The information in this Preliminary Placement Memorandum is not complete and may be changed. The Issue is meant only for Eligible Investors on a private placement basis and is not an offer to the public or to any other class of investors to purchase the Units. This Preliminary Placement Memorandum is not an offer to sell any Units and is not soliciting an offer to subscribe for or buy the Units in any jurisdiction where such offer or sale is not permitted. It is being issued for the sole purpose of information or discussion relating to the Units that may be Allotted through the Placement Memorandum.

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: C-5, First Floor, Defence Colony, New Delhi 110 024
Tel: +91 11 4957 7800; **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**

Indian Highway Concessions Trust (the "**Trust**") is proposing an initial offer of up to 91,000,000 Units through a private placement at a price of ₹ 100 per Unit (the "**Issue Price**"), aggregating up to ₹ 9,100 million (the "**Issue**").

The Issue Price is ₹ 100 per Unit.

THIS ISSUE, AND THE DISTRIBUTION OF THE PLACEMENT MEMORANDUM, WILL BE MADE ONLY TO ELIGIBLE INVESTORS IN RELIANCE UPON REGULATION 26B(1) OF THE SECURITIES AND EXCHANGE BOARD OF INDIA (INFRASTRUCTURE INVESTMENT TRUSTS) REGULATIONS, 2014

The Units are not proposed to be listed on any stock exchange.

This Preliminary Placement Memorandum has not been, and will not be, registered as a prospectus, will not be circulated or distributed to the public at large in India or any other jurisdiction, and will not constitute a public offer in India or any other jurisdiction.

The Units have not been and will not be registered under the United States Securities Act of 1933, as amended (the "**Securities Act**"), and may not be offered or sold within the United States. The Units are only being offered and sold outside the United States in "offshore transactions" to persons who are not "U.S. persons", in each case within the meaning of and in reliance on Regulation S under the Securities Act ("**Regulation S**"), and in compliance with the applicable laws of the jurisdictions where such offers and sales are being made.

THIS PRELIMINARY PLACEMENT MEMORANDUM IS PERSONAL TO EACH ELIGIBLE INVESTOR. THIS PRELIMINARY PLACEMENT MEMORANDUM HAS BEEN PREPARED BY THE TRUST SOLELY FOR PROVIDING INFORMATION IN CONNECTION WITH THE ISSUE.

YOU MAY NOT, AND ARE NOT AUTHORIZED TO, (1) DELIVER THIS PRELIMINARY PLACEMENT MEMORANDUM TO ANY OTHER PERSON; OR (2) REPRODUCE THIS PRELIMINARY PLACEMENT MEMORANDUM IN ANY MANNER WHATSOEVER. ANY DISTRIBUTION OR REPRODUCTION OF THIS PRELIMINARY PLACEMENT MEMORANDUM, IN WHOLE OR IN PART, IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS INSTRUCTION MAY RESULT IN A VIOLATION OF THE SECURITIES AND EXCHANGE BOARD OF INDIA (INFRASTRUCTURE INVESTMENT TRUSTS) REGULATIONS, 2014 OR OTHER APPLICABLE LAWS OF INDIA AND OF OTHER JURISDICTIONS.

INVESTMENTS IN UNITS INVOLVE RISKS AND INVESTORS SHOULD NOT INVEST ANY FUNDS IN THE ISSUE UNLESS THEY CAN AFFORD TO TAKE THE RISK OF LOSING THEIR ENTIRE INVESTMENT. IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE TRUST, THE UNITS, THE ISSUE, AND THIS PRELIMINARY PLACEMENT MEMORANDUM, INCLUDING THE RISKS INVOLVED. INVESTORS ARE ADVISED TO CAREFULLY READ THIS PRELIMINARY PLACEMENT MEMORANDUM, INCLUDING THE SECTION ENTITLED "RISK FACTORS" ON PAGE 55 BEFORE MAKING AN INVESTMENT DECISION. EACH ELIGIBLE INVESTOR IS ADVISED TO CONSULT ITS OWN ADVISORS, ABOUT THE CONSEQUENCES OF AN INVESTMENT IN THE UNITS BEING ISSUED PURSUANT TO THIS PRELIMINARY PLACEMENT MEMORANDUM.

Unless a serially numbered Preliminary Placement Memorandum along with an Application Form is addressed to a particular Eligible Investor, no invitation to offer shall be deemed to have been made to such Eligible Investor to make an offer to subscribe to Units pursuant to the Issue. For further details, please see the section entitled "*Issue Information*" on page 236. The distribution of this Preliminary Placement Memorandum or the disclosure of its contents without the Trustee's or Investment Manager's prior consent, to any person, other than to the addressees, is unauthorized and prohibited. Each addressee, by accepting delivery of this Preliminary Placement Memorandum, agrees to observe the foregoing restrictions and to make no copies of this Preliminary Placement Memorandum or any documents referred to in this Preliminary Placement Memorandum.

REGISTRAR AND 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
Fax: +91 40 2343 1551
Toll free number: 1800 309 4001
Website: www.kfintech.com
Email: ihct.invit@kfintech.com
Investor grievance e-mail: einward.ris@kfintech.com
Contact Person: M Murali Krishna
SEBI Registration No.: INR000000221
CIN: U72400TG2017PTC117649

This Preliminary Placement Memorandum is dated June 10, 2022.

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NOTICE TO INVESTORS

The statements contained in this Preliminary Placement Memorandum relating to the Trust and the Units are, in all material respects, true and accurate and not misleading. The opinions and intentions expressed in this Preliminary Placement Memorandum with regard to the Trust and the Units are honestly held and have been reached after considering all relevant circumstances and are based on reasonable assumptions and information presently available with the Investment Manager, the Sponsor or both the Investment Manager and the Sponsor. There are no other facts in relation to the Trust and the Units, the omission of which would, in the context of the Issue, make any statement in this Preliminary Placement Memorandum misleading in any material respect. Further, each of the Investment Manager and the Sponsor has made all reasonable enquiries to ascertain such facts and to verify the accuracy of all such information and statements.

Each Eligible Investor on receiving this Preliminary Placement Memorandum shall be deemed to acknowledge that such person has not relied on any of the financial, legal or other advisors to the Sponsor any of its respective shareholders, employees, counsel, officers, directors, representatives, agents, associates or affiliates in connection with their investigation of the accuracy of such information or such person's investment decision. Each Eligible Investor shall rely on its own examination of the Trust and the merits and risks involved in investing in the Units. Eligible Investors should not and shall not construe the contents of this Preliminary Placement Memorandum as legal, tax, accounting, or investment advice. Each Eligible Investor on receiving this Preliminary Placement Memorandum shall be deemed to acknowledge that in making an investment decision, such investor has relied solely on the information contained in this Preliminary Placement Memorandum and not on any other disclosure or representation by the Investment Manager, the Trustee, the Sponsor or any of their respective financial, legal or other advisors or any other party.

No person is authorized to give any information or to make any representation not contained in this Preliminary Placement Memorandum and any information or representation not so contained must not be relied upon as having been authorized by or on behalf of the Trust or by, or on behalf, of the Sponsor or the Investment Manager. The delivery of this Preliminary Placement Memorandum, at any time, does not imply that the information contained in it is correct as of any time subsequent to its date. This Preliminary Placement Memorandum contains a summary of some terms of certain documents which are qualified in their entirety by the terms and conditions of those documents.

This Preliminary Placement Memorandum is personal to each Eligible Investor.

The distribution of this Preliminary Placement Memorandum or the disclosure of its contents to any person, other than the Eligible Investors to whom it is addressed and those retained by such Eligible Investors to enable them to make a decision with respect to their purchase of the Units, is unauthorized and prohibited. Each Eligible Investor, by accepting delivery of this Preliminary Placement Memorandum, agrees to observe the foregoing restrictions and make no copies of this Preliminary Placement Memorandum or any other material in connection with the Issue or the Units.

Notice to Investors

The Units have not been, and will not be, registered under the Securities Act or any other applicable state securities laws of the U.S. The Units are only being offered and sold only outside the United States in "offshore transactions" to persons who are not "U.S. persons", in each case within the meaning of and in reliance on Regulation S, in each case in compliance with the applicable laws of the jurisdictions where those offers and sales are being made.

Each purchaser of the Units offered pursuant to this Preliminary Placement Memorandum will be deemed to have made the representations, agreements and acknowledgments as described in this section entitled "*Notice to Investors – Representations by Eligible Investors"* on page 2 and in the section entitled "*Selling and Transfer Restrictions*" on page 229.

THE UNITS OFFERED HEREBY HAVE NOT BEEN REGISTERED WITH, OR APPROVED OR DISAPPROVED BY ANY SECURITIES OR OTHER REGULATORY AUTHORITY IN ANY JURISDICTION. FURTHERMORE, NO SUCH REGULATORY AUTHORITY HAS PASSED ON OR ENDORSED THE MERITS OF THE OFFERING OR THE ACCURACY OR ADEQUACY OF THIS PRELIMINARY PLACEMENT MEMORANDUM. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The distribution of this Preliminary Placement Memorandum and the issue of the Units in certain jurisdictions may be restricted by law. As such, this Preliminary Placement Memorandum does not constitute, and may not be used for, or in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it is unlawful to make such offer or solicitation. In particular, no action has been taken by the Investment Manager which would permit an Issue of the Units or distribution of this Preliminary Placement Memorandum in any jurisdiction, other than India. Accordingly, the Units may not be offered or sold, directly or indirectly, and neither this Preliminary Placement Memorandum nor any Issue materials in connection with the Units be distributed or published in or from any country or jurisdiction that would require registration of the Units in such country or jurisdiction. Please see the section entitled "*Selling and Transfer Restrictions*" on page 229.

FATCA and Similar Measures

India has signed a Model 1 inter-governmental agreement with the United States (the "**U.S.-India IGA**") to give effect to the United States Foreign Account Tax Compliance Act provisions contained in sections 1471 to 1474 of the United States Internal Revenue Code and U.S. Treasury Regulations promulgated thereunder (together, as amended from time to time, "**FATCA**"). Pursuant to the U.S.-India IGA and the related Indian legislation, regulations and guidance, the Trust is required to report certain information about "Specified U.S. Persons" (as defined in the U.S.-India IGA) that own, directly or indirectly, an interest in the Trust. If the Trust does not comply with these obligations, it may be subject to a 30% withholding tax on certain payments to it of U.S. source income (including interest and dividends) (from July 1, 2014) and proceeds from the sale of property that could give rise to U.S. source interest or dividends (from January 1, 2019) (a "**FATCA Deduction**"), and to financial penalties or other sanctions under the relevant Indian legislation.

Under the terms of the current U.S.-India IGA, the Trust will not generally be required to withhold tax on payments made to an account holder (i.e. a Unitholder) or to close recalcitrant accounts. The Trust will be required to report certain information in respect of any "Specified U.S. Persons" to the Indian Directorate of Intelligence and Criminal Investigation (the "**Directorate**") and the Directorate will exchange this information, on an automatic basis annually, with the U.S. Internal Revenue Service.

It should be noted that a number of other jurisdictions have entered into or are committed to entering into inter-governmental agreements for the automatic cross-border exchange of tax information similar to the U.S.-India IGA, including, in particular, under a regime known as the OECD Common Reporting Standard (the "**CRS**"). India has signed, along with over 80 other countries, a multilateral competent authority agreement to implement the CRS, and has passed regulations to give effect to the CRS. These regulations require Indian "Financial Institutions", which is likely to include the Trust, to identify specified persons in participating jurisdictions under the CRS, and to report related information to the Directorate (for automatic exchange with the relevant tax authorities in such jurisdictions).

While the Trust will seek to satisfy its obligations under FATCA, the U.S.-India IGA, the CRS and the associated implementing legislation in India to avoid the imposition of any FATCA Deductions, financial penalties and other sanctions, the ability of the Trust to satisfy such obligations will depend on receiving relevant information and/or documentation about each Unitholder and the direct and indirect beneficial owners of the Units (if any). There can be no assurance that the Trust will be able to satisfy such obligations. If a Unitholder, or any related party, causes the Trust to suffer a FATCA Deduction, financial penalty, or other cost, expense or liability, or the Trust is required to make a FATCA Deduction from such Unitholder, the Investment Manager and/or the Trustee, on behalf of the Trust, reserves the right to take any action available to it and to pursue all remedies at its disposal to ensure that the FATCA Deduction or financial penalty and other associated costs, expenses and liabilities are economically borne by such Unitholder.

All prospective investors should consult with their own tax advisers regarding the possible implications of FATCA, the U.S.-India IGA, the CRS and the associated implementing legislation in India and any other similar legislation and/or regulations on their investments in the Trust.

Representations by Eligible Investors

References herein to "you" or "your" is to each Eligible Investor in the Issue.

By purchasing, or subscribing to, Units pursuant to the Issue, you are deemed to have represented to the Trustee, the Investment Manager and the Sponsor, and acknowledge and agree as follows:

1. You are entitled to acquire the Units under the laws of all relevant jurisdictions and that you have all necessary capacity and have obtained all necessary consents, governmental or otherwise and authorisations to enable you to commit to this participation in the Issue and to perform your obligations in relation thereto (including, without limitation, in the case of any person on whose behalf you are acting, all necessary consents and authorisations to agree to the terms set out or referred to in this Preliminary Placement Memorandum) and will honour such obligations;

2. You undertake to (i) hold, manage or dispose of any Units that are Allotted to you in accordance with the InvIT Regulations and all other applicable laws; and (ii) to comply with all requirements under applicable law in relation to reporting obligations, if any, in this relation;

3. You will make all necessary filings, in relation to the Issue and your investment in Units, with appropriate governmental, statutory or regulatory authorities, including the RBI, as may be required, in accordance with applicable law in your respective jurisdiction;

4. You agree to provide on request in a timely manner, and consent to the use and disclosure (including to any taxation or other regulatory authorities) of, any information or documentation in relation to yourself and, if and to the extent required, the direct or indirect beneficial ownership of your Units (if any), as may be necessary for the Trust (or the Trustee and its agents) and the Investment Manager to comply with any regulatory obligations and/or prevent the withholding of tax or other penalties under FATCA, the CRS or other similar exchange of tax information regimes, as maybe applicable. You acknowledge and agree that you shall have no claim against the Trust (or the Trustee and its agents) and the Investment Manager for any losses suffered by you (including in relation to the direct or indirect beneficial ownership of your Units (if any)) as a result of such use by or disclosure of such information or documentation to, any relevant regulatory, governmental or statutory authority;

5. You are aware that the Units have not been, and will not be registered through a prospectus under the InvIT Regulations, or under any other law in force in India. This Preliminary Placement Memorandum is being, and the Placement Memorandum will be, submitted to SEBI;

6. You confirm that, either: (i) you have not participated in or attended any investor meetings or presentations by the Trust or its agents ("**Presentations**") with regard to the Trust, the Units or the Issue; or (ii) if you have participated in or attended any Presentations, you understand and acknowledge that the Trustee may not have knowledge of the statements that the Trust or its agents may have made at such Presentations and are therefore unable to determine whether the information provided to you at such Presentations may have included any material misstatements or omissions, and, you acknowledge that the Trustee (or its agents), the Investment Manager or the Sponsor have advised you not to rely in any way on any information that was provided to you at such Presentations;

7. None of the Sponsor, the Investment Manager, the Trustee or any of their respective shareholders, directors, officers, employees, counsel, representatives, financial advisors, agents or affiliates is making any recommendations to you or advising you regarding the suitability of any transactions it may enter into in connection with the Issue. None of the Sponsor, the Trustee, the Investment Manager or any of their respective shareholders, employees, counsel, officers, directors, financial advisors, representatives, agents or affiliates have any duties or responsibilities to you for providing the protection afforded to their clients, or for providing advice in relation to the Issue and are in no way acting in a fiduciary capacity towards you;

8. All statements, other than statements of historical fact included in this Preliminary Placement Memorandum, including, without limitation, those regarding the Trust's financial position, business strategy, plans and objectives for future operations, the Investment Objectives, and the Projections of Revenue and Operating Cash Flow, are forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors that could cause actual results to be materially different from the results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Trust's present and future business strategies and the environment in which the Trust will operate in the future. You should not place undue reliance on forward-looking statements, which speak only as of the date of this Preliminary Placement Memorandum. The Trust, the Trustee, the Sponsor, the Investment Manager, or any of their respective shareholders, directors, officers, employees, counsel,

representatives, financial advisors, agents, associates or affiliates assume no responsibility to update any of the forward-looking statements contained in this Preliminary Placement Memorandum;

9. You have been provided a serially numbered copy of this Preliminary Placement Memorandum and will be deemed to have read this Preliminary Placement Memorandum in its entirety, including, in particular, the section entitled "*Risk Factors*" on page 55;

10. You are aware and understand that the Units are being offered only to Eligible Investors and are not being offered to the general public and the Allotment shall be on a discretionary basis;

11. You have made, or are deemed to have made, as applicable, the representations provided in the section entitled "*Selling and Transfer Restrictions*" on page 229;

12. You are not, and were not at any time an offer of the Units was made, in the "United States" and you are not a "U.S. person," in each case within the meaning of Regulation S, and you understand and agree that you are purchasing the Units in an "offshore transaction" within the meaning of and in reliance on Regulation S;

13. You understand that the Units have not been, and will not be, registered under the Securities Act or with any securities regulatory authority of any state of the United States and accordingly, you understand and agree that the Units may not be resold by you within the United States, except in reliance on an exemption from the registration requirements of the Securities Act; and

14. You understand and agree that the Units are transferable only in accordance with the restrictions described in the section entitled "*Selling and Transfer Restrictions*" on page 229, and you warrant that you will comply with such restrictions;

15. In making your investment decision, you have (i) relied on your own examination of the Trust, the Units and the terms of the Issue, including the merits and risks involved, (ii) made and will continue to make your own assessment of the Trust, the Units and the terms of the Issue based solely on the information contained in this Preliminary Placement Memorandum, (iii) consulted your own independent advisors or otherwise have satisfied yourself concerning, without limitation, the effects of local laws, (iv) relied solely on the information contained in this Preliminary Placement Memorandum and no other disclosure or representation by the Sponsor or the Investment Manager or any of their respective financial, legal or other advisors or any other party; (v) received all information in this Preliminary Placement Memorandum that you believe is necessary or appropriate in order to make an investment decision in respect of the Trust and the Units, and (vi) relied upon your own investigation in deciding to invest in the Issue;

16. You have such knowledge and experience in financial, business and investment matters as to be capable of evaluating the merits and risks of an investment in the Units. You and any accounts for which you are subscribing to the Units, (i) are each able to bear the economic risk of the investment in the Units; (ii) will not, subject to the terms of this Preliminary Placement Memorandum, look to any of the Investment Manager, the Trustee, the Sponsor or any of their respective shareholders, employees, counsel, officers, directors, representatives, financial advisors, agents or affiliates for all, or part, of any such loss or losses that may be suffered due to your investment in the Units; and (iii) are able to sustain a complete loss on the investment in the Units. You acknowledge that an investment in the Units involves a high degree of risk and that the Units are, therefore, a speculative investment. You are seeking to subscribe to the Units in the Issue for your own investment and not with a view to resell or distribute in any manner that could characterise you as an underwriter or a similar entity in any jurisdiction;

17. The Trustee, the Sponsor, the Investment Manager or any of their respective shareholders, directors, officers, employees, counsel, representatives, financial advisors, agents or affiliates have not provided you with any legal, financial or tax advice or otherwise made any representations regarding the tax consequences of the Units (including but not limited to, the Issue and the use of the proceeds of the Issue). You will obtain your own independent legal, financial or tax advice and will not rely on the Investment Manager, the Sponsor, the Trustee, or any of their respective shareholders, employees, counsel, officers, directors, representatives, financial advisors, agents or affiliates or the Investment Manager when evaluating the tax consequences in relation to the Units (including but not limited to the

Issue and the use of the proceeds of the Issue). You waive and agree not to assert any claim against the Sponsor, the Trustee, the Investment Manager or any of their respective financial advisors, agents or affiliates with respect to the tax aspects of the Units or the Issue or as a result of any tax audits by tax authorities, in relation to the Units and the Issue, wherever situated;

18. You are not the Trustee, or the Valuer or an employee of the Valuer involved in the valuation of the Project SPV;

19. The only information you are entitled to rely on, and on which you have relied, in committing yourself to acquire the Units is contained in this Preliminary Placement Memorandum, such information being all that you deem necessary to make an investment decision in respect of the Units and that you have neither received nor relied on any other information given or representations, warranties or statements made by the Trustee, the Investment Manager or the Sponsor, and neither the Trustee, the Investment Manager nor the Sponsor will be liable for your decision to accept an invitation to participate in the Issue based on any other information, representation, warranty or statement that you have obtained or received;

20. You understand that the Units to be Allotted in this Issue will, when issued, be credited as fully paid and rank *pari passu* in all respects with all other Units, including in respect of the right to receive all distributions declared, made or paid in respect of the Units after the Allotment. For details, please see the section entitled "*Distribution*" on page 178;

21. You are eligible to Bid for, and hold, Units, so Allotted. Your holding after the Allotment of the Units shall not exceed the investment level permissible as per any applicable law and regulation;

22. You agree to indemnify and hold the Trustee, Investment Manager and the Sponsor harmless from any and all actual and direct costs, claims, liabilities and expenses (including legal fees and expenses) arising out of or in connection with any breach of the representations and warranties in this section;

23. The Trustee, the Investment Manager, the Sponsor, their respective shareholders, employees, counsel, offices, directors, representatives, agents or affiliates, will rely on the truth and accuracy of the foregoing representations, warranties, acknowledgements and undertakings which are given to the Trust, the Sponsor, the Investment Manager and the Trustee, and the same are irrevocable;

24. You are eligible to invest in India and in the Units under applicable law, including the FEMA Regulations, and have not been prohibited by SEBI or any other statutory, regulatory or judicial authority from buying, selling or dealing in securities;

25. You understand that, subject to the terms of this Preliminary Placement Memorandum, neither the Investment Manager, the Sponsor nor the Trustee has any obligation to purchase or subscribe to all, or any part, of the Units purchased by you in the Issue, or to support any losses directly or indirectly sustained or incurred by you for any reason whatsoever in connection with the Issue;

26. Any dispute arising in connection with the Issue will be governed by, and construed in accordance with, the laws of the Republic of India and the courts at New Delhi shall have exclusive jurisdiction to settle any disputes which may arise out of or in connection with this Preliminary Placement Memorandum; and

27. You have made, or are deemed to have made, as applicable, the representations provided in this section and each of the representations, warranties, acknowledgements and agreements set out above shall continue to be true and accurate at all times, up to and including the Allotment of the Units in the Issue.

Available Information

The Investment Manager agrees to comply with any undertakings given by it from time to time in connection with the Units and, without prejudice to the generality of foregoing, shall furnish to the Unitholders all such information as may be required under the InvIT Regulations.

DEFINITIONS AND ABBREVIATIONS

This Preliminary Placement 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 Preliminary Placement 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 "Special Purpose Combined Financial Statements ", "Projections of Revenue and Operating Cash Flow", "Statement of Possible Direct Tax Benefits Available to the Trust and its Unitholders under the Applicable Laws in India" and "Legal and other Information" on pages 258, 314, 243 and 222, respectively, shall have the meanings ascribed to such terms in those respective sections.

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

Trust Related Terms

Term	Description
Associate	Associate shall have the meaning under Regulation 2(1)(b) of the InvIT Regulations
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 total subscription amounts by way of cash or share swap or otherwise as permitted under the InvIT Regulations (including transfer of interest in the Trust Assets by the Sponsor) received by the Trust from Unitholders (including the Sponsor) in connection with any placement, offering or issue of Units
Claims Benefit Assignment Agreement	The claims benefit assignment agreement dated June 7, 2022, entered into between the Project SPV, 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 Project SPV, 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 Project SPV, 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 the Project SPV, 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 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

Term	Description
	through the Investment Manager (acting on behalf of the Trustee)), the Project SPV, 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
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 136
Earn Out Agreement	The earn out agreement dated January 20, 2021 entered into between the Project SPV, 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 SPV each having a face value ₹ 10 each
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 October 4, 2021 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
Initial Portfolio Assets	Collectively, SJEPL and NCREPE
Investment	Investment by the Trust in Holding Companies or SPVs in accordance with the InvIT Documents and as permitted under applicable law
Investment Management Agreement	The amended and restated investment management agreement dated October 4, 2021 entered into between the Trust (acting through its Trustee) and the Investment Manager
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 20
Investment Strategy	The investment strategy and investment policy of the Trust described in this Preliminary Placement 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 20
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 Concession Agreement	The concession agreement dated May 6, 2022 entered between NCREPE and NHAI, including all amendments and supplements made thereto
NCREPE or Incorporated SPV	NCR Eastern Peripheral Expressway Private Limited
Parties to the Trust	Collectively, the Sponsor, the Trustee, the Investment Manager and the Project Manager
Project Implementation and Management Agreement	The project implementation and management agreement dated June 8, 2022 entered into amongst the Trustee, the Project Manager, the Investment Manager and the Project SPV
Project Manager	Maple Highway Project Management Private Limited
Project or SJEPL Project	The six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha in terms of the SJEPL Concession Agreement
Project SPV or SJEPL	Shree Jagannath Expressways Private Limited
Projections of Revenue and Operating Cash Flow	Projections of revenue from operations cash flows from operating activities and the underlying assumptions of the Trust and Project SPV, for the years ending March 31, 2023, March 31, 2024 and March 31, 2025 along with the basis of preparation and other explanatory information and the significant assumptions, in accordance with the Standard on Assurance Engagement

Term	Description
	3400, "The Examination of Prospective Financial Information", issued by the Institute of Chartered Accountants of India
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)), the Project SPV, 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 the Project SPV 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 the Project SPV, 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))
Shareholder Loan Agreement	The loan agreement dated June 7, 2022, 2022 entered into between the Trust (acting through the Trustee and represented by the Investment Manager) and the Project SPV in relation to the facility to be availed by the Project SPV from the Trust.
SJEPL Concession Agreement	The concession agreement dated August 6, 2010 entered between SJEPL and NHAI, including all amendments and supplements made thereto
Special Purpose Combined Financial Statements	Special purpose combined financial statements of the Trust, which comprise the Combined Balance Sheets as at December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019, the Combined Statement of Profit and Loss (including other comprehensive income), the Combined Statement of Changes in Equity and the Combined Statement of Cash Flows for the nine months period ended December 31, 2021, for the years ended March 31, 2021, March 31, 2020, and March 31, 2019, the Combined Statement of net assets at fair value as at December 31, 2021, the Combined Statement of Total Returns at Fair Value for the nine months period ended December 31, 2021 and year ended March 31, 2021 and notes to the special purpose combined financial statements including a summary of significant accounting policies and other explanatory information
SPV(s)	Special purpose vehicles, as defined under Regulation 2(l)(zy) of the InvIT Regulations
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-2 in the National Capital Region on toll, operate and transfer model
Tripartite Agreement	The tripartite agreement dated November 23, 2021 entered between NHAI, the Project SPV 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 this Issue), including any preliminary placement memorandum, final placement memorandum, preliminary offer document and final offer document, 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 to be incurred out of the Trust Assets as specified in the Indenture of Trust
Trustee	Axis Trustee Services Limited

Term	Description
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 Report	The valuation report issued by the Valuer, which sets out its opinion as to the fair enterprise value of the Project SPV as on December 31, 2022
Valuer	BDO Valuation Advisory LLP

Issue Related Terms

Term	Description
Allocated/ Allocation	The allocation of Units, to successful Bidders on the basis of the Application Form submitted by them, by the Investment Manager
Allot/ Allotment/ Allotted	Unless the context otherwise requires, the issue and allotment of Units to successful Bidders, pursuant to the Issue
Allottees	Bidders to whom Units are issued and Allotted pursuant to the Issue
Application Form	The serially numbered form pursuant to which Eligible Investors shall submit a Bid for the Units in the Issue
Bid Amount	The amount payable by a Bidder for the number of Units Bid for at the Issue Price specified in this Preliminary Placement Memorandum
Bid Lot	A minimum of such number of Units that the Bid Amount is not less than ₹ 10 million, and in multiples of 1 Unit thereafter
Bid(s)	Indication of interest of an Eligible Investor, as provided in the Application Form, to subscribe for the Units at the Issue Price, in terms of this Preliminary Placement Memorandum and the Application Form
Bid/Issue Closing Date	June 22 2022, which is the last date up to which the Application Forms shall be accepted
Bid/Issue Opening Date	June 16, 2022, which is the date on which the Application Forms shall be dispatched to Eligible Investors by the Registrar and the date from which, the Registrar shall accept Application Forms
Bid/Issue Period	Period between the Bid/Issue Opening Date and the Bid/Issue Closing Date, inclusive of both days, during which Eligible Investors can submit their Bids
Bidder	Any Eligible Investor, who makes a Bid pursuant to the terms of this Preliminary Placement Memorandum and the Application Form
Bodies Corporate	Bodies corporate as defined in Regulation 2(1)(d) of the InvIT Regulations, whether Indian or foreign
Cash Escrow Account	'No-lien' and 'non-interest bearing' account opened with the Escrow Collection Bank and in whose favour Bidders should transfer money through direct credit/NEFT/NECS/RTGS in respect of the Bid Amount when submitting a Bid
Cash Escrow Agreement	The cash escrow agreement dated January 21, 2022 entered into amongst the Trust (acting through the Trustee), the Investment Manager and the Escrow Collection Bank for, among others, collection of the Bid Amounts and for remitting refunds, if any, of the amounts collected, to the Bidders
Client ID	Client identification number maintained with one of the Depositories in relation to a demat account
Closing Date	The date on which Allotment of Units pursuant to the Issue shall be made, i.e. on or about June 28, 2022
Demographic Details	Details of the Bidders, including the Bidder's address, name of the Bidder's father/husband, investor status, occupation and bank account details
Designated Date	The date of credit of Units to the Eligible Investors' demat accounts
Eligible Investors	Institutional Investors and Bodies Corporate, whether Indian or foreign
Escrow Collection Bank	Axis Bank Limited
Institutional Investors	Institutional investor as defined in Regulation 2(1)(ya) of the InvIT Regulations
Issue	The issue of up to 91,000,000 Units at an Issue Price of ₹ 100 per Unit, aggregating up to ₹ 9,100 million, on a private placement basis
Issue Expenses	Expenses in relation to the Issue

Term	Description
Issue Price	₹ 100 per Unit, being the price at which Units will be Allotted to successful Bidders in terms of this Preliminary Placement Memorandum
Issue Proceeds	The proceeds of the Issue of up to ₹ 9,100 million. For further details about the use of the Issue Proceeds, please see the section entitled "*Use of Proceeds*" on page 172
Issue Size	The issue of up to 91,000,000 Units aggregating up to ₹ 9,100 million
Minimum Bid Size	₹ 10 million
Mutual Funds	Mutual funds registered with SEBI under the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996
Placement Memorandum	The placement memorandum dated [●] to be issued in relation to this Issue in accordance with the InvIT Regulations
Preliminary Placement Memorandum	This preliminary placement memorandum dated June 10, 2022 in relation to this Issue, to be filed with SEBI, and issued in accordance with the InvIT Regulations, which does not contain the complete particulars of the Issue, including any modifications, amendments, supplements, notices, corrections or corrigenda thereto
Qualified Institutional Buyers or QIB(s)	Qualified institutional buyers, as defined under Regulation 2(1)(ss) of the SEBI ICDR Regulations, which currently includes (i) a mutual fund, a VCF, an AIF and an FVCI registered with SEBI, (ii) an FPI, other than individuals, corporate bodies and family offices, (iii) a public financial institution as defined in section 2(72) of the Companies Act, 2013, (iv) a scheduled commercial bank as included in the second schedule to the Reserve Bank of India Act, 1934, (v) a multilateral and bilateral development financial institution, (vi) a state industrial development corporation, (vii) an insurance company registered with the IRDAI, (viii) a provident fund with minimum corpus of ₹ 250 million, (ix) a pension fund with minimum corpus of ₹ 250 million, (x) National Investment Fund set up by resolution no. F. No. 2/3/2005-DDII dated November 23, 2005 of the GoI published in the Gazette of India, (xi) insurance funds set up and managed by army, navy or air force of the Union of India, (xii) insurance funds set up and managed by the Department of Posts, India, and (xiii) systemically important non-banking financial companies.
Registrar and Transfer Agent or Registrar	Kfin Technologies Limited (formerly known as "Kfin Technologies Private Limited")
Working Day	Working Day shall mean all days, excluding Saturdays, Sundays and public holidays, on which commercial banks in Mumbai are open for business

Technical and Industry Related Terms

Term	Description
BoCW	Building and Other Construction Workers
BOT	Build Operate Transfer
CRISIL or CRISIL Research	CRISIL Research, a division of CRISIL Limited
CRISIL Report	A report entitled "*CRISIL Research – An assessment of the roads sector in India"* dated August 2021 along with an addendum dated January 2022, prepared by CRISIL
EPC	Engineering, Procuring and Construction
O&M	Operations and Maintenance
Technical Consultant	Ramboll India Private Limited
Technical Report	The technical report, prepared by the Technical Consultant, in relation to the Project SPV entitled "*Technical Due Diligence Chandikhole-Jagatpur-Bhubaneshwar Section of NH-5*" dated December 29, 2021
TOT	Toll Operate Transfer
Traffic Consultant or Steer	Steer Davies Gleave India Private Limited
Traffic Report	The traffic report, prepared by the Traffic Consultant, in relation to the Project SPV entitled "*Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhole*" dated January 2022

Abbreviations

Term	Description
AIF	Alternative Investment Fund as defined in and registered with SEBI under the SEBI AIF Regulations
BSE	BSE Limited
CAN	Confirmation of Allocation Note
CCI	Competition Commission of India
CDMA	Code Division Multiple Access
CDSL	Central Depository Services (India) Limited
CGU	Cash Generating Units
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
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
ECB Master Directions	The master directions issued by the Reserve Bank of India on External Commercial Borrowings, Trade Credits and Structured Obligations dated March 26, 2019
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
GSM	Global System for Mobile communication
GST	Goods and Services Tax
ICAI	Institute of Chartered Accountants of India
IFRS	International Financial Reporting Standards
Ind AS	Companies (Indian Accounting Standards) Rules, 2015 notified on February 19, 2015 by the MCA, including any amendments or modifications thereto
Indian GAAP	Generally Accepted Accounting Principles in India
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

Term	Description
MoEF	Ministry of Environment, Forest and Climate Change
MoRTH	Ministry of Road Transport and Highways
NACH	National Automated Clearing House
NASD	National Association of Securities Dealers
NCLAT	The National Company Law Appellate Tribunal, New Delhi
NCLT	The National Company Law Tribunal, Ahmedabad Bench
NDCF	Net distributable cash flows available for distribution
NECS	National Electronic Clearing Services
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
SCRR	Securities Contracts (Regulation) Rules, 1957
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
VCF	Venture capital funds as defined under the SEBI VCF Regulations

PRESENTATION OF FINANCIAL DATA AND OTHER INFORMATION

Certain Conventions

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

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

Financial Data

Unless stated otherwise, the financial information in this Preliminary Placement Memorandum is derived from the Special Purpose Combined Financial Statements .

Further, this Preliminary Placement Memorandum includes projections of revenue and operating cash flows of the Trust on a consolidated basis for the financial years ended March 31, 2023, March 31, 2024 and March 31, 2025, prepared in accordance with Standard on Assurance Engagement 3400, 'The Examination of Prospective Financial Information', issued by the Institute of Chartered Accountants of India (the "**Projections of Revenue and Operating Cash Flow**"). For further details, please see the section entitled "*Projections of Revenue and Operating Cash Flow*" on page 314.

Further, this Preliminary Placement Memorandum includes summary financial statements of the (i) Sponsor, as of and for the financial years ended December 30, 2021, December 30, 2020, and December 30, 2019, prepared in accordance with IFRS; and (ii) Investment Manager, for the financial years ended March 31, 2021, March 31, 2020 and March 31, 2019, prepared in accordance with Ind AS and the Companies Act. For further details, please see the sections entitled "*Summary Financial Information of the Sponsor*" and "*Summary Financial Information of the Investment Manager*" on pages 36 and 40, respectively.

The financial year for the Trust, the Investment Manager and the Project SPV, 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 SPV, 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 Preliminary Placement 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 on the financial disclosures presented in this Preliminary Placement Memorandum should accordingly be limited.

In this Preliminary Placement 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.

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.

Except otherwise specified, certain numerical information in this Preliminary Placement Memorandum has been presented in "million" units. One million represents 1,000,000 and one billion represents 1,000,000,000.

Unless the context requires otherwise, any percentage amounts, in relation to us as set forth in this Preliminary Placement Memorandum, have been calculated on the basis of the Special Purpose Combined Financial Statements .

Exchange Rates

This Preliminary Placement 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, 2022	As of March 31, 2021	As of March 31, 2020
1 US$	75.81	73.50	75.39

Source: www.rbi.org.in and www.fbil.org.in
Note: If the RBI reference rate is not available on a particular date due to a public holiday, exchange rates of the previous working day has been disclosed. The reference rates are rounded off to two decimal places.

Industry and Market Data

Unless stated otherwise, industry and market data used in this Preliminary Placement Memorandum has been obtained or derived from publicly available information, publications of the Government, the Technical Report, 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 Preliminary Placement 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 Research, 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 Research operates independently of, and does not have access to information obtained by CRISIL Ratings Limited / CRISIL Risk and Infrastructure Solutions Ltd (CRIS), which may, in their regular operations, obtain information of a confidential nature. The views expressed in this Report are that of CRISIL Research and not of CRISIL Ratings Limited / CRIS. 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 Preliminary Placement 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 55. Accordingly, investment decisions should not be based solely on such information.

The extent to which the market and industry data used in this Preliminary Placement 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 Report, prepared by the Traffic Consultant, in relation to the Project SPV entitled "*Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhole*" dated January 2022 was commissioned by the Investment Manager for purposes of the Issue. The Traffic Report is issued by the Traffic Consultant and is subject to the following disclaimers:

For the extracts of the Traffic Report:

"*This Preliminary Placement Memorandum includes selected provisions of or a summary of the Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhole (the "Report") prepared by Steer, Davies & Gleave India Private Limited, solely in its capacity as the Traffic Consultant (the "Traffic Consultant"), on behalf of Maple Infra InvIT Investment Manager Private Limited (the "Client") for the Issue and is not a full statement of the terms of the Report. Accordingly, such summary or excerpt is qualified in its entirety by reference to and is subject to the full text of the Report, which are attached hereto as Appendix C. Investors must view the summaries in the context of the full Report, which is subject to the limitations and disclaimers in such Report. Without limiting the generality of the foregoing, the Report is expressly subject to the qualifications, assumptions made, procedures followed, matters considered and any limitations on the scope of work contained therein.*

Investors should note that these summaries, and the Report, are provided only as of the date set forth therein and do not contemplate any event, circumstances or changes with respect to Issue or otherwise after such date. The foregoing summaries of the Report may include projected information and data (financial and otherwise), and other forward-looking information, that may or may not occur or prove to be accurate. Such projected and forward-looking information is based on current expectations and projections about future events which are beyond the control of the Traffic Consultant, the Client or any other participant in the Issue, and such projections and information can be affected by inaccurate assumptions. While these projections and information were prepared in good faith, no assurance can be given as to the accuracy or adequacy of such projections and information, or the assumptions underlying such projections and information."

For the Complete Traffic Report:

"*This report has been produced for the sole benefit of Maple Highways Pte. Ltd. The report may only be relied upon by Approved Addressees in accordance with the terms of our engagement letter.*

The projections of traffic contained within this document represent Steer's estimates. While they are not precise forecasts, they do represent, in our view, a reasonable expectation for the future, based on the information available as of the date of these estimates. The estimates contained within this document rely on numerous assumptions and judgements and are influenced by external circumstances that can change quickly and that can affect the outcome. In addition, it has been necessary to base most of this analysis on data collected by third parties. Steer does not guarantee the accuracy of this data.

Steer developed the relationships in the models used to produce the forecasts for this Project based on data received through August-2021 during which time the outbreak of the virus known as COVID-19 has continued to spread throughout the world and has been defined by the World Health Organization as a "pandemic". As of the date of distribution of this report, the COVID-19 outbreak is continuing to have a material impact on global economic and political affairs including having a significant impact on all the transportation industries, including toll road traffic, where in particular vehicle volumes have fallen in response to quarantine and self-care measures that governments have imposed including in Africa. The situation remains dynamic and is subject to significant change. In this challenging context, in the first phase of the study, Steer has produced base forecasts (directly produced from models using a combination of pre-COVID-19 and post-COVID-19 data till September 2020) which provide a view on a possible scenario for traffic and revenue recovery from COVID-19-related traffic decrease. Subsequently as new data up-to Augu-2021 was available, Steer has been tasked to run comparisons between the actuals and Steer estimates of base year traffic and revenue to validate the assumptions used in the forecasts. However, due to the ongoing spread of COVID-19, it is important to note that there is currently insufficient data available to allow Steer and readers of this report to have much confidence that the scenario and

assumptions Steer has identified will prove to be accurate. Outcomes therefore could well differ from those described in this report. Given the uncertainty described here and inherent in this unprecedented pandemic, Steer advises that all readers of this report consider the forecasts in the context of their own assessment of the COVID-19 outbreak and its likely impact before making final decisions related to this Project."

FORWARD-LOOKING STATEMENTS

Certain statements contained in this Preliminary Placement 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 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 business strategy, planned projects, revenue and profitability (including, without limitation, any financial or operating projections or forecasts), new business and other matters discussed in this Preliminary Placement Memorandum that are not historical facts. Further, this Preliminary Placement Memorandum also includes the section entitled "*Projections of Revenue and Operating Cash Flow*" on page 314.

The Valuation Report included in this Preliminary Placement 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 and financial projections 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, cash flow projections, 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 Initial Portfolio Asset of the Trust*", on pages 55, 144, 156 and 181, 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, financial projections and financial information include, but are not limited to, the following:

- The Trust being a new entity and not having an established operating history, which will make it difficult for our future performance to be assessed;

- The acquisition by the Trust of the Project SPV from Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG being subject to certain risks, which may result in damages and losses, and conditions that may prevent the Trust from acquiring the Project SPV or providing debt financing to them;

- Our not being able to recover losses arising from the acquisition of the Project SPV from Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG;

- Most of our 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;

- The Project SPV's financing agreements entailing interest at variable rates, and any increases in interest rates adversely affecting our results of operations, financial condition and cash flows. Further, the Project SPV being 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 Project SPV not having obtained NHAI approval for previous changes in its shareholding, under the terms of the concession agreement;

- Our current proposal to have only one Project SPV which has a concession that has been granted. Therefore, all of our projected revenue will be derived from the Project SPV;

- The lenders of the Project SPV not releasing the security, including pledge of shares of the Project SPV, that has been created pursuant to loan agreements that have been entered into between the Project SPV and its lenders. Further, the lenders of the existing shareholders of the Project SPV not releasing the pledge of shares of the Project SPV created pursuant to loan agreements entered into by them;

- The terms of the Project Implementation and Management Agreement changing subject to comments provided by the concessioning authority; and

- The Valuation Report by BDO Valuation Advisory LLP not being an opinion on the commercial merits and structure of the Issue nor being an opinion, express or implied, as to the future price of Units or the financial condition of Trust, and the valuation of the Project SPV contained in such Valuation Report not being indicative of the true value of the Project SPV.

The forward-looking statements, Projections of Revenue and Operating Cash Flow, Valuation Report, Technical Report and Traffic Report reflect current views as of the date of this Preliminary Placement Memorandum and are not a guarantee of future performance or returns to Bidders. These statements and projections 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 Bidders that such expectations will prove to be correct or accurate.

In accordance with the InvIT Regulations, the assumptions underlying the Projections of Revenue and Operating Cash Flow have been examined by the Auditors. The Projections of Revenue and Operating Cash Flow have been prepared for inclusion in this Preliminary Placement Memorandum for the purposes of this Issue, using a set of assumptions that include hypothetical assumptions about future events and management's actions that are not necessarily expected to occur, and have been approved by the board of directors of the Investment Manager. Consequently, Bidders are cautioned that the Projections of Revenue and Operating Cash Flow may not be appropriate for purposes other than that described above. In any event, these statements speak only as of the date of this Preliminary Placement Memorandum or the respective dates indicated in this Preliminary Placement Memorandum.

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 Preliminary Placement 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, Bidders are cautioned not to place undue reliance on such forward-looking statements and financial projections, and not to regard such statements to be a guarantee or assurance of the Trust's future performance or returns to investors.

THE ISSUE

The following is a general summary of the terms of this Issue. This summary should be read in conjunction with, and is qualified in its entirety by, the detailed information appearing elsewhere in this Preliminary Placement Memorandum:

Issue	Up to 91,000,000 Units aggregating up to ₹ 9,100 million
Issue Price	₹ 100
Minimum Bid Size	₹ 10 million
Bid/Issue Opening Date	June 16, 2022
Bid/Issue Closing Date	June 22, 2022
Sponsor	Maple Highways Pte Ltd
Trustee	Axis Trustee Services Limited
Investment Manager	Maple Infra InvIT Investment Management Private Limited
Project Manager	Maple Highway Project Management Private Limited
Eligible Investors	Institutional Investors and Bodies Corporate
Authority for this Issue	This Issue was authorised, and approved by the board of directors of the Investment Manager on June 7, 2022
Tenure of the Trust	The Trust shall remain in force until it is dissolved or terminated in accordance with the Indenture of Trust. For details, please see the section entitled "*Parties to the Trust*" on page 98
Units issued and outstanding as of the date of this Preliminary Placement Memorandum	As of the date of this Preliminary Placement Memorandum, there are no issued and outstanding Units.
Units issued and outstanding immediately after this Issue	Up to 91,000,000 Units
Sponsor Units as on the date of the Placement Memorandum	Up to [●] Units The Units held by the Sponsor shall rank *pari passu* with, and have the same rights as the Units to be Allotted to other Bidders pursuant to this Issue.
Distribution	Please see the section entitled "*Distribution*" on page 178
Indian Taxation	Please see the section entitled "*Statement of Possible Direct Tax Benefits available to the Trust and its Unitholders under the applicable laws in India"* on page 243
Use of Proceeds	Please see the section entitled "*Use of Proceeds*" on page 172
Closing Date	The date on which Allotment of the Units pursuant to this Issue shall be made, i.e. on or about June 28, 2022
Ranking	The Units being issued shall rank *pari passu* in all respects, including rights in respect of distribution. Please see the section entitled *"Rights of Unitholders"* on page 231
Lock-in and Rights of Unitholders	For details, please see the sections entitled "*Information Concerning the Units*" and "*Rights of Unitholders*" on pages 171 and 231, respectively
Risk Factors	Prior to making an investment decision, Bidders should consider carefully the matters discussed in the section entitled *"Risk Factors*" on page 55

In accordance with the InvIT Regulations, no Unitholder shall enjoy superior voting or any other rights over another Unitholder. Further, there shall not be multiple classes of Units. However, in the future, the Trust may issue subordinate units of the Trust only to the Sponsor and its Associates, in compliance with the InvIT Regulations, where such subordinate units of the Trust shall carry only inferior voting or other rights compared to the Units.

For further details in relation to this Issue, including the method of application, please see the section entitled "*Issue Information*" on page 236.

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 Preliminary Placement 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 Preliminary Placement 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. Investment in Units involves risks. Bidders are advised not to rely solely on this overview, however, should read this Preliminary Placement Memorandum in its entirety and, in particular, the section entitled "Risk Factors" on page 55.

Structure and description of the Trust

The Sponsor set up the Trust on November 6, 2019, pursuant to the Initial Indenture, 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 94.

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 98.

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, 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, towards making investments 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 shall be 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. 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, on reducing costs and growing revenue;

(ii). ***Acquisition growth strategy***: The Trust would also expand its initial 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 140. 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;
- *Geographical diversification:* Trust will seek to acquire, to the extent reasonably possible, projects in multiple geographies so as to reduce its regional concentration risk as well as to take advantage of growth opportunities in different regions;
- *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 the Project SPV, 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, approximately, are as follows:

(₹ in million)

Payable by the Trust	Estimated Expenses
Fee payable to the Valuer*	0.59
Fee payable to the Auditors*	0.59
Fee payable to Trustee	0.89
Fee payable for accounting and investor services	3.00
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	0.26
Fee payable to the Depositories	0.36

Payable by the Trust	Estimated Expenses
Fee payable to the Traffic Consultant*	1.77
Fee payable to the Technical Consultant*	1.18
Contingency/ Out-of Pocket expenses	0.14

*The expenses are estimates of the fee payable in connection with the Trust owning one Project SPV and the same will increase as and when the Trust acquires more assets.

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 Fees 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 for the immediately preceding financial year, as determined in accordance with the InvIT Regulations. The Management Fees may be revised for every financial year by the approval of the Unitholders as specified in the Investment Management Agreement. However, 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) INR 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)' and '[ICRA] A-(Stable)' for the ₹ 10,450 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, respectively.

FORMATION TRANSACTIONS IN RELATION TO THE TRUST

Details of arrangement pertaining to the Trust

The Trust's initial portfolio assets comprises (i) Shree Jagannath Expressways Private Limited ("**SJEPL**"), being the Project SPV and (ii) NCR Eastern Peripheral Expressway Private Limited ("**NCREPE**"), being the Incorporated SPV. The details of the Project SPV and the Incorporated SPV as of the date of this Preliminary Placement Memorandum are provided below:

Shree Jagannath Expressways Private Limited

The Project SPV was incorporated on June 15, 2010 under the Companies Act, 1956 (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 the Project SPV

Name of the Equity Shareholder	Number of Equity Shares	Percentage Holding
Simplex Infra Development Private Limited	50,275,800	34.00%
Galfar Engineering & Contracting (India) Private Limited	29,846,200	20.18%
Bharat Road Network Limited	59,148,000	40.00%
Galfar Engineering & Contracting SAOG	8,600,000	5.82%
Total	**147,870,000**	**100.00%***

*******The pledge on the shares of the Project SPV will be released prior to transfer of the Project SPV to the Trust in accordance with the InvIT Regulations. Such pledge is proposed to be released prior to the Bid/Issue Closing Date and the Allotment of Units in the Issue. Please also refer to the risk factor entitled "The lenders of the Project SPV may not release the security, including pledge of shares of the Project SPV, that has been created pursuant to loan agreements that have been entered into between the Project SPV and its lenders. Further, the lenders of the existing shareholders of the Project SPV may not release the pledge of shares of the Project SPV created pursuant to loan agreements entered into by them" in this regard, on page 59.*

NCR Eastern Peripheral Expressway Private Limited

The Incorporated SPV was incorporated on April 25, 2022 under the Companies Act, 2013 (U45209DL2022PTC397246) as a special purpose vehicle. Its registered office is located at C-2/39, BLK-C-2, Safdarjung Development Area, New Delhi, Delhi 110 016.

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-2 in the National Capital Region on tolling, operation, maintenance and transfer basis, under the NCREPE Concession Agreement.

Capital structure of the Incorporated SPV

Name of the Equity Shareholder	Number of Equity Shares	Percentage Holding
Axis Trustee Services Limited (acting in its capacity as the trustee of Indian Highway Concessions Trust)	490	98.00%
Maple Infra Invit Investment Manager Private Limited (nominee of Indian Highway Concessions Trust)	10	2.00%
Total	**500**	**100.00%**

Acquisition of the Project SPV

Securities Purchase Agreement read along with the Clarification Agreement to the Securities Purchase Agreement

After the Issue Opening Date and prior to the Allotment pursuant to this Issue, the Trust, acting through its Trustee, proposes to acquire 100% of the issued and paid-up equity share capital of the SJEPL (the "**Share Capital**"), pursuant to the Securities Purchase Agreement.

The Trust, acting through the Investment Manager (acting on behalf of the Trustee), has entered into a securities purchase agreement dated January 20, 2021 (the "**Securities Purchase Agreement**" or the "**SJEPL SPA**") with Shree Jagannath Expressways Private Limited ("**SJEPL**"), 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**") to acquire 100% of the issued and fully paid up equity shares of SJEPL ("**SJEPL Sale Shares**"), by itself and through a person nominated by the Trust to hold a nominal number of SJEPL Sale Shares on behalf of the Trust ("**SJEPL Purchaser Nominee**") from SIDPL, Galfar India, Galfar Oman and BRNL; such that as on the completion date, as defined in the SJEPL SPA (the "**Completion Date**") the Trust (and the SJEPL Purchaser Nominee) shall receive full legal and beneficial ownership of the SJEPL Sale Shares, subject to the terms of the SJEPL SPA ("**SJEPL Transaction**"). SIDPL, Galfar India, Galfar Oman and BRNL are collectively referred to as the "**Sellers**".

Consideration:

The final purchase consideration payable by the Trust as consideration for the SJEPL Sale Shares in accordance with the SJEPL SPA, shall be an amount determined, pursuant to adjustments mutually agreed to by the Parties, *inter alia* in accordance with the principles outlined in SJEPL SPA. Such amount includes the additional amounts payable by the Trust to the Sellers in accordance with the earn out agreement dated January 20, 2021 between the Trust, acting through the Investment Manager (acting on behalf of the Trustee), SIDPL, Galfar India, BRNL, Galfar Oman and SJEPL ("**Earn Out Agreement**"). For details in relation to the Earn Out Agreement, please see the section entitled "*Formation Transactions in relation to the Trust*" on page 23.

Representations and Warranties:

The representations and warranties provided by the Trust under the SJEPL SPA pertain to, amongst others:

(i). due incorporation and existence under the laws of India;
(ii). due registration as an infrastructure investment trust and due authorisation for the consummation of the SJEPL Transaction; and
(iii). non-contravention of trust deed, applicable law and material agreements to which the Trust is a party.

Subject to the disclosures in the disclosure letter and the updated disclosure letter, and as provided in accordance with the SJEPL SPA, the representations and warranties provided by the Sellers in respect of SJEPL under the SJEPL SPA, pertain to, amongst others:

(i). due incorporation and existence under the laws of India;
(ii). due authorisation for the consummation of the SJEPL Transaction;
(iii). non-contravention of the charter documents, applicable law and agreements to which such entity is a party, subject to the conditions specified in the SJEPL SPA;
(iv). operation of business and corporate affairs in accordance with its charter documents and the SJEPL Concession Agreement;
(v). the conduct of its business as a going concern in the ordinary course, as per the date specified in the SJEPL SPA; and
(vi). all toll collected from vehicles of Dhaneshwar Rath Institute of Engineering and Medical Sciences being at the concessional rate as prayed for in the relevant litigation and there being no claims against SJEPL for refund of any amounts collected by it as toll from the vehicles of Dhaneshwar Rath Institute of Engineering and Medical Sciences in the relevant litigation ("**DRIEMS Litigation Warranty**").

Further, subject to the disclosures in the disclosure letter and the updated disclosure letter, and as provided in accordance with the SJEPL SPA, the Sellers have severally or jointly, as applicable, represented and warranted, amongst other things, that:

(i). each of them is duly incorporated and validly existing under the laws of their respective jurisdictions;
(ii). the execution, delivery and performance by, and the consummation by, each of them of the transactions contemplated under the SJEPL SPA have been duly authorised and are not in contravention of their charter documents, applicable law and agreements to which such entity is a party, subject to fulfilment of certain conditions precedent as set out in the SJEPL SPA;
(iii). no insolvency event (as defined in the SJEPL SPA) has occurred in respect of any Seller;
(iv). no applicable law or existing judgment, injunction, order or decree of any governmental authority is in effect prohibiting consummation of any of the SJEPL Transaction; and
(v). there are no outstanding claims in connection with the Sale Securities against the Seller or any other Person, and there are no circumstances likely to give rise to any claims.

Further, the parties to the SJEPL SPA have agreed that (i) the fundamental representations and warranties provided by the Seller shall survive i.e. obligations of the Seller including the indemnity provisions, as applicable, till the concession period as per the concession agreement entered between SJEPL and NHAI, and any extension thereto; (ii) the taxation related representations and warranties provided by the Sellers shall survive for a period of eight years from the Completion Date; (iii) the DRIEMS Litigation Warranty provided by the Sellers shall survive till the conclusion of the relevant litigation and for any additional time period required for expiry of the statutory periods for filing appeals for the relevant litigation; and (iv) all other representations and warranties provided by the Sellers and SJEPL shall survive for a period of three years from the Completion Date.

Waiver of Claims:

Apart from the claims specified in the claims management agreement dated January 20, 2021 between the Trust, acting through the Investment Manager (acting on behalf of the Trustee), SIDPL, Galfar India, BRNL, and SJEPL ("**Claims Management Agreement**"), and the Claims Benefit Assignment Agreement, each Seller (and their affiliates) has irrevocably and unconditionally released, waived and discharged, all claims, demands, damages, losses, costs, expenses, actions or causes of action or lawsuits (in law or in equity), of any nature, that they may have against SJEPL in respect of any event or any of SJEPL's obligations or liabilities which occurred on or prior to the Completion Date. For details in relation to the Claims Management Agreement, and the Claims Benefit Assignment Agreement, please see the section entitled "*Formation Transactions in relation to the Trust*" on page 23.

Indemnity:

(i). In accordance with the SJEPL SPA and the Clarification Agreement to the Securities Purchase Agreement, the Sellers and the Reassuring Parties (as defined below, and collectively with the Sellers, the "**Indemnifying Parties**") have severally (and not jointly) agreed to indemnify SJEPL, the Trust (acting through its Trustee), the SJEPL Purchaser Nominee, the Sponsor, the Trustee, the Investment Manager, the Project Manager and their respective directors, officers, authorized representatives and employees (the "**Indemnified Parties**") in respect of any losses incurred by the Indemnified Parties, resulting from:

(a). any misrepresentation or inaccuracy of their taxation related warranties and other warranties (apart from the warranties provided by the Sellers in relation to the title of the SJEPL Sale Shares);
(b). any breach of any such Seller's covenants and/or covenants of SJEPL, prior to the Completion Date.

