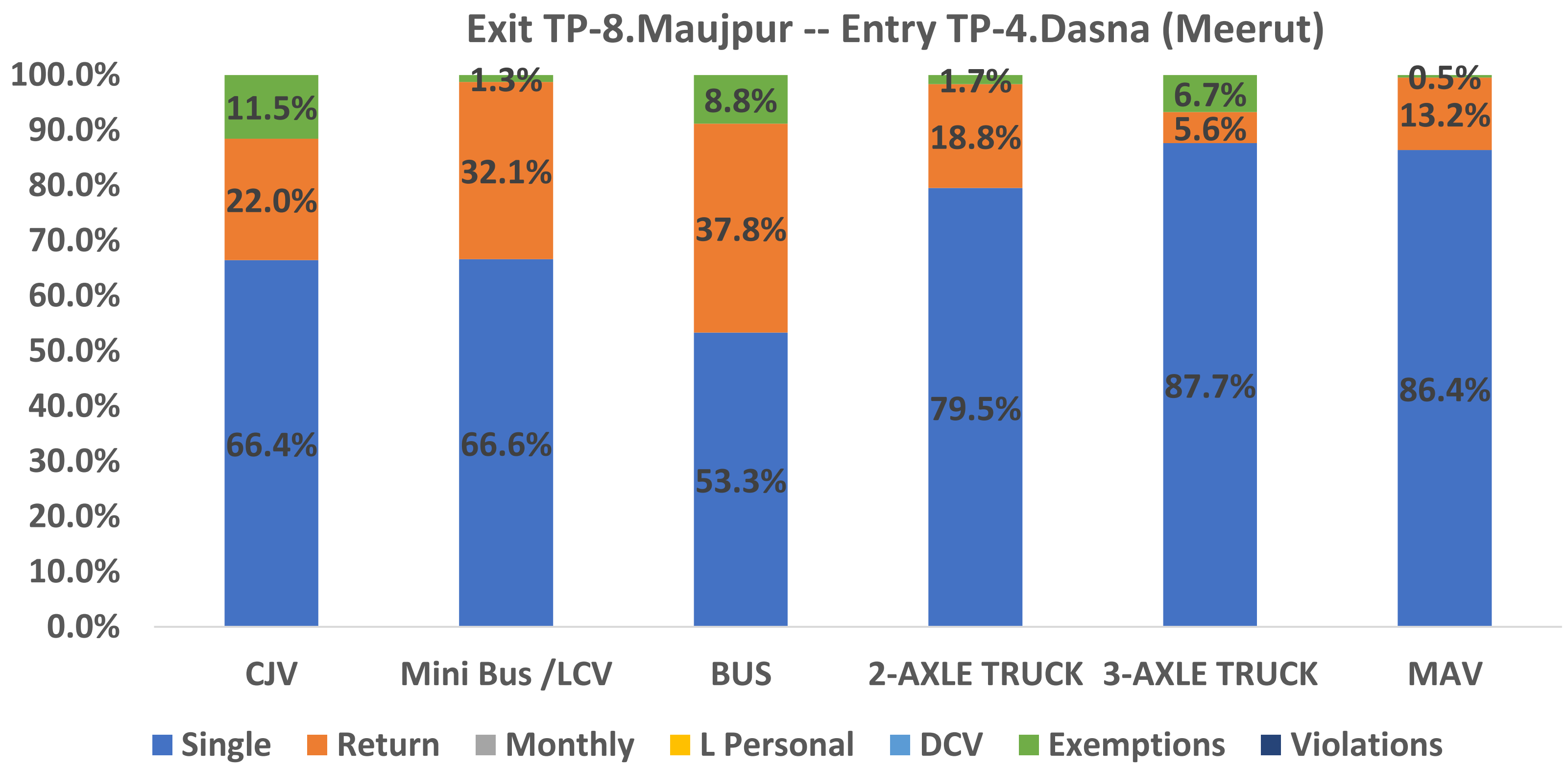
Exit TP-8.Maujpur -- Entry TP-4.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	66.4%	22.0%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	66.6%	32.1%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	53.3%	37.8%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
2-AXLE TRUCK	79.5%	18.8%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
3-AXLE TRUCK	87.7%	5.6%	0.0%	0.0%	0.0%	6.7%	0.0%	100.0%
MAV	86.4%	13.2%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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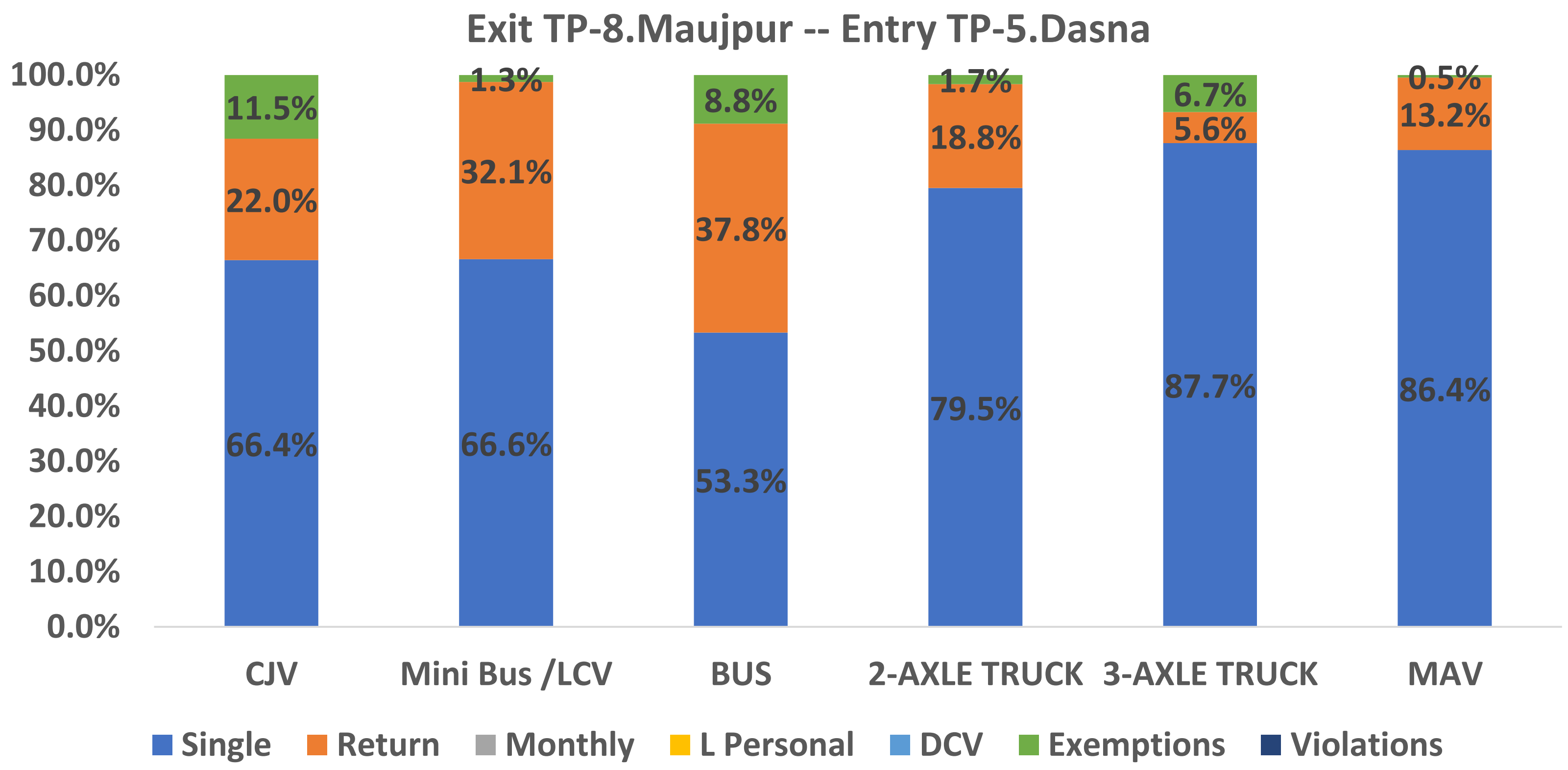
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	66.4%	22.0%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	66.6%	32.1%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	53.3%	37.8%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
2-AXLE TRUCK	79.5%	18.8%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
3-AXLE TRUCK	87.7%	5.6%	0.0%	0.0%	0.0%	6.7%	0.0%	100.0%
MAV	86.4%	13.2%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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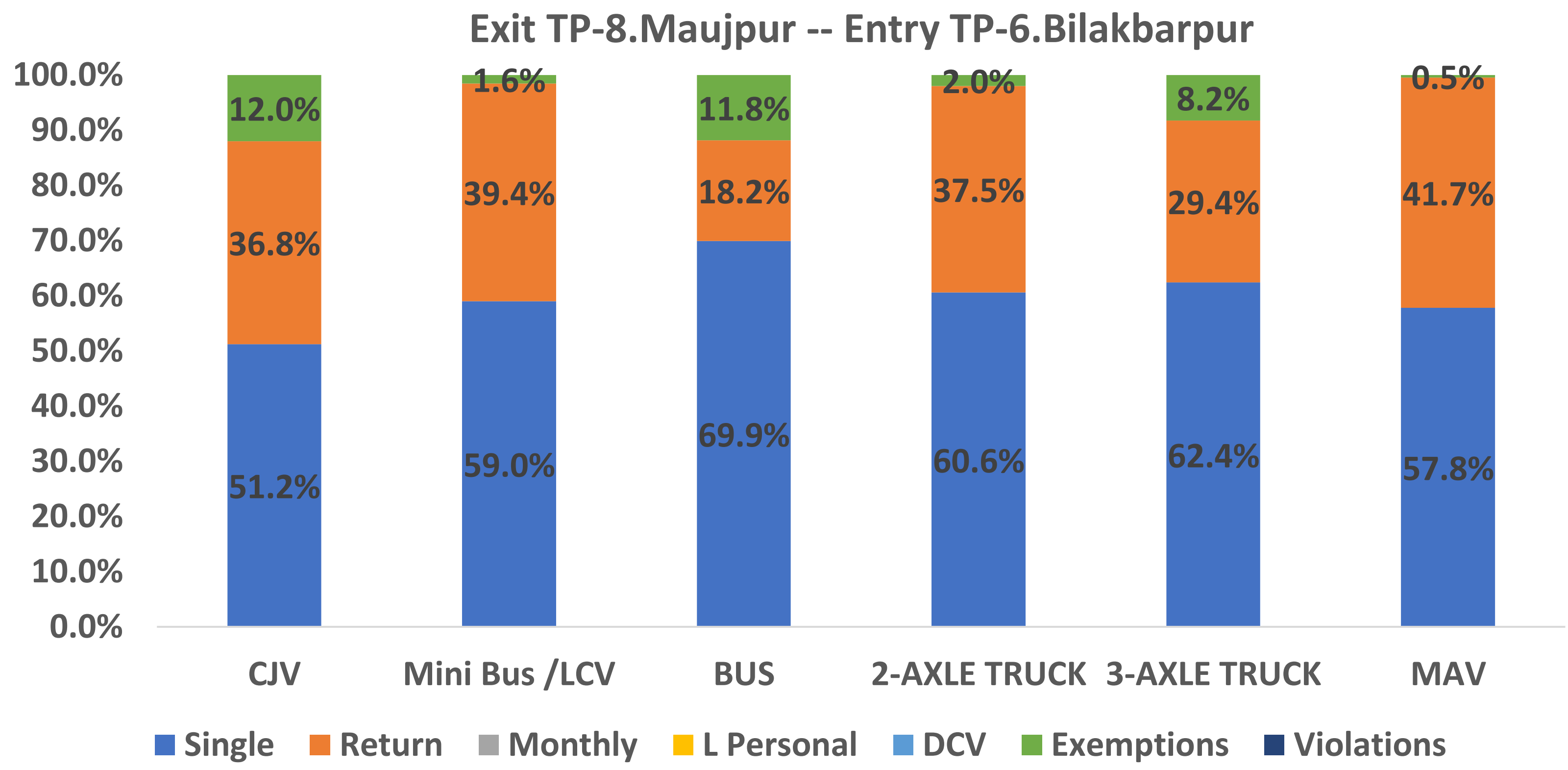
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-6.Bilakbarpur								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	51.2%	36.8%	0.0%	0.0%	0.0%	12.0%	0.0%	100.0%
Minibus /LCV	59.0%	39.4%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	69.9%	18.2%	0.0%	0.0%	0.0%	11.8%	0.0%	100.0%
2-AXLE TRUCK	60.6%	37.5%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	62.4%	29.4%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
MAV	57.8%	41.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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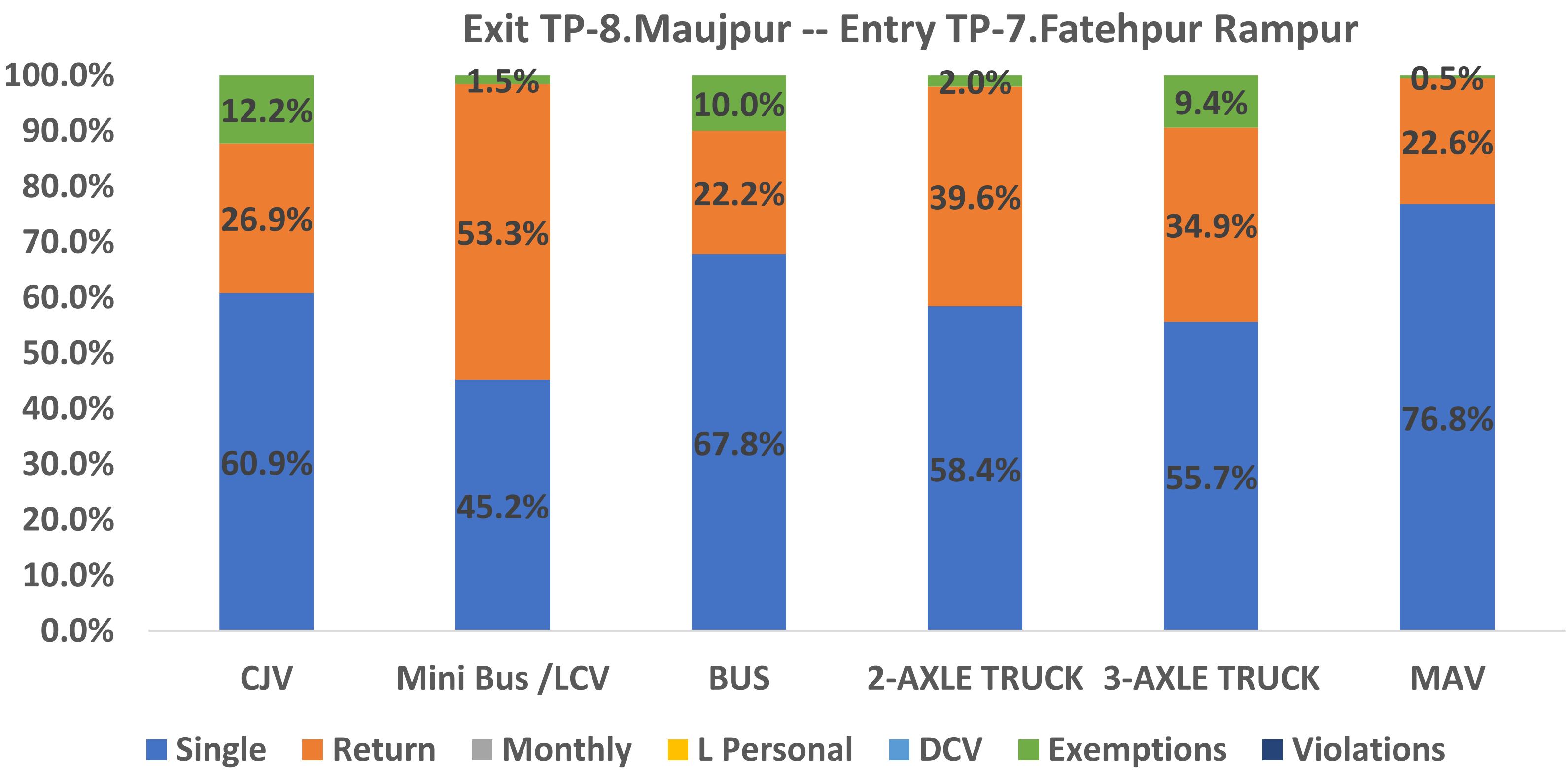
Exit TP-8.Maujpur -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	60.9%	26.9%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	45.2%	53.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	67.8%	22.2%	0.0%	0.0%	0.0%	10.0%	0.0%	100.0%
2-AXLE TRUCK	58.4%	39.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	55.7%	34.9%	0.0%	0.0%	0.0%	9.4%	0.0%	100.0%
MAV	76.8%	22.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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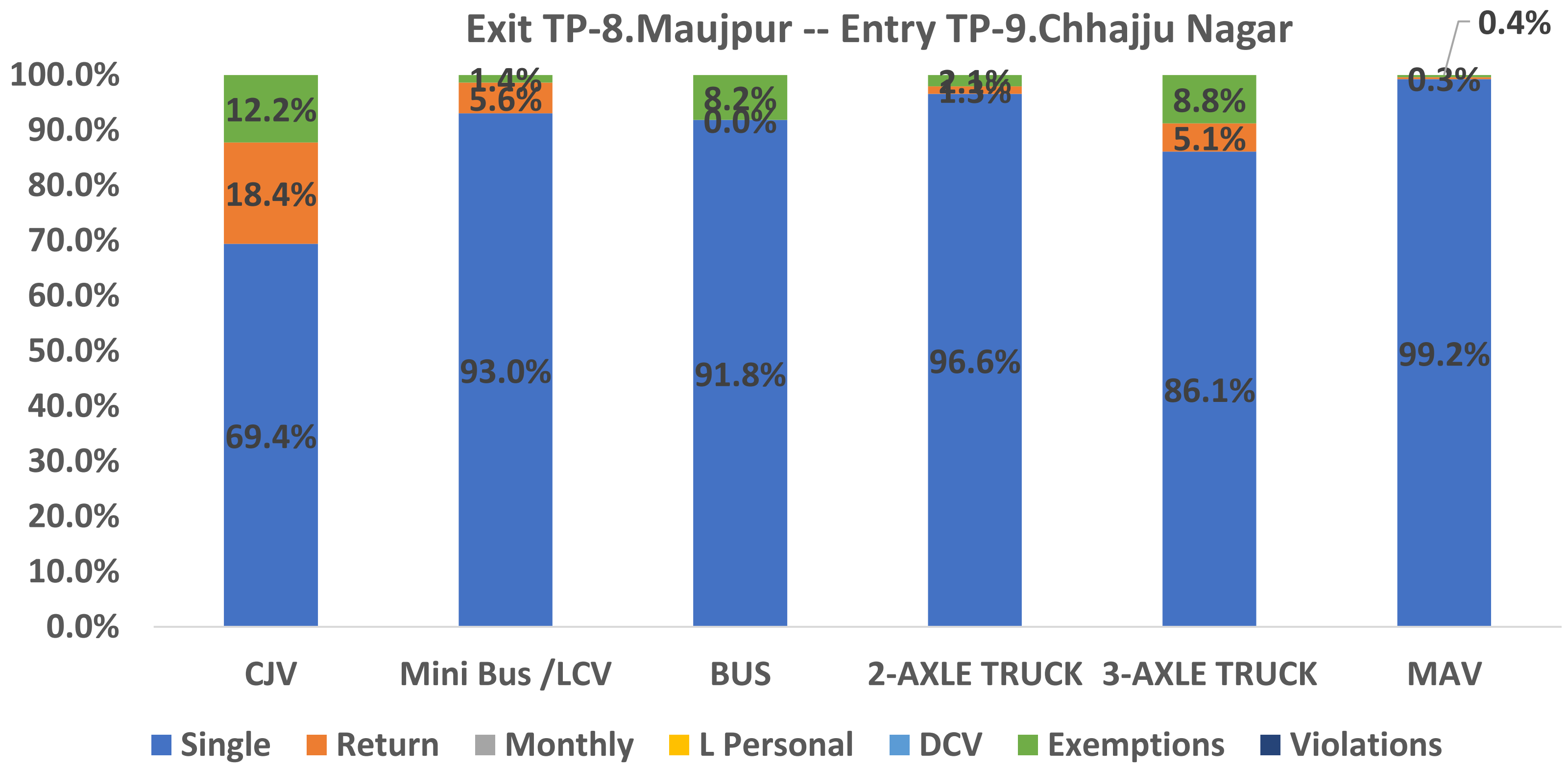
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-9.Chhajju Nagar								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	69.4%	18.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	93.0%	5.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	91.8%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
2-AXLE TRUCK	96.6%	1.3%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
3-AXLE TRUCK	86.1%	5.1%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
MAV	99.2%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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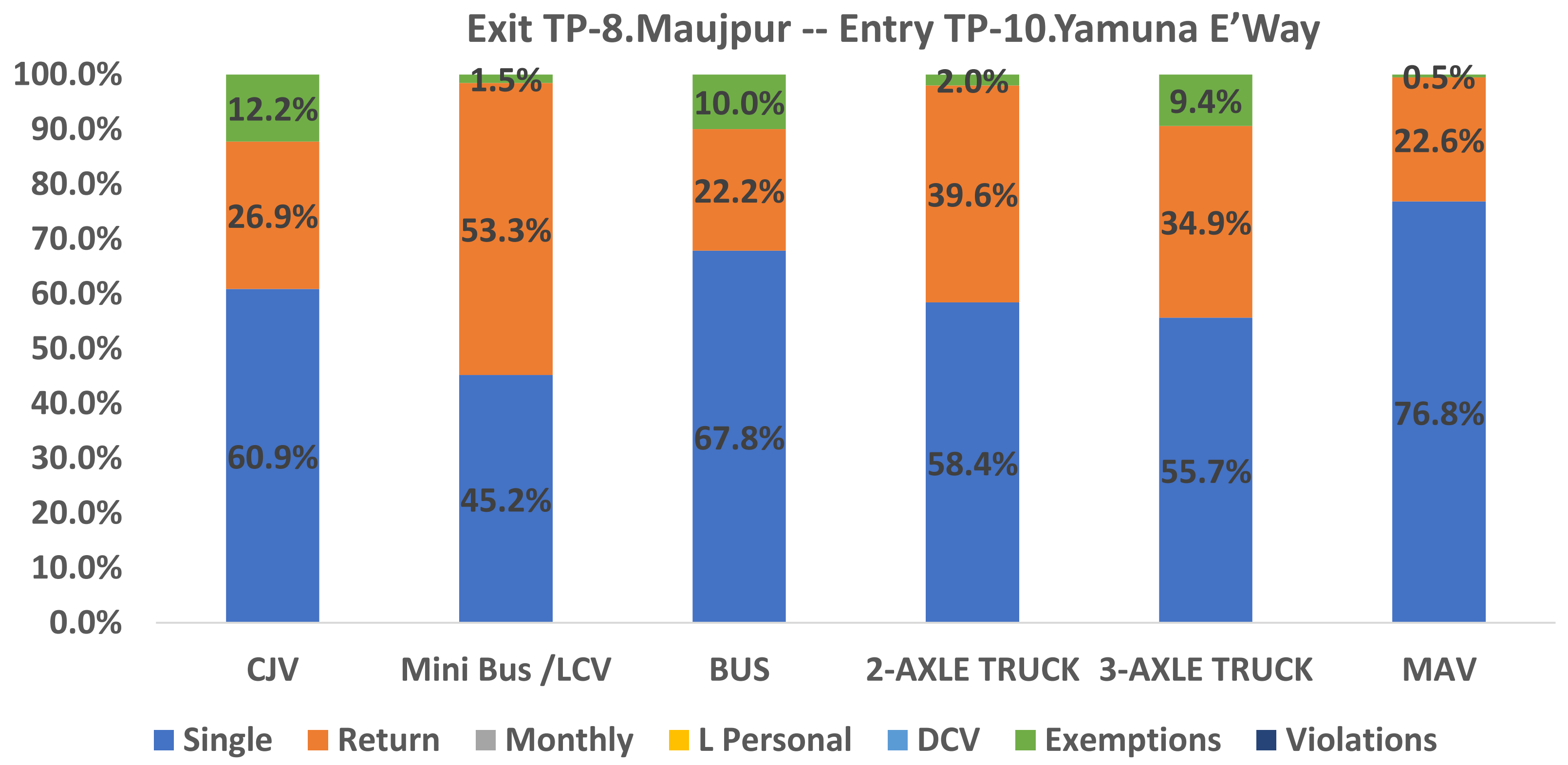
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	60.9%	26.9%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	45.2%	53.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	67.8%	22.2%	0.0%	0.0%	0.0%	10.0%	0.0%	100.0%
2-AXLE TRUCK	58.4%	39.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	55.7%	34.9%	0.0%	0.0%	0.0%	9.4%	0.0%	100.0%
MAV	76.8%	22.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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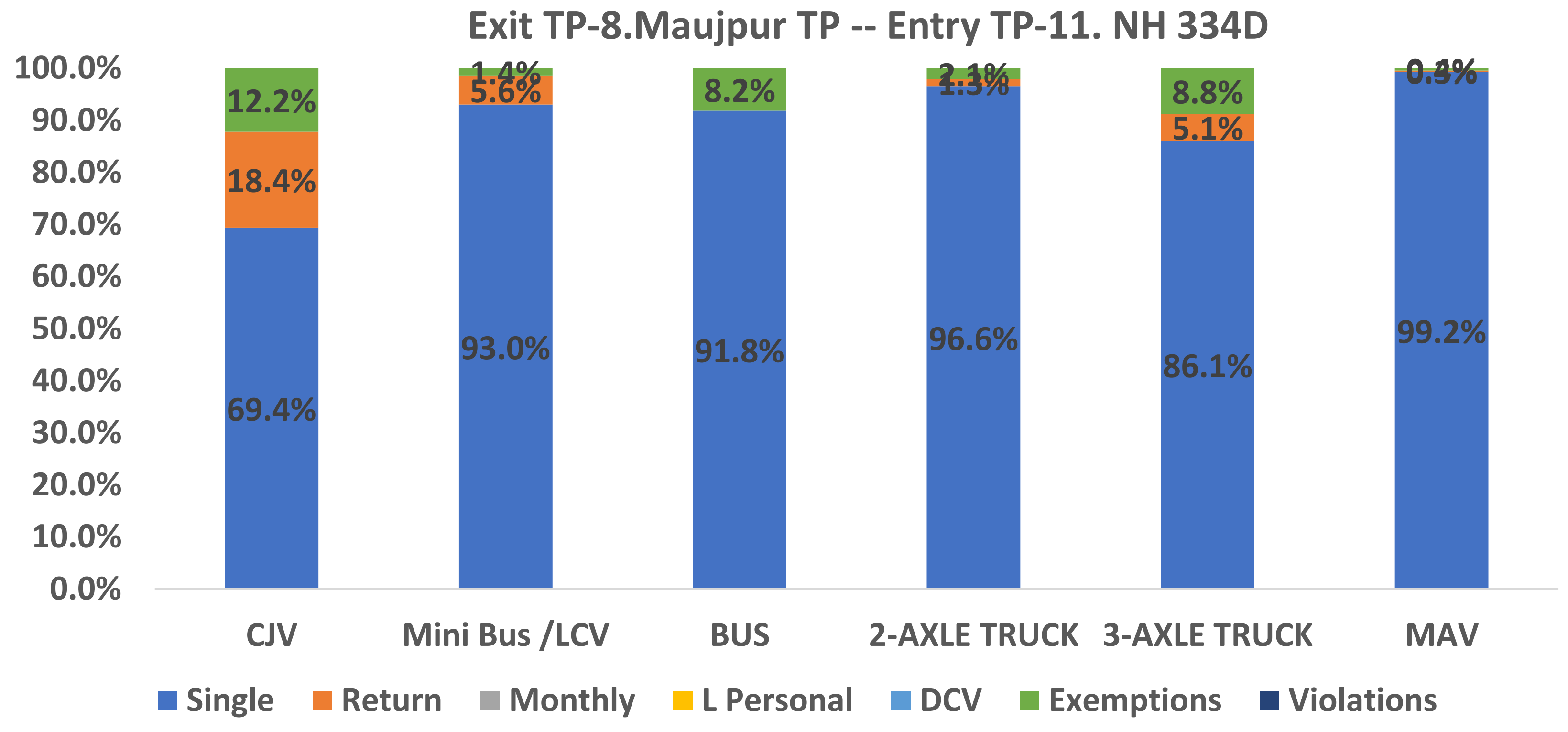
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-11. NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.4%	18.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	93.0%	5.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	91.8%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
2-AXLE TRUCK	96.6%	1.3%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
3-AXLE TRUCK	86.1%	5.1%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
MAV	99.2%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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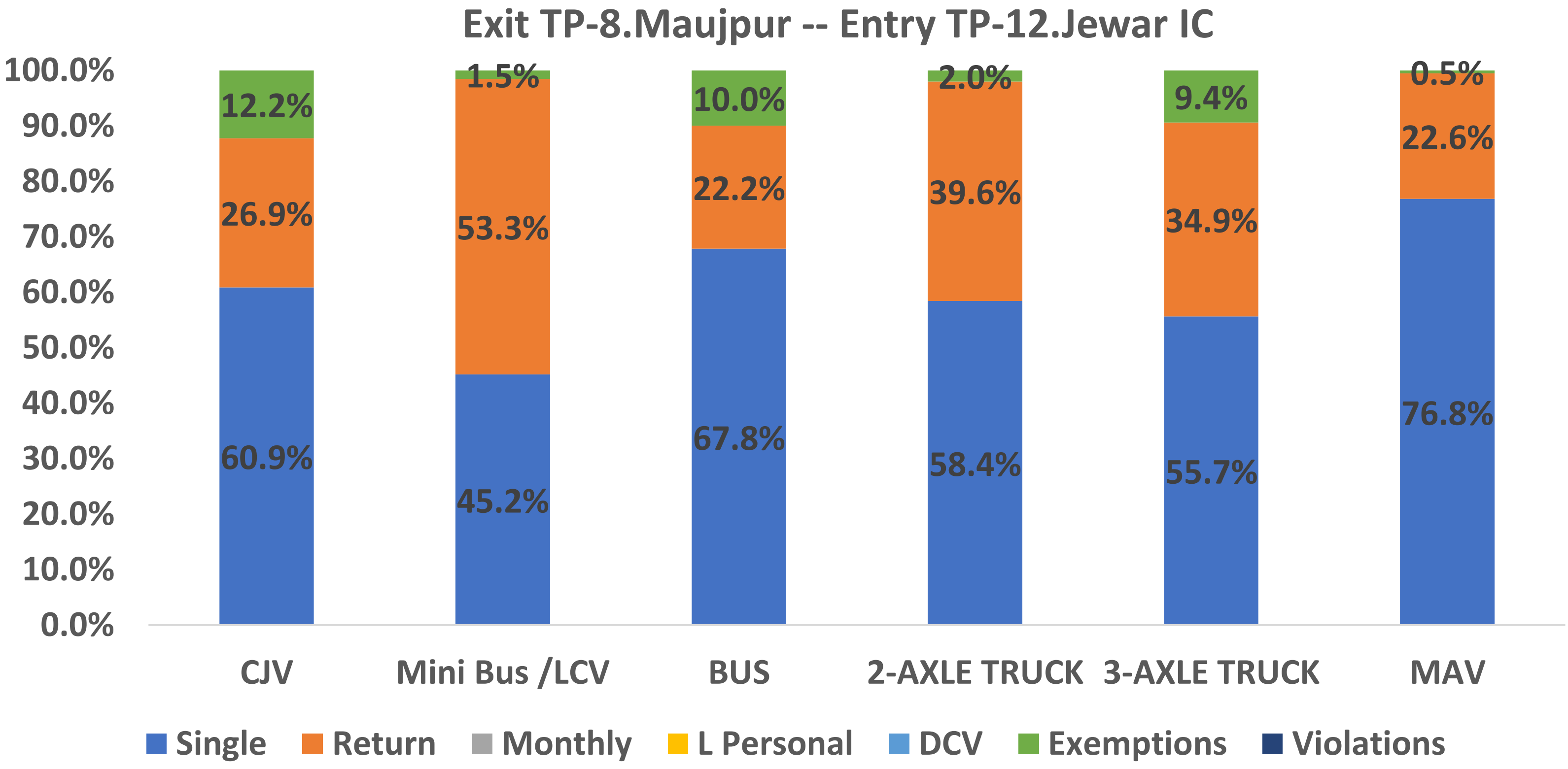
RECOMMENDED TRIP CATEGORIES – TP08

Exit TP-8.Maujpur -- Entry TP-12.Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	60.9%	26.9%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	45.2%	53.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	67.8%	22.2%	0.0%	0.0%	0.0%	10.0%	0.0%	100.0%
2-AXLE TRUCK	58.4%	39.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	55.7%	34.9%	0.0%	0.0%	0.0%	9.4%	0.0%	100.0%
MAV	76.8%	22.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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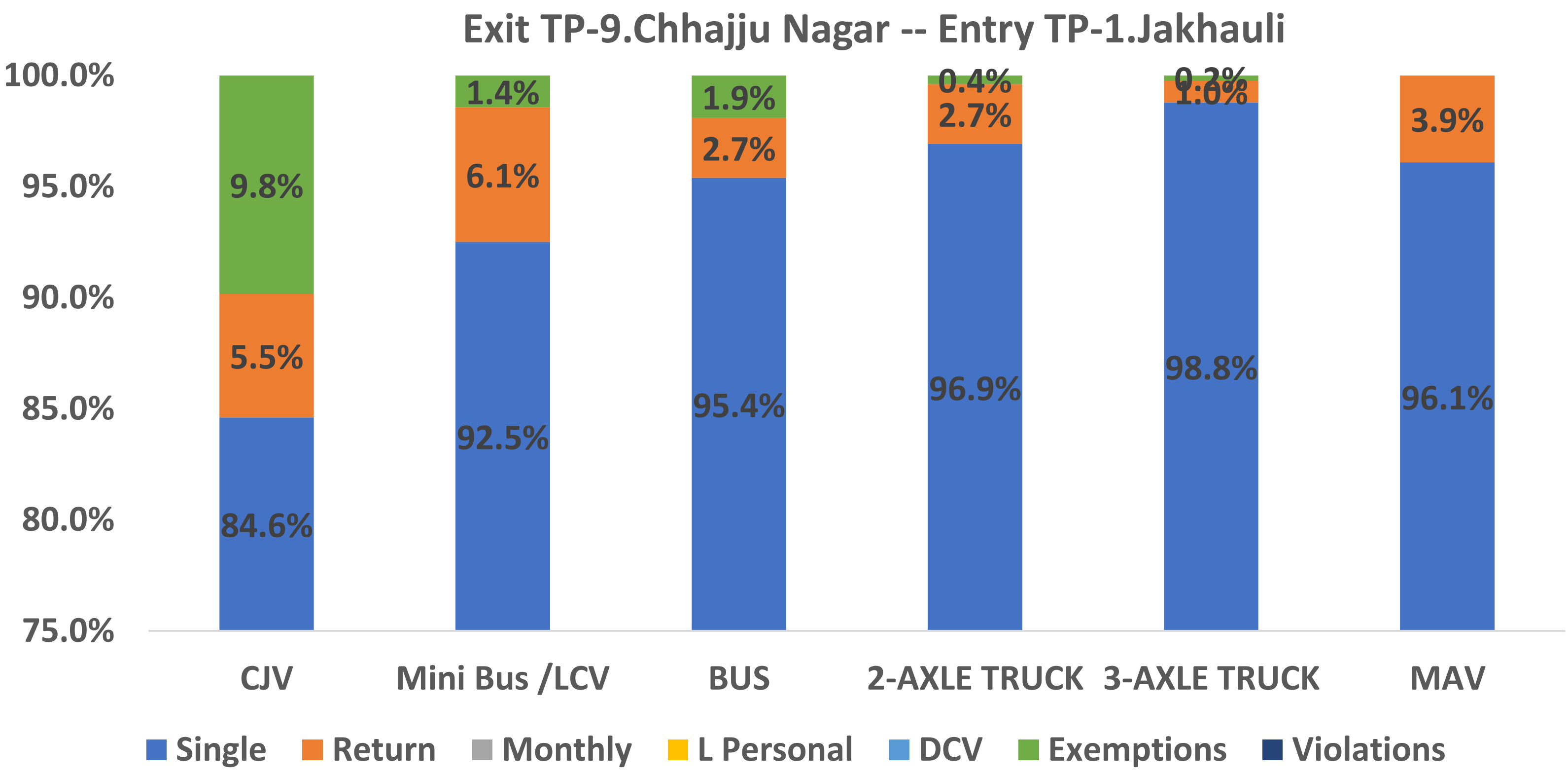
Exit TP-9.Chhajju Nagar -- Entry TP-1.Jakhauli								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	84.6%	5.5%	0.0%	0.0%	0.0%	9.8%	0.0%	100.0%
Minibus /LCV	92.5%	6.1%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	95.4%	2.7%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
2-AXLE TRUCK	96.9%	2.7%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	98.8%	1.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	96.1%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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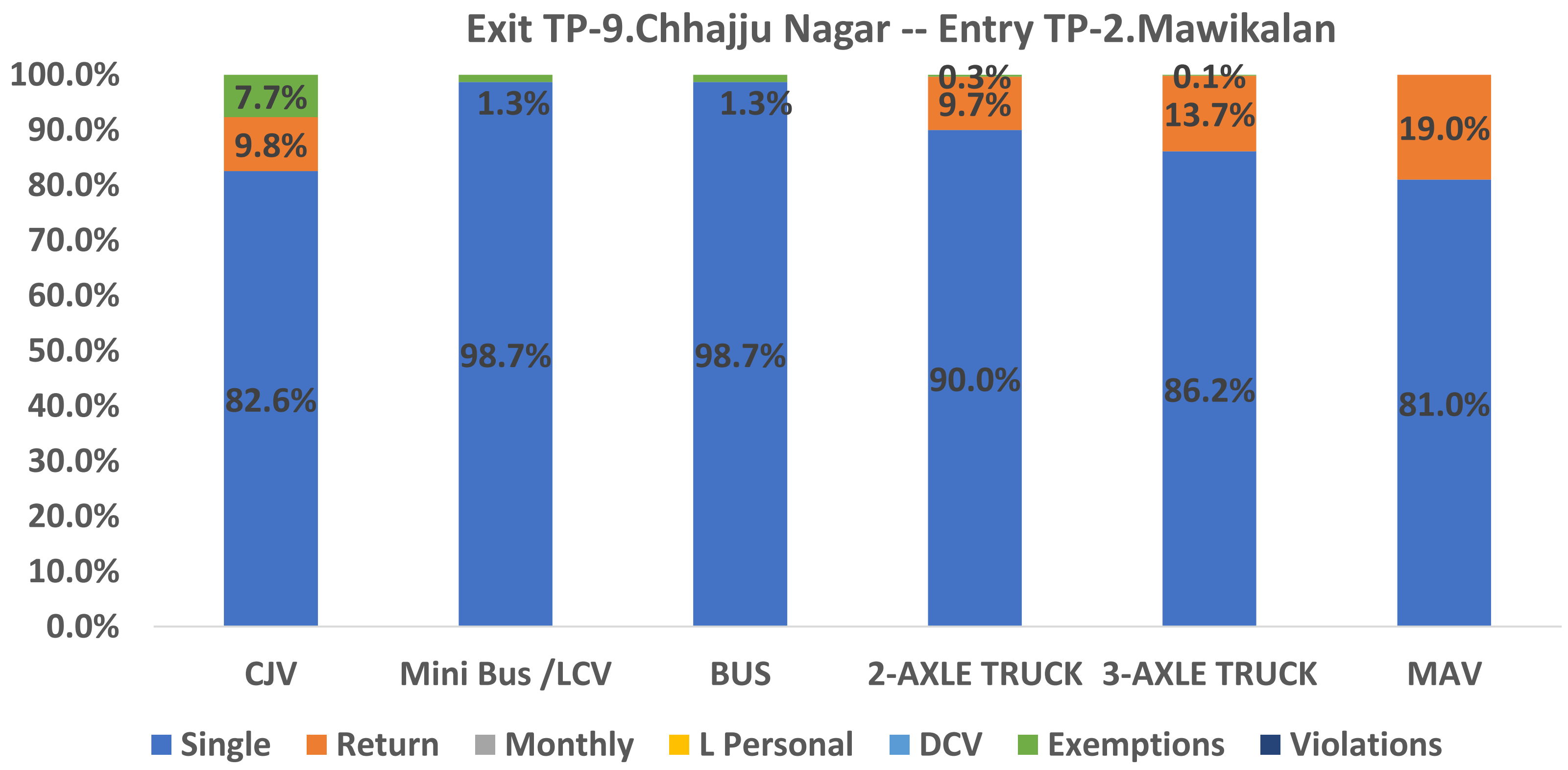
RECOMMENDED TRIP CATEGORIES – TP09

Exit TP-9.Chhajju Nagar -- Entry TP-2.Mawikalan								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	82.6%	9.8%	0.0%	0.0%	0.0%	7.7%	0.0%	100.0%
Minibus /LCV	98.7%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	98.7%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
2-AXLE TRUCK	90.0%	9.7%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	86.2%	13.7%	0.0%	0.0%	0.0%	0.1%	0.0%	100.0%
MAV	81.0%	19.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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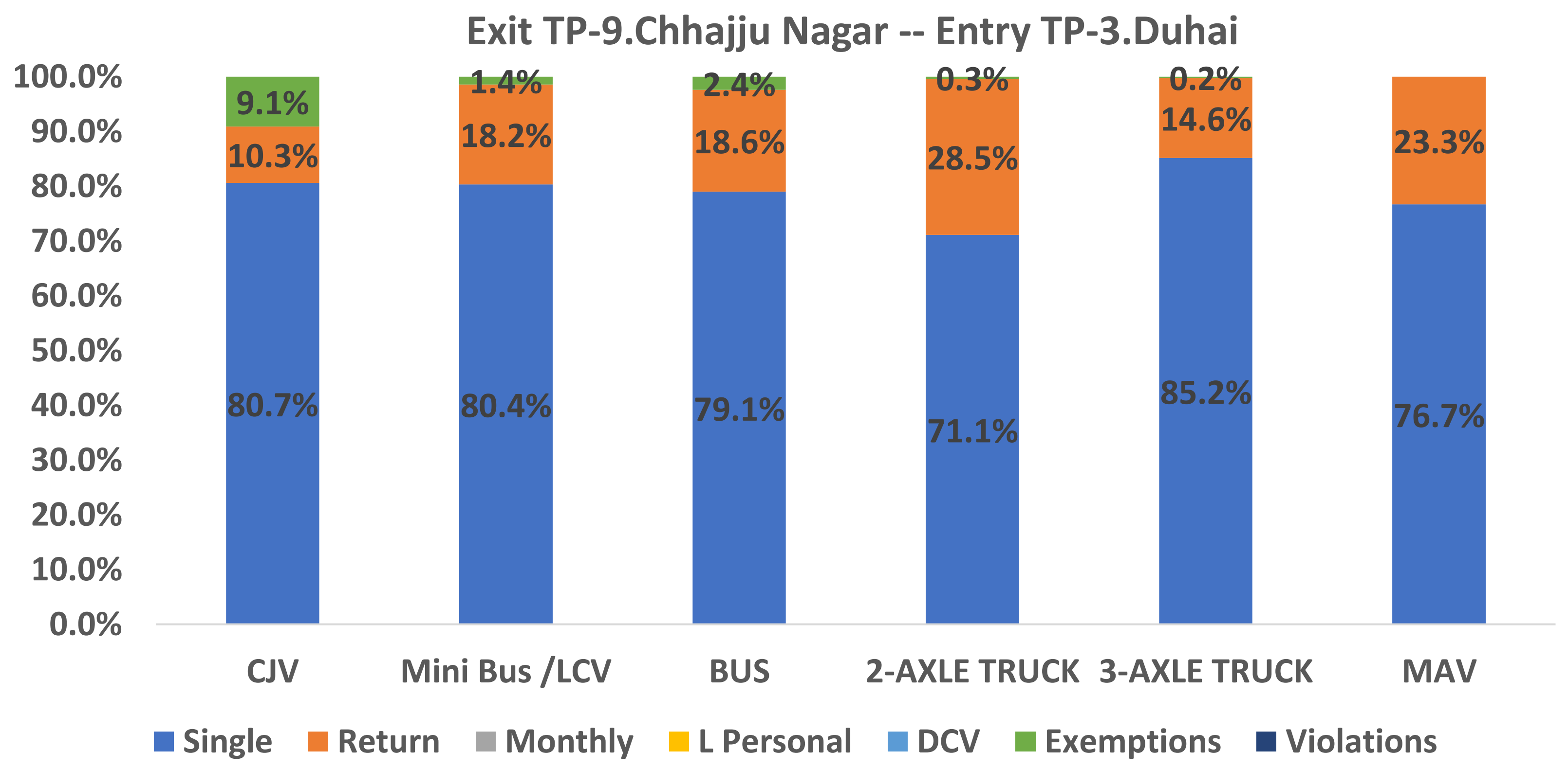
Exit TP-9.Chhajju Nagar -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	80.7%	10.3%	0.0%	0.0%	0.0%	9.1%	0.0%	100.0%
Minibus /LCV	80.4%	18.2%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	79.1%	18.6%	0.0%	0.0%	0.0%	2.4%	0.0%	100.0%
2-AXLE TRUCK	71.1%	28.5%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	85.2%	14.6%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	76.7%	23.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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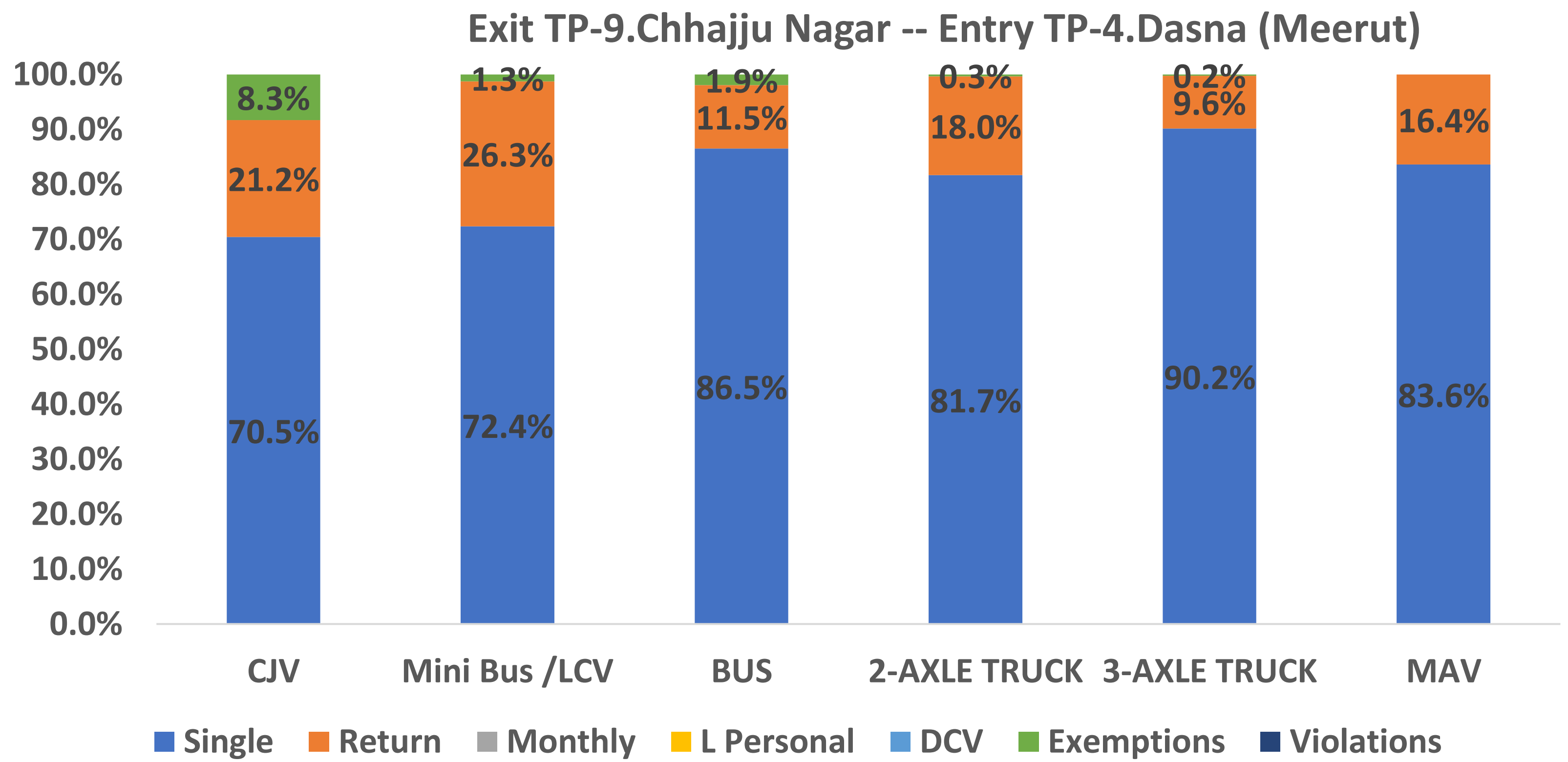
Exit TP-9.Chhajju Nagar -- Entry TP-4.Dasna								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	70.5%	21.2%	0.0%	0.0%	0.0%	8.3%	0.0%	100.0%
Minibus /LCV	72.4%	26.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	86.5%	11.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
2-AXLE TRUCK	81.7%	18.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	90.2%	9.6%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	83.6%	16.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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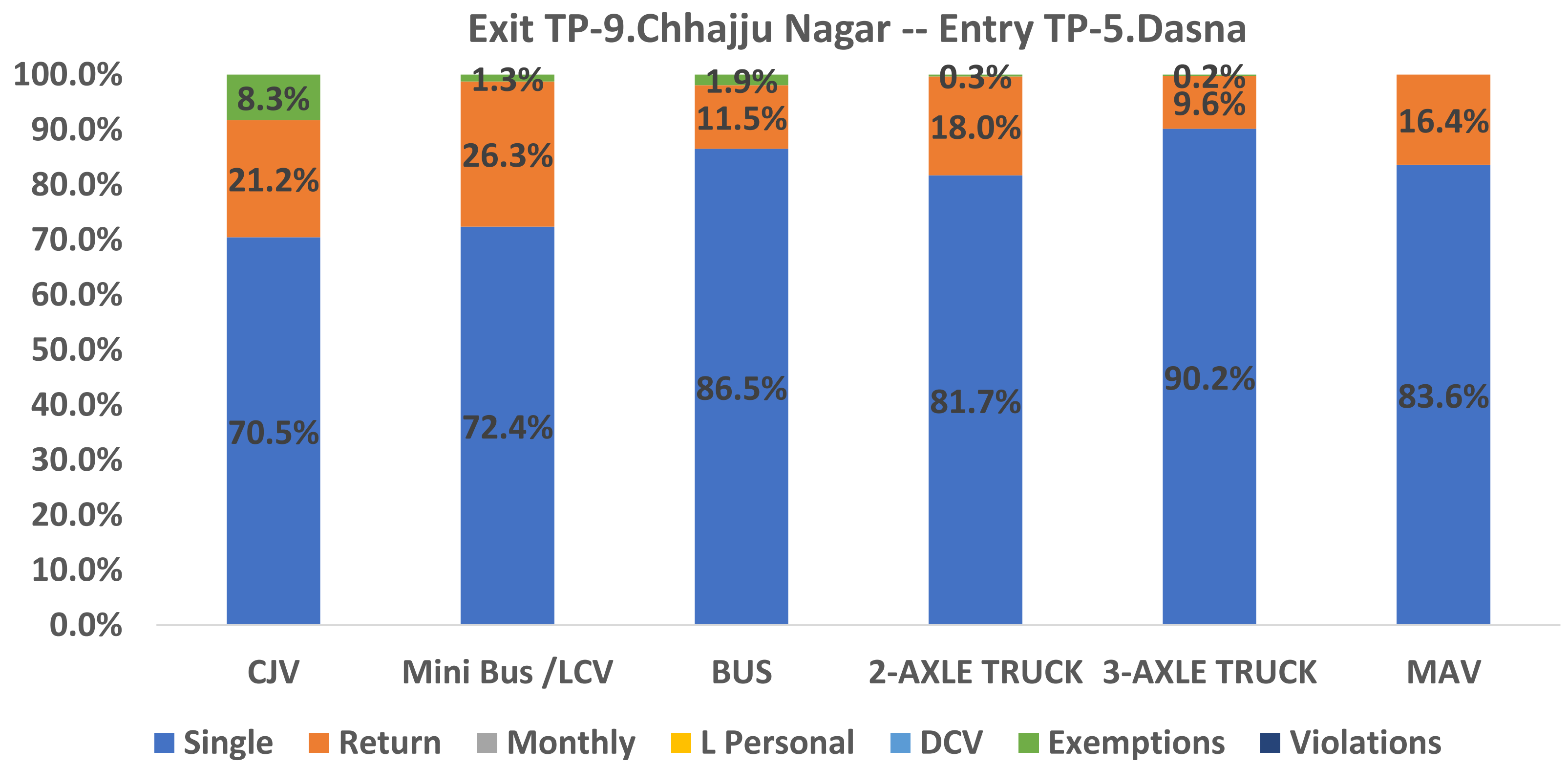
Exit TP-9.Chhajju Nagar -- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	70.5%	21.2%	0.0%	0.0%	0.0%	8.3%	0.0%	100.0%
Minibus /LCV	72.4%	26.3%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	86.5%	11.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
2-AXLE TRUCK	81.7%	18.0%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	90.2%	9.6%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	83.6%	16.4%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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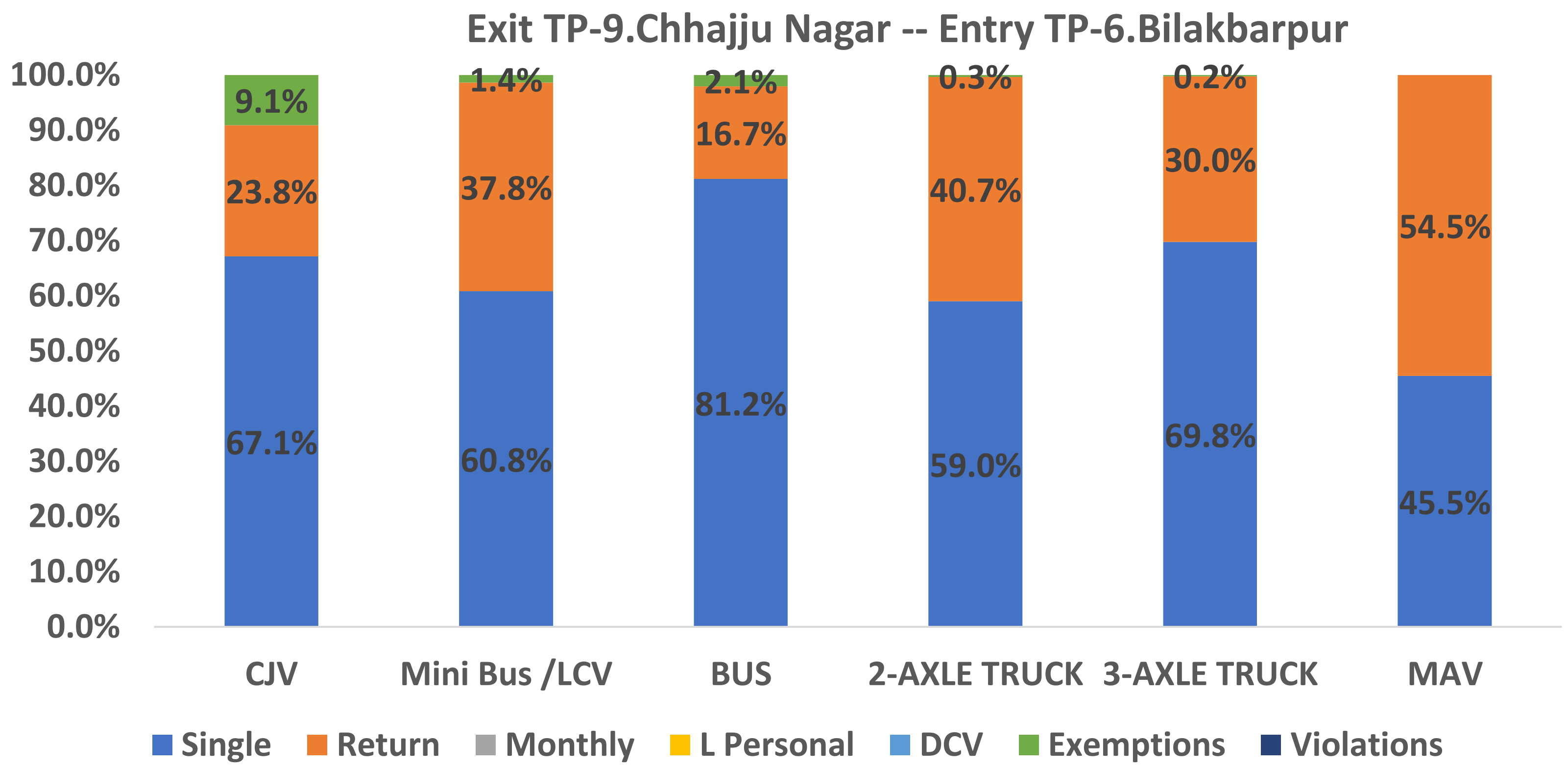
RECOMMENDED TRIP CATEGORIES – TP09

Exit TP-9.Chhajju Nagar -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.1%	23.8%	0.0%	0.0%	0.0%	9.1%	0.0%	100.0%
Minibus /LCV	60.8%	37.8%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	81.2%	16.7%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
2-AXLE TRUCK	59.0%	40.7%	0.0%	0.0%	0.0%	0.3%	0.0%	100.0%
3-AXLE TRUCK	69.8%	30.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	45.5%	54.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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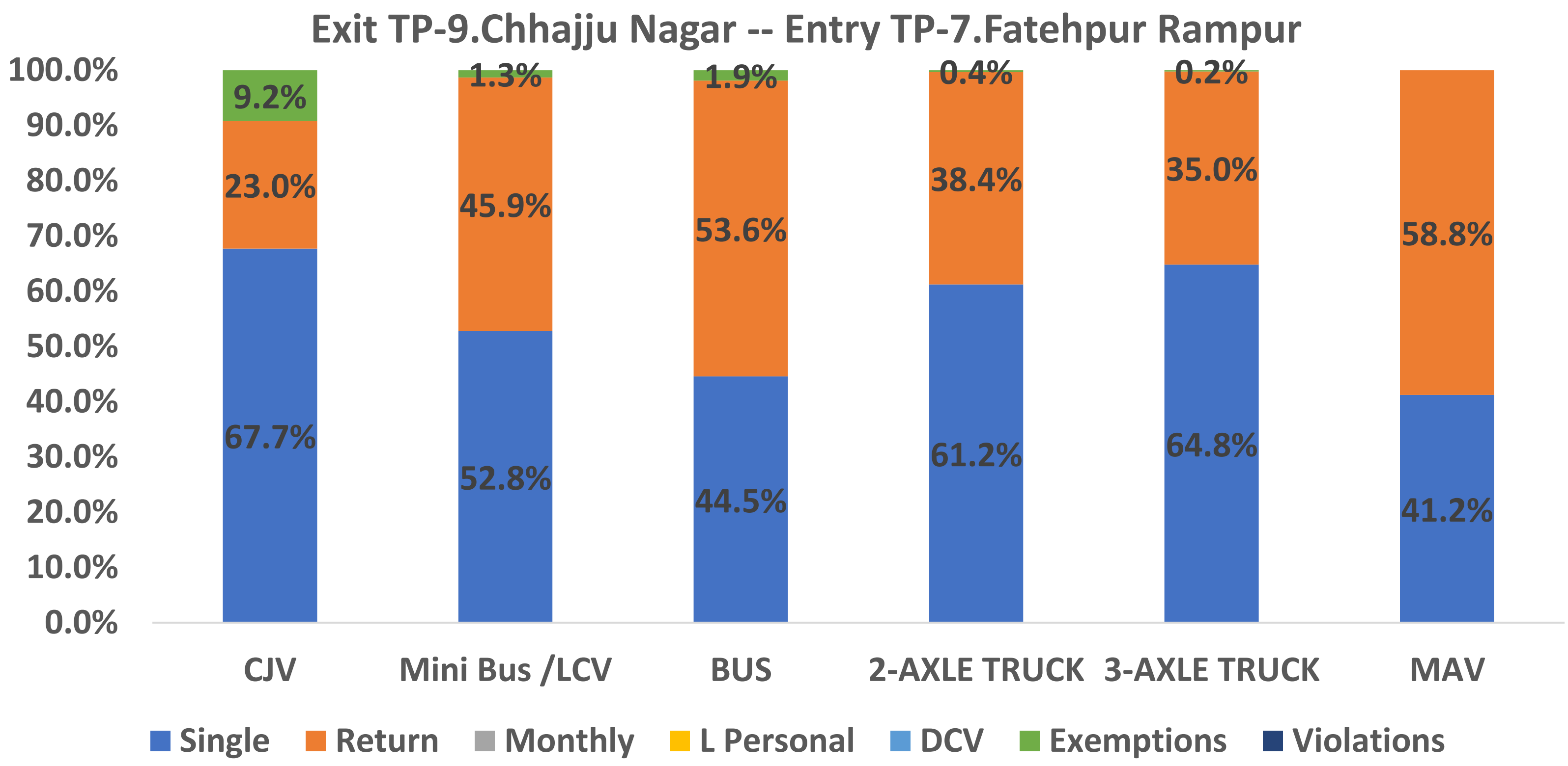
Exit TP-9.Chhajju Nagar -- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.7%	23.0%	0.0%	0.0%	0.0%	9.2%	0.0%	100.0%
Minibus /LCV	52.8%	45.9%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	44.5%	53.6%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
2-AXLE TRUCK	61.2%	38.4%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	64.8%	35.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	41.2%	58.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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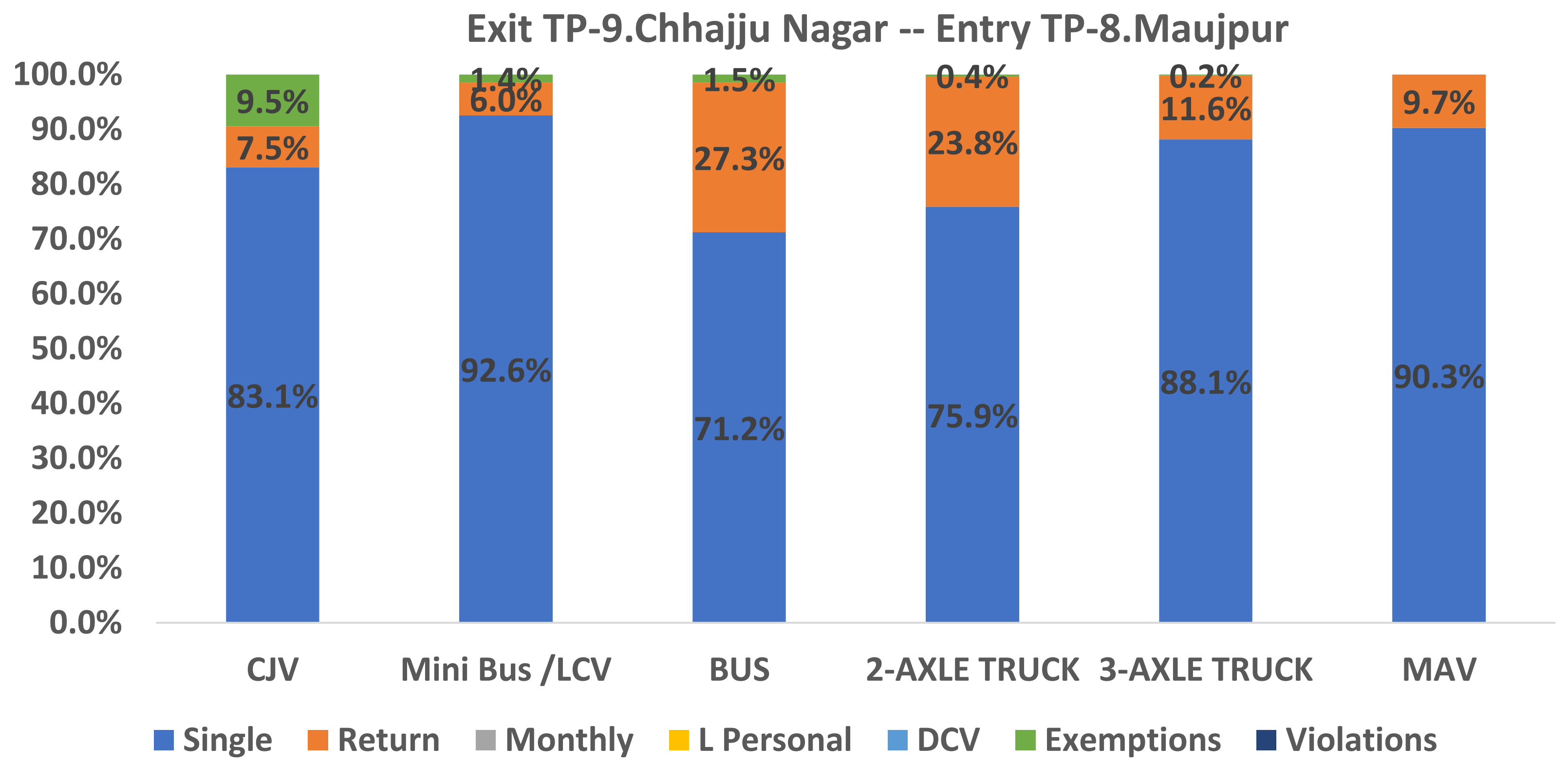
RECOMMENDED TRIP CATEGORIES – TP09

Exit TP-9.Chhajju Nagar -- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	83.1%	7.5%	0.0%	0.0%	0.0%	9.5%	0.0%	100.0%
Minibus /LCV	92.6%	6.0%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	71.2%	27.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
2-AXLE TRUCK	75.9%	23.8%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	88.1%	11.6%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	90.3%	9.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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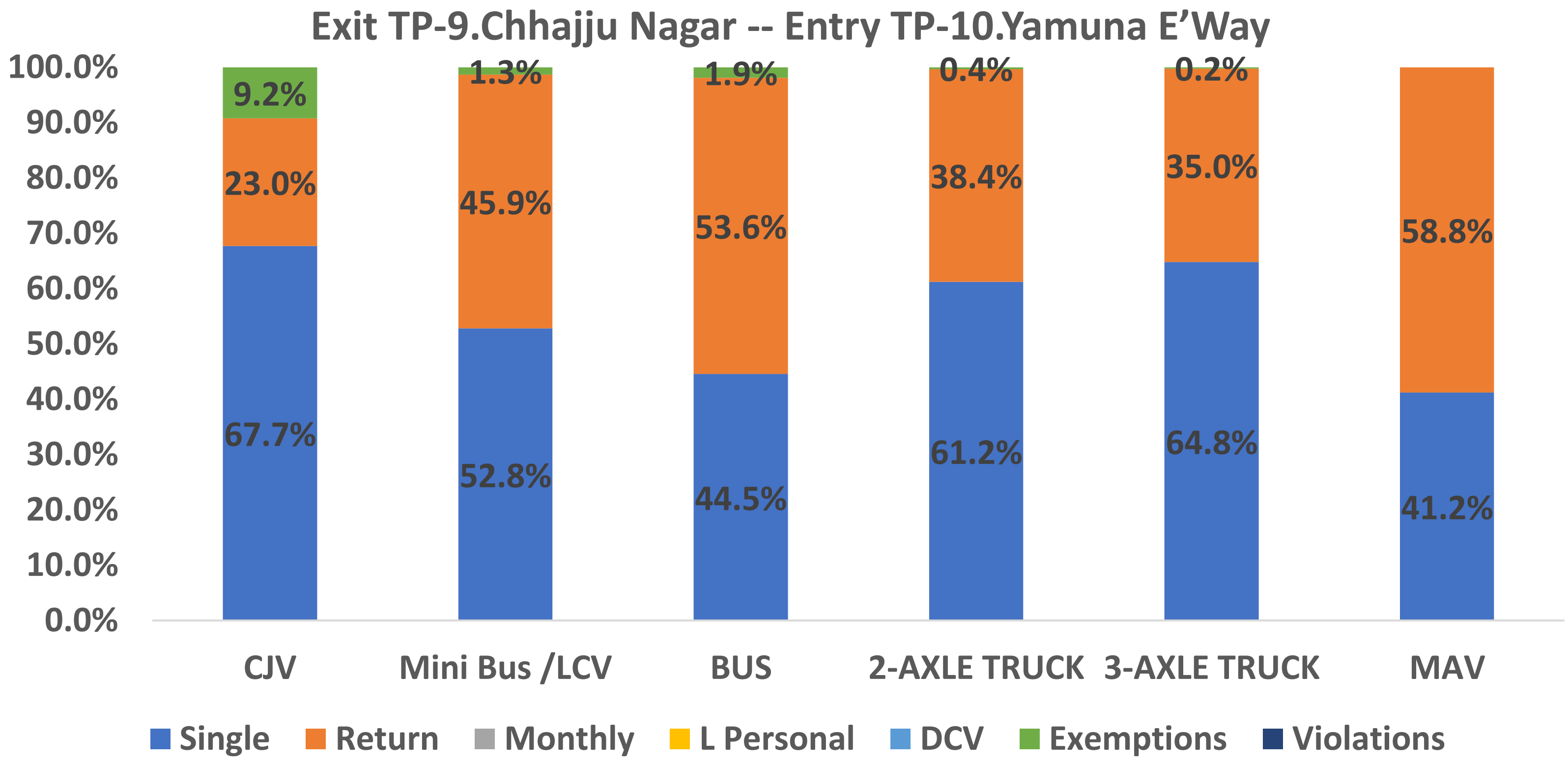
RECOMMENDED TRIP CATEGORIES – TP09

Exit TP-9.Chhajju Nagar -- Entry TP-10.Yamuna E'Way								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.7%	23.0%	0.0%	0.0%	0.0%	9.2%	0.0%	100.0%
Minibus /LCV	52.8%	45.9%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	44.5%	53.6%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
2-AXLE TRUCK	61.2%	38.4%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	64.8%	35.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	41.2%	58.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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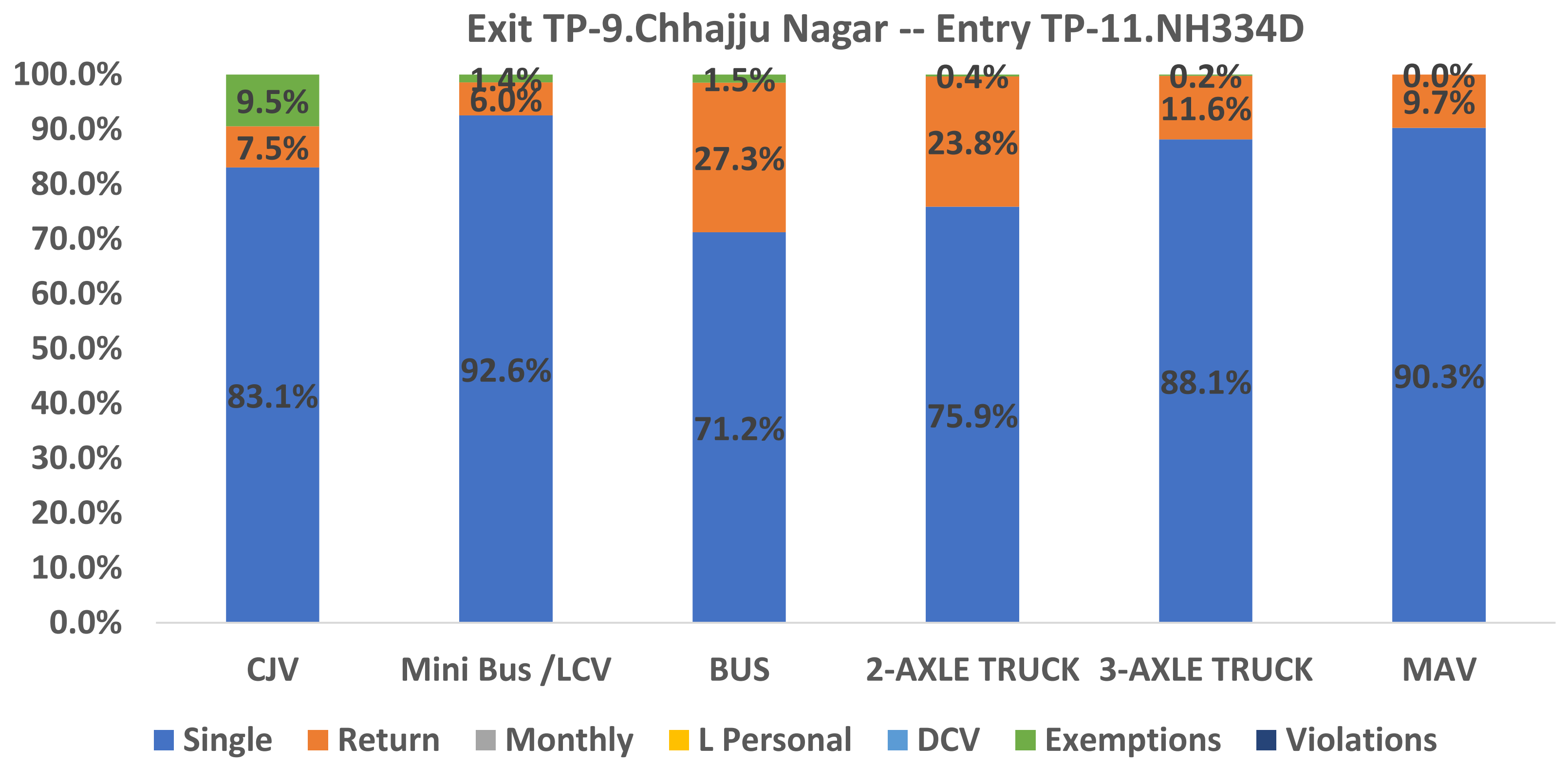
Exit TP-9.Chhajju Nagar -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	83.07%	7.46%	0.00%	0.00%	0.00%	9.47%	0.00%	100.0%
Minibus /LCV	92.56%	6.00%	0.00%	0.00%	0.00%	1.44%	0.00%	100.0%
BUS	71.22%	27.29%	0.00%	0.00%	0.00%	1.49%	0.00%	100.0%
2-AXLE TRUCK	92.56%	6.00%	0.00%	0.00%	0.00%	1.44%	0.00%	100.0%
3-AXLE TRUCK	75.87%	23.78%	0.00%	0.00%	0.00%	0.36%	0.00%	100.0%
MAV	88.14%	11.63%	0.00%	0.00%	0.00%	0.23%	0.00%	100.0%



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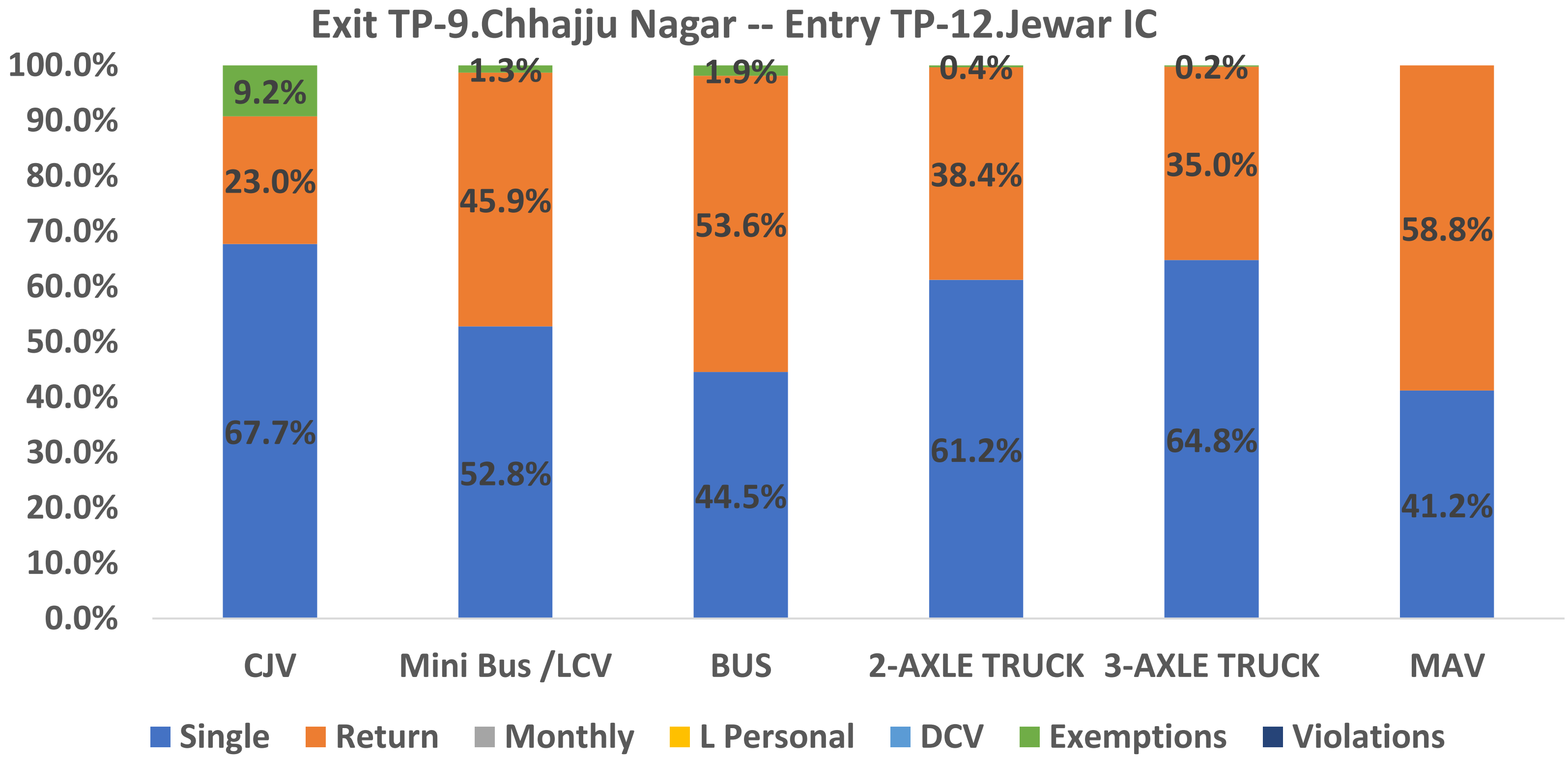
RECOMMENDED TRIP CATEGORIES – TP09

Exit TP-9.Chhajju Nagar -- Entry TP-12.Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.7%	23.0%	0.0%	0.0%	0.0%	9.2%	0.0%	100.0%
Minibus /LCV	52.8%	45.9%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	44.5%	53.6%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
2-AXLE TRUCK	61.2%	38.4%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%
3-AXLE TRUCK	64.8%	35.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
MAV	41.2%	58.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



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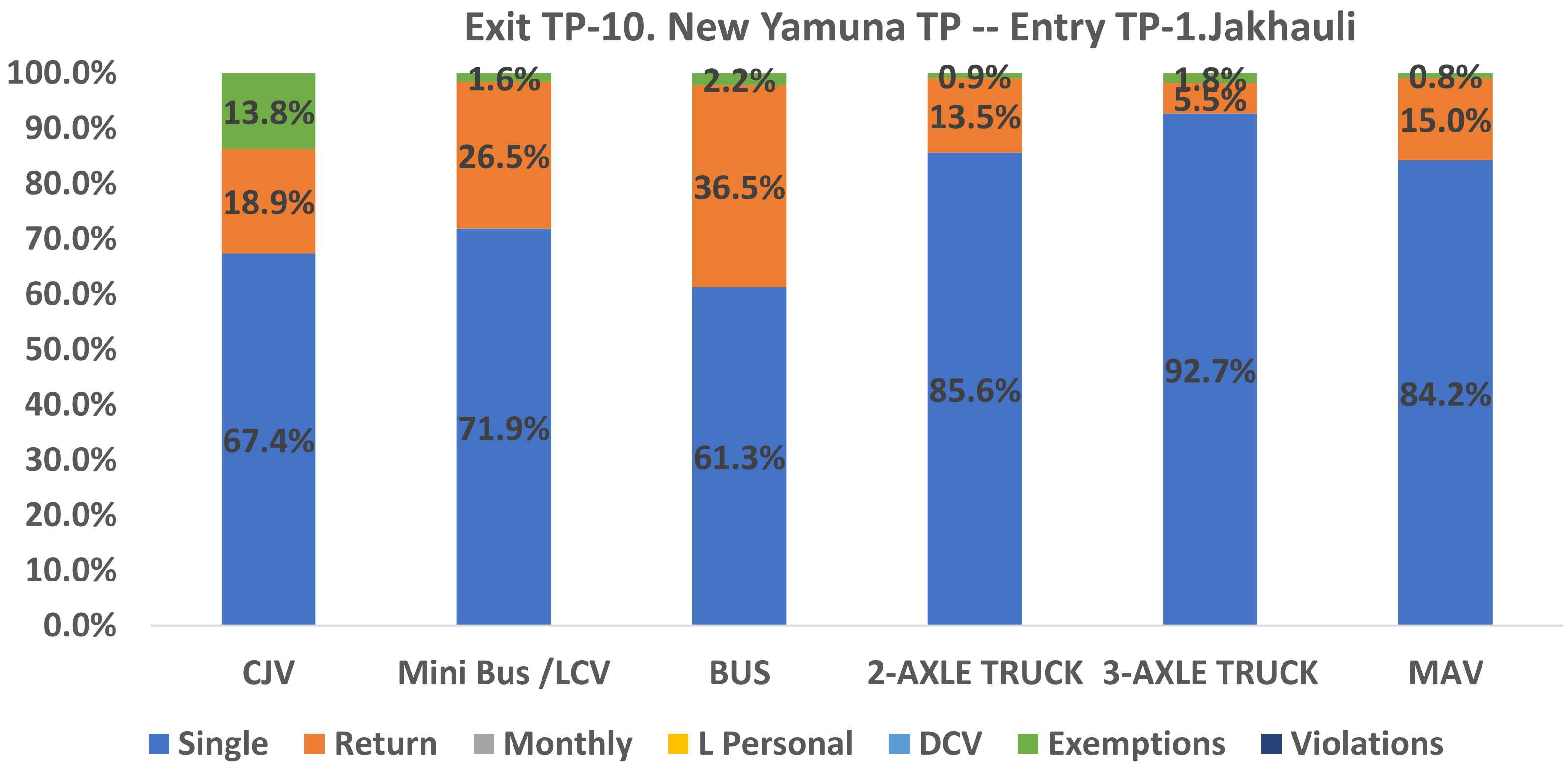
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-1.Jakhauli								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.4%	18.9%	0.0%	0.0%	0.0%	13.8%	0.0%	100.0%
Minibus /LCV	71.9%	26.5%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	61.3%	36.5%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
2-AXLE TRUCK	85.6%	13.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	92.7%	5.5%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%
MAV	84.2%	15.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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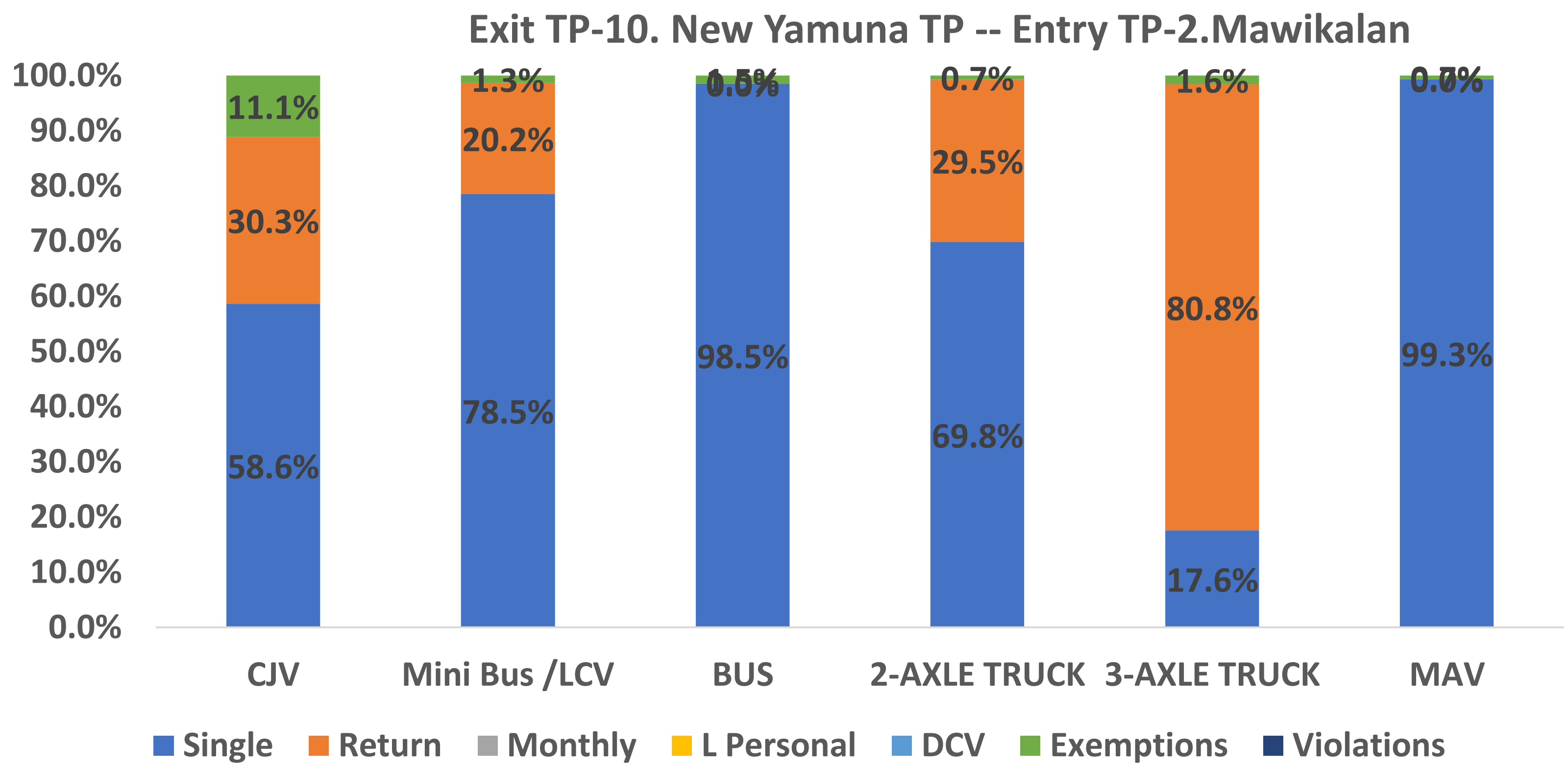
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-2.Mawikalan								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	58.6%	30.3%	0.0%	0.0%	0.0%	11.1%	0.0%	100.0%
Minibus /LCV	78.5%	20.2%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	98.5%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
2-AXLE TRUCK	69.8%	29.5%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	17.6%	80.8%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
MAV	99.3%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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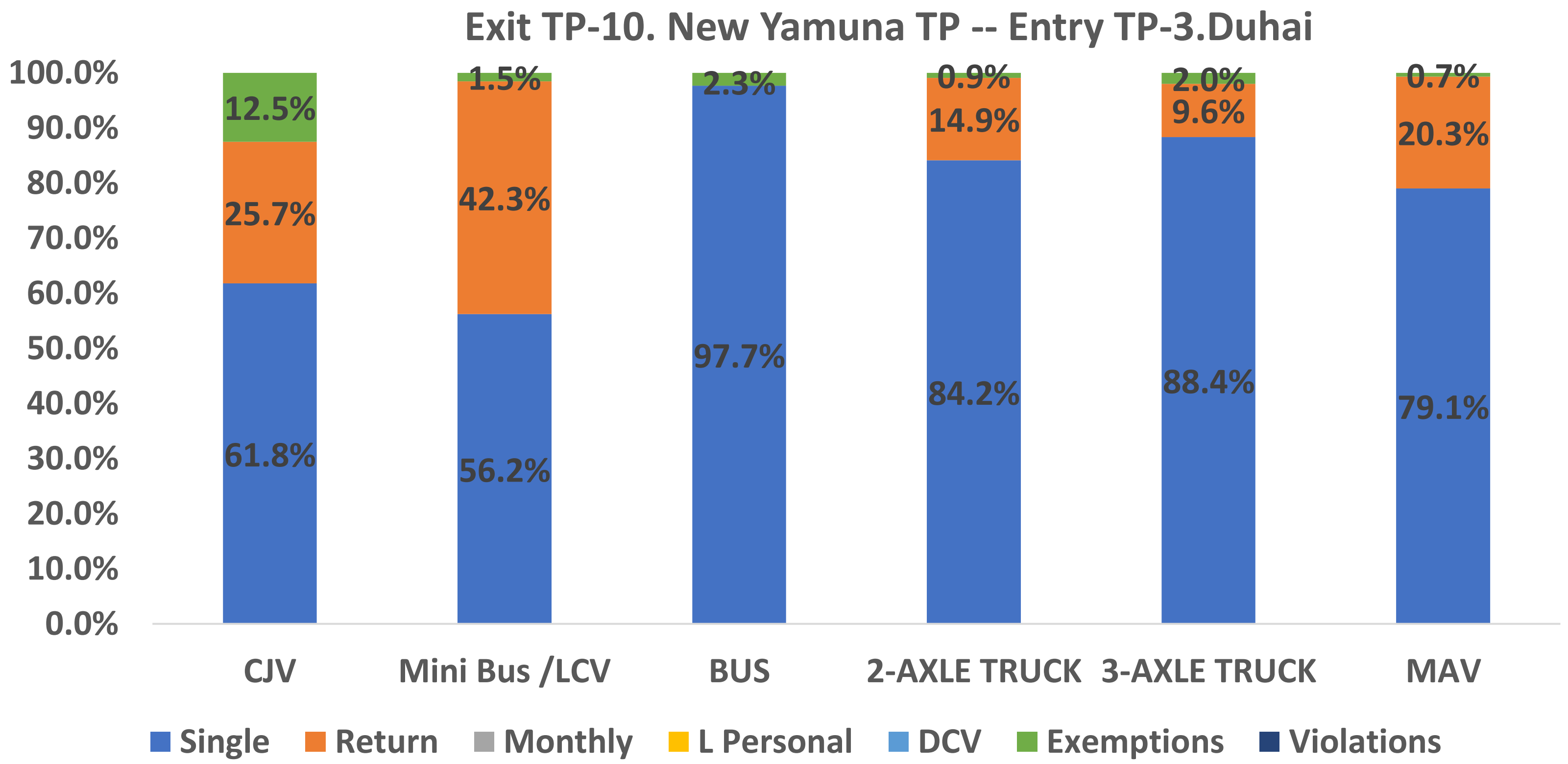
RECOMMENDED TRIP CATEGORIES – TP1