(ii). The Indemnifying Parties have jointly and severally agreed to indemnify the Indemnified Parties in respect of, amongst others, any losses incurred by them, resulting from:

(a). any misrepresentation or inaccuracy of the warranties provided by the Sellers in relation to the title of the SJEPL Sale Shares;
(b). any fraud and/or wilful concealment by any of the Sellers;
(c). the termination of the concession agreement executed with the NHAI on account of a breach by SJEPL and/or the Sellers, prior to the Completion Date;
(d). any payments to be made by SJEPL to the litigant counterparty under relevant toll related litigations, pursuant to an order of a governmental authority;

(e). SJEPL not receiving NHAI's approval for the Concession Period Extension (as defined in the Securities Purchase Agreement and the Clarification Agreement to the Securities Purchase Agreement), subject to certain limitations of this liability.

(iii). The Indemnifying Parties have severally (and not jointly) agreed to indemnify the Indemnified Parties in respect of any losses incurred by them, resulting from, amongst others:

(a). any claims made by the NHAI in relation to breaches of the concession agreement executed with the NHAI on account of a breach by SJEPL or the Sellers, prior to the Completion Date;
(b). any cash payments for taxes payable by SJEPL: (A) pursuant to any claims or orders of a governmental authority treating the toll collection and interest / capital gains during the construction period, relating to the period prior to the Completion Date, as taxable income of SJEPL in the year of receipt and not allowing the same to be reduced from the capital cost of the project, or (B) pursuant to any claims by governmental authorities on account of SJEPL claiming depreciation in respect of its intangible assets (instead of amortization), relating to the period prior to the Completion Date;
(c). any additional payment by SJEPL for taxes, as a result of any of the specified tax proceedings;
(d). any and all amounts that are to be adjusted pursuant to the Final Completion Value (as defined in the Securities Purchase Agreement) determined in accordance with the terms of the Securities Purchase Agreement; and
(e). any penalties and / or claims made / imposed by NHAI, including, amongst others, (A) those made by the Independent Engineer on behalf of NHAI, and/or (B) the claims made after the Completion Date against SJEPL, in relation to breaches of the Concession Agreement by SJEPL or the Sellers prior to the Completion Date. Further, the indemnity with respect to NHAI claims will be limited to the amounts agreed upon in the Securities Purchase Agreement read along with the Clarification Agreement to the Securities Purchase Agreement.

Further, the Indemnifying Parties have agreed to indemnify the Indemnified Parties provided that:

(i). the indemnification rights shall be the sole and exclusive monetary remedies of the Indemnified Parties against the Indemnifying Parties;

(ii). the claim periods within which the Indemnified Parties may claim such indemnification rights shall be
(a). the relevant warranty claim period for claims arising out of misrepresentation or inaccuracy of the warranties;
(b). seven years for certain specific indemnity matters, as specified in the SJEPL SPA;
(c). until the conclusion of the toll litigations and for any additional time period required for expiry of the statutory periods for filing appeals for the relevant litigation, for the relevant indemnities in relation to such matters;
(d). eight years for certain taxation related matters, as specified in the SJEPL SPA;
(e). until the end of the concession period as set out in the concession agreement executed with the NHAI, including any extension thereof, for certain fraud and wilful concealment related matters;
(f). three years for the indemnification obligation in relation to the breach of covenants under the SJEPL SPA;
(g). till the conclusion of the claims, in respect of the claims made by NHAI; and
(h). till the conclusion of the Concession Extension Claim, including any additional period required for expiry of any statutory periods for filing any appeals, in relation to Concession Extension Claim (as defined in the Claims Management Agreement).

(iii). the Indemnified Parties shall only be entitled to make a claim if the claim is for an amount equal to or exceeding ₹ 500,000 ("**De-Minimis Amount**"). The Indemnifying Parties shall only be liable to make a payment to the Indemnified Parties if the cumulative aggregate amount of all Agreed Claims, equal to or in excess of the De-Minimis Amount, is equalling or exceeding ₹ 25.00 million as a tipping basket;

(iv). the aggregate monetary liability of all the Sellers and/or all the Reassuring Parties, shall in no event exceed 100% of the aggregate of (a) the final purchase consideration under the SJEPL SPA, (b) the purchaser loan provided by the Trust to SJEPL, (c) the amounts paid to and received by the Sellers under the Earn Out Agreement and as specified in the SJEPL SPA; However, in accordance with the Clarification Agreement to the Securities Purchase Agreement, the capped amount shall stand increased for (A) all amounts paid to any of the Sellers and/ or SIL under the Claims Benefit Assignment Agreement including amounts paid pursuant to the concession extension claim (as defined under the Claims Management Agreement) but not

including payments in respect of any other Concessionaire Claims (as defined under the Claims Benefit Assignment Agreement); and (B) the amounts, if any, paid to any of the Sellers or reassuring parties pursuant to waiver of any condition precedent, and

(v). Unless otherwise specified in the SJEPL SPA and subject to applicable law, any crystallized amount (as defined in the respective Claims Management Agreement) can be set off by the purchaser i.e. the Trust acting through the Investment Manager (acting on behalf of the Trustee) and/or SJEPL, as the case may be, against any amounts payable to the Indemnifying Parties under the respective Claims Management Agreement.

Affirming Letters:

Pursuant to the SJEPL SPA, SREI Infrastructure Finance Limited ("**SREI**") and SIL (collectively, the "**Reassuring Parties**") have issued, as applicable, affirming letters to the Trust agreeing and acknowledging that they shall:

(i). indemnify and hold harmless the Indemnified Parties and the indemnified persons (under the Claims Management Agreement), jointly and severally with (i) BRNL, in case of SREI; and (ii) SIL, in case of SIDPL; and

(ii). discharge payment of any agreed claim, in terms of the SJEPL SPA and the Claims Management Agreement, to the Indemnified Parties and the indemnified persons (under the Claims Management Agreement) to the same extent and manner as applicable to (i) BRNL, in case of SREI; and (ii) SIL, in case of SIDPL; under the SJEPL SPA and the Claims Management Agreement (*as the case may be*).

SIL has also issued a letter dated June 7, 2022 to the Trust, acknowledging the Clarification Agreement to the Securities Purchase Agreement, the Clarification Agreement to the Claims Management Agreement and the Claims Benefit Assignment Agreement (the "**Additional Documents**") and agreeing and acknowledging that they shall:

(i). indemnify and hold harmless the Indemnified Parties and the indemnified persons (under the Additional Documents), jointly and severally with SIDPL;

(ii). discharge payment of any agreed claim, in terms of the Additional Documents, to the indemnified persons in the manner agreed upon in the affirming letters, as applicable to SIDPL.

Clarification Agreement to the Securities Purchase Agreement

An agreement to clarify and supplement the understanding in the SJEPL SPA, dated June 7, 2022 has been entered into between the Project SPV, the Sellers and the Trust acting through the Investment Manager (acting on behalf of the Trustee), amongst others, to clarify and record the final purchase consideration for acquisition of the Project SPV. The final purchase consideration is subject to, amongst others: (i) adjustments to the base number as agreed between the parties, (ii) principles of valuation adjustments specified in the SJEPL SPA and (iii) in the event any of the conditions precedent under the SJEPL SPA are not fulfilled to the satisfaction of the purchaser i.e. the Trust acting through the Investment Manager (acting on behalf of the Trustee).

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 will also be 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 the Project SPV 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 the Project SPV, 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 the Project SPV ("**Tripartite Agreement**"). The Project SPV received the in-principle approval of NHAI for the transfer of 100% equity shares of the Project SPV 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 the Project SPV and the Trust. Thereafter, the Project SPV 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, the Project SPV 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 Project SPV. 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. the Project SPV (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 the Project SPV pursuant to the change in ownership of the Project SPV and the relevant O&M requirements will be met as per the SJEPL Concession Agreement, (iii) the Project SPV 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 the Project SPV, the Trust will undertake to cause the Project SPV 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 the Project SPV, 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, the Project SPV 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, the Project SPV 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 the Project SPV 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.

Utilisation of Net Proceeds

Upon the Allotment of the Units, the Trust shall utilize a certain amount of the Net Proceeds to provide loans to the Project SPV ("**Trust Loan**"), through a facility agreement, entered into between the Trust (acting through the Trustee and represented by the Investment Manager), and the Project SPV ("**Shareholder Loan Agreement**").

The key terms of the Shareholder Loan Agreement include:

Loan Amount: In accordance with the Shareholder Loan Agreement, the Project SPV wishes to borrow an amount of ₹ 7,000 million ("**Initial Loan Amount**") from the Trust. At anytime after the date of execution of the Shareholder Loan Agreement but at least 7 days prior to the Completion Date (as defined in the Shareholder Loan Agreement), the parties to the Shareholder Loan Agreement may, by mutual agreement in writing, modify the Initial Loan Amount in the manner agreed between the Trust and the Project SPV.

(i). Subject to the terms of the Shareholder Loan Agreement, the Trust shall lend to the Project SPV, upon receipt of a utilization request from the Project SPV, in the format specified in the Shareholder Loan Agreement and on such dates as may be specified in the utilization request submitted by the Project SPV and as agreed upon by the Trust (each such date, a "**Drawdown Date**"), the relevant loan amount, by depositing it into the account of the Project SPV as specified in such utilization request.

(ii). If the entire loan amount has not been drawn down on the Drawdown Date, the Project SPV 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 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 the Project SPV and the Trust by giving a notice.

Repayment: The Trust may, at its sole discretion, by a notice in writing to the Project SPV, require the Project SPV 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 the Project SPV to repay the Trust Loan, the Project SPV 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 the Project SPV as at that date, as required by and in accordance with the relevant repayment notice (as defined in the Shareholder Loan Agreement), subject to any restricted payment conditions and any other conditions as may be mutually agreed between the Trust and the Project SPV in writing. Notwithstanding anything, all the payments will be made post scheduled payment due and payable towards Senior Debt (as defined in the Shareholder Loan Agreement) as required under the Senior Debt Financing Documents (as defined in the Shareholder Loan Agreement).

Security: The borrowing pursuant to the Shareholder Loan Agreement shall be unsecured. The trust loan amount under such agreement shall be subordinate (in terms of security) to external debt of the Project SPV and shall be subject to the terms specified in the 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 Shareholder Loan Agreement or to fund or perform any of its obligations or enjoy any of its rights pursuant to the 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 the Project SPV 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

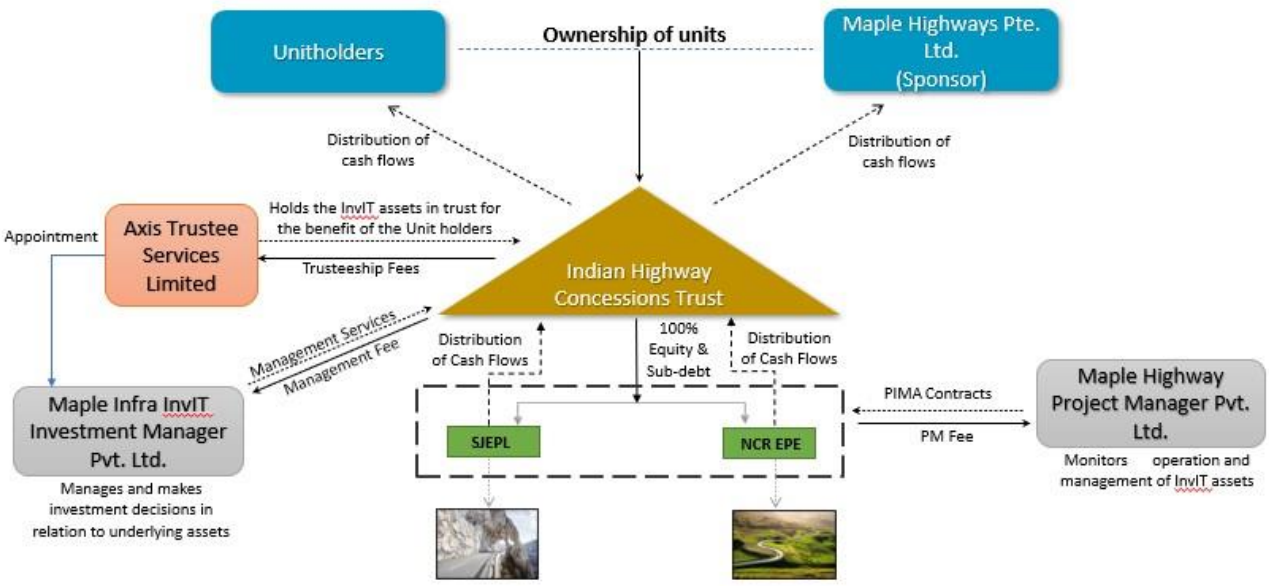
"**Termination Amount**"), and the Project SPV shall pay the Termination Amount, on or before the date specified by the Trust in the notice delivered to the Project SPV (being no earlier than the last day of any applicable grace period permitted by law). If, at any time it is or becomes unlawful for the Project SPV 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, the Project SPV 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 the Project SPV shall pay the Termination Amount, on or before the date specified by the Project SPV in the notice delivered to the Trust (being no earlier than the last day of any applicable grace period permitted by law).

For further details on utilization of Net Proceeds, please see the section entitled "*Use of Proceeds*" on page 172.

Purpose: The Trust Loan shall be utilised by the Project SPV towards repaying (in full or in part): (a) existing indebtedness of the Project SPV which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by the Project SPV; (b) liabilities of the Project SPV, as specified in the relevant utilisation request submitted by the Project SPV; (c) any other purpose as may be agreed mutually in writing between the Trust and the Project SPV, subject to applicable laws and in accordance with the 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 Shareholder Loan Agreement). For details of the outstanding borrowings of the Project SPV, please see the sections entitled "*Use of Proceeds*" and "*Financial Indebtedness*" on pages 172 and 175.

InvIT Structure

The following structure chart illustrates the relationship between the Trust, the Trustee, the Sponsor, the Investment Manager, the Project Manager and the Unitholders as on date of filing of the Preliminary Placement Memorandum:



SUMMARY FINANCIAL INFORMATION OF THE TRUST

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Indian Highway Concessions Trust
Special purpose Combined Balance Sheet
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
ASSETS :					
Non-current assets					
Property, plant & equipment	3	132.76	139.65	161.58	172.49
Intangible assets	4	1,24,597.96	88,364.97	91,624.95	94,729.79
Intangible assets under development	5	400.11	36,596.06	33,357.31	31,160.78
Financial assets	6	41.63	40.83	37.97	38.14
Other non current assets	7	538.91	812.74	654.95	535.65
Total non-current assets		**1,25,711.37**	**1,25,954.25**	**1,25,836.76**	**1,26,636.85**
Current assets					
Financial assets					
(i) Investments	8	3,220.37	3,143.00	4,547.89	1,753.74
(ii) Trade receivables	9	55.61	63.04	6.17	39.22
(iii) Cash & cash equivalents	10	719.37	1,575.49	978.84	628.98
(iv) Other bank balances	11	9,309.32	9,073.83	6,280.94	3,987.15
(v) Others financial assets	12	-	-	1,244.01	1,244.01
Other current assets	13	3,264.43	2,067.35	2,052.13	1,879.68
Total current assets		**16,569.10**	**15,922.71**	**15,109.98**	**9,532.78**
TOTAL ASSETS		**1,42,280.47**	**1,41,876.96**	**1,40,946.74**	**1,36,169.63**
EQUITY AND LIABILITIES:					
Equity					
Owner's equity	14	14,787.00	14,787.00	14,787.00	14,787.00
Other equity	14	(10,581.61)	(8,679.07)	(6,201.53)	(5,420.33)
Total equity		**4,205.39**	**6,107.93**	**8,585.47**	**9,366.67**
Liabilities					
Non-current Liabilities					
Financial liabilities					
(i) Borrowings	15	1,07,396.20	1,10,577.16	1,12,639.76	1,11,400.45
(ii) Other financial liability	16	2,565.33	1,571.56	320.48	-
Provisions	17	1,104.34	874.25	4,626.51	2,928.60
Total non-current liabilities		**1,11,065.87**	**1,13,022.97**	**1,17,586.75**	**1,14,329.05**
Current liabilities					
Financial liabilities					
(i) Borrowings	18	6,411.64	6,391.64	6,326.88	6,167.93
(ii) Trade payables	19	484.03	478.21	233.87	208.97
(iii) Other financial liabilities	20	12,789.28	10,075.05	8,160.15	6,025.00
Other current liabilities	21	23.54	41.82	53.18	69.62
Provisions	22	7,300.72	5,759.34	0.44	2.39
Total current liabilities		**27,009.21**	**22,746.06**	**14,774.52**	**12,473.91**
TOTAL EQUITY AND LIABILITIES		**1,42,280.47**	**1,41,876.96**	**1,40,946.74**	**1,36,169.63**

Indian Highway Concessions Trust
Special purpose Combined Statement of Profit and Loss
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
INCOME					
Revenue from operations	23	15,527.63	21,059.59	19,688.60	20,995.84
Other income	24	348.08	586.89	530.48	292.48
Total Income		**15,875.71**	**21,646.48**	**20,219.08**	**21,288.32**
EXPENSES					
Engineering, procurement and construction cost ("EPC")		1,390.50	1,463.94	378.23	3,044.39
Employee benefits expense	25	473.87	568.61	552.03	578.09
Finance costs	26	10,153.65	14,028.06	14,199.24	12,710.64
Depreciation and amortization expense	27	2,625.84	3,295.02	3,140.76	2,989.88
Provision for major maintenance obligations	51 (b)	1,268.04	1,537.02	1,397.30	1,270.27
Other expenses	28	1,864.49	3,229.42	1,328.03	1,990.46
Total expenses		**17,776.39**	**24,122.07**	**20,995.59**	**22,583.73**
Loss before tax		**(1,900.68)**	**(2,475.59)**	**(776.51)**	**(1,295.41)**
Tax expense	30	-	-	-	-
Loss for the period/year		**(1,900.68)**	**(2,475.59)**	**(776.51)**	**(1,295.41)**
Other comprehensive income	29				
Items that will not be reclassified to profit or loss					
Re-measurement losses on defined benefit obligations		**(1.86)**	**(1.95)**	**(4.69)**	(1.29)
Income tax relating to these items		-	-	-	-
Other comprehensive income for the period/year		**(1.86)**	**(1.95)**	**(4.69)**	**(1.29)**
Total comprehensive income for the period/year		**(1,902.54)**	**(2,477.54)**	**(781.20)**	**(1,296.70)**
Earnings per unit - [Refer note 52 (D)]					

Indian Highway Concessions Trust
Special purpose Combined Cash Flow Statement
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
A. CASH FLOW FROM OPERATING ACTIVITIES :				
Net profit/(loss) before tax	**(1,900.68)**	**(2,475.59)**	**(776.51)**	**(1,295.41)**
Adjustments for:				
Depreciation and amortisation expense	2,625.84	3,295.02	3,140.76	2,989.88
Net gain on sale of investment in mutual funds	(77.37)	(117.17)	(198.17)	(155.59)
Gain on disposal of property, plant and equipment	-	-	(0.63)	-
Provision for major maintenance obligations	1,268.04	1,537.02	1,397.30	1,270.27
Finance cost	10,153.65	14,028.06	14,199.24	12,710.64
Operating profit before working capital changes	**12,069.48**	**16,267.34**	**17,761.99**	**15,519.79**
Adjustments for changes in working capital				
Increase/(Decrease) in trade payables	5.82	244.34	24.90	0.94
Increase/(Decrease) in other financial liabilities	(222.30)	136.25	225.34	273.72
Increase/(Decrease) in other current liabilities	(18.28)	(11.36)	(16.44)	(11.76)
Increase/(Decrease) in short-term provisions	1,046.53	5,298.81	(293.19)	(149.35)
(Increase)/Decrease in trade receivables	7.43	(56.87)	33.05	(24.81)
(Increase)/Decrease in other current assets	(1,197.08)	1,228.79	(172.45)	(370.91)
(Increase)/Decrease in financial assets	(0.80)	(2.86)	0.17	(3.78)
Increase/(Decrease) in long-term provisions	(1,039.81)	(5,291.23)	295.92	153.28
Cash generated from operations	**10,650.99**	**17,813.21**	**17,859.29**	**15,387.12**
Income tax paid	273.83	(157.79)	(119.30)	(263.53)
Net cash flow from operating activities	**10,924.82**	**17,655.42**	**17,739.99**	**15,123.59**
B. CASH FLOW FROM INVESTING ACTIVITIES :				
Acquisition of property, plant and equipment	(16.33)	(13.11)	(29.11)	(68.20)
Proceeds from disposal of property, plant and equipment	-	-	4.73	-
Proceeds from redemption of mutual fund investment	-	1,522.07	1,604.06	6,817.03
Investment in mutual fund	-	-	(4,200.05)	(5,516.95)
Investment in fixed deposits	(235.49)	(2,792.89)	(2,293.78)	(3,987.15)
Acquisition of intangible assets under development	(2,639.66)	(3,238.75)	(2,196.53)	(4,283.05)
Net cash flow used in investing activities	**(2,891.48)**	**(4,522.68)**	**(7,110.68)**	**(7,038.32)**
C. CASH FLOW FROM FINANCING ACTIVITIES :				
Repayment of short-term borrowings	-	-	-	-
Grant (Equity Support from National High Authority of India)		-	-	-
Proceeds from long-term borrowings	-	-	1,310.45	7,580.99
Repayment of long-term borrowings	(1,602.55)	(2,091.06)	(765.47)	(6,723.81)
Interest paid	(7,286.91)	(10,445.03)	(10,824.43)	(10,373.00)
Net cash flow used in financing activities	**(8,889.46)**	**(12,536.09)**	**(10,279.45)**	**(9,515.82)**
Net (decrease)/increase in Cash & Cash Equivalents	**(856.12)**	**596.65**	**349.86**	**(1,430.55)**
Cash and cash equivalents at the beginning of the period/year	1,575.49	978.84	628.98	2,059.53
Cash and cash equivalents at the end of the period/year (refer note 10)	**719.37**	**1,575.49**	**978.84**	**628.98**

SUMMARY FINANCIAL INFORMATION OF THE SPONSOR

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Balance sheet as on December 31, 2021

(in Singapore dollars)

Particulars	As at 31st December 2021	As at 31st December 2020	As at 31st December 2019
I. Assets			
1) Non-Current Assets			
Investments at fair value	71,88,931.00	83,86,252.00	88,99,258.00
Total	71,88,931.00	83,86,252.00	88,99,258.00
2) Current Assets			
Cash	1,42,82,646.00	1,14,12,117.00	1,13,14,763.00
Accounts Receivable	9,757.00	37,590.00	335.00
Total	1,42,92,403.00	1,14,49,707.00	1,13,15,098.00
Total Assets	**2,14,81,334.00**	**1,98,35,959.00**	**2,02,14,356.00**
II. Equity and Liabilities			
EQUITY			
Share Capital	2,97,11,127.00	2,46,92,352.00	2,16,57,451.00
Other Equity	-99,44,808.00	-56,00,604.00	-14,85,635.00
Total	**1,97,66,319.00**	**1,90,91,748.00**	**2,01,71,816.00**
LIABILITIES			
1) Non Current Liabilities			
Advance from Parent Company	13,13,582.00	6,47,359.00	0.00
Total	13,13,582.00	6,47,359.00	0.00
2) Current Liabilities			
Trade and other payables	4,01,433.00	96,852.00	42,540.00
	4,01,433.00	96,852.00	42,540.00
Total Equity and Liabilities	**2,14,81,334.00**	**1,98,35,959.00**	**2,02,14,356.00**

Statement of Profit and Loss for the year ended December 31, 2021

(in Singapore dollars)

Particulars	31st December 2021	31st December 2020	31st December 2019
REVENUE			
Revenue from operations	0.00	0.00	0.00
Other Income	565.00	34,065.00	8,261.00
Total Income	**565.00**	**34,065.00**	**8,261.00**
EXPENSES			
Transaction cost and others	24,75,179.00	30,10,738.00	10,86,380.00
Consulting Services	7,84,856.00	4,20,063.00	0.00
Professional Services	1,10,015.00	47,613.00	30,014.00
Net unrealised loss on investments at fair value	11,97,321.00	5,13,006.00	1,14,158.00
Net Foreign Exchange loss/(gain)	-2,22,602.00	1,57,614.00	2,63,344.00
Total Expense	**43,44,769.00**	**41,49,034.00**	**14,93,896.00**
Profit/ (loss) before tax	-43,44,204.00	-41,14,969.00	-14,85,635.00
Tax expenses (incl. deferred tax)	0.00	0.00	0.00
Current tax	0.00	0.00	0.00
Other Comprehensive income	0.00	0.00	0.00
Total Comprehensive income for the year/period	**-43,44,204.00**	**-41,14,969.00**	**-14,85,635.00**

Statement of Cash flows for the year ended December 31, 2021

(in Singapore dollars)

Particulars	31st December 2021	31st December 2020	31st December 2019
A. CASH FLOW FROM OPERATING ACTIVITIES			
Loss before taxation	-43,44,204.00	-41,14,969.00	-14,85,635.00
Adjustments for:			
Net unrealised loss on investments at fair value	11,97,321.00	5,13,006.00	1,14,158.00
Interest income on bank accounts	-565.00	-34,065.00	-8,261.00
Operating cash flows before changes in working capital	**-31,47,448.00**	**-36,36,028.00**	**-13,79,738.00**
Changes in working capital			
Increase in accounts receivable	27,833.00	-37,255.00	-335.00
Increase in trade and other payables	3,04,581.00	54,312.00	42,540.00
Cash flows used in operations	-28,15,034.00	-36,18,971.00	-13,37,533.00
Interest income received on bank accounts	565.00	34,065.00	8,261.00
Net cash flows used in the operating activities	**-28,14,469.00**	**-35,84,906.00**	**-13,29,272.00**
B. CASH FLOW FROM INVESTING ACTIVITIES			
Payment for purchase of investments	0.00	0.00	-90,13,416.00
Net cash flows used in investing activity	**0.00**	**0.00**	**-90,13,416.00**
C. CASH FLOW FROM FINANCING ACTIVITIES			
Increase in advance from Parent Company	6,66,223.00	6,47,359.00	
Proceeds from capital contribution	50,18,775.00	30,34,901.00	2,16,57,451.00
Net cash flows received from financing activities	**56,84,998.00**	**36,82,260.00**	**2,16,57,451.00**
Net increase in cash	**28,70,529.00**	**97,354.00**	**1,13,14,763.00**
Cash, beginning of year	1,14,12,117.00	1,13,14,763.00	0.00
Cash, end of year	**1,42,82,646.00**	**1,14,12,117.00**	**1,13,14,763.00**

SUMMARY FINANCIAL INFORMATION OF THE INVESTMENT MANAGER

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Statement of Profit and Loss

(Rs. in millions)

Particulars	Year ended March 31, 2021	Year ended March 31, 2020	Year ended March 31, 2019
Income			
Other income	4.26	158.27	7.25
Total income	**4.26**	**158.27**	7.25
Expenses			
Employee Benefits Expenses	15.82	1.22	-
Depreciation and Amortisation Expenses	0.05	-	-
Other expenses	6.11	1.81	1.25
Total expenses	**21.98**	**3.03**	**1.25**
Profit before exceptional items and tax	(17.72)	155.24	6.00
Exceptional Items	-	-	-
Profit before tax	**(17.72)**	**155.24**	**6.00**
Tax expense			
Current tax			
- for the year	-	-	-
- for prior years	-	(0.12)	45.76
Deferred tax expense	-	-	46.98
Total tax expense	**-**	**(0.12)**	**92.74**
Profit/(Loss) for the year	**(17.72)**	**155.37**	**(86.74)**
Other comprehensive income for the year, net of tax	**-**	**-**	-
Total comprehensive income for the year	**(17.72)**	**155.37**	(86.74)
Earnings per equity share (Nominal value per share Rs 10/- each) (previous year Rs. 10 each)			
Basic earnings per share (Rs.)	(0.12)	1.04	(0.58)
Diluted earnings per share (Rs.)	**(0.12)**	**1.04**	(0.58)

Balance sheet

(Rs. in millions)

Particulars	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
ASSETS			
Non-current assets			
Property, plant and equipment	0.30	-	-
Other Intangible Assets	0.08	-	-
Income Tax Assets	0.87	0.55	1.85
Financial assets	-		
Investments	-	-	200.00
Other non-current assets	1.08	0.02	-
Total non-current assets	**2.33**	**0.57**	**201.85**
Current assets			
Financial assets			
i. Cash and cash equivalents	429.86	472.03	0.44
ii.Bank Balances other than (i) above		-	111.80
iii. Loans	1.50	-	-
iii. Other financial assets	19.62	-	1.61
Other Current Assets	0.01	-	
	-	-	-
Total current assets	**450.99**	**472.03**	**113.86**
Total assets	**453.32**	**472.60**	**315.71**
EQUITY AND LIABILITIES			
Equity			
Equity share capital	1,494.23	1,494.23	1,494.23
Other equity	(1,041.13)	(1,023.41)	(1,178.77)
Total equity	**453.10**	**470.82**	**315.46**
LIABILITIES			
Current liabilities			
Financial Liabilities			
Trade payables			
- Due to Micro, Small and Medium Enterprises		-	-
- Due to other than Micro, Small and Medium Enterprises	0.22	0.90	0.23
Other Financial Liabilities		0.61	-
Other current liabilities		0.27	0.02
Total current liabilities	**0.22**	**1.78**	**0.25**
Total Liabilities	**453.32**	**472.60**	**315.71**

Statement of Cash Flows

(Rs. in millions)

	Particulars	Year ended March 31, 2021	Year ended March 31, 2020	Year ended March 31, 2019
A	**Cash flow from operating activities :**			
	Profit before tax	(17.72)	155.24	6.00
	Adjustments for:			
	Depreciation / Amortization	0.05	-	-
	Interest income	(4.25)	(5.49)	(7.25)
	Liabilities no longer required written back	(0.01)	-	-
	Profit on sale of equity shares	-	(152.62)	-
	Operating loss before working capital changes	(21.93)	(2.86)	(1.25)
	Change in operating assets and liabilities	**(23.74)**	**1.51**	**0.60**
	(Decrease)/Increase in trade payables	(0.67)	0.68	0.10
	(Decrease)/Increase in other financial liabilities	(0.61)	0.61	-
	(Decrease)/Increase in other current liabilities	(0.27)	0.24	0.02
	Increase in loans	(1.50)	-	-
	(Increase) / Decrease in other current financial assets	(19.62)	(0.02)	0.07
	Increase in other current assets	(0.01)	-	-
	(Increase) / Decrease in other non-current assets	(1.06)	-	0.41
	Cash used in operations	(45.67)	(1.36)	(0.65)
	Income tax paid	(0.32)	1.43	(0.75)
	Net cash used in operating activities	**(45.99)**	**0.07**	**(1.40)**
B	**Cash flows from investing activities**			
	Purchase of Fixed Assets (including Capital Work in Progress)	(0.34)	-	-
	Purchase of Intangible Assets	(0.09)	-	-
	Interest received	4.25	7.10	5.95
	Proceeds / (Investments) in Bank Deposits	-	111.80	(111.80)
	Profit on sale of equity shares	-	152.62	-
	Sale of Investments	-	200.00	-
	Net Cash generated / (used in) from investing activities	**3.82**	**471.52**	**(105.85)**
	Net Increase / (Decrease) in Cash & cash equivalents	**(42.17)**	**471.59**	**(107.24)**
	Cash and cash equivalents as at the beginning of the financial year	472.03	0.44	107.68
	Cash and Cash equivalents as at the end of the year	**429.86**	**472.03**	**0.44**
	Reconciliation of cash & cash equivalent as per the statement of cash flows:			
	Cash and Cash Equivalents as per above comprise the following:			
	Bank balances			
	In current accounts	429.86	472.03	0.44
	Fixed deposits (less than 3 months maturity)		-	-
	Total cash and cash equivalent (Refer note 7)	**429.86**	**472.03**	**0.44**

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 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 Issue and the Units.

References to "we", "us" and "our" are to the Trust and its subsidiary, the Project SPV, 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 GDP between fiscals 2005 and 2012. Based on this, India's GDP increased at an eight-year CAGR of 6.6% to Rs 146 trillion in fiscal 2020 from Rs 87 trillion in fiscal 2012.

Fiscal 2021 has been a challenging year for the Indian economy, which was already experiencing a slowdown beforethe pandemic struck. GDP contracted 8% (in real terms) last fiscal, after growing 4.0% in fiscal 2020. At Rs 134 billion in fiscal 2021, India's GDP (in absolute terms) went even below the fiscal 2019 level of Rs 140.0 billion

After contracting in the first half because of the Covid-19 pandemic, 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 as a wholein fiscal 2021, agriculture and allied activities, and electricity, gas, water supply and other utility services were the outliers, logging positive growth. On the other hand, contact-intensive trade, hotels and transport sectors, and services related to broadcasting were hit the most and continued to shrink 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

India's per capita income, a broad indicator of living standards, rose from Rs 63,462 in fiscal 2012 to Rs 94,556 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 fairly stable at ~1% CAGR. However per capita income declined in fiscal 2021 owing to economic impact of Covid-19, per capita income declined by 9.1% on-year in fiscal 2021.

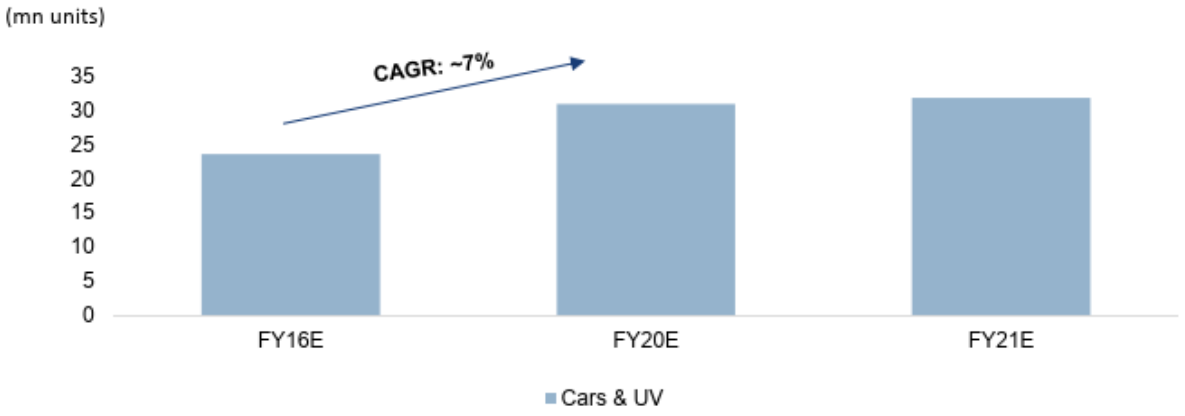
	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20RE	FY21AE
Per capita net nationalincome (Rs) (constant prices)	63,462	65,538	68,572	72,805	77,659	82,931	87,828	92,241	94,566	86,659
On-year growth (%)	2.1	3.3	4.6	6.2	6.7	6.8	5.9	5.0	2.5	-8.4

RE: Revised estimates; PE: Provisional estimates
Source: Second Advance Estimates of Annual National Income, 2020-21, CSO, MoSPI, CRISIL Research

Growth in vehicle population in the country

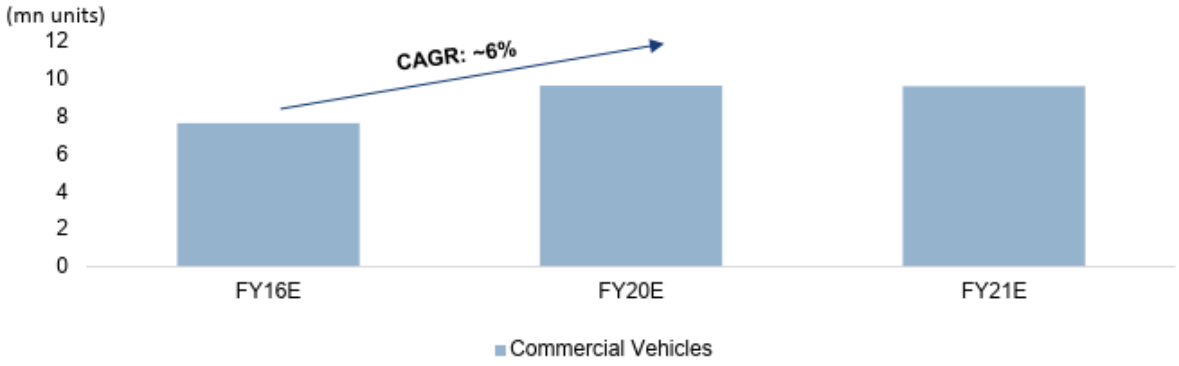
Population of cars and utility vehicles increased at 7.0% CAGR and commercial vehicles (CVs) at ~6% CAGR from fiscals 2016-20

Growth in passenger vehicles population (fiscal 2016-20)



E: Estimated
Source: CRISIL Research

Growth in freight vehicles population (fiscal 2016-20)



E: Estimated
Source: CRISIL Research

Road network in India

India has the second-largest road network in the world, spanning 6.2 million km. Road transportation, the most frequently used mode of transportation in India, accounts for about 86% of passenger traffic and close to 67% of freight traffic. Although Indian national highways span nearly 136,440 km, constituting just 2% of road length, they accounted for about 40% of total road traffic in fiscal 2021. The secondary system of roads comprise state roads and major district roads, which accounted for the remaining 60% of traffic and 98% of road length.

Road network in India in fiscal 2021

Road network	Length ('000km)	Percentage of total - length	Percentage of total - traffic	Connectivity to
National highways	136.4	~2%	40%	Union capital, state capitals, major ports, foreign highways
State highways	176.8	~3%	60%	Major centres within the states, national highways
Other roads	5902.5	95%		Major and other district roads, ruralroads - production centres, markets ,highways, railway stations

Source: MoRTH Annual Report 2020-21, CRISIL Research

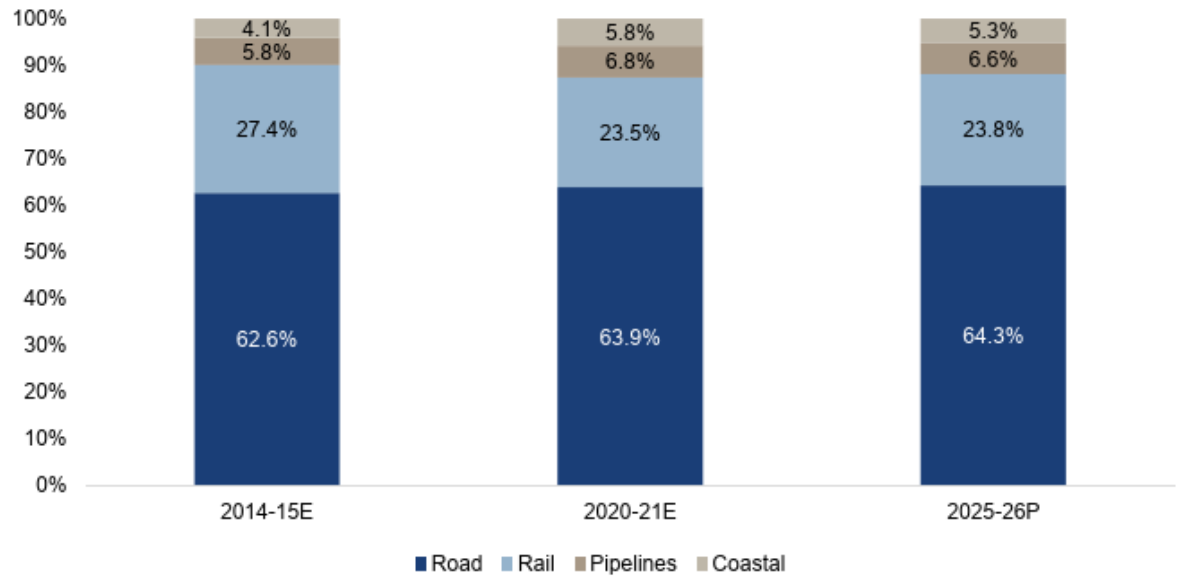
Break-down of road length across different regions (in KMs)

KM	FY15	FY16	FY17	FY18	FY19	FY20	FY21
National highways	97,991	101,011	114,158	126,350	132,500	132,995	136,440
State highways	167,109	176,166	175,036	186,908	186,528	194,900	176,818
Other roads	5,207,044	5,326,116	5,608,477	5,902,539	6,067,269	6,165,660	5,902,539
Total	54,72,144	56,03,293	58,97,671	62,15,797	63,86,297	64,93,555	6,215,797

Source: MoRTH Annual Report 2020-21, CRISIL Research

Roads currently is estimated to have a share of ~64% in overall freight movement as compared to the ~42% of rail mode of transport. CRISIL Research expects growth in road freight traffic to increase at a compounded annual growth rate (CAGR) of 6-8% in BTKM terms between fiscals 2021 and 2026, on a low base.

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



E: Estimated; P: Projected
Source: CRISIL Research

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 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 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 buildsroad, undertakes O&M and collects toll	Concessionaire	Concessionaire	Concessionaire	No	Toll	Around 20-25 years for the NHAI**	Highest revenuesharing bid / highest premium
BOT-annuity	Private party buildsroad, 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	Lowest annuity
BOT-HAM	Private party builds road, undertakes O&M. Gets 40% of payment during construction and 60% as annuity	Concessionaire	Concessionaire	Authority	40% during construction and 60% as semi-annual annuity, net of toll collected	Construction grant plus annuity payments	Around 15 years of operations	Lowest project cost plus O&M cost
EPC	Private party builds road, money is spent by the government	Concessionaire	Authority	Authority	Yes	Contract amount	Not required	Lowest tariff requested
OMT	Private party collects toll and undertakes O&M	No development except in case of paved shoulders	Concessionaire	Concessionaire	No	Toll	Around nine years for NHAI projects	Highest % of toll revenues 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 oneyear for NHAI projects	Highest revenue-sharing bid

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
TOT	Private party pays the estimated toll upfront to the authority, undertakes O&M and collects the toll during concession period	Authority (in case upgradation of lanes is taken up during the concession period)	Concessionaire	Concessionaire	Yes	Toll	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*
Source: CRISIL Research, NHAI

Key transactions in road sector

Recent private equity transactions

Date	Target	Investor	Transaction	Target Company details
Feb-21	Sadbhav Infrastructure Projects Ltd	Allianz Global Investors and joined by AMP Capital	To raise Rs 7 billion (USD 96 million) through NCD.	Developer and operator of highways, road and related projects. Capital raising part of a larger funding exercise to help the company repay debt and fund ongoing hybrid-annuity road assets.
Jan-21	Debt-ridden Chennai Elevated Tollway Ltd	JC Flowers Asset Reconstruction Company (JCFARC)	Acquire more than half of the debt of a stressed road developer at a discount of over 80%	The debt has been picked up from State Bank of India (SBI), Central Bank of India, Bank of Baroda and Bank of Maharashtra.
Dec-20	Chenani Nashri Tunnelway Ltd Asset - road tunnel from Infrastructure Leasing & Financial Services Ltd	Cube Highways	Rs 39.0 billion (USD 528 million)	
Oct-20	Road assets	NIIF		In October 2020, the National Investment and Infrastructure Fund (NIIF) made progress towards integrating its road and highway portfolio. The NIIF 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, assisted by a team of established professionals with diverse domain expertise in the transport field.
Sept-20	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 and Infrastructure Pte. Ltd has finally completed a transaction to acquire a road project from a unit of Hindustan Construction Company Ltd, two years after first signing the deal.

Source: CRISIL Research

Recent key asset sales

Seller	Asset	Type	Project status	Date of Agreement	% stake sold	Buyer	Selling Price (Rs. Mn)
Navayuga Road Projects Private Limited	Navayuga Dhola Infra Projects Limited & Navayuga Dibang Infra Projects Private Limited	BOT	NA	June, 2020	NA	Sekura Roads	11,121 ($ 150 million)
IL&FS Transportation Network Limited	Jorbat Shillong Expressway Limited (JSEL)	BOT	NA	Dec, 2020	100%	Sekura Roads	NA
Bharat Road Network Ltd (BRNL)	Shree Jagannath Expressway	BOT	NA	Jan, 2021	100%	Caisse de dépôt et placement du Québec (CDPQ)	18,000 - 20,000
Lanco Infrastructure	Neelamangala-Devihalli highway	NA	NA	Jan,2021	100%	Cube Highways	NA
Reliance Infrastructure Limited	DA Toll Road Private Limited	NA	NA	Jan, 2021	100%	Cube Highways	36,000
KNR Construction	KNR Shakarampet Projects	HAM	Under Construction	Aug, 2019	51%	Cube Highways	959
KNR Construction	KNR Tirumanla Infra	HAM	Under Construction	Feb, 2019	51%	Cube Highways	1,521
KNR Construction	KNR Srirangam Infra	HAM	Under Construction	Jan, 2019	51%	Cube Highways	736
HCC	Farakka- Raiganj Highways Ltd & Baharampore Farakka Highways	BOT	Completed	Oct, 2019	100%	Cube Highways	3,720
Ramky Infrastructure	Narketpalli Addanki Medarametala	BOT	Completed	Aug, 2018	100%	Cube Highways	33,000
Dilip Buildcon	24 assets	18 BOT & 6 HAM	14 operational and 4 under construction BOT + 6 HAM under construction projects	Aug, 2017	NA	Shrem Group	16,000

Note:
1 USD = 74.14 INR
The selling price represents enterprise value which includes debt
Source: CRISIL Research

SUMMARY OF BUSINESS

The following information should be read together with the more detailed financial and other information included in this Preliminary Placement 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 Initial Portfolio Asset of the Trust" and "Special Purpose Combined Financial Statements " on pages 156, 144, 55, 181 and 258 respectively and the Technical Report and Traffic Report included as "Annexure B" and "Annexure C", 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, 2021, CDPQ held approximately CAD 419.80 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 around 20 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 45.30 billion (as of December 31, 2021) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has investments in over 16 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.

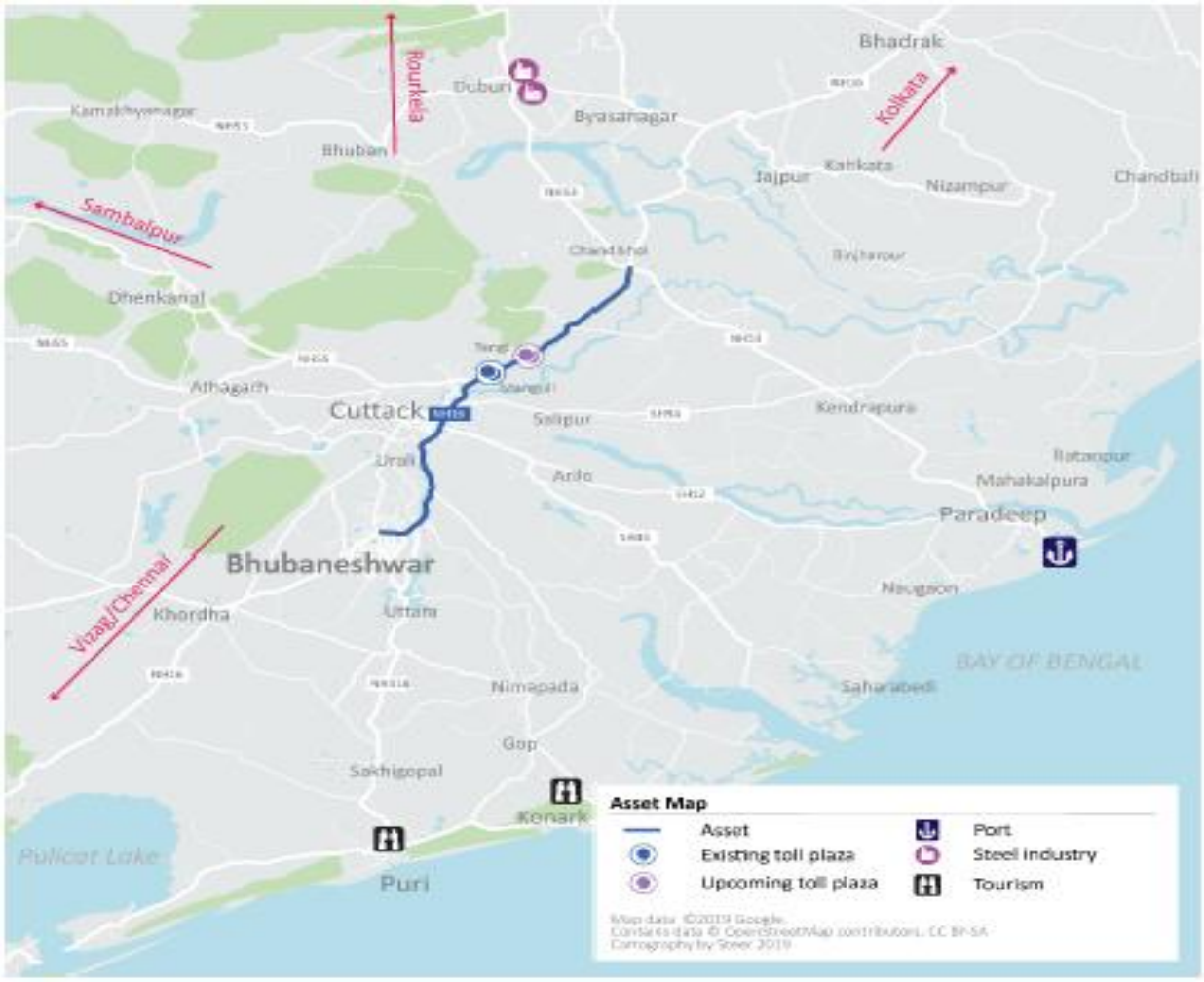
CDPQ has extensive global experience of investing in the transportation sector in developed markets and targeted developing markets, including the REM - public transit project in Montréal, Canada, the Conmex toll road in Mexico, Multisectoral (including toll roads) Infrastructure Platform with CKD IM in Mexico and a multisectoral (including toll roads) Infrastructure Platform in Colombia.

India is one of the key growth markets of focus for CDPQ. CDPQ, as of December 31, 2021 now has an exposure of approximately CAD 7.50 billion across different asset classes, including infrastructure, fixed income, private equity, public equity and real estate. CDPQ typically works in partnership with local firms to create institutional platforms for the long term. Furthermore, CDPQ has made certain other strategic investments in sovereign or quasi-sovereign bonds, investments in entities focusing on the transportation, logistics and financial services sectors.

The Project SPV 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.

The operating revenue of the Project SPV as at December 31, 2021 and for the Fiscals 2021, 2020 and 2019 was ₹ 15,653.62 lakhs, ₹ 21,064.35 lakhs, ₹ 19,844.50 lakhs, and ₹ 20,449.26 lakhs, respectively. Further, the operating revenue for the Fiscal 2022 was ₹ 2,0153.51 lakhs.

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



**Map not drawn to scale*

The Investment Manager will also have the flexibility to acquire new projects through acquisitions from third parties.

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 prior to acquisition by the Sponsor, 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 initially incorporated on January 28, 2010 and is 100% owned by the Sponsor and CDPQ Infrastructures Asia 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 98.

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 Project*

   The Project is located in a corridor that has a mix of high commercial and passenger vehicular traffic, located in a part of India with high gross state domestic product growth. The principal features of the Project are as follows:

The Project (also referred to as the "**Asset**") forms a part of the National Highway 16 which is called as the 'Golden Quadrilateral'. The Project is a key connector of Chennai to Kolkata corridor. The Asset is a National Highway in the eastern state of Odisha along NH16. Being part of the Golden Quadrilateral, the Asset becomes a key connector of Chennai-Kolkata corridor. At the same time, the east-west highway of NH55 connects to the Asset just south of the toll plaza. Therefore, the traffic moving between Mumbai and Kolkata is also captured on the Asset. The Asset 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, about 90 kms south of the Asset, 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 comes from the state of Odisha, where SJEPL asset is located. Duburi/Kalinganagar region, about 70km north of the Asset, is rich in iron ore deposits and has several steel industries, like Tata steel, VISA steel and Jindal stainless limited. This Asset is surrounded by industrial clusters around Talcher, Jajpur and Duburi/Kalinganagar. Its connections with Paradip port, one of the largest bulk ports of India, also make it an asset of strategic importance. Paradip port is one of the major ports of India, and the only major port in the state of Odisha. The port is about 100km away from the Asset and significant port-related movement is observed on the Asset *(Source: Traffic Report)*. For further details, please see the "*Traffic Report*" in Annexure C.

The Investment Manager believes that the Project caters to growth sectors and population densities that will utilise this Project 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

The Project SPV started collecting tolls in December 2011. From Fiscal 2019 to Fiscal 2020, toll collections by the Project SPV on the Project increased by 12.10 %, from ₹ 1,561.70 million to ₹ 1,750.68 million and 1.79 % from ₹ 1,750.68 million in Fiscal 2020 to ₹ 1,782.08 million in Fiscal 2021. Further, the Project SPV collected ₹ 1,292.91 million toll for the period ended December 31, 2021. One of the reasons for the increase in toll collections was increase in traffic volumes on the Project stretch over the relevant period. According to the Traffic Report, 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 initial portfolio assets of the Trust*" on page 181 and the *"Traffic Report"* in 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 around 20 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 45.30 billion (as of December 31, 2021) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has investments in over 16 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 initially incorporated on January 28, 2010 and is 100% owned by the Sponsor and CDPQ Infrastructures Asia Pte. Ltd.

For more details, please see the section entitled "*Parties to the Trust*" on page 98.

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 has 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 144.

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

The Trust will be managed by qualified personnel of the Investment Manager who have management and operational experience in the roads, infrastructure and highways sector with combined experience of over 100 years. 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 111. We believe that the experience and leadership of these teams will contribute to our growth and success and will position the Project SPV 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 diversify 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 SPV pursuant to the provisions of the Project Implementation and Management Agreement. For further details in respect of the Project Implementation and Management Agreement , please see the section entitled "*– Parties to the Trust – Key terms of the Project Implementation and Management Agreement*" on page 126.

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 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 acquisition strategy of the Trust.

The Trust (acting through the Investment Manager) has also submitted bids in the past, and may continue to do so for acquisition of assets. The Trust (acting through the Investment Manager (acting on behalf of the Trustee)) has also entered into (i) a share purchase agreement dated September 20, 2021, (ii) an earn out agreement dated September 20, 2021 and (iii) a claims management agreement dated September 20, 2021, with Durg Shivnath Expressways Private Limited ("**DSEPL**") and TRIL Roads Private Limited ("**TRIL**") for purposes of acquisition of 100% of the equity shares of DSEPL held by TRIL and its nominees subject to, amongst other things, the completion of the conditions precedent as set out in the agreements. DSEPL has undertaken the development, construction, maintenance, operation and tolling of Durg Bypass joining from Km 308.6 to Km 326.6 (approximately 18 km) of National Highway No. 6, in the state of Chhattisgarh under a build, operate and transfer toll basis in accordance with the (a) concession agreement dated November 5, 1997 entered into between the President of India (acting through the Ministry of Road, Transport and Highways (erstwhile Ministry of Surface Transport)), NHAI and SMS Limited (previously known as Shantikumar M. Sancheti Limited), and assigned in favour of DSEPL pursuant to an assignment agreement dated April 7, 1998 executed between SMS Limited, DSEPL and NHAI, (b) the project site license agreement dated March 25, 1998 between NHAI and SMS Limited, and (c) the supplementary agreement dated February 25, 2019 entered into between the DSEPL and NHAI.

RISK FACTORS

An investment in the Units involves a high degree of risk. Investors should carefully consider all the information in this Preliminary Placement Memorandum, including the risks and uncertainties described below, before making an investment in the Units. If any of the following risks actually occurs, the business, results of operations and financial condition of the Trust could suffer, the price of the Units could decline and investors may lose all or part of their investment. 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 and financial condition 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 may lose all or part of their investment. 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, prospective investors must rely on their own examination of the Trust and the terms of the Issue, 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 Initial Portfolio Asset of the Trust" on pages 156 and 181, respectively as well as the financial statements and other financial information included elsewhere in this Preliminary Placement Memorandum.

This Preliminary Placement 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 17.

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.

In making an investment decision, prospective investors must rely upon their own examinations and the terms of the Issue, including the merits and the risks involved. The prospective investors should consult their tax, financial and legal advisors about the particular consequences of investing in the Issue.

RISKS RELATING TO THE TRUST'S BUSINESS AND INDUSTRY

1. The Trust is a new entity and does not have an established operating history, which will make it difficult for our future performance to be assessed.

The Trust was established on December 23, 2019 and proposes to acquire 100% of the issued and paid-up equity share capital of the Project SPV (the "**Share Capital**"), pursuant to the Securities Purchase Agreement, immediately prior to the Closing Date. For further details, please see the section entitled "*Formation Transactions in Relation to the Trust*" on page 23. Accordingly, the Trust, as an infrastructure investment trust, does not have an 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 that the Project SPV will be able to generate sufficient cash flows from the operations of the InvIT Assets to make distributions to our Unitholders or that such distributions will be in line with those set out in the section entitled "*Projections of Revenue and Operating Cash Flow*" on page 314.

The Special Purpose Combined Financial Statements, consisting of historical financial data of the Project SPV and the Trust, as applicable, have been included elsewhere in this Preliminary Placement 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 included elsewhere in this Preliminary Placement Memorandum.

2. The acquisition by the Trust of the Project SPV from Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG may be subject to certain risks, which may result in damages and losses, and conditions that may prevent the Trust from acquiring the Project SPV or providing debt financing to them.

After the Issue Opening Date and prior to the Allotment pursuant to this Issue, the Trust, acting through its Trustee, proposes to acquire 100% of the issued and paid-up equity share capital of the SJEPL (the "**Share Capital**"), pursuant to the Securities Purchase Agreement and subject to the fulfillment of the conditions set out in the Securities Purchase Agreement. As on the date of this Preliminary Placement Memorandum, the Trust has not acquired the Project SPV.