Exit TP-10. Yamuna E'Way-- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	61.8%	25.7%	0.0%	0.0%	0.0%	12.5%	0.0%	100.0%
Minibus /LCV	56.2%	42.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	97.7%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	84.2%	14.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	88.4%	9.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
MAV	79.1%	20.3%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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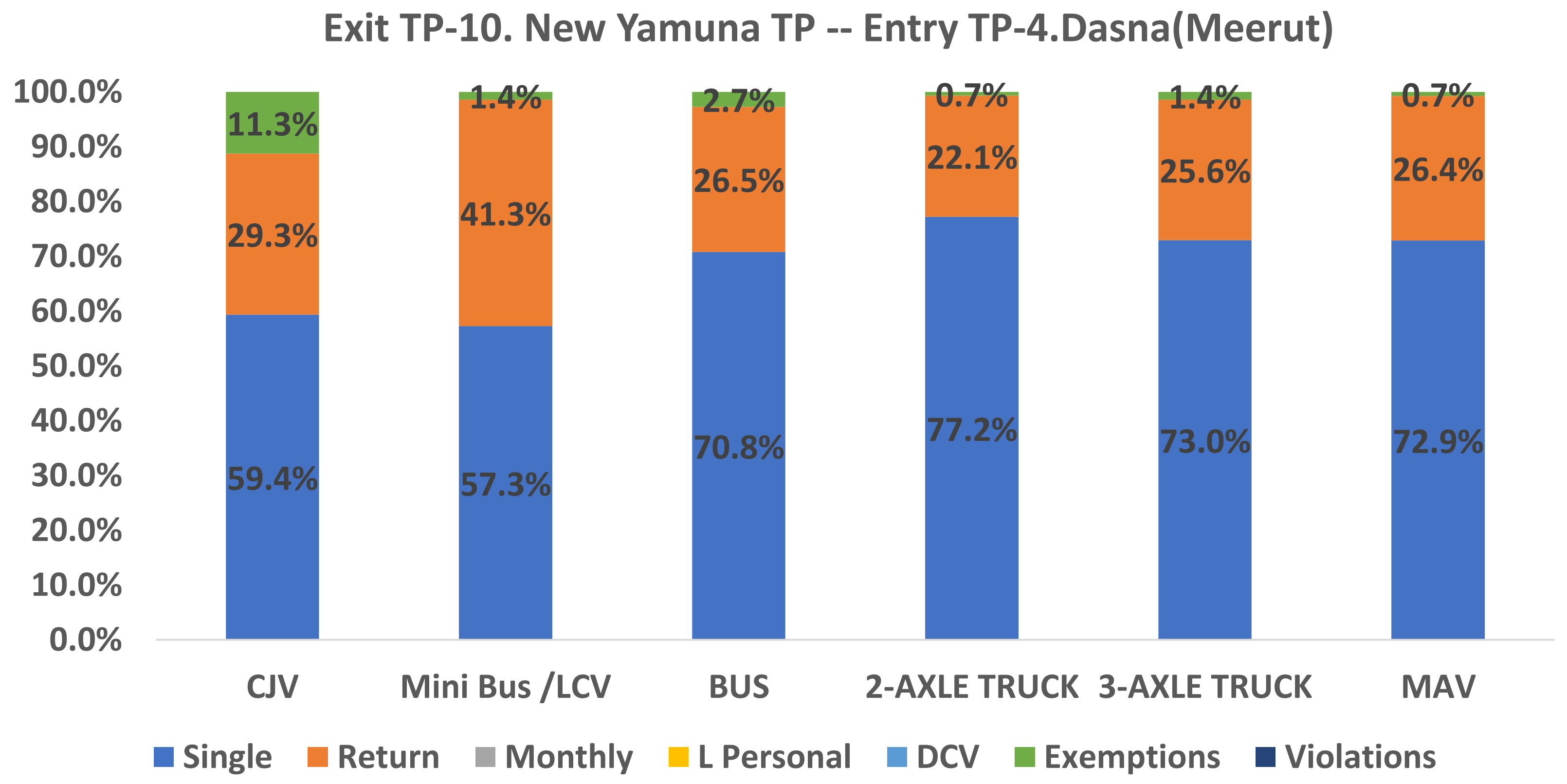
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-4.Dasna (Meerut)								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	59.4%	29.3%	0.0%	0.0%	0.0%	11.3%	0.0%	100.0%
Minibus /LCV	57.3%	41.3%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	70.8%	26.5%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	77.2%	22.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	73.0%	25.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
MAV	72.9%	26.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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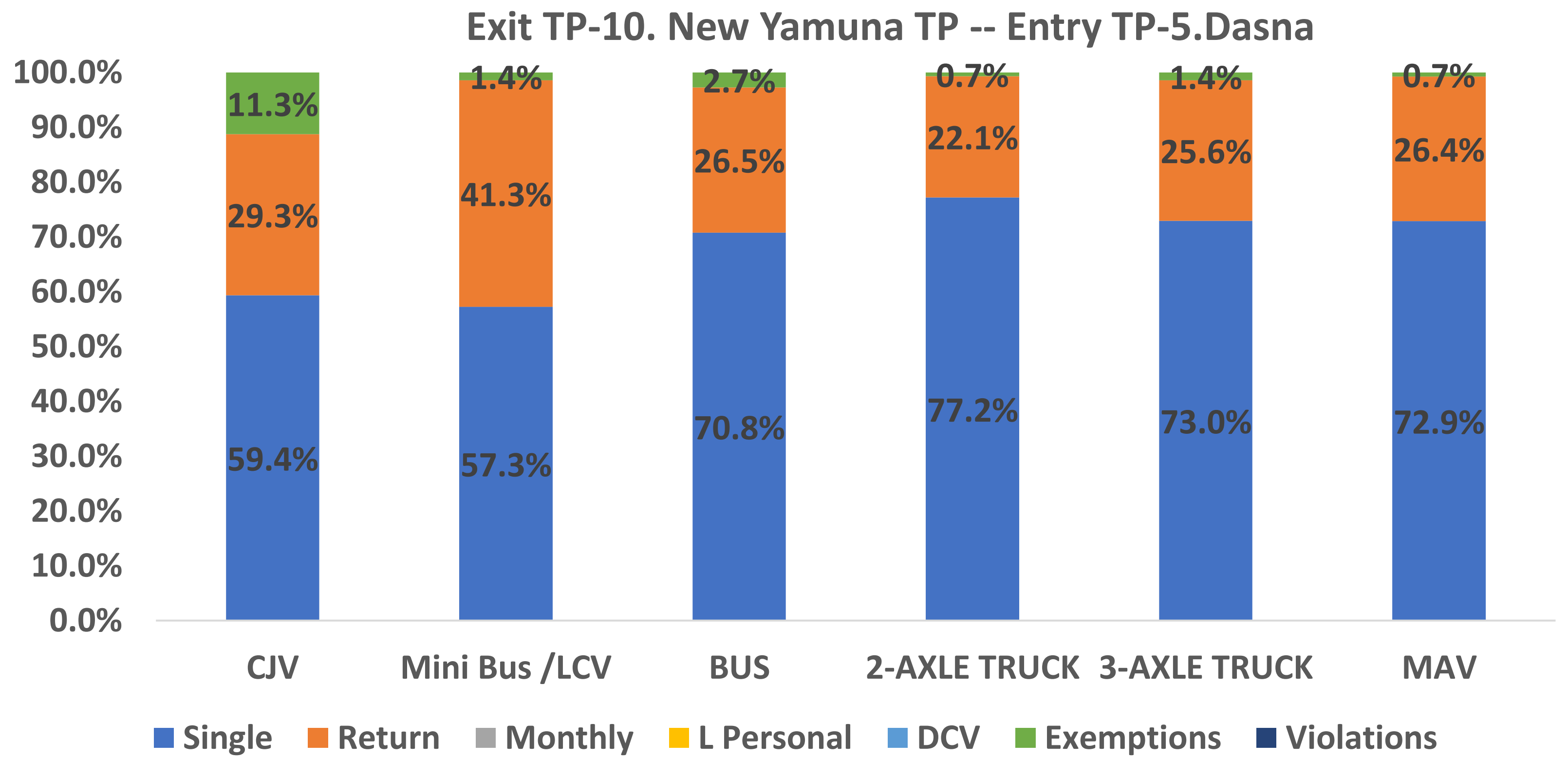
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	59.4%	29.3%	0.0%	0.0%	0.0%	11.3%	0.0%	100.0%
Minibus /LCV	57.3%	41.3%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	70.8%	26.5%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	77.2%	22.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	73.0%	25.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
MAV	72.9%	26.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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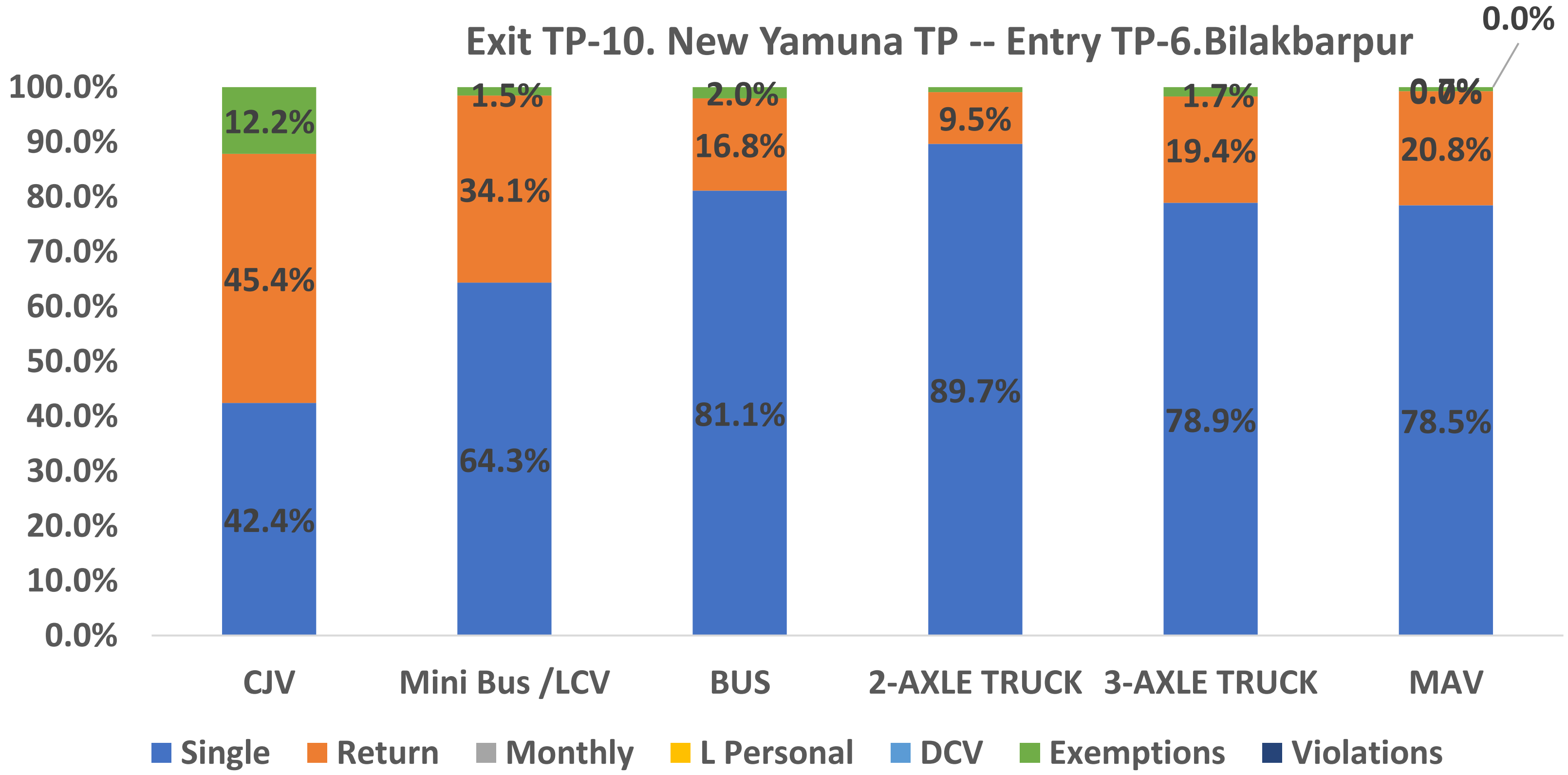
Exit TP-10. Yamuna E'Way-- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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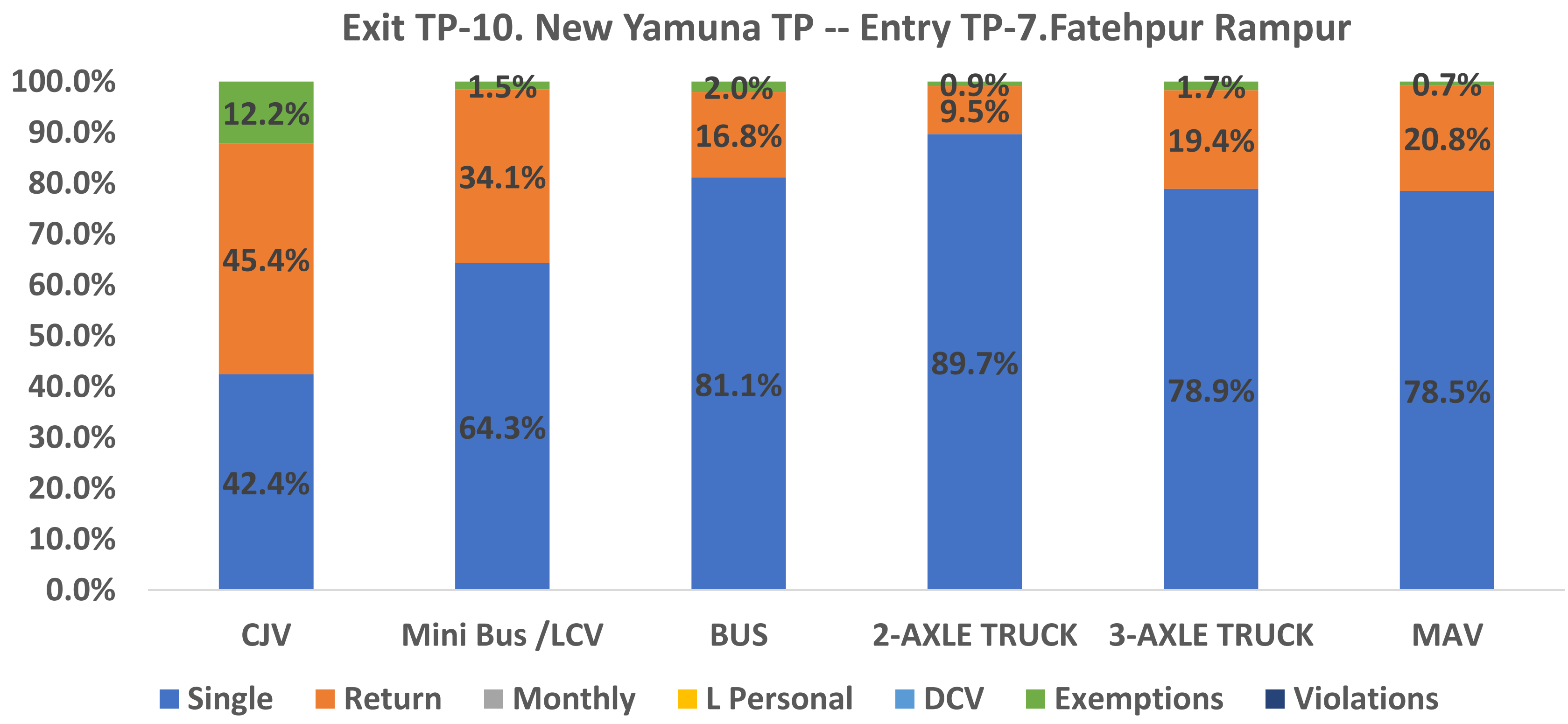
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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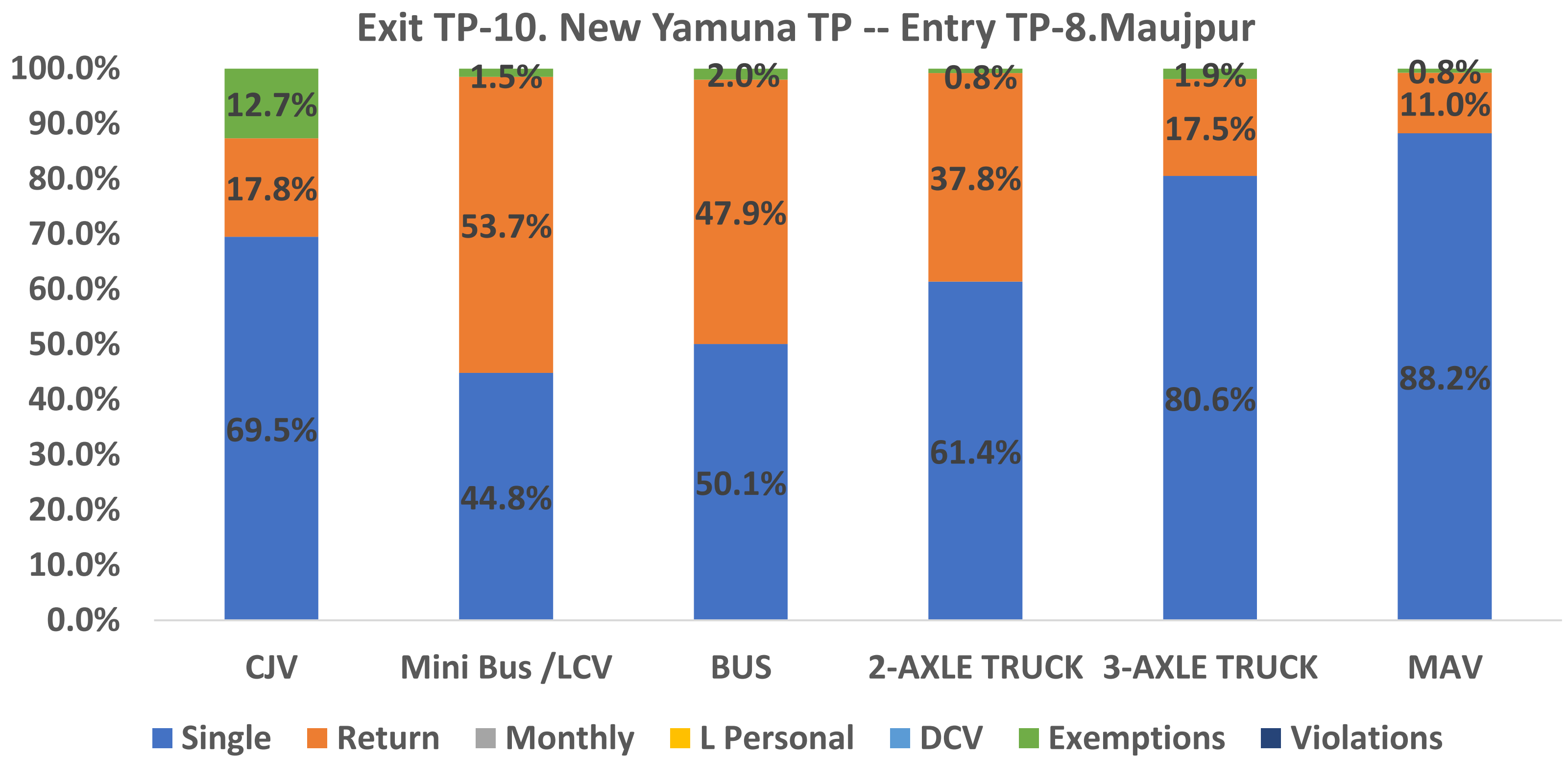
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.5%	17.8%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	44.8%	53.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	50.1%	47.9%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	61.4%	37.8%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	80.6%	17.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
MAV	88.2%	11.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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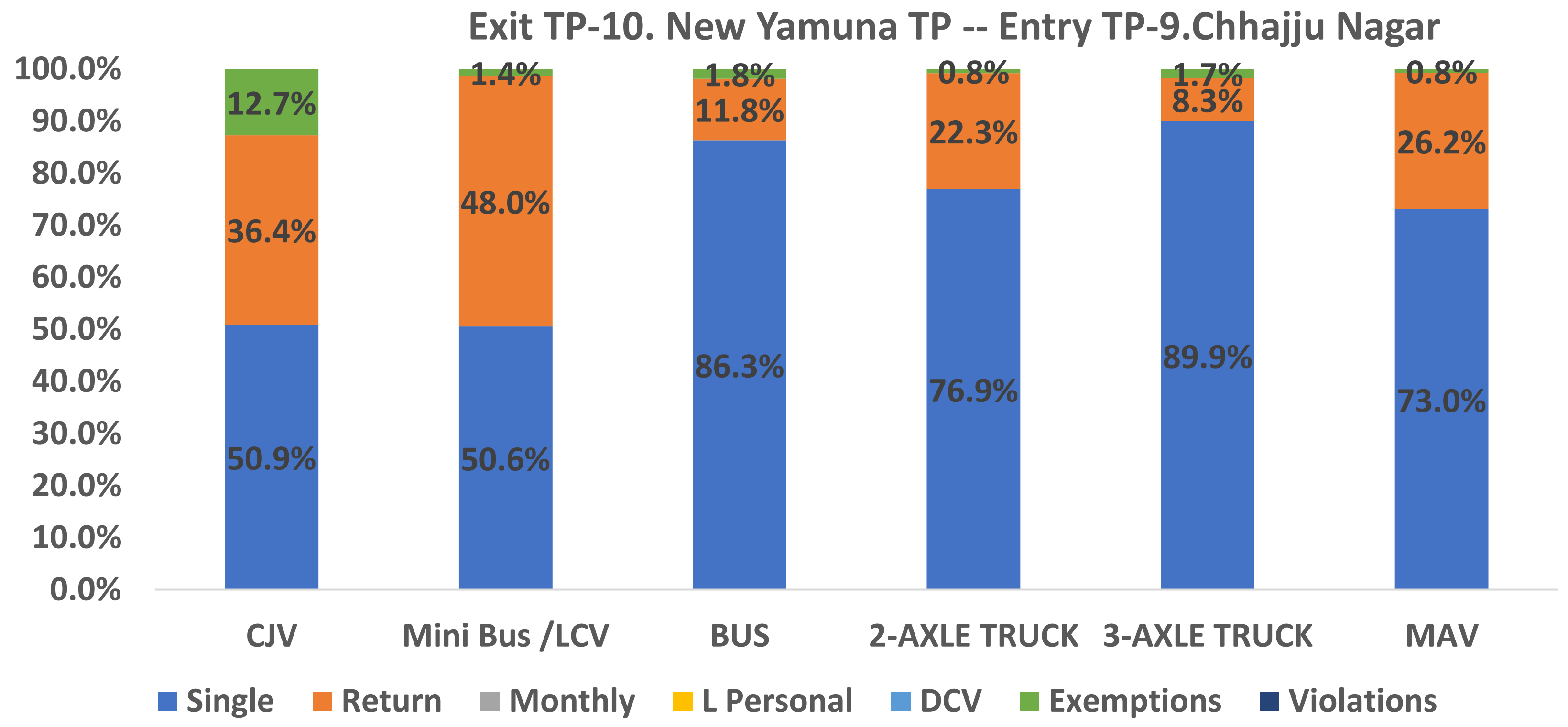
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-9.Chhajju Nagar								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	50.9%	36.4%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	50.6%	48.0%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	86.3%	11.8%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%
2-AXLE TRUCK	76.9%	22.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	89.9%	8.3%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	73.0%	26.2%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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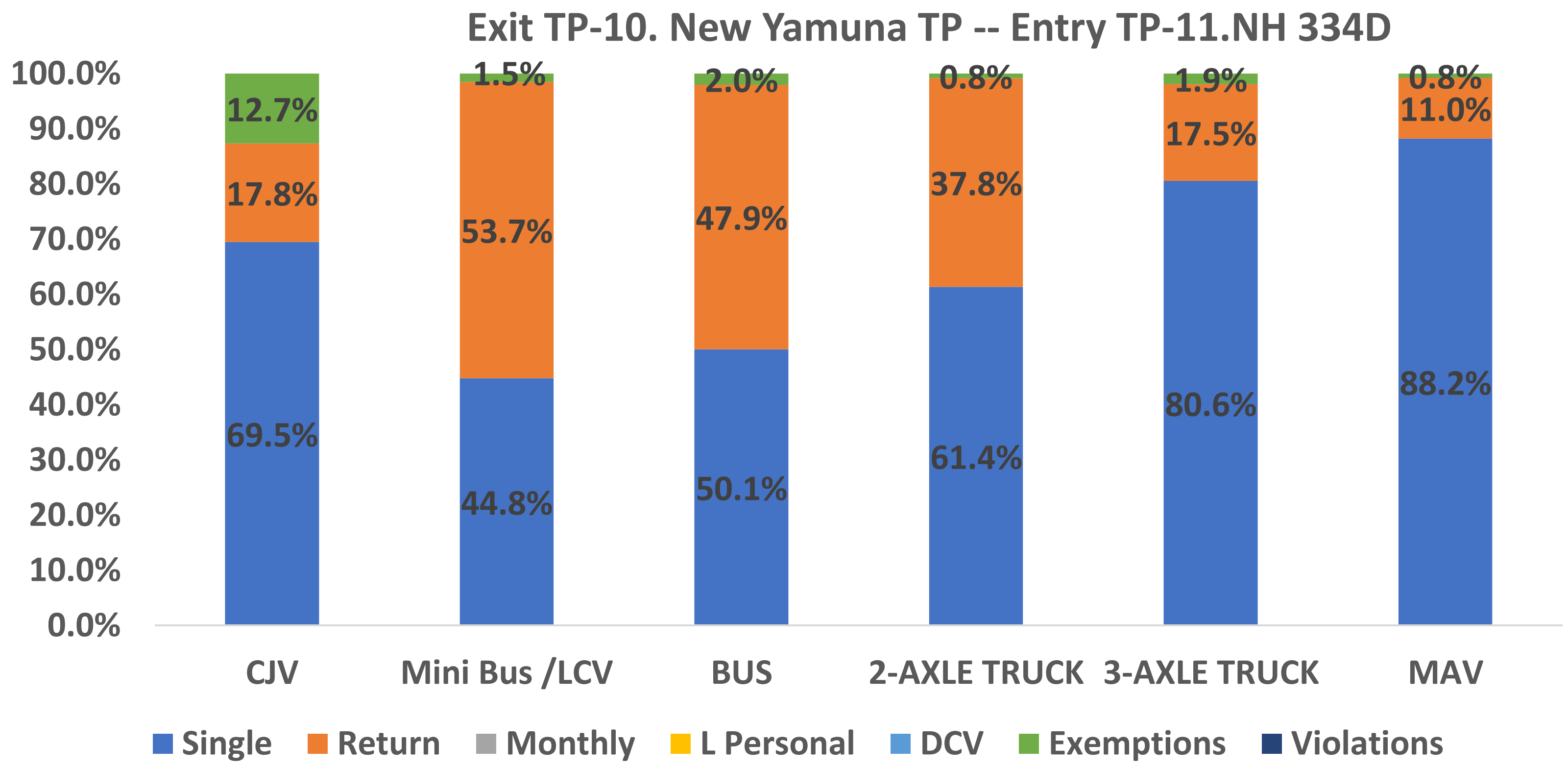
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-11.NH 334D								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	69.5%	17.8%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	44.8%	53.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	50.1%	47.9%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	61.4%	37.8%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	80.6%	17.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
MAV	88.2%	11.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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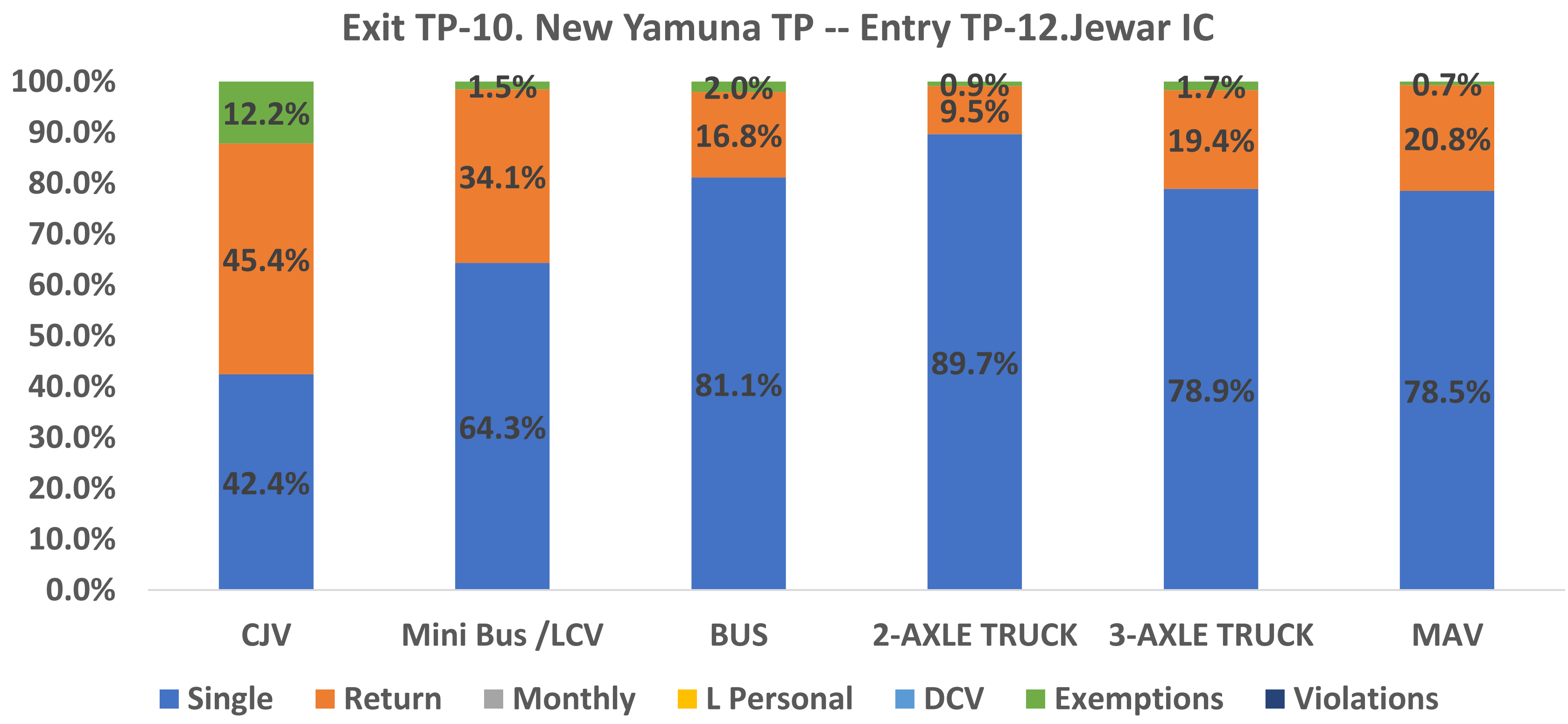
RECOMMENDED TRIP CATEGORIES – TP10