While the Investment Manager believes that reasonable due diligence has been carried out on the Project SPV prior to its acquisition by the Trust, there can be no assurance that the project will not have defects or deficiencies that are unknown or unquantified and that may require additional capital expenditure or obligations to third parties, including to the relevant concessioning and statutory authorities, which may have an adverse effect on the Trust's earnings and cash flows and the distributions to the Unitholders. Further, there may be delay in completion of statutory formalities in acquiring certain equity shares of the Project SPV, as statutory filings in respect of some of the equity shares will require completion of foreign exchange management regulations related compliance in relation to Galfar Engineering & Contracting SAOG's shareholding in the Project SPV. Further, certain foreign exchange management regulations related filings related to Galfar Oman's acquisition of certain shares of Project SPV from Galfar India have not been complied with by Galfar India as of date. Accordingly, in relation to acquisition by the Trust of such shares held by Galfar Oman, the Trust will not be able to make its filings under the foreign exchange management regulations, unless the filing required to be made by Galfar India has been approved by the Reserve Bank of India. Additionally, as the Project SPV was not originally owned by the Trust, we have relied on certain information and management representations provided by the sellers of the Project SPV, including due to non-availability of certain litigation case papers. While indemnities have been sought for some such cases in the Securities Purchase Agreement from the sellers of the Project SPV, we cannot assure you that there would not be any adverse impact on the Trust pursuant to reliance on such information, representations or due to non-availability of documents.

The sellers of the Project SPV, under the Securities Purchase Agreement, have agreed to indemnify the Project SPV, the Investment Manager and their respective directors, and the Trust for, amongst others, any losses arising out of or in connection with, misrepresentation of or inaccuracy in any of the tax warranties, on account of misrepresentation of or inaccuracy in certain warranties and on account of breach of any such seller's covenants and/or covenants of the Project SPV under the Securities Purchase Agreement, prior to the completion date, in terms of the Securities Purchase Agreement. Under the terms of the Securities Purchase Agreements, a claim for indemnity may be brought by an Indemnified Party within the specified claim periods mentioned. For further details, please see the section entitled "*Formation Transactions in Relation to the Trust*" on page 23.

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. Accordingly claims exceeding the amount limits, which are not the liability of the Project Manager, would have an adverse effect on the Project SPV's financial performance. The Project SPV may, from time to time, receive letters and notices from its concessioning authority imposing penalties and seeking claims for any deficiencies or non-compliance with the terms of the concession agreement or other project agreements or a claim or compensation under the terms of the concession agreement. The Project SPV may contest such claims or invoke any indemnification provided by the sellers of the Project SPV or any O&M contractor that the Project SPV may appoint. However, there would be an adverse effect on the Project SPV's operations and financial condition if a claim is decided against such Project SPV. Ongoing claims by the Project SPV against its concessioning authority as well as ongoing claims against the Project SPV, have been disclosed in the section entitled "*Legal and Other Information*" on page 222. Further, while the Project SPV has received consent from the concessioning authority in relation to, amongst others, the transfer of the Project SPV to the Trust, subject to the certain conditions, there can be no assurance that the concessioning authority will not impose any additional conditions in relation to such transfer or be satisfied in relation to the fulfilment of conditions imposed by the Project SPV. Further, the Project SPV has availed certain borrowings from banks and other institutions accordingly has obtained no-objection certificates or lender consents from

the relevant lenders for purposes of availing the loan as per the Shareholder Loan Agreement, subject to certain conditions. If such conditions are not fulfilled, or in the event of a dispute with the lenders in relation to such debt financing, the Trust may not be able to provide the necessary debt financing to the Project SPV which could have an adverse effect on the Trust's business and results of operations. Separately, as a part of the consent received from NHAI, one of the loans will be refinanced and taken over by an existing lender prior to the Closing Date.

In addition, the Project SPV may be subject to unknown or contingent liabilities for which the Trust may have limited or no recourse against the Sponsor. Such unknown or contingent liabilities may also include tax liabilities and other liabilities whether incurred in the ordinary course of business or otherwise.

3. We may not be able to recover losses arising from the acquisition of the Project SPV from Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG.

Pursuant to the terms of the Securities Purchase Agreement, entered into between the Trust (acting through the Investment Manager), Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG, the Trust shall acquire 100% shareholding in the Project SPV. Under the Securities Purchase Agreement, the sellers, along with SREI Infrastructure Finance Limited and Simplex Infrastructures Limited (the "**Indemnifying Parties**"), have agreed to indemnify and hold harmless the Project SPV, the Trust (acting through its Trustee), a person nominated by the Trust to hold a nominal number of SJEPL Sale Shares on behalf of the Trust (the "**SJEPL Purchaser Nominee**"), the Sponsor, the Trustee, the Investment Manager, the Project Manager and their respective directors, officers, authorized representatives and employees (the "**Indemnified Parties**") against all losses and damages which arise out of, or result from or may be payable by virtue of, amongst others, any falsity, incomplete, default, breach or inaccuracy of any of the purchase warranties granted under the Securities Purchase Agreement or a matter or event which renders any such warranties false, incomplete or inaccurate. There is no assurance that in the event any of the purchase warranties granted by the sellers to Indemnifying Parties is found to be inaccurate, false, incomplete or inaccurate, the Indemnified Parties will be able to recover any losses arising therefrom pursuant to the indemnification provisions of the Securities Purchase Agreement, in a timely manner, or at all. Further, as SREI Infrastructure Limited, being an Indemnifying Party, is currently undergoing a corporate insolvency resolution process under the Insolvency and Bankruptcy Code, 2016 ("**IBC**"), any amounts recoverable by the Project SPV from SREI Infrastructure Limited will be subject to the resolution process and provisions of the IBC.

4. Most of our 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 the Project SPV, have represented and warranted to the Trust that all authorizations necessary for the conduct of the business of the Project SPV have been obtained and such authorizations are valid, subsisting and in full force and effect. However, this representation is 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 the Project SPV 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 Project SPV by the Trust have been obtained either by the Project SPV, 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 221. Further, there can be no assurance that in the event of any legal proceeding or regulatory action against the Project SPV in relation to such applications or approvals, the Project SPV will not face adverse

consequences or penalties on account of not holding ownership in relation to such applications or approvals in its name.

5. The Project SPV's 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 SPV is subject to restrictive covenants under their financing agreements that could limit our flexibility in managing our business or to use cash or other assets.

We expect that certain financing arrangements of the Project SPV will remain in place after the allotment of the Units. Please see the section entitled "*Use of Proceeds*" on page 172 for details. These financing agreements entail interest at variable rates with a provision for the periodic reset of interest rates. Under the Project SPV's financing agreements, the lenders are entitled to change the applicable rate of interest on any date and accordingly, the Project SPV is 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 SPV 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; and (iii) 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 and financial condition. 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 and results of operations. 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 SPV 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 and results of operations.

For further details in relation to the financing arrangements entered into by the Project SPV, please see the section entitled "*Financial Indebtedness*" on page 175.

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

The concession agreement stipulates that any acquisition of 15% or more of the total equity of the Project SPV; or any acquisition of any control of the board of directors of the Project SPV, shall constitute a change in ownership and shall require prior approval of NHAI from a national security or public interest perspective. The 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 the Project SPV prior to the expiry of the construction period and two years thereafter, in terms of the concession agreement ("**Lock-In Period**"), it shall constitute a change in ownership and may require NHAI's prior approval. The shareholding pattern of the Project SPV 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 has been made to NHAI, in relation to the acquisition of 100% shareholding of the Project SPV by the Trust, which discloses the existing capital structure of the Project SPV. The Trust cannot assure investors that we will be able to obtain approval from NHAI in relation to the previous change in shareholding of the Project SPV, or that there will be no adverse consequential implications in the future.

7. Currently all of our projected revenue will be derived from the Project SPV.

The Project SPV has been granted concession by NHAI. Any adverse changes to the terms of the existing concession agreement of the Project SPV, or any changes to the existing policy framework of NHAI may adversely impact the cash flow, business and revenue from operations of the Project SPV and may accordingly have an adverse impact on the Trust.

Further, as per the Projections of Revenue and Operating Cash Flow, the revenue from operations for Fiscals 2023, 2024 and 2025 arising from the Project SPV is projected to constitute 100% of our overall projected revenue from operations for Fiscals 2023, 2024 and 2025. For further details of the Projections of Revenue and Operating Cash Flow and reliance on the same, please see the section entitled "*Projections of Revenue and Operating Cash Flow*" and the section entitled "*Risk Factors – The Special Purpose Combined Financial Statements and Projections of Revenue and Operating Cash Flow presented in this Preliminary Placement Memorandum may not be indicative of the future financial condition and results of operations of the Trust*" on pages 314 and 63, respectively. Any adverse impact on the revenue from operations of the Project SPV will have an adverse impact on the business, cash flows and revenue from operations of the Trust.

8. The lenders of the Project SPV may not release the security, including pledge of shares of the Project SPV, that has been created pursuant to loan agreements that have been entered into between the Project SPV and its lenders. Further, the lenders of the existing shareholders of the Project SPV may not release the pledge of shares of the Project SPV created pursuant to loan agreements entered into by them.

The shares of the Project SPV are pledged with its lenders as part of the security for borrowings availed by it from its lenders. If such security is not released by the lenders in a timely manner by the Bid/Issue Closing Date and prior to Allotment of Units in the Issue, it could have an adverse effect on the ability of the Trust to acquire shareholding in the Project SPV in a timely manner or at all. Further, pursuant to the facility agreements, the senior lenders shall be entitled to convert all or part of their secured obligations into fully paid up equity shares (carrying voting rights) or preference shares or optionally convertible debentures of the Project SPV in case of a default by the Project SPV under the facility agreement.

The Trust proposes to utilise the proceeds from the Issue for (i) acquiring 100% of the outstanding paid-up equity share capital of the Project SPV, (ii) providing the Trust Loan to the Project SPV which shall be utilized towards by the Project SPV towards repaying (in full or in part): (a) existing indebtedness of the Project SPV which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by the Project SPV; (b) existing liabilities of the Project SPV, as specified in the relevant utilisation request submitted by the Project SPV, including EPC liabilities, BoCW cess and royalty payments, major maintenance charge and adjustments for outstanding works; and (c) any other purpose as may be agreed mutually in writing between the Trust and the Project SPV, subject to applicable laws and in accordance with the Shareholder Loan Agreement, and (iii) for general purposes. For further details, please see the sections entitled "*Use of Proceeds*" and "*Financial Indebtedness*" on pages 172 and 175, respectively. The Project SPV has secured its indebtedness for benefit of its lenders. The security that has been created in favour of these lenders will be released within an agreed period of time as per the no-objection certificates or lender consents received from the respective lenders in relation to this Issue. If such security is not released by the lenders within the time period agreed, or in the event of a dispute with the Project SPV in relation to such security, it could have an adverse effect on the Trust's business and results of operations.

Further, Simplex Infra Development Private Limited and Bharat Road Network Limited, being shareholders of the Project SPV have also pledged certain shares of the Project SPV with certain lenders (including SREI Infrastructure Limited and SREI Equipment Finance Limited) as part of the security for borrowings availed by it and/or Simplex Infrastructures Limited from such lenders. If such security is not released by the lenders of Simplex Infra Development Private Limited, BRNL, Galfar India (to the extent of Project SPV shares pledged by Galfar India as security for loans availed by the Project SPV) or the Project SPV in a timely manner after the Bid/Issue Closing Date, it could have an adverse effect on the ability of the Trust to acquire shareholding in the Project SPV in a timely manner or at all.

9. The terms of the Project Implementation and Management Agreement may change subject to comments provided by the concessioning authority.

Pursuant to the terms of the concession agreement, the Project SPV is required to submit to its concessioning authority, drafts of all project agreements or any amendments or replacements, pursuant to which the concessioning authority has the right to review and provide comments within specified time periods. Accordingly, the Project SPV had submitted drafts of the Project Implementation and Management Agreement and the Shareholder Loan Agreement to the concessioning authority for its review and comments. While the time period indicated in the relevant concession agreement for providing such comments has not expired in relation to the Shareholder Loan Agreement, the NHAI has not provided any comments on Project Implementation and Management Agreement within the time period indicated in the SJEPL Concession Agreement for providing comments. We cannot assure you that, (i) the concessioning authorities may not have any comments on the Shareholder Loan Agreement or any further comments on the Project Management Agreement, and (ii) such comments may not have an impact on the business and operations of the Trust, the Project SPV and their financial operations.

10. The Valuation Report by BDO Valuation Advisory LLP (the "Valuer") is not an opinion on the commercial merits and structure of the Issue nor is it an opinion, express or implied, as to the future price of Units or the financial condition of Trust, and the valuation of the Project SPV contained in such Valuation Report may not be indicative of the true value of the Project SPV.

BDO Valuation Advisory LLP was appointed as the independent valuer (the "**Valuer**") to undertake independent appraisals of the Project SPV. The Valuer issued a letter and a report appended to it dated May 24, 2022 (together, the "**Valuation Report**"), which sets out its opinion as to the fair market value of the Project SPV as of December 31, 2021. The Valuation Report is based on various assumptions with respect to the Project SPV. 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.

The Valuation Report is neither an opinion on the commercial merits and structure of the Issue, nor is it 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 Issue or 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 SPV. Further, the Valuation Report is 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 the 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 exercise undertaken by the Valuer is 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 Valuation Report reflects the true value of the Project SPV or that other independent valuers would arrive at the same valuation. Accordingly, investors should not rely unduly on the Valuation Report in making an investment decision to purchase Units in the Issue. For details, please see the "*Valuation Report*" attached as Annexure A.

11. We have recently won 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 January 27, 2022. By way of a letter of award dated March 31, 2022 ("**LOA**"), the TOT project was awarded to the Trust, by NHAI, subject to completion of certain terms and conditions.

In accordance with the request for proposal ("**RFP**"), the Trust (acting through its Investment Manager) has incorporated an SPV by the name of "NCR Eastern Peripheral Expressway Private Limited" on April 25, 2022 and will own the TOT Bundle 7 Project through the SPV. Post completion of certain conditions as specified in the RFP and LOA, a concession agreement for the project was signed on May 6, 2022 ("**NCREPE Concession Agreement**"). The proposed scope of work for the project includes 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 ("**TOT Bundle 7 Project**"). NCREPE is currently in the process of achieving financial closure and complying with other conditions set out in the concession agreement and the TOT Bundle 7 Project has not been transferred to the Trust and will be transferred subject to fulfilment of certain obligations and conditions. There is also no financial information, valuation or technical details currently available for the TOT Bundle 7 Project. Accordingly, we cannot assure you that there would not be any adverse impact on the Trust, pursuant to such bid and acquisition of project. We cannot assure that NCREPE will be able to achieve the financial closure and other conditions set out in the NCEPL Concession Agreement and hence the appointed date for the TOT Bundle 7 Project may not be achieved which will also result in adverse impact on the Trust in terms of the Concession Agreement with this project. Even if we achieve the appointed date, we cannot assure that the actual cashflows will be in line with the projected cashflows of the Trust. For further details in relation to the LOA and the TOT Bundle 7 Project, please see the section entitled "*Business – The TOT Project*" on page 162.

12. Our Auditors have included certain matters of emphasis relating to the Special Purpose Combined Financial Statements of the Trust. We cannot assure you whether such matter of emphasis will not arise in the future.

Our Auditors have included certain matters of emphasis relating to the Special Purpose Combined Financial Statements, which are summarised as follows:

- *Basis of Accounting and Restriction on Distribution and Use*

  Attention is drawn to note 2.1 to the Special Purpose Combined Financial Statements, which describes the purpose and basis of preparation and presentation. The Special Purpose Combined Financial Statements have been prepared by the Investment Manager to the Trust to meet the requirements of SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended from time to time including the circulars notifications, clarifications and guidelines issued thereunder (the "**InvIT Regulations**"). Consequently, Special Purpose Combined Financial Statements may not necessarily be indicative of financial performance, financial position and cash flows of the Trust that would have occurred if it had operated as a single group of entities during the periods presented.

  The Report on the Special Purpose Combined Financial Statements is addressed to the Trust, the Trustee and the Investment Manager for inclusion in the placement memorandum in connection with the proposed issuance of unlisted units of the Trust on a private placement basis. As a result, the Special Purpose Combined Financial Statements may not be suitable for another purpose. The Report on the Special Purpose Combined Financial Statements should not be used, referred to or distributed for any other purpose or to any other party. Accordingly, the Auditors 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.

- *Possible effects arising from the outbreak of the COVID-19 pandemic*

  Attention is drawn to note 41 of the Special Purpose Combined Financial Statements which describes the uncertainties an Investment Manager's assessment of the impact of Covid-19 pandemic on the Trust's operations, carrying amounts of intangible assets (including intangible

assets under development) and recoverability of other financial and non-financial assets, for which a definitive assessment of the impact in subsequent period is dependent on the future developments and circumstances as they evolve.

- *Uncertainty of possible impact of delay in completion of project and non-receipt of Completion certificate*

  Attention is drawn to note 47 and note 31(d) of the Special Purpose Combined Financial Statements 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 by the Project SPV as on date and the consequential uncertainty of potential penalties and/or termination of SJEPL Concession Agreement.

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.

13. The accuracy of statistical and other information with respect to the road infrastructure sector and the traffic assessment report commissioned by the Investment Manager for the Project contained in this Preliminary Placement Memorandum cannot be guaranteed.

Statistical and other information in this Preliminary Placement 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.

The Project SPV is exclusively toll based. In relation to the Project SPV, the information reflected in the Traffic Report is subject to various limitations and is based upon certain estimates and assumptions that are subjective in nature. The Traffic Report reflects 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 Report 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 Report.

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 Report and the Technical Report 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 Consultant has prepared the Technical Report concerning the Project SPV which is contained in this Preliminary Placement Memorandum. We commissioned the Technical Report for the purposes of conducting a technical assessment of the Project SPV. Neither we, nor the Trustee, the Sponsor, the Investment Manager nor any other person connected with the Issue has verified the information in the Technical Report. Further, the Technical Report has been prepared based on information as of specific dates and may no longer be current or reflect current trends. Opinions in the Technical Report based on estimates, projections, forecasts and assumptions may prove to be incorrect. The Technical Report is 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 Consultant for the purposes of preparing the Technical Report will prove to be accurate. Future reports for the Project SPV could be materially different from those that are set forth in the Technical Report and this Preliminary Placement Memorandum. The Technical Report are not a recommendation to invest or disinvest in the Project SPV. Prospective investors are advised not to unduly rely on the Technical Report when making their investment decision.

14. The Special Purpose Combined Financial Statements and Projections of Revenue and Operating Cash Flow presented in this Preliminary Placement Memorandum may not be indicative of the future financial condition and results of operations of the Trust.

The financial statements of the Project SPV for the period ended December 31, 2021 and for the Fiscals 2021, 2020, and 2019 constitute a different presentation of information and may not necessarily reflect the consolidated financial position, results of operations or cash flows of the Trust, and nor will they necessarily give an indication of the financial position, results of operations or cash flows of the Trust or the Project SPV in the future.

After the Allotment, 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 Special Purpose Combined Financial Statements . For example, there are certain costs, such as the Investment Manager's fee, the Project Manager's fee and other costs relating to the Trust, that will be incurred by the Trust going forward, some of which were not incurred by the Project SPV historically. For details of recurring expenses, please see the section entitled *"Overview of the Trust"* on page 20. In addition, the Project SPV will be valued at fair value at the time of the actual acquisition of such assets by the Trust, which will occur prior to the Closing Date, for the purpose of a purchase price allocation exercise required under Ind AS for financial reporting purposes. Furthermore, the future consolidated financial statements of the Trust will be prepared on the basis of Ind AS 103 "Business Combinations", which is different from the accounting treatment used for the preparation of the Special Purpose Combined Financial Statements .

The financial projections contained in this Preliminary Placement Memorandum are based on historical financial information and certain estimates and assumptions. There can be no assurance that the Project SPV will be able to generate sufficient cash from the operations of the project 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 and Operating Cash Flow"* on page 314. 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. The flexibility of the Trust and the Initial Portfolio Assets 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 Initial Portfolio Assetsare required to establish an escrow account. The Initial Portfolio Assets 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 Initial Portfolio Assets, 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 Initial Portfolio Assets and the concessioning authority, (iii) cconcession 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 Initial Portfolio Assets.

Any withdrawals from the escrow accounts by the Initial Portfolio Assets 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 Initial Portfolio Assets 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 and results of operations.

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 Initial Portfolio Assets for its own purposes.

The loans/advances by the shareholders of the Initial Portfolio Assets 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 Initial Portfolio Assets 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 Initial Portfolio Assets may be entirely controlled by the discretion of the concessioning authority and/or the project lenders.

16. The Initial Portfolio Assets 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 Initial Portfolio Assets have entered into concession agreements with the concessioning authority with which the Initial Portfolio Assets 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 Initial Portfolio Assets 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 Initial Portfolio Assets being liable for compensating the concessioning authority for such breach or termination. In the past, NHAI has highlighted certain breaches by the Project SPV of its obligations with respect to maintenance of the project, on account of which NHAI had withheld partial payment of an instalment in relation to the equity support, as provided for under the SJEPL Concession Agreement. NHAI has also issued letters highlighting requirement for pavement design rectification, etc. by the Project SPV. 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 Initial Portfolio Assets 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 Initial Portfolio Assets 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 Initial Portfolio Assets 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 Initial Portfolio Assets 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 and results of operations 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 Initial Portfolio Assets, in the event of a suspension or termination of the concession agreements. Further, in case of the Initial Portfolio Assets 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 Initial Portfolio Assets in the event that the Project SPV is in "financial default"; that is, for example, if the NHAI or the lenders of such project have a reason to believe that the Initial Portfolio Assets 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 Initial Portfolio Assets.

The concession agreements also require the Initial Portfolio Assets 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 Initial Portfolio Assets, the Initial Portfolio Assets may be entitled to approach the concessioning authority to amend its concession agreements or seek compensation such that the Initial Portfolio Assets are placed in its former financial condition. The Initial Portfolio Assets 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 Initial Portfolio Assetsinclude, 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 Initial Portfolio Assets 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 Initial Portfolio Assets 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 Initial Portfolio Assets, which are still pending. The adverse settlement of such claims, including the payment of damages, fines or other penalties by the Initial Portfolio Assets could adversely affect the business, prospects, financial condition and results of operations of the Initial Portfolio Assets.

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 Initial Portfolio Assets. 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 Initial Portfolio Assets. In the event that the interpretation of the concession agreements are unfavourable to the Initial Portfolio Assets, its business, financial condition and results of operations 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.

Any failure by the Initial Portfolio Assets 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 Initial Portfolio Assets and recover such cost and damages from the Initial Portfolio Assets from the escrow account as if such costs and damages were O&M expenses. In the past, the Project SPV has received a "cure period notice" from NHAI, alleging several non-compliances by the Project SPV 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, etc. In this regard, NHAI has also levied damages in this respect to be paid by the Project SPV, 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 the Project SPV, 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 the Project SPV, in addition to other remedies available to NHAI, such as encashment of performance security and termination of the concession agreement.

If the concession agreements are terminated by the concessioning authority due to a default by the Initial Portfolio Assets, the Initial Portfolio Assets 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 Initial Portfolio Assets, will be calculated according to the terms of the concession agreements, which may be less than the actual cost incurred by the Initial Portfolio Assets on its project. Consequently, not only would the Initial Portfolio Assets 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 Initial Portfolio Assets, may be contested by the concessioning authority on the ground of the same being in nature of loans/advances by the shareholders of the Initial Portfolio Assets.

If the concession agreements are terminated by the concessioning authority due to a default by the Initial Portfolio Assets, or by the Initial Portfolio Assets due to a default by the concessioning authority, the Initial Portfolio Assets are entitled to termination 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 Initial Portfolio Assets 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 Initial Portfolio Assets.

If any concession agreements are terminated prematurely, the business, financial condition and results of operations of the Initial Portfolio Assets could be adversely affected. Please see the section entitled "*Summary of Concession Agreements*" on page 164.

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

In our toll-based Project or Project with a toll component, our toll revenue depends on the tolling rates set by the concessioning authority in accordance with the SJEPL Concession Agreement 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 SJEPL Concession Agreement 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. 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 agreement typically limits and regulates 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 SJEPL Concession Agreement 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 agreement. 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 SJEPL Concession Agreement. Even if we invoke the inflation adjustment clauses in our concession agreement, the increase may not be adequate to offset the negative impact of increases in interest rates or cost of raw materials.

As our Project often requires significant capital investment with potential returns spread over a long period of time, inadequate toll revenues collected from our Project 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.

19. The Project's 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 Project comprises 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 SPV's 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 SPV's 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 project. During such periods of curtailed activity, the Project SPV may continue to incur operating expenses but receive reduced toll revenues. Such fluctuations may adversely affect the Project SPV's business, financial condition or results of operations.

The toll revenues of the Project SPV 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 SPV's 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 Project may experience high traffic levels and congestion at certain times of the day or on certain days of the week. Although the Project SPV 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 SPV. This could also lead to user dissatisfaction and could potentially reduce traffic volume.

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

The Project is exclusively toll based. Toll receipts are primarily dependent on the integrity of toll collection systems. The Project SPV 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 SPV could have a limited ability to collect tolls. Under the terms of the SJEPL Concession Agreement, 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 SPV 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 SPV, there may be a considerable delay in the receipt of such compensation. Although the Project SPV has 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 and results of operations of the Project SPV.

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 the Project SPV is 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 SPV has a limited period to operate the project as the concession period granted to the Project SPV is fixed.

The SJEPL Concession Agreement entered into by the Project SPV provides 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 SPV, please see the section entitled "*Business*" on page 156. Further, the Project SPV has 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 is also making upfront payments pursuant to the Earnout Agreement to the Sellers of the Project SPV 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 the Project SPV's rights to operate the project is terminated before the expiration of the concession, the business, financial condition and results of operations 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 acquisition of the Project SPV, the project may not have received a final completion certificate from NHAI or the relevant independent engineer as required in terms of the SJEPL Concession Agreement. Certain aspects of Project may by under-construction and development. 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 SPV, which is responsible for the operation and maintenance of the project under the SJEPL Concession Agreement, may be directed by the concessioning authority to undertake, and the Project SPV will be obliged to perform, additional construction work.

Under the terms of the SJEPL Concession Agreement, the Project SPV is responsible for the operation and maintenance of the project during the applicable concession period. The concessioning authority may require the Project SPV to provide additional work and services not included in the original scope of the SJEPL Concession Agreement. For example, if the Project SPV 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, the Project SPV 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 the Project SPV were higher than the costs estimated by the

independent engineer. The Trust cannot assure investors if the costs incurred by the Project SPV will be recovered. Additionally, NHAI may also undertake descoping of any balance work, as a result of which the grant payable to the Project SPV may be significantly reduced, 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 SJEPL Concession Agreement, the concessioning authority may require the Project SPV to procure capacity augmentation in relation to the Project which may result in significant capital expenditure for the Project SPV. On refusal or non-acceptance by the Project SPV to undertake such augmentation, or on the failure of the Project SPV to undertake such augmentation as per the timelines set out by the concessioning authority, the concessioning authority may in its discretion terminate the SJEPL Concession Agreement.

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 SPV can collect.

The Project is a toll based project. Under the terms of the concession agreement entered into by the Project SPV, the concessioning authority or any other government instrumentality is entitled to construct an additional tollway for use by traffic which may serve as an alternate route to the project after the expiry of 12 years from the appointed date as set out in the concession agreement , depending on the terms of the concession agreement. Notwithstanding that the concessioning authority shall compensate the Project SPV for such a competing road, if in breach of the SJEPL Concession Agreement, during subsistence of such breach and the concession period will accordingly increase, the development of such an additional tollway during the subsistence of the SJEPL Concession Agreement 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 SPV which could have an adverse effect on its business, financial condition or results of operations. Please see the section entitled "*Summary of Concession Agreements – The SJEPL Concession Agreement* " on page 164.

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 Project in the future. For further details, please see Annexure C of this Preliminary Placement 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 Initial Portfolio Assets.

The Initial Portfolio Assets 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 SPV is required to comply with a wide variety of Indian laws and regulations. There can be no assurance that the Project SPV is 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 Initial Portfolio Assets could be adversely affected. Further, these permits, licenses and approvals could be subject to several conditions, and the Trust cannot assure investors that the Initial Portfolio Assets 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 Initial Portfolio Assets and may adversely affect the business, financial condition and results of operations of the Trust.

Further, certain terms and conditions in the Initial Portfolio Assets' concession agreement, 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 Initial Portfolio Assets of any project agreements (including financing agreements) relating to the operation of the road asset to which the Initial Portfolio Assets 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 Initial Portfolio Assets 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 also requires the submission to the concessioning authority, for its review and comments, all project agreements to which the Initial Portfolio Assets 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 and results of operations 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 and results of operations of the Initial Portfolio Assets.

The Initial Portfolio Assets 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 214. If the Initial Portfolio Assets 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 Initial Portfolio Assets as well as orders that could limit or halt the development or operations of the Initial Portfolio Assets. The Trust cannot assure investors that the Initial Portfolio Assets have been and will continue to be in compliance with all environmental, health and safety and labour laws and regulations.

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 SPV 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 Initial Portfolio Assets, 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.

There can be no assurance that the Initial Portfolio Assets 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 and results of operations of the Initial Portfolio Assets.

28. The current insurance coverage for the project may not protect the Project SPV 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.

The Project SPV has in place various project-specific insurance policies covering the Project SPV 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 156. However, there can be no assurance that all risks are adequately insured against or that the Project SPV 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 SPV. In addition, not all of the above risks may be insurable on commercially reasonable terms, or at all. For example, the Project SPV is 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 SPV 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 SPV 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 SPV suffers 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 SPV. Further, the Project SPV 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 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 project could be significant and could adversely affect the results of operations, cash flows and financial condition of the Project SPV.

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 SPV 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 SPV is required to repair or refurbish such equipment at periodical intervals, pursuant to the terms of the concession agreement. 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 SPV as a result of such replacement or refurbishment will not affect the profit margin of the Project SPV 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 Project 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 and results of operations.

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

The future success of the Project SPV 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 SPV to implement and adhere to certain technologies in connection with the Project 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 Project. There is no guarantee that the cost of implementing new technologies for the Project will be fully reimbursed by the concessioning authority and any such cost may therefore have an adverse effect on our business, results of operations and financial condition.

31. The business and financial performance of the Trust, the operations of the project 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 Project 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 Project.

32. The project awarded to the Project SPV is subject to and may be subject to legal or regulatory action and the Project SPV may be required to incur substantial expenses in defending any such actions and there is no assurance that the Project SPV 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 the Project SPV to the Trust, has made various claims on the Project SPV and has required that all claims (those made by NHAI against the Project SPV and those made by the Project SPV 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 that Project SPV will be successful in the claims made by Project SPV 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 and prospects.

Additionally, pursuant to the Claims Benefit Assignment Agreement and the Claims Management Agreement, monies received upon a successful claim by the Project SPV or in respect of the reserves created for claims where Project SPV is eventually successful in defending the claim made by NHAI, will not be available for the benefit of the Project SPV and will have to paid by the Project SPV 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 "*Formation Transactions in relation to the Trust*" on page 23.

The Project SPV may also become involved in legal proceedings at different levels of adjudication before various courts, tribunals and regulatory authorities. In addition, arbitration and litigation proceedings in India can be time consuming and the Project SPV 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 the Project SPV. The legal proceedings may be decided against the Project SPV or changes in the relevant laws and regulations may adversely affect the outcome of such legal proceedings.

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 SPV 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 and prospects. For more details, please see the section entitled "*Legal and Other Information*" on page 222.

33. The Project SPV, 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 and results of operations of the Trust.

The Project SPV and associates of the Sponsor, the Investment Manager and Project Manager, 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 Project SPV's interests may have an adverse effect on the Project SPV's business, future financial performance and results of operations.

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

The Project SPV or the Incorporated SPV may appoint independent contractors who, in turn, engage on-site contract labour to perform certain operations. The Project SPV has obtained the relevant registrations under the Contract Labour (Regulation and Abolition) Act, 1970 (the "**Contract Labour Act**") for certain locations where workmen are employed through contractors or agencies licensed under the Contract Labour Act. Although the Project SPV does not engage the labourers directly, in the event of default by any independent contractor, the Project SPV may be held responsible for any wage payments due to the labourers of such contractor. Any violation of the provisions of the Contract Labour Act by the Project SPV may result in penalties pursuant to the provisions of the Contract Labour Act. If the Project SPV is 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 SPV 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 SPV or other sub-contractors due to increased wage demands or the inability of the Project Manager, Project SPV or other sub-contractors to either retain or recruit employees and sub-contractors with suitable credentials, the ability of the Project SPV 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 SPV. 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 and results of operations of the Project SPV.

36. The Project SPV has experienced losses in previous years and any losses 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.

The Project SPV has experienced losses for one or more Fiscals in the last three Fiscals. Under the Companies Act, 2013, companies that do not generate "distributable profits" are not permitted to pay dividends. Accordingly, if the Project SPV fails 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. As a proposed shareholder of the Project SPV, the Trust's rights are subordinated to the rights of creditors, debt holders and other parties specified under Indian law in the event of insolvency or liquidation of the Project SPV.

In the event of liquidation of the Project SPV, the secured and unsecured creditors of the Project SPV will be entitled to payment from the liquidation proceeds in priority to us in our capacity as an equity shareholder of the Project SPV. Under the Insolvency and Bankruptcy Code, 2016, in the event of winding-up of the Project SPV, workmen's dues and debts due to secured creditors which rank *pari passu* are required to be paid in priority over all other outstanding debt, followed by wages and salaries of employees, debts due to unsecured creditors, any amounts due to the central or state government, any other debts, preference shareholders and equity shareholders. Further, amounts payable to us in respect of any unsecured debt issued by the Project SPV will be subordinated in the manner set forth above.

38. The Initial Portfolio Assets 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. 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 and prospects of the Initial Portfolio Assets.

39. 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 transactions, individually or in the aggregate, could have a material 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*", "*Formation Transactions in Relation to the Trust*" and "*Parties to the Trust*" on pages 211, 23 and 98, respectively.

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

41. 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.

The Trust's total outstanding consolidated net debt (excluding shareholders debt) shall be approximately ₹ 9,198.04 million after the Issue Proceeds are fully utilised, which will constitute approximately 42.64% of the value of the InvIT Assets upon completion of the Issue (net of cash and cash equivalents). Under the terms of the InvIT Regulations, the Indenture of Trust and the leverage policy of the Trust, the aggregate consolidated borrowings and deferred payments of the Trust may be up to 75% of the aggregate of the Trust Assets and any change in such limit must be approved by such percentage of the Unitholders as set out in the Indenture of Trust. There is no assurance that the relevant approval can be obtained in a timely manner, or at all. 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 Initial Portfolio Assets 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 projects under development 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.

42. 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 SPV. A leveraged capital structure will increase the Project SPV's 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 SPV is 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 SPV.

43. 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 Preliminary Placement Memorandum.

This Preliminary Placement Memorandum contains forward-looking statements including the Projections of Revenue and Operating Cash Flow. These forward-looking statements are based on a number of assumptions, many of which are outside the control of the Trust. The assumptions underlying the Projections of Revenue and Operating Cash Flow are inherently uncertain and are subject to significant business, regulatory, and tax risks, uncertainties and contingencies that could cause actual results to differ materially from the forecast 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 the landmarks set out in the Projections of Revenue and Operating Cash Flow 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. While the Trust currently expects to meet the Projections of Revenue and Operating Cash Flow based on the assumptions set out in *"Projections of Revenue and Operating Cash Flow",* no assurance can be given that the assumptions will remain true or relevant and that the actual profit and cash flow will be achieved as forecasted or projected.

The Projections of Revenue and Operating Cash Flow should be reviewed in conjunction with the description of the business of the Project SPV, *"Discussion and Analysis by the Directors of the Investment Manager of the financial condition, results of operations and cash flows of the Initial Portfolio Asset of the Trust"* on page 181 and other information contained in this Preliminary Placement Memorandum, including the information set forth in this *"Risk Factors"* section on page 55.

The Investment Manager does not intend to provide any updated or otherwise revised profit and cash flow forecast or profit and cash flow projection in the event that any assumptions differ from actual results.

44. The ability of the Trust to make or maintain consistency in distributions to Unitholders depends on the financial performance of the Project SPV 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 SPV 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 SPV 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 InvIT Loan will be subject to the terms and conditions of the InvIT Loan. Under the terms of the InvIT Regulations, in the event any assets are sold by the Trust or the Project SPV or if the equity shareholding or interest in the Project SPV 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 SPV in proportion of its holding in the Project SPV subject to the applicable provisions of the Companies Act, 2013. 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 SPV 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.

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

The project 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 and results of operations of the Trust.

RISKS RELATING TO OUR ORGANISATION AND STRUCTURE

46. Changes in government regulation could adversely affect our profitability, prospects, results of operations 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, 2021, could expose us to greater tax liability than what our financial projections assume. 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 SPV 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 SPV 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 nearly 100 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. Upon completion of the Issue, the Sponsor 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, upon completion of the Issue, 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. As a result and depending on (i) the number of Units held by the Sponsor upon completion of the Issue 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 immediately 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 231.

53. The Trust has a limited number of unlisted 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 Preliminary Placement Memorandum, there are a limited number of other infrastructure investment trusts with unlisted Units and, accordingly, the Trust is not in a position to provide a comparative analysis of its performance with many unlisted InvITs. Investors must rely on their own examination of the Trust for the purposes of investing in the Units.

54. 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.

55. 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.

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 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 and prospects.

56. 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.

57. 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 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

58. No investors are permitted to withdraw or lower their Bids (in terms of quantity of Units or the Bid Amount) at any stage after submitting a Bid.

Pursuant to the InvIT Regulations and SEBI guidelines, investors are required to pay the Bid Amount on submission of the Bid, and are not permitted to withdraw or lower their Bids (in terms of quantity of Units or the Bid Amount) at any stage after submitting a Bid, notwithstanding adverse developments in international or national monetary policy, financial, political or economic conditions, our business, results of operations, or otherwise, at any stage after the submission of their Bids.

59. 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 and does not fall 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.

60. 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.

Where new Units are issued at less than the Issue 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.

Further, under the InvIT Regulations, the Sponsor is required to hold a minimum of 15% of our Units for a minimum period of three years from the date of Allotment pursuant to the Issue and the balance of its unitholding in the Trust is required to be locked-in for a period of one year from the date of Allotment of the Units. 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.

61. 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

62. 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 and financial condition 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 and results of operations. 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.

63. 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.

64. 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.

65. 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 SPV. 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.

66. 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.

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

The Project SPV is 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.

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

India's sovereign rating decreased from Baa2 with a "negative" outlook to Baa3 with a "negative" outlook by Moody's and from BBB with a "stable" outlook to BBB with a "negative" outlook (Fitch) in June 2020; and from BBB "stable" to BBB "negative" by DBRS in May 2020. India's sovereign rating could be downgraded 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.

69. 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 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.

70. 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.

71. 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 Preliminary Placement Memorandum are prepared and presented in conformity with Ind AS, consistently applied during the periods stated in those reports, except as otherwise provided therein, and no attempt has been made to reconcile any of the information given in this Preliminary Placement 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 Preliminary Placement 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 Preliminary Placement 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.

72. 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) 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.

73. 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. However, there can be no assurance as to the impact of the provisions of the Competition Act on the agreements that the Project SPV 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 or the agreements they have entered into. 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

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

The GoI has announced the union budget for the Fiscal 2021 and the Finance Act, 2021 (the "**Finance Act**") has been granted assent by the President of India 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 – Investors may be subject to Indian taxes arising out of capital gains on the sale of Units and on any dividend or interest component of any returns from the Units*" 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 90 and 81.

There have been two recent 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.

75. Investors may be subject to Indian taxes arising out of capital gains on the sale of Units and on any dividend or interest component of any returns from the Units

Under current Indian 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 subject to 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 Income-tax Act, 1961 (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 SPV. 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 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 in the hands of a non-resident is subject to deduction of tax at the rate of 5%.

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.

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.

76. The Trust and the Project SPV 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 SPV to the Trust may be subject to taxation in the hands of the acquirer. The equity shares of the Project SPV 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 SPV, 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 SPV, 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.

77. The Project SPV enjoys certain benefits under Section 80-IA of the IT Act in relation to the Project SPV and any change in these tax benefits applicable to the Trust may adversely affect its results of operations.

Under the provisions of section 80-IA of the IT Act, the Project SPV 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 the Project SPV, the taxable profits derived by the Project SPV 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. The Project SPV will only be subject to MAT if the Project SPV 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 the Project SPV and may consequently affect the amount available for distribution by the Project SPV 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, the Project SPV will not be able to enjoy the benefits of such tax holiday.

78. 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 SPV 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). However, the relevant authorities may view the Trust as a "pass through" entity and the applicable tax rate will be the MMR applicable to its beneficiaries. If any beneficiary is chargeable to MMR at a rate higher than the rate applicable to other beneficiaries, the income of the Trust attributable to the share of such beneficiary will be taxed at a higher applicable rate. For example, if any Unitholder is a non-resident, the MMR of 40.0% (plus applicable surcharge and cess) would apply.

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.

79. Depreciation may not be claimed on the capitalised cost of a road constructed on a BOT basis.

The Project SPV 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, a Project SPV may be considered as the owner of a road 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 financial projections of the Project SPV and in turn, the financial position of the Trust.

The Project SPV 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.

80. 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.

81. Additional tax liability may arise on the Project SPV 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), the Project SPV was required to maintain and operate the existing highway. Accordingly, the Project SPV was 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, the Project SPV 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 the Target and has not been offered to

income tax as revenue income. In this regard, the Project SPV 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 the Project SPV 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 Project SPV.

82. GST may be payable on the Toll income

The Project SPV has 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 SPV 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 SPV has 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 SPV 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.

GENERAL INFORMATION

The Trust

The Trust was set up as an irrevocable trust under the provisions of the Indian Trusts Act, 1882 on December 23, 2019 at Mumbai. The Trust was registered as an infrastructure investment trust under the InvIT Regulations on March 20, 2019 having registration number IN/InvIT/19-20/0013. For information on the background of the Trust and the description of the Project SPV, please see the sections entitled "*Overview of the Trust*" and "*Business*" on pages 20 and 156, respectively.

Compliance Officer of the Trust

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

Ankit Dewan

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Bidders can contact the Compliance Officer in case of any pre-Issue or post-Issue related problems, non-credit of Allotted Units in the respective beneficiary account of Bidders after Allocation or non-receipt of refund orders.

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Registered and principle place of business:

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Steer Davies Gleave India Private Limited

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Escrow Collection Bank

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SEBI Registration Number: INBI00000017

Legal Counsel to the Trust and the Sponsor as to Indian law

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Registrar and Transfer Agent

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

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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, 2021, CDPQ held approximately CAD 419.80 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 around 20 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 45.30 billion (as of December 31, 2021) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has investments in over 10 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. For further details, please see the section entitled '*Business*' on page 156, of this Preliminary Placement 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 had a consolidated net worth of not less than ₹ 1,000 million as on December 31, 2021 and as on the date of this Preliminary Placement 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
1.	Cyril Sébastien Dominique Cabanes
2.	Leong Wai Leng

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, SW29, 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	DIN
1.	Rajesh Kumar Dahiya	07508488
2.	Ganesh Sankaran	07580955
3.	Deepa Rath	09163254

Brief profiles of the Directors of the Trustee

1. **Rajesh Kumar Dahiya**, aged 54 years, is a non-executive director on the board of the Trustee. He is also the executive director of Axis Bank Limited and is an engineer with a master's degree in management. Before joining Axis Bank Limited in June 2010, he was associated with the Tata Group for 20 years where he handled various responsibilities across functions such as human resources, manufacturing, exports, distribution and institutional sales. In his current role as executive director of Axis Bank Limited, he supervises all functions under the corporate centre viz. internal audit, human resources, compliance, company secretary, corporate communications, corporate real estate services, chief business relations officer (CBRO), corporate social

responsibility, ethics and sustainability and law. In addition, Rajesh Kumar Dahiya also oversees the functioning of the Axis Bank Foundation. He is also on the Board of Axis PE Ltd.

2. **Ganesh Sankaran**, aged 52 years, is a non-executive director on the board of the Trustee. He 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 and rural lending. Before joining Axis Bank Limited, he was the executive director at Federal Bank Limited, 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 Private Limited and Fedbank Financial Services Limited. Prior to that he was associated with HDFC Bank Limited where he was Co-Head, Corporate Banking. Ganesh Sankaran is an engineer with a master's degree in business administration.

3. **Deepa Rath,** aged 45 years, is the managing director on the board of the Trustee and is also the chief executive officer of the Trustee. She 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. Prior to taking over as the managing director and chief executive officer the Trustee, she was part of the founding leadership team and spearheaded the TReDS (Trades Receivable Discounting System) platform business at INVOICEMART / A. TREDS LTD (a joint venture between Axis Bank Limited and Mjunction Services Limited), a pioneer in the space of digital and transparent financing of MSMEs, financial inclusion, API integration and blockchain implementation. Prior to this, she led various business functions across geographies with the Axis Bank corporate banking department. In the early part of her career, she took several roles with IDBI Bank Limited and ICICI Bank Limited within the corporate banking and retail banking franchises. She has been a speaker on various finance and fintech related forums and was a part of Axis Bank's senior business leadership program and in initiatives pertaining to ethics & sustainability (POSH), recruitment and employee engagement, corporate social responsibility etc. She is a advisory member on the international consulting/advisory related to supply chain finance, fintech, go-to-market strategy and corporate banking practices. She holds a master's degree in business administration in finance from Institute of Management Technology, Ghaziabad and master's degree in economics and an `Advanced Diploma in Software Technology & Systems Management", from NIIT. Apart from several certifications like the Axis Business Leadership Program - ISB Hyderabad, she is currently pursuing "Advanced Program in Fintech & Financial Block chain" from Indian Institute of Management, Calcutta.

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:

Powers of the Trustee

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 may 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, either by itself or through the Investment Manager or any such delegate as may be permitted under the InvIT Regulations and the Trust Documents, 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.

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, in consultation with 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 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, subject to the advice of the Investment Manager, 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 consultation with the Investment Manager, 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, in consultation with the Investment Manager and 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, in consultation with the Investment Manager, 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, in consultation with the Investment Manager, 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, in consultation with the Investment Manager, 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 as approved by at least 60% of the Unitholders from time to time.

(e) Notwithstanding the above, if the Units are listed on the Stock Exchanges, 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, upon the recommendation of, the Investment Manager, 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, subject to the advice of the Investment Manager, 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, in consultation with the Investment Manager, 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, in consultation with 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 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, in consultation with the Investment Manager, 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 insure property

The Trustee in consultation with the Investment Manager, shall have the power to obtain insurance policies for the Trust or 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 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 pursuant to the advice of 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 including management of the Trust Assets vested in it under the Indenture of Trust, 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 Management 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 Management 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 Management 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 Authority, 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 delegate 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.

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 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 subject to any limit prescribed under the annual budget of the Trust (as defined in the Indenture of 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

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 14, 1992 as Gujarat Torrent Energy Corporation Limited. It was converted into a private limited company on February 26, 1998 through a fresh certificate of incorporation and the name of the Investment Manager was changed to Gujarat Torrent Energy Corporation Private Limited. Subsequently, the name of the Investment Manager was changed to CLP India Private Limited on February 3, 2012.

Subsequently, the name of the Investment Manager was changed from CLP India Private Limited to Maple Infra InvIT Investment Manager Private Limited and a fresh certificate of incorporation on May 8, 2020. The Investment 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 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 the Sponsor in December, 2019. The Investment Manager is 100% owned by the Sponsor and CDPQ Infrastructures Asia 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 a consolidated net worth of not less than ₹ 100 million as on December 31, 2021.

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	DIN
1.	Romesh Sobti	00031034
2.	Anil Aggarwal	01385684
3.	Saurabh Agarwal	06518876
4.	Yudhvir Singh Malik	00000555

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 and a diploma in corporate laws and secretarial practice. He is a career banker with 46 years of experience in three sectors of banking, namely, public, foreign, and private. He was the Executive Vice President – Country Executive, India and Head, UAE, and Sub-Continent, at ABN AMRO Bank N.V. In his previous banking career, he has also been associated with ANZ Grindlays Bank Plc (currently known as Standard Chartered Bank) and State Bank of India.

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. With over 30 years of work experience, he pursued a career in accounting and finance from 1985 to 2012 with several corporates including Indian Oil Corporation, Unit Trust of India, Reliance Capital, RPG Enterprises, and Punj Lloyd. Since 2013, he has worked on advisory assignments and as consultants to large companies including Godrej Fund Advisors, Caparo Group, and Trident Limited. He has experience in finance, accounting, strategy and mergers and acquisitions. He is currently also an independent director on the board of directors of Snowman Logistics Limited.

3. **Saurabh Agarwal** is the director on the board of directors of the Investment Manager. He holds a degree in Masters in Business Administration (Finance) from the University of Michigan, Ann Arbor, United States of America; Masters in Computer Science from the Penn State University, United States of America and a bachelors' degree in Computer Science and Engineering from National Institute of Technology in Rourkela, India. He has experience in the fields of corporate strategy, infrastructure investments, and investment banking. Saurabh is the managing director, infrastructure, leading CDPQ's infrastructure investment efforts in South Asia. He is responsible for sourcing, evaluating, executing and managing infrastructure investments, as well as developing long-term partner relationships in the region.

4. **Yudhvir Singh Malik** is an independent director on the board of directors of the Investment Manager. He belongs to the 1983 batch of Haryana cadre. He has a master's degree in english literature and language and a post graduate degree in journalism and mass communication. In addition, he holds a master of science in development management (with distinction) from Glasgow Caledonian University, Glasgow, Scotland, UK. Prior to his present assignments as Chairman and Managing Director of Unitech Limited and as a Member of the Conciliation Committee of NHAI, he 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.

Brief profiles of the Key Personnel of the Investment Manager

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

1. **Muraleemohan M** is the Chief Operating Officer of the Investment Manager since December 4, 2020. He holds a bachelors' degree in civil engineering from College of Engineering, Trivandrum and a master's degree in transportation engineering from Indian Institute of Technology, Madras. He has over 21 years of experience in public private partnerships, including, 16 years of experience in the development and management of road projects. Previously, he was the Head of Operations of Roads at L&T IDPL.

2. **Varun Mehta** is the Vice President (Finance) of the Investment Manager since November 1, 2020. He holds a bachelor's degree in commerce from Narsee Monjee College of Commerce & Economics, Mumbai University. He is a qualified Chartered Accountant, Chartered Financial Analyst and Financial Risk Manager. He has over 11 years of experience, including, more than 9 years of experience in the infrastructure sector.

3. **Abhishek Arora** is the Vice President (Strategy, Business Development and Mergers and Acquisitions) of the Investment Manager since April 27, 2021. He holds a master's degree in business administration in finance from the Indian Institute of Management, Lucknow and a bachelor's degree in information technology from Motilal Nehru National Institute of Technology, Allahabad. He has over 11 years of experience in the infrastructure sector. Prior to joining the Investment Manager, he was the Vice President – Investment Banking at Edelweiss Financial Services Limited wherein he has closed various transactions in roads, transmission and InvIT spaces with clients such as Cube Highways, KKR & Co. Inc., Powergrid Corporation of India Limited and Hindustan Construction Company Limited.

4. **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 11 years of experience including, more than 6 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 in consultation with the Trustee 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 Management 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 Management 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

The Investment Manager shall have the power to exercise all rights of the Trust in the Trust Assets, 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 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, if the Units are listed on the Stock Exchanges, the conditions for borrowings and deferred payments specified in the InvIT Regulations shall be applicable to 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, in consultation with the Trustee, 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 with Significant Majority Approval.

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

The Investment Manager, in consultation with the Trustee, shall have the power to enter into any indemnification obligation under contract or Applicable Law on behalf of 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 jointly with the Sponsor, 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 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, if applicable, 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 may 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, as applicable.

Delisting and winding-up of the Trust

In the event the InvIT is listed and in case of occurrence of any event specified in the InvIT Regulations, the Investment Manager shall be responsible for applying for delisting 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 and half-yearly reports

The Investment Manager shall, within the time period prescribed under the InvIT Regulations, submit annual reports and half yearly reports 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 the new Project Manager is appointed by the Trustee with Significant Majority Approval (as defined in the Investment Management Agreement), subject to such new Project Manager meeting 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 all matters which require Unitholders approval, will be 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 5th Floor, Suite 507, Worldmark 3, Aerocity, New Delhi 110 037. 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	DIN
1.	Deepak Malhotra	08625060
2.	Saurabh Agarwal	06518876

Background of the Project Manager

The Project Manager is 100% owned by the Sponsor and CDPQ Infrastructures Asia Pte. Ltd. The Project Manager shall (directly 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 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 the Project SPV, effective from the date on which the Trust acquires controlling interest in the Project SPV, to provide project implementation, execution and operations and maintenance services in relation to the InvIT Assets ("**PIMA**"), the key terms of which are provided below:

Scope of Services

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 InvIT 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.

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:

(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.

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, subject to approval of the Unitholders each year. The Auditors have audited the Special Purpose Combined Financial Statements and have examined the Projections of Revenue from Operations and Cash Flow from Operating Activities, and their reports in relation to such Special Purpose Combined Financial Statements and Projections of Revenue from Operations and Cash Flow from Operating Activities have been included in this Preliminary Placement 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 SPV, 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 Project SPV, and their report dated May 24, 2022 in relation to such valuation as on December 31, 2021, has been included in this Preliminary Placement 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 and 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.

(b) 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.

(c) Appoint an auditor from one of the Big 6 Firms for a period of not more than 5 (five) consecutive years provided that an auditor who is not an individual may be reappointed for a period of another 5 (five) years, subject to approval of the Unitholders in the annual meeting in accordance with the lnvIT Regulations.

(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 NHAI, from time to time, in accordance with applicable laws.

(v). Any change in the auditor of the Trust or Projects, 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 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, 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;

(c) 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

(d) 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 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;
(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;

(viii). 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;

(ix). the Valuer shall act with independence, objectivity and impartiality in performing the valuation;

(x). 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;

(xi). 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;

(xii). the Valuer shall before accepting any assignment, from any related party of the Trust, disclose to the Trust, by disclosing to the Investment Manager or the Trustee, any direct or indirect consideration which the Valuer may have in respect of such assignment;

(xiii). 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;

(xiv). the Valuer shall not make false, misleading or exaggerated claims in order to secure assignments;

(xv). the Valuer shall not provide misleading valuation, either by providing incorrect information or by withholding relevant information;

(xvi). the Valuer shall not accept an assignment which interferes with its ability to do fair valuation; and

(xvii). 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 SPV, as applicable and as specified in this section.

I. Investment Manager

Board of Directors

Composition of the Board of Directors of the Investment Manager

The board of directors of the Investment Manager shall adhere to the following:

(a). Not less than 50% of the board of directors of the Investment Manager shall comprise of independent directors and not directors or members of the governing board of the Investment Manager of another infrastructure investment trust registered under the InvIT Regulations. The independence of directors shall be determined in accordance with the Companies Act and other applicable laws; and

(b). Such other requirements as may be specified in the articles of association of the Investment Manager.

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 112.

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 directors of the Investment Manager may receive sitting fee for attending board meetings and meetings of the committees, in accordance with the Companies Act.

Committees of the board of directors

The committees of the board of directors of the Investment Manager shall be constituted, as required, in accordance with the Companies Act and other applicable law.

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 has adopted the Distribution Policy pursuant to a resolution of its board of directors dated June 7, 2022, in relation to Trust. For details of the Distribution Policy, please see the section entitled "*Distribution*" on page 178.

2. Code of Conduct (the "Code")

The Investment Manager has adopted the Code pursuant to a resolution of its board of directors 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 this 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 the resolution of its board of directors dated January 20, 2022. 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 aggregate consolidated borrowings and deferred payments, net of cash and cash equivalents of the Trust, and the SPVs shall, at all times, be in accordance with applicable law, and shall not exceed the limit as prescribed under applicable law (if any). However, the Investment Manager shall ensure, until the Trust is listed, the aggregate consolidated

borrowings and deferred payments of Trust, Holding Company(ies) and SPVs, net of cash and cash equivalents shall not exceed 75% of the value of the Trust assets, or such other percentage as may be prescribed under the InvIT Regulations and applicable law from time to time;

(b) the debt is availed at commercially reasonable terms as may be determined by the board of directors of the Investment Manager ("**Board**").

(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, 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 expected gains till the end of loan tenure from refinancing 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 CEO (as the case may be) shall take all actions necessary to obtain relevant approvals from any governmental agency or existing lenders within the desired timelines.

(iv). If the Board (either by itself or through a committee designated for such purpose) determines that the expected gains till the end of loan tenure from refinancing is less than the costs of such refinancing and thereby disapproves the debt refinancing proposal (including with modifications) then such refinancing proposal shall not be implemented.

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 Deed.

(ii). In case a foreign currency loan is availed, appropriate hedging mechanism would be undertaken, by the relevant borrower, in accordance with applicable law.

(iii). In addition to the above, any borrowing by the Asset 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 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 its board of directors resolution dated January 20, 2022. 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 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 applicable law, including the InvIT Regulations. The key terms of the Disclosure of Information Policy are set out below:

Deemed Material Information

(i). The following events and information shall be deemed to be material information and against which Trust shall not be required to apply the criteria for determining materiality of information (the "**Deemed Material Information**"):

(a) any information having bearing on the operation or performance of the Trust which includes but is not restricted to the following
- acquisition or disposal of any projects, directly or through any holding company or special purpose vehicle, value of which exceeds five per cent. of value of the Trust assets;
- additional borrowings, at the Trust, holding company or special purpose vehicle ("**SPV**") level that results in the aggregate consolidated borrowings of the Trust exceeding 75% of the value of assets of the Trust.
- additional issue of Units by the Trust i.e. any further issuance of units, rights issue, 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;
- financial results for each quarter, half-year or financial year, as the case may be, within such time as may be prescribed SEBI or under any Applicable Law; and
- any instance of non-compliance with the InvIT Regulations including any breach of limits specified under the InvIT Regulations.