Exit TP-10. Yamuna E'Way-- Entry TP-12.Jewar IC								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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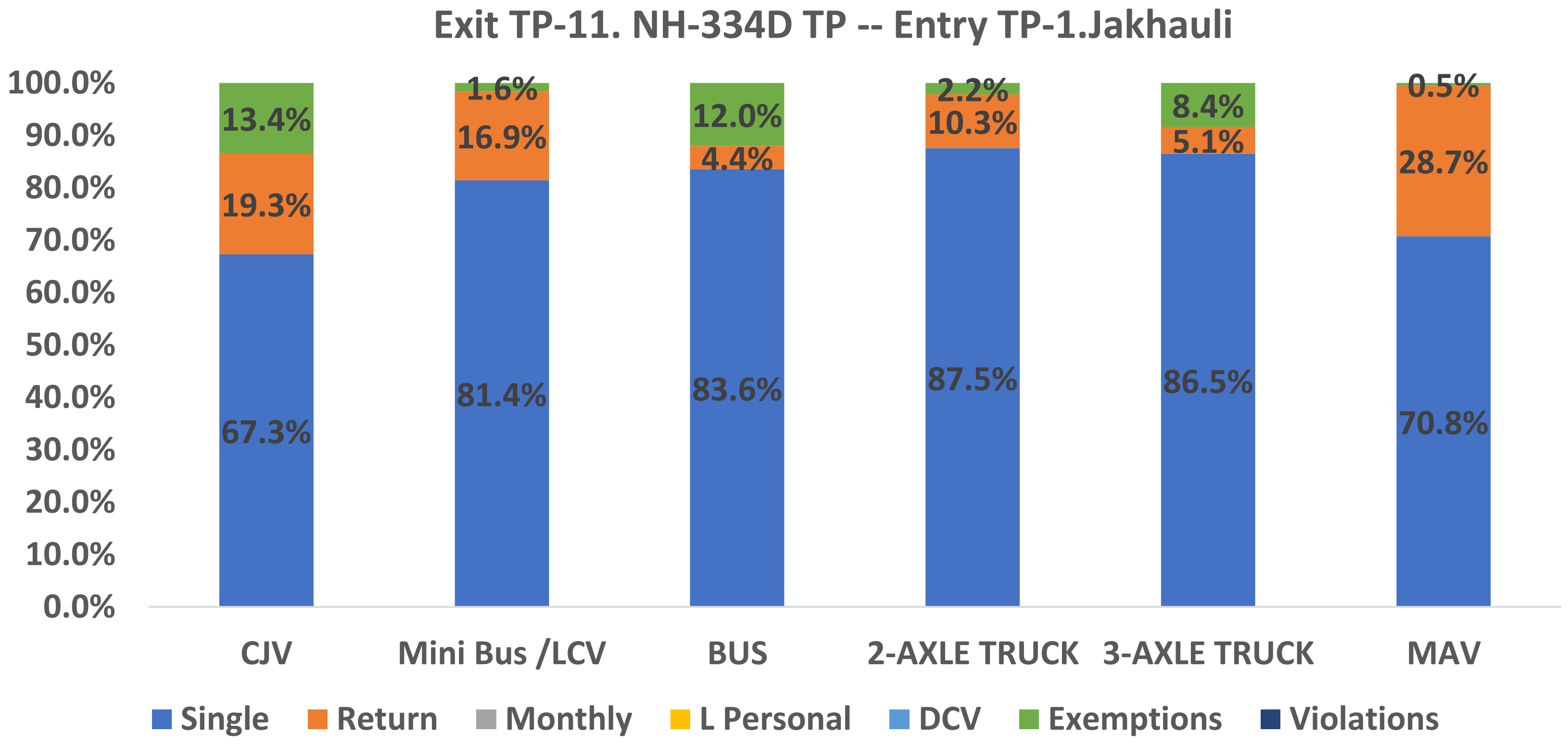
Exit TP-11. NH334D- Entry TP-1.Jakhauli								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	67.3%	19.3%	0.0%	0.0%	0.0%	13.4%	0.0%	100.0%
Minibus /LCV	81.4%	16.9%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	83.6%	4.4%	0.0%	0.0%	0.0%	12.0%	0.0%	100.0%
2-AXLE TRUCK	87.5%	10.3%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
3-AXLE TRUCK	86.5%	5.1%	0.0%	0.0%	0.0%	8.4%	0.0%	100.0%
MAV	70.8%	28.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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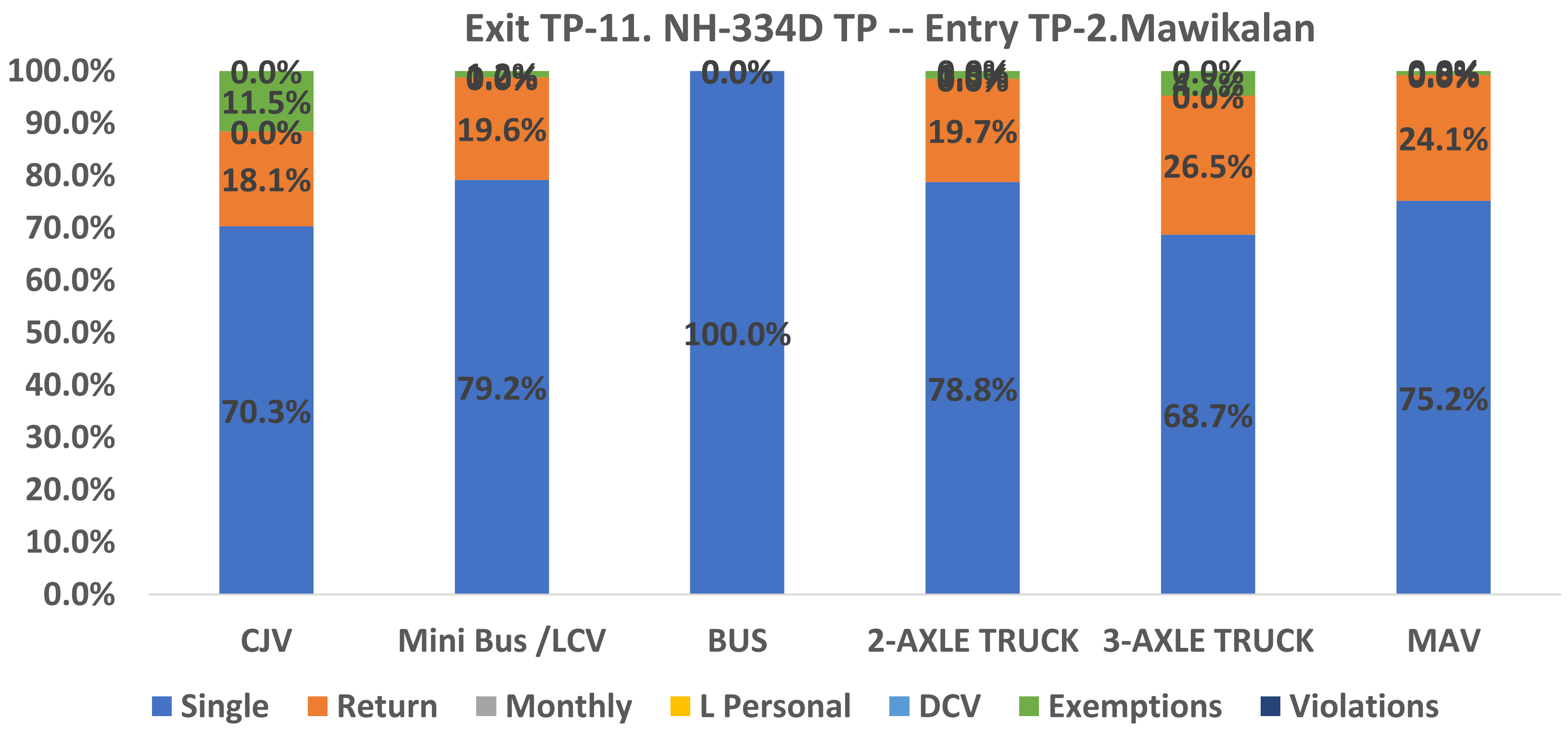
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-2.Mawikalan								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	70.3%	18.1%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	79.2%	19.6%	0.0%	0.0%	0.0%	1.2%	0.0%	100.0%
BUS	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2-AXLE TRUCK	78.8%	19.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
3-AXLE TRUCK	68.7%	26.5%	0.0%	0.0%	0.0%	4.7%	0.0%	100.0%
MAV	75.2%	24.1%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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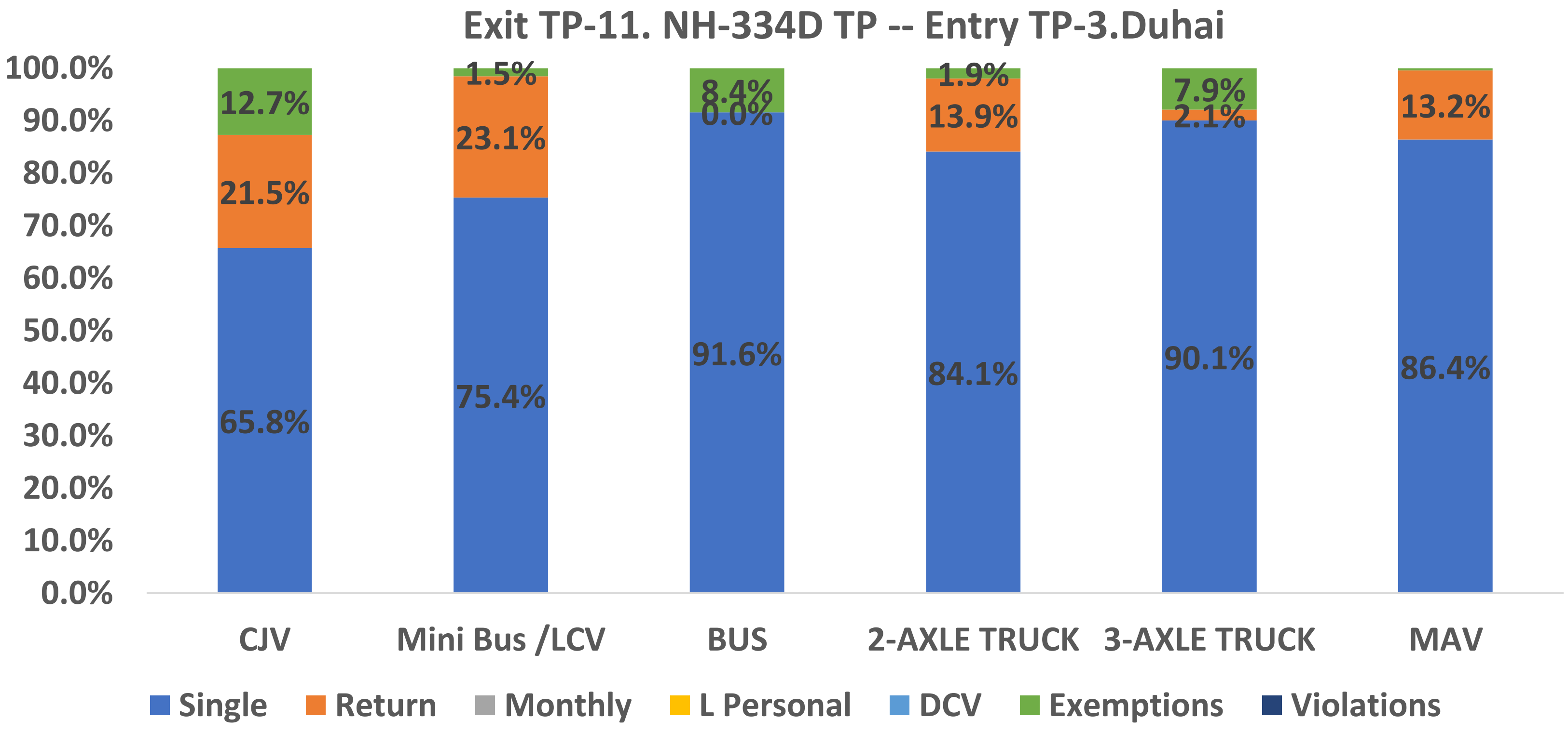
Exit TP-11. NH334D- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	65.8%	21.5%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	75.4%	23.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	91.6%	0.0%	0.0%	0.0%	0.0%	8.4%	0.0%	100.0%
2-AXLE TRUCK	84.1%	13.9%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
3-AXLE TRUCK	90.1%	2.1%	0.0%	0.0%	0.0%	7.9%	0.0%	100.0%
MAV	86.4%	13.2%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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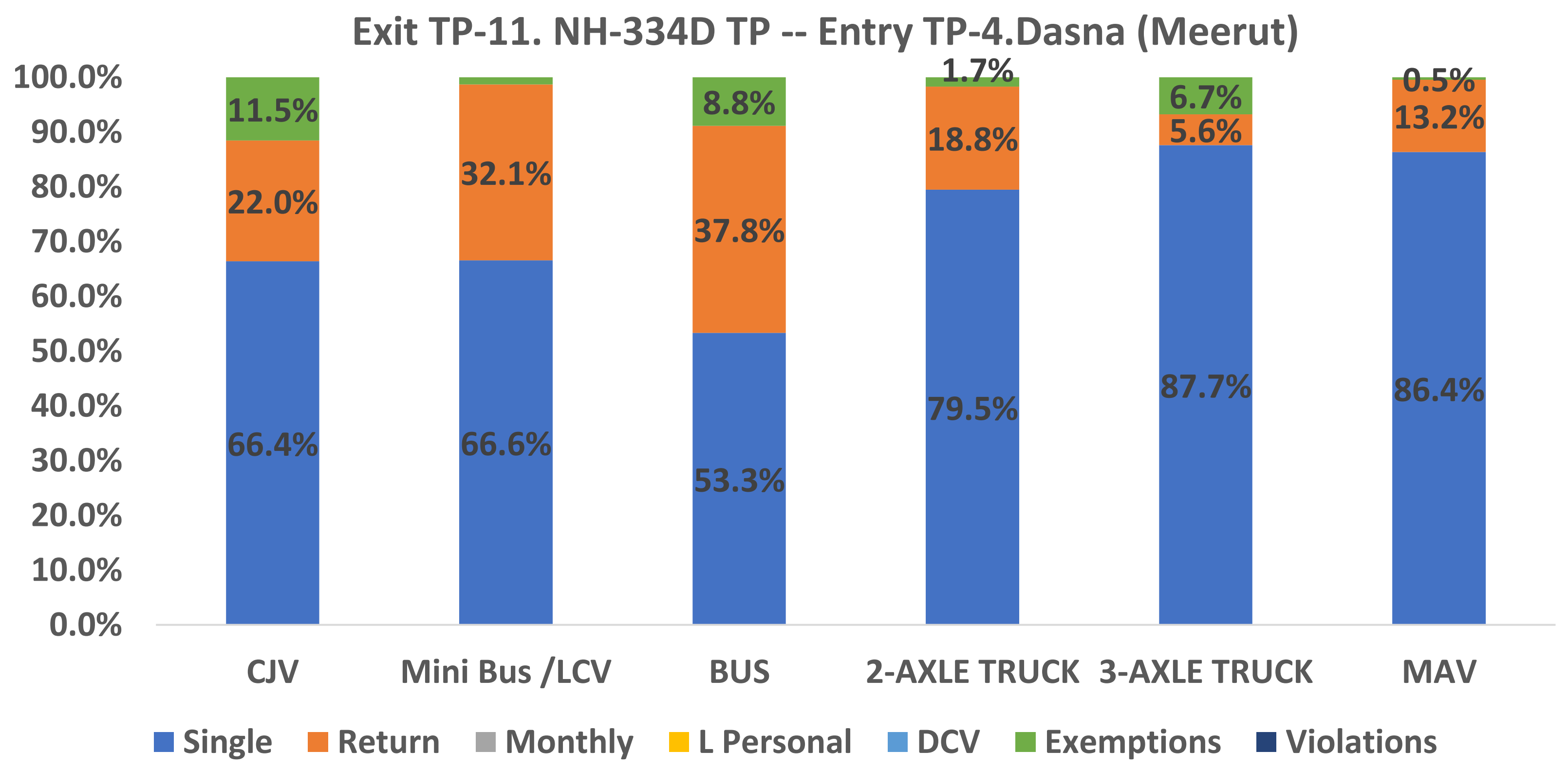
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-4.Dasna (Meerut)								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	66.4%	22.0%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	66.6%	32.1%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	53.3%	37.8%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
2-AXLE TRUCK	79.5%	18.8%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
3-AXLE TRUCK	87.7%	5.6%	0.0%	0.0%	0.0%	6.7%	0.0%	100.0%
MAV	86.4%	13.2%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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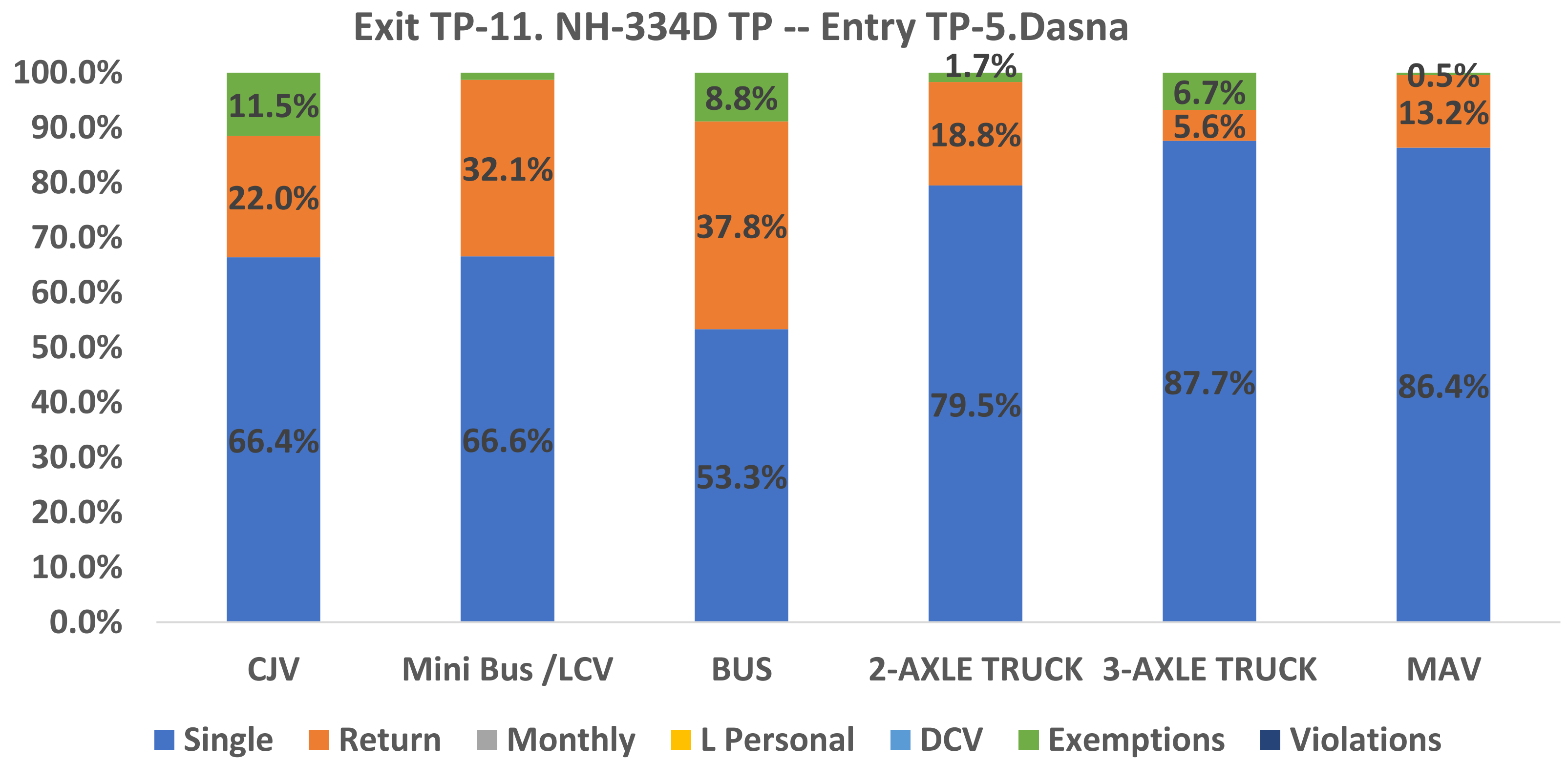
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	66.4%	22.0%	0.0%	0.0%	0.0%	11.5%	0.0%	100.0%
Minibus /LCV	66.6%	32.1%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	53.3%	37.8%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
2-AXLE TRUCK	79.5%	18.8%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
3-AXLE TRUCK	87.7%	5.6%	0.0%	0.0%	0.0%	6.7%	0.0%	100.0%
MAV	86.4%	13.2%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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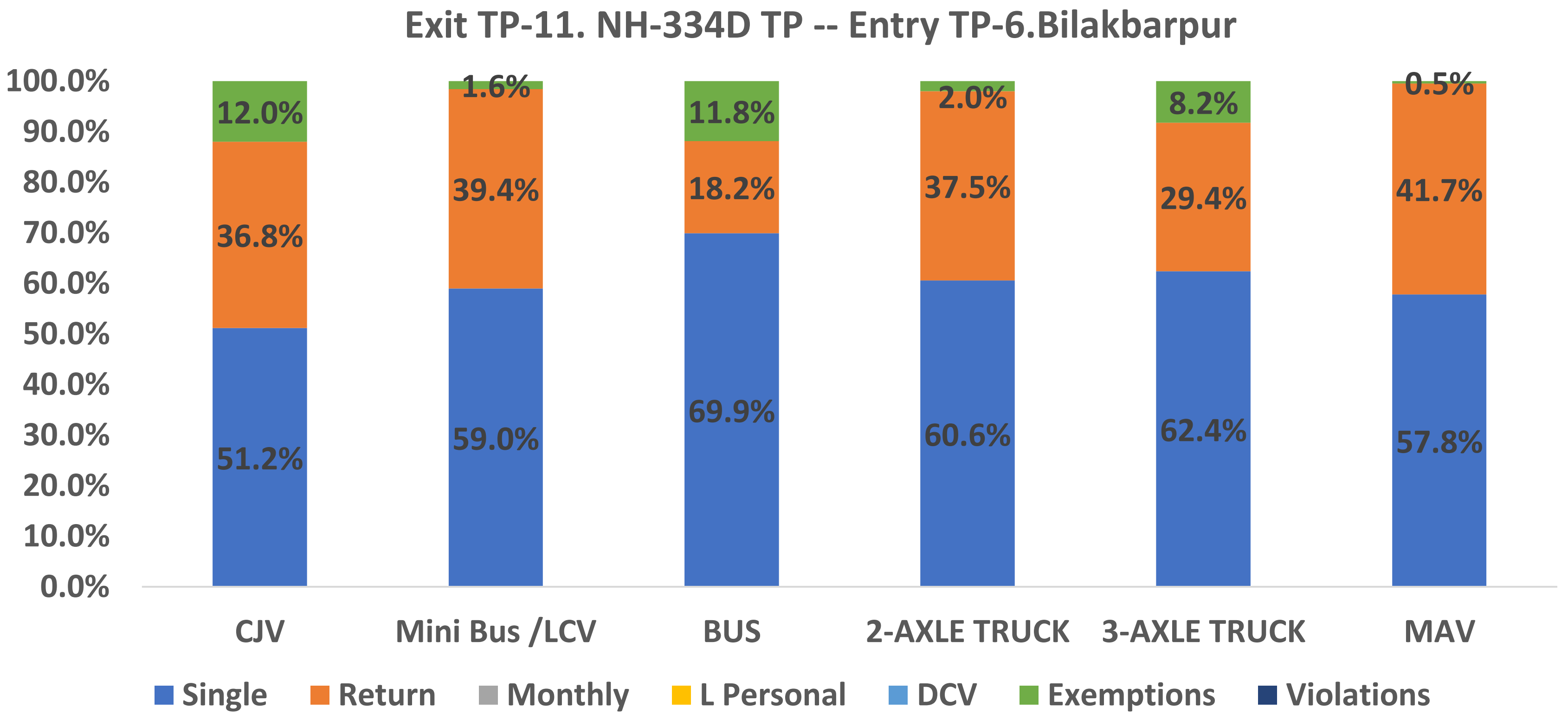
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	51.2%	36.8%	0.0%	0.0%	0.0%	12.0%	0.0%	100.0%
Minibus /LCV	59.0%	39.4%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	69.9%	18.2%	0.0%	0.0%	0.0%	11.8%	0.0%	100.0%
2-AXLE TRUCK	60.6%	37.5%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	62.4%	29.4%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
MAV	57.8%	41.7%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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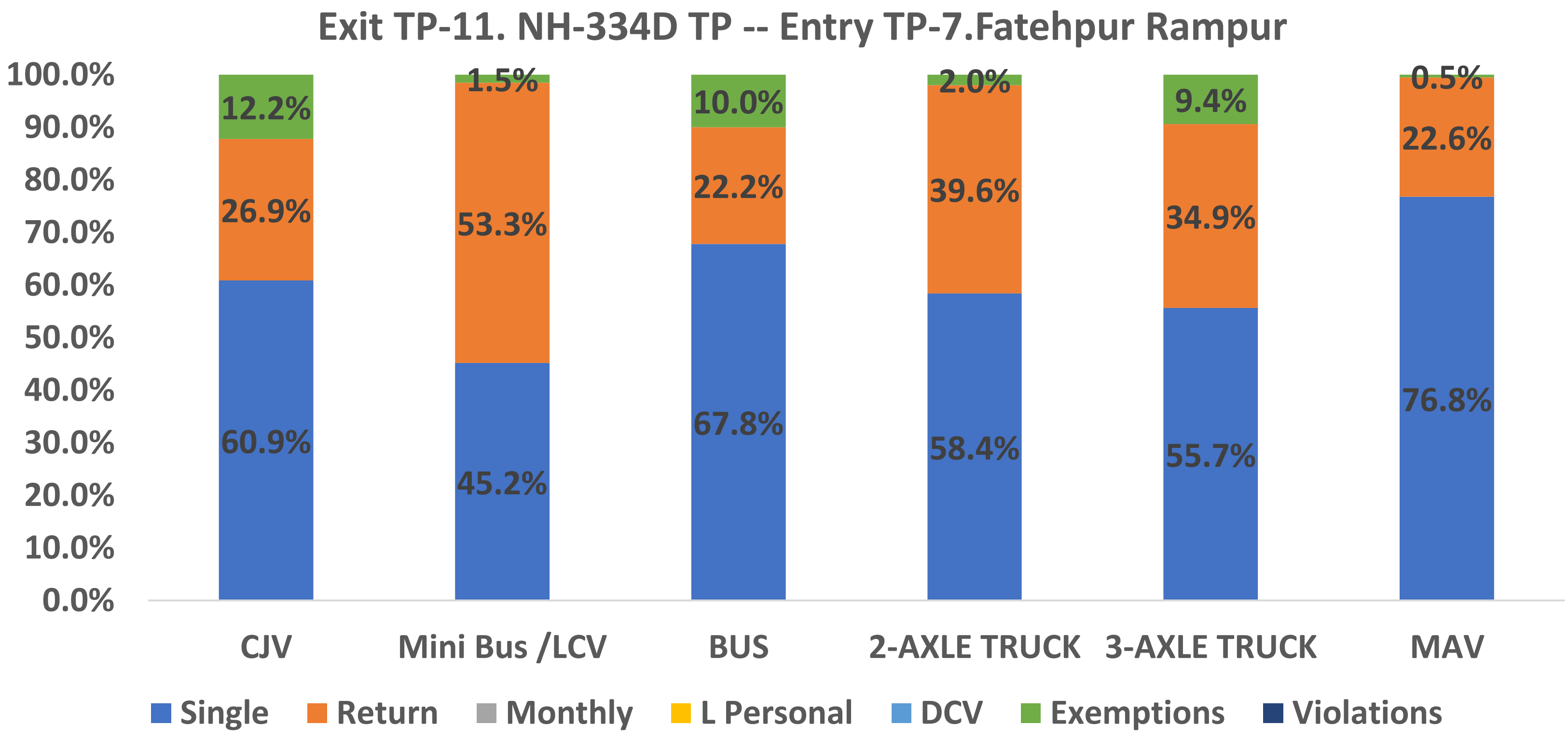
Exit TP-11. NH334D- Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	60.9%	26.9%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	45.2%	53.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	67.8%	22.2%	0.0%	0.0%	0.0%	10.0%	0.0%	100.0%
2-AXLE TRUCK	58.4%	39.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	55.7%	34.9%	0.0%	0.0%	0.0%	9.4%	0.0%	100.0%
MAV	76.8%	22.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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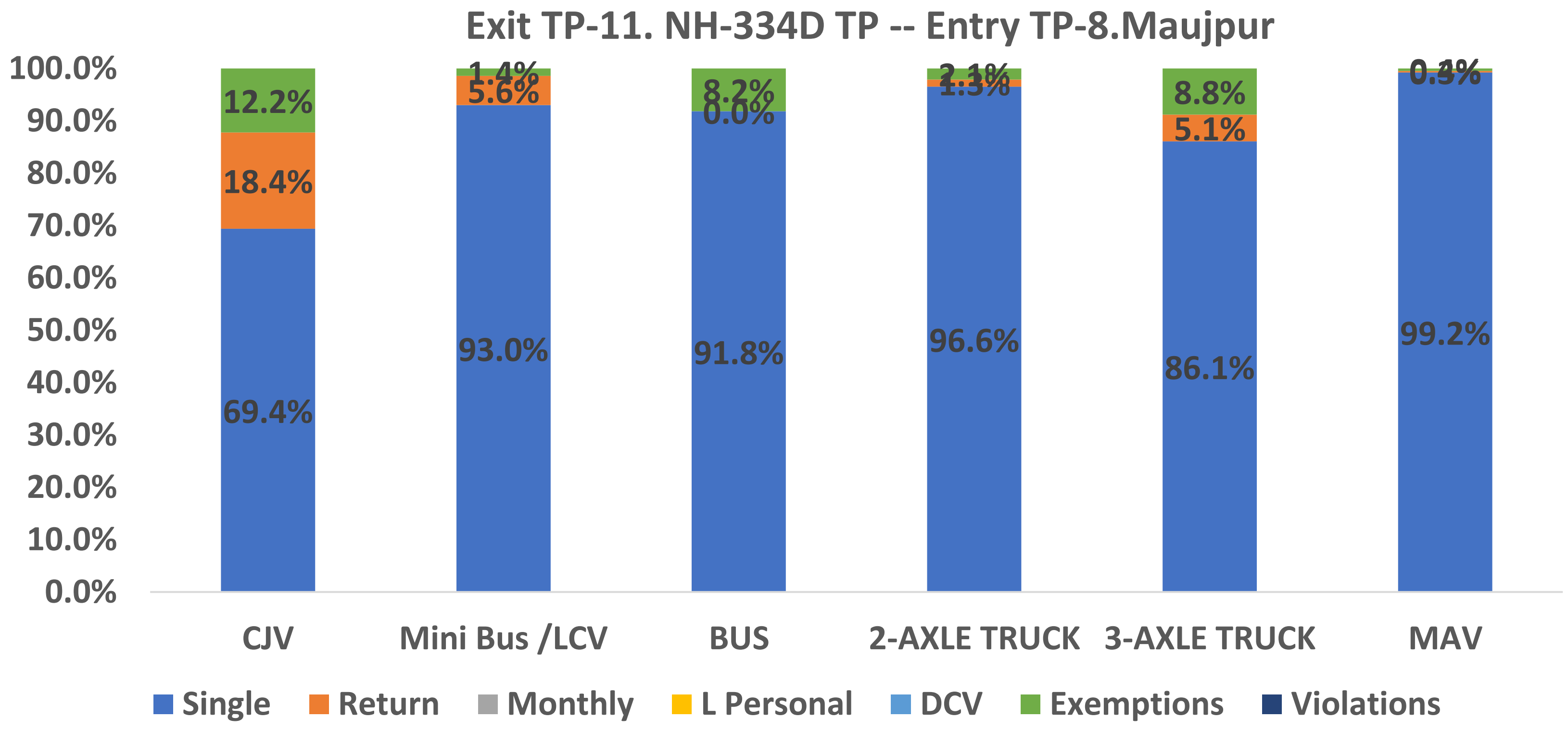
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.4%	18.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	93.0%	5.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	91.8%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
2-AXLE TRUCK	96.6%	1.3%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
3-AXLE TRUCK	86.1%	5.1%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
MAV	99.2%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%



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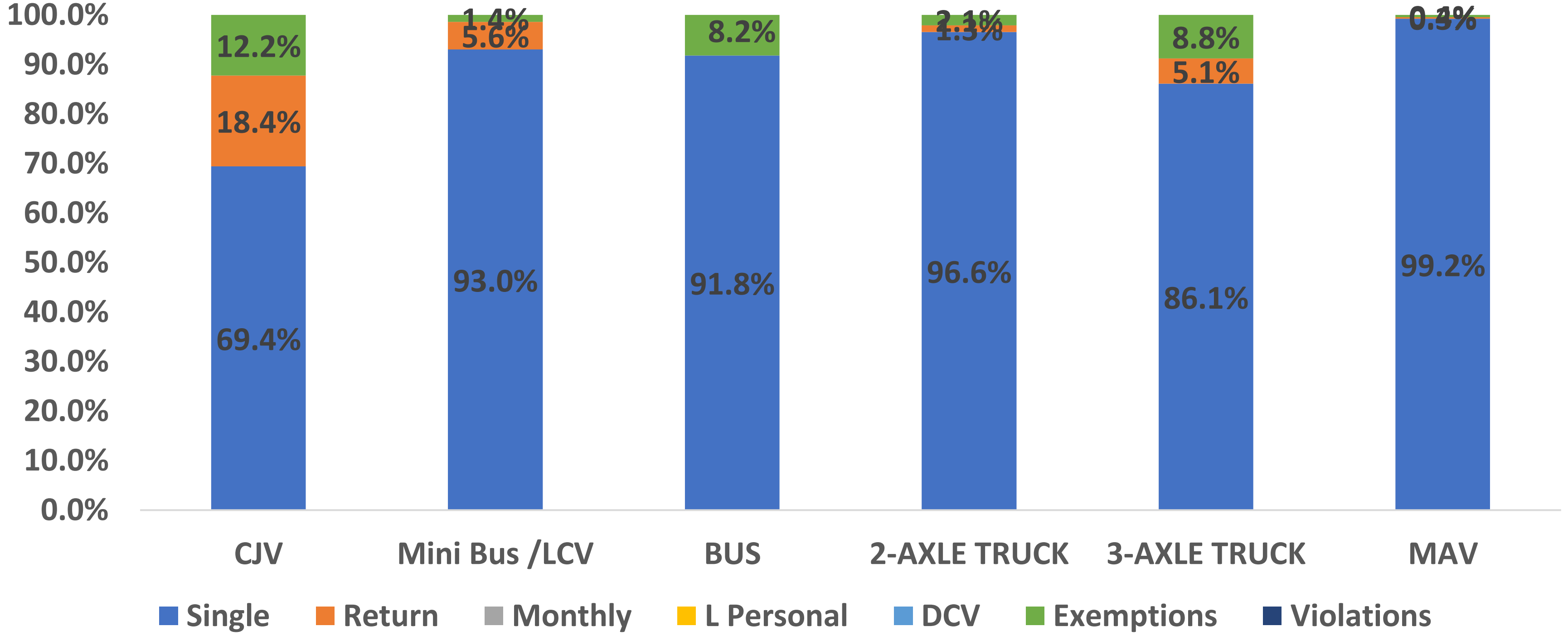
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-9.Chhajju Nagar								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	69.4%	18.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	93.0%	5.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	91.8%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
2-AXLE TRUCK	96.6%	1.3%	0.0%	0.0%	0.0%	2.1%	0.0%	100.0%
3-AXLE TRUCK	86.1%	5.1%	0.0%	0.0%	0.0%	8.8%	0.0%	100.0%
MAV	99.2%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	100.0%

Exit TP-11. NH-334D TP -- Entry TP-9.Chhajju Nagar



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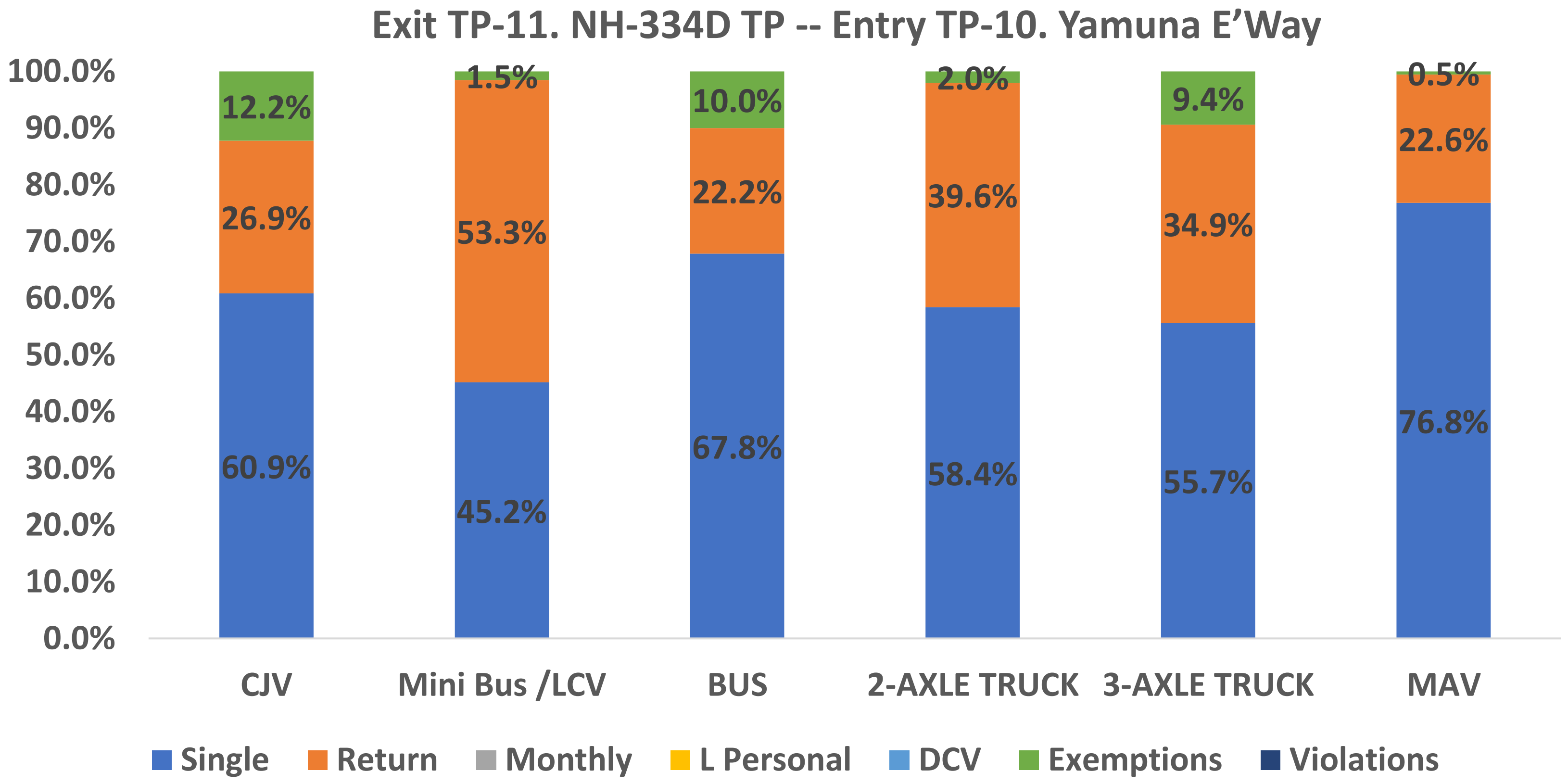
RECOMMENDED TRIP CATEGORIES – TP11

Exit TP-11. NH334D- Entry TP-10.Yamuna E'Way								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	60.9%	26.9%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	45.2%	53.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	67.8%	22.2%	0.0%	0.0%	0.0%	10.0%	0.0%	100.0%
2-AXLE TRUCK	58.4%	39.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	55.7%	34.9%	0.0%	0.0%	0.0%	9.4%	0.0%	100.0%
MAV	76.8%	22.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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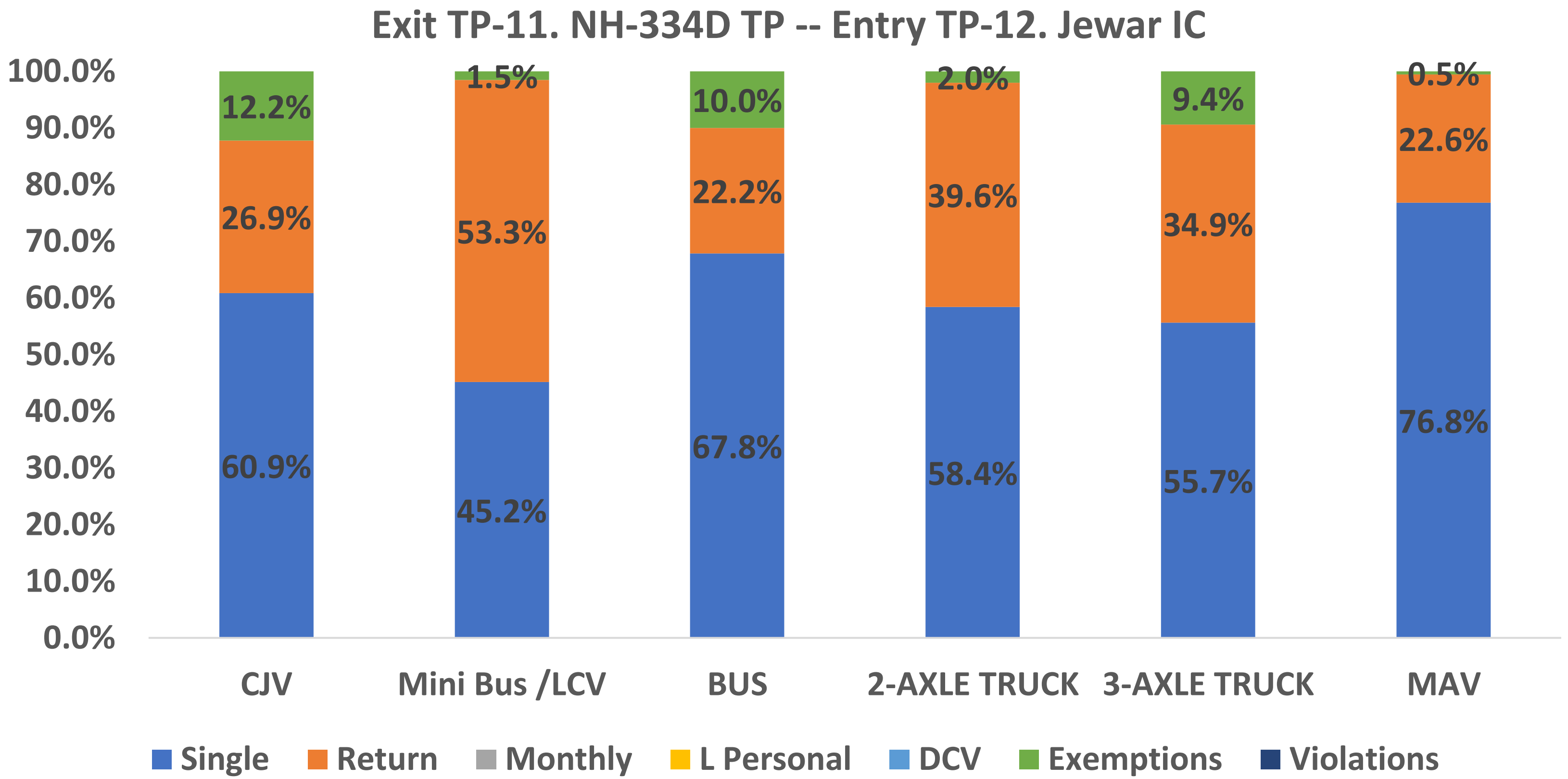
Exit TP-11. NH334D- Entry TP-12. Jewar IC								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	60.9%	26.9%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	45.2%	53.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	67.8%	22.2%	0.0%	0.0%	0.0%	10.0%	0.0%	100.0%
2-AXLE TRUCK	58.4%	39.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
3-AXLE TRUCK	55.7%	34.9%	0.0%	0.0%	0.0%	9.4%	0.0%	100.0%
MAV	76.8%	22.6%	0.0%	0.0%	0.0%	0.5%	0.0%	100.0%