(b) declaration or recommendation of annual distribution;
(c) proposal for buy back of units;
(d) proposal for listing on any stock exchange(s);
(e) changes in the sponsor, trustee, investment manager, project manager, auditors, valuer or compliance officer of the Trust;
(f) in case of resignation of the auditor, disclosure of detailed reasons for resignation of the auditor, as given by the said auditor;
(g) in case of resignation of an independent director of the investment manager, disclosure of (i) detailed reasons for the resignation as given by the said director; and (ii) disclosure of a confirmation provided by such independent director that there are no other material reasons other than those provided;
(h) any material amendment to the Indenture of Trust or Investment Management Agreement;
(i) entering into any material agreement not in the ordinary course of business and any amendments to such material agreements;
(j) fraud or defaults etc. by any of the parties to the Trust; and
(k) any change in investment strategy or any change in the management fee of the Trust along with the reasons for the same.

(ii). All related party transactions of the Trust shall be disclosed to the Unitholders periodically in accordance with the InvIT Regulations.

(iii). With respect to any related party transaction, details of any fees or commissions received or to be received by such related party(ies) shall be adequately disclosed to the Unitholders.

(iv). Valuation reports received by the Investment Manager shall be submitted by the Investment Manager to the Unitholders within 15 days from the receipt of such valuation reports.

(v). The Investment Manager shall submit an annual report to the Trustee and the Unitholders electronically or by physical copies within three months from the end of the financial year.

(vi). The Investment Manager shall submit a half-yearly report to the Trustee and the Unitholders within 45 days from the end of half year ending September 30.

(vii). 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). Any information concerning the Trust is considered material to the business and affairs of a Trust if: (i) it results in, or would reasonably be expected to result in a significant change in the value of units of the Trust; or (ii) if there is a substantial likelihood that a reasonable investor would consider it important in determining whether to buy, sell or hold, or engage in other transactions concerning the Units; or (iii) the investor would consider important in making an investment decision.

(ii). Under the InvIT Regulations, other than the Deemed Material Information, the Trust is required to disclose any material issue that, in the opinion of the Investment Manager or Trustee, needs to be disclosed to the Unitholders. 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 already available with the Unitholders; or
(b) the omission of an event or information is likely to result in significant market reaction if the said omission came to light at a later date;
(c) in case where the criteria specified in sub clause (a) and (b) above are not applicable, an event or information may be treated as being material if it has a bearing of 20 per cent. of value of the Trust assets;
(d) any event or information having a significant risk to the reputation of the Trust; or
(e) any other event or information which, in the opinion of the Investment Manager or the Trustee, 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 its board of directors resolution dated January 20, 2022. 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 133.

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 its board of directors resolution dated January 20, 2022. The key terms of the Future Acquisition Policy, include the following:

(i). The Investment Manager shall identify potential new eligible infrastructure projects ("**Future Projects**") jointly with the Sponsor other than in respect of such transactions where the Sponsor is the seller of such eligible infrastructure asset, for investment by the Trust in accordance with the InvIT Regulations. If the eligible infrastructure projects do not meet the criteria laid down below

(Criteria for Future Projects), approval of the Unitholders shall be taken in accordance with applicable law or the Investment Management Agreement.

(ii). Process for acquisition by the Trust: It shall be the endeavour of the Investment Manager that it shall follow the process below for the acquisition of the assets by the Trust:

(a) *Appointment of agents:* To evaluate the Future Projects, the Investment Manager in consultation with the Sponsor other than in respect of such transactions where the Sponsor is the seller of such eligible infrastructure asset may appoint agents including investment banker, legal counsel, and diligence consultants and any other consultants, to help the Investment Manager evaluate the Future Project.

(b) *Non-Binding offer by the Investment Manager:* The board of directors of the Investment Manager, jointly with the Sponsor other than in respect of such transactions where the Sponsor is the seller of such eligible infrastructure asset, may give a non-binding offer ("**NBO**") to the seller(s) to acquire a Future Project. In case such an NBO is accepted by the seller(s), 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.
- Legal diligence to ascertain all potential liabilities relating to ongoing or proposed claims, counter-claims, litigations or any related issue that could impact cash flows of the project.
- Environment and social 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 made by the Investment Manager on behalf of the Trust to the seller(s) for acquiring a Future Project, shall be made by the Investment Manager Board, post receiving approval of the Unitholders (i) as per the Investment Management Agreement, if the parameters provided in the Future Acquisition Policy are not met or; (ii) as may be required under the InvIT Regulations.

(d) *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 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 shall 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.

Criteria for Future Projects

The Future Project shall necessarily have:

(i). The Eligible Asset 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 Eligible Asset, 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 be 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, InvIT Documents (as defined in the Future Acquisition Policy) and applicable law.

7. Nomination and Remuneration Policy (the "NRC Policy")

The NRC Policy sets out the guidelines regarding the nomination, remuneration and removal of directors, key managerial personnel, senior management and employees of the Investment Manager, the identified SPVs, the Trust and the entities controlled by the Investment Manager and/or Trust, including the other SPVs (if any) (the "**Manager Group Members**"). The Investment Manager has adopted the NRC Policy pursuant to its board of directors resolution dated January 20, 2022. The key terms of the NRC Policy, includes the following:

Appointment

(i). The Investment Manager shall have the right to require any person nominated by it to be appointed as a director and/or observer on the board of directors of any SPV in accordance with the InvIT Regulations.

(ii). The board of directors of the Manager Group Members, as applicable, shall have the required number of Independent Directors in terms of applicable laws including the Companies Act and the InvIT Regulations.

(iii). The board of directors of Manager Group Members, as applicable, are expected to possess the required expertise, skill and experience to effectively manage and direct the Manager Group Members to attain its organizational and business goals. They are expected to be persons with vision, leadership qualities, and proven competence and integrity.

(iv). Each member of the board of directors of the Manager Group Members, as applicable, is expected to ensure that his/her personal interest does not run in conflict with any of the Manager Group Member's interests. Moreover, each director is expected to use his/her professional judgment to maintain both the substance and appearance of professionalism and objectivity. Each member of the board of directors of the Manager Group Members, as applicable, is expected to ensure that he/she acts in good faith and complies with all obligations and responsibilities imposed upon them in accordance with the Companies Act and the InvIT Regulations.

(v). The appointment of any Whole-Time Director/KMP/Senior Management shall also be governed by the prevailing employment policies of the Investment Manager.

(vi). The Directors, KMP and Senior Management shall retire as per the applicable provisions of the Companies Act and the prevailing policy of the Investment Manager. Once the retirement age is attained, the relevant Manager Group Member will have the discretion to retain the KMP, Senior Management in the same position/ remuneration or revised position/ remuneration, along with any terms & conditions as may be decided by the Board, for the benefit of the Investment Manager or the relevant Manager Group Member.

(vii). Due to reasons for any disqualification mentioned in the Companies Act or under any other applicable act, rules and regulations thereunder or for such other compelling reasons, the Board

may consider, removal of an Independent Director, KMP or Senior Management Personnel subject to the provisions and compliance to the Companies Act, rules and regulations and applicable policies of the Investment Manager.

Removal

Due to reasons for any disqualification mentioned in the Companies Act or any other applicable laws, or any other reasonable ground, the Board of Directors of the respective Manager Group Member may consider removal of a director, key managerial personnel or senior management personnel subject to applicable laws.

Remuneration

The annual performance and remuneration review of the Director(s), KMP(s), Senior Management and employees of the Manager Group Members will be done once every year.

The review of remuneration will be undertaken on the basis of the following criteria:

- Performance of the employee;
- Performance of the team to which such employee belongs;
- Overall performance of the Manager Group Member; and
- Prevailing business environment and requirement of manpower for future projects.

Additional terms applicable to the Investment Manager

*Committees of the Board of directors of the Investment Manager ("**Board**"):* The Board shall constitute such committees of the Board as are required to be constituted by the Investment Manager under applicable laws.

Appointment of Key Managerial Personnel: (i) The Board shall appoint and designate such key managerial personnel as are required under the laws applicable to the Investment Manager; and (ii) The key managerial personnel shall hold office at the pleasure of the Board.

II. Project SPV

Representatives on the Board of Directors of the Project SPV

The Investment Manager, in consultation with the Trustee, has appointed majority of the board of directors of the Project SPV.

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 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 Issue and the Units.

References to "we", "us" and "our" are to the Trust and its subsidiary, Project SPV, 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 GDP between fiscals 2005 and 2012. Based on this, India's GDP increased at an eight-year CAGR of 6.6% to Rs 146 trillion in fiscal 2020 from Rs 87 trillion in fiscal 2012.

Fiscal 2021 has been a challenging year for the Indian economy, which was already experiencing a slowdown beforethe pandemic struck. GDP contracted 8% (in real terms) last fiscal, after growing 4.0% in fiscal 2020. At Rs 134 billion in fiscal 2021, India's GDP (in absolute terms) went even below the fiscal 2019 level of Rs 140.0 billion

After contracting in the first half because of the Covid-19 pandemic, 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 as a wholein fiscal 2021, agriculture and allied activities, and electricity, gas, water supply and other utility services were the outliers, logging positive growth. On the other hand, contact-intensive trade, hotels and transport sectors, and services related to broadcasting were hit the most and continued to shrink 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

India's per capita income, a broad indicator of living standards, rose from Rs 63,462 in fiscal 2012 to Rs 94,556 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 fairly stable at ~1% CAGR. However per capita income declined in fiscal 2021 owing to economic impact of Covid-19, per capita income declined by 9.1% on-year in fiscal 2021.

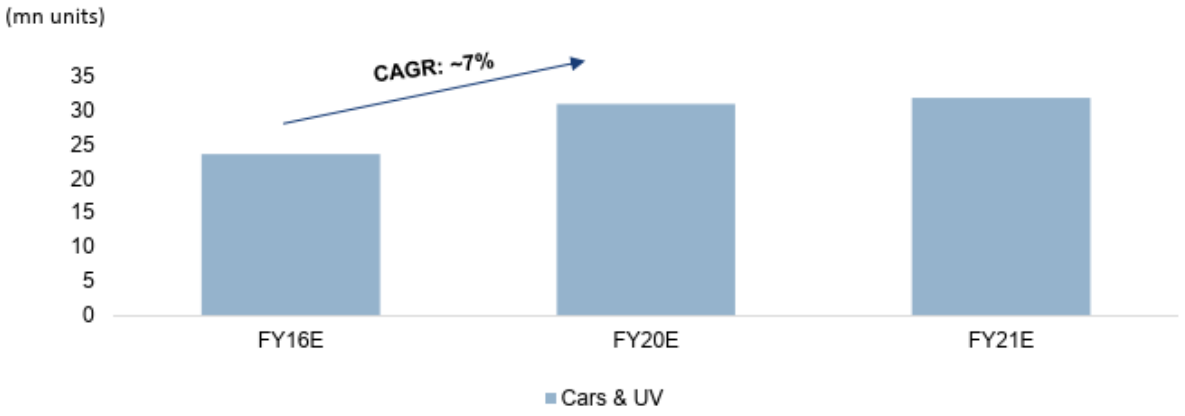
	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20RE	FY21AE
Per capita net national income (Rs) (constant prices)	63,462	65,538	68,572	72,805	77,659	82,931	87,828	92,241	94,566	86,659
On-year growth (%)	2.1	3.3	4.6	6.2	6.7	6.8	5.9	5.0	2.5	-8.4

RE: Revised estimates; PE: Provisional estimates
Source: Second Advance Estimates of Annual National Income, 2020-21, CSO, MoSPI, CRISIL Research

Growth in vehicle population in the country

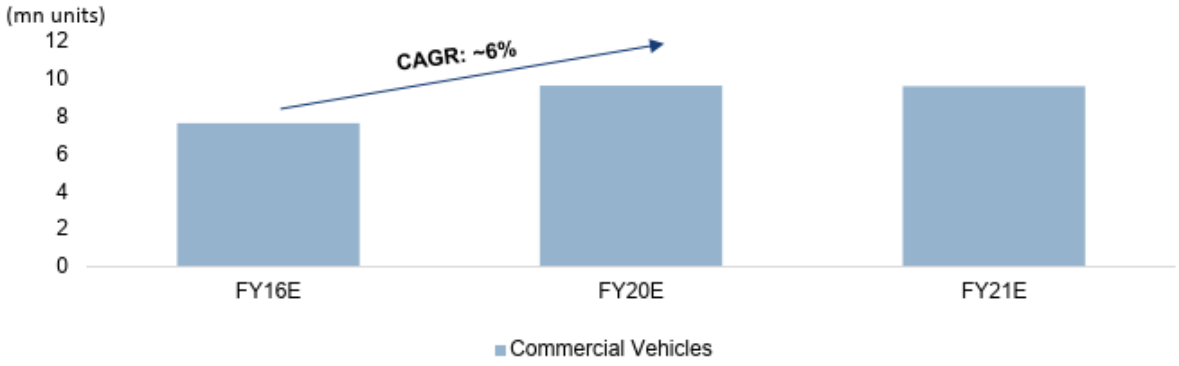
Population of cars and utility vehicles increased at 7.0% CAGR and commercial vehicles (CVs) at ~6% CAGR from fiscals 2016-20

Growth in passenger vehicles population (fiscal 2016-20)



E: Estimated
Source: CRISIL Research

Growth in freight vehicles population (fiscal 2016-20)



E: Estimated
Source: CRISIL Research

Road network in India

India has the second-largest road network in the world, spanning 6.2 million km. Road transportation, the most frequently used mode of transportation in India, accounts for about 86% of passenger traffic and close to 67% of freight traffic. Although Indian national highways span nearly 136,440 km, constituting just 2% of road length, they accounted for about 40% of total road traffic in fiscal 2021. The secondary system of roads comprise state roads and major district roads, which accounted for the remaining 60% of traffic and 98% of road length.

Road network in India in fiscal 2021

Road network	Length ('000km)	Percentage of total - length	Percentage of total - traffic	Connectivity to
National highways	136.4	~2%	40%	Union capital, state capitals, major ports, foreign highways
State highways	176.8	~3%	60%	Major centres within the states, national highways
Other roads	5902.5	95%		Major and other district roads, ruralroads - production centres, markets ,highways, railway stations

Source: MoRTH Annual Report 2020-21, CRISIL Research

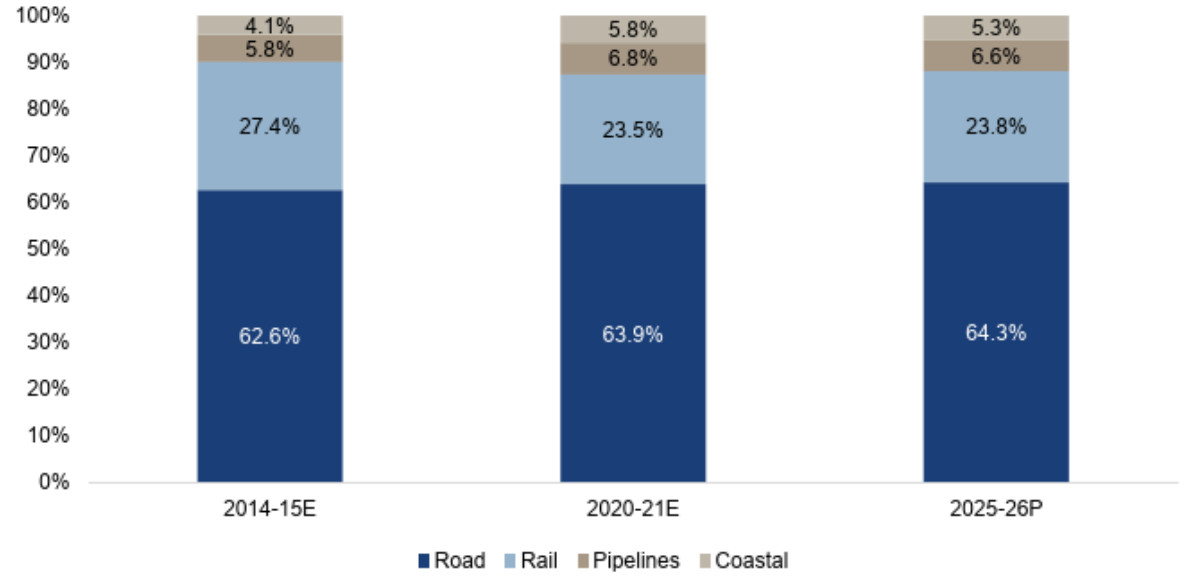
Break-down of road length across different regions (in KMs)

KM	FY15	FY16	FY17	FY18	FY19	FY20	FY21
National highways	97,991	101,011	114,158	126,350	132,500	132,995	136,440
State highways	167,109	176,166	175,036	186,908	186,528	194,900	176,818
Other roads	5,207,044	5,326,116	5,608,477	5,902,539	6,067,269	6,165,660	5,902,539
Total	54,72,144	56,03,293	58,97,671	62,15,797	63,86,297	64,93,555	6,215,797

Source: MoRTH Annual Report 2020-21, CRISIL Research

Roads currently is estimated to have a share of ~64% in overall freight movement as compared to the ~42% of rail mode of transport. CRISIL Research expects growth in road freight traffic to increase at a compounded annual growth rate (CAGR) of 6-8% in BTKM terms between fiscals 2021 and 2026, on a low base.

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



E: Estimated; P: Projected
Source: CRISIL Research

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 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 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 buildsroad, undertakes O&M and collects toll	Concessionaire	Concessionaire	Concessionaire	No	Toll	Around 20-25 years for the NHAI**	Highest revenuesharing bid / highest premium
BOT-annuity	Private party buildsroad, 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	Lowest annuity
BOT-HAM	Private party builds road, undertakes O&M. Gets 40% of payment during construction and 60% as annuity	Concessionaire	Concessionaire	Authority	40% during construction and 60% as semi-annual annuity, net of toll collected	Construction grant plus annuity payments	Around 15 years of operations	Lowest project cost plus O&M cost
EPC	Private party builds road, money is spent by the government	Concessionaire	Authority	Authority	Yes	Contract amount	Not required	Lowest tariff requested
OMT	Private party collects toll and undertakes O&M	No development except in case of paved shoulders	Concessionaire	Concessionaire	No	Toll	Around nine years for NHAI projects	Highest % of toll revenues 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 oneyear for NHAI projects	Highest revenue-sharing bid

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
TOT	Private party pays the estimated toll upfront to the authority, undertakes O&M and collects the toll during concession period	Authority (in case upgradation of lanes is taken up during the concession period)	Concessionaire	Concessionaire	Yes	Toll	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*
Source: CRISIL Research, NHAI

Key transactions in road sector

Recent private equity transactions

Date	Target	Investor	Transaction	Target Company details
Feb-21	Sadbhav Infrastructure Projects Ltd	Allianz Global Investors and joined by AMP Capital	To raise Rs 7 billion (USD 96 million) through NCD.	Developer and operator of highways, road and related projects. Capital raising part of a larger funding exercise to help the company repay debt and fund ongoing hybrid-annuity road assets.
Jan-21	Debt-ridden Chennai Elevated Tollway Ltd	JC Flowers Asset Reconstruction Company (JCFARC)	Acquire more than half of the debt of a stressed road developer at a discount of over 80%	The debt has been picked up from State Bank of India (SBI), Central Bank of India, Bank of Baroda and Bank of Maharashtra.
Dec-20	Chenani Nashri Tunnelway Ltd Asset - road tunnel from Infrastructure Leasing & Financial Services Ltd	Cube Highways	Rs 39.0 billion (USD 528 million)	
Oct-20	Road assets	NIIF		In October 2020, the National Investment and Infrastructure Fund (NIIF) made progress towards integrating its road and highway portfolio. The NIIF 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, assisted by a team of established professionals with diverse domain expertise in the transport field.
Sept-20	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 and Infrastructure Pte. Ltd has finally completed a transaction to acquire a road project from a unit of Hindustan Construction Company Ltd, two years after first signing the deal.

Source: CRISIL Research

Recent key asset sales

Seller	Asset	Type	Project status	Date of Agreement	% stake sold	Buyer	Selling Price (Rs. Mn)
Navayuga Road Projects Private Limited	Navayuga Dhola Infra Projects Limited & Navayuga Dibang Infra Projects Private Limited	BOT	NA	June, 2020	NA	Sekura Roads	11,121 ($ 150 million)
IL&FS Transportation Network Limited	Jorbat Shillong Expressway Limited (JSEL)	BOT	NA	Dec, 2020	100%	Sekura Roads	NA
Bharat Road Network Ltd (BRNL)	Shree Jagannath Expressway	BOT	NA	Jan, 2021	100%	Caisse de dépôt et placement du Québec (CDPQ)	18,000 - 20,000
Lanco Infrastructure	Neelamangala-Devihalli highway	NA	NA	Jan,2021	100%	Cube Highways	NA
Reliance Infrastructure Limited	DA Toll Road Private Limited	NA	NA	Jan, 2021	100%	Cube Highways	36,000
KNR Construction	KNR Shakarampet Projects	HAM	Under Construction	Aug, 2019	51%	Cube Highways	959
KNR Construction	KNR Tirumanla Infra	HAM	Under Construction	Feb, 2019	51%	Cube Highways	1,521
KNR Construction	KNR Srirangam Infra	HAM	Under Construction	Jan, 2019	51%	Cube Highways	736
HCC	Farakka- Raiganj Highways Ltd & Baharampore Farakka Highways	BOT	Completed	Oct, 2019	100%	Cube Highways	3,720
Ramky Infrastructure	Narketpalli Addanki Medarametala	BOT	Completed	Aug, 2018	100%	Cube Highways	33,000
Dilip Buildcon	24 assets	18 BOT & 6 HAM	14 operational and 4 under construction BOT + 6 HAM under construction projects	Aug, 2017	NA	Shrem Group	16,000

Note:
1 USD = 74.14 INR
The selling price represents enterprise value which includes debt
Source: CRISIL Research

Factors impacting toll growth

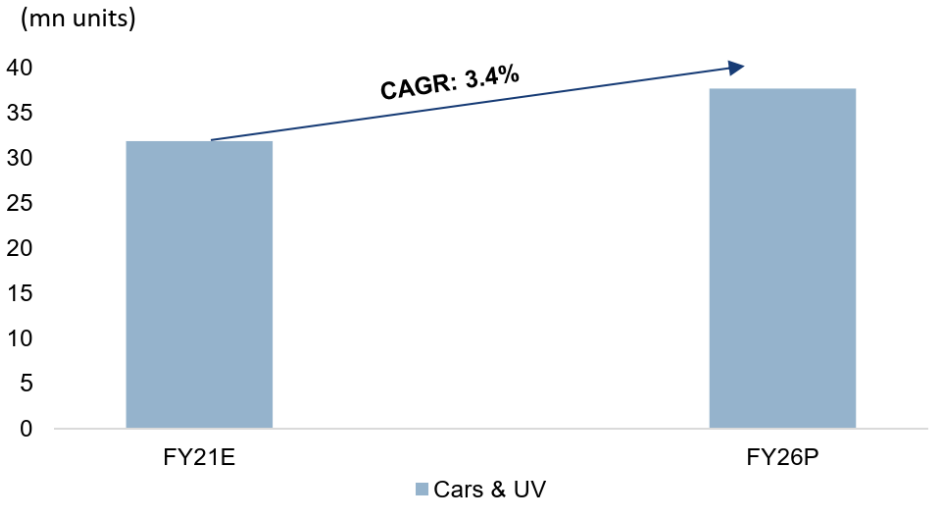
Covid-19 a short term issue; long term toll collection growth factors intact

Toll collections in first two months of fiscal 2021 were impacted due to suspension of toll collection till 19th April by NHAI and nation-wide lockdown announced by the government. Later on the traffic has rebounding sharply supported by both sharp resumption in economic activity and people using 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 passenger vehicle population and commercial vehicle population, strong execution of construction of national highways and better compliance management with ETC.

Robust growth in population of PVs is expected

We expect robust demand for cars and UVs. India's car market is highly underpenetrated compared with most developed economies and some developing nations and demand for vehicles from shared mobility will also boost the segment. As of fiscal 2019, India had ~23 passenger vehicles per 1,000 people. This is significantly lower than both developed nations and even other nations in the BRIC block (Brazil, Russia, and China) when compared to GDP per capita.

Outlook on passenger vehicles population



E: Estimated, P: Projected
Source: CRISIL Research

CV industry witnessed sequential recovery post decline in Q1 FY21

COVID-19 outbreak led to nationwide lockdown across the country which hampered economic activity in Q1 FY21. Supply chain constraints and labour availability issues hampered OEM's attempt to build up inventory at dealer end in the first quarter. OEMs also refrained from pushing inventory in a low demand scenario resulting in ~85% on-year decline in CV segment.

LCVs, which largely cater to movement of agricultural produce, e-retail, pharmaceuticals and consumer staples, showed some resilience in Q2FY21 as it witnessed a lower ~3% on-year decline vis-a-vis ~43% on-year decline in MHCVs. In the same quarter, MHCVs continued to be impacted by lower freight demand and over capacity due to revised axle norm. Buses, too, suffered owing to the need for social distancing and fell by ~78% on-year in Q2. The CV sales have recovered sequentially in Q3 & Q4 FY21.

Demand for goods carrying medium & heavy commercial vehicle to lead in the next five years

MHCV sales are likely to rise by ~8-10% compound annual growth rate (CAGR), over a low base, from fiscal 2020 to 2025 (five-year CAGR), as compared to the previous five-year (FY15-20) fall in CAGR of ~1%. Moreover, tonnage addition is expected to improve in-line due to a better product mix (higher growth in MAV and T-Trailer demand despite a shift to lower tonnage vehicles due to axle norm). Long term growth to appear higher over a low base after a ~47% drop in sales in FY20. The five year growth will be despite an expected fall of ~26-28% in fiscal 2021 due to the COVID-19 outbreak.

Factors driving long-term MHCV sales will be the improving industrial activity in the country, steady agricultural output, and the government’s focus on infrastructure. However, volume growth will be limited due to efficiencies achieved from the goods and services tax (GST), better road infrastructure along with the commissioning of the dedicated freight corridor (DFC).

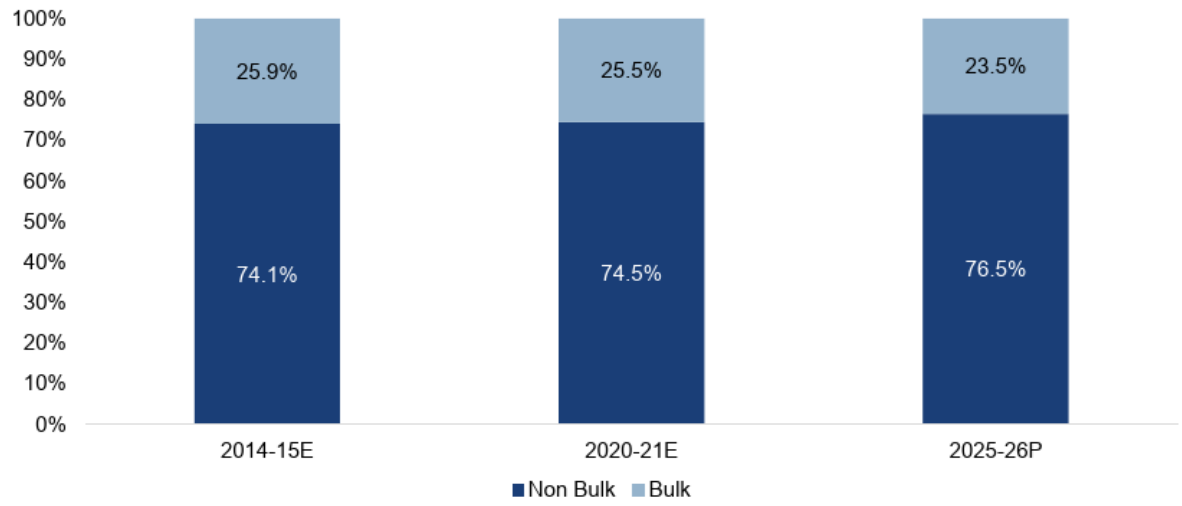
Roads remain the preferred mode for non-bulk transportation

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 Research expects the share of non-bulk commodities in the total road primary BTKM to increase to 76.5% by fiscal 2026 from 74.5% in fiscal 2021.

Roads predominantly transfer non-bulk freight



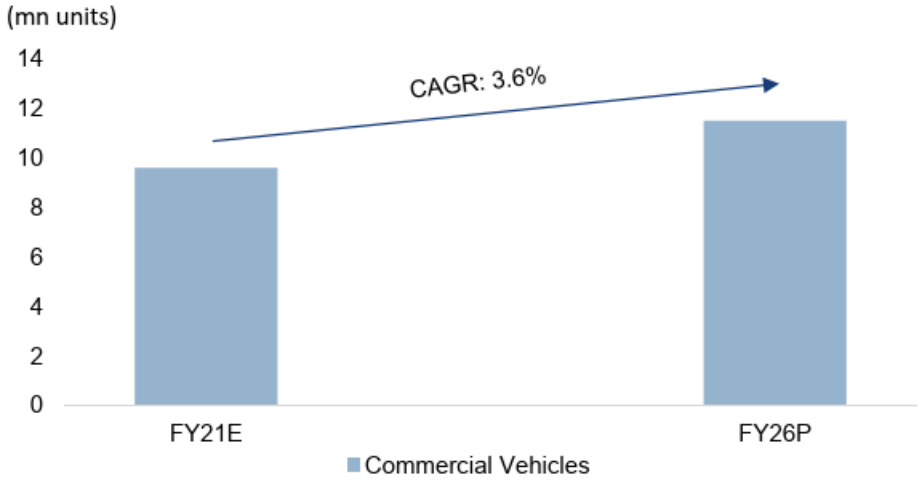
E: Estimated; P: Projected
Source: CRISIL Research

Efficiency gains, lower utilisation levels and recovery in manufacturing sector would impact CV population growth in next five fiscals

Manufacturing and construction sectors are the prime factors driving commercial vehicle demand. Both the sectors are expected to perform positively with revival in overall macroeconomic scenario. Transportation industry enjoyed an increase in available capacity due to axle load norms published in 2018, but this acted as a negative for CV industry as the sales declined due to increased capacity and lower utilisations. Also post implementation of GST, checkposts across the 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 Research expects CV population to grow at ~3.6% over the next five fiscals. The commercial traffic growth is expected to grow at a faster pace than the CV population due to increased number of trip possible per vehicle due to increased efficiency.

Outlook on freight vehicles population



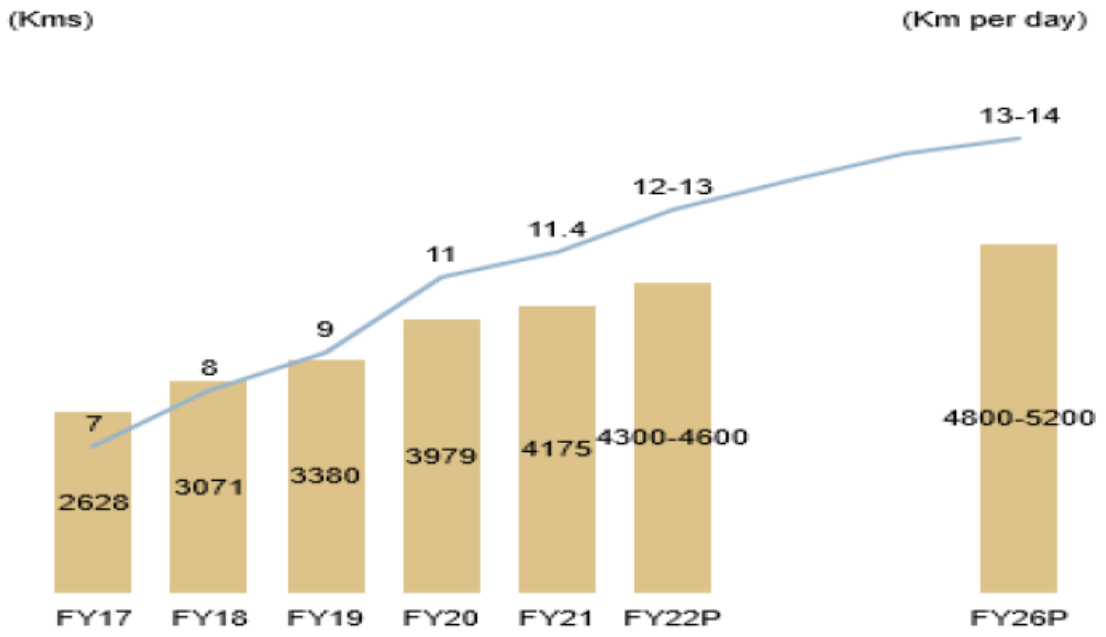
E: Expected; P: Projected
Source: CRISIL Research

National Highway construction is also rising steadily with focus on swifter execution

Despite the lockdowns and labour-related issues, developers made up for lost time and construction at NHAI projects rose 5% on-year to 4,175 kms in fiscal 2021. Given the acceleration in project awards, sharper focus on resolving land acquisition issues, and the 'Atmanirbhar Bharat' initiatives to ease liquidity (monthly milestone payments, release of retention money, reduction in performance security & extension of 3-6 months in milestones & SCODs) for EPC road players, the pace of construction should continue to increase steadily

As COVID-19 hit India, and the first lockdown was imposed on March 25th 2020, road construction activities came to a standstill. While some resumption was allowed from April 20th itself, normalcy returned post monsoons. Shortage of labour and mobilization of raw materials were some of the biggest challenges developers were facing during the lockdown amidst the fear of the virus spread. By the time the nationwide lockdown was announced, highway construction under the NHAI in fiscal 2020 was already at 3,979 km, 18% higher than the 3,380 km constructed in fiscal 2019. A shift in focus to swifter execution has paid off for NHAI. CRISIL Research expects fiscal 2022 NHAI construction to be in the range of 4300-4600 kms and rise steadily to ~14 km per day by fiscal 2025.

NHAI's pace of construction rising steadily, despite pandemic saw 5% growth in FY21



Source: NHAI, CRISIL Research

Better compliance and blocking leakages to help boost toll collection growth

In November 2019, MoRTH directed NHAI that 100% of toll lanes on national highways must have electronic toll collection (ETC). In December, the ministry relaxed the rule temporarily to have 75% of the lanes to have ETC. The government has shown intent to move towards complete electronic toll collection in the near future. Higher compliance of rules and regulations, blocking of leakages and reduction in exemptions at the toll plaza through the electronic toll collection would help toll collections be more robust. CRISIL Research expects a positive impact in toll collections due to implementation of ETC.

Improvement in macroeconomic scenario to aid traffic growth

Growth in coming year is expected to be aided by a weak base and a mild support from the budget to consumption. Forecasts assumes a normal monsoon and Brent crude prices at $60-$65 per barrel. Monetary policy would provide some support to growth, mainly through improved transmission. However, a recovery should be gradual, with the limited ability of fiscal and monetary policies, and risk aversion in the financial sector.

The base case of 9.5% GDP growth assumes that Covid-19 restrictions will continue and mobility will remain affected in some form or other, at least till August. The pace of economic recovery will also be a function of what the pace of vaccination is in the coming months. We find that countries with over 40% of their population vaccinated are seeing a faster and more broad-based economic recovery. The government plans to vaccinate India's entire adult population (68% of total population) by this December – a tall order even if there are sufficient vaccines available. CRISIL's base case is 70% of the adult population vaccinated by December.

A third wave would pose a significant downside risk to the growth forecast, as would a slower-than-anticipated pace of vaccination. In such a pessimistic case, CRISIL sees GDP growing at 8% in fiscal 2022.

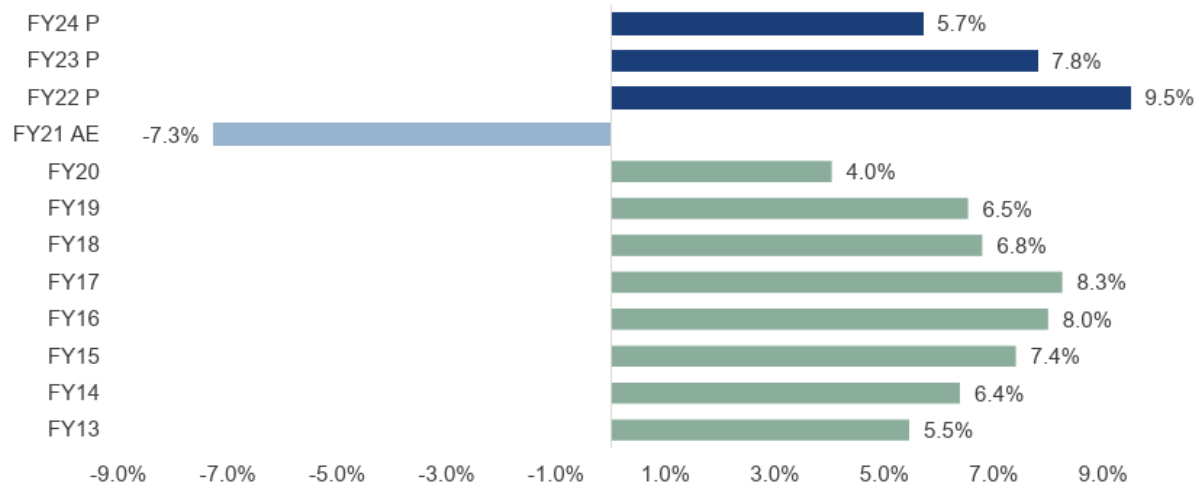
GDP growth in FY22 (y-o-y,%)

Source: S&P Global Ratings, CRISIL Research, June 2021

India to surpass global GDP growth in next three fiscals

CRISIL sees India's GDP growth rebounding to 9.5% this fiscal due to a very weak base, flattening of the Covid-19 curve, rollout of vaccinations, investment-focused government spending, and benefit from the 'rising global tide lifts all boats' effect. Yet, the economy is expected to reach pre-pandemic levels only by the second quarter of this fiscal. Services will take longer to recover than manufacturing. Beyond fiscal 2022, India is seen growing faster than the world. Over fiscals 2023-25, growth is seen averaging at ~6.0% annually.

Trend in real GDP growth (% on-year)



AE: Advance estimates; P: Projected by CRISIL Research; GDP calls updated as of June 2021;
Source: Provisional estimates of national income 2020-21, CSO, MoSPI, CRISIL Research

Outlook on roads sector

Despite COVID-19 induced lockdowns, investments in National Highways have sustained the sector

Last fiscal, the national highways sector thumbed nose at Covid-19 and delivered a stellar performance, riding on higher project awards, record construction, and traffic that surpassed pre-pandemic levels once the lockdowns were lifted in the second half. Though the second wave of infections has dampened this momentum, it may not have a material bearing on growth this fiscal. EPC contractors now have learnings from the first wave and scale up can happen after the economy opens up again, as seen in the last fiscal.

CRISIL Research estimates that National Highway capex grew by 30-35% in fiscal 2021 due to higher construction and the momentum is expected to continue in fiscal 2022 on the back of higher awards.

NHAI awarding momentum to sustain

In order to revive the roads sector, amidst the pandemic-led disruption – NHAI awarded 4,818 kms in fiscal 2021 - a three fiscal high. 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. Favourable changes in the BOT and HAM agreements, and relaxation of bidder eligibility criteria indicated a clear policy shift last fiscal to improve private-sector participation.

The trend is expected to continue in fiscal 2022 with awards to be in the range of 4400-4800 kms and over the medium term at 4000-4500 km per year, as developers will be able to free up capital through stake sales supported by the strong pipeline of projects under Bharatmala and the NIP.

Outlook of toll collection and remittance on national highways

Toll collection and remittance to grow at 9-9.5% on a like-to-like basis and to grow at 15.5-16% considering new road additions and subsequent tolling on them. CRISIL Research expects total toll collection and remittance revenue to reach Rs 640-655 bn in the year fiscal 2026 considering both the existing tolled highways and the additional highways to be executed over the subsequent years. 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.

BUSINESS

This section should be read in conjunction with, and is qualified in its entirety by, the sections entitled "Risk Factors", "Special Purpose Combined 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 Initial Portfolio Asset of the Trust" on pages 55, 258 and 181, respectively, and the Technical Report and Traffic Report included as "Annexure B" and "Annexure C", as well as all other information contained in this Preliminary Placement Memorandum.

References to "we", "us" and "our" are to the Trust and its subsidiary, the Project SPV, 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, 2021, CDPQ held approximately CAD 419.80 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 around 20 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 45.30 billion (as of December 31, 2021) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has investments in over 16 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.

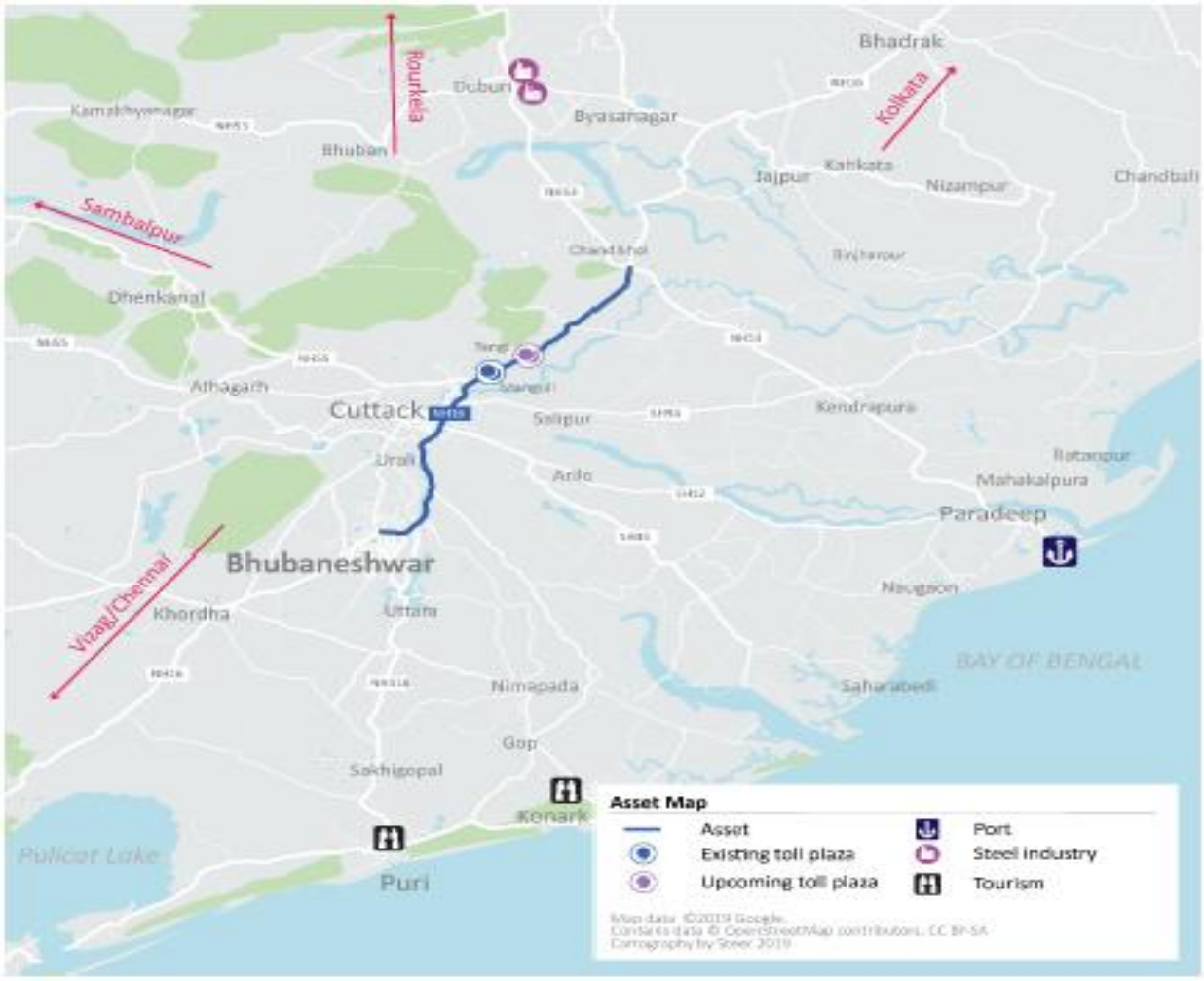
CDPQ has extensive global experience of investing in the transportation sector in developed markets and targeted developing markets, including the REM - public transit project in Montréal, Canada, the Conmex toll road in Mexico, Multisectoral (including toll roads) Infrastructure Platform with CKD IM in Mexico and a multisectoral (including toll roads) Infrastructure Platform in Colombia.

India is one of the key growth markets of focus for CDPQ. CDPQ, as of December 31, 2021 now has an exposure of approximately CAD 7.50 billion across different asset classes, including infrastructure, fixed income, private equity, public equity and real estate. CDPQ typically works in partnership with local firms to create institutional platforms for the long term. Furthermore, CDPQ has made certain other strategic investments in sovereign or quasi-sovereign bonds, investments in entities focusing on the transportation, logistics and financial services sectors.

The Project SPV 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.

The operating revenue of the Project SPV as at December 31, 2021 and for the Fiscals 2021, 2020 and 2019 was ₹ 15,653.62 lakhs,₹ 21,064.35 lakhs, ₹ 19,844.50 lakhs, and ₹ 20,449.26 lakhs, respectively. Further, the operating revenue for the Fiscal 2022 was ₹ 20,153.51 lakhs.

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



**Map not drawn to scale*

The Investment Manager will also have the flexibility to acquire new projects through acquisitions from third parties.

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 prior to acquisition by the Sponsor, 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 initially incorporated on January 28, 2010 and is 100% owned by the Sponsor and CDPQ Infrastructures Asia 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 98.

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 Project

The Project is located in a corridor that has a mix of high commercial and passenger vehicular traffic, located in a part of India with high gross state domestic product growth. The principal features of the Project are as follows:

The Project (also referred to as the "**Asset**") forms a part of the National Highway 16 which is called as the 'Golden Quadrilateral'. The Project is a key connector of Chennai to Kolkata corridor. The Asset is a National Highway in the eastern state of Odisha along NH16. Being part of the Golden Quadrilateral, the Asset becomes a key connector of Chennai-Kolkata corridor. At the same time, the east-west highway of NH55 connects to the Asset just south of the toll plaza. Therefore, the traffic moving between Mumbai and Kolkata is also captured on the Asset. The Asset 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, about 90 kms south of the Asset, 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 comes from the state of Odisha, where SJEPL asset is located. Duburi/Kalinganagar region, about 70km north of the Asset, is rich in iron ore deposits and has several steel industries, like Tata steel, VISA steel and Jindal stainless limited. This Asset is surrounded by industrial clusters around Talcher, Jajpur and Duburi/Kalinganagar. Its connections with Paradip port, one of the largest bulk ports of India, also make it an asset of strategic importance. Paradip port is one of the major ports of India, and the only major port in the state of Odisha. The port is about 100km away from the Asset and significant port-related movement is observed on the Asset *(Source: Traffic Report)*. For further details, please see the *"Traffic Report"* in Annexure C.

The Investment Manager believes that the Project caters to growth sectors and population densities that will utilise this Project 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

The Project SPV started collecting tolls in December 2011. From Fiscal 2019 to Fiscal 2020, toll collections by the Project SPV on the Project increased by 12.10 %, from ₹ 1,561.70 million to ₹ 1,750.68 million and 1.79 % from ₹ 1,750.68 million in Fiscal 2020 to ₹ 1,782.08 million in Fiscal 2021. Further, the Project SPV collected ₹ 1,292.91 million toll for the period ended December 31, 2021. One of the reasons for the increase in toll collections was increase in traffic volumes on the Project stretch over the relevant period. According to the Traffic Report, 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 initial portfolio assets of the Trust*" on page 181 and the *"Traffic Report"* in 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 around 20 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 45.30 billion (as of December 31, 2021) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has investments in over 16 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 initially incorporated on January 28, 2010 and is 100% owned by the Sponsor and CDPQ Infrastructures Asia Pte. Ltd.

For more details, please see the section entitled "*Parties to the Trust*" on page 98.

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 has 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 144.

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

The Trust will be managed by qualified personnel of the Investment Manager who have management and operational experience in the roads, infrastructure and highways sector with combined experience of over 100 years. 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 111. We believe that the experience and leadership of these teams will contribute to our growth and success and will position the Project SPV 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 diversify 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 SPV pursuant to the provisions of the Project Implementation and Management Agreement. For further details in respect of the Project Implementation and Management Agreement , please see the section entitled "*– Parties to the Trust – Key terms of the Project Implementation and Management Agreement*" on page 126.

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 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 acquisition strategy of the Trust.

The Trust (acting through the Investment Manager) has also submitted bids in the past, and may continue to do so for acquisition of assets. The Trust (acting through the Investment Manager (acting on behalf of the Trustee)) has also entered into (i) a share purchase agreement dated September 20, 2021, (ii) an earn out agreement dated September 20, 2021 and (iii) a claims management agreement dated September 20, 2021, with Durg Shivnath Expressways Private Limited ("**DSEPL**") and TRIL Roads Private Limited ("**TRIL**") for purposes of acquisition of 100% of the equity shares of DSEPL held by TRIL and its nominees subject to, amongst other things, the completion of the conditions precedent as set out in the agreements. DSEPL has undertaken the development, construction, maintenance, operation and tolling of Durg Bypass joining from Km 308.6 to Km 326.6 (approximately 18 km) of National Highway No. 6, in the state of Chhattisgarh under a build, operate and transfer toll basis in accordance with the (a) concession agreement dated November 5, 1997 entered into between the President of India (acting through the Ministry of Road, Transport and Highways (erstwhile Ministry of Surface Transport)), NHAI and SMS Limited (previously known as Shantikumar M. Sancheti Limited), and assigned in favour of DSEPL pursuant to an assignment agreement dated April 7, 1998 executed between SMS Limited, DSEPL and NHAI, (b) the project site license agreement dated March 25, 1998 between NHAI and SMS Limited, and (c) the supplementary agreement dated February 25, 2019 entered into between the DSEPL and NHAI.

Structure of the Trust

The Sponsor set up the Trust on December 23, 2019, 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 will acquire the initial portfolio asset which comprises the Project SPV consisting of the Project. The Trust will, subject to receiving the requisite approvals, acquire the Project through the acquisition of 100.00% of the issued and paid-up equity share capital of the Project SPV from third parties. Please see the section entitled "*Formation Transactions in relation to the Trust*" on page 23, for a graphical representation of the structure of the Trust

Brief description of the Project

The initial portfolio of the Trust comprises one Project that is operated and maintained by the Project SPV. The Project is a toll-based road infrastructure asset. In a toll-based project, after achieving the provisional certificate 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 Project is currently generating revenue and collecting tolls since the appointed date specified in the table below.

Kilometers	No. of lanes	State	Authority	Appointed Date	End of Concession Period	Residual Concession Period (in years) (As of December 31, 2021)	Toll Revenue for Fiscal 2021 (in ₹ million)
67	6	Odisha	NHAI	December 2011	December 2037	16 years and 6months	1,782.08

The Project

SJEPL Concession agreement

On August 6, 2010, the NHAI and the Project SPV entered into the concession agreement and supplementary agreements dated November 27, 2014, November 26, 2015, November 11, 2016 and November 14, 2018 (the

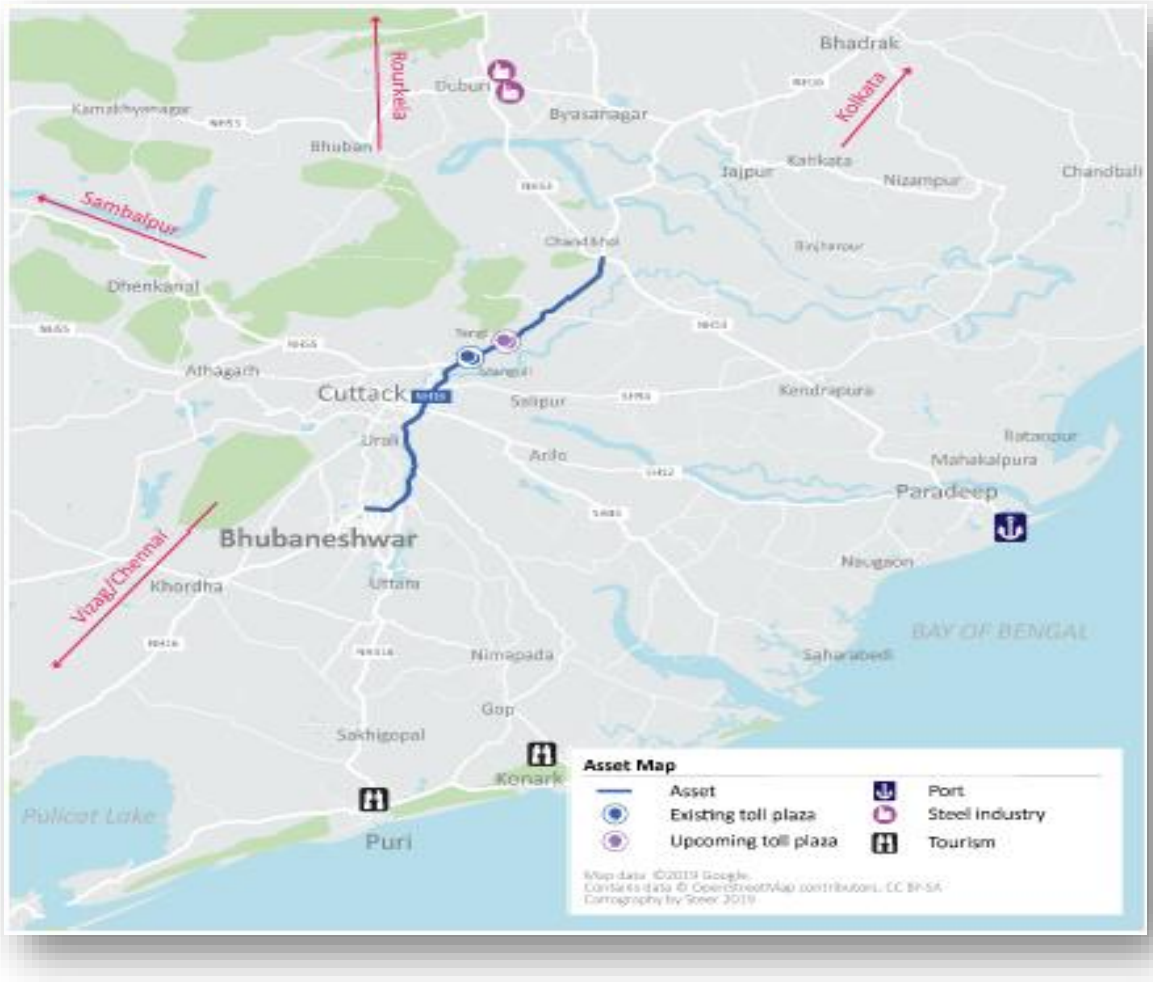
"**SJEPL Concession Agreement**"). The Project SPV was engaged, on a design, build, finance, operate and transfer basis, under the Concession Agreement for the six laning of stretches of the Chandikhole – Jagatpur – Bhubaneswar section of NH-5 in the State of Odisha.

The SJEPL Project commenced collection of tolls in December 2011. The SJEPL Concession Agreement was granted for 26 years. As consideration, the SJEPL Project has the sole and exclusive right to demand, collect and appropriate tolls payable by vehicles using the 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. The Project SPV pays the NHAI Re. 1.00 per year, as 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 164.

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 Report, 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 .

Traffic volume

The table below sets forth the AADT by category of vehicles for Fiscals 2021, 2020 and 2019:

	Fiscal		
	2021*	**2020**	**2019**
Car	8766	10661	10891
LCV	569	935	989
Two-axle trucks /Bus	2017	3081	2896
Three-axle trucks/ MAV	5790	5817	5205
OSV	1	2	2
AADT	**17144**	**20496**	**19983**

** FY21 daily traffic is estimated based on traffic till September 2020*
Note: For further details, please see 'Annexure C - Traffic Report -Table 3.1'.
Operation and maintenance

For details, please see the section entitled "*Summary of the Concession Agreements*" on page 164 and the "*Traffic Report*" in Annexure C

Capital structure

As of December 31, 2021, the equity invested was ₹ 1,478.70 million and debt outstanding to lenders, (including unsecured loans) was ₹ 11,956.87 million.

The TOT project

The Trust (acting through its Investment Manager) has recently won a bid, by way of a letter of award dated March 31, 2022 ("**Letter of Award**"), issued by NHAI, 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 on toll, operate and transfer model ("**TOT Bundle 7 Project**").

The key terms specified in the LOA in relation to the TOT Bundle 7 Project were as follows:

(i). Execution of the concession agreement within 30 days from the date of issue of LOA as specified in the request for proposal ("**RFP**");
(ii). Incorporation of an SPV ("**Incorporated SPV**") in accordance with the Companies Act, for entering into a concession agreement with NHAI and for performing all its obligations therein;
(iii). Furnishing a performance security by way of an irrevocable and unconditional bank guarantee with amounts as specified in the LOA, within 45 days from the date of signing of the concession agreement.

Post the receipt of LoA, the Trust incorporated a new SPV named NCR Eastern Peripheral Expressway Private Limited. Additionally, in accordance with the provisions of the RFP, a concession agreement was entered into between NHAI and NCREPE dated 6th May, 2022, for undertaking tolling, operation and maintenance, for the TOT Bundle 7 Project, by the NCREPE. The NCREPE Concession Agreement broadly includes the (i) scope of the project, (ii) obligations of NCREPE and NHAI, (iii) development and operations provisions, such as, performance security, O&M, right of way, traffic regulation etc, (iv) financial covenants, such as, concession fee, user fee and insurance (v) force majeure and termination related provisions and certain other miscellaneous provisions. As per the bid, NCREPE has to pay an amount of ₹ 62,670 million to NHAI against which NCREPE will receive the tolling rights on the project for a concession period of 20 years from the appointed date.

Environment, health and safety

The Project SPV is required to meet certain health, safety and environmental specifications and standards in the operation and maintenance of the Project and are subject to a number of laws and regulations relating to health, safety and environmental protection. The Project SPV is also required to adhere to various labour and workplace related laws and regulations in India. The Project SPV has policies and procedures in place to ensure that the operation and maintenance of the Project conform to existing health, safety and environmental regulatory standards and that adequate workmen's compensation, group medical insurance and personal accident insurance 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

The Project SPV maintains 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 the Project SPV against material damage, and debris removal. Further, the Project SPV also maintain insurance policies relating to any employees' compensation liability.

Employees

As of December 31, 2021, the Project SPV had 146 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 SPV is licensed to use the roads and the related infrastructure which constitute the concession assets and the Project SPV is 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 the summaries of the Concession Agreements. The descriptions and summaries of the Concession Agreements below is indicative, and it is not, nor does it purport to be full, complete or exhaustive descriptions and summaries. Certain terms used in this section have the meaning assigned to them in the Concession Agreements.

The Initial Portfolio Assets, 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 TOT SPV 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 – 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.

- During concession period: (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.

- On termination: (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-2 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 Consession 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 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 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 of the Trust

Particulars	Number of Units*
Units issued and outstanding prior to this Issue	Nil
Units issued and outstanding after this Issue	Up to [●]*

* *To be updated in the Placement Memorandum prior to filing with SEBI.*

Unitholders holding more than 5% of the Units

Sr. No.	Name of Unit Holders*	Pre-Issue		Post-Issue*	
		Number of Units	Percentage of holding (%)	Number of Units	Percentage of holding (%)
1.	Sponsor	Nil	Nil	Up to [●]	[●]
2.	[●]	[●]	[●]	[●]	[●]

**To be updated in the Placement Memorandum prior to filing with SEBI.*

Unitholding of the Sponsor, Investment Manager, Project Manager and Trustee

The Sponsor, shall be allotted [●] Units of the Trust aggregating to [●]% of the Units on a post-Issue basis.

The Trustee, Investment Manager and Project Manager do not hold any Units and shall not acquire any Units in this Issue.

Unitholding of the directors of the Investment Manager

As on the date of this Preliminary Placement Memorandum, none of the directors of the Investment Manager hold any Units or propose to hold any Units in the Trust.

Sponsor lock-in

In terms of the InvIT Regulations, the Sponsor shall hold at least 15% of the Units on a post-Issue basis ([●] Units), which shall be locked-in for a period of three years from the date of Allotment of the Units, subject to provisions of the InvIT Regulations. Further, unitholding of the Sponsor, exceeding 15% on a post-Issue basis, aggregating to [●] Units, if any, shall be locked-in for a period of not less than one year from the date of Allotment of the Units.

USE OF PROCEEDS

The proceeds of the Issue will be up to ₹ 9,100 million (the "**Issue Proceeds**").

The Issue Proceeds will be utilised towards the following objects:

- Acquisition of the 100% of the outstanding paid-up equity share capital of the Project SPV;
- Providing the Trust Loan to the Project SPV or infusing equity into the Project SPV which shall be utilized by the Project SPV towards repaying (in full or in part): (a) existing indebtedness of the Project SPV which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by the Project SPV; (b) existing liabilities of the Project SPV, as specified in the relevant utilisation request submitted by the Project SPV, including EPC liabilities, BoCW cess and royalty payments, major maintenance charge and adjustments for outstanding works; (c) the creation of reserves/ funding Project SPV for meeting the Project SPV payment obligations as contemplated in the Claims Benefit Assignment Agreement; and (d) any other purpose as may be agreed mutually in writing between the Trust and the Project SPV, subject to applicable laws and in accordance with the Shareholder Loan Agreement; and
- General purposes.

Requirements of Funds

The Issue Proceeds are proposed to be utilised in accordance with the details provided in the following table:

(In ₹ million)

S. No.	Particulars	Amount
(a)	Acquisition of the 100% of the outstanding paid-up equity share capital of the Project SPV	2,353
(b)	Providing the Trust Loan to the Project SPV or infusing equity into the Project SPV which shall be utilized by the Project SPV towards repaying (in full or in part): (a) existing indebtedness of the Project SPV which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by the Project SPV; (b) existing liabilities of the Project SPV, as specified in the relevant utilisation request submitted by the Project SPV, including EPC liabilities, BoCW cess and royalty payments, major maintenance charges and adjustments for outstanding works; (c) the creation of reserves/ funding Project SPV for meeting the Project SPV payment obligations as contemplated in the Claims Benefit Assignment Agreement; and (d) any other purpose as may be agreed mutually in writing between the Trust and the Project SPV, subject to applicable laws and in accordance with the Shareholder Loan Agreement	5,927
(c)	General purposes	820
Total		9,100

The Investment Manager believes that utilizing the Issue Proceeds towards the above objects will help reduce the outstanding indebtedness of the Trust on a consolidated basis and assist the Trust in maintaining a favourable debt-equity ratio. It will also help reduce the existing liabilities of the Project SPV. This will enable the Trust to raise further resources in the future to fund potential business development opportunities and plans to grow and expand its business in the future thereby enabling the Trust to meet its commitment towards distributions to Unitholders.

The fund requirements mentioned above, and the proposed deployment, are based on the estimates of the Investment Manager and have not been appraised by any bank, financial institution or any other external agency. The fund requirements may vary due to factors beyond the Investment Manager's control, such as market conditions, competitive environment, interest rate and exchange rate fluctuations. Consequently, the fund requirements are subject to revisions, in the future, at the discretion of the Investment Manager.

Details of Utilisation of the Proceeds

The details of utilisation of the Issue Proceeds are set forth herein below:

(a) Acquisition of 100% of the outstanding paid-up equity share capital of the Project SPV

The Trust proposes to utilize an aggregate amount of ₹ 2,353 million from the Issue Proceeds to acquire 100% of the outstanding paid-up equity share capital of the Project SPV pursuant to the Securities Purchase Agreement. Consequently, the Trust will hold 100% of the outstanding paid-up equity share capital of the Project SPV. For further details, please see the section entitled "*Formation Transactions in relation to the Trust*" on page 23.

(b) Providing the Trust Loan to the Project SPV or infusing equity into the Project SPV which shall be utilized by the Project SPV towards repaying (in full or in part): (a) existing indebtedness of the Project SPV which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by the Project SPV; (b) existing liabilities of the Project SPV, as specified in the relevant utilisation request submitted by the Project SPV, including EPC liabilities, BoCW cess and royalty payments, major maintenance charges, and adjustments for outstanding works;* (*c) the creation of reserves/ funding Project SPV for meeting the Project SPV payment obligations as contemplated in the Claims Benefit Assignment Agreement; and (d) any other purpose as may be agreed mutually in writing between the Trust and the Project SPV, subject to applicable laws and in accordance with the Shareholder Loan Agreement

The Trust proposes to utilize an aggregate amount of ₹ 5,927 million from the Issue Proceeds to provide the Trust Loan to the Project SPV or infusing equity into the Project SPV which shall be utilized towards by the Project SPV towards repaying (in full or in part): (a) existing indebtedness of the Project SPV which was availed of from its erstwhile and existing shareholders, as specified in the relevant utilisation request submitted by the Project SPV; (b) existing liabilities of the Project SPV, as specified in the relevant utilisation request submitted by the Project SPV, including EPC liabilities, BoCW cess and royalty payments, major maintenance charges, and adjustments for outstanding works; (c) the creation of reserves/ funding Project SPV for meeting the Project SPV payment obligations as contemplated in the Claims Benefit Assignment Agreement; and (d) any other purpose as may be agreed mutually in writing between the Trust and the Project SPV, subject to applicable laws and in accordance with the Shareholder Loan Agreement. The Trust (acting through the Trustee), the Investment Manager and the Project SPV have entered into the Shareholder Loan Agreement setting out the terms and conditions for grant of the Trust Loan. The Trust Loan is proposed to be utilized for repayment, in full or in part, of the Project SPV's borrowings or liabilities availed from erstwhile and existing shareholders as follows:

(In ₹ million)

S. No.	Lender	Amount outstanding
1.	SREI	1,534.89*
2.	SIL	91.12**
3.	SIDPL	884.55**
Total		**2,510.56**

** As of March 31, 2022*
*** As of June 4, 2022.*

For further details of the Project SPV's indebtedness, please see the section entitled "*Financial Indebtedness*" on page 175.

The repayment of term loans, in full or in part, availed by the Project SPV as set out above shall be based on various factors, including, (i) any conditions attached to the loans restricting our ability to repay the loans, in full or in part, and the time taken to fulfil any such requirements; (ii) provisions of any laws, rules, regulations and contracts governing such borrowings; and (iv) other commercial considerations, including, the interest rate on the loan facility, the amount of the loan outstanding and the remaining tenor of the loan. The aggregate amount to be utilised from the Issue Proceeds towards repayment of existing indebtedness of the Project SPV, in part or full, repayment of existing liabilities of the Project SPV, and for any other purposes, as may be mutually agreed between the Project SPV and the Trust, would not exceed ₹ 10 million.

(c) General Purposes

In terms of the InvIT Regulations, the Investment Manager shall, at its discretion, deploy the balance Net Proceeds aggregating ₹ 820.35 million towards general expenses for the operation of the Trust, subject to such utilization not exceeding 10% of the Issue Proceeds, in compliance with the InvIT Regulations. The general purposes for which the Trust proposes to utilize Net Proceeds include meeting exigencies and expenses incurred in the ordinary course of business. In addition, the Trust may utilize the Net Proceeds towards other expenditure (in the ordinary course of business) considered expedient and as approved by the Investment Manager or the Trustee, as the case may be, subject to compliance with applicable law.

In case of a shortfall in Issue Proceeds, the Investment Manager may, in compliance with the InvIT Regulations, have the flexibility to meet such shortfall including, by utilising the Trust's internal accruals or availing facilities from lenders. The Investment Manager, in accordance with the Investment Objectives of the Trust, policies of its board of directors and the InvIT Regulations, will have flexibility in utilising any surplus amounts.

Issue Expenses

The Issue Expenses shall not be met from the monies from the Issue Proceeds. The total expenses of this Issue are estimated to be up to ₹ 10 million. The Issue Expenses comprises fees payable to escrow collection bank, stamp duties payable on issuance of units, fee payable to the Registrar and Transfer Agent, fees payable to valuer and auditor and all other incidental and miscellaneous expenses.

For ease of operations, if required, the expenses in relation to the Issue as stated above, at the outset, may be borne by the Sponsor or the Investment Manager on behalf of the Trust, and the Investment Manager (on behalf of the Trust) agrees that it will reimburse the Sponsor or the Investment Manager for all such expenses as may be incurred by the Sponsor or the Investment Manager on actual basis.

FINANCIAL INDEBTEDNESS

The details of indebtedness of the Trust as at December 31, 2021, 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	0.00
Unsecured	244.00
Total Borrowings	244.00
Project SPV	
Secured	11,052.02
Unsecured	904.85
Total Borrowings	**11,956.87**
Total	**12,200.87**

Principal terms of the borrowings availed by the Trust and the Project SPV:

1. *Security:* The loans availed by the Project SPV, are secured by, amongst others, a first ranking pari passu charge and a second ranking pari passu charge over:

   (i). all immovable assets of the Project SPV (present and future) except (i) the project assets; and (ii) immoveable properties with a book value of less than INR 5,000,000 as on March 31, 2017;

   (ii). all current and moveable assets of the Project SPV (present and future) except the project assets;

   (iii). pledge of a certain specified percentage of the equity shares of the Project SPV;

   (iv). accounts of the Project SPV, including escrow accounts and sub-accounts maintained in accordance with the financing arrangements, accounts created for maintaining reserves such as major maintenance reserves, debt service reserve account and any other bank accounts of the Project SPV and all its receivables;

   (v). the assignment of all rights and interests of the Project SPV: (A) under the project agreements (excluding debt documents), (B) in the clearances obtained by the Project SPV, (C) any letter of credit, liquidation damages or performance bonds provided by an party to the project agreement, and (D) insurance contracts; and

   (vi). a demand promissory note covering the principal and interest payment.

2. *Pre-payment:* The Project SPV 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 on account of an increase in the 'Spread' on the facility by a senior lender which increase is not acceptable to the Project SPV, (ii) the prepayment being made within 15 days of any spread reset date, after giving a prior written notice of 15 days to the lenders; (iii) the prepayment being made from the internal accruals, after giving a prior written notice of 15 days to the lenders; (iv) the prepayment being made from the proceeds of initial public offer of the Project SPV, (v) the prepayment being made at the request of the lenders or (vi) a prior notice being provided to the lender. The Project SPV 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 or on behalf of the Project SPV, as set out in the financing arrangements such as liquidated damages or penalties received under the Concession Agreements and any insurance proceeds received, and (ii) occurrence of a liquidity event such as raising of equity.

3. *Restrictive Covenants:* The borrowing arrangements entered into by the Trust and the Project SPV contain standard restrictive covenants affecting the Trust and the Project SPV, which prevent it from undertaking certain actions, including:

   (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). making any investments other than investments in certain permissible instruments such as Government securities;

(iii). effecting changes in its ownership 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, prepayment of any financial indebtedness and interest thereon, subject to the fulfillment of 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;

(ix). enter into any merger or amalgamation or do a buy- back; and

(x). 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 the Project SPV contain standard events of default affecting the Project SPV, 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 the Project SPV under any of its other financing documents;

(iv). the security interest provided to the lenders being in jeopardy, in the opinion of the lenders;

(v). initiation of insolvency or other analogous proceedings against the Project SPV;

(vi). cessation of business of the Project SPV; and

(vii). failure to maintain the debt service coverage ratio as set out in the facility agreement.

5. *Consequences of default*: In terms of the borrowing arrangements entered into by the Project SPV, the following, amongst others, are the consequences of default:

(i) cancellation or suspension the available commitments;

(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 borrowing arrangements.

This is an indicative list of the terms of the borrowings availed by the Trust and the Project SPV and there may be additional terms, conditions and requirements under the various borrowing arrangements entered into by the Trust and the Project SPV.

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, the Project SPV may, from time to time, enter into re-financing arrangements and draw down funds thereunder, prior to the filing of this Preliminary Placement Memorandum.

Principal terms of the borrowings to be availed by the Project SPV from the Trust

Please see the section entitled "*Formation Transactions in relation to the Trust – Utilisation of Issue Proceeds*" on page 30 for a description of the terms of the Shareholder Loan Agreement.

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 75% of the aggregate of the Trust Assets.

Status of lender consents

The Trust and the Project SPV have received all lender consents in relation to this Issue. Further, the terms and conditions of consents received from the lenders of the Project SPV require the Sponsor and its affiliates to maintain certain percentage of unitholding in the Trust.

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 of the Trust*" on page 137.

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. Bidders are cautioned not to place undue reliance on these forward-looking statements that are stated only as at the date of this Preliminary Placement Memorandum. For details in relation to such forward-looking statements, please see the section entitled "Forward-Looking Statements" on page 17.

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 SPV , please see the section entitled "*Business*" on page 156. Presently, cash flows receivable by the Trust may be in the form of dividend, interest income or principal repayment received from the Project SPV in relation to any debt sanctioned by the Trust, or a combination of both.

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 SPV, 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 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 SPV, or if the equity shares or interest in the Project SPV 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 55.

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 or any other reserve requirements as required by lenders;

Description
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)

Description
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
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 INITIAL PORTFOLIO ASSET OF THE TRUST

You should read the following discussion and analysis of our financial condition, results of operations and cash flows in conjunction with the sections entitled "Summary Financial Information fo the Trust" and "Special Purpose Combined Financial Statements" on pages 32 and 258, respectively. This discussion contains forward-looking statements and involves numerous risks and uncertainties, including, but not limited to, those described in the section entitled "Risk Factors" on page 55. Actual results could differ materially from those contained in any forward-looking statements and for further details regarding forward-looking statements, kindly refer to the section entitled "Forward-Looking Statements" on page 17.

The Special Purpose Combined Financial Statements are prepared in accordance with Ind AS, which differs in certain respects from Indian GAAP, International Financial Reporting Standards and U.S. GAAP. Our fiscal year ends on March 31 of each year, and references to a particular fiscal are to the twelve-month period ended March 31 of that year. For the sole purposes of the Special Purpose Combined Financial Statements, references to "we", "us" and "our" is to the initial portfolio assets on a combined 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, 2021, CDPQ held approximately CAD 419.80 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 around 20 years of infrastructure investing experience. Its worldwide infrastructure portfolio was valued at approximately CAD 45.30 billion (as of December 31, 2021) with direct investments in companies across sectors including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks. It has investments in over 16 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.

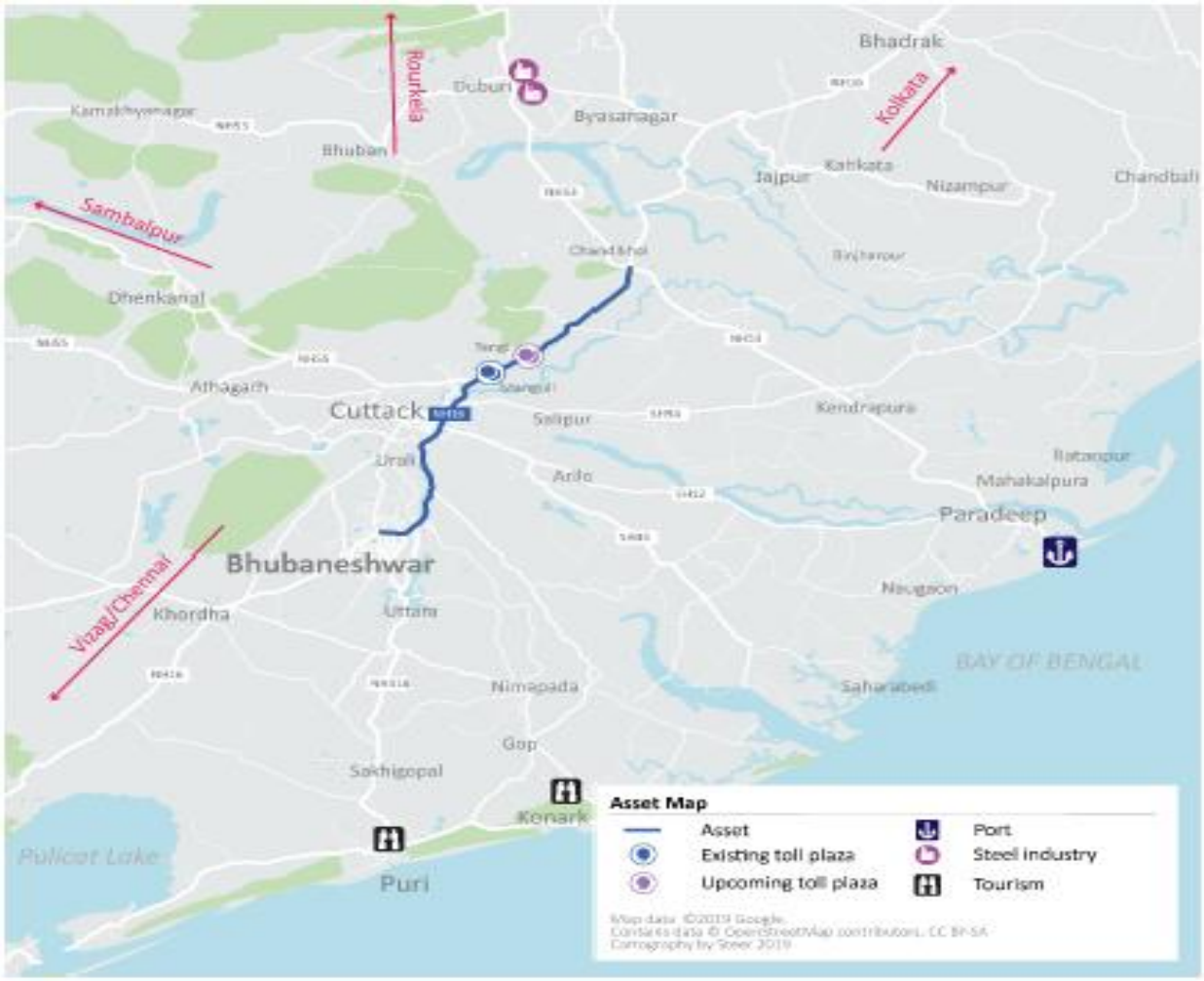
CDPQ has extensive global experience of investing in the transportation sector in developed markets and targeted developing markets, including the REM - public transit project in Montréal, Canada, the Conmex toll road in Mexico, Multisectoral (including toll roads) Infrastructure Platform with CKD IM in Mexico and a multisectoral (including toll roads) Infrastructure Platform in Colombia.

India is one of the key growth markets of focus for CDPQ. CDPQ, as of December 31, 2021 now has an exposure of approximately CAD 7.50 billion across different asset classes, including infrastructure, fixed income, private equity, public equity and real estate. CDPQ typically works in partnership with local firms to create institutional platforms for the long term. Furthermore, CDPQ has made certain other strategic investments in sovereign or quasi-sovereign bonds, investments in entities focusing on the transportation, logistics and financial services sectors.

The Project SPV 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 Concession Agreement.

The operating revenue of the Project SPV as at December 31, 2021 and for the Fiscals 2021, 2020 and 2019 was ₹ 15,653,62 lakhs,₹ 21,064.35 lakhs, ₹ 19,844.50 lakhs, and ₹ 20,449.26 lakhs, respectively. Further, the operating revenue for the Fiscal 2022 was ₹ 20,153.51 lakhs.

The map* below illustrates the location of the Project:



**Map not drawn to scale*

The Investment Manager will also have the flexibility to acquire new projects through acquisitions from third parties.

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 prior to acquisition by the Sponsor, 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 initially incorporated on January 28, 2010 and is 100% owned by the Sponsor and CDPQ Infrastructures Asia 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 98.

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 project or project with a toll component, our toll revenue depends on the tolling rates set by the concessioning authority in accordance with the concession agreement 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 agreement 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. 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 agreement typically limits and regulates 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 our concession agreement 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 agreement. 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 agreement. Even if we invoke the inflation adjustment clauses in our concession agreement, the increase may not be adequate to offset the negative impact of increases in interest rates or cost of raw materials.

As our project often requires significant capital investment with potential returns spread over a long period of time, inadequate toll revenues collected from our project 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.

Operating expenses are dependent on the routine and periodic major maintenance obligations contained in the concession agreements and are subject to fluctuations.

The SJEPL Concession Agreement provides that the Project SPV is required to operate and maintain the Project in accordance with the concession agreement. Accordingly, the Project SPV prepares a maintenance manual and a maintenance program in consultation with an independent engineer appointed by the NHAI for the Project, and is required to abide by the same. The Project SPV's maintenance obligations are primarily to operate and maintain the Project in order to permit the safe, smooth and uninterrupted flow of traffic and the related work and maintenance that it is required to undertake in order to fulfil such obligations. Such maintenance obligation includes the repair of wear and tear of roads including overlaying the surface of the roads, among other things. Please see the section entitled "*Summary of the Concession Agreements*" on page 164 for details on the Project SPV's O&M obligations.

Routine and periodic major maintenance costs mainly comprise costs of raw materials and other items including fuel, equipment costs and labour expenses, besides maintenance and replacement of hardware, software and equipment. The prices and supply of raw materials depend upon factors that are beyond our control, including, but not limited to, general economic conditions, transportation costs, global and domestic market prices, competition, production levels and import duties, which could be cyclical in nature. Unanticipated increases in the price of materials, fuel costs, labour or other inputs will affect the results of operations of the Project SPV, especially if the wear and tear on the relevant Project requires major work. The Project SPV's ability to absorb increases in the purchase price of materials, fuel and other inputs is limited.

Further, our operational costs may also increase substantially if the relevant O&M Contractors fail to perform its duties as per the O&M Agreements.

Inflation/deflation and interest rate risks.

There are no specific provisions in our 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. Many factors causing such adverse changes are beyond our control and we are usually not able to demand matching increases in our tolling rates. While our tolling rates may increase with an increase in WPI, any increase may not be adequate to offset the negative impact of increases in interest rates or O&M costs. Further, our tolling rates

may decrease with a decrease in WPI and accordingly, the business, financial condition and results of operations of the Trust may be adversely affected.

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.

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 our business.

Dependence on support from governmental entities

The operations of the Project 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.

Tax benefits for road infrastructure sector in India

The Project SPV 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 the Project SPV 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.

Basis of Preparation of Special Purpose Combined Financial Statements

The Special Purpose Combined Financial Statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances. The financial statements of the Project SPV and Trust used for the purpose of combination are drawn up to the same reporting date i.e. year ended on March 31 each year/nine months ended December 31.

The procedure for preparing the Special Purpose Combined Financial Statements of the Trust are stated below:

- combine like items of assets, liabilities, equity, income, expenses and cash flows of the SPV;

- eliminate in full intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the Trust (profits or losses resulting from intragroup transactions that are recognised in assets, such as inventory and fixed assets, are eliminated in full). Ind AS-12 Income Taxes applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

Significant Accounting Policies

Basis of Preparation and presentation

The Special Purpose Combined Financial Statements comprise of financial statements of the Trust and the Project SPV, (collectively referred to as "**Trust**") for the nine months ended December 31, 2021 and years ended March 31, 2021, March 31, 2020 and March 31, 2019.

The Special Purpose Combined Financial Statements of the Trust comprise Special Purpose Combined Balance Sheet as at December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 and Special Purpose Combined Statement of Profit and Loss, Special Purpose Combined Cash Flow Statement, Special Purpose Combined Statement of Changes in equity and a Summary of Significant Accounting Policies and Notes to accounts for the nine months ended December 31, 2021 and years ended March 31, 2021, March 31, 2020 and March 31, 2019.

The Special Purpose Combined Financial Statements have been prepared in accordance with recognition and measurement principles of 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 ("**Ind AS**") except for Ind AS 33: Earning Per Share read with SEBI (Infrastructure Investment Trusts) Regulations, 2014 as amended from time to time including circulars notifications, clarifications and guidelines issued thereunder ("**InvIT Regulations**") and the Guidance Note on Combined and Carve-Out Financial Statements issued by the Institute of Chartered Accountants of India ("**Guidance Note**").

The Special Purpose Combined Financial Statements have been prepared by the Board of Directors of Investment Manager, acting on behalf of the Trust ("**Trust Management**") to meet the requirements of InvIT Regulations and for inclusion in placement memorandum prepared by the Investment Manager in connection with proposed issue of unlisted units on a private placement basis of the Trust. As a result, the Special Purpose Combined Financial Statements may not be suitable for another purpose. Further, the Special Purpose Combined Financial

Statements are not prepared in accordance with requirements of Schedule III (as amended) notified under the Companies Act, 2013.

In accordance with requirements of the InvIT Regulations, since the Trust was set up on November 06, 2019 and registered as an InvIT on February 24, 2020, it has been in existence for a period lesser than three completed financial years before the filing of placement memorandum. Accordingly, the Special Purpose Combined Financial Statements has been prepared considering financial information of the Project SPV for the year ended March 31, 2019 and March 31, 2020 when such historical financial statements of Trust were not available. For the year ended March 31, 2021 and period ended December 31, 2021, the Special Purpose Combined Financial Statements has been prepared by combining financial information of the Project SPV and the Trust. The general purpose Ind AS financial statements of the Project SPV for the years ended March 31, 2019 March 31, 2020, March 31, 2021 and nine months ended December 31, 2021 were audited by firms of Chartered Accountants other than S.R. Batliboi & Co. LLP. The historic financial information of the Trust for the year ended March 31, 2021 and period ended December 31, 2021 has been certified by the Investment Manager, as there are no unit holders of the Trust till date.

Further, as required by the InvIT regulations, the Special Purpose Combined Financial Statements are prepared, based on an assumption that the Project SPV was part of the Trust for such period when the Trust was not in existence. However, the Special Purpose Combined Financial Statements may not be representative of the position which may prevail after the Project SPV is transferred to the Trust. Further, in accordance with SEBI Circular CIR/IMD/DF/114/2016 dated October 20, 2015 the Special Purpose Financial Statements have been presented after making necessary adjustments, rectifications and reclassifications of incorrect accounting policies, errors, omissions wherever necessary and to conform with the accounting policies of the Trust and accordingly, these may be different from the general purpose audited financial statements of the Project SPV. Refer note 53 for details of adjustments made in these Special Purpose Combined Financial Statements.

The Special Purpose Combined Financial Statements are presented in INR, which is the functional currency of the Trust. The Trust does not have any foreign operation and has assessed the functional currency of the SPV to be INR. 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 0.00.

These Special Purpose Combined Financial Statements correspond to classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. These Special Purpose Combined Financial Statements have been prepared on a historical cost convention and on an accrual basis except for certain financial assets like mutual funds (refer accounting policy regarding financial instruments).

Basis of Combination

The Special Purpose Combined Financial Statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances. The financial statements of the Project SPV and Trust used for the purpose of combination are drawn up to the same reporting date i.e. year ended on March 31 each year/nine months ended December 31.

The procedure for preparing Special Purpose Combined Financial Statements of the Trust are stated below –

a) combine like items of assets, liabilities, equity, income, expenses and cash flows of the SPV;
b) eliminate in full intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the Trust (profits or losses resulting from intragroup transactions that are recognised in assets, such as inventory and fixed assets, are eliminated in full). Ind AS-12 Income Taxes applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

Summary of significant accounting policies

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. 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. When significant parts of property, plant and equipment are required to be replaced at intervals, the Trust de-recognizes 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 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 eliminated from financial statements, either on disposal or when retired from active use. Losses arising in the case of retirement of property, plant and equipment and gains or losses arising from disposal of property, plant and equipment are recognised in the statement of profit and loss in the year of occurrence.

Freehold land and building are measured at cost less impairment losses.

The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year end and adjusted prospectively, if appropriate. Currently the residual life is considered as 5% of the value of property plant and equipment.

Depreciation on assets has been provided on a straight line basis at the useful lives specified in the Schedule II of the Companies Act, 2013 except Furnitures & Fixtures. Depreciation on additions/ deductions is calculated pro-rata from/ to the period of additions/ deductions. The useful life is as below:

Category	**Life**
Leasehold improvement	9.38 years
Furniture & Fixtures	8 years*
Vehicles	8 years
Office Equipment	5 years
Electrical Installations	10 years
Computer & Peripherals	3 years
Toll Booths	5 years

**The estimated useful life of Furniture and fixtures has been derived based on internal technical estimate which is based on the usage of assets. Accordingly, the useful life in respect of these assets have been taken as 8 years which is different from the indicative life as prescribed under Schedule II of Companies Act 2013.*

d. Intangible Assets

Intangible assets under Service Concession Arrangements (Appendix C to Ind AS 115 – Revenue from contracts with customers)

Under Appendix C 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 Trust receives a right to charge users of the toll road. The financial asset model is used when the Trust has an unconditional right to receive cash for the construction services.

The Trust 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. Equity support from NHAI is reduced from the intangible asset under development.

As per appendix C to Ind AS 115 - Service Concession Arrangement, Intangible assets arising from a service concession arrangement are recognized when the Trust has a right to charge for usage of the concession infrastructure. An intangible asset received as consideration for providing construction or upgrade services in a service concession arrangement is measured at fair valuation on initial recognition by references to the fair value of the services provided.

Grant received are 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 is the period from when the Trust is able to charge the public for the use of the infrastructure to the end of the concession period.

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 assets 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.

e. Intangible Assets Under Development

Intangible Assets under development includes direct and indirect expenditure incurred for the Highway Project 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 will be 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 has been adjusted from the total cost incurred on intangible asset under development.

The fair value of an intangible asset received as consideration for providing construction services in a service concession arrangement is estimated by reference to the fair value of the construction services. The fair value is calculated as the estimated cost of construction. The Trust does not recognize any margin on construction services. When the Trust receives an intangible asset and a financial asset as a consideration for providing services in a service concession arrangement, the Trust estimates the fair value of the intangible asset as the difference between the cost of construction services provided less fair value of the asset received.

Transition to Ind AS

The Trust elected to continue with the carrying value as per cost model (for all of its property, plant and equipment and Intangible assets) as recognised in the financial statements as at the date of transition to Ind AS, measured as per previous GAAP.

f. 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 (i.e. on confirmation of completion of Project Highway from I.E/NHAI) are capitalized as part of the cost of the respective asset. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consists of interest, debt syndication fees, front end fees and other cost of similar nature that an entity incurs in connection with the borrowing of funds which are amortized using effective interest rate method.

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 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.

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 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 de-recognised (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. The Project SPV has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

ECL is the weighted average of difference between all contractual cash flows that are due to the Trust in accordance with the contract and all the cash flows that the Trust expects to receive, discounted at the original effective interest rate, with the respective risks of default occurring as the weights. When estimating the cash flows, the Trust is required to consider:

- All contractual terms of the financial assets (including prepayment and extension) over the expected life of the assets.
- Cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

(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 Trust's financial liabilities include trade and other payables, loans and borrowings and other financial liabilities.

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. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

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)

This is the category most relevant to the Trust. 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 de-recognised 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 de-recognised 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.

h. Revenue Recognition

Construction services

Revenue related to construction or upgrade services under a service concession arrangement (refer note 40) is recognised based on the stage of completion of the work performed, consistent with the Trust'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 Trust.

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 (demonetisation relief, 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.

i. Employee Benefits

(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 Trust has defined contribution plans where the Trust 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 i.e., "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 Trust recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Trust recognises the following changes in the net defined benefit obligation as an expense in the combined 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.

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 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 Trust recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Trust 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

j. ***Leases***

Ind AS 116 Leases was notified by MCA on March 30, 2019 and it replaces Ind AS 17 Leases, including appendices thereto, Ind AS 116 is effective for annual periods beginning on or after April 1, 2019. Accordingly, the leases are accounted in accordance with Ind AS 17 up-to March 31, 2019 and post which the leases are accounted in accordance with Ind AS 116.

Ind AS 116

The leases are assessed 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.

A single recognition and measurement approach is applied for all leases, except for short-term leases and leases of low-value assets. The Trust 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.

Transition to Ind AS 116

A lessee shall apply this Standard to its leases either:

a) retrospectively to each prior reporting period presented applying Ind AS 8, Accounting Policies, Changes in Accounting Estimates and Errors; or
b) retrospectively with the cumulative effect of initially applying the Standard recognised at the date of initial application

A lessee shall recognise a lease liability at the date of initial application for leases previously classified as an operating lease applying Ind AS 17. The lessee shall measure that lease liability at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate at the date of initial application and recognise a right-of-use asset at the date of initial application for leases previously classified as an operating lease applying Ind AS 17.

For leases previously classified as operating leases applying Ind AS 17, a lessee is not required to make any adjustments on transition for leases for which the underlying asset is of low value.

The Trust elects to use the exemptions proposed by the standard on lease contracts for which the lease terms ends within 12 months as of the date of initial application, and lease contracts for which the underlying asset is of low value.

Ind AS 17

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Trust is classified as a finance lease.

Assets acquired on leases where a significant portion of risk and reward of ownerships are retained by the Lessor are classified as operating leases. Operating lease payments are recognised as an expense in the statement of profit and loss on a straight-line basis over the lease term.

k. Accounting for Taxes on Income

Tax on income for the current period is determined on the basis of taxable income and tax credits computed in accordance with the provisions of the Income Tax Act, 1961, and based on expected outcome of assessments / appeals.

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.

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 (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.

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.

l. 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.

m. 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 are probable.

(e) Provisions, Contingent Liabilities and Contingent Assets are reviewed at each Balance Sheet date and adjusted as appropriate.

(f) Provision for major repair maintenance

As per the Concession Agreements, the Trust is obligated to carry out resurfacing of the roads under concession. The Trust estimates the likely provision required towards resurfacing and provides for the same by discounting using a rate that reflects the time value of money. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost. The same is reviewed at each balance sheet date and adjustments if any to the carrying amount is provided for accordingly.

n. Claims

Claims against the Trust including claims from EPC contractor in context with escalations are accounted for as and when accepted and claims by the Trust on NHAI are accounted for as and when the claim is received.

o. Earnings Per Unit

Basic Earnings Per Unit is calculated by dividing the net profit or loss for the period attributable to unit holders 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 equity units.

p. 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.

q. 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.

r. 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 Special Purpose Combined 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.

s. 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 Special Purpose Combined 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 Special Purpose Combined 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 Special Purpose Combined 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.

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.

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.

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.

New and amended standards

There are no new standards that are notified, but not yet effective, up-to the date of issuance of the Trust's Special Purpose Combined Financial Statements.

Further, several amendments apply for the first time for the year beginning April 1, 2022, but do not have an impact on the Special Purpose Combined Financial Statements of the Trust. The Trust has not early adopted any standards, amendments that have been issued but are not yet effective/notified.

(a) Amendments to Ind AS 116: Covid-19-Related Rent Concessions.

MCA issued an amendment to Ind AS 116 Covid-19-Related Rent Concessions beyond 30 June 2021 to update the condition for lessees to apply the relief to a reduction in lease payments originally due on or before 30 June 2022 from 30 June 2021. The amendment applies to annual reporting periods beginning on or after 1 April 2021. In case a lessee has not yet approved the financial statements for issue before the issuance of this amendment,

then the same may be applied for annual reporting periods beginning on or after 1 April 2020.

These amendments had no impact on the Trust's Special Purpose Combine Financial Statements.

(b) Amendments to Ind AS 103 Business Combinations

The amendment states that to qualify for recognition as part of applying the acquisition method, the identifiable assets acquired and liabilities assumed must meet the definitions of assets and liabilities in the Framework for the Preparation and Presentation of Financial Statements in accordance with Indian Accounting Standards* issued by the Institute of Chartered Accountants of India at the acquisition date. Therefore, the acquirer does not recognise those costs as part of applying the acquisition method. Instead, the acquirer recognises those costs in its post-combination financial statements in accordance with other Ind AS.

These amendments had no impact on the Trust's Special Purpose Combine Financial Statements.

(c) Amendments to Ind AS 105, Ind AS 16 and Ind AS 28: Definition of Recoverable amount

The definition of "Recoverable amount" is amended such that the words "the higher of an asset's fair value less costs to sell and its value in use" are replaced with "higher of an asset's fair value less costs of disposal and its value in use". The consequential amendments are made in Ind AS 105, Ind AS 16 and Ind AS 28. These amendments had no impact on the Trust's Special Purpose Combine Financial Statements.

(d) Interest Rate Benchmark Reform – Phase 2: Amendments to Ind AS 109, Ind AS 107, Ind AS 104 and Ind AS 116

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include the following practical expedients:

- A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest

- Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued

- Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component.

- These amendments have no impact on the Special Purpose Combined Financial Statements of the Trust.

Principal Components of Combined 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.

- ***Utility Shifting Services***: Revenue from utility shifting services includes compensation receivable by the

Project SPV from the NHAI for shifting certain utilities that are located on construction sites and which is not part of the scope of work as per the Concession Agreement.

- ***Income from change in scope***: Income from change in scope represents compensation for cost incurred for additional work which is not mentioned in scope of the concession agreements.

- ***Other operating revenue***: Other operating revenue primarily consists of the revenue from supervision of utility services and supervision of change in scope services.

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 funds and others.

Expenses

Our expenses consist of 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, wages and bonus, 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, interest on late payment of statutory dues, 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 Project SPV for the periods indicated:

(in ₹ lakh)

Particulars	Nine months ended December 31, 2021	Percentage of Total Income	March 31, 2021	Percentage of Total Income	March 31, 2020	Percentage of Total Income	March 31, 2019	Percentage of Total Income
Revenue from operations	15,527.63	97.81	21,059.59	97.29	19,688.60	97.38	20,995.84	98.63
Other income	348.08	2.19	586.89	2.71	530.48	2.62	292.48	1.37
Total Income	**15,875.71**	**100.00**	**21,646.48**	**100.00**	**20,219.08**	**100.00**	**21,288.32**	**100.00**
EXPENSES								
EPC cost	1,390.50	8.76	1,463.94	6.76	378.23	1.87	3,044.39	14.30
Employee benefits expense	473.87	2.98	568.61	2.63	552.03	2.73	578.09	2.72
Finance costs	10,153.65	63.96	14,028.06	64.81	14,199.24	70.23	12,710.64	59.71
Depreciation and amortization expense	2,625.84	16.54	3,295.02	15.22	3,140.76	15.53	2,989.88	14.04
Provision for major maintenance obligations	1,268.04	7.99	1,537.02	7.10	1,397.30	6.91	1,270.27	5.97
Other expenses	1,864.49	11.74	3,229.42	14.92	1,328.03	6.57	1,990.46	9.35
Total expenses	**17,776.39**	**111.97**	**24,122.07**	**111.44**	**20,995.59**	**103.84**	**22,583.73**	**106.09**
Loss before tax	**(1,900.68)**	**(11.97)**	**(2,475.59)**	**(11.44)**	**(776.51)**	**(3.84)**	**(1,295.41)**	**(6.09)**
Tax expense	-	-	-	-	-	-	-	-
Loss for the year	**(1,900.68)**	**(11.97)**	**(2,475.59)**	**(11.44)**	**(776.51)**	**(3.84)**	**(1,295.41)**	**(6.09)**
Other comprehensive income								
Items that will not be reclassified to profit or loss								
(i) Re-measurement losses on defined benefit obligations	(1.86)	(0.01)	(1.95)	(0.01)	(4.69)	(0.02)	(1.29)	(0.01)
(ii) Income tax relating to these items	-	-	-	-	-	-	-	-
Other comprehensive income for the year	**(1.86)**	**(0.01)**	**(1.95)**	**(0.01)**	**(4.69)**	**(0.02)**	**(1.29)**	**(0.01)**
Total comprehensive income for the year	**(1,902.54)**	**(11.98)**	**(2,477.54)**	**(11.45)**	**(781.20)**	**(3.86)**	**(1,296.70)**	**(6.09)**

Nine months ended December 31, 2021

Total Income

Total income was ₹ 15,875.71 lakh for the nine months ended December 31, 2021, which was principally comprised of revenue from operations of ₹ 15,527.63 lakh and other income of ₹ 348.08 lakh.

Revenue from operations

Revenue from operations was ₹ 15,527.63 lakh for the nine months ended December 31, 2021, primarily due to revenues from toll operations and from provision of construction services.

Revenue from Toll Operations

Revenue from toll operations was ₹ 12,887.97 lakh for the nine months ended December 31, 2021. There has been an increase in revenue from toll operations due to increase in traffic volume and increase in toll rates as per the Concession Agreement. Income arising out of toll collection represented 81.18 % of our total income for the nine months ended December 31, 2021.

Revenue from construction services

Revenue from construction services was ₹ 2,639.66 lakh for the nine months ended December 31, 2021 which was principally attributable to the EPC work carried out by EPC contractors in relation to the Project SPV. Revenue from construction services represented 16.63 % of our total income for the nine months ended December 31, 2021.

Other income

Other income was ₹ 348.08 lakh for the nine months ended December 31, 2021, primarily on account of interest on fixed deposits and gain on sale of investments in mutual fund. Other income represented 2.19 % of our total income for the nine months ended December 31, 2021.

Interest on Fixed Deposit

Interest on bank deposits for the nine months ended December 31, 2021 was ₹ 252.60 lakh which was primarily attributable to fixed deposit reserves created against various reserves as per the financing document such as debt service reserve account (the "DSRA") etc. Interest on Fixed Deposit represented 1.59 % of our total income for the nine months ended December 31, 2021.

Other non-operating income

Other non-operating income primarily comprised gain on sale of investments in mutual fund, interest on Income Tax refund and other miscellaneous income. Gain on sale of investments in mutual funds represented 0.49 % of our total income for the nine months ended December 31, 2021.

Total Expenses

Total expenses were ₹ 17,776.39 lakh for the nine months ended December 31, 2021, 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 111.97 % of our total income for the nine months ended December 31, 2021.

EPC Cost

EPC cost of construction was ₹ 1,390.50 lakh for the nine months ended December 31, 2021, in relation to the work carried out by the EPC contractors for the development of the Project in accordance with the terms of the concession agreement. EPC cost represented 8.76 % of our total income for the nine months ended December 31, 2021.

Employee benefit expense

Employee benefits expenses was ₹ 473.87 lakh for the nine months ended December 31, 2021, due to payment of salaries and wages. Employee benefits expenses represented 2.98 % of our total income for the nine months ended December 31, 2021.

Finance costs

Finance costs was ₹ 10,153.65 lakh for the nine months ended December 31, 2021, primarily attributable to the interest on term loans from banks and financial institutions and related parties. Finance costs represented 63.96 % of our total income for the nine months ended December 31, 2021.

Depreciation and Amortization Expense

Depreciation and amortization expense was ₹ 2,625.84 lakh for the nine months ended December 31, 2021which is due to the implementation of the requirements of Schedule II of the Companies Act to depreciation and the revenue based method to amortization of intangible assets and is in the normal course of business and operations. Depreciation and Amortisation represented 16.54 % of our total income for the nine months ended December 31, 2021.

Provision for major maintenance obligations

The provision for major maintenance obligations was ₹ 1,268.04 lakh for the nine months ended December 31, 2021mainly on account of planned spend on period maintenance as per the concession agreement and represented 7.99 % of our total income for the nine months ended December 31, 2021.

Other expenses

Other expenses were ₹ 1,864.49 lakh for the nine months ended December 31, 2021, and is mainly on account of highway maintenance expenses, insurance costs, costs on power and fuel, legal and professional fees, etc. Other expenses represented 11.74 % of our total income for the nine months ended December 31, 2021.

Loss before and after tax

As a result of the factors outlined above, our loss before and after tax was ₹ 1,900.68 lakh for the nine months ended December 31, 2021.

Other comprehensive income/(Loss)

Other comprehensive loss was ₹ 1.86 lakh for the nine months ended December 31, 2021 on account of re-measurement gains on defined benefit obligations. Other comprehensive loss represented 0.01 % of our total income for the nine months ended December 31, 2021.

Total comprehensive income/(loss)

As a result of the factors outlined above, our total comprehensive loss was ₹ 1,902.54 lakh for the nine months ended December 31, 2021.

Financial year ended March 31, 2021 compared to financial year ended March 31, 2020

Total Income

Total income increased by 7.06% from ₹ 20,219.08 lakhs in Fiscal 2020 to ₹ 21,646.48 lakh in Fiscal 2021, primarily because of increase in toll revenue and due to completion of construction of the remaining stretch of the project.

Revenue from operations

Revenue from operations increased by 6.96% from ₹ 19,688.60 lakh for Fiscal 2020 to ₹ 21,059.59 lakh for Fiscal 2021, primarily due to increase in the construction services of EPC work carried out by EPC contractors in relation to the Project SPV.

Revenue from Toll Operations

Revenue from toll operations increased by 1.79%, from ₹ 17,506.80 lakh for Fiscal 2020 to ₹ 17,820.84 lakh for Fiscal 2021 primarily due to increase in the toll rate as per the concession agreement which was offset by reduction in the traffic volumes because of lockdown restrictions due to Covid 19.

Revenue from construction services

Revenue from construction services increased by 48.98% from ₹ 2,173.99 lakh for Fiscal 2020 to ₹ 3,238.75 lakh for Fiscal 2021. This increase is due to increase in the construction services of EPC work carried out by EPC contractors in relation to the Project SPV.

Other income

Other income increased by 10.63% from ₹ 530.48 lakh for Fiscal 2020 to ₹ 586.89 lakh for Fiscal 2021, primarily on account of increase interest on fixed deposits and increase in miscellaneous income.

Total Expenses

Total expenses increased by 14.89 % from ₹ 20,995.59 lakh for Fiscal 2020 to ₹ 24,122.07 lakh for Fiscal 2021, primarily on account of increase in expenses on engineering, procurement and construction costs and other expenses.

EPC Cost

EPC cost of construction sharply increased by 287.05 % from ₹ 378.23 lakh for Fiscal 2020 to ₹ 1,463.94 lakh for Fiscal 2021, primarily due to increase in the construction services of EPC work carried out by EPC contractors in relation to the Project SPV.

Employee benefit expense

Employee benefits expenses increased by 3.00% from ₹ 552.03 lakh for Fiscal 2020 to ₹ 568.61 lakh for Fiscal 2021, due to a minor increase in salaries and wages and staff welfare expenses

Finance costs

Finance costs reduced marginally by 1.21 % from ₹ 14,199.24 lakh for Fiscal 2020 to ₹ 14,028.06 lakh for Fiscal 2021, primarily attributable to the repayment of loans from banks and financial institutions.

Depreciation and Amortization Expense

Depreciation and amortization expense slightly increased by 4.91% from ₹ 3,140.76 lakh for Fiscal 2020 to ₹ 3,295.02 lakh for Fiscal 2021 which is in normal course of business and operations.

Provision for major maintenance obligations

Provision for major maintenance obligations increased by 10.00 % from ₹ 1,397.30 lakh for Fiscal 2020 to ₹ 1,537.02 lakh for Fiscal 2021, primarily attributable to the time value of money.

Other expenses

Other expenses increased by 143.17 % from ₹ 1,328.03 lakh for Fiscal 2020 to ₹ 3,229.42 lakh for Fiscal 2021. This sharp increase is because of one time write off of claims receivable from NHAI. Apart from this, there was an increase in highway maintenance expenses, insurance costs and legal and professional fee.

Loss before and after tax

As a result of the factors outlined above, our loss before and after tax increased by 218.81 % from ₹ (776.51) lakh for Fiscal 2020 to ₹ (2,475.59) lakh for Fiscal 2021.

Other comprehensive loss

Other comprehensive expense reduced by 58.42% from ₹ 4.69 lakh for Fiscal 2020 to ₹ 1.95 lakh for Fiscal 2021.

Total comprehensive loss

As a result of the factors outlined above, our total comprehensive loss increased by 217.15 % from ₹ (781.20) lakh for Fiscal 2020 to ₹ (2,477.54) lakh for Fiscal 2021.

Financial year ended March 31, 2020 compared to financial year ended March 31, 2019

Total Income

Total income decreased by 5.02 % from ₹ 21,288.32 lakh in Fiscal 2019 to ₹ 20,219.08 lakh in Fiscal 2020, primarily due to increase in toll collection which is offset by a decrease in revenue from change in scope services and revenue from construction services.

Revenue from operations

Revenue from operations decreased by 6.23 % from ₹ 20,995.84 lakh for Fiscal 2019 to ₹ 19,688.60 lakh for Fiscal 2020, primarily due to reduction in revenue from change in scope services and from construction services which was offset by an increase in revenue from toll operations.

Revenue from Toll Operations

Revenue from toll operations increased by 12.10 %, from ₹ 15,616.96 lakh for Fiscal 2019 to ₹ 17,506.80 lakh for Fiscal 2020. This increase was attributable to augmentation in traffic volume and increase in toll rates as per the Concession Agreement.

Revenue from construction services

Revenue from construction services decreased by 54.56 % from ₹4,783.91 lakh for Fiscal 2019 to ₹ 2,173.99 lakh for Fiscal 2020. This decrease was attributable to reduction in the construction activity.

Utility Shifting services

Revenue from utility shifting services decreased by 95.84 % from ₹109.28 lakh for Fiscal 2019 to ₹ 4.54 lakh for Fiscal 2020, due to major utility shifting work completed during Fiscal 2019 along with completion of the project.

Change in scope services

Revenue from change in scope services decreased by 100.00% from ₹459.64 lakh for Fiscal 2019 to nil for Fiscal 2020, due to completion of change in scope services in Fiscal 2019 of the project.

Other income

Other income increased by 81.37 % from ₹ 292.48 lakh for Fiscal 2019 to ₹ 530.48 lakh for Fiscal 2020, primarily on account of an increase in the interest income on fixed deposits and gain on sale of investments in mutual funds which was partially offset by a decrease in interest income on income tax refund.

Total Expenses

Total expenses decreased by 7.03 % from ₹ 22,583.73 lakh for Fiscal 2019 to ₹ 20,995.59 lakh for Fiscal 2020, primarily on account of decrease in construction cost and other expenses which was offset by an increase in finance cost.

EPC Costs

EPC costs decreased by 87.58 % from ₹ 3,044.39 lakh for Fiscal 2019 to ₹ 378.23 lakh for Fiscal 2020, primarily attributable to a reduction in construction costs due to land acquisition issues.

Employee benefit expense

Employee benefits expenses decreased slightly by 4.51% from ₹ 578.09 lakh for Fiscal 2019 to 552.03 lakh for Fiscal 2020, due to a slight decrease in salaries and wages, contribution to provident and other funds and staff welfare expenses.

Finance costs

Finance costs increased by 11.71 % from 12,710.64 lakh for Fiscal 2019 to ₹ 14,199.24 lakh for Fiscal 2020, primarily attributable to an increase in interest cost on banks, financial institutions and related parties and unwinding cost on provision for major maintenance.

Depreciation and Amortization Expense

Depreciation and amortization expense increased by 5.05 % from ₹ 2,989.88 lakh for Fiscal 2019 to ₹ 3,140.76 lakh for Fiscal 2020, which is in normal course of business and operations.

Provision for major maintenance obligations

Provision for major maintenance obligations increased by 10.00 % from ₹ 1,270.27 lakh for Fiscal 2019 to ₹ 1,397.30 lakh for Fiscal 2020, primarily due to the time value of money.

Other expenses

Other expenses decreased by 33.28 % from ₹ 1,990.46 lakh for Fiscal 2019 to ₹ 1,328.03 lakh for Fiscal 2020, primarily due to a decrease in utility service expenses, change in scope expenses and highway maintenance expenses.

Loss before and after tax

As a result of the factors outlined above, our loss before and after tax reduced by 40.06 % from ₹ (1,295.41) lakh for Fiscal 2019 to ₹ (776.51) lakh for Fiscal 2020.

Other comprehensive loss

Other comprehensive expense increased by 263.57 % from ₹ 1.29 lakh for Fiscal 2019 to ₹ 4.69 lakh for Fiscal 2020.

Total comprehensive loss

As a result of the factors outlined above, our total comprehensive loss reduced by 39.75 % from ₹ (1,296.70) lakh for Fiscal 2019 to ₹ (781.20) lakh for Fiscal 2020.

Cash Flows

The following table sets forth certain information relating to the cash flows of the Project SPV on a combined basis for the periods indicated:

(*In ₹ lakh*)

Particulars	Nine months ended December 31, 2021	Financial Year ended March 31,		
		2021	2020	2019
Net cash from operating activities	10,924.82	17,655.42	17,739.99	15,123.59
Net cash used in investing activities	(2,891.48)	(4,522.68)	(7,110.68)	(7,038.32)
Net cash used in financing activities	(8,889.46)	(12,536.09)	(10,279.45)	(9,515.82)

Net cash from operating activities

Net cash from operating activities for the nine months ended December 31, 2021 was ₹ 10,924.82 lakh, primarily arising out of tolling operations.

Net cash from operating activities for Fiscal 2021 was ₹ 17,655.42 lakh, primarily arising out of tolling operations.

Net cash used in operating activities for Fiscal 2020 was ₹ 17,739.99 lakh, primarily arising out of tolling operations.

Net cash from operating activities for Fiscal 2019 was ₹ 15,123.59 lakh, primarily arising out of tolling operations.

Net cash used in investing activities

Net cash used in investing activities for the nine months ended December 31, 2021 was ₹ 2,891.48 lakh, primarily arising out of additions in intangible assets under development and investment of surplus funds in fixed deposits.

Net cash used in investing activities for Fiscal 2021 was ₹ 4,522.68 lakh, primarily due to addition in intangible assets under development and investment of surplus funds in fixed deposits.

Net cash used in investing activities for Fiscal 2020 was ₹ 7,110.68 lakh, primarily due to increased investments in mutual funds, fixed deposits and addition in intangible assets under development.

Net cash used in investing activities for Fiscal 2019 was ₹ 7,038.32 lakh, primarily increased investments in fixed deposits and addition in intangible assets under development.

Net cash used in financing activities

Net cash used in financing activities for the nine months ended December 31, 2021 was ₹ 8,889.46 lakh, primarily due to repayment of borrowings and interest paid.

Net cash used in financing activities for Fiscal 2021 was ₹ 12,536.09 lakh, primarily due to repayment of borrowings and

interest paid.

Net cash used in financing activities for Fiscal 2020 was ₹ 10,279.45 lakh, primarily due to payment of interest which was offset by increase in borrowings.

Net cash from financing activities for Fiscal 2019 was ₹ 9,515.82 lakh, primarily due to payment of interest which was offset by increase in borrowings.

Capital Expenditure

The Project SPVs capital expenditure has historically been principally for construction cost. In the nine months ended December 31, 2021, Fiscals 2021, 2020 and 2019, the capital expenditure incurred for the Project SPV (including capital expenditures with respect to the EPC costs) was ₹ 2,642.07 lakh, ₹ 3,243.51 lakh, ₹ 2,334.44 lakh and ₹ 4,306.26 lakh, respectively.

Indebtedness

The following table provides the types and amounts of the Project SPV outstanding indebtedness as of December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019:

(*In ₹ lakh*)

Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Secured				
(a) Term loans				
Secured Term Loans from Banks				
I. Term loan from banks-facility A	1,00,502.14	1,01,655.77	1,02,868.40	1,01,839.69
Less: Current maturities of long term debt	2,615.75	1,452.28	935.45	218.52
II. Term loan from banks-facility B	1,436.33	1,762.54	2,192.36	2,617.87
Less: Current maturities of long term debt	436.27	434.10	429.82	425.51
Secured term loans from financial institutions (subservient to senior lenders)	8,509.80	8,509.80	7,347.82	3,869.25
	1,07,396.25	**1,10,041.73**	**1,11,043.31**	**1,07,682.78**
Unsecured				
Unsecured loan from financial institution	2,656.88	2,656.89	3,717.91	5,839.13
Less: Current maturities of unsecured loan from financial institution	2,656.93	2,121.46	2,121.46	2,121.46
	-0.05	**535.43**	**1,596.45**	**3,717.67**
Total Borrowings	1,07,396.20	1,10,577.16	1,12,639.76	1,11,400.45

As at December 31, 2021, the Project SPV's total borrowings comprising of unsecured loans and secured loans of the Project SPV, was ₹ 1,07,396.20 lakh, consisting of unsecured loans of ₹ (0.05) lakh and secured loans of ₹ 1,07,396.25 lakh including borrowings classified as other financial liabilities. Most of the Project SPVs' financing arrangements are secured by their movable and immovable assets, including charges on their equipment and intangible assets relating to toll collection rights and financial assets relating to their respective projects.