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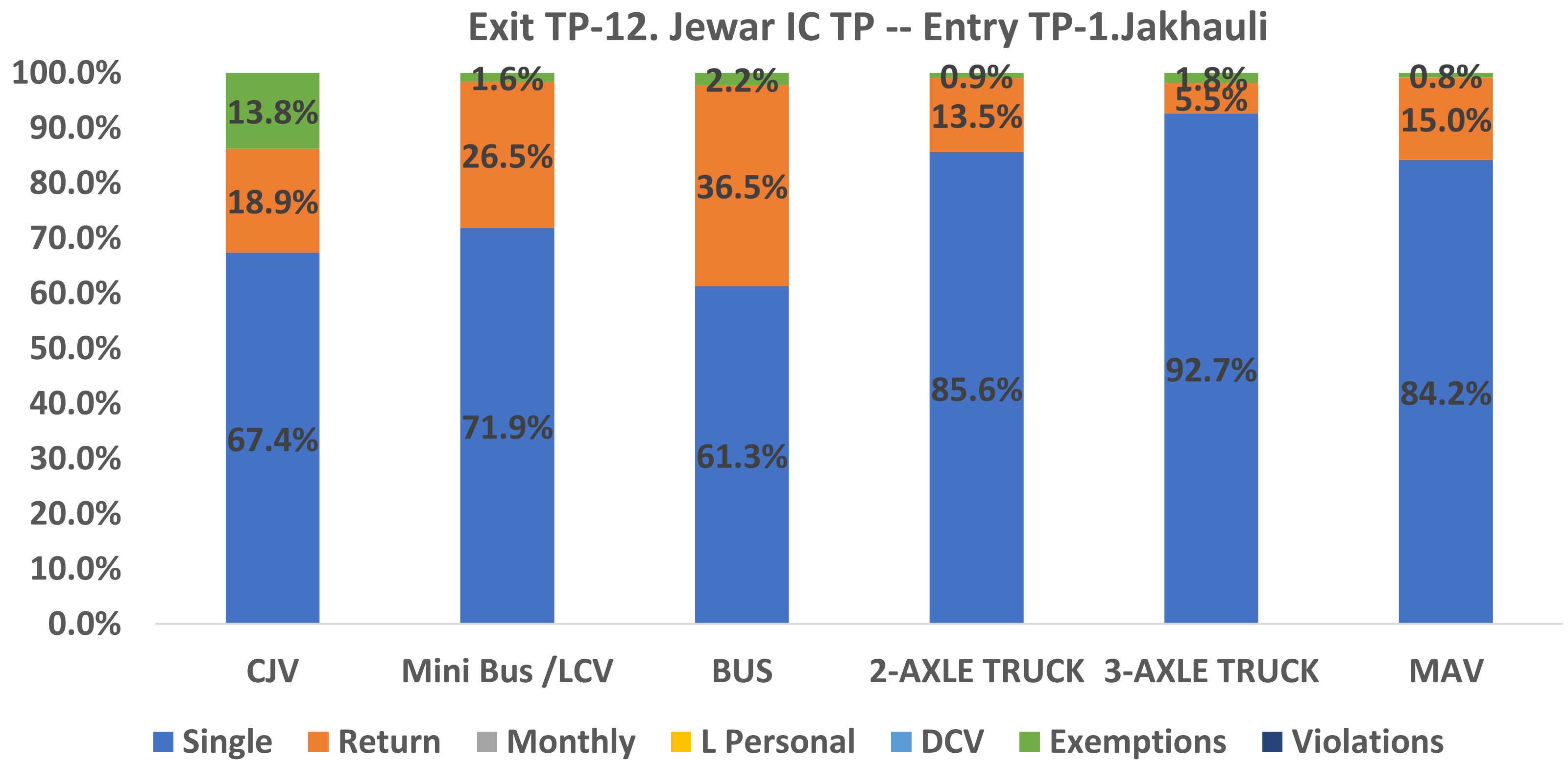
Exit TP-12. Jewar IC -- Entry TP-1.Jakhauli								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	67.4%	18.9%	0.0%	0.0%	0.0%	13.8%	0.0%	100.0%
Minibus /LCV	71.9%	26.5%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
BUS	61.3%	36.5%	0.0%	0.0%	0.0%	2.2%	0.0%	100.0%
2-AXLE TRUCK	85.6%	13.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	92.7%	5.5%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%
MAV	84.2%	15.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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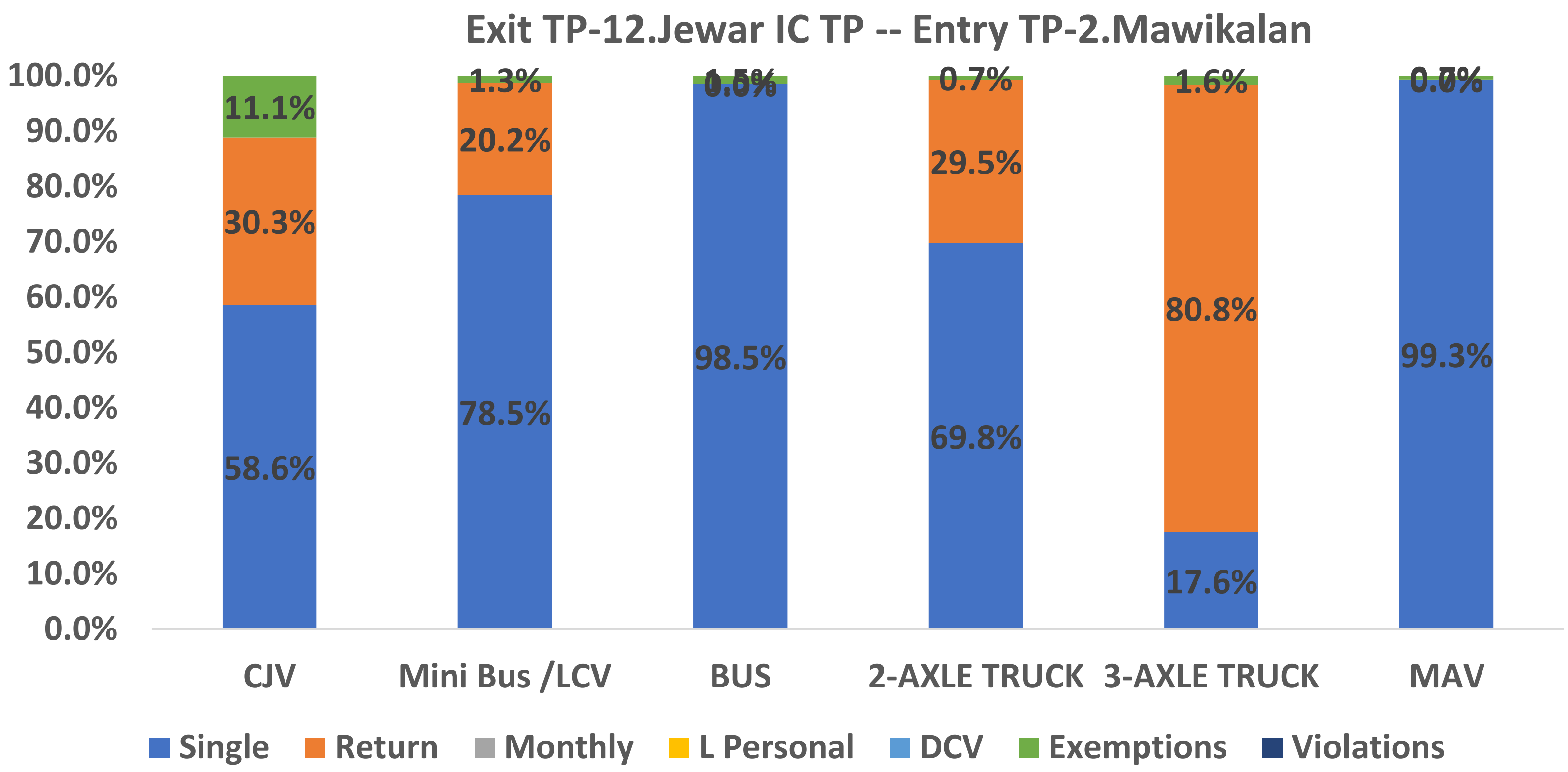
Exit TP-12. Jewar IC -- Entry TP-2.Mawikalan								
Mode	**Single**	**Return**	**Monthly**	**L Personal**	**DCV**	**Exemptions**	**Violations**	**Total**
CJV	58.6%	30.3%	0.0%	0.0%	0.0%	11.1%	0.0%	100.0%
Minibus /LCV	78.5%	20.2%	0.0%	0.0%	0.0%	1.3%	0.0%	100.0%
BUS	98.5%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
2-AXLE TRUCK	69.8%	29.5%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	17.6%	80.8%	0.0%	0.0%	0.0%	1.6%	0.0%	100.0%
MAV	99.3%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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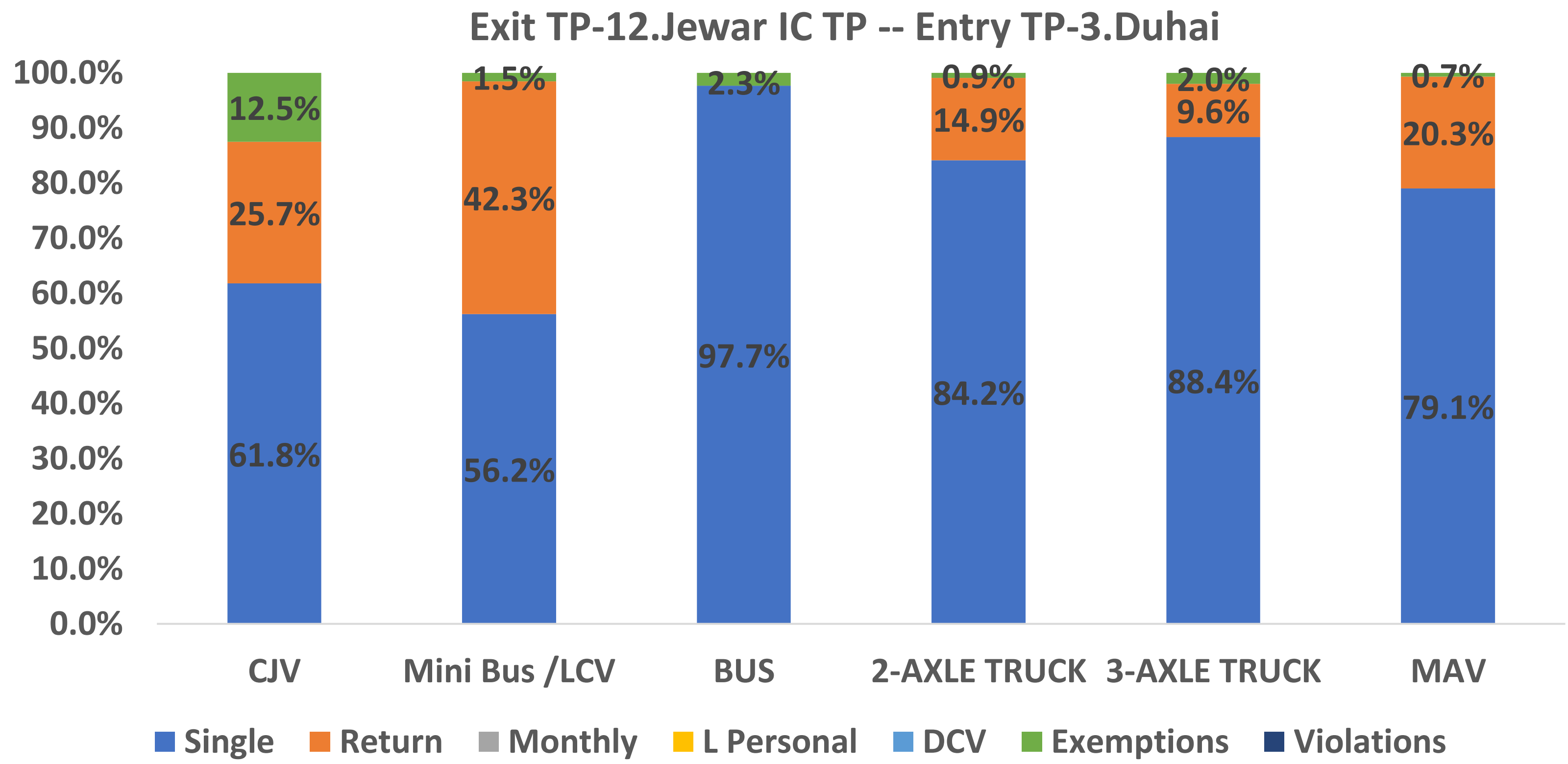
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC -- Entry TP-3.Duhai								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	61.8%	25.7%	0.0%	0.0%	0.0%	12.5%	0.0%	100.0%
Minibus /LCV	56.2%	42.3%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	97.7%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	100.0%
2-AXLE TRUCK	84.2%	14.9%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	88.4%	9.6%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
MAV	79.1%	20.3%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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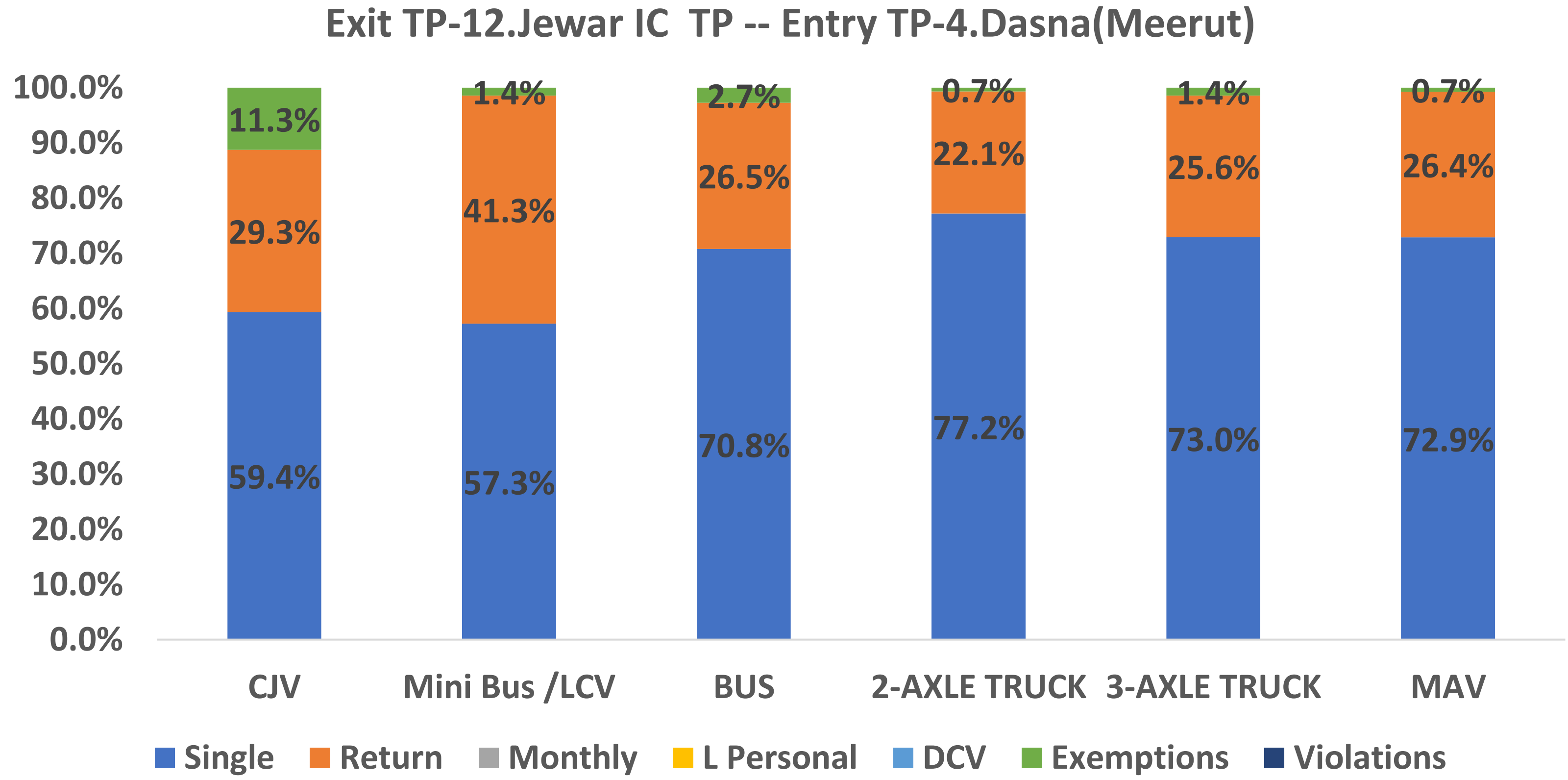
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC -- Entry TP-4.Dasna (Meerut)								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	59.4%	29.3%	0.0%	0.0%	0.0%	11.3%	0.0%	100.0%
Minibus /LCV	57.3%	41.3%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	70.8%	26.5%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	77.2%	22.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	73.0%	25.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
MAV	72.9%	26.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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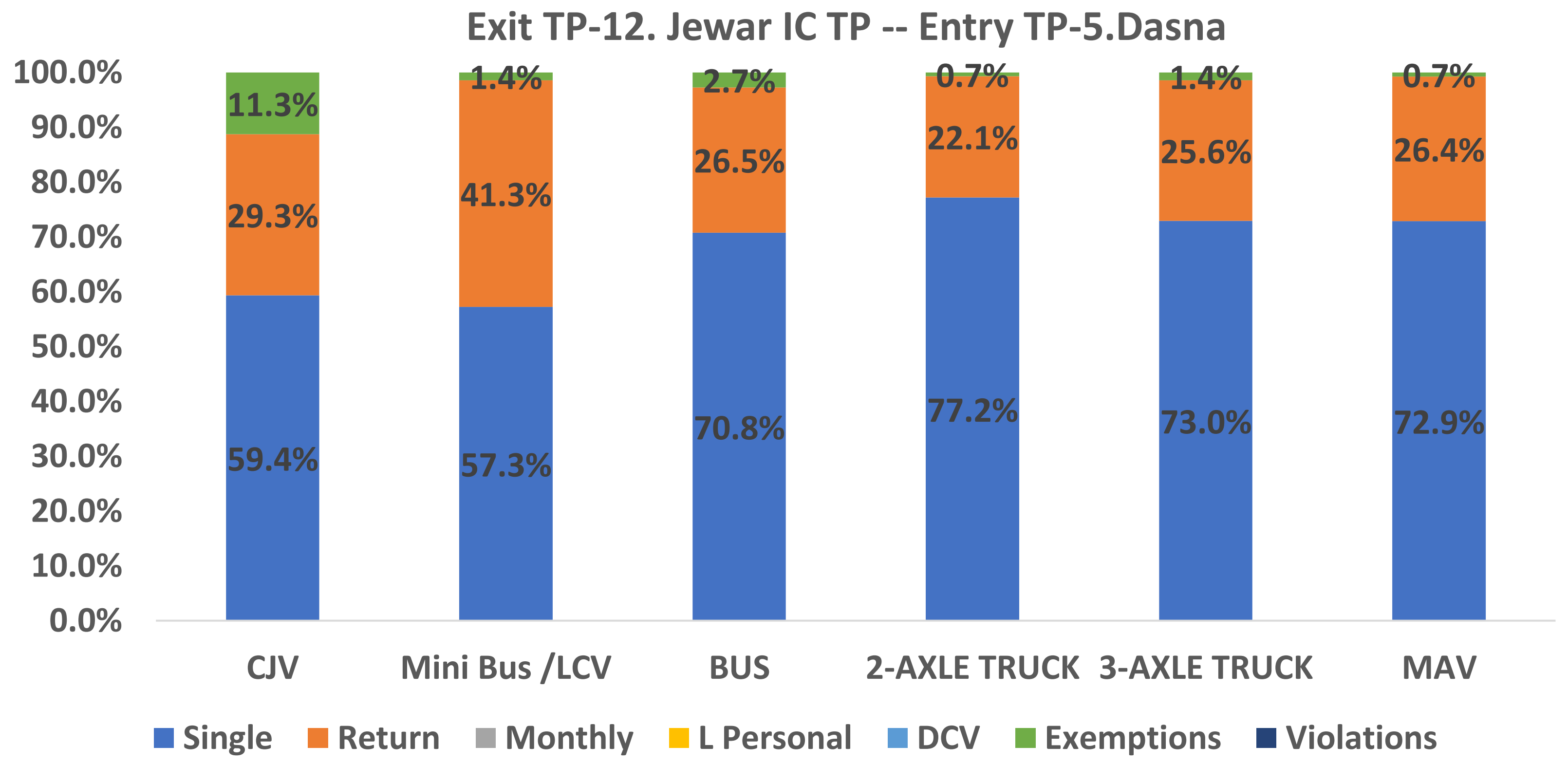
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC -- Entry TP-5.Dasna								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	59.4%	29.3%	0.0%	0.0%	0.0%	11.3%	0.0%	100.0%
Minibus /LCV	57.3%	41.3%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	70.8%	26.5%	0.0%	0.0%	0.0%	2.7%	0.0%	100.0%
2-AXLE TRUCK	77.2%	22.1%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%
3-AXLE TRUCK	73.0%	25.6%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
MAV	72.9%	26.4%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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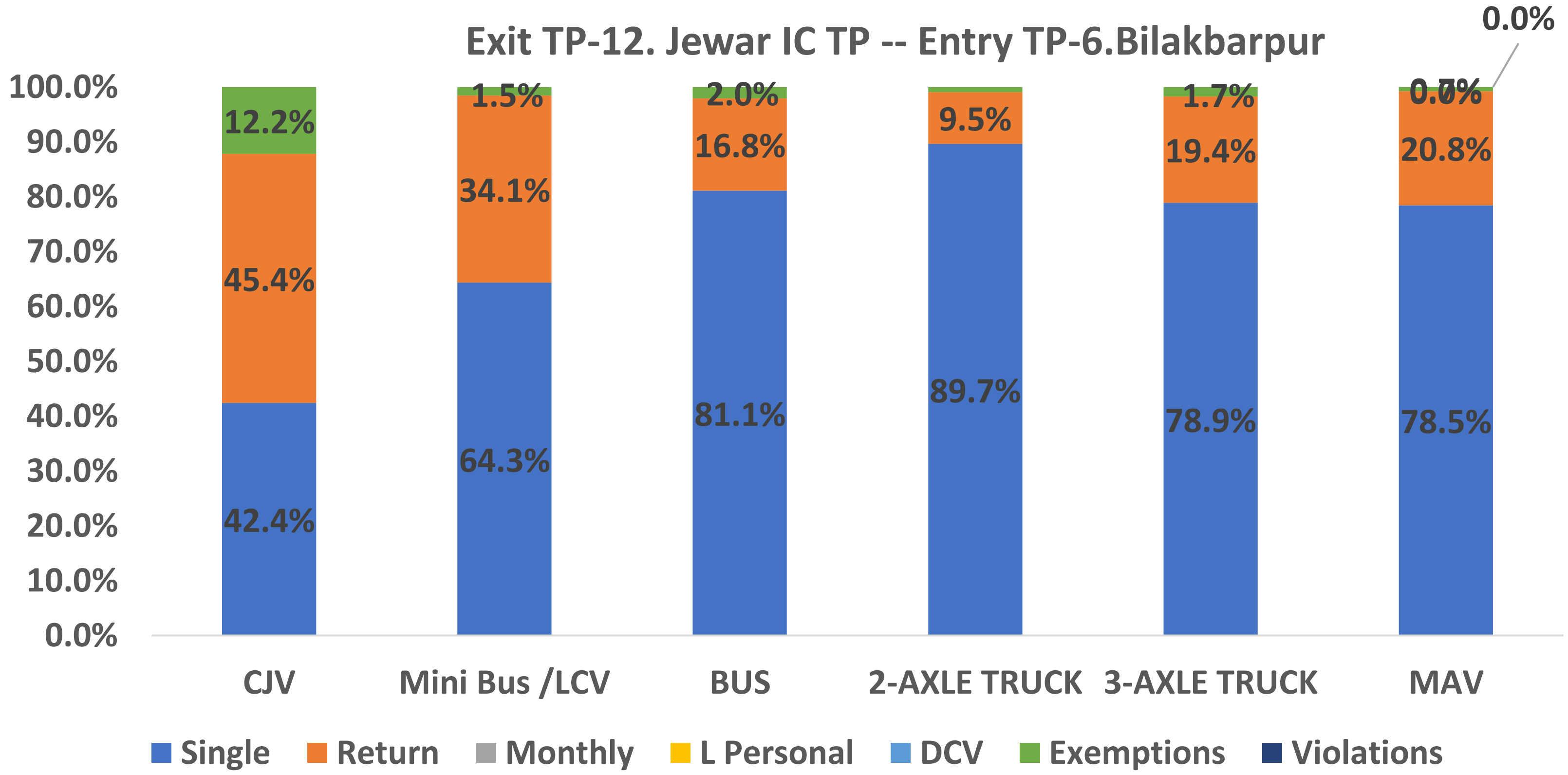
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC -- Entry TP-6.Bilakbarpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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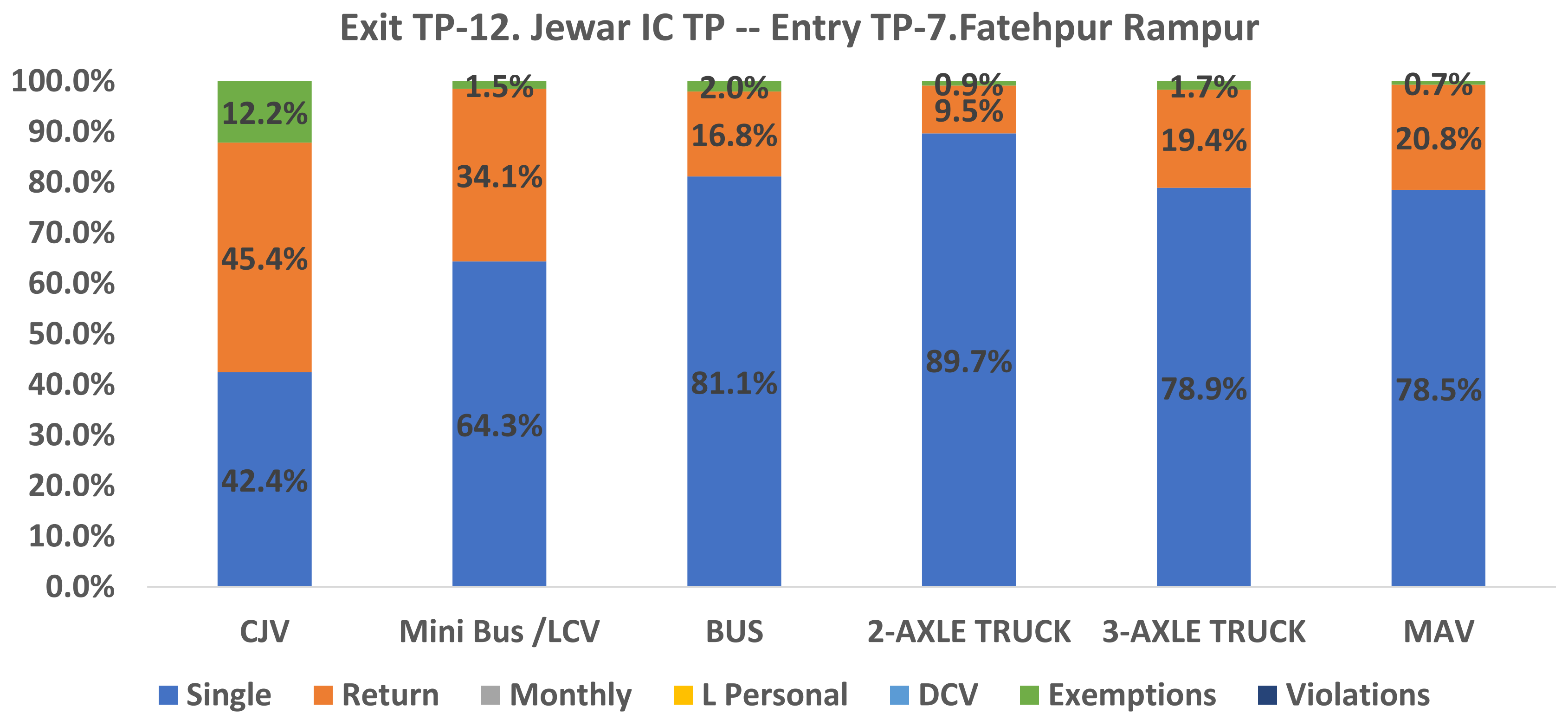
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC - Entry TP-7.Fatehpur Rampur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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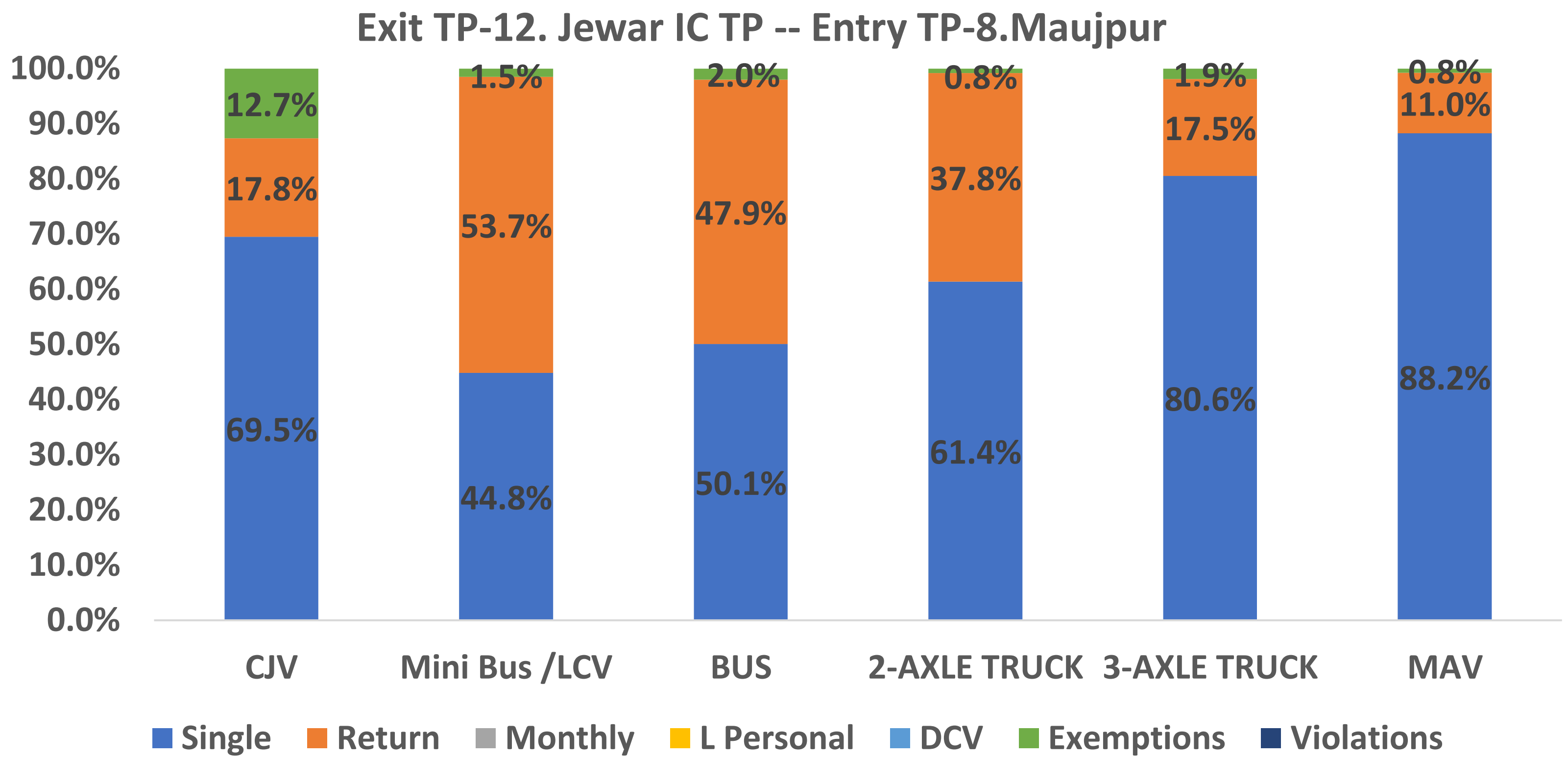
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC -- Entry TP-8.Maujpur								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.5%	17.8%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	44.8%	53.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	50.1%	47.9%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	61.4%	37.8%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	80.6%	17.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
MAV	88.2%	11.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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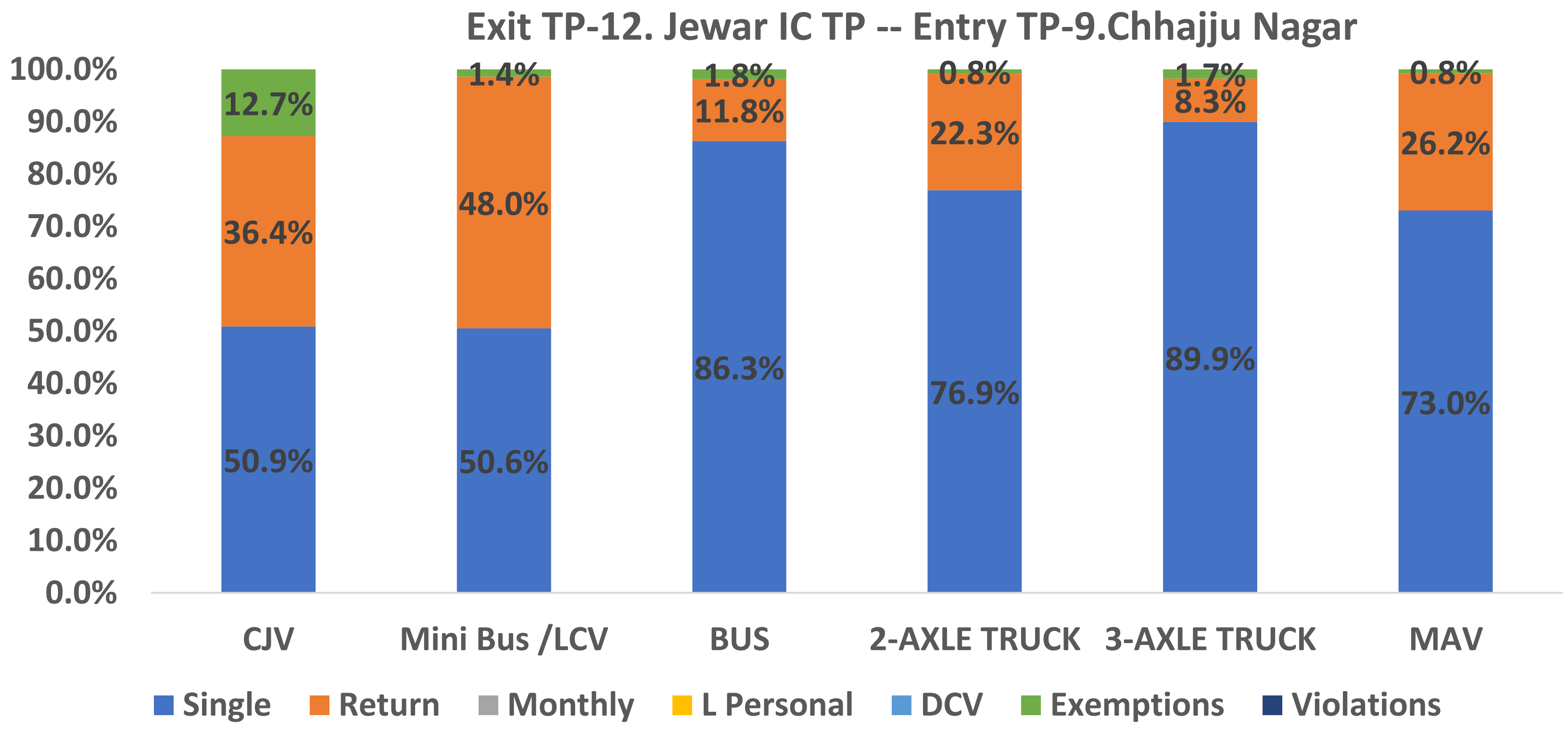
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC -- Entry TP-9.Chhajju Nagar								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	50.9%	36.4%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	50.6%	48.0%	0.0%	0.0%	0.0%	1.4%	0.0%	100.0%
BUS	86.3%	11.8%	0.0%	0.0%	0.0%	1.8%	0.0%	100.0%
2-AXLE TRUCK	76.9%	22.3%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	89.9%	8.3%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	73.0%	26.2%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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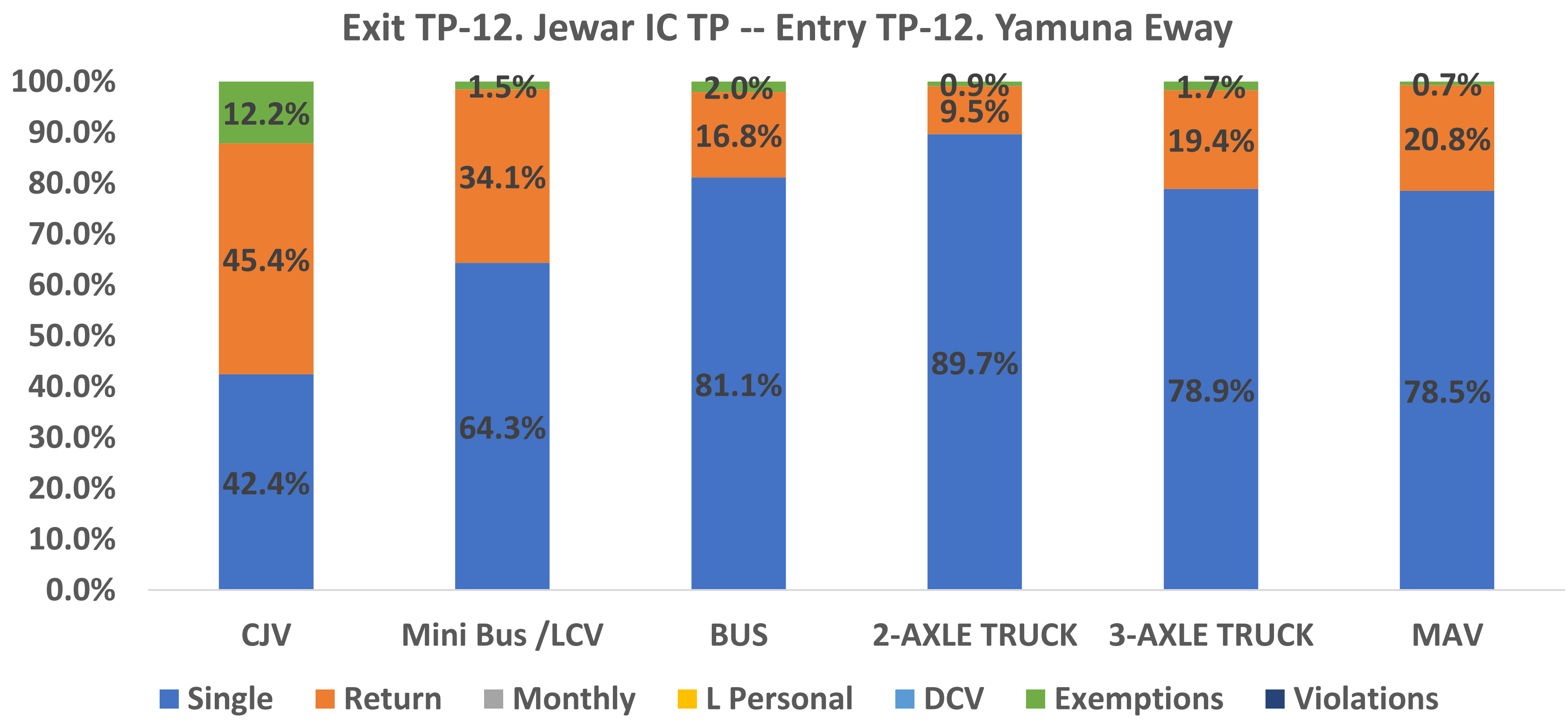
RECOMMENDED TRIP CATEGORIES – TP12

Exit TP-12. Jewar IC - Entry TP-12. Yamuna Eway								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	42.4%	45.4%	0.0%	0.0%	0.0%	12.2%	0.0%	100.0%
Minibus /LCV	64.3%	34.1%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	81.1%	16.8%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	89.7%	9.5%	0.0%	0.0%	0.0%	0.9%	0.0%	100.0%
3-AXLE TRUCK	78.9%	19.4%	0.0%	0.0%	0.0%	1.7%	0.0%	100.0%
MAV	78.5%	20.8%	0.0%	0.0%	0.0%	0.7%	0.0%	100.0%



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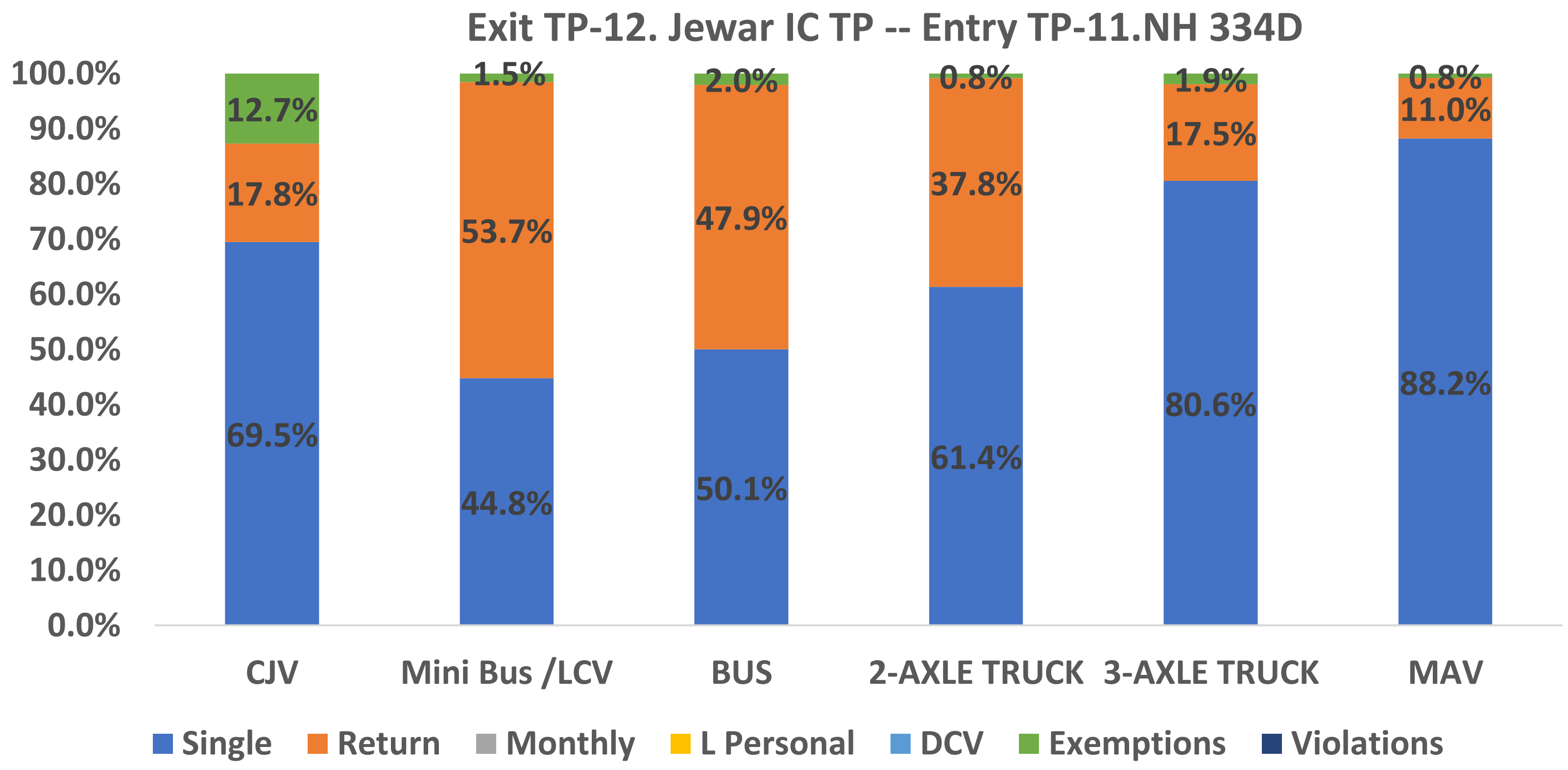
Exit TP-12. Jewar IC -- Entry TP-11.NH 334D								
Mode	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
CJV	69.5%	17.8%	0.0%	0.0%	0.0%	12.7%	0.0%	100.0%
Minibus /LCV	44.8%	53.7%	0.0%	0.0%	0.0%	1.5%	0.0%	100.0%
BUS	50.1%	47.9%	0.0%	0.0%	0.0%	2.0%	0.0%	100.0%
2-AXLE TRUCK	61.4%	37.8%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%
3-AXLE TRUCK	80.6%	17.5%	0.0%	0.0%	0.0%	1.9%	0.0%	100.0%
MAV	88.2%	11.0%	0.0%	0.0%	0.0%	0.8%	0.0%	100.0%



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REVENUE ASSESSMENT METHODOLOGY

REVENUE COMPUTATION METHODOLOGY | EXAMPLE (1/2)

EXIT PLAZA : JAKHAULI

ENTRY PLAZA : MAWI KALAN

O-D Pair AADT

Annual Average Daily Traffic

At Exit Plaza:	Base Year AADT coming from							
1.Jakhauli	2.Mawikalan	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	atehpur Ramp	8.Maujpur	9.Chhajju Nagar
Car	3,143	3,016	-	1,513	303	494	281	196
Mini Bus	12	13	-	12	3	3	3	1
Bus	345	27	-	135	8	29	3	4
LCV	908	940	-	886	247	192	187	70
2AT	83	109	-	161	55	41	33	32
3AT	88	103	-	305	84	17	17	80
MAV	351	423	-	803	267	72	49	188
OSV	0	1	-	1	0	0	0	-

O-D Pair - Trip Categories

Trip Stream

At Exit Plaza:	From 2.Mawikalan							
1.Jakhauli	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations	Total
Car	71%	29%	0%	0%	0%	0%	0%	100%
Mini Bus	55%	45%	0%	0%	0%	0%	0%	100%
Bus	23%	77%	0%	0%	0%	0%	0%	100%
LCV	55%	45%	0%	0%	0%	0%	0%	100%
2AT	58%	42%	0%	0%	0%	0%	0%	100%
3AT	69%	31%	0%	0%	0%	0%	0%	100%
MAV	60%	40%	0%	0%	0%	0%	0%	100%
OSV	100%	0%	0%	0%	0%	0%	0%	100%

Traffic / Trips (Tickets)

Trip Rates

Trip Rates

At Exit Plaza:	1.Jakhauli						
1.Jakhauli	Single	Return	Monthly	L Personal	DCV	Exemptions	Violations
Car	1.00	2.00	50.00	50.00	1.00	1.00	1.00
Mini Bus	1.00	2.00	50.00	50.00	1.00	1.00	1.00
Bus	1.00	2.00	50.00	50.00	1.00	1.00	1.00
LCV	1.00	2.00	50.00	50.00	1.00	1.00	1.00
2AT	1.00	2.00	50.00	50.00	1.00	1.00	1.00
3AT	1.00	2.00	50.00	50.00	1.00	1.00	1.00
MAV	1.00	2.00	50.00	50.00	1.00	1.00	1.00
OSV	1.00	2.00	50.00	50.00	1.00	1.00	1.00

Traffic / Trips

	01-Apr-21 31-Mar-22
TOLLABLE TRAFFIC	
2 From 2.Mawikalan	
Single	
Car	2,232
Mini Bus	7
Bus	80
LCV	504
2AT	48
3AT	61
MAV	209
OSV	-

Toll Rates

	01-Apr-21 31-Mar-22
From 2.Mawikalan	
Single	
Car	25.0
Mini Bus	40.0
Bus	85.0
LCV	40.0
2AT	85.0
3AT	95.0
MAV	135.0
OSV	165.0

Revenue (Base Year)

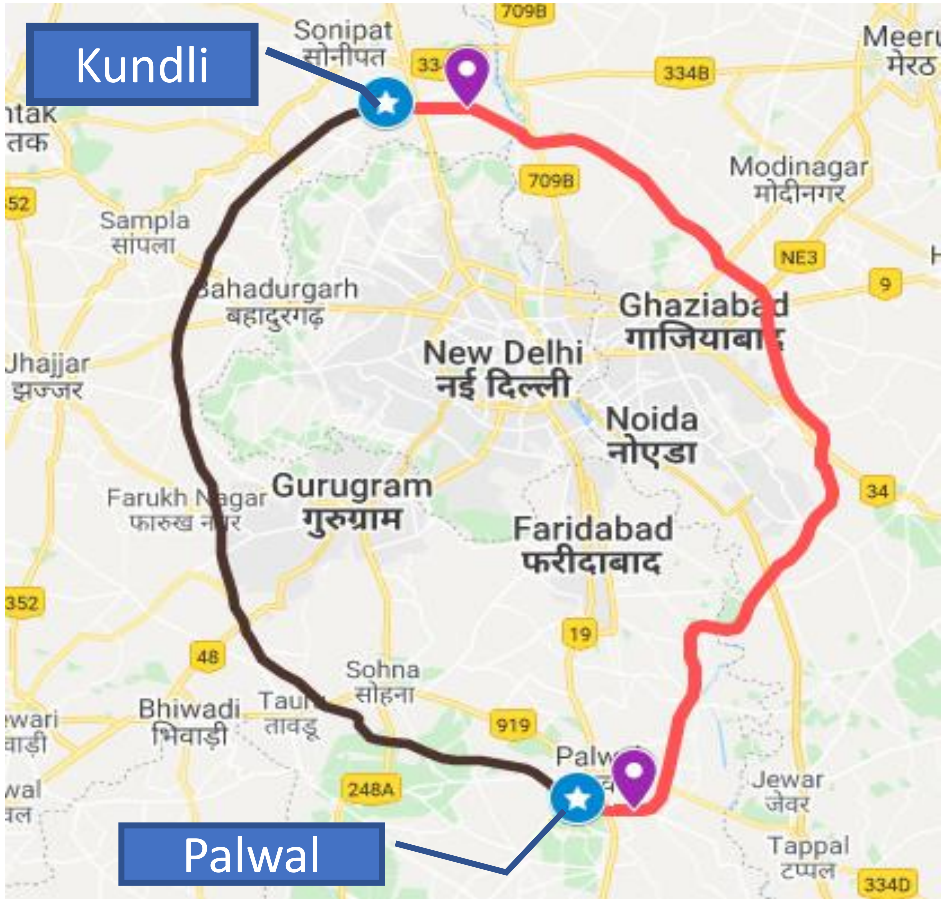
1 DETAILED TOLL REVENUE COMPUTATION FOR - 1.Jakhauli	
2 From 2.Mawikalan	
Single	
Car	2.04
Mini Bus	0.01
Bus	0.25
LCV	0.74
2AT	0.15
3AT	0.21
MAV	1.03
OSV	-

EPE vs WPE

IBI

COMPARISON EASTERN PERIPHERAL EXPRESSWAY VS WESTERN PHERIPERAL EXPRESSWAY

CDPQ



Western Peripheral Expressway

Eastern Peripheral Expressway

Survey Locations on WPE

Survey Locations on EPE

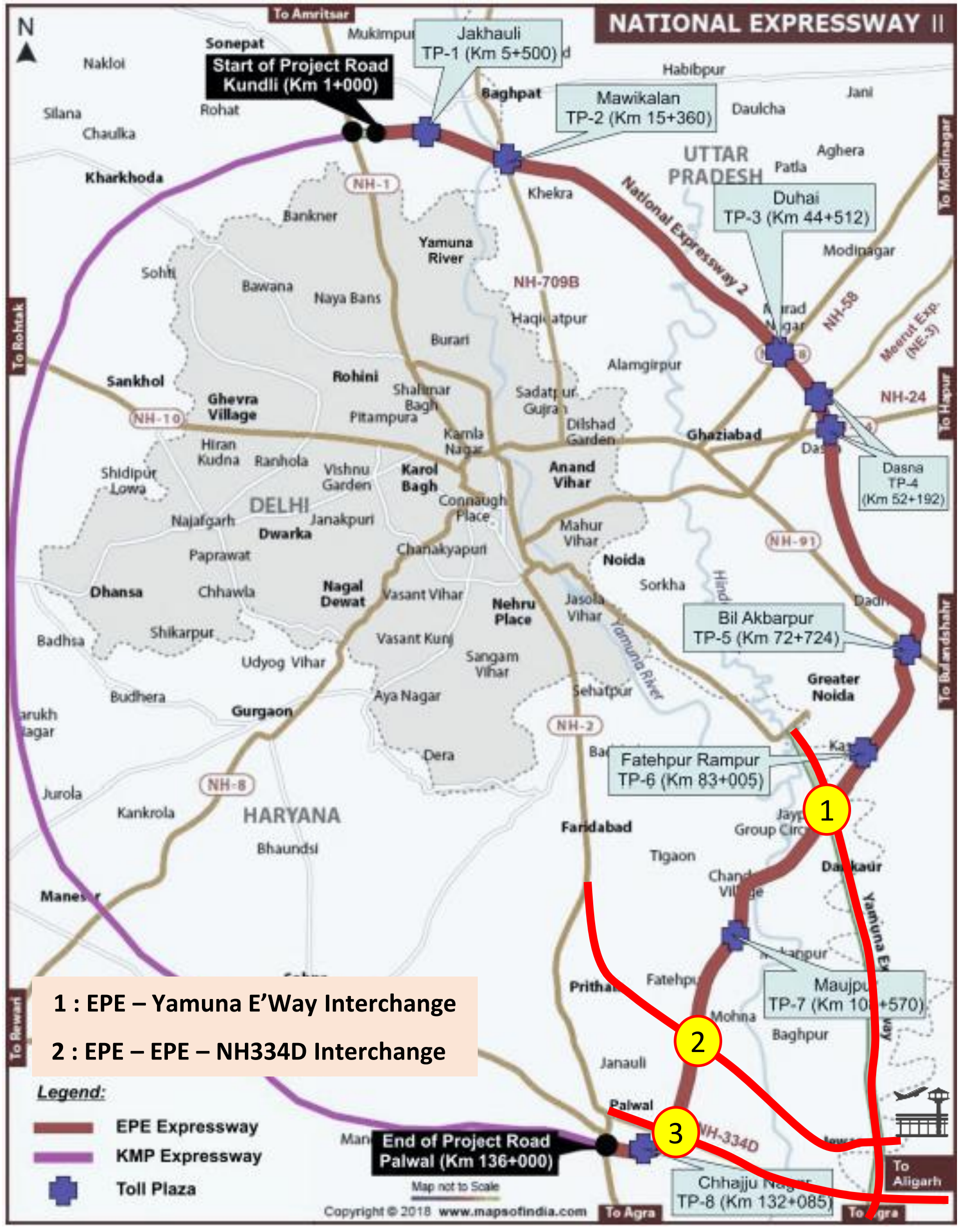
ADT	EPE	WPE	EPE VS WPE
	1.Jakhauli	Near Kundli	
Vehicles	32,023	24,234	32%
PCU	58,607	45,001	30%
	9.Chhajju Nagar	Near Palwal	
Vehicles	10,761	16,169	-33%
PCU	25,286	36,828	-31%

Attribute	EPE	WPE
Length (Km)	135	135.6
Lane Configuration	6-lane	6-lane

Rate/Km (Toll Rates)			
VEHICLE_TYPE	EPE	WPE	EPE VS WPE
Car	1.78	1.44	23%
MAV	9.37	7.57	24%

NEW (PROPOSED) INTERCHANGES ON EPE

PROPOSED INTERCHANGES | INTRODUCTION



Sl. No	Interchange/ Toll Plaza	Description	Construction Period	Operational Start Year
1	EPE – Yamuna E'Way	The interchange is proposed at the intersection of EPE & Yamuna E'way connecting Greater Noida and Agra	3 Years	FY - 2026
2	EPE – Jewar Airp[ort	The Interchange is proposed at the intersection of EPE & the proposed Jewar Airport Elink originating from Faridabad **(DPR under preparation)**	3 Years	FY - 2026
3	EPE – NH334D	The Interchange is proposed at the intersection of EPE & NH334D connecting Palwal with Aligarh through Jewar, Khair	3 Years	FY - 2026

Construction period and Operational start years are IBI Assumptions

PROPOSED INTERCHANGES | APPROACH & METHODOLOGY

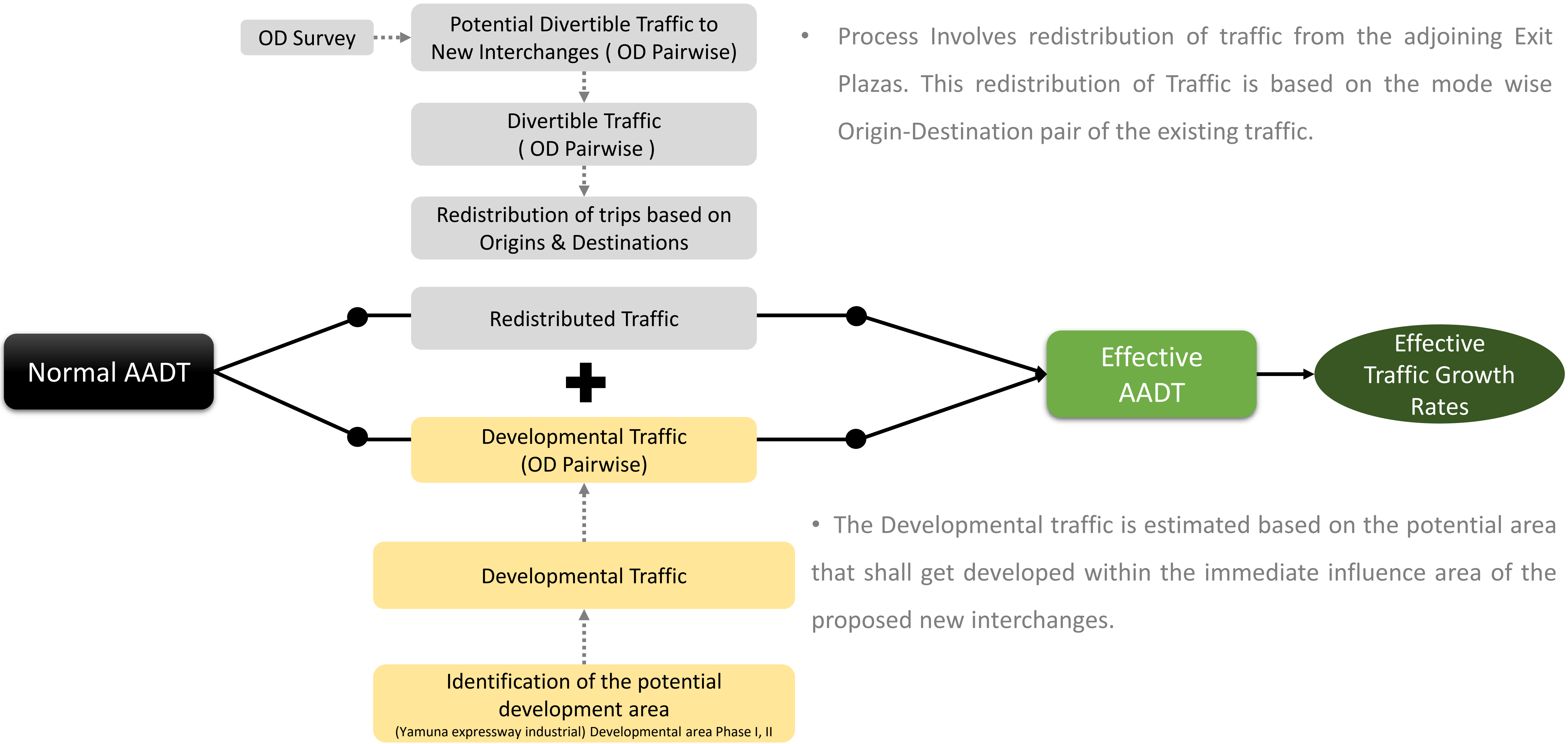
TRAFFIC AT NEW INTERCHANGES

REDISTRIBUTED TRAFFIC

Process Involves redistribution of traffic from the adjoining Exit Plazas. This redistribution of Traffic is based on the mode wise Origin-Destination pair of the existing traffic.

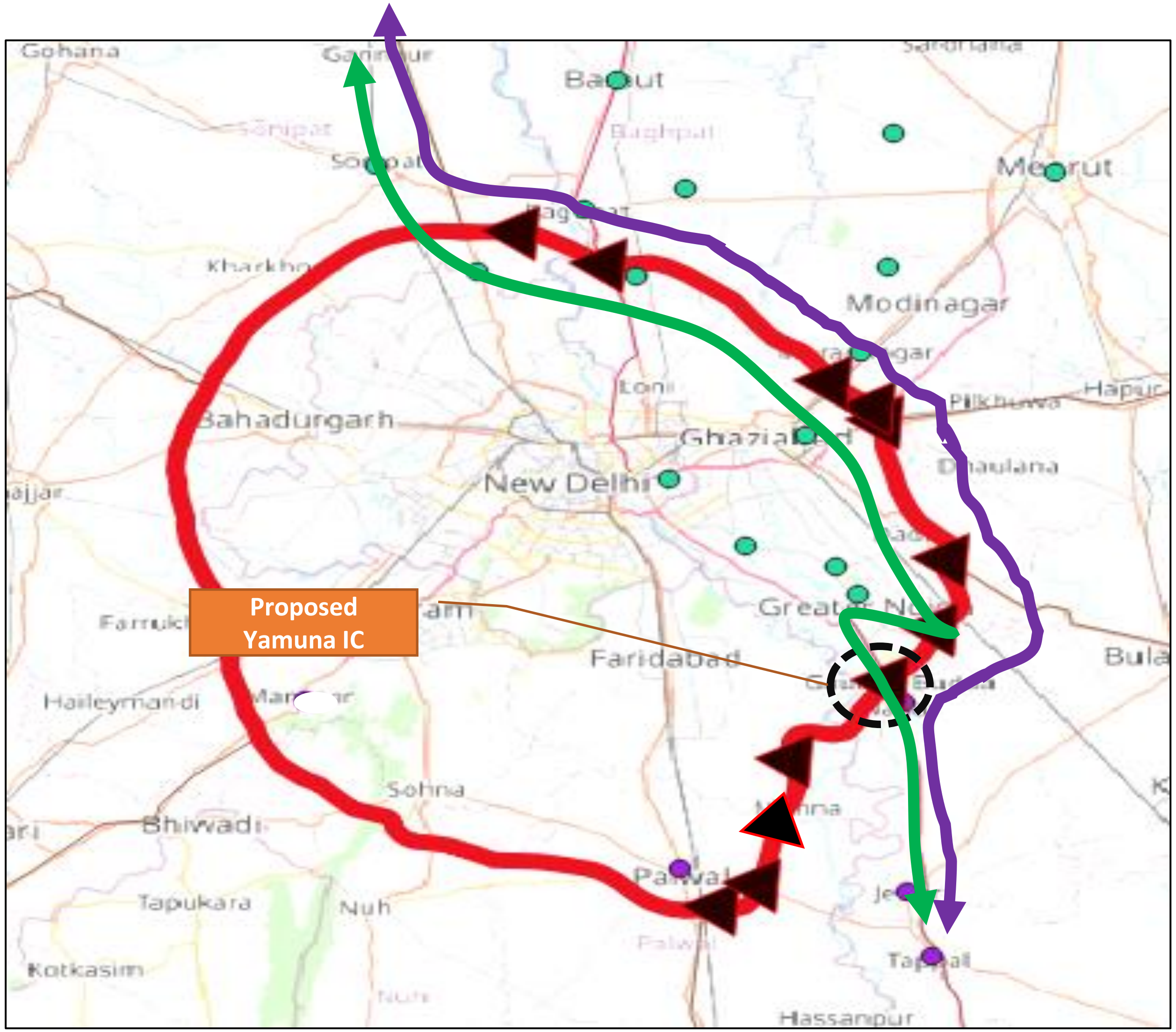
DEVELOPMENT TRAFFIC

- The Developmental traffic is estimated based on the potential area that shall get developed within the immediate influence area of the-
  - Project road and the Yamuna E'Way.
  - Project road and NH 334 D
  - Project road and Jewar link
- The methodology adopted to quantify the impact of these shall developments shall be the same the methodology applied to estimate the generated traffic from the development of New Noida City and Jewar Airport



- Process Involves redistribution of traffic from the adjoining Exit Plazas. This redistribution of Traffic is based on the mode wise Origin-Destination pair of the existing traffic.