As at March 31, 2021, the Project SPV's total borrowings, comprising of unsecured loans and secured loans of the Project SPV, was ₹ 1,10,577.16 lakh, consisting of unsecured loans of ₹ 535.43 lakh and secured loans of ₹ 1,10,041.73 lakh including borrowings classified as other financial liabilities. Most of the Project SPVs' financing arrangements are secured

by their movable and immovable assets, including charges on their equipment and intangible assets relating to toll collection rights and financial assets relating to their respective projects.

As at March 31, 2020, the Project SPV's total borrowings, comprising of unsecured loans and secured loans of the Project SPV, was ₹ 1,12,639.76 lakh, consisting of unsecured loans of ₹ 1,596.45 lakh and secured loans of ₹ 1,11,043.31 lakh including borrowings classified as other financial liabilities. Most of the Project SPVs' financing arrangements are secured by their movable and immovable assets, including charges on their equipment and intangible assets relating to toll collection rights and financial assets relating to their respective projects.

As at March 31, 2019, the Project SPV's total borrowings, comprising of unsecured loans and secured loans of the Project SPV, was ₹ 1,11,400.45 lakh, consisting of unsecured loans of ₹ 3,717.67 lakh and secured loans of ₹ 1,07,682.78 lakh including borrowings classified as other financial liabilities. Most of the Project SPVs' financing arrangements are secured by their movable and immovable assets, including charges on their equipment and intangible assets relating to toll collection rights and financial 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 allotment 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 211.

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 SPV. 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 Placement 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 section entitled "*Industry Overview*" and "*Business*" on pages 144 and 156, respectively.

Known Trends or Uncertainties

Other than as described in the section entitled "*Risk Factors*" on page 55 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 Initial Portfolio Asset of the Trust*" on page 181, 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 SPV, 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 has 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 and debt capital markets and monitors cash balances daily. 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.

Significant Developments since December 31, 2021

The Trust and the Investment Manager confirm that, except as set out below, there has been no material change in the share capital, long term debt, unsecured loan from the Sponsor and others, and the reserve and surplus (except P/L) as of March 31, 2022 when compared to December 31, 2021, being the date of latest financial information included by way of the Special Purpose Combined Financial Statements, which adversely affect or are likely to affect the revenue or profitability of the Project SPV, or the value of its assets or its ability to pay its liability within the next 12 months:

(*In ₹ lakh*)

Particulars	As at December 31, 2021	As at March 31, 2022	Increase/(Decrease)
Share Capital	14,787.00	14,787.00	NIL
Long Term Debt (Senior Lenders)	1,03,462.92	1,02,944.96	(517.96)
Loan from Sponsor and Others	17,435.64	17,435.64	NIL
Revenue and Surplus (except P/L) – NHAI Grant	NIL	NIL	NIL

Further, except for the ordinary course of business of the Project SPV, we are not aware of any circumstances that have arisen since December 31, 2021 that materially and adversely affect, or are likely to affect, our operations or profitability, the value of our respective assets, or our ability to pay our respective liabilities within the next 12 months.

Further, the following table sets forth certain information with respect to the key financial data of the Project SPV for the Fiscal 2022:

(*In ₹ million*)

Particulars	As at March 31, 2022
Revenue from operations for the year	2,015.35
Loss for the year	(412.65)
Net worth	873.73
Intangible assets	12,326.77
Long-term borrowings	11,567.22
Short-term borrowings	342.42

The month-wise revenue for the Project SPV from the date of the latest financial statements included in this Preliminary Placement Memorandum until the completed month before the filing of this Preliminary Placement Memorandum has been provided below.

(in ₹ lakhs)

Sr. No.	Project SPV	January 2022	February 2022	March 2022	April 2022	May 2022
1.	SJEPL	1,428.18	1,421.51	1,579.21	1,630.95	1,646.35

Emphasis of Matter

1. *Basis of Accounting and Restriction on Distribution and Use*

   Attention is drawn to note 2.1 to the Special Purpose Combined Financial Statements, which describes the purpose and basis of preparation and presentation. The Special Purpose Combined Financial Statements have been prepared by the Investment Manager to the Trust to meet the requirements of SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended from time to time including the circulars notifications, clarifications and guidelines issued thereunder (the "**InvIT Regulations**"). Consequently, Special Purpose Combined Financial Statements may not necessarily be indicative of financial performance, financial position and cash flows of the Trust that would have occurred if it had operated as a single group of entities during the periods presented.

   The Report on the Special Purpose Combined Financial Statements is addressed to the Trust, the Trustee and the Investment Manager for inclusion in the placement memorandum in connection with the proposed issuance of

unlisted units of the Trust on a private placement basis. As a result, the Special Purpose Combined Financial Statements may not be suitable for another purpose. The Report on the Special Purpose Combined Financial Statements should not be used, referred to or distributed for any other purpose or to any other party. Accordingly, the Auditors 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.

2. *Possible effects arising from the outbreak of the COVID-19 pandemic*

Attention is drawn to note 41 of the Special Purpose Combined Financial Statements which describes the uncertainties an Investment Manager's assessment of the impact of Covid-19 pandemic on the Trust's operations, carrying amounts of intangible assets (including intangible assets under development) and recoverability of other financial and non-financial assets, for which a definitive assessment of the impact in subsequent period is dependent on the future developments and circumstances as they evolve.

3. *Uncertainty of possible impact of delay in completion of project and non-receipt of Completion certificate*

Attention is drawn to note 47 and note 31(d) of the Special Purpose Combined Financial Statements 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 by the Project SPV as on date and the consequential uncertainty of potential penalties and/or termination of Concession Agreement.

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, please see the section entitled "*Special Purpose Combined Financial Statements* " on page 258. 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 has 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.

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 assessing a proposal put up before the Audit Committee/Board for approval, the Audit Committee/Board (as the case may be) may review the following documents/seek inter alia the following information:

(a) Nature of the transaction – including description of functions to be performed, risks to be assumed and assets to be employed under the proposed transaction;

(b) Key terms (such as price and other commercial compensation contemplated under the arrangement) of the proposed transaction, including value and quantum;

(c) Key covenants (non-commercial) as per the draft of the proposed agreement/contract to be entered into for such transaction;

(d) Special terms covered/to be covered in separate letters or undertakings or any other special or sub arrangement forming part of a composite transaction;

(e) Benchmarking information that may have a bearing on the arm's length basis analysis, such as:

- market analysis, research report, industry trends, business strategies, financial forecasts, etc.;
- third party comparables, valuation reports, price publications including stock exchange and commodity market quotations;
- management assessment of pricing terms and business justification for the proposed transaction;
- comparative analysis, if any, of other such transaction entered into by the Trust.

(viii). 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.

(ix). 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.

(x). 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.

(xi). 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.

(xii). 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.

(xiii). 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.

(xiv). 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 and this Issue

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 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, consistent with:

(A) Indenture of Trust

Please see the section entitled "*Parties to the Trust – Key Terms of the Indenture of Trust*" on page 100 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 114 for a description of the terms of the Investment Management Agreement.

(C) Project Implementation and Management Agreement

Please see the section entitled "*Parties to the Trust – Key terms of the Project Implementation and Management Agreement*" on page 126 for a description of the terms of the Project Implementation and Management Agreement.

(D) Shareholder Loan Agreement

Please see the section entitled "*Formation Transactions in relation to the Trust – Utilisation of Issue Proceeds*" on page 30 for a description of the terms of the Shareholder Loan Agreement.

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. Part or all of such borrowings are proposed to be pre-paid or repaid from the Issue Proceeds. For details, please see the section entitled "*Financial Indebtedness*" and "*Use of Proceeds*" on pages 175 and 172, respectively.

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 SPV 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 Bidders, 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 SPV, please see the section entitled "Regulatory Approvals" on page 221.

Provided below are certain significant legislations, regulations and policies that generally govern the road infrastructure sector in which the Project SPV 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 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;
- The National Highways (Manner of Depositing the Amount by the Central Government with Competent Authority for Acquisition of Land) Rules, 1998;
- 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.

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 neither the sponsor nor the investment manager of such an infrastructure investment trust is 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 SPV for carrying out their present businesses. Unless otherwise stated, these approvals are valid as of the date of this Preliminary Placement 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 SPV will apply for such renewal from time to time. Further, provided below are the material approvals in relation to the Issue and in relation to the Trust.

A. 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.

B. Material Business Approvals in relation to the Project SPV

- 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 the Project SPV.

- 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 the Project SPV.

C. Approvals applied for, but not yet received

As on the date of this Preliminary Placement Memorandum, there are no approvals required to be obtained by the Trust and the Project SPV, for which applications have been made, but approvals have not been received.

D. Approvals for which applications are yet to be made

As on the date of this Preliminary Placement Memorandum, there are no approvals required to be obtained by the Trust and the Project SPV, for which applications are yet to be made.

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 CDPQ and its wholly owned subsidiaries and does not include the portfolio or investee companies of CDPQ other than to the extent such litigation has a reputational 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 SPV 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 SPV has been disclosed.

In respect of the Sponsor and its Associates (comprising CDPQ and its wholly owned subsidiaries and excluding the portfolio or investee companies of CDPQ other than to the extent such litigation has a reputational impact on CDPQ), all outstanding cases which involve an amount equivalent to or exceeding CAD 4.19 billion (being 1% of the net assets of CDPQ as of December 31, 2021) have been considered material. All cases where the amount is not ascertainable, but considered material have also been disclosed.

In respect of the Investment Manager and its Associates, all outstanding cases which involve an amount equivalent to or exceeding CAD 4.19 billion (being 1% of the net assets of CDPQ as of December 31, 2021) i.e. the materiality threshold as specified for the Sponsor), have been considered material. All cases where the amount is not ascertainable, but considered material, have also been disclosed.

In respect of the Project Manager and its Associates, all outstanding cases which involve an amount equivalent to or exceeding CAD 4.19 billion (being 1% of the net assets of CDPQ as of December 31, 2021) i.e. the materiality threshold as specified for the Sponsor), have been considered material. All cases where the amount is not ascertainable, but considered material, 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 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 ₹ 11.61 million (being 5 % of the profit after tax for Fiscal 2022 based on the audited standalone financial statements of the Trustee for Fiscal 2022), 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 SPV, the outstanding cases involving an amount equivalent to or exceeding ₹ 79.37 million (being 5 % of the total income of the Trust for the period ended December 31, 2021) 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 SPV.

I. Litigation involving the Trust

There are no material litigations and regulatory actions pending against the Trust as on the date of this Preliminary Placement Memorandum.

II. Litigation involving the Project SPV

Litigation against Project SPV

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; 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, 2021, 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. The Main Petition is currently pending adjudication.

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 the Project SPV (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 the Project SPV is discriminatory in comparison with other toll plazas operated by NHAI; and (iv) the toll collection by the Project SPV 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 the Project SPV 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 the Project SPV from charging higher toll as per the Fee Notifications, pending consideration of the Petition. The aforesaid interim orders were subsequently challenged by the Project SPV 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. The Petition is pending adjudication.

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 the Project SPV (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 the Project SPV 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 the Project SPV 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 the Project SPV 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 the Project SPV 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 the Project SPV (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) the Project SPV, 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 the Project SPV 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 the Project SPV to not collect toll from the said toll plazas. The matter is currently pending adjudication.

5. An arbitral tribunal passed an award dated September 29, 2017 ("**Arbitral Award**") in relation to a dispute between the Project SPV 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 the Project SPV 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) the Project SPV 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 the Project SPV 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 has directed the NHAI to release 75% of the awarded amount along with interest to the Project SPV within 2 weeks from the date of the order, subject to the Project SPV 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 the Project SPV, within 2 weeks from the date of the order, subject to the Project SPV furnishing an unconditional bank guarantee of the equivalent amount in favour of NHAI within 1 week from the date of the order. The Project SPV 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 the Project SPV 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 has set aside the Arbitral Award. The Project SPV has filed an appeal on April 23, 2022 in relation to the order passed by the High Court. This appeal is currently pending.

6. 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. These notices are currently pending.

Litigation by the Project SPV

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. The estimated amount involved in this matter is approximately ₹ 1,268.87 million. This claim is currently pending and has now been taken up for conciliation.

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.

Claims involving the Project SPV

Claims against the Project SPV

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.This matter is pending and has now been taken up for conciliation.

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 damages 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 and has been taken up for conciliation.

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. This matter is currently pending closure.

4. The Project SPV 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 labour cess claim) .

Claims by the Project SPV

1. The Project SPV 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 the Project SPV 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 the Project SPV was 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. Further, the Project SPV is looking for de-scoping of certain pending construction work on the Project which, as a negative Change of Scope would be treated as per the terms of the Concession Agreement. The amount involved in these claims aggregates to approximately ₹ 2,099.52 million. These matters are under discussion.

2. The Project SPV, 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 and have been taken up for conciliation.

3. The Project SPV has raised a claim with NHAI in relation to the (i) order passed by the High Court of Orissa ("**High Court**") in the writ petition W.P. (C) No. 31946 / 2011 filed by Keonjhar Nava Nirman Parishad and Badri Narayana Mohaptara against Union of India and others; (ii) 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 Orders**"). By way of the HC Orders, High Court adjudicated that the Project SPV must stop collecting toll at the revised rate under the NHAI Revised Fee Notification. Subsequent to the HC Orders, the Supreme Court passed an order dated May 24, 2012 ("**SC Order**") which stayed the HC Orders till the final disposal of the writ petition(s). The Project SPV 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, the Project SPV has sought conciliation of dispute in this regard. The amount involved is ₹ 1,268.87 million. The matter is subject to conciliation.

4. The Project SPV 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 and has been taken up for conciliation.

5. The Project SPV has raised an insurance claim for the repair works undertaken by the Project SPV in relation to the damage caused due to cyclone 'Fani'. The amount pending in this claim aggregates to approximately ₹ 9.35 million. Further, the Project SPV has also made claims in relation to the shifting of electrical utilities and water utilities. These matters are under discussion.

6. The Project SPV 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 the Project SPV in accordance with the Concession Agreement. Further, the Project SPV 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 the Project SPV 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 the Project SPV and any hindrances in the form of structures, trees, pipelines are to be removed by the Project SPV as per its contractual obligations under the Concession Agreement, which the Project SPV has failed to perform. The amount pending in this claim aggregates to approximately ₹ 6,996.40 million. This matter is currently pending and has been taken up for conciliation.

7. The Project SPV 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 and has been taken up for conciliation.

8. The Project SPV has made certain claims to 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 the Project SPV. These claims are currently pending and have been taken up for conciliation.

III. Litigation involving the Sponsor

There are no material litigations and regulatory actions pending against the Sponsor as on the date of this Preliminary Placement 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 Preliminary Placement 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 Preliminary Placement Memorandum.

VI. Litigation involving the Associates of the Sponsor, the Investment Manager and the Project Manager (other than the Project SPV)

Other than as disclosed below, 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 Preliminary Placement Memorandum.

Material litigation and regulatory actions pending against the associates of the Sponsor and Investment Manager

Except as disclosed below, there are no material regulatory actions pending against the associates of the Sponsor and Investment Manager as on the date of this Preliminary Placement Memorandum:

1. In June 2019, an ex-senior executive of Otera Capital Holding Inc. filed a claim of CAD 6,946,134.31 before the Supreme Court of Québec against Otera Capital Holding Inc. ("**Otera**"), Ivanhoé Cambridge Inc. ("**IC**") and Caisse de dépôt et placement du Québec ("**CDPQ**") for wrongful dismissal, defamation and violation of his right to dignity and honour. The break-up of the claim was as follows: (a) CDPQ: CAD 600,000 (CAD 450,000 for defamation and CAD 150,000 in punitive damages (the "**Joint and Several Claim**")), (b) Otera: CAD 1,243,500 (the Joint and Several Claim, CAD 643,500 in payments under the short and long-term incentive plans, and an undetermined amount for the pension plan). and (c) IC: CAD 6,302,634.31 (the Joint and Several Claim, CAD 5,702,634.31 in severance and payments under the short and long-term incentive plans). The matter is currently pending.

Material litigation and regulatory actions pending against the Associates of the Project Manager

There are no material regulatory actions pending against the associates of the Project Manager as on the date of this Preliminary Placement Memorandum.

VII. Litigation involving the Trustee

There are no material litigations and regulatory actions pending against the Trustee as on the date of this Preliminary Placement 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 Preliminary Placement 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 SPV			
1.	Direct Tax	1	Nil
2.	Indirect Tax	1	0.5
Project Manager			
3.	Direct Tax	Nil	Nil

Sr. No.	Nature of Case	Number of cases	Amount involved (in ₹ million, unless otherwise specified)
4.	Indirect Tax	Nil	Nil
Investment Manager			
5.	Direct Tax	4	24.40
6.	Indirect Tax	Nil	Nil
Sponsor			
7.	Direct Tax	7	7.6 million CAD

SELLING AND TRANSFER RESTRICTIONS

The distribution of this Preliminary Placement Memorandum and the offer, sale or delivery of the Units is restricted by law in certain jurisdictions. Persons who may come into possession of this Preliminary Placement Memorandum are advised to consult with their own legal advisors as to what restrictions may be applicable to them and to observe such restrictions. This Preliminary Placement Memorandum may not be used for the purpose of an offer or invitation in any circumstances in which such offer or invitation is not authorized. Due to the following restrictions, investors are advised to consult legal counsel prior to purchasing Units or making any resale, pledge or transfer of the Units.

Canada

The Units may be sold only in any province of Canada to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Units must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Placement Memorandum (including any amendment hereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor. The Issuer does not believe that there is any relationship with the Joint Lead Managers that would require disclosure pursuant to National Instrument 33-105 Underwriting Conflicts.

Upon receipt of this Placement Memorandum, each Canadian purchaser hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque acheteur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.*

Singapore

This Placement Memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this Placement Memorandum and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Units may not be circulated or distributed, nor may Units be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Units are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Units pursuant to an offer made under Section 275 of the SFA except:

(1) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(2) where no consideration is or will be given for the transfer;

(3) where the transfer is by operation of law;

(4) as specified in Section 276(7) of the SFA; or

(5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Any reference to the SFA is a reference to the Securities and Futures Act, Chapter 289 of Singapore and a reference to

any term as defined in the SFA or any provision in the SFA is a reference to that term or provision as modified or amended from time to time including by such of its subsidiary legislation as may be applicable at the relevant time.

YOU ARE ADVISED TO CONSULT YOUR OWN LEGAL COUNSEL PRIOR TO MAKING ANY OFFER, RESALE, PLEDGE OR TRANSFER OF THE UNITS.

RIGHTS OF UNITHOLDERS

The rights and interests of Unitholders are included in this Preliminary Placement Memorandum and the InvIT Regulations. Under the Indenture of Trust and the 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 Preliminary Placement 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 Portfolio Assets of the Trust and is not entitled to transfer of the Portfolio Assets (or any part thereof) or any interest in the Portfolio Assets (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 Unitholders' complaints and their redressal, from time to time, in accordance with applicable law. For details, please see the section entitled "*Corporate Governance*" on page 136.

Distribution

The Unitholders shall have the right to receive distribution in accordance with the InvIT Regulations and in the manner provided in this Preliminary Placement Memorandum. For details, please see the section entitled "*Distribution*" on page 178.

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;

(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, 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

Any listing of Units shall be in accordance with the InvIT Regulations.

DILUTION

Dilution is the amount by which the Issue Price exceeds the net asset value ("**NAV**") per Unit, immediately after the completion of this Issue. NAV per Unit is determined by subtracting the total liabilities of the Trust from the total assets of the Trust and dividing by the number of Units issued and outstanding immediately before this Issue. There was no *pro forma* NAV before this Issue for the Units.

The Trust will issue 91,000,000 Units at an Issue Price of ₹ 100 for each Unit.

The following provides the per Unit dilution approximately:

Combined NAV per Unit before this Issue	Not applicable
Combined NAV per Unit after this Issue	₹ 37.53
Dilution in NAV per Unit to Unitholders	₹ 62.47
Dilution to Unitholders as a percentage of the Issue Price	62.47%

ISSUE STRUCTURE

Initial offer through a private placement of up to 91,000,000 Units for cash at price of ₹ 100 per Unit, aggregating up to ₹ 9,100 million by the Trust.

Particulars	Details
Number of Units available for Allotment/allocation	Up to 91,000,000 Units
Basis of Allotment/ allocation	Discretionary
Minimum Bid	Such number of Units that the Bid Amount is not less than ₹ 10 million, and in multiples of 1 Unit thereafter[(1)]
Maximum Bid	Such number of Units (in multiples of 1 Unit) not exceeding the size of this Issue, subject to applicable investment limits[(1)]
Mode of Allotment	Compulsorily in dematerialised form
Bid Lot	A minimum of such number of Units that the Bid Amount is not less than ₹ 10 million, and in multiples of 1 Unit thereafter
Allotment Lot	A minimum of such number of Units that the Bid Amount is not less than ₹ 10 million, and in multiples of 1 Unit thereafter
Who can apply	(i) Institutional Investors; and (ii) Bodies Corporate
Terms of Payment	Entire amount to be paid at the time of submission of the Application Form[(1)]

[(1)] *In case of joint Bids, the Application Form should contain only the name of the First Bidder whose name should also appear as the first holder of the beneficiary account held in joint names. The signature of only the First Bidder would be required in the Application Form and such First Bidder would be deemed to have signed on behalf of the joint holders. Bidders are advised to consult their own advisors with respect to any restrictions or limitations that may be applicable to them, including any restrictions or limitations in relation to their ability to invest in the Units. By making a Bid (including any revision thereof), the Bidder will be deemed to have represented to the Investment Manager and the Trustee that it is eligible to participate in the Issue and be Allotted Units under applicable law.*

Indicative Issue Timeline

Event	Indicative Date
Bid/Issue Opening Date	June 16, 2022
Bidders to submit completed Application Forms	Bid/Issue Period
Bid/Issue Closing Date	June 22, 2022
Dispatch of CANs to successful Bidders	On or about June 27, 2022
Closing Date	On or about June 28, 2022
Designated Date	On or about June 28, 2022
Initiation of refunds, if any, in excess of the amount which was required to be paid by such Bidder pursuant to the Units Allocated to such Bidder	On or about June 29, 2022
Initiation of refunds, if any, in the event of any failure to Allot within seven Working Days from Bid/Issue Closing Date	On or about June 29, 2022

The above timetable is indicative and does not constitute any obligation or liability on the Trust, the Investment Manager, the Trustee.

ISSUE INFORMATION

Below is a summary, intended to provide a general outline of the procedures for the bidding, application, payment, Allocation and Allotment of the Units to be offered pursuant to the Issue.

Eligible Investors are advised to inform themselves of any restrictions or limitations that may be applicable to them under applicable law to which they are subject, and should consult their respective advisors in this regard. Eligible Investors that apply in this Issue will be required to confirm, and will be deemed to have represented to the Trustee, the Investment Manager and their respective directors, officers, agents, affiliates and representatives, that they are eligible under all applicable laws, rules, regulations, guidelines and approvals to acquire the Units. The Investment Manager and the Sponsor and their respective directors, officers, agents, affiliates and representatives accept no responsibility or liability for advising any investor on whether such investor is eligible to acquire the Units.

Authority for the Issue

The Trust is making this Issue in accordance with Regulation 26B(1) of the InvIT Regulations. The Issue was authorised and approved by the board of directors of the Investment Manager on June 7, 2022.

The Investment Manager has filed a copy of this Preliminary Placement Memorandum, and will file a copy of the Placement Memorandum with SEBI.

The Units are not proposed to be listed on any stock exchange. The Units have not been and will not be registered, listed or otherwise qualified in any jurisdiction outside India and may not be offered or sold, and Bids may not be made by persons in any such jurisdiction, except in compliance with the applicable law of such jurisdiction. The Units shall not be offered or sold where such offer or sale would require registration, qualification or listing.

Eligible Investors should note that Allotment to successful Bidders will only be in the dematerialized form. Application Forms which do not have the details of the Bidders' demat accounts including DP ID, PAN and Client ID will be treated as incomplete and rejected. Bidders will not have the option of receiving Allotment in physical form.

Issue Procedure

1. The Investment Manager, shall electronically circulate serially numbered copies of this Preliminary Placement Memorandum and the Application Form to Eligible Investors. The Application Form will be specifically addressed to each Eligible Investor. The list of Eligible Investors to whom the serially numbered copies of this Preliminary Placement Memorandum and the Application Form will be circulated, shall be determined by the Investment Manager.

2. **Unless a serially numbered Preliminary Placement Memorandum along with an Application Form is addressed to a particular Eligible Investor, no invitation to subscribe shall be deemed to have been made to such Eligible Investor.** Even if such documentation were to come into the possession of any person other than the intended recipient, no offer or invitation to offer shall be deemed to have been made to such person and such person shall not be eligible to participate in the Issue.

3. Bidders may submit an Application Form to the Investment Manager, only during the Bid/Issue Period and not later than the Bid/Issue Closing Date.

4. Bidders will be required *inter alia*, to indicate the following in the Application Form:

    - a representation that it is outside the United States acquiring the Units in an offshore transaction under Regulation S and has agreed to certain other representations set forth in the Application Form;
    - name of the Bidder to whom the Units are to be Allotted;
    - number of Units Bid for;
    - details of the Bid Amount deposited by the Bidder into the Cash Escrow Account;
    - details of the demat accounts to which the Units should be credited;
    - a representation that such person is an "Institutional Investor" or a "Body Corporate" in terms of the InvIT Regulations;
    - the details of Bidder's bank account along with fund transfer details, in case of any refund; and

- any other information which may be relevant to the Bid.

Note: The Bids made by asset management companies or custodians of Mutual Funds, if permitted under applicable law, shall specifically state the names of the concerned schemes for which the Bids are made. In case of a Mutual Fund, a separate Bid can be made in respect of each scheme of the Mutual Fund registered with SEBI and such Bids in respect of more than one scheme of the Mutual Fund will not be treated as multiple Bids provided that the Bids clearly indicate the scheme for which the Bid has been made. Bidders are advised to ensure that any single Bid from them does not exceed the investment limits or maximum number of Units that can be held by them under applicable law.

5. Each Bidder shall be required to make payment of the entire Bid Amount for the Units at the Issue Price, only through electronic transfer to the Cash Escrow Account during the Bid/Issue Period, along with the completed Application Form.

6. No payment shall be made by Bidders in cash. Please note that any payment of Bid Amount for Units shall be made from the bank account of the relevant Bidder applying for Units, and the Investment Manager, shall keep a record of the bank account from where such Bid Amounts have been received. The Bid Amount payable on Units to be held by joint holders shall be paid from the bank account of the person whose name appears first in the completed Application Form. Pending Allotment, all Bid Amounts received from Bidders shall be kept by in a separate bank account with a scheduled bank (i.e. the Cash Escrow Account).

7. Once a duly completed Application Form is submitted by a Bidder on the basis of disclosures in this Preliminary Placement Memorandum, such Application Form shall constitute an irrevocable offer and cannot be withdrawn.

8. Upon receipt of the completed Application Form and the receipt of the Bid Amount in the Cash Escrow Account, the Investment Manager shall, after Bid/Issue Closing Date, determine the number of the Units to be Allocated pursuant to the Issue.

9. Upon determination of the Bidders to whom Allocation shall be made, the Investment Manager, will send the CANs, along with serially numbered Placement Memorandum, to the Bidders who have been Allocated Units. The dispatch of a CAN shall be deemed a valid, binding and irrevocable contract in respect of the number of Units Allocated to the Bidder. **Please note that the Allocation and Allotment will be at the absolute discretion of the Investment Manager**.

10. Upon the dispatch of CAN to successful Bidders, the Investment Manager shall Allot Units of the Trust as per the details in the CAN sent to successful Bidders.

11. Allottees are advised to instruct their respective Depository Participant to accept the Units that may be Allotted to them pursuant to the Issue into their respective demat accounts.

12. In the event the Investment Manager is unable to Allot the Units or upon cancellation of the Issue, the Investment Manager shall be liable to refund the Bid Amounts with interest to the Bidders in accordance with applicable law. For each Bidder to whom any amounts are to be refunded, the refund shall be made to the same bank account from which the Bid Amount was remitted by such Bidder.

13. The Bid Amount will be transferred to the accounts of the Trust from the Cash Escrow Account only upon completion of Allotment.

14. In the event the minimum number of unitholders in the Trust, other than the sponsor, its related parties and its associates, is not five, and collectively holding at least 25% of the total units of the InvIT, the Issue shall fail and the Investment Manager shall be liable to refund the Bid Amounts to the Bidders in accordance with the Cash Escrow Agreement and applicable law. Further, for each Bidder to whom any amounts are to be refunded, the refund shall be made to the same bank account from which the Bid Amount was remitted by such Bidder.

Who can Bid?

Each Bidder should check if it is eligible to Bid under applicable law. Furthermore, certain categories of Bidders may not be permitted to Bid in the Issue or hold Units in excess of the limits specified under applicable law.

Only Institutional Investors and Bodies Corporate are eligible to participate in this Issue.

An Institutional Investor is defined in Regulation 2(1)(ya) of the InvIT Regulations.

A Body Corporate is defined in Section 2(11) of the Companies Act, 2013 to include a company incorporated outside India, but does not include (i) a co-operative society registered under any law relating to co-operative societies; and (ii) any other body corporate (not being a company as defined in the Companies Act, 2013) which the Central Government may, by notification, specify in this regard.

Bodies Corporate incorporated outside India are permitted to participate in the Issue subject to compliance with Schedule VIII of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019.

The Trustee, the Valuer and the employees of the Valuer who were involved in the valuation of the Trust are not permitted to Bid in this Issue.

Bids by FPIs

Foreign Portfolio Investors (other than individuals, corporate bodies and family offices) are permitted to participate in the Issue subject to compliance with Schedule VIII and other applicable provisions of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019. In case of Bids by FPIs the payment should be paid as inward remittance from abroad through banking channels or out of funds held in NRE, SNRR or FCNR(B) account maintained in accordance with the Foreign Exchange Management (Deposit) Regulations, 2016, along with documentary evidence in support of the remittance. In case of Bids made by FPIs, a verified true copy of the certificate of registration issued by the designated depository participant under the SEBI FPI Regulations is required to be attached along with the Application Form, failing which the Investment Manager, reserves the right to reject the Bid.

Bids by SEBI registered VCFs and AIFs

The SEBI VCF Regulations prescribe, amongst others, the investment restrictions on VCFs registered with SEBI. Further, the SEBI AIF Regulations prescribe, amongst others, the investment restrictions on AIFs. Further, VCFs which have not re-registered as an AIF under the SEBI AIF Regulations shall continue to be regulated by the SEBI VCF Regulations until the existing fund or scheme managed by the fund is wound up and such funds shall not launch any new scheme after the notification of the SEBI AIF Regulations. Additionally, VCFs and AIFs are subject to certain investment restrictions, including with respect to the percentage of investible funds held in each investee entity. Allotments made in respect of Bids by VCFs and AIFs in this Issue shall be subject to the rules and regulations that are applicable to each of them respectively. In case of Bids made by VCFs or AIFs, a certified true copy of the issued by SEBI is required to be attached along with the Application Form failing which the Investment Manager reserves the right to reject the Bid.

Bids by Banking Companies

Bids may be made by banks as permitted by the RBI and is subject to conditions specified in the Prudential Guidelines – Banks' investment in units of REITs and InvITs dated April 18, 2017. In case of Bids made by banking companies registered with the RBI, certified copies of (i) the certificate of registration issued by the RBI, and (ii) the approval of such banking company's investment committee are required to be attached to the Application Form, failing which the Investment Manager reserves the right to reject the Bid.

Bids by Mutual Funds

Bids may be made by mutual funds under all its schemes, existing and future, subject to the investment conditions and other restrictions prescribed under the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 (including, the circular on mutual funds dated February 28, 2017 and any other circulars, notifications and guidelines issued thereunder). In case of Bids made by Mutual Funds, a certified true copy of the issued by SEBI is required to be attached along with the Application Form, failing which the Investment Manager reserves the right to reject the Bid.

Bids by Eligible NRIs

In accordance with Schedule IV of the FEMA Rules, Eligible NRIs, including companies, trusts and partnership firms incorporated outside India which are owned and controlled by NRIs, are permitted to purchase units issued by an 'investment vehicle' without any limit, either on the stock exchange or outside it. The FEMA Rules define an 'investment vehicle' to mean an entity registered and regulated under the regulations framed by the SEBI or any other authority designated for that purpose, including an InvIT governed by the SEBI.

Investments by Eligible NRIs in the Units shall be on a non-repatriation basis, and shall be deemed to be domestic investment at par with investments made by residents of India.

Bids by Insurance Companies

Bids may be made by insurance companies as permitted by the Insurance Regulatory and Development Authority of India in terms of the Master Circular – Investments, 2016 and the circular issued by the IRDAI entitled, Investment in Units of Real Estate Investment Trusts (REIT) & Infrastructure Investment Trusts (InvIT), dated March 14, 2017.

Bids under Power of Attorney

In case of Bids made pursuant to a power of attorney by Institutional Investors or bodies corporate, a certified copy of the power of attorney or the relevant resolution or authority, as the case may be, along with a certified copy of the memorandum of association and articles of association and/or bye laws must be submitted along with the Application Form, failing which the Investment Manager reserves the right to reject the Bid.

The Investment Manager, in its absolute discretion, reserves the right to relax the above condition of simultaneous lodging of the power of attorney along with the Application Form.

Allotments, if any, made to FVCIs in the Issue are subject to the respective rules and regulations that are applicable to each of them.

All Non-Resident Investors including Eligible NRIs and FPIs should note that refunds, dividends and other distributions, if any, will be payable in Indian Rupees only and net of bank charges and/or commission.

There is no reservation for NRIs, FPIs and FVCIs and all Bidders will be treated on the same basis with other categories for the purpose of allocation.

In accordance with the notifications and circulars issued by the Ministry of Finance, Ministry of Labour and Employment and Pension Fund Regulatory and Development Authority, provident funds, pension funds, superannuation funds, gratuity funds and national pension fund schemes are permitted to invest in fresh issues of units by InvITs only if such units are proposed to be listed.

The Parties to the Trust are not liable for any amendment or modification or change to applicable law or regulations, which may occur after the date of this Preliminary Placement Memorandum. Eligible Investors are advised to make their independent investigations and satisfy themselves that they are eligible to apply in this Issue. Eligible Investors are advised to ensure that any single application from them does not exceed the investment limits or maximum number of Units that can be held by them under applicable law or regulation or as specified in this Preliminary Placement Memorandum.

Maximum and Minimum Bid Size

- Each Bidder is required to Bid for a Minimum Bid Size of ₹ 10 million and in multiples of 1 Unit thereafter.
- No Bidder shall Bid for such number of Units that exceeds the Issue size.

Application Process

Application Form

Bidders shall only use the Application Forms provided by the Investment Manager electronically, for the purpose of making a Bid in terms of this Preliminary Placement Memorandum.

By making a Bid for the Units through Application Forms, Bidders will be deemed to have made the following representations and warranties, respectively:

(a). The Bidder confirms that it is an Institutional Investor or a Body Corporate, and is eligible to participate in the Issue;

(b). The Bidder has deposited the Bid Amount in the Cash Escrow Account;

(c). The Bidder has no right to withdraw its Bid once such Bid is submitted to the Investment Manager;

(d). The Bidder confirms that it is eligible to apply for, and hold, any Units that may be Allotted to the Bidder pursuant to the Issue. The Bidder further confirms that any such Allotment of Units to, and the holding of Units by, the Bidder does not, and shall not, exceed the level permissible as per any law applicable to the Bidder; and

(e). The Bidder confirms that it is, and was at each time an offer of the Units was made, outside the "United States", it is not a "U.S. person" and it is purchasing the Units in an "offshore transaction", in each case within the meaning of and in reliance on Regulation S under the Securities Act.

ELIGIBLE INVESTORS MUST PROVIDE THEIR DEMAT ACCOUNT DETAILS, THEIR DEPOSITORY PARTICIPANT'S NAME, DEPOSITORY PARTICIPANT IDENTIFICATION NUMBER, BENEFICIARY ACCOUNT NUMBER AND BANK ACCOUNT DETAILS IN THE APPLICATION FORM. ELIGIBLE INVESTORS MUST ENSURE THAT THE NAME GIVEN IN THE APPLICATION FORM IS EXACTLY THE SAME AS THE NAME IN WHICH THE DEMAT ACCOUNT IS HELD.

Demographic details such as address and bank account details will be obtained from the Depositories as per the demat account details given in the Application Form.

Instructions for completing the Application Form

Bidders may note that Application Forms not filled completely or correctly as per instructions provided in this Preliminary Placement Memorandum and the Application Form are liable to be rejected. The Bids should adhere to the following:

(a). Bids must be made only in the prescribed Application Form;

(b). Application Form must be completed in full, in BLOCK LETTERS in ENGLISH and in accordance with the instructions contained herein and in the Application Form. Incomplete Application Forms are liable to be rejected. Bidders must provide details of valid and active DP ID, Client ID and PAN clearly and without error. Invalid accounts, suspended accounts, or where such account is classified as invalid or suspended shall not be considered for Allotment. Bidders should note that the Registrar and the Investment Manager will not be liable for errors in data entry due to incomplete or illegible Application Forms; and

(c). Bidders are required to sign the Application Form. Bidders should ensure that the thumb impressions and signatures other than in the languages specified in the Eighth Schedule to the Constitution of India, are attested by a Magistrate or a Notary Public or a Special Executive Magistrate under official seal.

Submission of Application Form

All Application Forms must be duly completed with information including the name of the Bidder, the number of the Units applied for and the Bid Amount. The Application Form shall be submitted to the Investment Manager either through electronic form and followed-up through physical delivery of the Application Form at the following address:

5th Floor,
Suite 507,
Worldmark 3, Aerocity,
New Delhi 110 037
Telephone: +91 11 4957 7800

The Investment Manager shall not be required to provide any written acknowledgement of the Application Form.

PAN

Each Eligible Investor must mention its Permanent Account Number ("PAN") allotted under the IT Act. Each Eligible Investor is required to submit a copy of its PAN card along with the Application Form. Applications without this information will be considered incomplete and are liable to be rejected. Eligible Investors should not submit the general index registrar number ("**GIR**") instead of the PAN as the Application Form is liable to be rejected on this ground.

Bank Account for Payment of Bid Amount

The Investment Manager has opened the Cash Escrow Account with Axis Bank Limited, acting as the Escrow Collection Bank in terms of the arrangement among the Trust, the Investment Manager and the Escrow Collection Bank. Bidders are required to deposit the entire Bid Amount during the Bid/Issue Period, together with the completed Application Form, in favour of "Indian Highway Concessions Trust - CASH ESCROW A/C".

If the payment of the Bid Amount is not made favouring the Cash Escrow Account within the Bid/Issue Period, the Application Form of the Bidder is liable to be rejected.

The Trustee and the Investment Manager shall utilize the amount deposited in the Cash Escrow Account only for the purposes of: (i) adjustment against Allotment; or (ii) refund of application monies in case of any failure to allot Units in the Issue. For further details, please see the section entitled "*Issue Information - Refunds*" on page 241.

Payment Instructions

The payment of Bid Amount shall be made by the Bidders in the name of the Cash Escrow Account as per the payment instructions provided in this Preliminary Placement Memorandum and the Application Form.

Payments are to be made only through electronic fund transfer. Payments through cheques or cash or any mode other than electronic mode shall be rejected.

Allocation

The Bidders shall submit their Bids for the Units within the Bid/Issue Period to the Investment Manager. The Registrar shall provide a schedule of Bids received which shall indicate the Bid Amount received in respect of each Bid (based on a schedule to be provided by the Escrow Collection Bank to the Registrar), to the Investment Manager.

Method of Allocation

The Investment Manager shall determine the Allocation on a discretionary basis. After finalization of the Allocation, the Investment Manager will update this Preliminary Placement Memorandum with the Issue details and file the Placement Memorandum with SEBI, and dispatch the CAN, together with a serially numbered Placement Memorandum to each successful Bidder.

THE DECISION OF THE INVESTMENT MANAGER IN RESPECT OF ALLOCATION SHALL BE FINAL AND BINDING ON ALL BIDDERS. BIDDERS MAY NOTE THAT ALLOCATION OF THE UNITS IS AT THE SOLE AND ABSOLUTE DISCRETION OF THE INVESTMENT MANAGER, AND BIDDERS MAY NOT RECEIVE ANY ALLOCATION EVEN IF THEY HAVE SUBMITTED VALID APPLICATION FORMS. THE INVESTMENT MANAGER IS NOT OBLIGED TO ASSIGN ANY REASON FOR ANY SUCH NON-ALLOCATION.

Confirmation of Allocation Note or CAN

Based on the Application Forms and the Bid Amounts received from Bidders, the Investment Manager in its sole and absolute discretion, will decide the Bidders to whom the serially numbered CANs shall be sent, pursuant to which the details of Units Allocated to them shall be notified to such Bidders. Further, details of the amounts payable for Allotment of the Units in their respective names shall be notified to such Bidders. Additionally, the CAN will include the probable designated date, being the date of credit of the Units to the respective Bidder's demat account ("**Designated Date**").

Bidders, who have been Allocated Units, would also be sent a serially numbered Placement Memorandum either in electronic form or by physical delivery along with the serially numbered CAN. The dispatch of the serially numbered Placement Memorandum and the CAN to Bidders shall be deemed a valid, binding and irrevocable contract in respect of the number of Units Allocated to each successful Bidder.

Bidders are advised to instruct their Depository Participant to accept the Units that may be Allotted to them pursuant to the Issue.

Bidders' Demat Account and Bank Account Details

Bidders should note that on the basis of Bidders' PAN, DP ID and Client ID provided by them in the Application Form, the Registrar will obtain from the Depository the demographic details including the Bidders' address and bank account details (including the nine-digit Magnetic Ink Character Recognition ("**MICR**") code as appearing on a cheque leaf (the "**Demographic Details**")), from the Depository. The Demographic Details will be used for giving refunds (including through direct credit, NACH, NECS, NEFT and RTGS) to the Bidders. It is mandatory to provide the bank account details in the space provided in the Application Form and Application Forms that do not contain such details are liable to be rejected. Hence, Bidders are advised to immediately update their bank account details, PAN and Demographic Details as appearing in the records of the Depository Participant and ensure that they are true and correct. Failure to do so could result in delays in credit of refunds to Bidders at their sole risk and none of the Registrar, the Escrow Collection Bank, the Investment Manager or the Trustee will have any responsibility or undertake any liability for this. Accordingly, Bidders should carefully fill in their demat account details in the Application Form.

By signing the Application Form, the Bidder is deemed to have authorized the Depositories to provide to the Registrar, on request, the required Demographic Details as available in their records.

Closing Date and Allotment of the Units

The Trustee and the Investment Manager will endeavour to complete the Allotment of Units by the Closing Date.

In accordance with the InvIT Regulations, the Units will be issued and Allotment shall be made only in dematerialised form to the Allottees. The Investment Manager (on behalf of the Trust) and the Registrar have entered into:

1. an agreement dated June 3, 2022, with NSDL; and
2. an agreement dated June 3, 2022, with CDSL.

The Trustee and/or the Investment Manager, at their discretion, reserve the right to cancel the Issue at any time prior to the issuance of CAN, without assigning any reason whatsoever.

Refunds

In the event of failure of Allotment, the Trust shall be liable to refund the Bid Amounts to the Allottees in compliance with the InvIT Regulations.

Other Instructions

Right to Reject Applications

The Investment Manager may reject Bids, in part or in full, without assigning any reason whatsoever. The decision of the Investment Manager in relation to the rejection of Bids shall be final and binding.

Units in Dematerialised form with NSDL or CDSL

The Allotment of the Units shall be only in dematerialised form (i.e., not in physical certificates but represented by the statement issued through the electronic mode).

A Bidder applying for the Units to be issued pursuant to the Issue must have at least one beneficiary account with a Depository Participant of NSDL or CDSL prior to making the Bid. Allotment to a successful Bidder will be credited in electronic form directly to the beneficiary account (with the Depository Participant) of such Bidder.

The Trustee or the Investment Manager, will not be responsible or liable for the delay in the credit of the Units to be issued and transferred pursuant to the Issue due to errors in the Application Form, delay in payment of Bid Amount or otherwise on part of the Bidders.

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
(formerly CLP Power India 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 private placement offering of units of Indian Highway Concessions Trust (the "Trust") 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 2023 relevant to the assessment year 2023-24). 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 issue of units 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 placement memorandum proposed to be filed with the Securities and Exchange Board of India, for the proposed issue of unlisted units, by the Trust on a private placement basis 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 private placement 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 in the private placement 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: 22501396AKLMPU2195

Place of Signature: Gurugram
Date: June 7, 2022

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, 2022 applicable for financial year ending 31 March 2023 relevant to the assessment year 2023-24. 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'.

As per the provisions of section 193 of the Act, every Indian company shall withhold taxes at rates in force prescribed under the relevant Finance Act i.e. 10 percent for FY 2022-23, while making payment of any interest on unlisted securities.

Accordingly, SPVs will be required to withhold taxes where interest is paid or payable on unlisted securities. Please note that the procedural provisions regarding exemption from TDS in relation to such interest paid or payable by SPV to business trust are absent. Accordingly, where SPVs withhold taxes on interest on securities paid or payable to the Trust, the Trust shall be eligible to claim a refund for the same.

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 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.

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).

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.

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. 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.

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:

Where Unitholder is a 'domestic company':

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.

Where Unitholder is a person 'other than company':

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')/ Foreign Institutional Investors ('FIIs'):

In case of Foreign Institutional Investor or Foreign Portfolio Investor registered under SEBI (Foreign Portfolio Investors) Regulations 2014 ('FII/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. 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.

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 or long term capital gain 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.

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.

II. TAX DEDUCTION AT SOURCE[1]

Section 194LBA – Deduction of tax on certain income from the Trust

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.

[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*

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

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

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, 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];

[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.*

(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.

General tax rates and provisions:

1. The income-tax rates specified in this note are as applicable for the financial year 2022-23 (relevant to assessment year 2023-24), 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%
(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.

[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.*

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, 2022applicable for financial year ending 31 March 2023 relevant to the assessment year 2023-24. 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

LEGAL MATTERS

Cyril Amarchand Mangaldas, does not make, or purport to make, any statement in this Preliminary Placement Memorandum and is not aware of any statement in this Preliminary Placement 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 Preliminary Placement Memorandum.

INDEPENDENT ACCOUNTANTS

The Special Purpose Combined Financial Statements have been prepared in accordance with the requirements of the InvIT Regulations and the accounting principles generally accepted in India, including Ind AS. The Special Purpose Combined Financial Statements included in this Preliminary Placement Memorandum have been audited by S R Batliboi & Co. LLP, the statutory auditors of the Trust, as stated in their audit report dated June 7, 2022 included in this Preliminary Placement Memorandum.

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INDEPENDENT AUDITOR'S REPORT ON SPECIAL PURPOSE COMBINED FINANCIAL STATEMENTS

Indian Highway Concessions Trust
acting through its Investment Manager,

The Board of Directors of
Maple Infra InvIT Investment Manager Private Limited
(formerly CLP Power India Private Limited)
6th Floor, Chanakya, Off. Ashram Road, Ahmedabad,
Gujarat 380009

Report on the Audit of Special Purpose Combined Financial Statements

Opinion

We have audited the accompanying special purpose combined financial statements of Indian Highway Concessions Trust ('Trust') and Shree Jagannath Expressways Private Limited (the "Project SPV") (collectively referred to as 'Trust Group'), which comprise the Combined Balance Sheets as at December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019, the Combined Statement of Profit and Loss (including other comprehensive income), the Combined Statement of Changes in Equity and the Combined Statement of Cash Flows for the nine months period ended December 31, 2021, for the years ended March 31, 2021, March 31, 2020, and March 31, 2019, the Combined Statement of net assets at fair value as at December 31, 2021, the Combined Statement of Total Returns at Fair Value for the nine months period ended December 31, 2021 and year ended March 31, 2021 and notes to the special purpose combined financial statements including a summary of significant accounting policies and other explanatory information (collectively, the "Special Purpose Combined Financial Statements"). The Special Purpose Combined Financial Statements are prepared in connection with the proposed issuance of unlisted units of the Trust on a private placement basis as per InvIT Regulations.

The Special Purpose Combined Financial Statements have been prepared in accordance with the basis of preparation as set out in Note 2.1 to Special Purpose Combined 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 financial statements of the Project SPV, the aforesaid Special Purpose Combined Financial Statements give a true and fair view in accordance with the basis of preparation as specified in note 2.1 to the Special Purpose Combined Financial Statements in case of:

i. the combined balance sheet, of the state of affairs of the Trust Group as at December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019;
ii. the combined statement of profit and loss (including other comprehensive income) of the Trust Group, of the loss for the nine months period ended December 31, 2021, for the years ended March 31, 2021, March 31, 2020 and March 31, 2019;
iii. the combined cash flow statement, of the cash movements of the Trust Group for the nine months period ended December 31, 2021, for the years ended March 31, 2021, March 31, 2020 and March 31, 2019;
iv. the combined statement of changes in equity, of the movement of the equity holders for the nine months period ended December 31, 2021, for the years ended March 31, 2021, March 31, 2020 and March 31, 2019;
v. the combined statement of net asset at fair value, of the net assets as at December 31, 2021; and
vi. the combined statement of total returns at fair values, of the total returns for the nine months period ended December 31, 2021 and for the year ended March 31, 2021.

Basis of opinion

We conducted our audit of the Special Purpose Combined 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 Special Purpose Combined Financial Statements section of our report. We are independent of the Trust Group in accordance with the Code of Ethics issued by the ICAI together with the independence requirements that are relevant to our audit of the financial statements under the provisions of the Companies Act, 2013 (the "Act") and the Rules made thereunder, and we have fulfilled our other responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence obtained by us is sufficient and appropriate to provide a reasonable basis for our audit opinion on the Special Purpose Combined Financial Statements.

Emphasis of Matters

a. Basis of Accounting and Restriction on Distribution and Use

We draw attention to note 2.1 to the Special Purpose Combined Financial Statements, which describes the purpose and basis of preparation and presentation. The Special Purpose Combined Financial Statements have been prepared by the Investment Manager to the Trust to meet the requirements of SEBI (Infrastructure Investment Trusts) Regulations, 2014, as amended from time to time including the circulars notifications, clarifications and guidelines issued thereunder (the "InvIT Regulations"). Consequently, Special Purpose Combined Financial Statements may not necessarily be indicative of financial performance, financial position and cash flows of the Trust Group that would have occurred if it had operated as a single group of entities during the periods presented.

This Report is addressed to the Trust, the Trustee and the Investment Manager for inclusion in the placement memorandum in connection with the proposed issuance of unlisted units of the Trust on a private placement basis. As a result, the Special Purpose Combined Financial Statements may not be suitable for another purpose. Our report should not be used, referred to or distributed for any other purpose or to any other party. 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.

b. Possible effects arising from the outbreak of the COVID-19 pandemic

We draw attention to note 41 of the Special Purpose Combined Financial Statements which describes the uncertainties and Investment Manager's assessment of the impact of Covid-19 pandemic on the Trust Group's operations, carrying amounts of intangible assets (including intangible assets under development) and recoverability of other financial and non-financial assets, for which a definitive assessment of the impact in subsequent period is dependent on the future developments and circumstances as they evolve.

c. **Uncertainty of possible impact of delay in completion of project and non-receipt of Completion certificate**

We draw attention to note 47 and note 31(c) of the Special Purpose Combined Financial Statements 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 by the Project SPV as on date and the consequential uncertainty of potential penalties and/or termination of Concession Agreement.

Our opinion is not modified in respect of above matters.

Management's Responsibility for the Special Purpose Combined Financial Statements

The Board of Directors of the Investment Manager to the Trust are responsible for the preparation and presentation of these Special Purpose Combined Financial Statements that give a true and fair view of the financial position, financial performance, changes in equity and cash flows, position of net assets at fair value and total return at fair value of the Trust Group in accordance with the basis stated in Note 2.1 to the Special Purpose Combined Financial Statements.

The Board of Directors of the Project SPV and the Board of Directors of the Investment Manager are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Project SPV and the Trust, respectively 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 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 Special Purpose Combined 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 Special Purpose Combined Financial Statements by the Directors of the Investment Manager, as aforesaid.

In preparing the Special Purpose Combined Financial Statements, Board of Directors of the Project SPV and Board of Directors of the Investment Manager are responsible for assessing the Trust Group'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 Group or to cease operations, or has no realistic alternative but to do so.

The Board of Directors of the Investment Manager are also responsible for overseeing the Trust Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Special Purpose Combined Financial Statements

Our objectives are to obtain reasonable assurance about whether the Special Purpose Combined 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 Special Purpose Combined Financial Statements.

As part of an audit in accordance with SAs and other pronouncements issued by ICAI, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Special Purpose Combined 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 Group'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 of Project SPV'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 Project SPV'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 Special Purpose Combined 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 Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the Special Purpose Combined Financial Statements, including the disclosures, and whether the Special Purpose Combined 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

i. The financial statements of the Project SPV for the nine months period ended December 31, 2021, and for the years ended March 31, 2021, March 31, 2020 and March 31, 2019 have been prepared as per Ind AS and have been audited by the statutory auditor of the Project SPV for the respective years and have been used for the purpose of preparation of the special purpose combined financial statements by the Investment Manager of the Trust, which has been relied upon by us, for our audit of these Special Purpose Combined financial statements. The Investment Manager to the Trust has made adjustment/restatements to the general purpose audited financial statements of the Project SPV as explained in the note 53 of the Special Purpose Combined Financial statements. In our opinion such adjustments/restatements are appropriate and have been audited by us.

The Project SPV and the periods which were audited by other auditors are as follows:

S.No	Project SPV	Periods	Revenue (in lacs)	Total Assets (in lacs)	Net Cash outflows/(inflows) (in lacs)	Type of opinion	Date of Audit report
1	Shree Jagannath Expressways Private Limited	For the nine months period ended December 31, 2021	16,001.70	1,42,083.97	858.20	Unmodified	March 11, 2022
		Year ended March 31, 2021	21,651.24	1,41,544.79	(596.65)	Unmodified	June 24, 2021
		Year Ended March 31, 2020	20,352.45	1,40,311.08	(349.86)	Unmodified	July 16, 2020
		Year Ended March 31, 2019	20,741.75	1,35,645.95	1,430.56	Unmodified	May 27, 2019

ii. The Special Purpose Combined Financial Statements of the Trust Group for the years ended March 31, 2019 and March 31, 2020 comprise of financial information of only the Project SPV for the respective years as the Trust was not in existence during such period.

Report on Other Legal and Regulatory Requirements

As required by the SEBI InvIT Regulations and SEBI Circular CIR/IMD/DF/114/2016 dated 20 October 2016, we report that:

a) we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;

b) the Special Purpose Combined Balance Sheet, Special Purpose Combined Statement of Profit and Loss (including other comprehensive income) and Special Purpose Combined Statement of Changes in Equity, dealt with by this Report are in agreement with the books of account maintained for the purpose of preparation of these Special Purpose Combined Financial Statements; and

c) in our opinion, the Special Purpose Combined Financial Statements comply with the basis of preparation as stated in note 2.1 to the Special Purpose Combined Financial Statements.

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: 22501396AKLMLR7246
Place of Signature: Gurugram
Date: June 7, 2022

Indian Highway Concessions Trust
Special purpose Combined Balance Sheet
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
ASSETS :					
Non-current assets					
Property, plant & equipment	3	132.76	139.65	161.58	172.49
Intangible assets	4	1,24,597.96	88,364.97	91,624.95	94,729.79
Intangible assets under development	5	400.11	36,596.06	33,357.31	31,160.78
Financial assets	6	41.63	40.83	37.97	38.14
Other non current assets	7	538.91	812.74	654.95	535.65
Total non-current assets		**1,25,711.37**	**1,25,954.25**	**1,25,836.76**	**1,26,636.85**
Current assets					
Financial assets					
(i) Investments	8	3,220.37	3,143.00	4,547.89	1,753.74
(ii) Trade receivables	9	55.61	63.04	6.17	39.22
(iii) Cash & cash equivalents	10	719.37	1,575.49	978.84	628.98
(iv) Other bank balances	11	9,309.32	9,073.83	6,280.94	3,987.15
(v) Others financial assets	12	-	-	1,244.01	1,244.01
Other current assets	13	3,264.43	2,067.35	2,052.13	1,879.68
Total current assets		**16,569.10**	**15,922.71**	**15,109.98**	**9,532.78**
TOTAL ASSETS		**1,42,280.47**	**1,41,876.96**	**1,40,946.74**	**1,36,169.63**
EQUITY AND LIABILITIES:					
Equity					
Owner's equity	14	14,787.00	14,787.00	14,787.00	14,787.00
Other equity	14	(10,581.61)	(8,679.07)	(6,201.53)	(5,420.33)
Total equity		**4,205.39**	**6,107.93**	**8,585.47**	**9,366.67**
Liabilities					
Non-current Liabilities					
Financial liabilities					
(i) Borrowings	15	1,07,396.20	1,10,577.16	1,12,639.76	1,11,400.45
(ii) Other financial liability	16	2,565.33	1,571.56	320.48	-
Provisions	17	1,104.34	874.25	4,626.51	2,928.60
Total non-current liabilities		**1,11,065.87**	**1,13,022.97**	**1,17,586.75**	**1,14,329.05**
Current liabilities					
Financial liabilities					
(i) Borrowings	18	6,411.64	6,391.64	6,326.88	6,167.93
(ii) Trade payables	19	484.03	478.21	233.87	208.97
(iii) Other financial liabilities	20	12,789.28	10,075.05	8,160.15	6,025.00
Other current liabilities	21	23.54	41.82	53.18	69.62
Provisions	22	7,300.72	5,759.34	0.44	2.39
Total current liabilities		**27,009.21**	**22,746.06**	**14,774.52**	**12,473.91**
TOTAL EQUITY AND LIABILITIES		**1,42,280.47**	**1,41,876.96**	**1,40,946.74**	**1,36,169.63**
Summary of significant accounting policies	2				

The accompanying notes are an integral part of these Special Purpose Combined Financial Statements.

As per our report of even date

For S.R.Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership number: 501396

Place: Gurugram
Date: June 07, 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**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

Indian Highway Concessions Trust
Special purpose Combined Statement of Profit and Loss
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	Note	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
INCOME					
Revenue from operations	23	15,527.63	21,059.59	19,688.60	20,995.84
Other income	24	348.08	586.89	530.48	292.48
Total Income		**15,875.71**	**21,646.48**	**20,219.08**	**21,288.32**
EXPENSES					
Engineering, procurement and contruction cost ("EPC")		1,390.50	1,463.94	378.23	3,044.39
Employee benefits expense	25	473.87	568.61	552.03	578.09
Finance costs	26	10,153.65	14,028.06	14,199.24	12,710.64
Depreciation and amortization expense	27	2,625.84	3,295.02	3,140.76	2,989.88
Provision for major maintenance obligations	51(b)	1,268.04	1,537.02	1,397.30	1,270.27
Other expenses	28	1,864.49	3,229.42	1,328.03	1,990.46
Total expenses		**17,776.39**	**24,122.07**	**20,995.59**	**22,583.73**
Loss before tax		**(1,900.68)**	**(2,475.59)**	**(776.51)**	**(1,295.41)**
Tax expense	30	-	-	-	-
Loss for the period/year		**(1,900.68)**	**(2,475.59)**	**(776.51)**	**(1,295.41)**
Other comprehensive income	29				
Items that will not be reclassified to profit or loss					
Re-measurement losses on defined benefit obligations		(1.86)	(1.95)	(4.69)	(1.29)
Income tax relating to these items		-	-	-	-
Other comprehensive income for the period/year		**(1.86)**	**(1.95)**	**(4.69)**	**(1.29)**
Total comprehensive income for the period/year		**(1,902.54)**	**(2,477.54)**	**(781.20)**	**(1,296.70)**
Earnings per unit - [Refer note 52 (D)]					

Summary of significant accounting policies 2
The accompanying notes are an integral part of these Special Purpose Combined Financial Statements.

As per our report of even date

For S.R.Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership number: 501396

Place: Gurugram
Date: June 07, 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**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

Indian Highway Concessions Trust
Special purpose Combined Cash Flow Statement
(All amounts in ₹ lacs, unless otherwise stated)

Particulars	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
A. CASH FLOW FROM OPERATING ACTIVITIES :				
Net profit/(loss) before tax	**(1,900.68)**	**(2,475.59)**	**(776.51)**	**(1,295.41)**
Adjustments for:				
Depreciation and amortisation expense	2,625.84	3,295.02	3,140.76	2,989.88
Net gain on sale of investment in mutual funds	(77.37)	(117.17)	(198.17)	(155.59)
Gain on disposal of property, plant and equipment	-	-	(0.63)	-
Provision for major maintenance obligations	1,268.04	1,537.02	1,397.30	1,270.27
Finance cost	10,153.65	14,028.06	14,199.24	12,710.64
Operating profit before working capital changes	**12,069.48**	**16,267.34**	**17,761.99**	**15,519.79**
Adjustments for changes in working capital				
Increase/(Decrease) in trade payables	5.82	244.34	24.90	0.94
Increase/(Decrease) in other financial liabilities	(222.30)	136.25	225.34	273.72
Increase/(Decrease) in other current liabilities	(18.28)	(11.36)	(16.44)	(11.76)
Increase/(Decrease) in short-term provisions	1,046.53	5,298.81	(293.19)	(149.35)
(Increase)/Decrease in trade receivables	7.43	(56.87)	33.05	(24.81)
(Increase)/Decrease in other current assets	(1,197.08)	1,228.79	(172.45)	(370.91)
(Increase)/Decrease in financial assets	(0.80)	(2.86)	0.17	(3.78)
Increase/(Decrease) in long-term provisions	(1,039.81)	(5,291.23)	295.92	153.28
Cash generated from operations	**10,650.99**	**17,813.21**	**17,859.29**	**15,387.12**
Income tax paid	273.83	(157.79)	(119.30)	(263.53)
Net cash flow from operating activities	**10,924.82**	**17,655.42**	**17,739.99**	**15,123.59**
B. CASH FLOW FROM INVESTING ACTIVITIES :				
Acquisition of property, plant and equipment	(16.33)	(13.11)	(29.11)	(68.20)
Proceeds from disposal of property, plant and equipment	-	-	4.73	-
Proceeds from redemption of mutual fund investment	-	1,522.07	1,604.06	6,817.03
Investment in mutual fund	-	-	(4,200.05)	(5,516.95)
Investment in fixed deposits	(235.49)	(2,792.89)	(2,293.78)	(3,987.15)
Acquisition of intangible assets under development	(2,639.66)	(3,238.75)	(2,196.53)	(4,283.05)
Net cash flow used in investing activities	**(2,891.48)**	**(4,522.68)**	**(7,110.68)**	**(7,038.32)**
C. CASH FLOW FROM FINANCING ACTIVITIES :				
Repayment of short-term borrowings	-	-	-	-
Grant (Equity Support from National High Authority of India)		-	-	-
Proceeds from long-term borrowings	-	-	1,310.45	7,580.99
Repayment of long-term borrowings	(1,602.55)	(2,091.06)	(765.47)	(6,723.81)
Interest paid	(7,286.91)	(10,445.03)	(10,824.43)	(10,373.00)
Net cash flow used in financing activities	**(8,889.46)**	**(12,536.09)**	**(10,279.45)**	**(9,515.82)**
Net (decrease)/increase in Cash & Cash Equivalents	**(856.12)**	**596.65**	**349.86**	**(1,430.55)**
Cash and cash equivalents at the beginning of the peiod/year	1,575.49	978.84	628.98	2,059.53
Cash and cash equivalents at the end of the period/year (refer note 10)	**719.37**	**1,575.49**	**978.84**	**628.98**

Notes

1) 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 equivalent represent cash and bank balances.
3) Refer note 10B for changes in liabilities arising from financing activities.
4) There is no non-cash transaction in investing activity.

Summary of significant accounting policies 2
As per our report of even date

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 number: 501396

Place: Gurugram
Date: June 07, 2022

Romesh Sobti	**Saurabh Agarwal**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

Indian Highway Concessions Trust
Statement of changes in Unit holder's equity
(All amounts in ₹ lacs, unless otherwise stated)

A **Owner's equity [refer note 14]**

Particulars	Number of Shares	Amount
Balance as at April 01, 2018	**14,78,70,000**	**14,787.00**
Changes in equity share capital	-	-
Balance as at March 31, 2019	**14,78,70,000**	**14,787.00**
Changes in equity share capital	-	-
Balance as at March 31, 2020	**14,78,70,000**	**14,787.00**
Changes in equity share capital	-	-
Balance as at March 31, 2021	**14,78,70,000**	**14,787.00**
Changes in equity share capital	-	-
Balance as at December 31, 2021	**14,78,70,000**	**14,787.00**

B **Other Equity**

Particulars	Retained earnings	Total
Balance as at April 01, 2018	(1,529.57)	(1,529.57)
Adjustment to retained earnings (refer note 53)	(2,594.06)	(2,594.06)
Adjusted balance as at April 1, 2018	**(4,123.63)**	**(4,123.63)**
Loss for the year	(1,295.41)	(1,295.41)
Other comprehensive income/(loss) for the year	(1.29)	(1.29)
Balance as at March 31, 2019	**(5,420.33)**	**(5,420.33)**
Loss for the year	(776.51)	(776.51)
Other comprehensive income/(loss) for the year	(4.69)	(4.69)
Balance as at March 31, 2020	**(6,201.53)**	**(6,201.53)**
Loss for the year	(2,475.59)	(2,475.59)
Other comprehensive income/(loss) for the year	(1.95)	(1.95)
Balance as at March 31, 2021	**(8,679.07)**	**(8,679.07)**
Loss for the period	(1,900.68)	(1,900.68)
Other comprehensive income/(loss) for the period	(1.86)	(1.86)
Balance as at December 31, 2021	**(10,581.61)**	**(10,581.61)**

Summary of significant accounting policies 2

As per our report of even date

For S.R.Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per **Amit Gupta**
Partner
Membership number: 501396

Place: Gurugram
Date: June 07, 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**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

1. Corporate 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 and restated on December 19, 2019 and 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.The registered office of the Trust is located at C-5, Defence Colony, New Delhi-110024, India.

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 (formerly known as CLP Power India Private Limited) (the "Investment Manager") and Maple Highway Project Management Private Limited (formerly known as CLP Wind Farms (Theni - Project III) 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 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.

The Project SPV is a private limited company registered under Companies Act, 1956. The Project SPV has entered into 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. The Concession Agreement for the project was signed on August 06, 2010 for a period of 26 years. Also refer note 40 for details about the Service Concession Agreement.

The Trust proposes to acquire 100% equity shares of the Project SPV from its existing shareholders and accordingly has entered into a Share Purchase Agreement ('SPA') dated January 20, 2021 with the Project SPV and its shareholders.

As required by the Guidance Note on Combined and Carve-Out Financial Statements issued by the Institute of Chartered Accountants of India, the details of various entities comprised in the Combined Financial Statements is as given below:

Name of Entity	Country of incorporation
Indian Highway Concessions Trust	India
Shree Jagannath Expressways Private Limited	India

The Special Purpose Combined Financial Statements were approved for issue in accordance with resolution passed by the Board of Directors of the Investment Manager, acting on behalf of the Trust on June 07, 2022.

2. Significant Accounting Policies

2.1 Basis of Preparation and presentation

The Special Purpose Combined Financial Statements comprise of financial statements of the Trust and Shree Jagannath Expressway Private Limited (the "Company" or the "Project SPV'), (collectively referred to as "Trust Group") for the nine months ended December 31, 2021 and years ended March 31, 2021, March 31, 2020 and March 31, 2019.

The Special Purpose Combined Financial Statements of the Trust Group comprise Special Purpose Combined Balance Sheet as at December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 and Special Purpose Combined Statement of Profit and Loss, Special Purpose Combined Cash Flow Statement, Special Purpose Combined Statement of Changes in equity and a Summary of Significant Accounting Policies and Notes to accounts for the nine months ended December 31, 2021 and years ended March 31, 2021, March 31, 2020 and March 31, 2019.

The Special Purpose Combined Financial Statements have been prepared in accordance with recognition and measurement principles of 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 ("Ind AS") except for Ind AS 33: Earning Per Share read with SEBI (Infrastructure Investment Trusts) Regulations, 2014 as amended from time to time including circulars notifications, clarifications and guidelines issued thereunder ("InvIT Regulations") and the Guidance

Note on Combined and Carve-Out Financial Statements issued by the Institute of Chartered Accountants of India ("Guidance Note").

The Special Purpose Combined Financial Statements have been prepared by the Board of Directors of Investment Manager, acting on behalf of the Trust ('Trust Management') to meet the requirements of InvIT Regulations and for inclusion in placement memorandum prepared by the Investment Manager in connection with proposed issue of unlisted units on a private placement basis of the Trust. As a result, the Special Purpose Combined Financial Statements may not be suitable for another purpose. Further, the Special Purpose Combined Financial Statements are not prepared in accordance with requirements of Schedule III (as amended) notified under the Companies Act, 2013.

In accordance with requirements of the InvIT Regulations, since the Trust was set up on November 06, 2019 and registered as an InvIT on February 24, 2020, it has been in existence for a period lesser than three completed financial years before the filing of placement memorandum. Accordingly, the Special Purpose Combined Financial Statements has been prepared considering financial information of the Project SPV for the year ended March 31, 2019 and March 31, 2020 when such historical financial statements of Trust were not available. For the year ended March 31, 2021 and period ended December 31, 2021, the Special Purpose Combined Financial Statements has been prepared by combining financial information of the Project SPV and the Trust. The general purpose Ind AS financial statements of the Project SPV for the years ended March 31, 2019 March 31, 2020, March 31, 2021 and nine months ended December 31, 2021 were audited by firms of Chartered Accountants other than S.R. Batliboi & Co. LLP. The historic financial information of the Trust for the year ended March 31, 2021 and period ended December 31, 2021 has been certified by the Investment Manager, as there are no unit holders of the Trust till date.

Further, as required by the InvIT regulations, the Special Purpose Combined Financial Statements are prepared, based on an assumption that the Project SPV was part of the Trust for such period when the Trust was not in existence. However, the Special Purpose Combined Financial Statements may not be representative of the position which may prevail after the Project SPV is transferred to the Trust. Further, in accordance with SEBI Circular CIR/IMD/DF/114/2016 dated October 20, 2015 the Special Purpose Financial Statements have been presented after making necessary adjustments, rectifications and reclassifications of incorrect accounting policies, errors, omissions wherever necessary and to conform with the accounting policies of the Trust and accordingly, these may be different from the general purpose audited financial statements of the Project SPV. Refer note 53 for details of adjustments made in these Special Purpose Combined Financial Statements.

The Special Purpose Combined Financial Statements are presented in INR, which is the functional currency of the Trust. The Trust Group does not have any foreign operation and has assessed the functional currency of the SPV to be INR. 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 0.00.

These Special Purpose Combined Financial Statements correspond to classification provisions contained in Ind AS 1 'Presentation of Financial Statements'. These Special Purpose Combined Financial Statements have been prepared on a historical cost convention and on an accrual basis except for certain financial assets like mutual funds (refer accounting policy regarding financial instruments).

Basis of Combination

The Combined Financial Statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances. The financial statements of the Project SPV and Trust used for the purpose of combination are drawn up to the same reporting date i.e. year ended on March 31 each year/nine months ended December 31.

The procedure for preparing Combined Financial Statements of the Trust Group are stated below –

a) combine like items of assets, liabilities, equity, income, expenses and cash flows of the SPV;
b) eliminate in full intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the Trust Group (profits or losses resulting from intragroup transactions that are recognised in assets, such as inventory and fixed assets, are eliminated in full). Ind AS-12 Income Taxes applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

2.2 Summary of significant accounting policies

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 Group'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 Group'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 Group 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 Group is considered as 12 months period.

c. 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. When significant parts of property, plant and equipment are required to be replaced at intervals, the Trust Group de-recognizes 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 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 eliminated from financial statements, either on disposal or when retired from active use. Losses arising in the case of retirement of property, plant and equipment and gains or losses arising from disposal of property, plant and equipment are recognised in the statement of profit and loss in the year of occurrence.

Freehold land and building are measured at cost less impairment losses.

The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year end and adjusted prospectively, if appropriate. Currently the residual life is considered as 5% of the value of property plant and equipment.

Depreciation on assets has been provided on a straight line basis at the useful lives specified in the Schedule II of the Companies Act, 2013 except Furnitures & Fixtures. Depreciation on additions/ deductions is calculated pro-rata from/ to the period of additions/ deductions. The useful life is as below:

Category	Life
Leasehold improvement	9.38 years
Furniture & Fixtures	8 years*
Vehicles	8 years
Office Equipments	5 years
Electrical Installations	10 years
Computer & Peripherals	3 years
Toll Booths	5 years

*The estimated useful life of Furniture and fixtures has been derived based on internal technical estimate which is based on the usage of assets. Accordingly, the useful life in respect of these assets have been taken as 8 years which is different from the indicative life as prescribed under Schedule II of Companies Act 2013.

d. Intangible Assets

Intangible assets under Service Concession Arrangements (Appendix C to Ind AS 115 – Revenue from contracts with customers)

Under Appendix C 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 Trust Group receives a right to charge users of the toll road. The financial asset model is used when the Trust Group has an unconditional right to receive cash for the construction services.

The Trust 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. Equity support from NHAI is reduced from the intangible asset under development.

As per appendix C to Ind AS 115 - Service Concession Arrangement, Intangible assets arising from a service concession arrangement are recognized when the Trust Group has a right to charge for usage of the concession infrastructure. An intangible asset received as consideration for providing construction or upgrade services in a service concession arrangement is measured at fair valuation on initial recognition by references to the fair value of the services provided.

Grant received are 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 is the period from when the Trust Group is able to charge the public for the use of the infrastructure to the end of the concession period.

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 assets 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.

e. Intangible Assets Under Development

Intangible Assets under development includes direct and indirect expenditure incurred for the Highway Project and costs incidental and related thereto.

All expenses which are capital in nature and directly relatable to development of Highway Project incurred upto 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 will be 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 has been adjusted from the total cost incurred on intangible asset under development.

The fair value of an intangible asset received as consideration for providing construction services in a service concession arrangement is estimated by reference to the fair value of the construction services. The fair value is calculated as the estimated cost of construction. The Trust Group does not recognize any margin on construction services. When the Trust Group receives an intangible asset and a financial asset as a consideration for providing services in a service concession arrangement, the Trust Group estimates the fair value of the intangible asset as the difference between the cost of construction services provided less fair value of the asset received.

Transition to Ind AS

The Trust Group elected to continue with the carrying value as per cost model (for all of its property, plant and equipment and Intangible assets) as recognised in the financial statements as at the date of transition to Ind AS, measured as per previous GAAP.

f. 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 (i.e. on confirmation of completion of Project Highway from I.E/NHAI) are capitalized as part of the cost of the respective asset. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consists of interest, debt syndication fees, front end fees and other cost of similar nature that an entity incurs in connection with the borrowing of funds which are amortized using effective interest rate method.

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 asset's contractual cash flow characteristics and the Trust Group'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 Group has applied the practical expedient, the Trust 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.

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 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.

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 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 Trust 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 Trust 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 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 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 Group 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 Group's balance sheet) when:

- The rights to receive cash flows from the asset have expired, or
- The Trust Group 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 Group has transferred substantially all the risks and rewards of the asset, or
(b) the Trust Group 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 Group applies a simplified approach in calculating ECLs. Therefore, the Trust Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

ECL is the weighted average of difference between all contractual cash flows that are due to the Trust Group in accordance with the contract and all the cash flows that the SPV Group expects to receive, discounted at the original effective interest rate, with the respective risks of default occurring as the weights. When estimating the cash flows, the Trust Group is required to consider –

- All contractual terms of the financial assets (including prepayment and extension) over the expected life of the assets.
- Cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

(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 Trust Group's financial liabilities include trade and other payables, loans and borrowings and other financial liabilities.

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 Group that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

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 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 Trust Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and borrowings)

This is the category most relevant to the Trust Group. 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.

h. Revenue Recognition

Construction services
Revenue related to construction or upgrade services under a service concession arrangement (refer note 40) is recognised based on the stage of completion of the work performed, consistent with the Trust 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 Trust 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 (demonetisation relief, 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.

i. Employee Benefits

(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 Trust Group has defined contribution plans where the Trust 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 i.e., "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 Trust Group recognises related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Trust Group recognises the following changes in the net defined benefit obligation as an expense in the combined 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.

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 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

j. ***Leases***

Ind AS 116 Leases was notified by MCA on March 30, 2019 and it replaces Ind AS 17 Leases, including appendices thereto, Ind AS 116 is effective for annual periods beginning on or after April 1, 2019. Accordingly, the leases are accounted in accordance with Ind AS 17 upto March 31, 2019 and post which the leases are accounted in accordance with Ind AS 116.

Ind AS 116

The leases are assessed 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.

A single recognition and measurement approach is applied for all leases, except for short-term leases and leases of low-value assets. The Trust 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.

Transition to Ind AS 116

A lessee shall apply this Standard to its leases either:

(a) retrospectively to each prior reporting period presented applying Ind AS 8, Accounting Policies, Changes in Accounting Estimates and Errors; or

(b) retrospectively with the cumulative effect of initially applying the Standard recognised at the date of initial application

A lessee shall recognise a lease liability at the date of initial application for leases previously classified as an operating lease applying Ind AS 17. The lessee shall measure that lease liability at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate at the date of initial application and recognise a right-of-use asset at the date of initial application for leases previously classified as an operating lease applying Ind AS 17.

For leases previously classified as operating leases applying Ind AS 17, a lessee is not required to make any adjustments on transition for leases for which the underlying asset is of low value.

The Trust Group elects to use the exemptions proposed by the standard on lease contracts for which the lease terms ends within 12 months as of the date of initial application, and lease contracts for which the underlying asset is of low value.

Ind AS 17

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Assets acquired on leases where a significant portion of risk and reward of ownerships are retained by the Lessor are classified as operating leases. Operating lease payments are recognised as an expense in the statement of profit and loss on a straight-line basis over the lease term.

k. Accounting for Taxes on Income

Tax on income for the current period is determined on the basis of taxable income and tax credits computed in accordance with the provisions of the Income Tax Act, 1961, and based on expected outcome of assessments / appeals.

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.

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 (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.

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.

l. Impairment of Assets (Other than financial assets measured at fair value)

As at each balance sheet date, the Trust Group 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 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 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 Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Trust 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.

m. 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 Group 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 are probable.

(e) Provisions, Contingent Liabilities and Contingent Assets are reviewed at each Balance Sheet date and adjusted as appropriate.

(f) Provision for major repair maintenance

As per the Concession Agreements, the Trust Group is obligated to carry out resurfacing of the roads under concession. The Trust Group estimates the likely provision required towards resurfacing and provides for the same by discounting using a rate that reflects the time value of money. When discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost. The same is reviewed at each balance sheet date and adjustments if any to the carrying amount is provided for accordingly.

n. Claims

Claims against the Trust Group including claims from EPC contractor in context with escalations are accounted for as and when accepted and claims by the Trust Group on NHAI are accounted for as and when the claim is received.

o. Earnings Per Unit

Basic Earnings Per Unit is calculated by dividing the net profit or loss for the period attributable to unit holders 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 equity units.

p. 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 Group are segregated and presented accordingly.

q. Segment reporting

Operating results are regularly reviewed by the Trust Group'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.

r. Fair Value measurement

The Trust 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 Trust 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 Trust 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 Special Purpose Combined 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 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.

s. Use of Judgement, Estimates and Assumptions

The preparation of financial statements in conformity with Ind AS requires that management of the Trust 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 is involving complex and subjective judgements and the use of the assumptions in these Special Purpose Combined 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 Special Purpose Combined 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 Group has based its assumptions and estimates on parameters available when the Special Purpose Combined 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.

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.
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 Group has a history of losses, which may not be used to offset taxable income elsewhere in the Trust Group. The Trust 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 Trust Group has determined that it cannot recognise deferred tax assets on the tax losses carried forward.

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.

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 Group's Special Purpose Combined Financial Statements.

Further, several amendments apply for the first time for the year beginning April 1, 2022, but do not have an impact on the Special Purpose Combined Financial Statements of the Trust Group. The Trust Group has not early adopted any standards, amendments that have been issued but are not yet effective/notified.

(a) Amendments to Ind AS 116: Covid-19-Related Rent Concessions.

MCA issued an amendment to Ind AS 116 Covid-19-Related Rent Concessions beyond 30 June 2021 to update the condition for lessees to apply the relief to a reduction in lease payments originally due on or before 30 June 2022 from 30 June 2021. The amendment applies to annual reporting periods beginning on or after 1 April 2021. In case a lessee has not yet approved the financial statements for issue before the issuance of this amendment, then the same may be applied for annual reporting periods beginning on or after 1 April 2020.

These amendments had no impact on the Trust Group's Special Purpose Combine Financial Statements.

(b) Amendments to Ind AS 103 Business Combinations

The amendment states that to qualify for recognition as part of applying the acquisition method, the identifiable assets acquired and liabilities assumed must meet the definitions of assets and liabilities in the Framework for the Preparation and Presentation of Financial Statements in accordance with Indian Accounting Standards* issued by the Institute of Chartered Accountants of India at the acquisition date. Therefore, the acquirer does not recognise those costs as part of applying the acquisition method. Instead, the acquirer recognises those costs in its post-combination financial statements in accordance with other Ind AS.

These amendments had no impact on the Trust Group's Special Purpose Combine Financial Statements.

(c) Amendments to Ind AS 105, Ind AS 16 and Ind AS 28: Definition of Recoverable amount

The definition of "Recoverable amount" is amended such that the words "the higher of an asset's fair value less costs to sell and its value in use" are replaced with "higher of an asset's fair value less costs of disposal and its value in use". The consequential amendments are made in Ind AS 105, Ind AS 16 and Ind AS 28.

These amendments had no impact on the Trust Group's Special Purpose Combine Financial Statements.

(d) Interest Rate Benchmark Reform – Phase 2: Amendments to Ind AS 109, Ind AS 107, Ind AS 104 and Ind AS 116

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR).

The amendments include the following practical expedients:

- A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest
- Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued
- Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component.
- These amendments have no impact on the Special Purpose Combined Financial Statements of the Trust Group.

Note 3: Property, Plant and Equipment

Description	Freehold Land	Leasehold improvements	Furniture & Fixtures	Vehicles	Office Equipments	Electrical Installations	Computer & Peripherals	Toll Booths	Total
Gross Block									
Balance as at April 01, 2018	**9.69**	**14.04**	**5.70**	**42.83**	**28.29**	**50.81**	**28.75**	**1.09**	**181.20**
Additions during the year	-	-	1.01	-	34.55	30.94	1.70	-	68.20
Disposals/Deductions during the year	-	-	-	-	-	-	-	-	-
Balance as at March 31, 2019	**9.69**	**14.04**	**6.71**	**42.83**	**62.84**	**81.75**	**30.45**	**1.09**	**249.40**
Additions during the period	-	-	0.53	7.59	13.55	-	5.57	1.87	29.11
Disposals/Deductions during the year	-	-	-	(6.69)	-	-	-	-	(6.69)
Balance as at March 31, 2020	**9.69**	**14.04**	**7.24**	**43.73**	**76.39**	**81.75**	**36.02**	**2.96**	**271.82**
Additions during the period	-	-	4.17	-	6.30	-	2.65	-	13.12
Disposals/Deductions during the year	-	-	-	-	-	-	-	-	-
Balance as at March 31, 2021	**9.69**	**14.04**	**11.41**	**43.73**	**82.69**	**81.75**	**38.67**	**2.96**	**284.94**
Additions during the period	-	-	0.43	-	13.84	-	2.06	-	16.33
Disposals/Deductions during the period	-	-	-	-	-	-	-	-	-
Balance as at December 31, 2021	**9.69**	**14.04**	**11.84**	**43.73**	**96.53**	**81.75**	**40.73**	**2.96**	**301.27**
Accumulated depreciation									
Balance as at April 01, 2018	**-**	**7.67**	**2.64**	**13.37**	**11.04**	**3.00**	**5.30**	**1.01**	**44.03**
Charged during the year	-	2.39	0.99	6.51	8.53	5.54	8.92	-	32.88
Depreciation on disposal/deductions during the year	-	-	-	-	-	-	-	-	-
Balance as at March 31, 2019	**-**	**10.06**	**3.63**	**19.88**	**19.57**	**8.54**	**14.22**	**1.01**	**76.91**
Charged during the year	-	2.32	0.78	4.06	11.31	7.79	9.40	0.26	35.92
Depreciation on disposal/deductions during the year	-	-	-	(2.59)	-	-	-	-	(2.59)
Balance as at March 31, 2020	**-**	**12.38**	**4.41**	**21.35**	**30.88**	**16.33**	**23.62**	**1.27**	**110.24**
Charged during the year	-	0.32	0.66	4.03	13.86	7.77	8.05	0.36	35.05
Depreciation on disposal/deductions during the year	-	-	-	-	-	-	-	-	-
Balance as at March 31, 2021	**-**	**12.70**	**5.07**	**25.38**	**44.74**	**24.10**	**31.67**	**1.63**	**145.29**
Charged during the year	-	0.18	0.71	3.04	10.67	5.85	2.50	0.27	23.22
Depreciation on disposal/deductions during the period	-	-	-	-	-	-	-	-	-
Balance as at December 31, 2021	**-**	**12.88**	**5.78**	**28.42**	**55.41**	**29.95**	**34.17**	**1.90**	**168.51**
									-
Net Block as at March 31, 2019	**9.69**	**3.98**	**3.08**	**22.95**	**43.27**	**73.21**	**16.23**	**0.08**	**172.49**
Net Block as at March 31, 2020	**9.69**	**1.66**	**2.83**	**22.38**	**45.51**	**65.42**	**12.40**	**1.69**	**161.58**
Net Block as at March 31, 2021	**9.69**	**1.34**	**6.34**	**18.35**	**37.95**	**57.65**	**7.00**	**1.33**	**139.65**
Net Block as at December 31, 2021	**9.69**	**1.16**	**6.06**	**15.31**	**41.12**	**51.80**	**6.56**	**1.06**	**132.76**

(i) The Trust Group does not have any contractual commitments for the acquisition of property, plant and equipment
(ii) Borrowing cost has not been capitalized during the years ended March 31, 2019, March 2020 and March 31, 2021 and for the period ended December 31, 2021.

Note 4: Intangible assets

Description	Toll collection rights	Total
Gross Block		
Balance as at April 01, 2018	**1,00,968.56**	**1,00,968.56**
Additions during the year	-	-
Disposals/Deductions during the year	-	-
Balance as at March 31, 2019	**1,00,968.56**	**1,00,968.56**
Additions during the period	-	-
Disposals/Deductions during the year	-	-
Balance as at March 31, 2020	**1,00,968.56**	**1,00,968.56**
Additions during the year	-	-
Disposals/Deductions during the year	-	-
Balance as at March 31, 2021	**1,00,968.56**	**1,00,968.56**
Additions during the year*	38,835.61	38,835.61
Disposals/Deductions during the year	-	-
Balance as at December 31, 2021	**1,39,804.17**	**1,39,804.17**
Accumulated amortisation		
Balance as at April 01, 2018	**3,281.78**	**3,281.78**
Amortisation during the year	2,956.99	2,956.99
Adjustments during the year (Refer note: 53)	-	-
Balance as at March 31, 2019	**6,238.77**	**6,238.77**
Amortisation during the year	3,324.43	3,324.43
Adjustments during the year (Refer note: 53)	(219.59)	(219.59)
Balance as at March 31, 2020	**9,343.61**	**9,343.61**
Amortisation during the period	3,252.27	3,252.27
Adjustments during the year (Refer note: 53)	7.71	7.71
Balance as at March 31, 2021	**12,603.59**	**12,603.59**
Amortisation during the period	2,602.62	2,602.62
Balance as at December 31, 2021	**15,206.21**	**15,206.21**
Net Block as at March 31, 2019	**94,729.79**	**94,729.79**
Net Block as at March 31, 2020	**91,624.95**	**91,624.95**
Net Block as at March 31, 2021	**88,364.97**	**88,364.97**
Net Block as at December 31, 2021	**1,24,597.96**	**1,24,597.96**

Toll collection rights have been pledged to secure borrowings of the Trust Group. See Note 46 for details of security pledged for each class of borrowings.

Amortisation for the period/year has been included in line item 'Depreciation and amortisation expense' in Combined Statement of Profit and Loss.
Contractual Obligations: Refer note 32, for disclosure of capital and other commitments for the acquisition of intangible assets.

Note 5: Intangible assets under development

Description	Toll collection rights	Total
Balance as at April 1, 2018	**26,714.25**	**26,714.25**
Adjustments to retained earnings	163.48	163.48
Additions during the year	4,306.26	4,306.26
Adjustments during the year (Refer note: 53)	(23.21)	(23.21)
Balance as at March 31, 2019	**31,160.78**	**31,160.78**
Additions during the year	2,334.44	2,334.44
Adjustments during the year (Refer note: 53)	(137.91)	(137.91)
Balance as at March 31, 2020	**33,357.31**	**33,357.31**
Additions during the year	3,243.51	3,243.51
Adjustments during the year (Refer note: 53)	(4.76)	(4.76)
Balance as at March 31, 2021	**36,596.06**	**36,596.06**
Additions during the period	2,642.07	2,642.07
Capitalised during the period*	(38,835.61)	(38,835.61)
Adjustments during the period (Refer note: 53)	(2.41)	(2.41)
Balance as at December 31, 2021	**400.11**	**400.11**

*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). The Project SPV received Provisional Completion Certificate dated January 12, 2017 for 56.878 km, while for 10.232 km it is still awaited. During the period ended December 31, 2021, the Project SPV has completed the remaining construction work for the balance 10.232 Km and requested the IE of NHAI to review the progress at site and IE in its letter dated December 24, 2021 has issued an updated Punch list items, confirming the status of work at the Project Site. As per the said letter, construction work of the Project highways has been substantially completed and the balance punch list items are either pending due to extraneous factors or de-scoping activities which is pending with NHAI , basis which the Project SPV has capitalized the balance Intangible assets under development on December 24, 2021. The provisional Completion certificate/ Completion Certificate for the balance 10.232 km/entire length is expected to be received once all the final approvals including the settlements of all claims by NHAI is complete (also, refer note 47 (i) , 47 (ii), 31(c), and Note 53).

Note	Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Note 6	**Financial assets**				
	Unsecured, considered good				
	Security deposits	41.63	40.83	37.97	38.14
		41.63	**40.83**	**37.97**	**38.14**
	Refer note 43 - Fair value disclosures for disclosure of fair value in respect of financial assets measured at amortised cost.				
Note 7	**Other non-current asset**				
	Capital advances	325.39	557.40	406.71	328.65
	Balance with government authorities	163.71	205.53	198.43	158.00
	Labour cess with NHAI	49.81	49.81	49.81	49.00
		538.91	**812.74**	**654.95**	**535.65**
Note 8	**Investments**				
	Current				
	Investment in mutual funds (carried at FVTPL)				
	ICICI Liquid Fund-D P Growth - December 31, 2021: 10,36,039 units, March 31, 2021: 10,36,039 units , March 31, 2020: 15,53,968 units. March 2019: 6,36,039 units of ICICI Flexible income plan growth	3,220.37	3,143.00	4,547.89	1,753.74
		3,220.37	**3,143.00**	**4,547.89**	**1,753.74**
	Mutual Fund amounting to ₹ 3,220.37 lacs is kept as earmarked as DSRA &MMRA(Debt service Reserve Account & Major maintenance reserve) as on December 31, 2021 (March 31, 2021: ₹ 3,143 lacs , March 31, 2020: ₹ 4,547.89 lacs ,March 31, 2019: ₹ 1,753.74 lacs)				
	Aggregate amount of quoted investments and market value thereof;	3,220.37	3,143.00	4,547.89	1,753.74
	Aggregate amount of unquoted investments	-	-	-	-
	Aggregate amount of impairment in value of investments	-	-	-	-
Note 9	**Trade Receivables**				
	Current				
	Unsecured, considered good	55.61	63.04	6.17	39.22
		55.61	**63.04**	**6.17**	**39.22**
	Refer note 43 - Fair value disclosures for disclosure of fair value in respect of financial assets measured at amortised cost.				
Note 10	**Cash and cash equivalents**				
(a)	Balances with banks				
	- In current accounts	713.40	1,567.09	973.36	547.71
(b)	Cash on hand	5.97	8.40	5.48	81.27
		719.37	**1,575.49**	**978.84**	**628.98**
	i) For the purpose of cash flow statement, cash and cash equivalents comprise of:				
	Balances with banks				
	- In current accounts	713.40	1,567.09	973.36	547.71
	Cash on hand	5.97	8.40	5.48	81.27
		719.37	**1,575.50**	**978.84**	**628.98**
	Refer note 46 for cash and cash equivalents which are under restriction.				
	Other than as disclosed, there are no repatriation restrictions with respect to cash and cash equivalents as at the end of the reporting period and comparative periods.				

Note 10B: Changes in liabilities arising from financing activities

Particulars	March 31, 2021	Cash flows	Non cash changes*	December 31, 2021
Long term borrowings from banks and financial institution	1,14,584.89	(1,602.55)	119.65	1,13,101.99
Short term borrowings from related parties	6,391.64	-	-	6,391.64

Particulars	March 31, 2020	Cash flows	Non cash changes*	March 31, 2021
Long term borrowings from banks and financial institution	1,16,126.37	(1,800.03)	258.55	1,14,584.89
Short term borrowings from related parties	6,326.88	-	64.76	6,391.64

Particulars	March 31, 2019	Cash flows	Non cash changes*	March 31, 2020
Long term borrowings from banks and financial institution	1,14,165.83	544.98	1,415.56	1,16,126.37
Short term borrowings from related parties	6,167.93	-	158.95	6,326.88

Particulars	March 31, 2018	Cash flows	Non cash changes*	March 31, 2019
Long term borrowings from banks and financial institution	1,10,216.88	857.18	3,091.77	1,14,165.83
Short term borrowings from related parties	4,250.20	-	1,917.73	6,167.93

* Non cash changes includes effective interest rate charged and interest accrued on borrowings. (also refer note 50)

Note	Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Note 11	**Other bank balances**				
	Deposit with original maturity of more than 3 months but less than 12 months	9,309.32	9,073.83	6,280.94	3,987.15
		9,309.32	**9,073.83**	**6,280.94**	**3,987.15**
	Refer note 46 for cash and cash equivalents which are under restriction.				
	Other than as disclosed, there are no repatriation restrictions with respect to cash and cash equivalents as at the end of the reporting period and comparative periods.				
	Fixed deposits as above are made by the Company in order of compliance to fulfill the requirement of Term Loan financing by the banks. Such fixed deposits amounting to ₹ 9,139.91 lacs is kept as earmarked Debt Service reserve account and Major maintenance reserve as on December 31, 2021 (March 31, 2021: ₹ 8,954.21 lacs, March 31, 2020: ₹ 5,894.92 lacs, March 31, 2019: ₹ 3,878.74 lacs).				
Note 12	**Others financial assets**				
	Claims recoverable from NHAI (refer note 49 A)	-	-	1,244.01	1,244.01
		-	**-**	**1,244.01**	**1,244.01**
Note 13	**Other Current Assets**				
(a)	**Advances other than capital advances**				
	(i) Advance to vendors	124.64	395.89	159.87	22.60
	(ii) Other recoverable (refer note 49 B)	2,991.80	1,577.79	1,862.27	1,831.97
(b)	**Others**				
	Prepaid expenses	147.99	93.67	29.99	25.11
		3,264.43	**2,067.35**	**2,052.13**	**1,879.68**

Note 14 A. Owner's equity*

Particulars	As at December 31, 2021		As at March 31, 2021		As at March 31, 2020		As at March 31, 2019	
	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount
Authorised								
Equity shares of ₹ 10/- each	14,80,00,000	14,800.00	14,80,00,000	14,800.00	14,80,00,000	14,800.00	14,80,00,000	14,800.00
Issued, subscribed and fully paid up								
Equity shares of ₹ 10/- each	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00
	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00

(ii) Reconciliation of the number of equity shares outstanding at the beginning and at the end of the reporting period are as given below:

Particulars	As at December 31, 2021		As at March 31, 2021		As at March 31, 2020		As at March 31, 2019	
	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount
Number of shares outstanding at the beginning of the period	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00
Add: Issued during the year	-	-	-	-	-	-	-	-
Number of shares outstanding at the end of the period	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00	14,78,70,000	14,787.00

*No bonus shares has been issued by the Project SPV.

(iii) Terms/rights attached to equity shares

i) The Project SPV has only one class of equity shares having par value of Rs. 10/- per share. Each holder of equity shares is entitled to one vote per share.

ii) In the event of liquidation of the company, the holders of Equity Shares will be entitled to receive remaining assets of the Company. The distribution will be in proportion to the number of Equity Shares held by the shareholders.

iii) Each shareholder has the right to receive the dividend as proposed by the Board of Directors which is subject to the approval of the shareholders in the ensuing Annual General Meeting.

(iv) Details of shareholders holding more than 5% shares in the Company

Name of the shareholder	As at December 31, 2021		As at March 31, 2021		As at March 31, 2020		As at March 31, 2019	
	Number of shares	%	Number of shares	%	Number of shares	%	Number of shares	%
Bharat Road Network Limited	5,91,48,000	40.00%	5,91,48,000	40.00%	5,91,48,000	40.00%	5,91,48,000	40.00%
Simplex Infra Development Private Limited	5,02,75,800	34.00%	5,02,75,800	34.00%	5,02,73,200	34.00%	5,02,73,200	34.00%
Galfar Engineering and Contracting SAOG, OMAN	86,00,000	5.82%	86,00,000	5.82%	86,00,000	5.82%	86,00,000	5.82%
Galfar Engineering and Contracting (India)Private Limited	2,98,46,200	20.18%	2,98,46,200	20.18%	2,98,46,200	20.18%	2,98,46,200	20.18%

*The Trust has entered into a Securities Purchase Agreement ('SPA') to acquire 100% equity shares of the Project SPV from its existing shareholders. The transfer has not been completed and the acquisition of the Project SPV by the Trust will be completed upon the filing of Placement Memorandum with SEBI for issue of unlisted units by the Trust . Accordingly, in place of the required disclosures for unit capital of the Trust, the disclosure with respect to Owner's equity of the Project SPV has been given as there are no units issued and Trust's unitholders as of date.

There is no holding company of the project SPV.

Note 14 B. Other Equity

Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Retained earnings	(10,581.61)	(8,679.07)	(6,201.53)	(5,420.33)
	(10,581.61)	(8,679.07)	(6,201.53)	(5,420.33)

Nature and purpose of reserve

Retained earnings: Retained earnings are the profits/(loss) that the Group has earned/incurred till date, less any transfers to general reserve, dividends or other distributions paid to shareholders.

Note	Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Note 15	**Financial liabilities - borrowings**				
	Secured				
(a)	**Term loans**				
	Secured Term loans from banks				
	I.Term loan from banks-facility A	1,00,502.14	1,01,655.77	1,02,868.40	1,01,839.69
	Less: Current maturities of long term debt	2,615.75	1,452.28	935.45	218.52
	II.Term loan from banks-facility B	1,436.33	1,762.54	2,192.36	2,617.87
	Less: Current maturities of long term debt	436.27	434.10	429.82	425.51
	Secured term loans from financial institution(subservient to senior lenders) (Refer: Note 50)	8,509.80	8,509.80	7,347.82	3,869.25
		1,07,396.25	1,10,041.73	1,11,043.31	1,07,682.78
	Unsecured				
(b)	Unsecured loan from financial institution	2,656.88	2,656.89	3,717.91	5,839.13
	Less: Current maturities of unsecured loan from financial institution	2,656.93	2,121.46	2,121.46	2,121.46
		1,07,396.20	**1,10,577.16**	**1,12,639.76**	**1,11,400.45**
	Secured term loans from banks				
	Nature of security				
	For securing the Facility a secured obligations a first ranking pari passu charge, and for securing the Facility B Secured Obligations , a second ranking pari passu charge on				
	1. A First Mortgage and charge on all the immovable properties, both present and future, relating to the project, save and except the project assets.				
	2. A First charge of all the tangible movable assets, including movable plant and machinery, machinery spares, tools and accessories, furniture and fixtures, vehicles, all other movable assets and current assets both present and future, relating to the project, save and except the project assets.				
	3. A First Charge on all Insurance Contracts present and future along with agreed bank clause.				
	4. A First Charge on Escrow Accounts (including MMRA and DSRA) together with authorised investments, all monies and securities in the account.				
	5. All the rights, title, interest,benefits, claims and demands whatsoever of the Borrower in any letter of credit, guarantee including contractors guarantees, liquidated damages and performance bonds provided by any party to the Project agreement(excluding Debt Documents), both present and future.				
	6. All the rights, title, interest,benefits,claim and demands whatsoever of the Borrower in the Project Agreement(excluding Debt Documents) both present and future.				
	7. A first ranking pari passu pledge for securing the Facility A Secured obligations and second ranking pari passu pledge for securing the Facility B Secured Obligations of 51% (fiftyone percent) of the fully paid up equity share capital of the Borrower, held by the pledgors in dematerialised form, provided that any enforcement of the pledge shall be subject to the Concession Agreement and the prior written approval of the Authority as provided therein.				
	8.All the rights, title and interest of the Project SPV in, to and under all the Clearances, both present and future.				
	Terms of repayment of Secured term loan.				
	Facility A repayable in 66 quarterly unequal instalments & Facility B repayable in 31 quarterly unequal instalments commencing from December 31, 2017 as per refinancing arrangement.				
	The Trust Group's total long term borrowings from bank have an effective weighted average contractual rate in December 31, 2021: 8.65-9.65%, March 31, 2021: 9.06%-10.56%, March 31, 2020: 9.50%-10.56%, March 31, 2019: 9.50%-10.56% calculated using the effective interest rate method.				
	Secured Term Loans from Financial Institution(Subservient to Senior Lenders)				
	Nature of Security				
	Secured by				
	1.Cash Flows transferred to Bharat Road Network Limited (BRNL) by Shree Jagannath Expressway Private Limited (SJEPL) in form of dividend and cash upstreaming by SJEPL to BRNL				
	2.Pledge of entire fully paid up unencumbered equity shares of the borrower in demat form not less that 19.5%of the total equity share capital of the borrower				
	3.Corporate guarantee of Bharat Road Network Limited				
Note 16	**Other Non Current financial Liabilities**				
	Borrowing cost accrued on yield to maturity (refer note 50)	2,565.33	1,571.56	320.48	-
		2,565.33	**1,571.56**	**320.48**	-

Note	Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Note 17	**Non Current Provisions**				
	Provision for employee benefits				
	Provision for gratuity	35.17	30.31	21.24	12.48
	Provision for compensated absences	6.72	4.72	4.31	3.71
	Other Provisions				
	Provision for major maintenance obligations (refer note 53 and 51(b))	1,062.45	839.22	4,600.95	2,912.41
		1,104.34	**874.25**	**4,626.51**	**2,928.60**
Note 18	**Short-term Borrowings**				
	Loans from related parties	6,411.64	6,391.64	6,326.88	6,167.93
	Terms of loan	**6,411.64**	**6,391.64**	**6,326.88**	**6,167.93**
	Loan availed by Project SPV				
	Repayable in one year				
	Interest rate of 1% p.a. payable monthly with yield to maturity/exit at the rate of 16% p.a.				
	Loan availed by Trust				
	Unsecured loan repayable on demand				
	Floating interest rate of bank rate plus 575 bps per annum.				
Note 19	**Trade payables**				
	Dues of Micro and small enterprises	-	-	-	-
	Dues of other	484.03	478.21	233.87	208.97
		484.03	**478.21**	**233.87**	**208.97**
Note 20	**Financial Liabilities - Other financial liabilities**				
	Current Maturities of Long Term borrowings from banks	3,048.95	1,886.37	1,365.27	644.02
	Current Maturities of Long Term borrowings from financial institution	2,656.93	2,121.46	2,121.46	2,121.46
	Interest accrued on secured loan	405.41	341.92	328.08	97.60
	Interest accrued on unsecured loan	685.97	315.63	113.05	155.75
	Interest accrued on inter corporate deposits	0.09	-	-	-
	Capital creditors	297.48	453.13	474.92	261.60
	Others				
	Advance receipt from NHAI - for change of scope	-	43.70	43.70	43.70
	Retention money (Refer Note 36)	749.26	625.95	505.71	437.34
	Employee benefits payable	13.34	16.13	9.62	14.24
	Toll fee receipts refundable	1.25	1.23	1.23	1.17
	Provision for uncertified construction work (Refer note 49C)	2,248.12	2,248.12	2,248.13	2,248.12
	Borrowing cost accrued on yield to maturity	2,679.65	1,933.22	948.98	-
	Unrealised fastag fee payable to NHAI	2.83	88.19	-	-
		12,789.28	**10,075.05**	**8,160.15**	**6,025.00**
Note 21	**Other current liabilities**				
	Statutory dues	23.54	41.82	53.18	69.62
		23.54	**41.82**	**53.18**	**69.62**
Note 22	**Provisions - Current**				
(a)	Provision for compensated absences	0.14	0.17	0.17	0.50
(b)	Provision for gratuity	2.07	0.33	0.27	1.89
(c)	Provision for major maintenance obligations (refer note 53 and 51(b))	7,298.51	5,758.84	-	-
		7,300.72	**5,759.34**	**0.44**	**2.39**

Note	Particulars	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
Note 23	**Revenue from operations**				
	Revenue from contract with customers				
	Revenue from Toll operations	12,887.97	17,820.84	17,506.80	15,616.96
	Construction services	2,639.66	3,238.75	2,173.99	4,783.91
	Utility shifting services	-	-	4.54	109.28
	Change of scope services	-	-	-	459.64
	Supervision of utility Shifting services	-	-	0.23	5.46
	Supervision of change of scope services	-	-	3.04	20.59
		15,527.63	**21,059.59**	**19,688.60**	**20,995.84**
	Refer note 40 for disclosure in accordance with Appendix D: Service Concession Arrangements Disclosures of Ind AS 115: Revenue from Contracts with Customers.				
Note 24	**Other Income**				
	Interest Income				
	on Fixed deposit	252.60	416.10	323.71	108.41
	on Security deposit	0.01	0.03	1.38	1.63
	on Income tax refund	5.61	0.92	-	18.55
	Gain on sale/change in fair value of investments in mutual fund	77.37	117.17	198.17	162.18
	Gain on disposal of property, plant and equipment	-	-	0.63	-
	Miscellaneous income	12.49	52.67	6.59	1.71
		348.08	**586.89**	**530.48**	**292.48**
Note 25	**Employee benefit expenses**				
	Salaries and wages	418.76	492.89	484.79	499.97
	Contribution to provident and other funds	27.01	44.89	43.23	48.71
	Gratuity	5.83	9.17	7.95	6.80
	Staff welfare expenses	22.27	21.66	16.06	22.61
		473.87	**568.61**	**552.03**	**578.09**
Note 26	**Finance Costs**				
	Interest on term loan from Banks	7,407.56	10,586.14	10,873.07	10,510.93
	Interest on loan from Financial institution	394.41	584.86	1,585.03	1,127.30
	Interest on borrowings from related parties	48.24	63.50	62.56	710.95
	Total interest expense on borrowings	7,850.21	11,234.50	12,520.66	12,349.18
	Interest on borrowings at yield to maturity	1,740.18	2,236.16	1,269.71	-
	Unwinding cost on provision for major maintenance obligations	494.85	460.09	291.24	149.29
	Other borrowing costs	19.47	40.45	63.86	59.59
	Interest on TDS	-	-	1.97	2.22
	Unwinding cost of retention money	48.94	56.86	51.80	150.36
		10,153.65	**14,028.06**	**14,199.24**	**12,710.64**
Note 27	**Depreciation and Amortization Expense**				
	Amortization of intangible asset	2,602.62	3,259.98	3,104.84	2,956.99
	Depreciation on property, plant and equipments	23.22	35.04	35.92	32.89
		2,625.84	**3,295.02**	**3,140.76**	**2,989.88**
Note 28	**Other Expenses**				
	Utility shifting expense	-	-	4.54	109.28
	Change of scope expenses	-	-	-	459.64
	Power & fuel	129.20	162.32	147.45	135.35
	Security expenses	25.68	83.08	69.05	43.04
	Highway maintenance expenses	1,041.41	824.93	641.73	825.24
	Rent	9.59	10.96	12.49	13.16
	Legal and professional fees	332.60	536.14	183.03	157.13
	Travelling and conveyance expenses	32.32	14.43	23.73	18.26
	Insurance cost	148.07	221.80	119.70	113.54
	Vehicle and maintenance expenses	57.41	44.00	43.12	44.56
	Toll administration expenses	21.80	18.18	12.21	16.86
	Rates & taxes	0.05	13.39	0.36	0.36
	Bank charges	1.13	6.38	10.61	12.65
	Communication costs	5.94	7.76	10.80	7.31
	Printing & stationery	0.94	4.54	7.03	7.87
	Loss on fair valuation of mutual funds	-	-	-	6.59
	Amount recoverable written off	10.03			
	Claim receivables from NHAI written off (refer note 48)	-	1,244.01	-	-
	Miscellaneous expenses	48.32	37.50	42.18	19.62
		1,864.49	**3,229.42**	**1,328.03**	**1,990.46**
Note 29	**Other comprehensive income**				
(A)	**Items that will not be reclassified to profit or loss**				
(i)	Remeasurements gain/loss of the defined benefit plans	(1.86)	(1.95)	(4.69)	(1.29)
		(1.86)	**(1.95)**	**(4.69)**	**(1.29)**

Note 30

Tax Expenses	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
Current tax	-	-	-	-
Deferred tax	-	-	-	-

Reconciliation of tax expense and the accounting profit multiplied by India's domestic tax rate :

Particulars	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
Accounting profit/ (loss) before income tax	(1,900.68)	(2,475.59)	(776.51)	(1,295.41)
Statutory income tax rate of the Trust Group	25.17%	25.17%	25.17%	26.00%
Expected tax expense	**(478.40)**	**(623.11)**	**(195.45)**	**(336.81)**
Adjustments in respect of :				
Deferred tax asset not recognised due to absence of certainty of realisability	478.40	623.11	195.45	336.81
	478.40	**623.11**	**195.45**	**336.81**
Net Tax Expense	**-**	**-**	**-**	**-**

The Trust Group has an unabsorbed tax depreciation amounting to ₹ 66,382.93 lacs as at December 31, 2021 (March 31, 2021: ₹ 63,233.63 lacs) that are available for offsetting against future taxable profits for indefinite years (refer note 38).

Note 31 Contingent Liabilities and Contingencies

(a) Claims by EPC contractor

EPC contractors of the Project SPV have filed a claim of ₹ 89,298.79 lacs against the Project SPV for the additional cost incurred, losses suffered from unrecovered expenses, underutilization of resources due to delays encountered during the construction of the Project Highway as per the terms of their respective EPC contracts. Consequently, the Project SPV has filed successive claim on the NHAI for reimbursement of cost compensation claimed by the EPC Contractor in accordance with Article 4, Article 10 and Article 35 of the Concession agreement. The Board of Directors of Investment Manager, acting on behalf of the Trust, based on its internal assessment and as per terms of contracts agreed with EPC contractors which states that the EPC Contractor shall be entitled to any increase in the Contract Price only if the Project SPV receives compensation towards the same from the NHAI, is of the view that the claim filed by EPC Contractor will be paid only after receipt of successive claim from NHAI and accordingly no liability in this regard shall devolve upon the

(b) Litigations

(i) A writ petition was filed against the Union of India, NHAI and the Project SPV challenging the notification dated October 19, 2011 issued by NHAI for toll collection at enhanced rates by the Project SPV. In the said matter, the Hon'ble High Court of Odisha vide its order dated May 09, 2012 decided in favour of the petitioners by directing NHAI and Project SPV not to collect toll at such enhanced rates. The Project SPV has filed a Special Leave Petition before the Hon'ble Supreme Court against the said order and the Hon'ble Supreme Court has directed to stay the order issued by the High Court. Further, the Hon'ble Supreme Court vide its order dated July 27, 2015 has converted the SLP into Civil Appeal and has directed the High Court to dispose off the writ petition expeditiously. The matter is currently pending for disposal. The Board of Directors of Investment Manager, acting on behalf of the Trust, based on their internal assessment, believes and supported by an external legal opinion, that the Project SPV has reasonable ground to succeed in the said writ petition and accordingly no liability in this regard shall devolve upon the Trust Group.

(ii) A writ petition has been filed in the Hon'ble High Court of Odisha against the Union of India, NHAI and the Project SPV challenging the toll collection by the Project SPV at the toll plaza citing it to be illegal and outside the purview of NHAI Act and Rules. The matter is currently pending for disposal. The Board of Directors of Investment Manager, acting on behalf of the Trust, based on their internal assessment, believes that the Project SPV has reasonable ground to succeed in the said writ petition and accordingly no liability in this regard shall devolve upon the Trust Group.

Further, as per the SPA the shareholders of the Project SPV have undertaken to indemnify the Trust against all possible losses incurred or suffered by the Trust Group arising out of above -mentioned litigations.

Further, as per the terms of Concession Agreement with NHAI in case of any termination on account of any default attributable to NHAI, the Project SPV shall be eligible for termination payment equivalent to 100% of Debt Due and 150% of Adjusted Equity in accordance with the Concession Agreement and accordingly the management, supported by an external legal opinion, believes that the chances of any liability on account of such contingency devolving upon the Trust Group is remote.

(c) List of recoveries/damages imposed by NHAI on the Project SPV

NHAI vide its letter dated July 23, 2021 while granting in principle approval for change in 100% change in shareholding of Project SPV has imposed certain conditions on the Trust subject to which the Trust may acquire the 100% shareholding of the Project SPV. Further, the NHAI has also mentioned list of dues and recoveries from the Project SPV in accordance with the Concession Agreement which shall be cleared and settled before final approval. The recoveries/damages totalling of ₹ 24,437.44 lacs imposed by the NHAI are as below:

(i) Non-payment by the Project SPV of Labour cess at the rate of 1% of the Construction cost amounting to ₹ 876.71 lacs
(ii) Default by Project SPV in meeting maintenance obligation amounting to ₹ 79.66 lacs
(iii) Delay in completion of Punch List -1 items by the Project SPV amounting to ₹ 10,337.60 lacs up to May 31, 2021. This being a continued default and per day penalty is being imposed by the NHAI.
(iv)Recoveries an account of negative Change in scope amounting to ₹3,652.01 lacs (net)
(v) Recovery of damages of ₹ 9,491.46 lacs (including interest of ₹ 3,400.46 lacs up to May 31, 2021) for providing deficient pavement crust

Further, NHAI in the said letter has also mentioned claims lodged by the Project SPV totalling ₹ 94,070.08 lacs. However, subsequent to the in principle approval of NHAI as mentioned above, NHAI vide its letter dated October 21, 2021 has asked the Trust to execute a Tripartite Agreement between NHAI, Project SPV and the Trust, whereby the Project SPV and the Trust has undertaken to clear all the dues and claims as and when finalised by Conciliation Committee of Independent Experts which has been subsequently executed on November 23, 2021.