- The Developmental traffic is estimated based on the potential area that shall get developed within the immediate influence area of the proposed new interchanges.

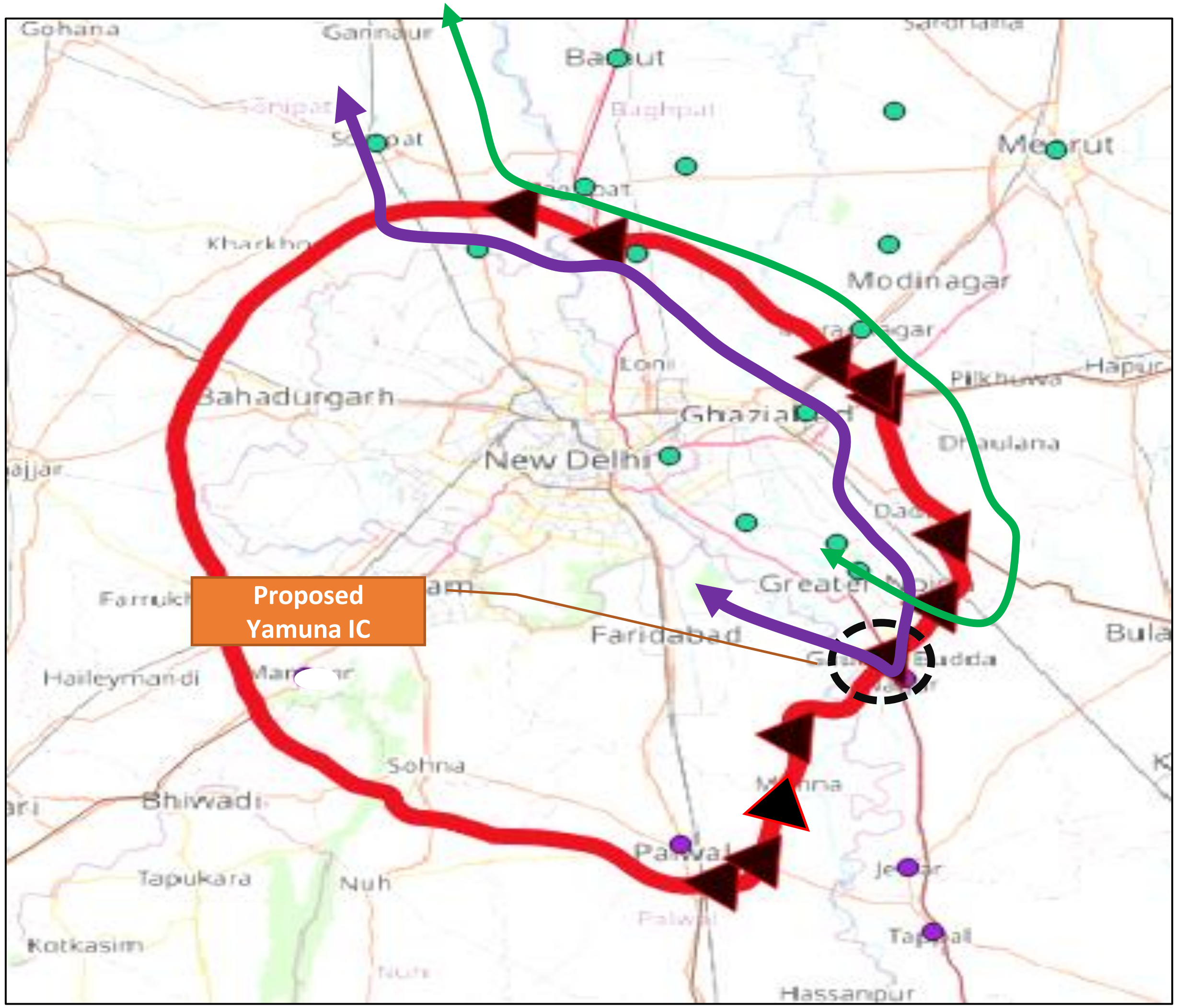


Existing Route (Entry: Jakhauli , Exit : Fatehpur Rampur)

New Route (Entry: Jakhauli , Exit : New Yamuna Eway Interchange)

Major OD Pairs
Sonipat – Agra
Sonipat – Mathura
Agra – Karnal
Kundli - Kanpur

From the map, it can be observed that the traffic originating from or destinated to Agra and the surrounding regions has been using the Fatehpur Rampur Plaza to enter/exit the Project road. Once the Yamuna E'Way Plaza gets operational, this traffic is expected to shift to the new Plaza as it provides direct connectivity to the Agra Regions.
The Top OD Pairs that get influenced by the Toll Plaza are listed above.



Major OD Pairs
Sonipat – Greater Noida
Sonipat – Noida
Bhagpat – Greater Noida
Shamli – Greater Noida

From the map, it can be observed that the traffic originating from or destinated to Greater Noida and the surrounding regions has been using the Fatehpur Rampur Plaza to enter/exit the Project road. Once the Yamuna E'Way Plaza gets operational, this traffic is expected to shift to the new Plaza as it provides direct connectivity to the Greater Noida regions.
The Top OD Pairs that get influenced by the Toll Plaza are listed above.

Existing Route (Entry: Jakhauli , Exit : Fatehpur Rampur)

New Route (Entry: Jakhauli , Exit : New Yamuna Eway Interchange)

PROPOSED INTERCHANGES | REDISTRIBUTION | EXAMPLE – I (Yamuna Expressway IC)

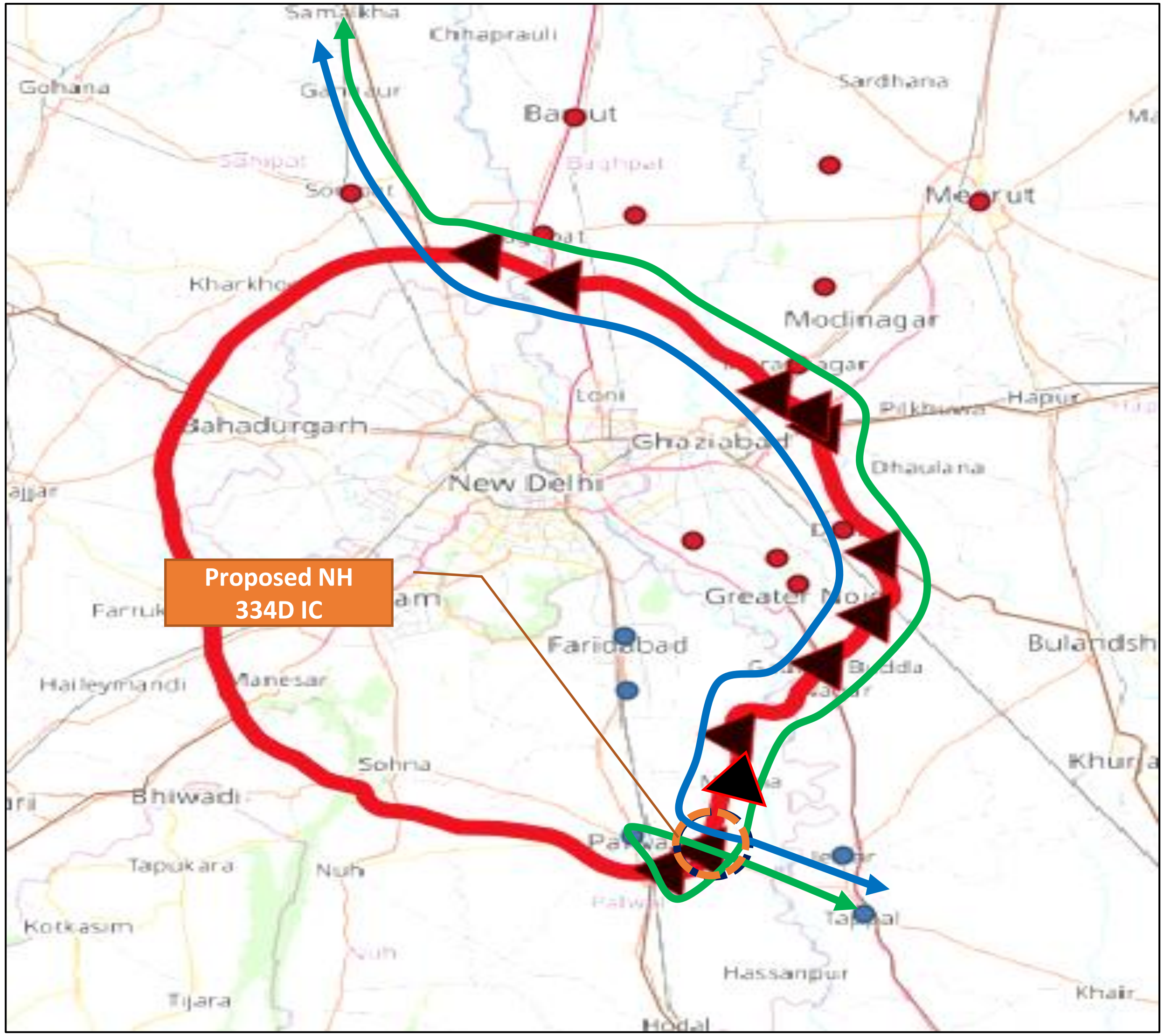
North to South

	1.Jakhauli - Main	2.Mawikalan ·	3.Duhai – IC	4.Dasna (Meerut Eway)	5.Dasna (Hapu	6.Bil Akbarpur	7.Fatehpur Rampur – IC			
At Exit Plaza:	**Potential Divertable Traffic**									
8.Maujpur	**1.Jakhauli**	**2.Mawikalan**	**3.Duhai**	**4.Meerut Eway**	**5.Dasna**	**6.Bilakbarpur**	**7.Fatehpur Rampur**	**10. Yamuna**	**11.334D**	**9.Chhajju Nagar**
Car	29	2	11	5		14	25			
Mini Bus										
Bus										
LCV			1				6			
2-Axle Truck			1				7			
3-Axle Truck										
MAV							1			
OSV										

N To S	1.Jakhauli - Main	2.Mawikalan ·	3.Duhai – IC	4.Dasna (Meerut Eway)	5.Dasna (Hapu	6.Bil Akbarpur		8.Maujpur – IC		9.Chhajju Nagar - Main
At Exit Plaza:	**Potential Divertable Traffic**									
7.Fatehpur Rampur	**1.Jakhauli**	**2.Mawikalan**	**3.Duhai**	**4.Meerut Eway**	**5.Dasna**	**6.Bilakbarpur**	**10. Yamuna**	**8.Maujpur**	**11.334D**	**9.Chhajju Nagar**
Car	51	58	1089	23	13	24				
Mini Bus			5							
Bus			26							
LCV	40	38	99	21	13	6		3		
2-Axle Truck	16	5	42	7		2				
3-Axle Truck	3	3	25	5						
MAV	28	16	66	2	2	4				
OSV										

North to South

At Exit Plaza:	**Potential Divertable Traffic**									
10. Yamuna	**1.Jakhauli**	**2.Mawikalan**	**3.Duhai**	**4.Meerut Eway**	**5.Dasna**	**6.Bilakbarpur**	**7.Fatehpur Rampur**	**8.Maujpur**	**11.334D**	**9.Chhajju Nagar**
Car	96	54	992	34	12	36	22			
Mini Bus			4							
Bus			23							
LCV	39	35	90	19	12	5	6	3		
2AT	17	4	40	6		2	6			
3AT	2	3	22	5						
MAV	31	15	59	2	2	3	1			
OSV										



Existing Route (Entry: Jakhauli , Exit : Chhajju Nagar)

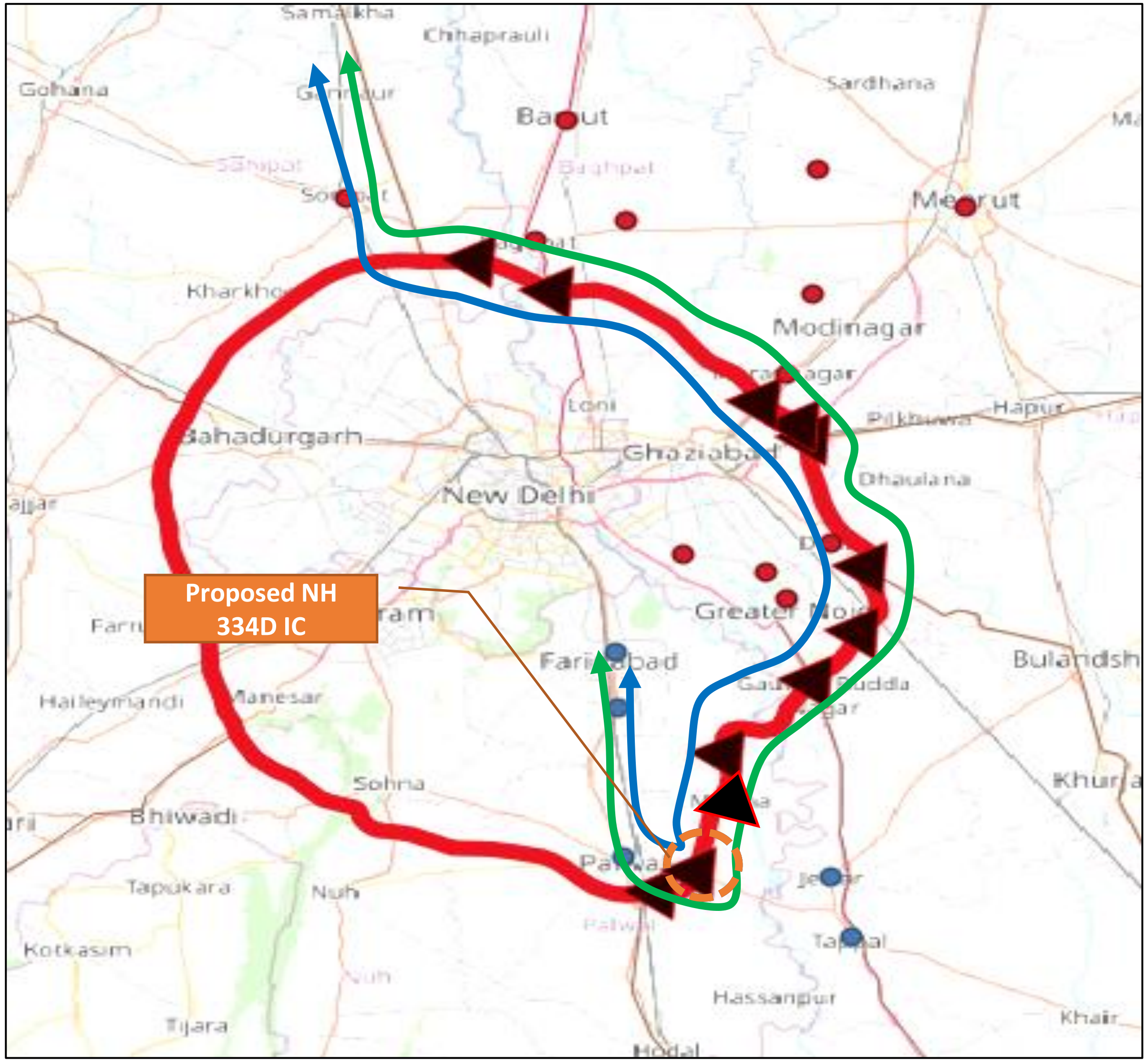
New Route (Entry: Jakhauli , Exit : NH-334D Interchanges)

Major OD Pairs
Sonipat – Agra
Sonipat – Mathura
Panipat – Aligarh

From the map, it can be observed that the traffic originating from or destinated to Aligarh and the surrounding regions has been using the Chhajju Nagar Plaza to enter/exit the Project road. Once the NH-334D Plaza gets operational, this traffic is expected to shift to the new Plaza as it provides direct connectivity to the Aligarh regions.

The Top OD Pairs that get influenced by the Toll Plaza are listed above.

PROPOSED INTERCHANGES | REDISTRIBUTION | EXAMPLE – II (NH-334D IC) (E – I)



Existing Route (Entry: Jakhauli , Exit : Chhajju Nagar)

New Route (Entry: Jakhauli , Exit : NH-334D Interchanges)

Major OD Pairs
Sonipat - Palwal
Sonipat – Faridabad
Meerut - Palwal

From the map, it can be observed that the traffic originating from or destinated to Palwal and the surrounding regions has been using the Chhajju Nagar Plaza to enter/exit the Project road. Once the NH-334D Plaza gets operational, this traffic is expected to shift to the new Plaza as it provides direct connectivity to the Palwal regions.

The Top OD Pairs that get influenced by the Toll Plaza are listed above.

PROPOSED INTERCHANGES | REDISTRIBUTION | EXAMPLE – II (NH-334D IC)

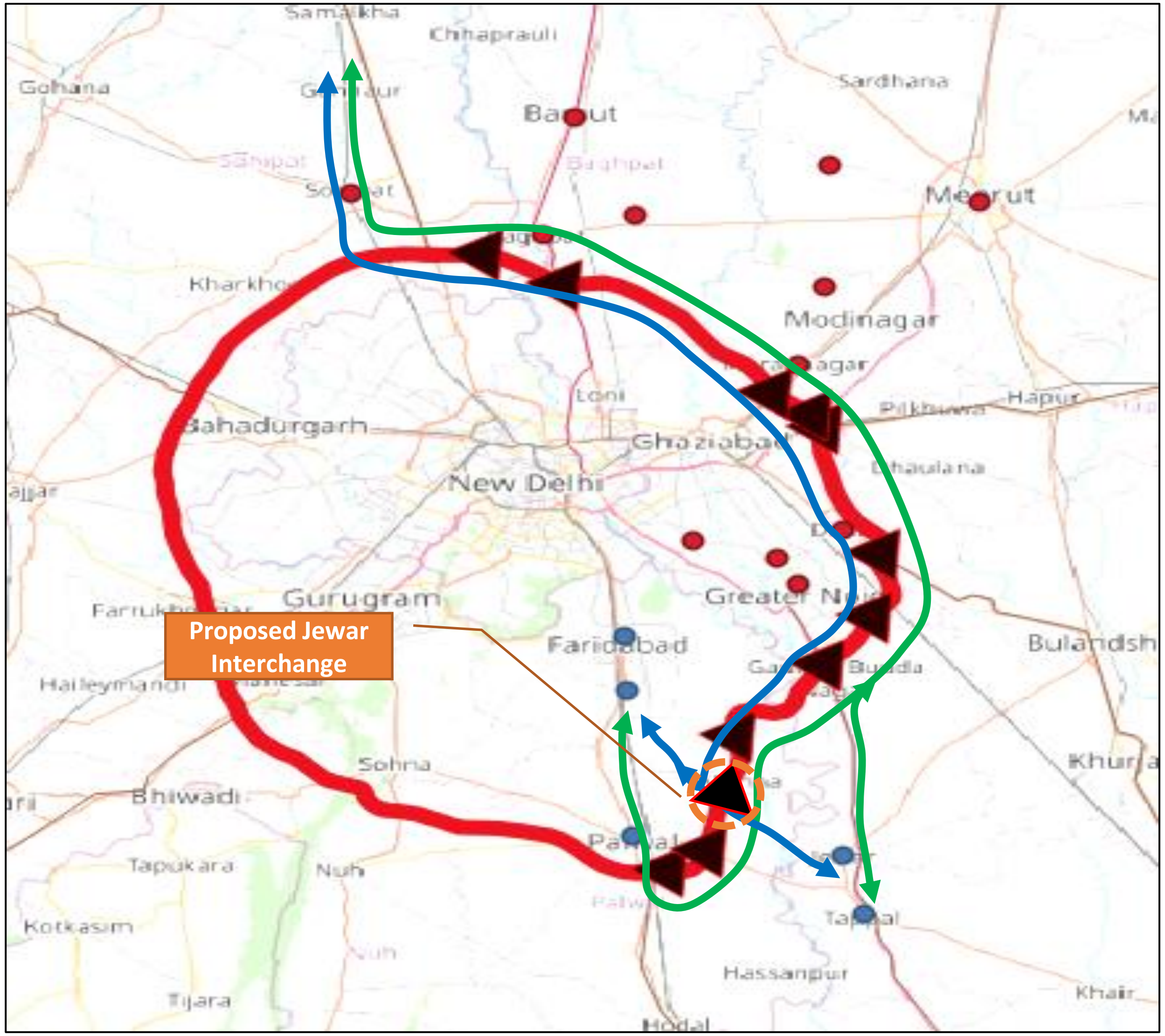
N To S

At Exit Plaza:	Potential Divertable Traffic									
8.Maujpur	1.Jakhauli	2.Mawikalan	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	7.Fatehpur Rampur	10. Yamuna	11.334D	9.Chhajju Nagar
Car	115	11	29	26	26	85	262			11
Mini Bus						3	1			
Bus										
LCV	84	6	10	14	40	45	244			
2AT	11		1	4	5	13	9			
3AT	15				2	8	23			
MAV	28		2	6	7	20	35			
OSV										

At Exit Plaza:	Potential Divertable Traffic									
9.Chhajju Nagar	1.Jakhauli	2.Mawikalan	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	7.Fatehpur Rampur	10. Yamuna	8.Maujpur	11.334D
Car	13	4	38	34	16	28	44		46	
Mini Bus							2			
Bus										
LCV	12		7	7	14	19	38		10	
2AT	6		3	3	3	6	12		12	
3AT	7	1	6	6	1	15	30		11	
MAV	34	4	15	3	9	19	36		26	
OSV										

North to South

At Exit Plaza:	Potential Divertable Traffic									
11.334D	1.Jakhauli	2.Mawikalan	3.Duhai	4.Meerut Eway	5.Dasna	6.Bilakbarpur	.Fatehpur Rampu	10. Yamuna	8.Maujpur	9.Chhajju Nagar
Car	128	15	67	60	46	116	306		46	11
Mini Bus						3	3			
Bus										
LCV	96	6	19	21	54	64	282		10	
2AT	17		4	7	8	19	21		12	
3AT	22	1	6	6	3	23	53		11	
MAV	62	4	17	9	16	39	71		26	
OSV										



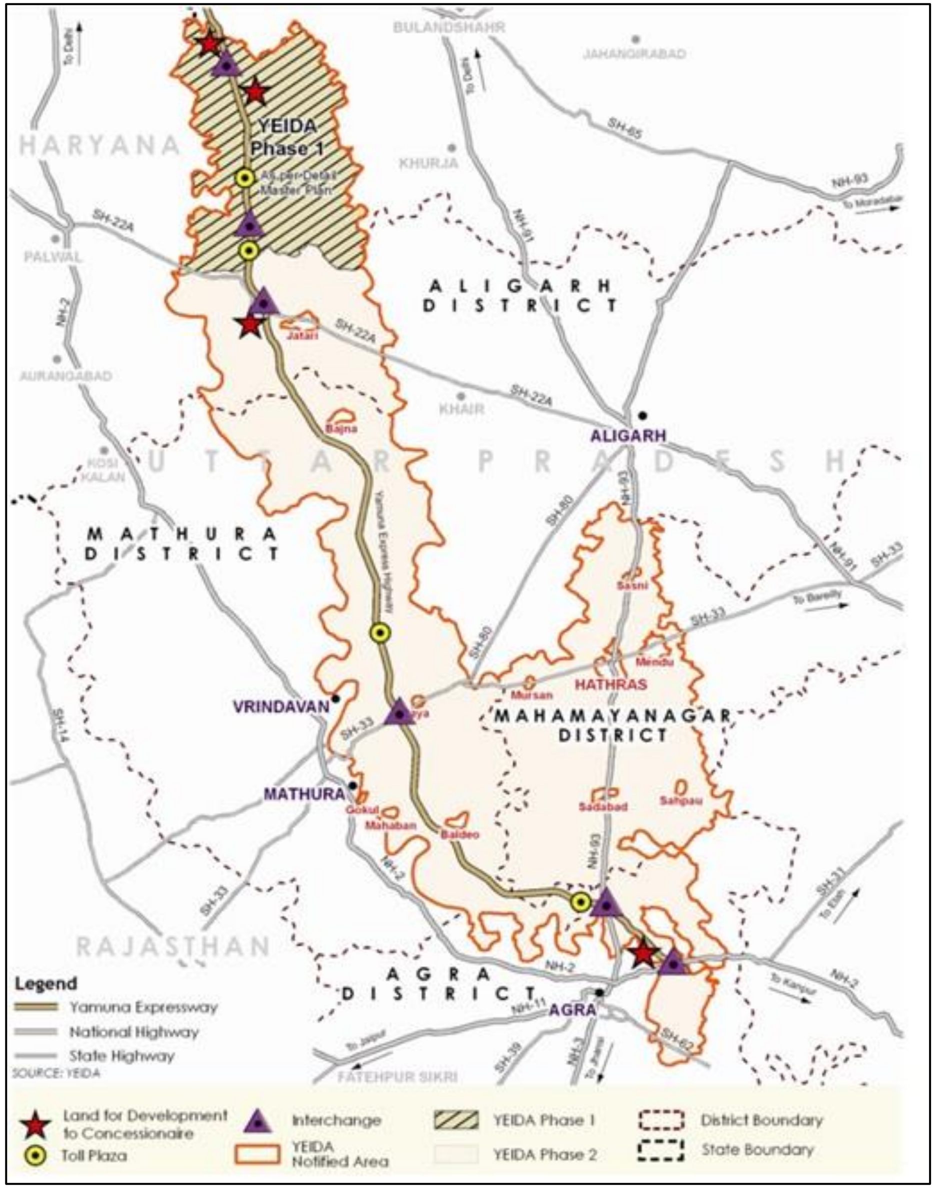
Existing Route (Entry: Jakhauli , Exit : Chhajju Nagar, Fatehpur Rampur)

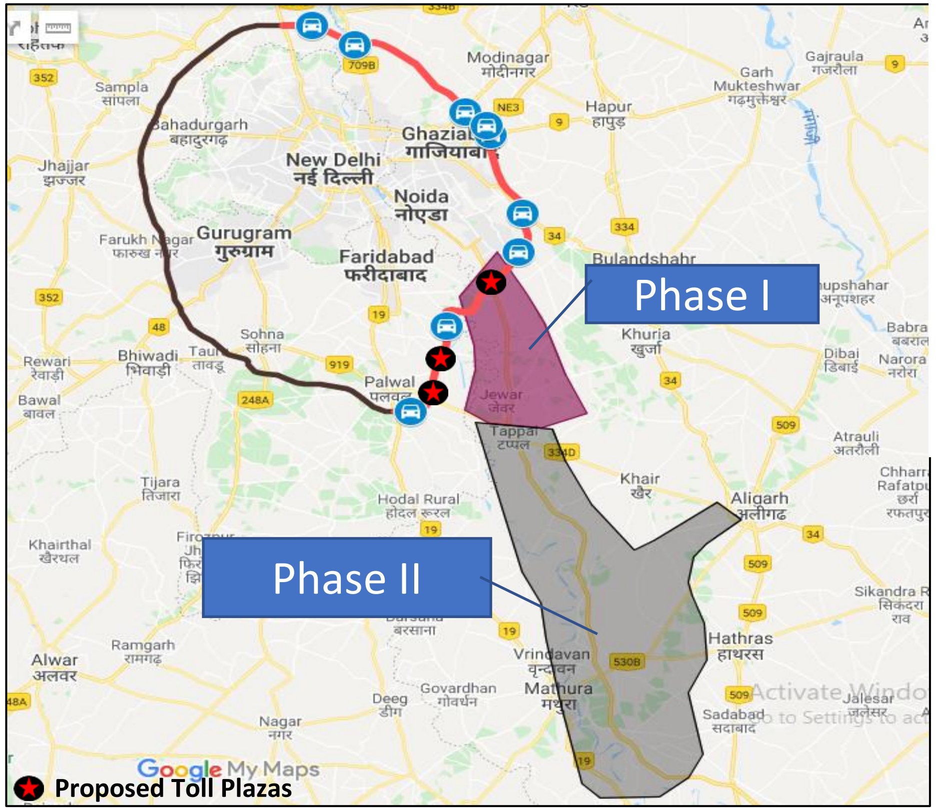
New Route (Entry: Jakhauli , Exit : Jewar Airport IC)

Major OD Pairs
Sonipat – Jewar
Sonipat – Tappal
Panipat – Faridabad
Sonipat – Faridabad/Ballabhgarh
Sonipat/Panipat – Proposed Jewar Airport

From the map, it can be observed that the traffic originating from or destinated to Jewar/Tappal , Faridabad and the surrounding regions has been using the Chhajju Nagar Plaza or the Fatehpur Rampur Plaza to enter/exit the Project road. Once the Jewar Plaza gets operational, this traffic is expected to shift to the new Plaza as it provides direct connectivity to the Proposed Jewar Airport, Jewar, Tappal, Faridabad and Ballabhgarh regions.
The Top OD Pairs that get influenced by the Toll Plaza are listed above.

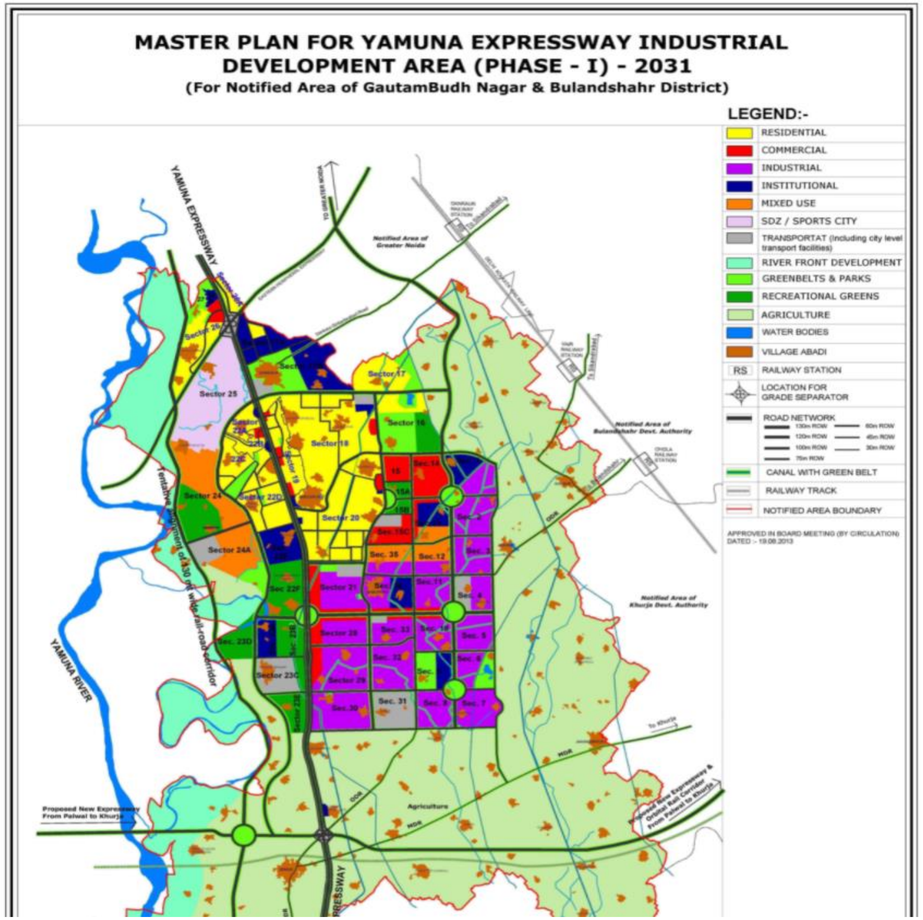
PROPOSED INTERCHANGES | DEVELOPMENT AREA

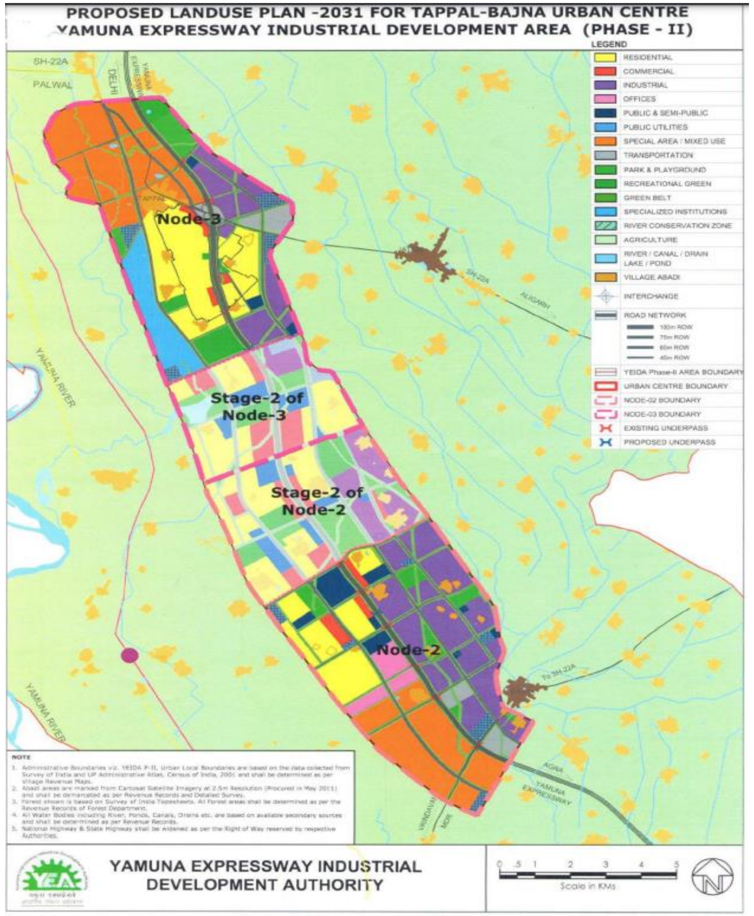




District	Area (Sq.Km.)	
GB Nagar + Bulandshahr	584	PHASE 1
Aligarh	2105	PHASE 2
Mathura		
Mahamayanagar		
Agra		

Sl. No	Development	Description	Start Year	Impact Toll Plaza
1	YEIDA – Phase I	Phase 1 being developed Gautam Budh Nagar and Bulandshahr and area of development is 584 Sq. Km	FY - 2026	10. New Yamuna IC 12. Jewar IC
2	YEIDA – Phase II	Phase 1 being developed Aligarh, Mathura and Agra and area of development is 2105 Sq. Km	FY-2031	10. New Yamuna IC 11. NH-334D 12. Jewar IC



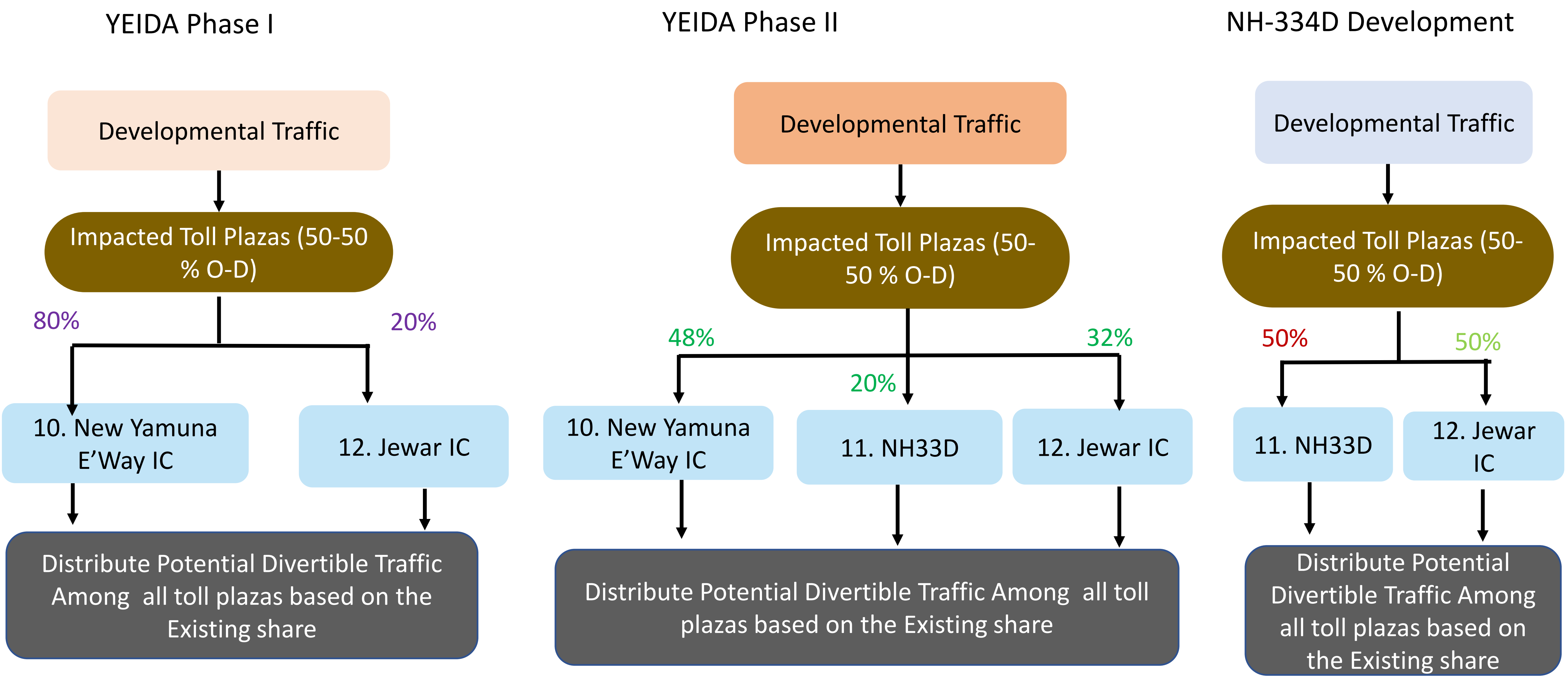


Based on the detailed review and analysis of the development plans and the master plans for the regions in and around the Yamuna Expressway (YEIDA), the following areas were observed to be lying in the immediate influence area of the project road. IBI has performed a detailed analysis on the Traffic generation potential of these developments and estimated the traffic wise impact of these developments on the project road.

Source: http://www.yamunaexpresswayauthority.com/sites/default/files/uploads/yeampamend300316c.pdf

Source: http://www.yamunaexpresswayauthority.com/mplan2031.html

PROPOSED INTERCHANGES | DEVELOPMENTAL TRAFFIC METHODOLOGY



TRAFFIC PROJECTIONS – 12 TOLL PLAZAS

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – JAKHAULI TP

JAKHAULI TP 1 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.3%	4.8%	4.8%	4.3%	3.4%	4.0%	7.4%
2024	6.8%	4.1%	4.1%	3.5%	2.5%	3.1%	6.5%
2025	6.7%	4.2%	4.2%	3.9%	2.9%	3.5%	6.9%
2026	6.0%	3.8%	3.8%	3.4%	2.5%	3.1%	6.4%
2027	6.0%	3.8%	3.8%	3.4%	2.5%	3.1%	6.3%
2028	6.0%	3.8%	3.8%	3.3%	2.0%	2.8%	6.4%
2029	6.0%	3.8%	3.8%	3.3%	2.0%	2.8%	6.4%
2030	6.0%	3.8%	3.8%	3.1%	1.9%	2.6%	6.2%
2035	5.1%	3.4%	3.4%	2.1%	1.1%	1.8%	4.9%
2040	4.2%	2.9%	2.9%	1.6%	0.6%	1.3%	4.2%
2042	3.5%	2.6%	2.6%	1.0%	-0.1%	0.4%	3.7%
JAKHAULI TP 1 – EFFECTIVE PROJECTIONS							
2023	-3.5%	5.2%	-11.9%	1.7%	1.5%	1.7%	5.0%
2024	6.8%	4.1%	4.1%	3.4%	2.3%	2.7%	5.9%
2025	6.7%	4.2%	4.2%	3.9%	3.1%	3.9%	6.9%
2026	6.1%	3.8%	3.8%	3.6%	2.8%	3.6%	7.2%
2027	6.2%	3.8%	3.8%	3.5%	2.6%	3.4%	6.5%
2028	6.1%	3.8%	3.8%	3.3%	2.1%	2.9%	6.6%
2029	6.1%	3.8%	3.8%	3.3%	2.3%	3.0%	6.6%
2030	6.3%	3.8%	3.8%	3.4%	2.8%	4.1%	7.1%
2035	5.3%	3.4%	3.4%	2.3%	1.6%	2.5%	5.2%
2040	4.2%	2.9%	2.9%	1.6%	0.6%	1.4%	4.1%
2042	3.5%	2.6%	2.6%	1.2%	0.2%	1.1%	3.7%

Reference
Work Book
1.Jakhauli_EPE_Fin Input and Rev 7.xlsx
Sheet
1.JA Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
1.JA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Jakhauli Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – MAWIKALAN TP

IBI | CDPQ

MAWIKALAN TP 2 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.1%	4.8%	4.8%	5.1%	3.3%	3.9%	7.8%
2024	6.6%	4.1%	4.1%	4.2%	2.4%	3.0%	6.8%
2025	6.7%	4.1%	4.1%	4.7%	2.8%	3.5%	7.2%
2026	6.0%	3.8%	3.8%	4.2%	2.4%	3.0%	6.7%
2027	6.0%	3.8%	3.8%	4.2%	2.4%	3.0%	6.7%
2028	6.0%	3.8%	3.8%	4.2%	1.8%	2.7%	6.7%
2029	6.0%	3.8%	3.8%	4.2%	1.8%	2.7%	6.7%
2030	5.9%	3.7%	3.7%	4.0%	1.7%	2.5%	6.5%
2035	5.3%	3.4%	3.4%	2.8%	1.1%	1.9%	5.1%
2040	4.3%	2.9%	2.9%	2.3%	0.5%	1.3%	4.4%
2042	3.6%	2.6%	2.6%	1.7%	0.0%	0.2%	3.8%
MAWIKALAN TP 2 – EFFECTIVE PROJECTIONS							
2023	-14.4%	-3.3%	-27.1%	-8.9%	-4.7%	-16.1%	-5.5%
2024	6.6%	4.1%	4.1%	4.1%	1.8%	3.9%	7.0%
2025	6.7%	4.1%	4.1%	4.8%	3.2%	4.5%	7.2%
2026	9.0%	3.8%	3.8%	5.3%	4.3%	4.8%	7.9%
2027	6.0%	3.8%	3.8%	4.1%	2.1%	2.7%	7.1%
2028	6.1%	3.8%	3.8%	4.2%	1.6%	3.0%	6.5%
2029	6.0%	3.8%	3.8%	4.1%	2.4%	2.8%	6.3%
2030	6.4%	3.7%	3.7%	4.1%	2.4%	1.9%	7.0%
2035	5.4%	3.4%	3.4%	2.8%	0.8%	1.9%	5.2%
2040	4.2%	2.9%	2.9%	2.3%	0.4%	1.4%	4.4%
2042	3.5%	2.6%	2.6%	1.8%	0.4%	0.7%	3.9%

Reference
Work Book
2.Mawikalan_EPE_Fin Input and Rev 7.xlsx
Sheet
2.MA Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
2.MA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Mawikalan Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – DUHAI TP

DUHAI TP 3 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.3%	4.6%	4.6%	5.9%	4.8%	5.2%	8.6%
2024	6.9%	4.0%	4.0%	4.9%	3.8%	4.2%	7.5%
2025	7.2%	4.5%	4.5%	5.5%	4.5%	4.9%	8.2%
2026	6.4%	4.1%	4.1%	5.0%	3.9%	4.3%	7.6%
2027	6.5%	4.1%	4.1%	5.0%	3.9%	4.3%	7.5%
2028	6.5%	4.1%	4.1%	4.9%	3.7%	4.2%	7.6%
2029	6.5%	4.1%	4.1%	4.9%	3.7%	4.2%	7.6%
2030	6.3%	4.0%	4.0%	4.7%	3.4%	3.9%	7.3%
2035	5.6%	3.4%	3.4%	3.5%	2.4%	3.0%	5.7%
2040	4.6%	3.0%	3.0%	2.9%	1.7%	2.3%	4.9%
2042	4.1%	2.6%	2.6%	2.2%	0.9%	1.5%	4.1%
DUHAI TP 3 – EFFECTIVE PROJECTIONS							
2023	8.4%	5.3%	3.9%	5.8%	4.6%	5.1%	8.1%
2024	6.8%	4.0%	4.0%	5.0%	4.1%	4.3%	8.0%
2025	7.2%	4.5%	4.5%	5.6%	4.0%	5.4%	8.4%
2026	6.5%	4.1%	4.1%	5.0%	3.5%	3.1%	7.4%
2027	6.8%	4.1%	4.1%	4.9%	4.8%	5.0%	7.7%
2028	6.5%	4.1%	4.1%	4.9%	3.5%	4.0%	7.4%
2029	6.5%	4.1%	4.1%	5.0%	3.6%	4.6%	7.7%
2030	6.5%	4.0%	4.0%	4.7%	3.7%	4.7%	7.4%
2035	5.7%	3.4%	3.4%	3.5%	2.7%	3.1%	5.6%
2040	4.6%	3.0%	3.0%	3.0%	1.6%	2.5%	4.9%
2042	3.9%	2.6%	2.6%	2.5%	1.3%	1.9%	4.4%

Reference
Work Book
3.Duhai_EPE_Fin Input and Rev 7.xlsx
Sheet
3.DU Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
3.DA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Duhai Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – MEERUT EW TP

MEERUT EWAY TP 4 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.4%	4.5%	4.5%	6.0%	4.5%	5.4%	8.5%
2024	7.0%	3.9%	3.9%	5.0%	3.5%	4.4%	7.4%
2025	7.6%	4.3%	4.3%	5.7%	4.2%	5.1%	8.1%
2026	6.8%	3.9%	3.9%	5.1%	3.7%	4.5%	7.5%
2027	6.8%	3.9%	3.9%	5.1%	3.7%	4.5%	7.4%
2028	6.8%	3.9%	3.9%	5.1%	3.3%	4.4%	7.5%
2029	6.8%	3.9%	3.9%	5.1%	3.3%	4.4%	7.5%
2030	6.5%	3.8%	3.8%	4.8%	3.1%	4.2%	7.2%
2035	5.8%	3.4%	3.4%	3.8%	2.1%	2.8%	5.6%
2040	4.8%	2.9%	2.9%	3.2%	1.4%	2.2%	4.8%
2042	4.2%	2.5%	2.5%	2.5%	0.4%	1.4%	4.1%
MEERUT EWAY TP 4 – EFFECTIVE PROJECTIONS							
2023	8.5%	5.3%	3.7%	5.9%	3.7%	4.1%	6.0%
2024	7.0%	3.9%	3.9%	5.0%	3.1%	3.4%	7.2%
2025	10.3%	4.3%	4.3%	5.7%	5.0%	5.0%	8.5%
2026	4.1%	3.9%	3.9%	3.0%	2.2%	4.5%	6.1%
2027	10.9%	3.9%	3.9%	4.7%	4.3%	4.7%	8.1%
2028	7.5%	3.9%	3.9%	5.2%	4.0%	4.7%	7.8%
2029	7.8%	3.9%	3.9%	5.4%	3.1%	4.5%	7.9%
2030	8.1%	3.8%	3.8%	4.8%	5.1%	5.5%	7.4%
2035	6.8%	3.4%	3.4%	4.1%	3.6%	3.1%	6.6%
2040	4.6%	2.9%	2.9%	3.5%	1.7%	2.9%	4.7%
2042	3.9%	2.6%	2.6%	2.8%	0.8%	2.2%	4.2%

Reference
Work Book
4.Meerut Eway_EPE_Fin Input and Rev 7.xlsx
Sheet
4.ME Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
4.ME Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Meerut E'Way Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – DASNA TP

FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
DASNA TP 5 – NORMAL PROJECTIONS							
2023	8.3%	4.6%	4.6%	5.6%	4.4%	5.0%	8.3%
2024	6.9%	4.0%	4.0%	4.6%	3.4%	4.0%	7.3%
2025	7.2%	4.5%	4.5%	5.3%	4.0%	4.6%	7.9%
2026	6.4%	4.1%	4.1%	4.8%	3.5%	4.1%	7.3%
2027	6.4%	4.1%	4.1%	4.8%	3.5%	4.1%	7.3%
2028	6.4%	4.1%	4.1%	4.7%	3.1%	3.9%	7.4%
2029	6.4%	4.1%	4.1%	4.7%	3.1%	3.9%	7.3%
2030	6.3%	3.9%	3.9%	4.5%	2.9%	3.7%	7.1%
2035	5.6%	3.4%	3.4%	3.2%	1.8%	2.8%	5.5%
2040	4.6%	3.0%	3.0%	2.5%	1.2%	2.2%	4.7%
2042	4.1%	2.6%	2.6%	1.9%	0.5%	1.2%	4.0%
DASNA TP 5 – EFFECTIVE PROJECTIONS							
2023	8.3%	4.9%	4.8%	5.7%	4.4%	5.1%	8.3%
2024	6.8%	4.0%	4.0%	4.7%	3.6%	4.0%	7.2%
2025	8.6%	4.5%	4.5%	5.1%	3.7%	4.3%	8.1%
2026	8.0%	4.1%	4.1%	5.0%	3.9%	4.8%	7.7%
2027	7.8%	4.1%	4.1%	4.7%	3.9%	4.6%	7.7%
2028	6.9%	4.1%	4.1%	4.7%	3.5%	4.2%	7.4%
2029	7.0%	4.1%	4.1%	4.8%	3.4%	3.9%	7.6%
2030	7.9%	3.9%	3.9%	4.6%	3.5%	4.5%	7.7%
2035	6.4%	3.4%	3.4%	3.3%	2.4%	3.6%	5.8%
2040	4.5%	3.0%	3.0%	2.6%	1.3%	1.9%	4.6%
2042	3.7%	2.6%	2.6%	2.2%	1.0%	1.7%	4.2%

Reference
Work Book
5.Dasna_EPE_Financial Input and Revenue7.xlsx
Sheet
5.DA Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
5.DA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Dasna Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – BIL AKBAR TP

BIL AKBARPUR TP 6 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.5%	4.6%	4.6%	5.7%	4.2%	3.7%	8.1%
2024	7.0%	4.0%	4.0%	4.7%	3.3%	2.7%	7.1%
2025	7.6%	4.5%	4.5%	5.3%	3.9%	3.4%	7.7%
2026	6.9%	4.2%	4.2%	4.8%	3.4%	2.8%	7.1%
2027	6.9%	4.2%	4.2%	4.8%	3.4%	2.8%	7.1%
2028	6.9%	4.2%	4.2%	4.7%	3.0%	2.2%	7.2%
2029	6.9%	4.2%	4.2%	4.7%	3.0%	2.2%	7.1%
2030	6.6%	4.0%	4.0%	4.5%	2.8%	2.0%	6.9%
2035	5.8%	3.4%	3.4%	3.3%	2.0%	1.3%	5.3%
2040	4.8%	2.9%	2.9%	2.7%	1.4%	0.6%	4.5%
2042	4.2%	2.4%	2.4%	2.1%	0.3%	0.1%	3.8%
BIL AKBARPUR TP 6 – EFFECTIVE PROJECTIONS							
2023	8.5%	1.3%	5.2%	5.5%	3.8%	3.9%	8.1%
2024	7.0%	4.0%	4.0%	5.1%	3.5%	2.6%	7.2%
2025	9.5%	4.5%	4.5%	5.0%	4.0%	3.5%	7.5%
2026	14.6%	4.2%	4.2%	5.3%	3.8%	4.2%	7.9%
2027	9.8%	4.2%	4.2%	5.2%	4.8%	4.8%	7.8%
2028	8.3%	4.2%	4.2%	4.8%	2.8%	2.0%	7.4%
2029	8.5%	4.2%	4.2%	5.3%	3.6%	3.2%	7.4%
2030	12.4%	4.0%	4.0%	6.1%	9.1%	9.1%	9.9%
2035	7.8%	3.4%	3.4%	4.2%	5.0%	5.5%	6.6%
2040	4.4%	2.9%	2.9%	2.9%	2.2%	1.4%	4.5%
2042	3.6%	2.6%	2.6%	2.1%	1.3%	0.8%	3.8%

Reference
Work Book
6.Bilakbarpur_EPE_Fin Input and Rev 7.xlsx
Sheet
6.BI Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
6.BI Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Bil Akbarpur Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – FATHEPUR TP

FATHEPUR RAMPUR TP 7 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.5%	4.6%	4.6%	5.8%	5.2%	5.4%	8.6%
2024	7.0%	4.0%	4.0%	4.8%	4.2%	4.4%	7.5%
2025	7.6%	4.5%	4.5%	5.5%	4.9%	5.1%	8.2%
2026	6.8%	4.1%	4.1%	4.9%	4.3%	4.5%	7.6%
2027	6.8%	4.1%	4.1%	4.9%	4.3%	4.5%	7.5%
2028	6.8%	4.1%	4.1%	4.8%	4.1%	4.4%	7.6%
2029	6.8%	4.1%	4.1%	4.8%	4.1%	4.4%	7.6%
2030	6.6%	4.0%	4.0%	4.6%	3.9%	4.1%	7.3%
2035	5.8%	3.5%	3.5%	3.5%	2.9%	2.9%	5.7%
2040	4.8%	3.0%	3.0%	2.8%	2.3%	2.3%	4.9%
2042	4.2%	2.5%	2.5%	2.1%	1.5%	1.7%	4.1%
FATHEPUR RAMPUR TP 7 – EFFECTIVE PROJECTIONS							
2023	8.4%	5.2%	7.8%	5.8%	4.9%	5.2%	8.5%
2024	7.1%	4.0%	4.0%	4.6%	4.5%	4.7%	7.5%
2025	15.3%	4.5%	4.5%	5.3%	4.6%	4.5%	8.0%
2026	-0.3%	4.1%	4.1%	4.9%	4.6%	4.4%	7.6%
2027	6.9%	4.1%	4.1%	5.0%	4.2%	5.3%	7.0%
2028	6.8%	4.1%	4.1%	4.7%	4.4%	4.5%	7.6%
2029	6.9%	4.1%	4.1%	5.0%	4.0%	3.8%	7.5%
2030	11.3%	4.0%	4.0%	5.7%	7.4%	14.2%	12.2%
2035	7.0%	3.5%	3.5%	3.8%	3.9%	5.8%	7.7%
2040	4.8%	3.0%	3.0%	2.8%	2.5%	2.9%	5.5%
2042	3.9%	2.6%	2.6%	2.2%	1.8%	2.1%	4.7%

Reference
Work Book
7.Fatehpur_EPE_Fin Input and Rev 7.xlsx
Sheet
7.FA Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
7.FA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Fatehpur Rampur Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – MAUJPUR TP

MAUJPUR TP 8 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	9.0%	4.8%	4.8%	4.9%	3.8%	4.4%	7.8%
2024	7.5%	4.1%	4.1%	4.1%	3.0%	3.6%	6.9%
2025	7.3%	4.4%	4.4%	4.4%	3.3%	3.9%	7.2%
2026	6.6%	4.1%	4.1%	4.0%	2.9%	3.5%	6.7%
2027	6.6%	4.1%	4.1%	4.0%	2.9%	3.5%	6.6%
2028	6.6%	4.1%	4.1%	4.0%	2.7%	3.4%	6.7%
2029	6.6%	4.1%	4.1%	4.0%	2.7%	3.4%	6.7%
2030	6.5%	3.9%	3.9%	3.8%	2.6%	3.3%	6.5%
2035	5.5%	3.5%	3.5%	3.2%	2.2%	2.9%	5.3%
2040	4.5%	3.0%	3.0%	2.7%	1.6%	2.3%	4.6%
2042	3.8%	2.6%	2.6%	2.3%	1.0%	1.9%	4.1%
MAUJPUR TP 8 – EFFECTIVE PROJECTIONS							
2023	8.9%	6.0%	1.4%	4.8%	3.9%	3.9%	7.9%
2024	7.5%	4.1%	4.1%	4.2%	2.8%	2.4%	6.8%
2025	7.4%	4.4%	4.4%	4.4%	3.9%	5.9%	7.3%
2026	13.0%	4.1%	4.1%	6.6%	9.1%	12.6%	10.9%
2027	12.1%	4.1%	4.1%	2.7%	4.0%	4.5%	7.8%
2028	8.2%	4.1%	4.1%	4.6%	3.9%	5.0%	7.1%
2029	8.2%	4.1%	4.1%	4.6%	4.4%	6.0%	7.5%
2030	12.4%	3.9%	3.9%	5.6%	9.4%	14.7%	14.2%
2035	7.7%	3.5%	3.5%	4.2%	5.7%	6.7%	7.3%
2040	4.2%	3.0%	3.0%	2.9%	1.9%	2.2%	4.5%
2042	3.3%	2.6%	2.6%	2.3%	1.6%	2.4%	4.0%

Reference
Work Book
8.Maujpur_EPE_Fin Input and Rev 7.xlsx
Sheet
8.MA Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
8.MA Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Maujpur Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – CHHAJJU TP

CHAJJUNAGAR TP 9 – NORMAL PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2023	8.6%	4.6%	4.6%	4.1%	3.8%	3.8%	7.5%
2024	7.2%	3.9%	3.9%	3.2%	2.9%	3.0%	6.5%
2025	7.4%	4.4%	4.4%	3.7%	3.4%	3.5%	7.0%
2026	6.6%	4.0%	4.0%	3.2%	2.9%	3.0%	6.5%
2027	6.6%	4.0%	4.0%	3.3%	2.9%	3.0%	6.4%
2028	6.6%	4.0%	4.0%	3.0%	2.6%	2.6%	6.5%
2029	6.6%	4.0%	4.0%	3.0%	2.6%	2.6%	6.5%
2030	6.5%	3.9%	3.9%	2.8%	2.4%	2.5%	6.3%
2035	5.8%	3.4%	3.4%	1.7%	1.5%	1.5%	4.9%
2040	4.8%	2.9%	2.9%	1.1%	1.0%	0.9%	4.2%
2042	4.2%	2.6%	2.6%	0.2%	-0.1%	0.0%	3.7%
CHHAJJUNAGAR TP 9 – EFFECTIVE PROJECTIONS							
2023	8.7%	3.8%	3.7%	4.1%	3.7%	3.9%	7.5%
2024	7.2%	3.9%	3.9%	3.2%	2.8%	2.2%	6.4%
2025	7.4%	4.4%	4.4%	3.6%	3.6%	3.8%	7.0%
2026	8.3%	4.0%	4.0%	4.7%	6.7%	8.8%	10.3%
2027	1.5%	4.0%	4.0%	1.6%	1.2%	1.3%	4.4%
2028	6.9%	4.0%	4.0%	3.3%	3.6%	3.7%	7.0%
2029	6.9%	4.0%	4.0%	3.4%	3.8%	4.8%	7.2%
2030	8.5%	3.9%	3.9%	4.2%	6.2%	7.8%	9.2%
2035	6.5%	3.4%	3.4%	2.7%	3.8%	4.5%	6.0%
2040	4.7%	2.9%	2.9%	1.5%	1.7%	1.5%	4.1%
2042	3.9%	2.6%	2.6%	1.0%	0.9%	0.9%	3.5%

Reference
Work Book
9.Chhajju Nagar_EPE_Fin Input and Rev 7.xlsx
Sheet
9.CH Traffic-Normal

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
9.CH Traffic

The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Chhajju Nagar Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – NEW YAMUNA TP

NEW YAMUNA E;WAY TP 10 – EFFECTIVE PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2026	2,389	5	27	291	132	85	248
2027	10.6%	4.1%	4.1%	6.9%	11.9%	13.1%	12.7%
2028	10.8%	4.1%	4.1%	7.6%	9.8%	13.5%	12.6%
2029	11.0%	4.1%	4.1%	7.3%	11.7%	17.0%	14.2%
2030	11.4%	4.0%	4.0%	7.5%	11.6%	14.7%	13.9%
2035	8.5%	3.5%	3.5%	5.5%	7.5%	9.0%	8.9%
2040	4.1%	3.0%	3.0%	3.0%	2.8%	2.9%	3.8%
2042	3.4%	2.6%	2.6%	2.2%	1.6%	1.9%	2.8%

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
10.YA Traffic

This toll Plaza is expected to start operations in FY 26(Shown as Effective Traffic), The Tables above illustrate the effective growth rates (post diversions and developments) for the New Yamuna E'Way Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – NH-334D TP

NH-334D TP 11 – EFFECTIVE PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2026	159	0	0	98	15	22	48
2027	137.2%	4.1%	4.1%	8.9%	30.0%	25.9%	25.9%
2028	15.1%	4.1%	4.1%	2.6%	5.0%	3.7%	11.7%
2029	15.1%	4.1%	4.1%	5.5%	10.7%	4.3%	6.6%
2030	15.9%	3.9%	3.9%	4.5%	10.8%	11.7%	9.8%
2035	10.1%	3.5%	3.5%	6.3%	13.8%	12.2%	12.4%
2040	3.4%	3.0%	3.0%	2.6%	3.1%	3.7%	4.0%
2042	2.3%	2.6%	2.6%	2.4%	1.6%	1.4%	3.4%

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
11.PA Traffic

This toll Plaza is expected to start operations in FY 26(Shown as Effective Traffic ,The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the NH-334D Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC GROWTH SUMMARY – NORMAL & EFFECTIVE PROJECTIONS – JEWAR AIRPORT TP

JEWAR AIRPORT TP 12 – EFFECTIVE PROJECTIONS							
FINANCIAL YEAR	CARS	MINIBUS	BUS-2A	LCV	2-A TRUCK	3-A TRUCK	MAV
2026	441	0	3	101	30	30	72
2027	58.8%	4.1%	4.1%	9.6%	26.6%	23.9%	27.2%
2028	14.5%	4.1%	4.1%	6.5%	12.8%	13.4%	11.1%
2029	15.1%	4.1%	4.1%	6.7%	11.0%	11.5%	12.7%
2030	15.5%	3.9%	3.9%	6.1%	18.4%	12.5%	12.2%
2035	9.7%	3.5%	3.5%	7.0%	10.8%	11.6%	11.5%
2040	3.5%	3.0%	3.0%	2.8%	3.1%	3.0%	3.7%
2042	2.5%	2.6%	2.6%	2.0%	2.3%	2.2%	2.4%

Reference
Work Book
ToT_7_EPE_12 Plazas.Xlsx
Sheet
12.JA Traffic

This toll Plaza is expected to start operations in FY 26(Shown as Effective Traffic) ,The Tables above illustrate the normal growth rates and the effective growth rates (post diversions and developments) for the Jewar airport IC Toll Plaza till the end of the concession period (FY 2042)

TRAFFIC COMPARISON PLAZA WISE - NORMAL

Year	NORMAL TRAFFIC - PCU								
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
2022	30,963	10,520	11,018	5,985	14,597	10,631	10,708	5,052	13,732
2023	32,943	11,221	11,836	6,421	15,661	11,399	11,496	5,388	14,603
2024	34,714	11,848	12,573	6,815	16,623	12,095	12,209	5,689	15,388
2025	36,679	12,540	13,422	7,280	17,731	12,913	13,046	6,019	16,288
2026	38,561	13,202	14,242	7,730	18,802	13,707	13,858	6,336	17,156
2027	40,544	13,900	15,113	8,209	19,940	14,552	14,722	6,670	18,072
2028	42,620	14,633	16,036	8,717	21,145	15,446	15,638	7,022	19,032
2029	44,808	15,407	17,017	9,256	22,424	16,397	16,612	7,393	20,045
2030	47,060	16,206	18,025	9,808	23,739	17,371	17,611	7,776	21,083
2031	49,179	16,956	18,981	10,333	24,987	18,299	18,561	8,139	22,067
2032	51,398	17,742	19,988	10,886	26,302	19,277	19,564	8,518	23,098
2033	53,503	18,519	21,010	11,422	27,577	20,210	20,530	8,895	24,059
2034	55,700	19,332	22,050	11,986	28,915	21,188	21,545	9,290	25,062
2035	57,994	20,183	23,144	12,578	30,320	22,216	22,612	9,703	26,110
2036	60,105	20,964	24,157	13,129	31,624	23,173	23,605	10,085	27,083
2037	62,299	21,778	25,216	13,704	32,986	24,173	24,642	10,483	28,094
2038	64,578	22,625	26,322	14,306	34,408	25,217	25,727	10,898	29,145
2039	66,947	23,507	27,478	14,935	35,894	26,307	26,860	11,329	30,238
2040	69,271	24,371	28,619	15,557	37,360	27,386	27,980	11,754	31,312
2041	71,357	25,142	29,646	16,120	38,686	28,367	28,996	12,138	32,286
2042	73,510	25,939	30,710	16,705	40,060	29,383	30,050	12,534	33,293

*Reference:- Refer to “**Plaza Name**” Traffic-Normal in respective individual toll plaza Workbooks.*

The Table above illustrate the Normal traffic (exit traffic) in PCU terms for all the toll plazas till the end of the concession period (FY 2042)

IBI

TRAFFIC COMPARISON PLAZA WISE - EFFECTIVE

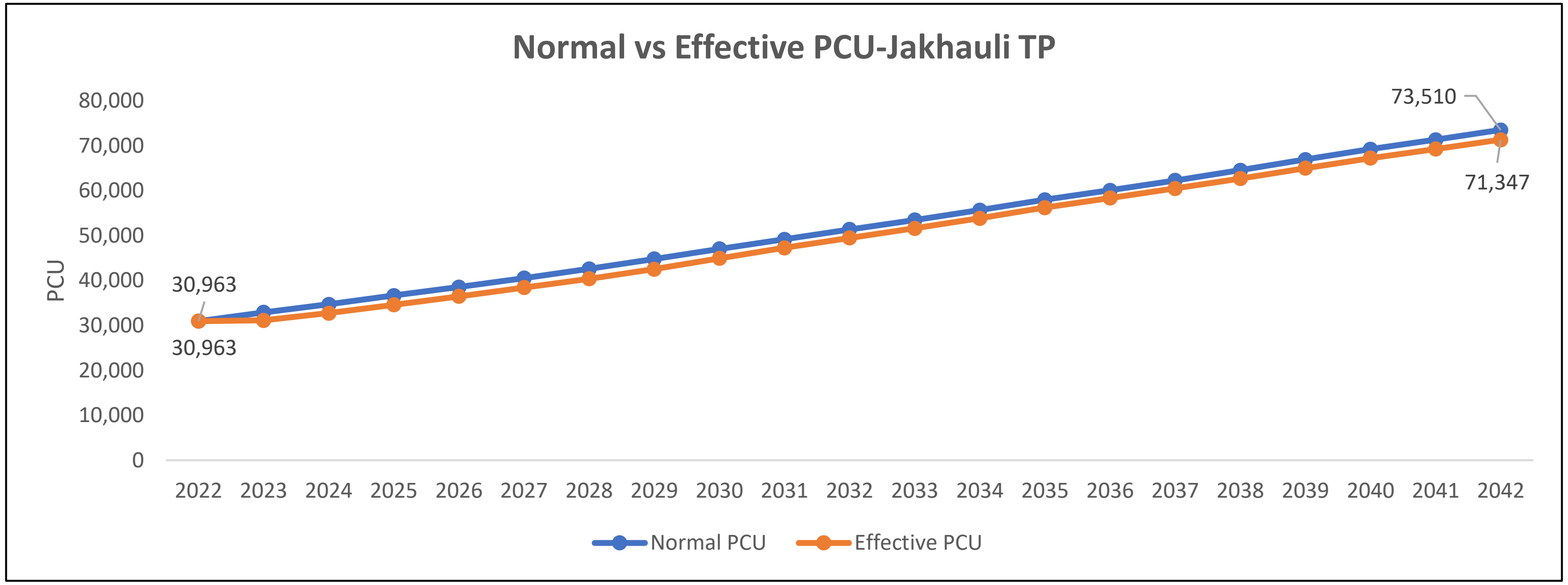
CDPQ

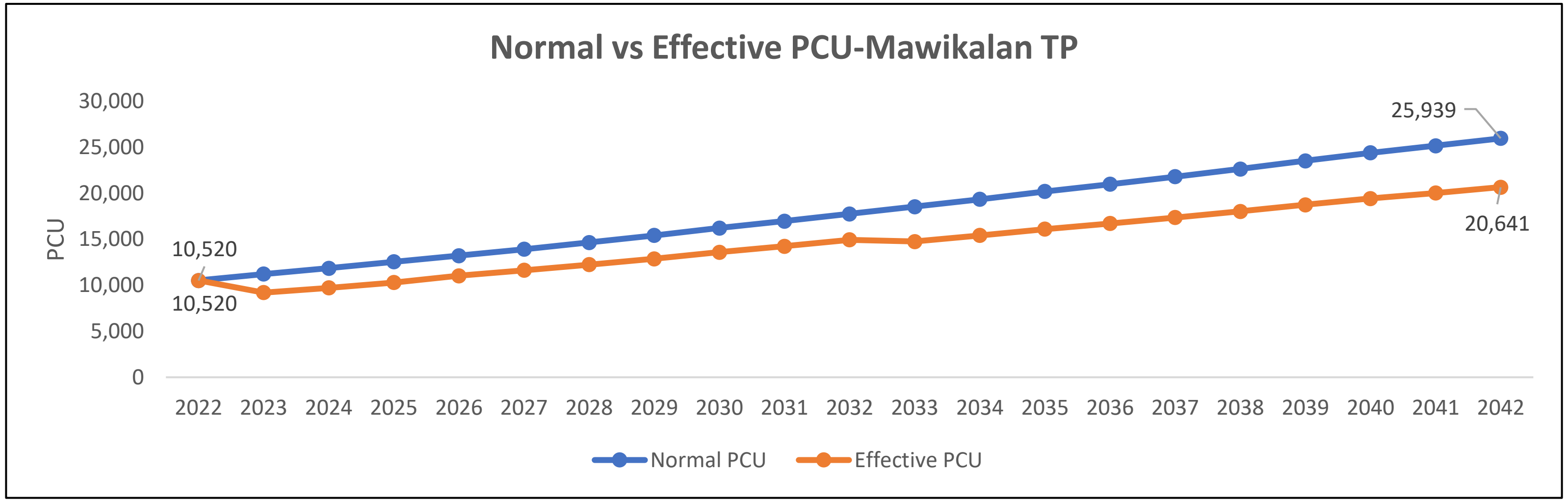
Year	EFFECTIVE TRAFFIC - PCU											
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TP 10	TP 11	TP 12
2022	30,963	10,520	11,018	5,985	14,597	10,631	10,708	5,052	13,732	[redacted]		
2023	31,162	9,200	11,831	6,414	15,661	11,403	11,501	5,382	14,597			
2024	32,772	9,707	12,562	6,799	16,626	12,089	12,199	5,681	15,360			
2025	34,618	10,269	13,399	7,335	17,827	12,959	13,257	6,010	16,251			
2026	36,548	10,998	14,213	7,663	19,062	13,982	10,483	5,828	17,217	4,656	608	1,086
2027	38,476	11,581	15,097	8,290	20,342	15,048	11,111	6,230	17,717	5,150	915	1,477
2028	40,471	12,191	16,015	8,842	21,619	16,065	11,794	6,616	18,756	5,719	1,002	1,661
2029	42,589	12,834	16,994	9,432	22,990	17,163	12,518	7,037	19,867	6,373	1,103	1,877
2030	44,990	13,517	18,024	10,094	24,552	18,925	13,783	7,805	21,476	7,121	1,220	2,132
2031	47,340	14,168	19,024	10,997	26,318	20,998	14,619	8,757	23,304	9,274	1,895	3,297
2032	49,585	14,834	19,939	11,682	27,823	22,580	15,503	9,449	24,653	10,552	2,173	3,842
2033	51,700	14,655	20,967	12,333	29,287	23,270	15,892	10,029	25,905	11,365	2,375	4,196
2034	53,933	15,300	22,013	13,034	30,848	24,777	16,845	10,654	27,262	12,274	2,610	4,605
2035	56,291	15,980	23,111	13,799	32,513	26,436	17,875	11,365	28,735	13,305	2,884	5,081
2036	58,429	16,601	24,133	14,527	34,060	27,894	18,669	11,981	30,037	14,445	3,206	5,632
2037	60,563	17,235	25,186	15,185	35,548	29,125	19,493	12,460	31,180	15,155	3,339	5,884
2038	62,758	17,894	26,279	15,839	37,065	30,347	20,356	12,923	32,313	15,725	3,454	6,086
2039	65,043	18,583	27,421	16,525	38,641	31,624	21,258	13,399	33,501	16,323	3,572	6,295
2040	67,292	19,255	28,550	17,210	40,205	32,912	22,156	13,884	34,679	16,935	3,694	6,511
2041	69,299	19,854	29,561	17,838	41,623	34,046	22,932	14,308	35,743	17,529	3,819	6,732
2042	71,349	20,472	30,607	18,468	43,057	35,168	23,733	14,716	36,794	18,038	3,902	6,886

*Reference:- Refer to “**Plaza Name**” Traffic in respective individual toll plaza in ToT_7_EPE_12 Plazas.Xlsx*

The Table above illustrate the effective traffic (exit traffic) in PCU terms for all the toll plazas till the end of the concession period (FY 2042)

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 1/7



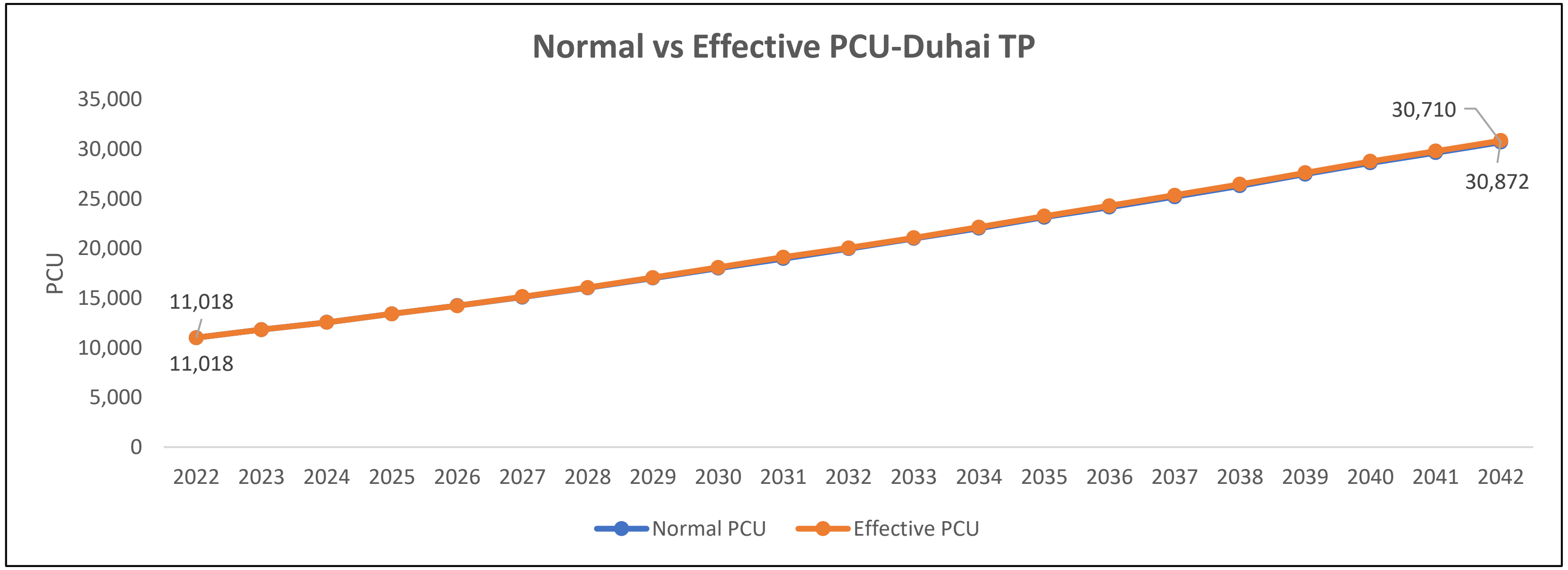


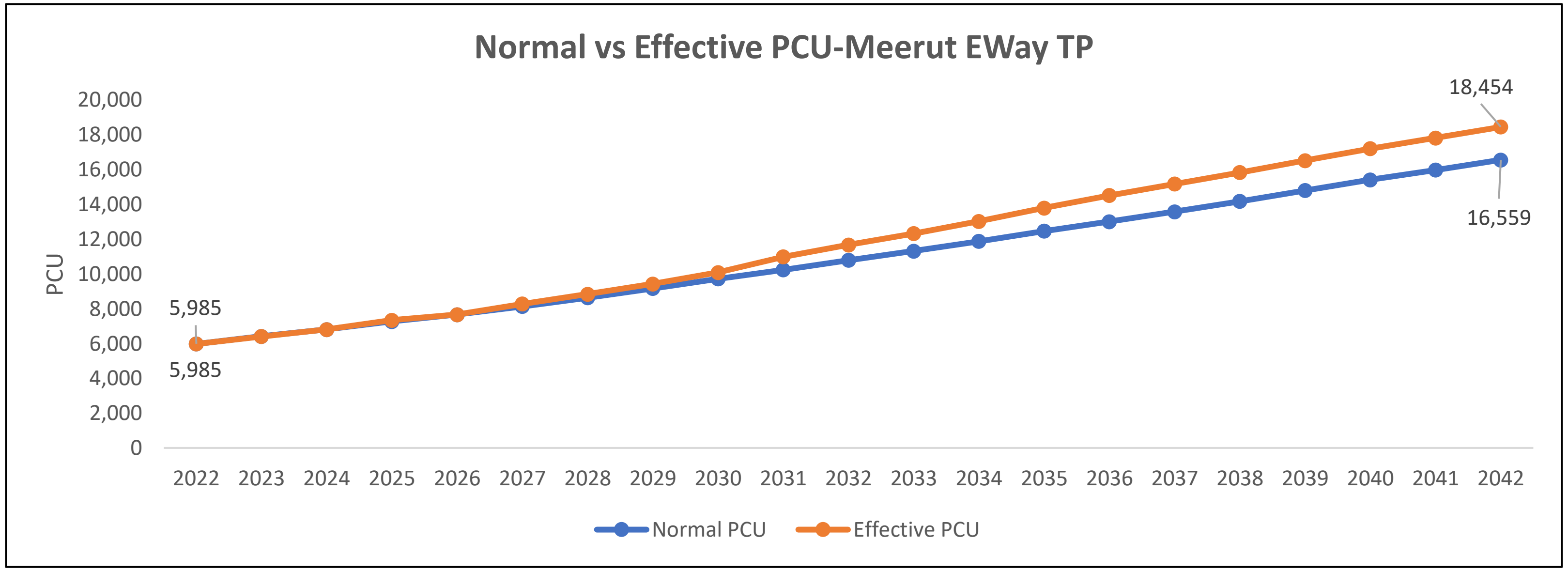
IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Jakhauli TP	Farmers Protest	2023
	Eastern DFC	2024
	RRTS (Alwar + Meerut)	2032
	DNGIR & New Noida City	2030
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026
Mawikalan TP	Farmers Protest	2023
	Dehradun E'Way (Noida & Ghaziabad Traffic)	2026
	Commodity Risk (Cement)	2033
	Dehradun E'Way	2026
	Commodity Risk (Sand)	2030
	DNGIR & New Noida City	2030
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 2/7



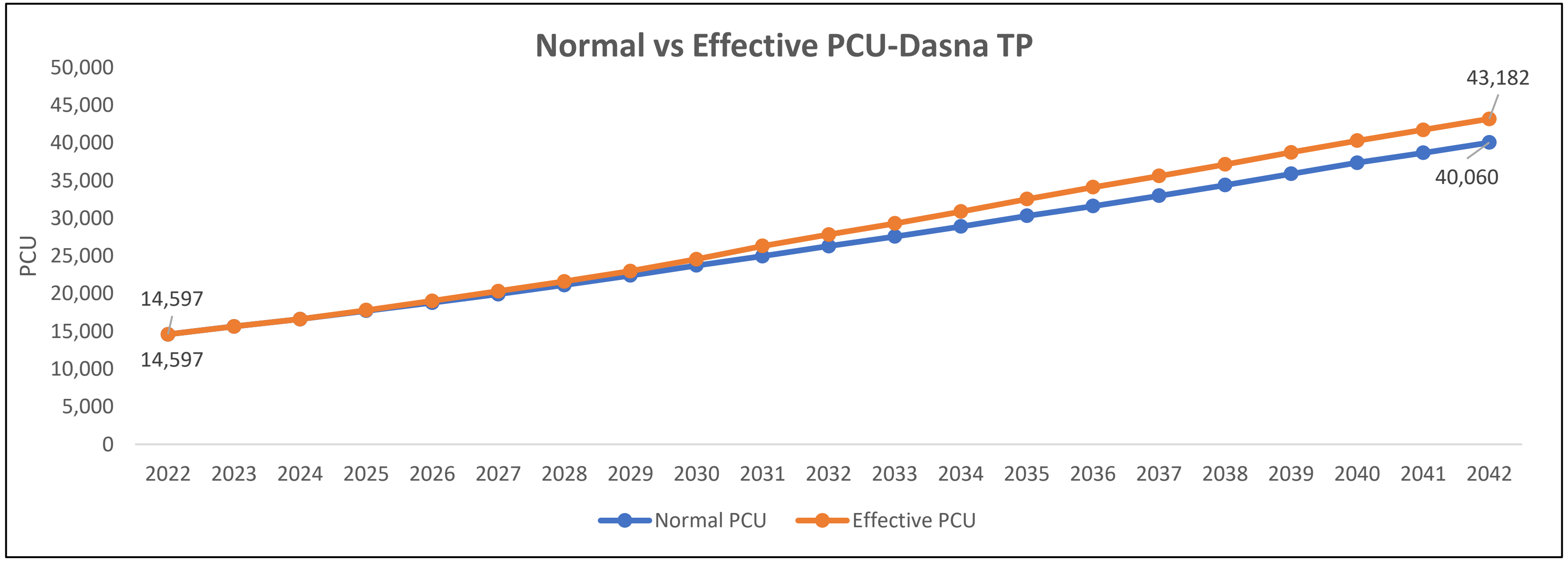


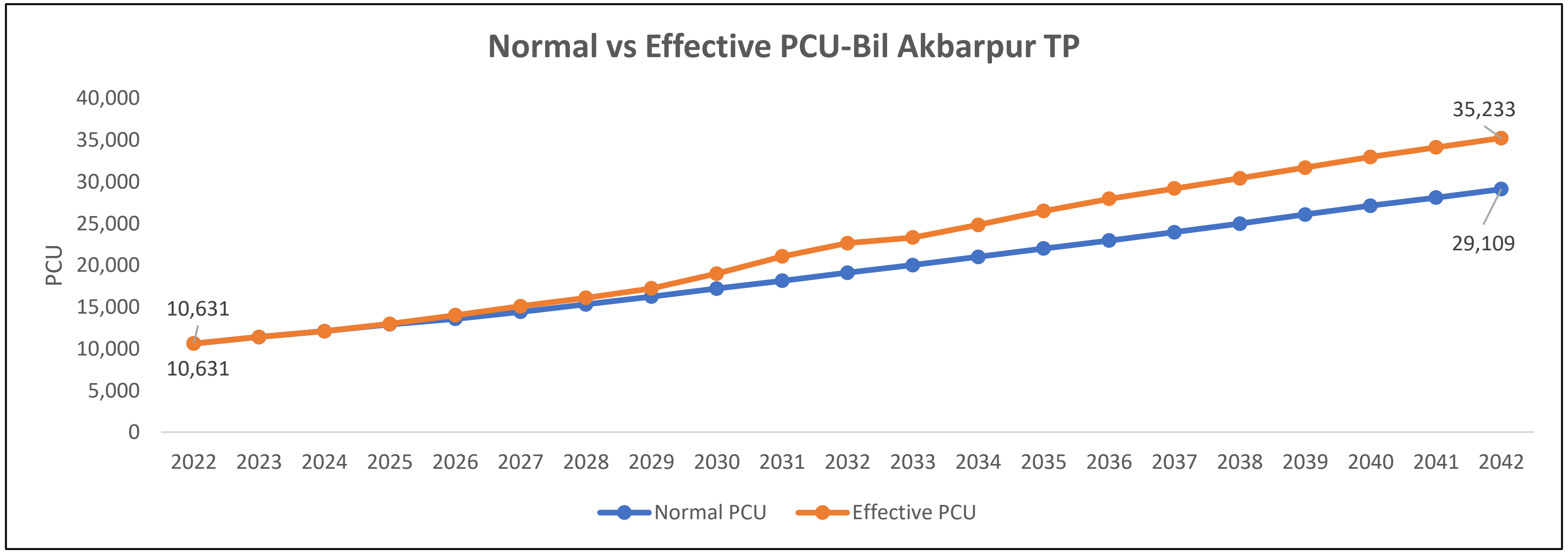
IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Duhai TP	RRTS (Alwar + Meerut)	2032
	DNGIR & New Noida City	2030
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026
Meerut E'way	Eastern DFC	2024
	RRTS (Alwar + Meerut)	2032
	Dehradun E'Way (Noida & Ghaziabad Traffic)	2026
	Dehradun E'Way	2026
	DNGIR & New Noida City	2030
	Jewar Airport	2025
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 3/7



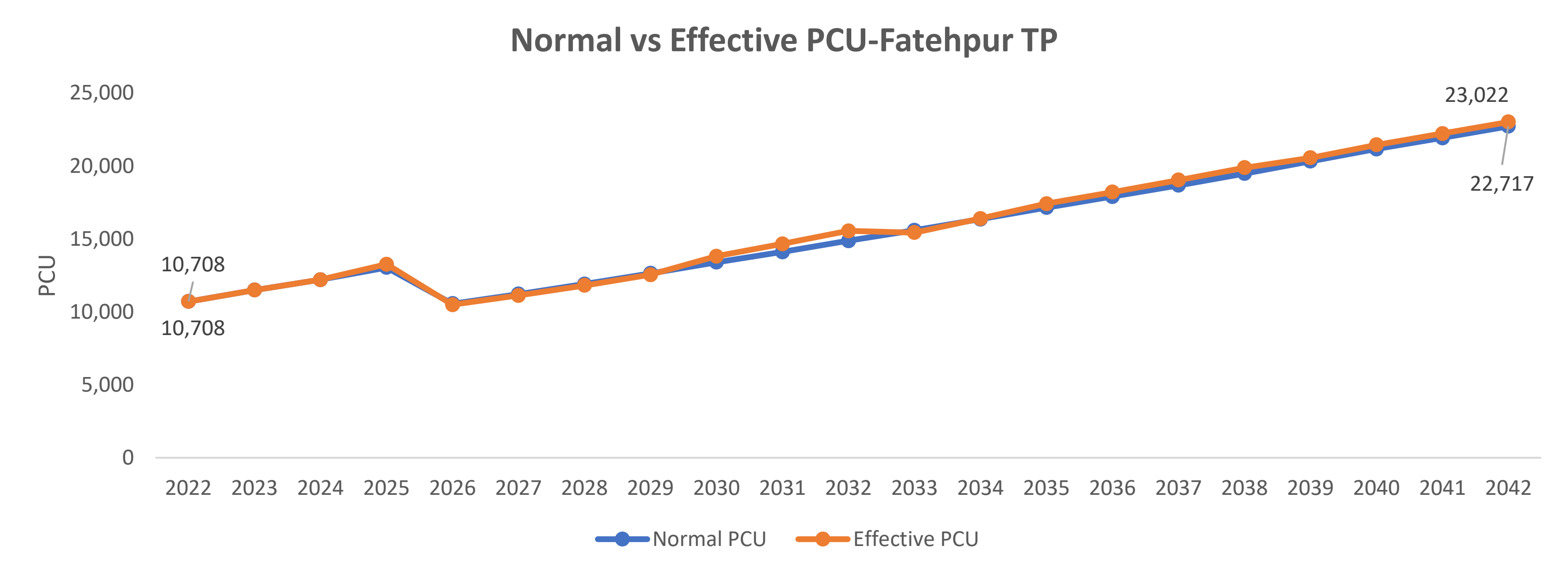


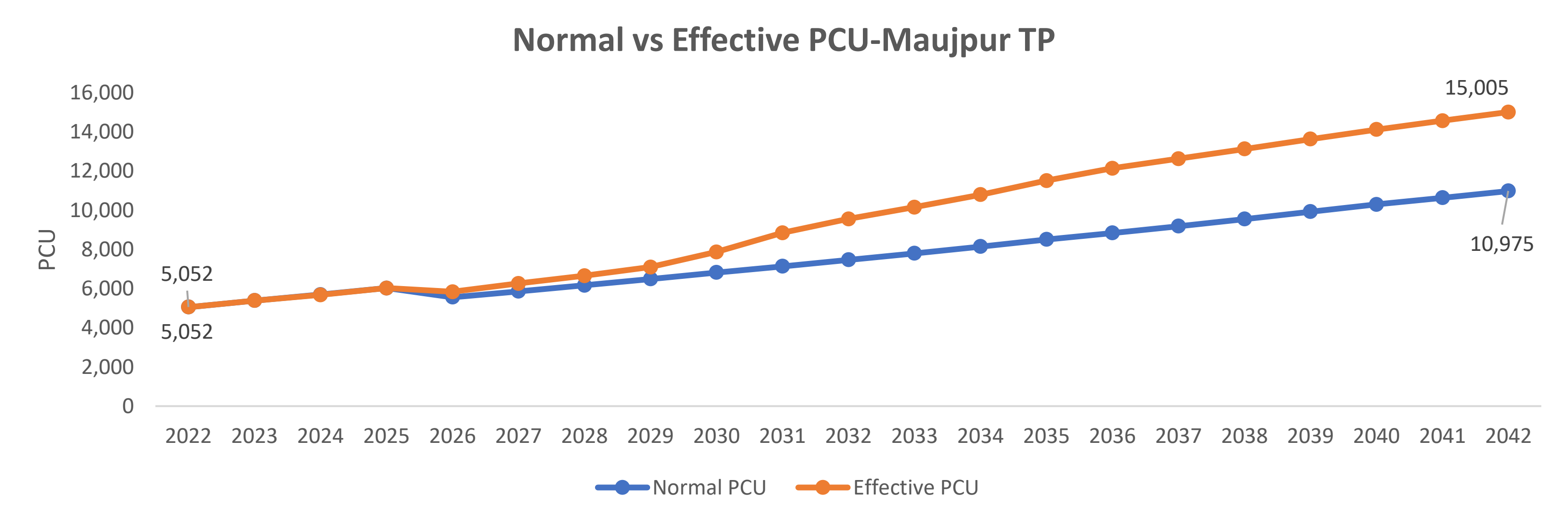
IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Dasna TP	RRTS (Alwar + Meerut)	2032
	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	DNGIR & New Noida City	2030
	Jewar Airport	2025
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026
Bilakbarpur TP	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	Commodity Risk (Cement)	2033
	DNGIR & New Noida City	2040
	Jewar Airport	2025
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 4/7



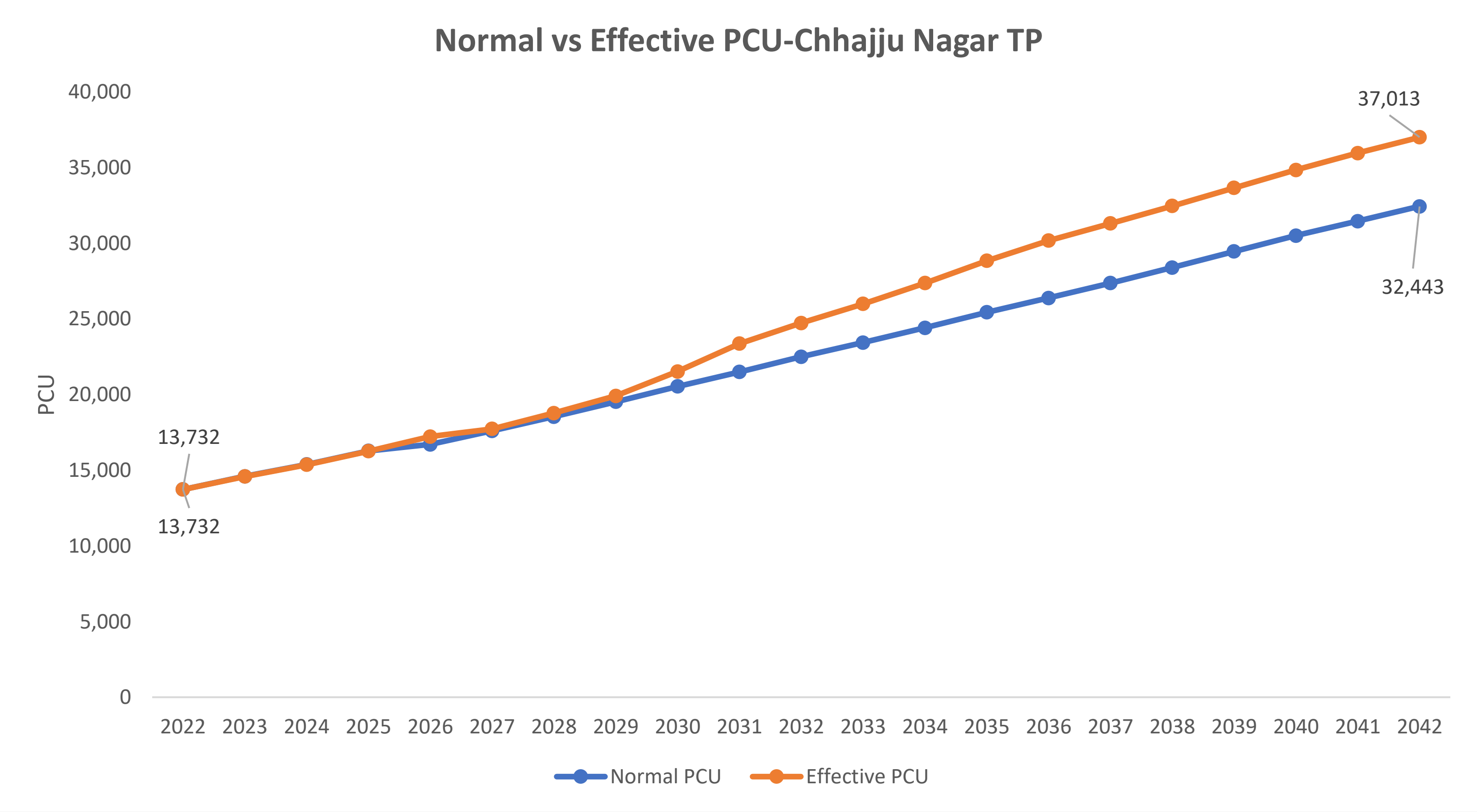


IMPACTS – EFFECTIVE TRAFFIC

TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Fatehpur TP	Eastern DFC	2024
	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	Dehradun E'Way	2026
	Commodity Risk (Const. & Cement)	2033
	DNGIR & New Noida City	2040
	Jewar Airport	2025
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026
Maujpur TP	Delhi Mumbai E'Way (Noida & Jewar Spur)	2023
	DNGIR & New Noida City	2030
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

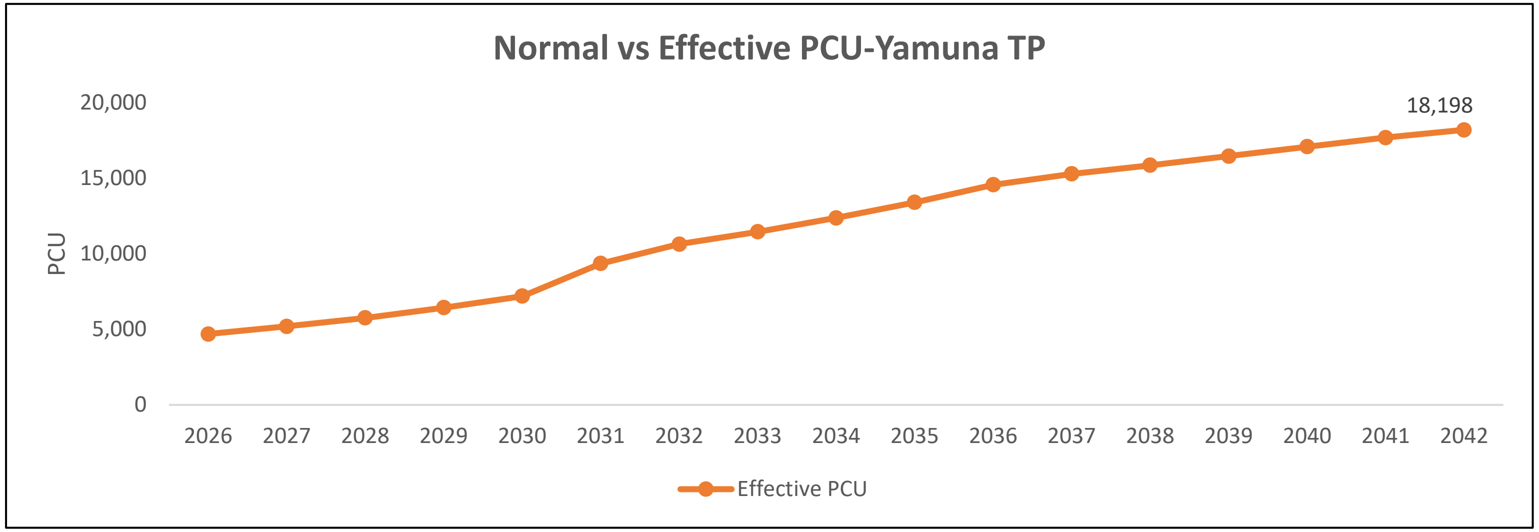
TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 5/7



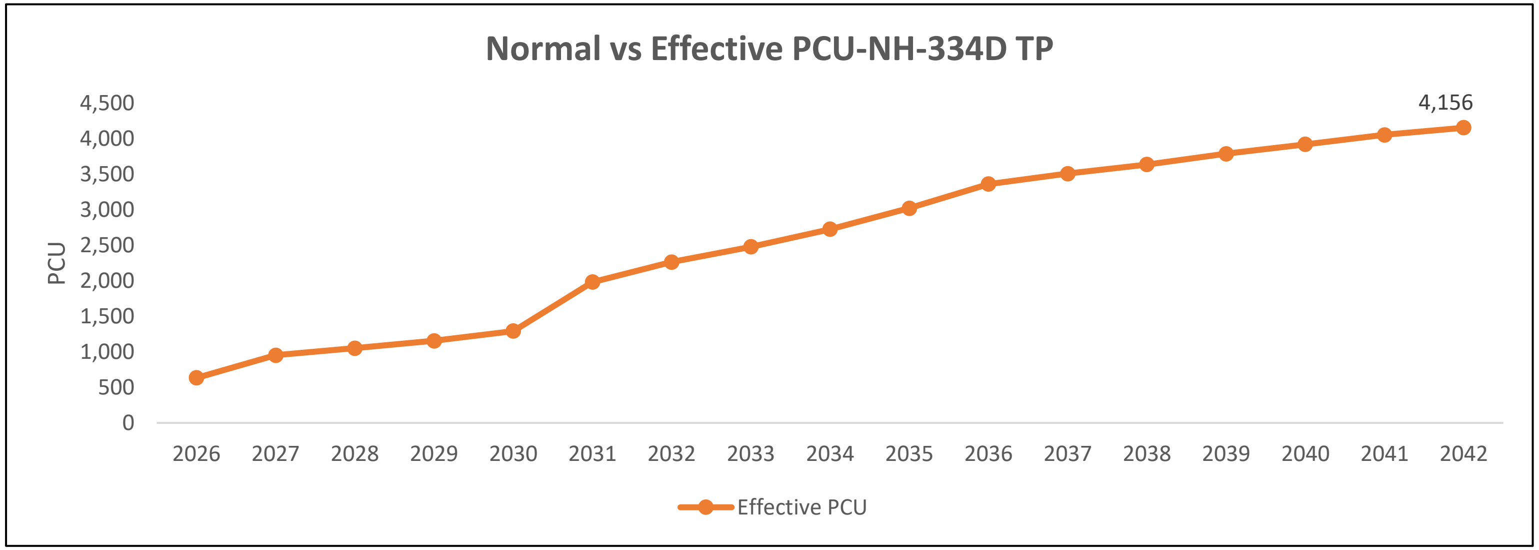
IMPACTS – EFFECTIVE TRAFFIC		
TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Chhajju Nagar TP	Eastern DFC	2024
	RRTS (Alwar + Meerut)	2032
	Delhi Mumbai E'Way (Noida & Jewar Spur)	2027
	Dehradun E'Way	2026
	DNGIR & New Noida City	2030
	New Interchange Redistribution traffic	2026
	Developmental (YIEDA)	2026

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 6/7



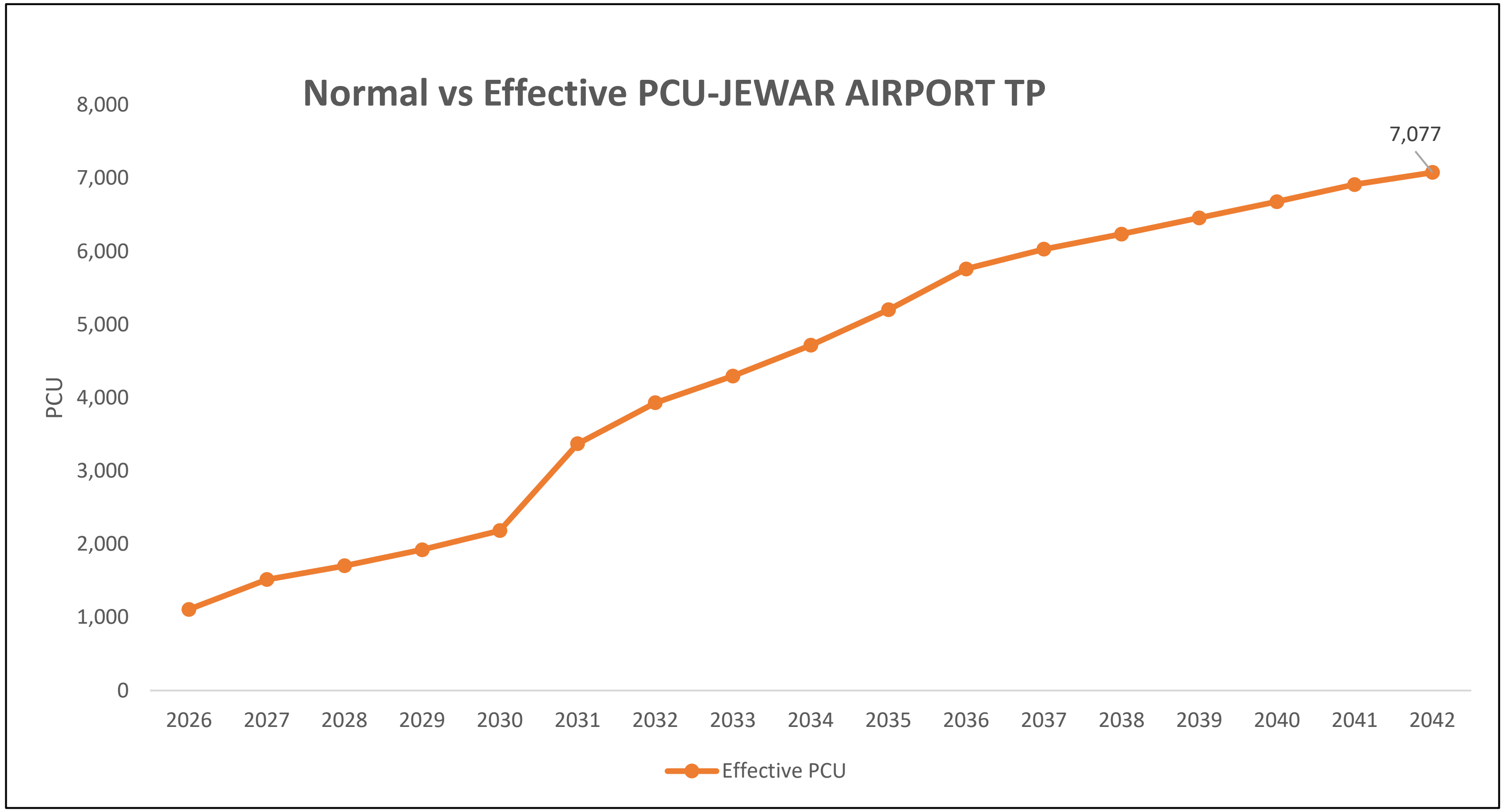
IMPACTS – EFFECTIVE TRAFFIC		
TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Yamuna Eway TP	YEIDA Developmental	Phase I - 2026
		Phase II - 2031



IMPACTS – EFFECTIVE TRAFFIC		
TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
NH 334D TP	334D Developmental	2027
		Phase II - 2031

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

TRAFFIC COMPARISON NORMAL Vs EFFECTIVE – 7/7



IMPACTS – EFFECTIVE TRAFFIC		
TP	NAME OF IMPACT	CONSIDERATION YEAR (FROM)
Jewar AirPort	YEIDA Developmental	Phase I - 2026
		Phase II - 2031
	334D Developmental	Phase I -2027
		Phase II - 2031

The graphs above illustrate the comparison between the growth of normal traffic and the effective traffic till the end of the concession period. Also, the tables above list of the potential impacts on the respective toll plaza and the corresponding consideration year

TRAFFIC COMPARISON LINK WISE – EFFECTIVE [NORMAL + DIVERSIONS + DEVELOPMENTS]

IBI | CDPQ

Year	EFFECTIVE TRAFFIC - PCU												
	LINK 1	LINK 2	LINK 3	LINK 4	LINK 5	LINK 6	LINK 7	LINK 8	LINK 9	LINK 10	LINK 11	AVERAGE - EPE	YOY(%)
2022	61,246	49,334	42,084	39,372	33,566	33,452	35,944	28,539				40,442	
2023	61,960	51,047	44,008	41,318	35,444	35,453	38,149	30,325				42,213	4.4%
2024	65,353	53,879	46,454	43,631	37,455	37,484	40,259	32,013				44,566	5.6%
2025	69,347	57,255	49,456	46,491	39,982	40,073	42,832	34,046				47,435	6.4%
2026	73,031	60,713	55,755	52,749	45,788	45,362	51,018	43,866	37,259	35,359	33,996	48,627	2.5%
2027	77,299	64,408	59,564	56,394	49,018	48,571	54,482	46,670	39,655	37,300	35,572	51,721	6.4%
2028	81,657	68,162	63,325	60,030	52,309	51,884	58,123	49,576	42,176	39,581	37,712	54,958	6.3%
2029	86,306	72,178	67,397	63,976	55,894	55,497	62,087	52,710	44,897	42,025	39,999	58,452	6.4%
2030	91,763	76,964	72,352	68,909	60,599	60,361	67,605	57,268	48,786	45,580	43,361	63,050	7.9%
2031	97,865	82,598	79,553	76,237	67,838	67,991	76,094	63,374	54,297	49,833	46,850	69,321	9.9%
2032	103,119	87,258	84,863	81,544	72,920	73,258	81,937	67,740	58,089	53,003	49,668	73,945	6.7%
2033	107,054	91,165	89,048	85,653	76,735	77,110	85,917	70,741	60,702	55,195	51,590	77,355	4.6%
2034	112,228	95,744	93,979	90,533	81,345	81,846	91,150	74,862	64,297	58,307	54,397	81,699	5.6%
2035	117,756	100,656	99,344	95,861	86,413	87,069	96,930	79,393	68,252	61,703	57,440	86,438	5.8%
2036	122,845	105,207	104,481	100,961	91,258	92,064	102,409	83,532	71,919	64,744	60,088	90,864	5.1%
2037	127,651	109,411	108,818	105,189	95,145	95,992	106,678	86,899	74,844	67,350	62,496	94,588	4.1%
2038	132,544	113,663	113,053	109,292	98,880	99,752	110,772	90,228	77,727	69,962	64,928	98,255	3.9%
2039	137,644	118,096	117,470	113,573	102,780	103,677	115,043	93,696	80,734	72,689	67,469	102,079	3.9%
2040	142,691	122,494	121,873	117,847	106,683	107,612	119,329	97,168	83,745	75,412	70,002	105,896	3.7%
2041	147,222	126,453	125,881	121,741	110,245	111,209	123,243	100,303	86,487	77,868	72,271	109,356	3.3%
2042	151,800	130,430	129,801	125,527	113,674	114,649	126,973	103,336	89,123	80,285	74,542	112,740	3.1%

The table above illustrates the link volumes (Effective traffic). The link volume is the quantum of traffic plying on a particular link between the main entry/exit toll plazas. (Eg: for 2 toll plazas there would be 1 link connecting them. Hence for 12 toll plazas, there would be a total of 11 links). Link 7, Link 9 and Link 11 Corresponds to New Yamuna E'Way Toll plaza, NH-334D and Jewar Toll Plaza which starts operations in FY-2026.

A CAGR of ***5.5% over a 20-year period*** (PCU terms) i.e., till the end of the concession period was observed for the project road.

Reference	
Work Book	*ToT_7_EPE_12 Plazas.Xlsx*
Sheet	*Input& Output*

REVENUE PLAZA WISE (12 PLAZAS CONFIGURATION)

Year	REVENUE IN CR													
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TP 10	TP 11	TP 12	TOTAL	YOY(%)
2022	109	16	27	18	45	36	30	16	70	0	0	0	367	
2023	123	16	32	22	53	42	35	19	82	0	0	0	423	**15.1%**
2024	135	18	35	24	59	47	39	21	91	0	0	0	470	**11.1%**
2025	149	19	40	27	66	52	44	23	100	0	0	0	520	**10.8%**
2026	164	22	43	26	73	57	39	21	109	19	3	6	583	**12.0%**
2027	181	24	48	30	81	64	44	23	117	22	5	8	647	**11.1%**
2028	199	26	53	33	91	71	48	26	130	26	6	9	718	**11.0%**
2029	218	29	59	37	101	79	53	29	143	30	7	11	796	**10.8%**
2030	241	32	65	41	112	91	62	33	162	35	8	13	895	**12.5%**
2031	265	35	72	47	125	105	68	39	184	48	13	21	1,021	**14.1%**
2032	291	38	79	52	139	117	76	44	205	57	15	26	1,138	**11.4%**
2033	316	39	86	57	152	124	77	48	224	64	17	30	1,235	**8.5%**
2034	344	42	95	63	167	137	86	54	246	72	20	34	1,361	**10.2%**
2035	375	46	104	69	184	153	96	60	271	82	23	39	1,502	**10.4%**
2036	408	50	114	76	201	168	105	67	297	94	27	46	1,653	**10.0%**
2037	440	54	123	83	219	182	114	72	321	102	29	50	1,789	**8.3%**
2038	477	59	134	91	238	199	124	78	348	111	32	54	1,944	**8.7%**
2039	517	64	146	98	260	217	134	85	377	120	34	59	2,111	**8.6%**
2040	560	69	160	107	283	236	146	92	408	130	37	63	2,293	**8.6%**
2041	600	75	172	116	305	254	158	99	439	141	40	68	2,467	**7.6%**
2042	647	81	186	125	331	274	171	107	473	151	43	73	2,661	**7.9%**
2043	694	86	201	135	356	295	185	114	508	162	46	78	2,862	**7.5%**

The table above illustrates the toll plaza wise revenue as well as the total revenue till the end of the concession period.

A revenue CAGR of ***10.3% over a 21-year period*** is estimated for the project road

9 PLAZA'S VS 12 PLAZA'S COMPARISON

TRAFFIC PLAZA WISE – EFFECTIVE (9 PLAZAS CONFIGURATION)

Year	EFFECTIVE TRAFFIC - PCU								
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
2022	30,963	10,520	11,018	5,985	14,597	10,631	10,708	5,052	13,732
2023	31,162	9,200	11,831	6,414	15,661	11,403	11,501	5,382	14,597
2024	32,753	9,715	12,567	6,812	16,622	12,096	12,205	5,677	15,369
2025	34,599	10,291	13,431	7,349	17,815	12,969	13,266	6,021	16,263
2026	36,369	11,009	14,236	7,637	18,899	13,778	14,100	6,331	17,121
2027	38,240	11,599	15,115	8,108	20,039	14,627	14,955	6,636	17,556
2028	40,183	12,207	16,025	8,605	21,263	15,527	15,907	6,983	18,492
2029	42,246	12,844	17,018	9,152	22,554	16,501	16,920	7,354	19,465
2030	44,566	13,550	18,043	9,748	24,032	18,079	18,495	8,038	20,907
2031	46,616	14,170	19,010	10,293	25,322	19,146	19,593	8,481	21,953
2032	48,694	14,840	19,920	10,815	26,609	20,296	20,789	8,934	22,901
2033	50,732	14,652	20,931	11,382	27,961	20,694	21,048	9,424	23,962
2034	52,873	15,303	21,969	11,963	29,374	21,900	22,315	9,925	25,104
2035	55,117	15,976	23,074	12,589	30,864	23,191	23,622	10,474	26,307
2036	57,112	16,583	24,088	13,146	32,229	24,200	24,704	10,908	27,275
2037	59,193	17,228	25,133	13,746	33,632	25,266	25,877	11,336	28,308
2038	61,350	17,885	26,238	14,347	35,085	26,363	27,019	11,793	29,358
2039	63,592	18,586	27,395	14,991	36,612	27,518	28,198	12,265	30,488
2040	65,798	19,264	28,529	15,620	38,110	28,651	29,386	12,745	31,572
2041	67,760	19,870	29,559	16,190	39,463	29,656	30,476	13,141	32,523
2042	69,802	20,489	30,608	16,775	40,871	30,684	31,547	13,561	33,515

The Table above illustrate the effective traffic (exit traffic) in PCU terms for all the 9 toll plazas till the end of the concession period (FY 2042)

TRAFFIC COMPARISON PLAZA WISE – EFFECTIVE (12 TOLL PLAZAS)

Year	EFFECTIVE TRAFFIC - PCU											
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TP 10	TP 11	TP 12
2022	30,963	10,520	11,018	5,985	14,597	10,631	10,708	5,052	13,732	[redacted]	[redacted]	[redacted]
2023	31,162	9,200	11,831	6,414	15,661	11,403	11,501	5,382	14,597	[redacted]	[redacted]	[redacted]
2024	32,753	9,715	12,567	6,812	16,622	12,096	12,205	5,677	15,369	[redacted]	[redacted]	[redacted]
2025	34,599	10,291	13,431	7,349	17,815	12,969	13,266	6,021	16,263	[redacted]	[redacted]	[redacted]
2026	36,514	11,025	14,235	7,671	19,048	14,009	10,493	5,830	17,228	4,680	633	1,106
2027	38,444	11,618	15,148	8,287	20,341	15,089	11,130	6,257	17,737	5,189	951	1,514
2028	40,435	12,232	16,067	8,842	21,622	16,101	11,816	6,654	18,779	5,754	1,050	1,702
2029	42,558	12,875	17,065	9,435	22,998	17,228	12,542	7,093	19,922	6,431	1,155	1,921
2030	44,957	13,589	18,101	10,094	24,572	18,987	13,818	7,868	21,535	7,190	1,291	2,183
2031	47,303	14,238	19,129	10,988	26,331	21,048	14,660	8,840	23,376	9,354	1,982	3,370
2032	49,524	14,923	20,065	11,678	27,840	22,639	15,548	9,553	24,735	10,635	2,265	3,929
2033	51,647	14,744	21,085	12,328	29,324	23,319	15,432	10,149	26,003	11,452	2,478	4,295
2034	53,895	15,403	22,148	13,029	30,889	24,832	16,395	10,790	27,369	12,376	2,727	4,716
2035	56,254	16,089	23,260	13,797	32,555	26,496	17,414	11,506	28,845	13,405	3,023	5,201
2036	58,399	16,708	24,302	14,523	34,129	27,942	18,206	12,136	30,176	14,562	3,362	5,757
2037	60,536	17,359	25,366	15,178	35,619	29,184	19,033	12,627	31,317	15,285	3,508	6,028
2038	62,726	18,020	26,472	15,839	37,148	30,406	19,889	13,124	32,466	15,862	3,639	6,235
2039	65,025	18,726	27,627	16,521	38,739	31,694	20,559	13,623	33,668	16,460	3,790	6,457
2040	67,267	19,408	28,772	17,210	40,296	32,973	21,452	14,118	34,848	17,082	3,923	6,678
2041	69,285	20,019	29,807	17,824	41,729	34,115	22,225	14,564	35,959	17,689	4,055	6,912
2042	71,347	20,641	30,872	18,454	43,182	35,233	23,022	15,005	37,013	18,198	4,156	7,077

The Table above illustrate the effective traffic (exit traffic) in PCU terms for all the toll plazas till the end of the concession period (FY 2042)

TRAFFIC COMPARISON PLAZA WISE (9TP'S VS 12TP'S)

Year	EFFECTIVE TRAFFIC - PCU								
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9
2022	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2026	0.4%	0.2%	0.0%	0.4%	0.8%	1.7%	-25.6%	-7.9%	0.6%
2027	0.5%	0.2%	0.2%	2.2%	1.5%	3.2%	-25.6%	-5.7%	1.0%
2028	0.6%	0.2%	0.3%	2.8%	1.7%	3.7%	-25.7%	-4.7%	1.6%
2029	0.7%	0.2%	0.3%	3.1%	2.0%	4.4%	-25.9%	-3.6%	2.4%
2030	0.9%	0.3%	0.3%	3.5%	2.3%	5.0%	-25.3%	-2.1%	3.0%
2031	1.5%	0.5%	0.6%	6.7%	4.0%	9.9%	-25.2%	4.2%	6.5%
2032	1.7%	0.6%	0.7%	8.0%	4.6%	11.5%	-25.2%	6.9%	8.0%
2033	1.8%	0.6%	0.7%	8.3%	4.9%	12.7%	-26.7%	7.7%	8.5%
2034	1.9%	0.7%	0.8%	8.9%	5.2%	13.4%	-26.5%	8.7%	9.0%
2035	2.1%	0.7%	0.8%	9.6%	5.5%	14.3%	-26.3%	9.9%	9.6%
2036	2.3%	0.8%	0.9%	10.5%	5.9%	15.5%	-26.3%	11.3%	10.6%
2037	2.3%	0.8%	0.9%	10.4%	5.9%	15.5%	-26.4%	11.4%	10.6%
2038	2.2%	0.8%	0.9%	10.4%	5.9%	15.3%	-26.4%	11.3%	10.6%
2039	2.3%	0.8%	0.8%	10.2%	5.8%	15.2%	-27.1%	11.1%	10.4%
2040	2.2%	0.7%	0.9%	10.2%	5.7%	15.1%	-27.0%	10.8%	10.4%
2041	2.3%	0.7%	0.8%	10.1%	5.7%	15.0%	-27.1%	10.8%	10.6%
2042	2.2%	0.7%	0.9%	10.0%	5.7%	14.8%	-27.0%	10.7%	10.4%

The Table above illustrates the variation observed in terms of the traffic (exit traffic in PCU terms) due to the opening of 3 new toll plazas in FY-26

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TRAFFIC LINK WISE – EFFECTIVE (9 PLAZAS CONFIGURATION)

CDPQ

Year	EFFECTIVE TRAFFIC - PCU									
	LINK 1	LINK 2	LINK 3	LINK 4	LINK 5	LINK 6	LINK 7	LINK 8	AVERAGE - EPE	YOY(%)
2022	61,246	49,334	42,084	39,372	33,566	33,452	35,944	28,539	40,442	
2023	61,960	51,047	44,008	41,318	35,444	35,453	38,149	30,325	42,213	**4.4%**
2024	65,354	53,877	46,454	43,631	37,463	37,492	40,274	32,030	44,572	**5.6%**
2025	69,379	57,279	49,466	46,502	40,003	40,099	42,871	34,075	47,459	**6.5%**
2026	73,221	60,430	52,152	49,072	42,236	42,373	45,243	35,986	50,089	**5.5%**
2027	77,166	63,731	54,985	51,699	44,417	44,505	47,307	37,531	52,668	**5.1%**
2028	81,349	67,255	58,053	54,609	46,960	47,083	49,976	39,678	55,620	**5.6%**
2029	85,811	71,025	61,327	57,712	49,672	49,828	52,803	41,944	58,765	**5.7%**
2030	91,051	75,500	65,350	61,657	53,351	53,706	56,946	45,204	62,845	**6.9%**
2031	95,528	79,300	68,678	64,842	56,191	56,622	59,977	47,619	66,094	**5.2%**
2032	100,082	83,127	72,017	68,046	59,057	59,581	63,050	50,009	69,371	**5.0%**
2033	103,546	86,496	74,946	70,821	61,450	61,990	65,053	51,516	71,977	**3.8%**
2034	108,280	90,537	78,525	74,272	64,571	65,218	68,347	54,122	75,484	**4.9%**
2035	113,266	94,803	82,310	77,925	67,881	68,646	71,813	56,849	79,187	**4.9%**
2036	117,667	98,560	85,614	81,083	70,684	71,518	74,668	59,101	82,362	**4.0%**
2037	122,263	102,474	89,060	84,379	73,621	74,530	77,682	61,501	85,689	**4.0%**
2038	127,011	106,527	92,610	87,771	76,629	77,606	80,750	63,936	89,105	**4.0%**
2039	131,990	110,772	96,337	91,332	79,797	80,847	83,982	66,509	92,696	**4.0%**
2040	136,873	114,941	99,996	94,829	82,908	84,035	87,159	69,028	96,221	**3.8%**
2041	141,247	118,678	103,267	97,952	85,679	86,865	89,994	71,297	99,372	**3.3%**
2042	145,757	122,532	106,648	101,179	88,537	89,786	92,887	73,607	102,617	**3.3%**

The table above illustrates the link volumes (Effective traffic). The link volume is the quantum of traffic plying on a particular link between the main entry/exit toll plazas. (Eg: for 2 toll plazas there would be 1 link connecting them. Hence for 9 toll plazas, there would be a total of 8 links).

A CAGR of ***4.8% over a 20-year period*** (PCU terms) i.e., till the end of the concession period was observed for the project road. . It is observed that the threshold of 90,000 PCU is breached in FY-40.

TRAFFIC LINK WISE – EFFECTIVE (12 PLAZAS CONFIGURATION)

Year	EFFECTIVE TRAFFIC - PCU												
	LINK 1	LINK 2	LINK 3	LINK 4	LINK 5	LINK 6	LINK 7	LINK 8	LINK 9	LINK 10	LINK 11	AVERAGE - EPE	YOY(%)
2022	60,643	49,009	43,436	40,680	34,695	34,143	38,593	34,126	28,841	27,593	26,504	38,024	
2023	61,312	50,698	45,464	42,727	36,659	36,147	40,937	36,199	30,633	29,313	28,157	39,840	4.8%
2024	64,670	53,512	48,015	45,142	38,768	38,238	43,251	38,214	32,361	30,962	29,728	42,078	5.6%
2025	68,643	56,883	51,132	48,113	41,391	40,819	46,063	40,674	34,422	32,923	31,612	44,789	6.4%
2026	73,063	60,738	55,790	52,792	45,846	45,432	51,118	43,941	37,335	35,413	34,025	48,681	8.7%
2027	77,383	64,482	59,649	56,494	49,136	48,708	54,668	46,818	39,792	37,400	35,634	51,833	6.5%
2028	81,747	68,239	63,416	60,138	52,434	52,032	58,333	49,751	42,338	39,700	37,781	55,083	6.3%
2029	86,441	72,305	67,544	64,148	56,091	55,725	62,389	52,952	45,118	42,199	40,117	58,639	6.5%
2030	91,939	77,113	72,530	69,115	60,832	60,629	67,963	57,555	49,049	45,788	43,494	63,273	7.9%
2031	98,059	82,773	79,753	76,472	68,106	68,306	76,523	63,724	54,618	50,078	47,003	69,583	10.0%
2032	103,339	87,451	85,083	81,802	73,222	73,618	82,422	68,142	58,458	53,279	49,845	74,242	6.7%
2033	107,289	91,360	89,279	85,916	77,038	77,452	86,005	70,760	60,703	55,093	51,377	77,479	4.4%
2034	112,515	95,983	94,257	90,845	81,697	82,243	91,316	74,943	64,358	58,251	54,214	81,875	5.7%
2035	118,070	100,919	99,642	96,195	86,786	87,492	97,125	79,503	68,344	61,669	57,256	86,637	5.8%
2036	123,200	105,514	104,827	101,348	91,687	92,551	102,679	83,702	72,066	64,760	59,936	91,116	5.2%
2037	128,047	109,749	109,199	105,613	95,614	96,525	107,010	87,117	75,038	67,393	62,358	94,878	4.1%
2038	132,970	114,035	113,472	109,758	99,396	100,342	111,170	90,505	77,968	70,045	64,811	98,588	3.9%
2039	138,127	118,507	117,924	114,074	103,329	104,300	115,319	93,860	80,866	72,650	67,198	102,378	3.8%
2040	143,189	122,918	122,342	118,362	107,250	108,257	119,631	97,347	83,892	75,384	69,728	106,209	3.7%
2041	147,776	126,926	126,397	122,313	110,878	111,933	123,642	100,569	86,713	77,906	72,056	109,737	3.3%
2042	152,404	130,949	130,360	126,142	114,347	115,421	127,428	103,658	89,395	80,356	74,341	113,164	3.1%

The table above illustrates the link volumes (Effective traffic). The link volume is the quantum of traffic plying on a particular link between the main entry/exit toll plazas. (Eg: for 2 toll plazas there would be 1 link connecting them. Hence for 12 toll plazas, there would be a total of 11 links). Link 7, Link 9 and Link 11 Corresponds to New Yamuna E'Way Toll plaza, NH-334D and Jewar Toll Plaza which starts operations in FY-2026.

A CAGR of ***5.6% over a 20-year period*** (PCU terms) i.e., till the end of the concession period was observed for the project road.

LINK VOLUMES COMPARISON (9TP'S VS 12TP'S)

YEAR	AVERAGE (9 TP'S)	AVERAGE (12 TP'S)	VARIATION
2022	40,442	40,442	**0.0%**
2023	42,213	42,213	**0.0%**
2024	44,572	44,572	**0.0%**
2025	47,459	47,459	**0.0%**
2026	50,089	48,681	**-2.8%**
2027	52,668	51,833	**-1.6%**
2028	55,620	55,083	**-1.0%**
2029	58,765	58,639	**-0.2%**
2030	62,845	63,273	**0.7%**
2031	66,094	69,583	**5.3%**
2032	69,371	74,242	**7.0%**
2033	71,977	77,479	**7.6%**
2034	75,484	81,875	**8.5%**
2035	79,187	86,637	**9.4%**
2036	82,362	91,116	**10.6%**
2037	85,689	94,878	**10.7%**
2038	89,105	98,588	**10.6%**
2039	92,696	102,378	**10.4%**
2040	96,221	106,209	**10.4%**
2041	99,372	109,737	**10.4%**
2042	102,617	113,164	**10.3%**

The table above illustrates comparison between the average link volumes for 9 TP configuration and 12 TP Configuration.
On comparison it can be observed that the threshold of 1,30,000 PCU is not breached before the end of the concession period (The new TPs are assumed to start operation in FY-26)

REVENUE PLAZA WISE (9 PLAZAS CONFIGURATION)

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Year	REVENUE IN CR										
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TOTAL	YOY(%)
2022	109	16	27	18	45	36	30	16	70	367	
2023	123	16	32	22	53	42	35	19	82	423	**15.1%**
2024	135	18	35	24	59	47	39	21	91	470	**11.1%**
2025	149	19	40	27	66	52	44	23	100	520	**10.8%**
2026	163	22	43	30	73	58	49	26	110	573	**10.2%**
2027	179	24	48	33	81	64	54	28	118	630	**9.9%**
2028	197	26	53	36	90	71	60	31	130	695	**10.4%**
2029	216	29	59	40	99	79	67	34	143	766	**10.1%**
2030	238	31	65	45	111	90	76	39	160	855	**11.7%**
2031	260	34	72	49	122	99	85	43	176	940	**9.9%**
2032	285	38	79	54	134	110	94	47	192	1,033	**9.8%**
2033	309	38	87	60	146	116	97	51	210	1,114	**7.9%**
2034	336	42	95	65	160	127	108	57	229	1,219	**9.5%**
2035	366	45	104	72	176	141	119	62	251	1,337	**9.6%**
2036	398	50	114	78	192	154	130	68	273	1,456	**8.9%**
2037	428	53	123	85	209	166	142	74	295	1,575	**8.2%**
2038	464	58	134	93	228	182	155	80	319	1,712	**8.7%**
2039	503	63	146	101	249	198	168	87	346	1,862	**8.7%**
2040	545	68	160	110	271	216	184	95	376	2,024	**8.7%**
2041	585	74	172	119	292	232	199	102	403	2,176	**7.5%**
2042	631	80	186	129	317	251	215	110	434	2,351	**8.0%**
2043	677	85	201	139	341	271	232	118	467	2,532	**7.7%**

A revenue CAGR of ***9.6% over a 21-year period*** is estimated for the project road

REVENUE PLAZA WISE (12 PLAZAS CONFIGURATION)

Year	REVENUE IN CR													
	TP 1	TP 2	TP 3	TP 4	TP 5	TP 6	TP 7	TP 8	TP 9	TP 10	TP 11	TP 12	TOTAL	YOY(%)
2022	109	16	27	18	45	36	30	16	70	0	0	0	367	
2023	123	16	32	22	53	42	35	19	82	0	0	0	423	**15.1%**
2024	135	18	35	24	59	47	39	21	91	0	0	0	470	**11.1%**
2025	149	19	40	27	66	52	44	23	100	0	0	0	520	**10.8%**
2026	164	22	43	26	73	57	39	21	109	19	3	6	583	**12.0%**
2027	181	24	48	30	81	64	44	23	117	22	5	8	647	**11.1%**
2028	199	26	53	33	91	71	48	26	130	26	6	9	718	**11.0%**
2029	218	29	59	37	101	79	53	29	143	30	7	11	796	**10.8%**
2030	241	32	65	41	112	91	62	33	162	35	8	13	895	**12.5%**
2031	265	35	72	47	125	105	68	39	184	48	13	21	1,021	**14.1%**
2032	291	38	79	52	139	117	76	44	205	57	15	26	1,138	**11.4%**
2033	316	39	86	57	152	124	77	48	224	64	17	30	1,235	**8.5%**
2034	344	42	95	63	167	137	86	54	246	72	20	34	1,361	**10.2%**
2035	375	46	104	69	184	153	96	60	271	82	23	39	1,502	**10.4%**
2036	408	50	114	76	201	168	105	67	297	94	27	46	1,653	**10.0%**
2037	440	54	123	83	219	182	114	72	321	102	29	50	1,789	**8.3%**
2038	477	59	134	91	238	199	124	78	348	111	32	54	1,944	**8.7%**
2039	517	64	146	98	260	217	134	85	377	120	34	59	2,111	**8.6%**
2040	560	69	160	107	283	236	146	92	408	130	37	63	2,293	**8.6%**
2041	600	75	172	116	305	254	158	99	439	141	40	68	2,467	**7.6%**
2042	647	81	186	125	331	274	171	107	473	151	43	73	2,661	**7.9%**
2043	694	86	201	135	356	295	185	114	508	162	46	78	2,862	**7.5%**

A revenue CAGR of ***10.3% over a 21-year period*** is estimated for the project road

MODIFICATIONS IN THE CONCESSION PERIOD

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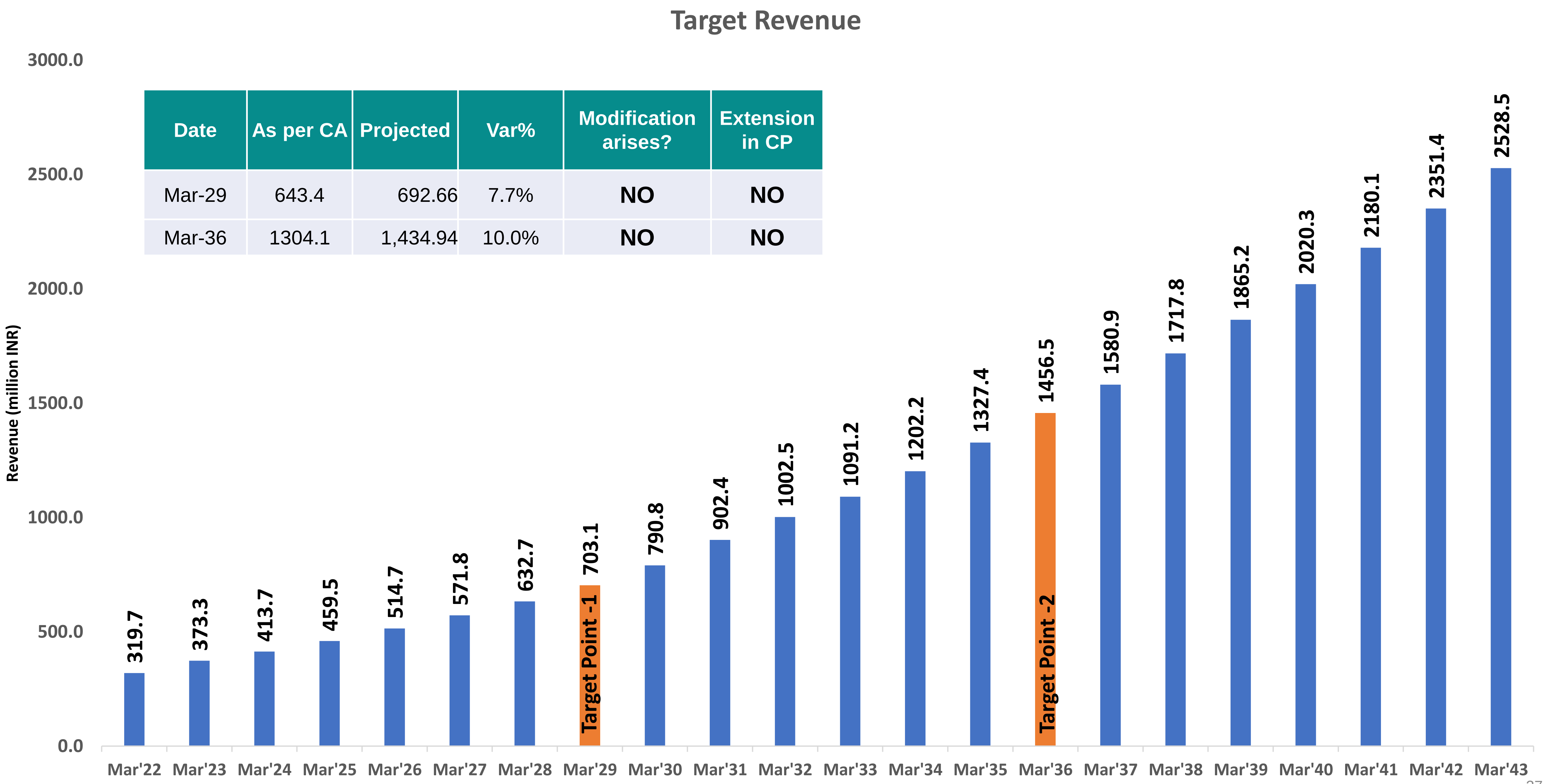

Date	As per CA	Projected	Var%	Modification arises?	Extension in CP
Mar-29	643.4	692.66	7.7%	**NO**	**NO**
Mar-36	1304.1	1,434.94	10.0%	**NO**	**NO**

REVENUE COMPARISON (9TP'S VS 12TP'S)

IBI CDPQ

YEAR	TOTAL REVENUE (9 TP'S)	TOTAL REVENUE (12 TP'S)	VARIATION
2022	367		**NA**
2023	423		
2024	470		
2025	520		
2026	573	583	**1.6%**
2027	630	647	**2.7%**
2028	695	718	**3.3%**
2029	766	796	**4.0%**
2030	855	895	**4.7%**
2031	940	1,021	**8.6%**
2032	1,033	1,138	**10.2%**
2033	1,114	1,235	**10.9%**
2034	1,219	1,361	**11.6%**
2035	1,337	1,502	**12.4%**
2036	1,456	1,653	**13.5%**
2037	1,575	1,789	**13.6%**
2038	1,712	1,944	**13.6%**
2039	1,862	2,111	**13.4%**
2040	2,024	2,293	**13.3%**
2041	2,176	2,467	**13.4%**
2042	2,351	2,661	**13.2%**
2043	2,532	2,862	**13.0%**

The table illustrates comparison between the toll revenues for 9 TP configuration and 12 TP Configuration. On comparison it can be observed that by the end of the concession period the 12 TPs configuration is generating higher revenue than the 9 TPs configuration by 13%. This high increase in revenue is due to the development traffic that is being generated because of the opening of the new toll plazas