Pursuant to the SPA, the Trust is indemnified by the existing shareholders of the Project SPV for any such claim if imposed by the NHAI on the Project SPV and hence no liability shall devolve upon the Trust Group in this regard.

(d) The Project SPV has not deducted TDS amounting to Rs. 126.97 lacs, Rs. 96.72 lacs and Rs. 172.59 lacs for the years ended March 31, 2020, March 31, 2021 and period ended December 31, 2021 on Yield to Maturity (YTM) portion of the secured and unsecured borrowing availed from the Related parties and the Sponsor. Non-deduction of such TDS was also qualified by the statutory auditor of the Project SPV in its audit report dated July 16, 2020 for the year ended March 31, 2020, issued as per Companies (Auditor's report) Order, 2016. However the said qualification was not continued by the current auditors of the Project SPV in its audit report for the year ended March 31, 2021 and period ended December 31, 2021. The Investment Manager of the Trust and the Project SPV, based on legal opinion from tax expert, is of the view that TDS liability on such YTM portion of borrowing is due only at the time of payment of such YTM and accordingly, no TDS was required to be deducted in the years in which such YTM was accrued in the books of accounts of the Project SPV/Trust Group and hence no liability in this regard shall devolve upon the Trust Group.

Note 32 Capital Commitments

Particulars	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
Estimated amount of contracts remaining pending to be executed on capital account	123.39	858.08	2,322.01	2,702.85

Note 33 Approval from NHAI for change in shareholding

In accordance with Article 5 of Concession Agreement, the Project SPV shall not undertake or permit any change in ownership except with the prior approval of the NHAI. As the Trust has proposed to acquire the 100% equity of the Project SPV, The Project SPV had submitted the application and basis the application, the Project SPV has received an in-principle approval from NHAI dated July 23, 2021 for change in ownership and subsequently have received the final approval from NHAI dated October 21, 2021, for change in ownership, subject to the conditions mentioned in those letters.

Note 34 Segment Information

The Trust Group primary business segment is reflected based on principal business activities carried on by the Trust Group i.e. building, operating and management of road projects and all other related activities which as per Ind AS 108 on 'Operating Segments" is considered to be the only reportable business segment. The Trust Group derives its major revenues from operation and maintenance of highways. The Trust Group is operating in India which is considered as a single geographical segment.

Note 35 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 nine months ended December 31, 2021 and years ended March 31, 2021, March 31, 2020 and March 31, 2019 :

A. Parties to the Trust

i. Maple Highways Pte Limited (Sponsor)
ii. Maple Infra InvIT Investment Manager Private Limited (formerly known as CLP Power India Private Limited) (Investment Manager)
iii. Maple Highway Project Management Private Limited (formerly known as CLP Wind Farms (Theni - Project III) 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 (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 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

C. Parties having substantial interest in voting power of the Project SPV* ("Existing Shareholders")

- Bharat Road Network Limited
- Simplex Infra Development Private Limited
- Galfar Engineering & Contracting (India) Private Limited
- Galfar Engineering and Contracting SAOG, OMAN

D. Holding Company of one of the Existing Shareholders

- Simplex Infrastructures Limited

II Transactions with the related parties and Outstanding balances as at the end of the period/year:

Nature of Transaction (Name of related party)	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
EPC Cost paid:				
Simplex Infrastructures Limited	-	-	111.08	1,197.67
Reimbursement of Utility Shifting Services, Tree Cutting,Change of Scope etc:				
Simplex Infrastructures Limited	-	-	65.31	570.60
Reimbursement of Expenses:				
Simplex Infrastructures Limited	-	-	4.02	-
Unsecured Loan taken (net of repayment) from Existing Shareholders, its Holding Company and Investment Manager:				
Simplex Infrastructures Limited	-	6.48	(5,858.58)	1,917.73
Maple Infra InvIT Investment Manager Private Limited	20.00			
Simplex Infra Development Private Limited	-	58.00	6,017.77	-
Interest on unsecured loans from Existing Shareholders and its Holding Company:				
Simplex Infrastructures Limited	2.38	3.12	32.93	710.95
Simplex Infra Development Private Limited	45.78	60.32	29.63	-
Finance cost on Loan taken				
Maple Infra InvIT Investment Manager Private Limited	0.09			
Finance cost on yield to maturity* **				
Simplex Infrastructures Limited	36.88	48.40	494.50	-
Simplex Infra Development Private Limited	709.53	934.99	454.49	-
Reimbursement of expenses incurred and other liabilities discharged on behalf of the Trust				
Maple Infra InvIT Investment Manager Private Limited	91.48	171.93	-	-

Note 35 Related Party Disclosures

III Net Outstanding amount - Payable/(Receivable):

Nature of Transaction (Name of related party)	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Simplex Infrastructures Limited				
Trade Payables/(Advances)	(280.55)	(273.23)	(218.85)	(209.94)
Unsecured Loan***	315.82	315.82	309.35	6,167.93
Interest (Net of TDS) payable on unsecured loan:	2.86	0.72	0.46	73.00
Borrowing cost accrued on yield to maturity payable (refer note 50)	579.77	542.89	494.50	-
Simplex Infra Development Private Limited				
Unsecured Loan***	6,075.77	6,075.77	6,017.77	-
Interest (Net of TDS) Payable on unsecured loan	54.99	13.79	8.90	-
Borrowing cost accrued on yield to maturity payable (refer note 50)	2,099.01	1,389.47	454.49	-
Maple Infra InvIT Investment Manager Private Limited				
Unsecured loan	20.00	-	-	-
Interest payable on unsecured loan	0.09			
Trade payable**	263.41	171.93	-	-

*The Trust has entered into a Share Purchase Agreement ('SPA') to acquire 100% equity shares of the Project SPV from its existing shareholders. The transfer has not been completed and the acquisition by the Project SPV by the Trust will be completed upon the filing of Placement Memorandum with SEBI for issue of unlisted units by the Trust. Accordingly, transactions of Project SPV with its related parties have been disclosed.

**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 the Trust 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 expenses discharged by the Investment Manager shall be reimbursed by the Trust as and when unit capital is issued by the Trust. Accordingly, as on December 31, 2021 the Trust has incurred expenses of ₹ 263.41 lacs (March 31, 2021: ₹ 171.93 lacs) respectively on account of professional fees and other regular operation 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.

***In accordance with provision of Ind AS 109 Financial Instruments: Project SPV has recognized interest on the effective interest rate ('EIR') of 16.50 % (16.00% up to November 30, 2019) guaranteed at maturity on these loans. These loan has been fair valued (also refer note 50).

Note 36 The Project SPV has withheld a sum of ₹ 615.00 lacs from the dues of M/s RKD Construction Private Limited, one of the EPC Contractors towards retention against their responisbilities for meeting primary obligation of construction of Project Highways.

Note 37 Micro, Small and Medium Enterprises

Under the Micro, Small and Medium Enterprises Development Act, 2006, based on the information available with the Trust Group, there are no Micro, Small and Enterprises to whom the Company owes dues which are outstanding as at reporting dates. The same has been relied upon by the auditors.

Note 38 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 , specific IND AS related adjustments resulted into Net Deferred Tax Assets. The deferred tax assets is not recognized by the Trust Group since there is no reasonable certainty that the same will be utilised in future against the taxable profit.

Note 39 Due to the Demonetisation Scheme announced by Government of India w.e.f. 9th November 2016, the toll collection had been suspended in accordance with directives of National Highways Authority of India (NHAI) during the period from November 9, 2016 to December 2, 2016. The Trust Group has raised claim of ₹ 710.56 lacs on NHAI to compensate for the same out of which an amount of ₹ 314.50 lacs has been received during 2016-17 and ₹ 251.60 lacs received during 2017-18 and recognised as revenue.There has been no collection till date after that and hence the Project SPV did not recognise revenue in respect of balance recoverable amounting to Rs. 144.46 lacs.

Note 40 **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, 2019: 7.30 years, March 31, 2020: 8.30 years, March 31, 2021: 9.30 years, December 31, 2021: 10.05 years
Remaining amortisation period as on as on March 31, 2019: 18.70 years, March 31, 2020: 17.70 years, March 31, 2021: 16.70 years, December 31, 2021: 16.00 years
Construction complete date: Provision completion certificate received on January 12, 2017 for 56.878 kms; Provisional completion certificate/ Completion certificate for the balance 10.12 Km is awaited.

The project have the following rights and obligations:
(a) Right to use the specified asset
(b) Obligations to provide or rights to expect provision of services
(c) Obligations to deliver or rights to receive at the end of the Concession.

The Project SPV, 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.

Note 41 The Trust Group is in business of infrastructure assets primarily road assets. The Trust Group's road project is implemented and held in Project SPV, revenue pertaining to which arises from toll collections. On account of COVID-19 pandemic, nationwide lockdown was imposed by Government of India frequently at various intervals from March -2020. The outbreak of Coronavirus (COVID -19) pandemic globally and in India has caused significant disturbance and slowdown of economic activities.

In compliance with the lockdown instructions issued by the Central and State Governments, the operations at toll plaza of the Project SPV was impacted resulting in significant loss of toll collection and delays in construction of balance project road. The Investment Manager has assessed the possible impact of COVID 19 and resulting future uncertainties on various aspects of its business operations and financial position including carrying amounts of intangible assets, intangible assets under development, receivables, contract assets, other financial and non-financial assets, based on the information available and discussions with various stakeholders, views from experts and industry participants, forecasts by various agencies and organizations, and market estimates, etc., upto the date of approval of special purpose combined financial statements. The Investment Manager has performed sensitivity analysis on the assumptions used (in consultation with management's expert valuers) and based on current estimates, expects that the carrying amount of these assets will be recovered.

Further, the Trust Group is of the view, losses if any, on the Project SPV are recoverable under the extant provisions of the Concession Agreement executed between the Project SPV and NHAI and no significant impact is expected on account of the same. Basis above, Investment Manager has estimated its future cash flows for the Trust Group which indicates no major change in the financial performance as estimated prior to COVID-19 impact.

Further, the extent to which the COVID-19 pandemic will impact the Trust Group in future years will depend on future developments such as the extent, spread severity, government actions etc. which are uncertain as of date.

Due to the nature of pandemic, the Trust Group will continue to monitor developments to identify significant uncertainties in future periods, if any and shall take necessary action based on how the situation evolves. However, as of the reporting date, the Trust Group believes that there is no impact on the Group's ability to meet its liabilities as and when they fall due However, due to unpredictable nature of the ongoing pandemic, the impact of COVID-19 on the Trust Group's financial information may differ from the estimated as at the date of approval of these special purpose combined financial statements.

Note 42: Employee benefits

1 Defined contribution plan

The Trust 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) Employer's contribution to Employee state insurance
The Trust Group has recognised the following amounts in the Statement of profit and loss account

Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2021	As at March 31, 2020
Employer's contribution to Provident fund	26.20	34.93	32.17	33.73
Employer's contribution to Employee state insurance	7.51	10.01	11.06	14.99

2 Defined Benefit Plan

a) The Trust 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:

	Gratuity			
Actuarial study analysis	**As at December 31, 2021**	**As at March 31, 2021**	**As at March 31, 2020**	**As at March 31, 2019**
Principal actuarial assumptions				
Discount rate	7.10%	6.71%	6.58%	7.49%
Range of compensation increase	3.00%	3.00%	3.00%	3.00%
Attrition rate:				
Age 21 - 44	87.49%	87.49%	87.49%	87.49%
Age 45 - 59	12.51%	12.51%	12.51%	12.51%
Plan duration	12.00yrs	13.51yrs	13.89yrs	13.22yrs
Components of statement of income statement charge				
Current service cost	4.16	7.77	7.02	6.12
Interest cost	1.67	1.40	0.93	0.68
Recognition of past service cost	-	-	-	-
Settlement/curtailment/termination loss	-	-	-	-
Total charged to consolidated statement of profit or loss	**5.83**	**9.17**	**7.95**	**6.80**
Movements in net liability/(asset)				
Net liability at the beginning of the year	30.64	21.51	14.37	8.82
Employer contributions	-	(0.40)	(3.90)	
Total expense recognised in the consolidated statement of profit or loss	5.83	9.17	7.95	6.80
Total amount recognised in OCI	0.77	0.36	3.09	(1.25)
Net liability at the end of the year	**37.24**	**30.64**	**21.51**	**14.37**
Re-measurements of defined benefit plans				
Actuarial gain/(loss) due to changes in financial assumptions	(1.50)	(0.45)	2.12	0.27
Actuarial gain/(loss) due to changes in demographic assumptions	-	-	(0.02)	
Actuarial gain/(loss) on account of experience adjustments	2.27	0.81	1.00	(1.51)
Total actuarial gain/(loss) recognised in OCI	**0.77**	**0.36**	**3.10**	**(1.24)**
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	**-**	**-**	**-**	**-**

	Compensated Absences			
Actuarial study analysis	**As at December 31, 2021**	**As at March 31, 2021**	**As at March 31, 2020**	**As at March 31, 2019**
Principal actuarial assumptions				
Discount rate	7.10%	6.71%	7.49%	7.49%
Range of compensation increase	3.00%	3.00%	3.00%	3.00%
Attrition rate:				
Age 21 - 44	87.49%	87.49%	87.49%	87.49%
Age 45 - 59	12.51%	12.51%	12.51%	12.51%
Expected rate of return on plan assets				
Plan duration	10.00Yrs	10.18Yrs	10.84Yrs	10.95Yrs
Components of statement of income statement charge				
Current service cost	0.60	0.50	0.60	0.58
Interest cost	0.27	0.23	0.23	0.20
Recognition of past service cost	-	-	-	-
Settlement/curtailment/termination loss	-	-	-	-
Total charged to consolidated statement of profit or loss	**0.87**	**0.73**	**0.83**	**0.78**
Movements in net liability/(asset)				
Net liability at the beginning of the year	4.88	4.46	4.20	4.55
Benefits paid directly by the Group	-	(1.90)	(2.16)	(1.19)
Total expense recognised in the consolidated statement of profit or loss	0.87	0.73	0.83	0.88
Total amount recognised in OCI	1.10	1.59	1.59	(0.04)
Net liability at the end of the year	**6.85**	**4.88**	**4.46**	**4.20**
Reconciliation of benefit obligations				
Obligation at start of the year	4.88	4.46	4.20	4.55
Current service cost	0.60	0.50	0.60	0.58
Interest cost	0.27	0.23	0.23	0.30
Benefits paid directly by the Group	-	(1.90)	(2.16)	(1.19)
Actuarial loss	1.10	1.59	1.59	(0.04)
Defined benefits obligations at the end of the year	**6.85**	**4.88**	**4.46**	**4.20**
Re-measurements of defined benefit plans				
Actuarial gain/(loss) due to changes in financial assumptions	(0.19)	(0.06)	0.36	0.07
Actuarial gain/(loss) due to changes in demographic assumptions	-	-	(0.01)	
Actuarial gain/(loss) on account of experience adjustments	1.29	1.65	1.24	(0.11)
Total actuarial gain/(loss) recognised in OCI	**1.10**	**1.59**	**1.59**	**(0.04)**
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***

The following table present a sensitivity analysis to one of the relevant actuarial assumption, holding other assumptions constant, showing how the defined benefit obligation would have been affected by changes in the relevant actuarial assumptions that were reasonably possible at the reporting date.

	Gratuity			
	As at December 31, 2021	**As at March 31, 2021**	**As at March 31, 2020**	**As at March 31, 2019**
Discount rate				
+ 1% discount rate	30.90	27.49	19.18	12.99
-1% discount rate	38.23	34.35	24.29	16.00
Salary increase				
+1% salary growth	38.35	34.46	24.36	16.06
-1% salary growth	30.75	27.35	19.09	12.92

d) Experience adjustments

	Gratuity			
	As at December 31, 2021	**As at March 31, 2021**	**As at March 31, 2020**	**As at March 31, 2019**
Defined benefit obligation	37.24	30.64	21.51	14.37
Fair value of plan assets	-	-	-	-
(Surplus)/deficit in plan assets	-	-	-	-
Experience adjustment on plan liabilities	-	-	-	-
Actual return on plan assets less interest on plan assets	-	-	-	-

	Compensated Absences			
	As at December 31, 2021	**As at March 31, 2021**	**As at March 31, 2020**	**As at March 31, 2019**
Defined benefit obligation	6.85	4.88	4.46	4.20
Fair value of plan assets	-	-	-	-
(Surplus)/deficit in plan assets	-	-	-	-
Experience adjustment on plan liabilities	-	-	-	-
Actual return on plan assets less interest on plan assets	-	-	-	-

The estimates of future salary increases considered in actuarial valuation takes into account inflation, seniority, promotion and other relevant factors.

Note 43: Financial instruments

A. Accounting classification and fair values

	Carrying amount				Fair value			
December 31, 2021	**FVTPL**	**FVTOCI**	**Amortized Cost***	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets								
Trade Receivables	-	-	55.61	55.61	-	-	55.61	55.61
Cash and cash equivalents	-	-	719.37	719.37	-	-	719.37	719.37
Other bank balances	-	-	9,309.32	9,309.32	-	-	9,309.32	9,309.32
Non-current Loans & Advances	-	-	41.63	41.63	-	-	41.63	41.63
Current investments	3,220.37	-	-	3,220.37	3,220.37	-	-	3,220.37
	3,220.37	**-**	**10,125.93**	**13,346.30**	**3,220.37**	**-**	**10,125.93**	**13,346.30**
Financial liabilities								
Borrowings	-	-	1,13,807.84	1,13,807.84	-	-	1,13,807.84	1,13,807.84
Trade and other payables	-	-	484.03	484.03	-	-	484.03	484.03
Other financial liabilities	-	-	15,354.61	15,354.61	-	-	15,354.61	15,354.61
	-	-	**1,29,646.48**	**1,29,646.48**	**-**	**-**	**1,29,646.48**	**1,29,646.48**

** The carrying amount of financial instruments carried at amortized cost are a reasonable approximation of fair value.*

	Carrying amount				Fair value			
March 31, 2021	**FVTPL**	**FVTOCI**	**Amortized Cost***	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets								
Trade Receivables	-	-	63.04	63.04	-	-	63.04	63.04
Cash and cash equivalents	-	-	1,575.49	1,575.49	-	-	1,575.49	1,575.49
Non-current Loans & Advances	-	-	40.83	40.83	-	-	40.83	40.83
Current investments	3,143.00	-	-	3,143.00	3,143.00	-	-	3,143.00
	3,143.00	**-**	**1,679.36**	**4,822.36**	**3,143.00**	**-**	**1,679.36**	**4,822.36**
Financial liabilities								
Borrowings	-	-	1,16,968.80	1,16,968.80	-	-	1,16,968.80	1,16,968.80
Trade and other payables	-	-	478.21	478.21	-	-	478.21	478.21
Other financial liabilities	-	-	11,646.61	11,646.61	-	-	11,646.61	11,646.61
	-	-	**1,29,093.62**	**1,29,093.62**	**-**	**-**	**1,29,093.62**	**1,29,093.62**

** The carrying amount of financial instruments carried at amortized cost are a reasonable approximation of fair value.*

	Carrying amount				Fair value			
March 31, 2020	**FVTPL**	**FVTOCI**	**Amortized Cost***	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets								
Trade Receivables	-	-	6.17	6.17	-	-	6.17	6.17
Cash and cash equivalents	-	-	978.84	978.84	-	-	978.84	978.84
Non-current Loans & Advances	-	-	37.97	37.97	-	-	37.97	37.97
Current investments	4,547.89	-	-	4,547.89	4,547.89	-	-	4,547.89
	4,547.89	**-**	**2,266.99**	**6,814.88**	**4,547.89**	**-**	**2,266.99**	**6,814.88**
Financial liabilities								
Borrowings	-	-	1,18,966.64	1,18,966.64	-	-	1,18,966.64	1,18,966.64
Trade and other payables	-	-	233.87	233.87	-	-	233.87	233.87
Other financial liabilities	-	-	8,480.63	8,480.63	-	-	8,480.63	8,480.63
	-	-	**1,27,681.14**	**1,27,681.14**	**-**	**-**	**1,27,681.14**	**1,27,681.14**

** The carrying amount of financial instruments carried at amortized cost are a reasonable approximation of fair value.*

	Carrying amount				Fair value			
March 31, 2019	**FVTPL**	**FVTOCI**	**Amortized Cost***	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Financial assets								
Trade Receivables	-	-	39.22	39.22	-	-	39.22	39.22
Cash and cash equivalents	-	-	628.98	628.98	-	-	628.98	628.98
Non-current Loans & Advances	-	-	38.14	38.14	-	-	38.14	38.14
Current investments	1,753.74	-	-	1,753.74	1,753.74	-	-	1,753.74
	1,753.74	**-**	**1,950.35**	**3,704.09**	**1,753.74**	**-**	**1,950.35**	**3,704.09**
Financial liabilities								
Borrowings	-	-	1,17,568.38	1,17,568.38	-	-	1,17,568.38	1,17,568.38
Trade and other payables	-	-	208.97	208.97	-	-	208.97	208.97
Other financial liabilities	-	-	6,025.00	6,025.00	-	-	6,025.00	6,025.00
	-	-	**1,23,802.35**	**1,23,802.35**	**-**	**-**	**1,23,802.35**	**1,23,802.35**

** The carrying amount of financial instruments carried at amortized cost are a reasonable approximation of fair value.*

B. Measurement of fair values

The table shown below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined below:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)

- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

C. Valuation techniques

The following methods and assumptions were used to estimate the fair values

1) Fair value of the cash and short term deposits, current loans and advances, trade payables and other current financial liabilities and other similar items approximate their carrying value largely due to short term maturities of these instruments.

2) The fair value of liquid mutual funds is based on quoted price.

3) Long-term borrowings are evaluated by the Company based on parameters such as interest rates, specific country risk factors and the risk characteristics of the financed project.

Note 44: Financial Risk Management Objective And Policies

The Trust Group's activities expose it to a variety of financial risks, including market risk, credit risk and liquidity risk. The Trust Group's primary risk management focus is to minimize potential adverse effects of market risk on its financial performance. The Trust Group's risk management assessment and policies and processes are established to identify and analyses the risks faced by the Company, to set appropriate risk limits and controls, and to monitor such risks and compliance with the same. Risk assessment and management policies and processes are reviewed regularly to reflect changes in market conditions and the Trust Group's activities.

The Board of Directors of the Investment Manager and management of the Project SPV shall have overall responsibility for the establishment and oversight of the Trust and Project SPV 's risk management framework respectively. This note presents information about the risks associated with its financial instruments, the Trust Group's objectives, policies and processes for measuring and managing risk, and the Trust Group's management of capital.

Credit Risk

The Trust Group is exposed to credit risk as a result of the risk of counterparties defaulting on their obligations. The Trust Group's exposure to credit risk primarily relates to investments, accounts receivable and cash and cash equivalents. The Trust Group monitors and limits its exposure to credit risk on a continuous basis.

Trade receivables

The Trust 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.

Investment

The Trust Group`s investments in mutual funds are susceptible to market price risk arising from uncertainties about future values of the investment securities. The Trust Group manages the price risk through diversification and by placing limits on individual and total investments.

Cash and cash equivalents

Cash and cash equivalents comprise cash in 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.

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was:

	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Investments	3,220.37	3,143.00	4,547.89	1,753.74
Trade Receivables	55.61	63.04	6.17	39.22
Cash and cash equivalents (including Short term deposits with original maturity of three months of less)	719.37	1,575.49	978.84	628.98

Liquidity risk

The Trust Group is exposed to liquidity risk related to its ability to fund its obligations as they become due. The Trust Group monitors and manages its liquidity risk to ensure access to sufficient funds to meet operational and financial requirements. The Trust Group has access to credit facilities and debt capital markets and monitors cash balances daily. In relation to the Trust Group's liquidity risk, the Trust 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 Trust Group's reputation.

Financing arrangements

The Trust Group has access to following undrawn borrowing facilities at the end of the reporting period:

	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Variable rate borrowings	2,800.00	2,800.00	2,800.00	4,024.46

Maturities of financial liabilities

The contractual undiscounted cash flows of financial liabilities are as follows:

As at 31 December 2021	Less than 1 year	1-5 years	> 5 years	Total
Borrowings including current maturities and interest accrued	15,707.30	37,142.30	74,016.74	1,26,866.34
Trade payables	504.06	-	-	504.06
Other financial liabilities	3,312.29	-	-	3,312.29
	19,523.65	**37,142.30**	**74,016.74**	**1,30,682.69**

As at 31 March 2021	Less than 1 year	1-5 years	> 5 years	Total
Borrowings including current maturities and interest accrued	6,417.85	40,705.49	72,258.48	1,19,381.82
Trade payables	478.21	-	-	478.21
Other financial liabilities	3,476.46	-	-	3,476.46
	10,372.52	**40,705.49**	**72,258.48**	**1,23,336.49**

As at 31 March 2020	Less than 1 year	1-5 years	> 5 years	Total
Borrowings including current maturities and interest	12,617.76	32,714.46	79,917.80	1,25,250.02
Trade payables	233.92	-	-	233.92
Other financial liabilities	3,283.32	-	-	3,283.32
	16,135.00	**32,714.46**	**79,917.80**	**1,28,767.26**

As at 31 March 2019	Less than 1 year	1-5 years	> 5 years	Total
Borrowings including current maturities and interest	12,863.90	24,137.96	86,227.10	1,23,228.96
Trade payables	208.99	-	-	208.99
Other financial liabilities	3,006.17	-	-	3,006.17
	16,079.06	**24,137.96**	**86,227.10**	**1,26,444.12**

Interest rate risk

Interest rate risk is the risk that an upward movement in the interest rate would adversely effect the borrowing cost of the Trust Group. The Trust Group is exposed to long term and short-term borrowings. The Trust 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 Trust Group's borrowings to interest rate changes at the end of the reporting period are as follows:

a) Interest rate risk exposure

	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Variable rate borrowings	1,01,935.41	1,03,418.32	1,05,060.77	1,04,457.55
Fixed rate borrowings	17,578.32	17,558.33	17,392.61	15,876.31

b) Sensitivity analysis

The Trust Group's fixed rate borrowings are carried at amortised cost. They are therefore not subject to interest rate risk as defined in IND AS 107, since neither the carrying amount nor the future cash flow will fluctuate because of a change in market interest rates. Hence sensitivity has been considered only on variable rate borrowing. Profit or loss estimate to higher/lower interest rate expense from borrowings as a result of changes in interest rates.

	Impact on profit after tax			
	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
Interest rates - increase by 50 basis points	509.68	517.09	525.30	522.29
Interest rates - decrease by 50 basis points	(509.68)	(517.09)	(525.30)	(522.29)

Foreign Currency Risk

The Trust Group operates domestically and the business is transacted in local currencies and consequently the Trust Group is not exposed to foreign exchange risk through its sales and services.

Price Risk

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 45: Capital Management

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The Trust Group's main objectives when managing capital are to:
· ensure ongoing access to funding to maintain, refurbish and expand the Project
- ensure sufficient liquidity is available (either through cash and cash equivalents, investments or committed credit facilities) to meet the needs of the business;
· ensure compliance with covenants related to its credit facilities and senior unsecured debentures; and
· minimize finance costs while taking into consideration current and future industry, market and economic risks and conditions.
· safeguard its ability to continue as a going concern
· to maintain an efficient mix of debt and equity funding thus achieving an optimal capital structure and cost of capital.

The Board of Directors of the Investment Manager and the management of the Project SPV shall have the primary responsibility of the Trust and the Project SPV respectively to maintain a strong capital base and reduce the cost of capital through prudent management of deployed funds and leveraging opportunities in domestic and international financial markets so as to maintain investor, creditor and market confidence and to sustain future development of the business.

For the purpose of Trust Group's capital management, capital includes issued capital and all other equity reserves. The Trust Group manages its capital structure in light of changes in the economic and regulatory environment and the requirements of the financial covenants.

The Trust Group manages its capital on the basis of net debt to equity ratio which is net debt (total borrowings net of cash and cash equivalents) divided by total equity and gearing ratio, which is net debt divided by total capital plus net debt. The Group's policy is to keep the gearing ratio between 90% to 100%.

	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	March 31, 20219
Total liabilities*	1,25,853.14	1,24,481.42	1,23,722.84	1,20,333.87
Less : Cash and cash equivalent	719.37	1,575.49	978.84	628.98
Net debt	**1,25,133.77**	**1,22,905.93**	**1,22,744.00**	**1,19,704.89**
Total equity^	4,205.39	6,107.93	8,585.47	9,366.67
Net debt to equity ratio	29.76	20.12	14.30	12.78
Total equity and net debt	**1,29,339.16**	**1,29,013.86**	**1,31,329.47**	**1,29,071.56**
Gearing ratio	96.75%	95.27%	93.46%	92.74%

** Liabilities : Consists of Secured Term Loan from Senior Lenders (Bank)+ secured and unsecured loan from financial institution+ Borrowing cost accrued on yield to maturity+ Interest accrued*

^Equity : Share Capital + Reserves & Surplus (including Capital Reserve)

Note 46 - Assets Charged as Security
The carrying amounts of assets charged as security for borrowings are:

Sl No	Particulars	As at December 31, 2021	As at March 31, 2021	As at March 31, 2020	As at March 31, 2019
(1)	**Non-current Assets**				
	First Charge				
	(i) Freehold Land	9.69	9.69	9.69	9.69
	(ii) Leasehold land development	1.16	1.34	1.66	3.98
	Furniture and Fixtures	6.06	6.33	2.83	3.07
	Vehicles	15.31	18.35	22.38	22.95
	Office equipment	41.12	37.93	45.49	43.26
	Electrical Installation	51.80	57.65	65.42	73.20
	Intangibles	1,24,598	88,365	91,625	94,730
	Intangible assets under development	400	36,596	33,357	31,161
	Others				
	(i) Computer & Peripherals	6.56	7.01	12.41	16.24
	(ii) Toll booths	1.06	1.34	1.70	0.09
		1,25,130.83	**1,25,100.67**	**1,25,143.84**	**1,26,063.05**
	First Charge				
	Security Deposits	41.63	40.83	37.97	38.14
	Other Non current Assets	538.91	812.74	654.95	535.65
	Total Non Current assets charged as security	**580.54**	**853.57**	**692.92**	**573.79**
(2)	**Current Assets**				
	First Charge				
	(i) Investments	3,220.37	3,143.00	4,547.89	1,753.74
	(ii) Cash & cash equivalents	717.37	1,575.49	978.84	628.98
	(iii) Other bank balances	9,309.32	9,073.83	6,280.94	3,987.15
	(iv) Advances other than capital advances	3,116.44	1,973.68	2,022.14	1,854.57
	Total Current assets charged as security	**16,363.50**	**15,766.00**	**13,829.81**	**8,224.44**
	TOTAL ASSETS CHARGED AS SECURITY	**1,42,074.87**	**1,41,720.24**	**1,39,666.57**	**1,34,861.28**

Note 47(i): Extension of Scheduled completion and current status of the project

*The Project SPV entered into a Concession Agreement ('CA') on August 06, 2010 with NHAI for augmentation and expansion of existing 4 lane highway to 6 lane highway on the Chandikhole – Bhubaneshwar section of NH 5 in Odisha for 67 Kms of toll project road ('Project Highway') on Design Build Finance Operate and Transfer (DBFOT) model for a period of 26 years starting from December 14, 2011 being the Appointed Date. Further, the Project SPV was granted right to collect toll on existing 4 lane highway from the Appointed Date.

In accordance with the CA, the Project SPV was obligated to complete the above-mentioned augmentation and expansion work within a period of 910 days from the 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. The Project SPV was granted Provisional Completion Certificate by Independent Engineer on January 12, 2017 for 56.878 Kms of the total 67 Kms of the Project Highway. Accordingly, proportionate project cost pertaining to 56.878 Kms was capitalised as "Intangible Asset" by the Project SPV in its annual statutory financial statements for the year ended March 31, 2017.

Further, the Project SPV was required to complete the balance construction work within 90 days of receipt of Provisional Completion Certificate. However, due to various reason as cited by the Project SPV to the NHAI and the Independent Engineer, the balance construction could not be completed till June 30, 2021 being the latest extension date as recommended by Independent Engineer.

Though Independent Engineer had recommended for extension of time for completion of project till June 30, 2021, no formal approval from NHAI in this regard was received by the Project SPV post March 31 2017.

In accordance with provision of Article 14.4.2 of 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 the Project SPV, which was also imposed by NHAI while granting the in-principle approval for change in shareholding by the Project SPV as more detailed in Note 31(c). The management of the Project SPV based on its assessment believes that delay in completion is not on any grounds attributable to the Project SPV, and since recommendations of Independent Engineer for extension of time have been received from time to time, no liability in this regard shall devolve upon the Project SPV. The Company has subsequently taken this up for resolution through conciliation. Further, pursuant to the SPA, the Trust Group is indemnified for any liability which may devolve upon the Trust in this regard.

Note 47(ii) : Capitalization of Balance intangible assets under development
Read with Note 47(i) above, and in accordance with the CA, the Project SPV was required to complete the balance construction of the Project Highway to meet its obligations under the CA and receive the Final Completion Certificate from Independent Engineer. During the period ended December 31, 2021, the Project SPV, post completion of the balance construction work for the Project Highway, carried out a joint inspection of the Project Highway along with the Independent Engineer. Basis the same, the Independent Engineer has issued a letter dated December 24, 2021 to the Project Director, NHAI on the status of the updated punch list items. As per the said letter, the Project SPV has completed majority of the punch list items as specified in the Provisional Completion Certificate dated January 12, 2017 and the balance punch list items are either pending due to extraneous factors or the Project SPV has applied to N for de-scoping of the same.

The Project SPV has completed the substantial balance construction for the Project Highway. Also. Project SPV has the right to collect user fees for the entire project stretch, including the items as mentioned in the punch list and the Project SPV is expected to receive the future economic benefits in terms of extension of concession period in accordance with the Concession Agreement, the management of the Project SPV, in accordance with the provisions of IND AS 38 Intangible Assets, has capitalized the intangible assets under development as Intangible assets on December 24, 2021. The management of Project SPV and Board of Investment Manager, acting on behalf of the Trust, believes that obtaining the Final completion certificate from NHAI is only procedural in nature and all the activities necessary to prepare the qualifying asset for its intended use have substantially completed (even though routine administrative work might still continue) and thus, the capitalization is appropriate.

Note 48: The Trust Group has net current liabilities of ₹ 10,440.11 lacs as at December 31, 2021 (March 31, 2021: ₹ 6,823.35 lacs)(including current maturities of long term loan and short term loan from related parties and a non-banking financial institution of ₹ 2,3914.67 lacs). Further, during the period ended December 31, 2021, the Trust Group has incurred loss of ₹ 1,902.54 lacs (March 31, 2021: ₹. 2,477.54 lacs) . During the last four years, the Project SPV has incurred losses and the Trust Group has accumulated losses of ₹ 10,581.61 lacs (March 31, 2021: ₹ 8,679.07 lacs) against Owner's Equity of ₹14,787.00 lacs (March 31, 2021: 14,787.00 lacs) thereby, resulting in erosion of more then 50% of the Owner's Equity of the Trust Group as at December 31, 2021. Considering the future cash flow projections of the Project SPV backed by projected traffic by an expert, fair value of the project by an expert valuer indicating the fair value is significantly higher and pursuant to the Share Purchase Agreement (SPA) dated January 20, 2021 wherein the Trust has proposed to acquire the 100% stake in Project SPV and has undertaken to refinance the existing sub-ordinate loan facilities from related parties and a non-banking financial institution, availed by the Project SPV from the proceeds of Units proposed to be issued by the Trust, at an interest rate below the existing contractual interest rate, the management is confident that the Trust Group will be able to meet its obligations in the next twelve months as they fall due. Accordingly, these special purpose combined financial statements have been prepared using the going concern assumption.

Note 49 (A): Ongoing litigation with respect to Claim for collection of tolls at increased rate for Mahanadi bridge
The Project SPV, post completion of construction of a bridge, demanded increase in tolling rates from March 08, 2014 before the NHAI which was not approved by NHAI. As per the provisions of Concession Agreement, the parties referred the dispute to arbitration. The arbitration order adjudicated by a three-member ex-Court Judges was awarded in the favour of the Project SPV and a claim of ₹ 10,405.69 lacs was awarded to the Project SPV. Awarded amount shall also carry interest at the rate of prevailing market rate plus 2% till the date of payment. NHAI filed an appeal against the said order in the High Court of Delhi. The High Court of Delhi vide its order dated March 7, 2022, has set aside the above arbitration order. The Project SPV has filed an appeal on April 23, 2022 against the order passed by the High Court. The Project SPV paid an amount of ₹ 1,244.01 lacs (including Rs. 1,180.00 lacs to one of its related parties) in connection with consultancy support in relation to the arbitration proceedings which was supposed to be adjusted upon realization of such claim. However, pending settlement of arbitration award for long, the same has been charged off in the Statement of Profit and Loss during the year ended March 31, 2021.

Note 49 (B): The Project SPV has paid an advance amounting to ₹ 1,407.11 lacs to its EPC contractor, a related party against Change of scope work assigned by the NHAI in March 2018. Further advance of Rs. 48.00 lacs was paid during the period April 1, 2018 to December 31, 2021, resulting in amount recoverable of Rs. 1,455.11 lacs as at December 31, 2021. Post completion of work by the EPC contractor, NHAI has not released payment for the said Change of scope work to the Project SPV. The Company has filed a claim against the NHAI for the recovery of the said amount and the same was shown as recoverable from the NHAI in the standalone audited financial statements of the Project SPV. However, considering the said Change of Scope has not yet been approved by the NHAI or its Independent Engineer and pending settlement of these recoverable amount, in accordance with the consistent accounting policy of the Trust, the Board of Directors of Investment Manager to the Trust has disclosed these as advance to the Vendors in these Special Purpose Combined Financial Statements.

Similar to above an amount of ₹ 1,414.00 lacs has been paid to various vendors, for change of scope work ("COS") assigned by NHAI in April to December 2021 considering the said COS has not been approved by NHAI/Independent Engineer, it has been reclassified from Recoverable from NHAI as reported in the audited standalone financial statements of the Project SPV as advance to vendors in these special purpose combined financial statements.

The Board of Directors of Investment Manager, acting on behalf of the Trust 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.

Further, as per the SPA between the Project SPV and the Trust, the shareholders of the Project SPV have indemnified the Trust Group in case of any loss or non-recovery of the above amount by the Project SPV.

Note 49 (C): Provision for uncertified construction work
The Project SPV based on internal discussion and its estimates from Management of Project SPV has recognized provision for uncertified construction work with respect to the Project Cost to be incurred by the EPC Contractors amounting to ₹ 2,248.12 lacs including taxes in the year ended March 31, 2019 which has not yet been certified by the Independent Engineer and has accordingly not been paid to the EPC Contractor. The Board of the Investment Manager, based on discussion with the management of the Project SPV is of the view that the said provision shall be settled along with the final settlement of the Total Project and other dues of the EPC Contractors and has accordingly continued with the said provision in these Special purpose combined financial statements.The same has been capitalised by the Investment Manager as part of Special Purpose Combined Financial Statements for the period ended December 31, 2021.

Further, as per the SPA, the shareholders of the Project SPV have indemnified the Trust Group in case of any loss/settlement on account of the above amount by the Project SPV.

Note 50: Accounting of loans from related parties and financial institutions

The Project SPV has borrowed unsecured loans from its related parties as well as secured and unsecured loans from a Non-Banking Finance Company to fund the construction activities and operations of the project as per details below:

Name of lender	Terms of loan	Interest rate (per annum)			
		December 31, 2021	March 31, 2021	March 31, 2020	March 31, 2019
Simplex Infrastructures Limited	Unsecured, Tenure: 1 year	1% *	1% *	1% *	16%
Simplex Infra development Private Limited	Unsecured, Tenure: 1 year	1% *	1% *	1% *	-
SREI Infrastructure Finance Limited (transferred to SREI equipment finance limited w.e.f. Oct 01, 2019)	Secured, Repayable in 6 half yearly instalments from December 2028	-	-	-	16%
SREI Equipment Finance Limited	Secured, Repayable in 6 half yearly instalments from December 2028	1% *	1% *	1% *	-

*yield to maturity/exit at the rate of 16.5% p.a.

Name of lender	Outstanding as at (₹ in lacs)			
	December 31, 2021	March 31, 2021	March 31, 2020	March 31, 2019
Simplex Infrastructures Limited	315.82	315.82	309.1	6,167.92
Simplex Infra development private limited	6,075.82	6,075.82	6,017.77	-
SREI Infrastructure Finance Limited (Secured)	-	-	-	3,869.25
SREI Equipment Finance Limited (Secured)	8,509.80	8,509.80	7,347.82	-

In accordance with provision of Ind AS 109 Financial Instruments: Project SPV has recognized interest on the effective interest rate ('EIR') of 16.50 % (16.00% up to November 30, 2019) guaranteed at maturity on these loans. Considering the rate of unsecured borrowing from a Non-Banking Finance Company ('NBFC'), the management believes that the rate of borrowing from related parties is also at arm's length and accordingly no adjustments is considered

As per the terms of Common Loan Agreement and the escrow mechanism established by the Lenders, the Project SPV, without the prior approval of the Lenders, was not allowed to make any payment to the related parties/NBFC. Accordingly, the Project SPV, for the purpose of principal repayment to the related parties/NBFC, payment of interest on borrowing from related parties/NBFC and TDS on such interest, used to procure additional funds from the above parties. Further, in most of the cases, payments for TDS, interest and principal repayment were being made directly by the new lender to earlier lender and credit/debit of the same was recognized in the books of the Project SPV. The management of the Project SPV and Board of Investment Manager believes that since the above funds were utilized for the purpose of toll operations, there is no non-compliance of the Concession Agreement or the Common Loan Agreement and no penalty in this regard shall devolve upon the Project SPV. Further,all such outstanding loans will be paid upon completion of the share transfer to the Trust from existing shareholders.

Note 51(a) Approval from Lenders

Pursuant to the proposed acquisition of 100% equity of the Project SPV by the Trust, the Project SPV has received Conditional No Objection Certificates from the Lenders of the Project for the proposed transfer of 100% shareholding of Project SPV to the Trust.

Project SPV and the Board of Directors of Investment Manager, acting on behalf of the Trust believes that the conditions mentioned in the said NOCs are only procedural and will be complied before the proposed acquisition of 100% shareholding of Project SPV by the Trust.

Note 51(b): Provision for major maintenance obligations

Particulars	Amount
As at April 1, 2018	1,492.85
Created during the year	1,270.27
Increase in the discounted amount arising from the passage of time	149.29
As at March 31, 2019	**2,912.41**
Created during the year	1,397.30
Increase in the discounted amount arising from the passage of time	291.24
As at March 31, 2020	**4,600.95**
Created during the year	1,537.02
Increase in the discounted amount arising from the passage of time	460.09
As at March 31, 2021	**6,598.06**
Created during the period	1,268.04
Increase in the discounted amount arising from the passage of time	494.85
As at December 31, 2021	**8,360.95**

Read with Note 53, the Investment Manager, based on inputs from Technical report from a Technical Consultant, have considered provision of Major Maintenance Expenses due to be incurred in FY 2022-23 in these combined financial statements and thus, accounted for accordingly.

Note 52: Disclosures as required by SEBI Circular no. CIR/IMD/DF/114/2016 dated 20 October 2016

A) Statement of Net Assets at Fair Value as on December 31, 2021

Particulars	Book value	Fair value
(A) Assets	1,42,280.47	2,43,084.00
(B) Liabilities	1,38,075.08	1,38,075.08
(C) Net Assets (A-B)	**4,205.39**	**1,05,008.92**
(D) No of units	Refer below note	Refer below note
NAV (C/D)	Refer below note	Refer below note

Note:

1) The number of units that Indian Highway Concessions Trust will issue to investors in the proposed initial offer through private placement is not presently ascertainable. Hence, the disclosure in respect of No. of units and NAV per unit have not been given.
2) Since there is only one project, the above information pertains to Shree Jagannath Expressway Private Limited.
3) Fair values of assets as disclosed above are based solely on the valuation report of the independent valuer appointed under InvIT regulations.
4) Fair values of assets has been arrived at after adding the cash and cash equivalent, investments and provision for major maintenance obligations in enterprise value.

B) Statement of Total Return at Fair Value

Particulars	For the nine months ended December 31, 2021	For the year ended March 31, 2021
Total Comprehensive Income (As per the Statement of Profit and Loss)	(1,902.54)	(2,477.54)
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	22,919.00	12,854.00
Total return	**21,016.46**	**10,376.46**

In the above statement, other changes in fair value for the nine months ended December 31, 2021 has been computed based on the difference in fair values of total assets as at December 31, 2021 and as at March 31, 2021 and that for the year ended March 31, 2021 has been computed based on the difference in fair values of total assets as at March 31, 2021 and as at March 31, 2020 which are based solely on the valuation report of the independent valuer appointed under InvIT Regulations.

C) Projectwise operating cashflows for the nine months ended December 31, 2021 and financial year ended March 31, 2021, March 31, 2020 and March 31, 2019

Particulars	Shree Jagannath Expressways Private Limited	Shree Jagannath Expressways Private Limited	Shree Jagannath Expressways Private Limited	Shree Jagannath Expressway Private Limited
	For the nine months ended December 31, 2021	For the year ended March 31, 2021	For the year ended March 31, 2020	For the year ended March 31, 2019
CASH FLOW FROM OPERATING ACTIVITIES				
Net profit before tax	(1,792.81)	(2,301.67)	(776.51)	(1,295.41)
Adjustments to reconcile profit before tax to net cash flows				
Depreciation and amortisation expense	2,625.84	3,295.02	3,140.76	2,989.88
Finance cost	10,138.61	14,028.06	14,199.24	12,710.64
Gain on sale of investments	(77.37)	(117.17)	(198.17)	(155.59)
Provision for major maintenance obligations	1,268.04	1,537.02	1,397.30	1,270.27
Gain on disposal of property, plant and equipment	-	-	(0.63)	-
Operating profit before working capital changes	12,162.31	16,441.26	17,761.99	15,519.79
Adjustments for changes in working capital				
Increase/(Decrease) in trade payables	(84.19)	70.42	24.90	0.94
Increase/(Decrease) in other current liabilities	(18.37)	(11.36)	(16.44)	(11.76)
Increase/(Decrease) in other financial liabilities	(222.30)	136.25	225.34	273.72
Increase/(Decrease) in short-term provisions	1,046.53	5,298.81	(293.19)	(149.35)
(Increase)/Decrease in trade receivables	7.43	(56.87)	33.05	(24.81)
(Increase)/Decrease in other current assets	(1,197.08)	1,228.79	(172.45)	(370.91)
(Increase)/Decrease in loans & advances given	(0.80)	(2.86)	0.17	(3.78)
Increase/(Decrease) in long-term provisions	(1,039.81)	(5,291.23)	295.92	153.28
Cash generated from operations	**10,653.72**	**17,813.21**	**17,859.29**	**15,387.12**
Income Taxes refund / (paid) during the year	273.83	(157.79)	(119.30)	(263.53)
Net cash flow from /(used in) operating activities	**10,927.55**	**17,655.42**	**17,739.99**	**15,123.59**

The above disclosure is after giving effect to the restatements/rectifications, as mentioned in Note 53.

D) Earnings Per Unit (EPU)

The number of units that Indian Highway Concessions Trust will issue to investors in the proposed initial offer through private placement is not presently ascertainable. Hence the disclosures in respect of Earnings per Unit have not been given

E) Capitalisation Statement

Particulars	Pre-issue as at December 31, 2021	As adjusted for issue *
Non-current borrowings (including interest accrued)	1,09,961.53	
Current borrowings	6,411.64	
Current maturities of non-current borrowings (including interest accrued)	9,476.90	
Total debt (A)	**1,25,850.07**	
Equity share capital	14,787.00	
Other equity	(10,581.61)	
Total equity (B)	**4,205.39**	
Debt/Equity ratio [A/(A+B)]	97%	

* The number of units that Indian Highway Concessions Trust will issue to investors in the proposed initial offer through private placement is not presently ascertainable. Hence the required disclosures have not been provided in the above table.

Note 52: Disclosures as required by SEBI Circular no. CIR/IMD/DF/114/2016 dated 20 October 2016 (contd.)

F) Debt payment history

Particulars	As at December 31, 2021		As at March 31, 2021		As at March 31, 2020		As at March 31, 2019	
	Term Loans	Loan from related parties	Term Loans	Loan from related parties	Term Loans	Loan from related parties	Term Loans	Loan from related parties
Carrying amount of debt at the beginning of the period/year	**1,14,584.88**	**6,391.63**	**1,16,126.37**	**6,326.87**	**1,14,165.83**	**6,167.92**	**1,10,216.88**	**4,250.20**
Additional borrowings during the period/year*	-	-	1,453.03	64.76	4,758.51	6,158.95	11,066.82	2,226.60
Repayments during the period/year*	(1,602.55)	-	(3,151.78)	-	(2,942.96)	(6,000.00)	(7,256.89)	(308.88)
Other adjustments/settlements during the period/year	119.65	-	157.26	-	144.99		139.02	
Carrying amount of debt at the end of the period/year	**1,13,101.98**	**6,391.63**	**1,14,584.88**	**6,391.63**	**1,16,126.37**	**6,326.87**	**1,14,165.83**	**6,167.92**

Interest payments (Net of TDS)**	**7,284.81**	**-**	**10,427.48**	**-**	**10,748.10**	**-**	**10,372.92**	**-**

* All the additional borrowings and repayments were recorded in books based on non cash entries (refer note 50), except for addition of Rs. 1,224.10 lacs and Rs. 7,197.56 lacs during the year ended March 31, 2020 and March 31, 2019 and repayment of Rs. 1,602.55 lacs, Rs. 1,800.02 lacs, Rs. 765.46 lacs and Rs. 6,723.80 lacs respectively during the period/year ended December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019, which took place through normal banking channels.

** Interest payments excludes interest converted into loans and other non-cash transaction.

Note 53

The Combined Financial Statements are prepared after considering the adjustments as required pursuant to section 3.4 of SEBI Circular no. CIR/IMD/DF/114/2016 dated 20 October 2016.

Below disclosure compiles the adjustments made to the general purpose annual audited financial statements of the Company for the financial years ended March 31, 2019, March 31, 2020, March 31, 2021 and period ended December 31, 2021 respectively, while preparing these Special purpose combined financial statements:

		December 31, 2021			March 31, 2021			March 31, 2020			March 31, 2019		
Particulars	**Note**	Interim financial statements	Adjustments	Special purpose financial statements	General purpose audited financial statements	Adjustments	Special purpose financial statements	General purpose audited financial statements	Adjustments	Special purpose financial statements	General purpose audited financial statements	Adjustments	Special purpose financial statements
ASSETS :													
Non-current Assets													
Property, plant & equipment		132.76	-	132.76	139.65	-	139.65	161.58	-	161.58	172.49	-	172.49
Intangible assets	1	1,22,222.17	2,375.79	1,24,597.96	88,153.09	211.88	88,364.97	91,405.36	219.59	91,624.95	94,729.79	-	94,729.79
Intangible assets under development	2	2,653.01	(2,252.90)	400.11	36,598.43	(2.37)	36,596.06	33,354.96	2.35	33,357.31	31,020.50	140.28	31,160.78
Financial assets													
(i) Loans		41.63	-	41.63	40.83	-	40.83	37.97	-	37.97	38.14	-	38.14
Other non current assets	3	504.11	34.80	538.91	528.58	284.16	812.74	248.24	406.71	654.95	207.00	328.65	535.65
		1,25,553.68	157.69	1,25,711.37	1,25,460.58	493.67	1,25,954.25	1,25,208.11	628.65	1,25,836.76	1,26,167.92	468.93	1,26,636.85
Current assets													
Financial assets													
(i) Investments		3,220.37	-	3,220.37	3,143.00	-	3,143.00	4,547.89	-	4,547.89	1,753.74	-	1,753.74
(ii) Trade receivables	4	96.71	(41.10)	55.61	63.04	-	63.04	6.17	-	6.17	39.22	-	39.22
(iii) Cash & cash equivalents	5	10,026.62	(9,309.32)	717.30	10,649.32	(9,073.83)	1,575.49	7,259.78	(6,280.94)	978.84	4,616.13	(3,987.15)	628.98
(iii) Other bank balance	5	-	9,309.32	9,309.32	-	9,073.83	9,073.83	-	6,280.94	6,280.94	-	3,987.15	3,987.15
(iv) Others		-	-	-	-	-	-	1,244.01	-	1,244.01	1,244.01	-	1,244.01
Other current assets	3	3,186.58	77.84	3,264.42	2,228.83	(161.48)	2,067.35	2,045.13	7.00	2,052.13	1,824.92	54.76	1,879.68
		16,530.28	36.74	16,567.02	16,084.19	(161.48)	15,922.71	15,102.98	7.00	15,109.98	9,478.02	54.76	9,532.78
TOTAL ASSETS		1,42,083.96	194.43	1,42,278.39	1,41,544.77	332.19	1,41,876.96	1,40,311.09	635.65	1,40,946.74	1,35,645.94	523.69	1,36,169.63
EQUITY AND LIABILITIES:													
Equity													
Equity share capital		14,787.00	-	14,787.00	14,787.00	-	14,787.00	14,787.00	-	14,787.00	14,787.00	-	14,787.00
Other equity	6	(3,733.68)	(6,566.25)	(10,299.92)	(1,924.04)	(6,581.07)	(8,505.11)	(1,643.11)	(4,558.42)	(6,201.53)	(1,550.90)	(3,869.42)	(5,420.32)
Liabilities													
Non-current liabilities :													
Financial liabilities													
(i) Borrowings	7	1,16,540.80	(9,144.60)	1,07,396.20	1,19,189.80	(8,612.64)	1,10,577.16	1,20,870.02	(8,230.26)	1,12,639.76	1,18,404.95	(7,004.50)	1,11,400.45
(ii) Other financial liability	8	-	2,565.33	2,565.33	-	1,571.56	1,571.56	-	320.48	320.48	-	-	-
Provisions	9	35.04	1,069.30	1,104.34	35.03	839.22	874.25	25.56	4,600.95	4,626.51	16.19	2,912.41	2,928.60
Other non-current liabilities	8	5,184.05	(5,184.05)	-	3,458.18	(3,458.18)	-	1,269.46	(1,269.46)	-	-	-	-
		1,21,759.89	(10,694.02)	1,11,065.87	1,22,683.01	(9,660.04)	1,13,022.97	1,22,165.04	(4,578.29)	1,17,586.75	1,18,421.14	(4,092.09)	1,14,329.05
Current liabilities													
Financial liabilities													
(i) Short term borrowings	10	-	6,391.64	6,391.64	-	6,391.64	6,391.64	-	6,326.88	6,326.88	-	6,167.93	6,167.93
(ii) Trade payables	11	220.41	-	220.41	304.43	-	304.43	1,147.90	(914.03)	233.87	829.29	(620.32)	208.97
(iii) Other financial liabilities	12	8,130.75	4,658.38	12,789.13	4,649.98	5,425.07	10,075.05	3,800.64	4,359.51	8,160.15	3,087.40	2,937.59	6,024.99
Other current liabilities	13	919.09	(895.55)	23.54	1,043.89	(1,002.25)	41.64	53.18	-	53.18	69.62	-	69.62
Provisions		0.50	7,300.22	7,300.72	0.50	5,758.84	5,759.34	0.44	-	0.44	2.39	-	2.39
		9,270.75	17,454.70	26,725.44	5,998.80	16,573.30	22,572.10	5,002.16	9,772.36	14,774.52	3,988.70	8,485.20	12,473.90
TOTAL EQUITY AND LIABILITIES		1,42,083.96	194.43	1,42,278.39	1,41,544.77	332.19	1,41,876.96	1,40,311.09	635.65	1,40,946.74	1,35,645.94	523.69	1,36,169.63

		December 30, 2021			March 31, 2021			March 31, 2020			March 31, 2019		
Particulars	**Note**	Interim financial statements	Adjustments	Special purpose financial statements	General purpose annual audited financial statements	Adjustments	Special purpose financial statements	General purpose annual audited financial statements	Adjustments	Special purpose financial statements	General purpose annual audited financial statements	Adjustments	Special purpose financial statements
Revenue From Operations	14	15,653.62	(125.99)	15,527.63	21,064.35	(4.76)	21,059.59	19,844.50	(155.90)	19,688.60	20,449.26	546.58	20,995.84
Other Income		348.08	-	348.08	586.89	-	586.89	507.94	22.54	530.48	292.48		292.48
Total Income		16,001.70	(125.99)	15,875.71	21,651.24	(4.76)	21,646.48	20,352.44	(133.36)	20,219.08	20,741.74	546.58	21,288.32
EXPENSES													
EPC Cost		1,390.50	-	1,390.50	1,463.94	-	1,463.94	378.23	-	378.23	3,044.39	-	3,044.39
Employee benefits expense	15	467.17	6.70	473.87	568.61	-	568.61	552.03	-	552.03	578.09	-	578.09
Finance costs	16	9,645.38	491.13	10,136.51	13,554.90	473.16	14,028.06	14,823.89	(624.65)	14,199.24	12,726.53	(15.89)	12,710.64
Depreciation and amortization expense	1	2,624.12	1.72	2,625.84	3,287.31	7.71	3,295.02	3,360.35	(219.59)	3,140.76	2,989.88	-	2,989.88
Provision for major maintenance obligations	9	-	1,268.04	1,268.04	-	1,537.02	1,537.02	-	1,397.30	1,397.30	-	1,270.27	1,270.27
Other expenses	17	3,684.18	(1,905.46)	1,778.72	3,055.49	-	3,055.49	1,325.45	2.58	1,328.03	1,422.90	567.56	1,990.46
Total expenses		17,811.35	(137.87)	17,673.48	21,930.25	2,017.89	23,948.14	20,439.96	555.64	20,995.59	20,761.79	1,821.94	22,583.73
Profit/(loss) before and tax		(1,809.65)	11.88	(1,797.77)	(279.01)	(2,022.65)	(2,301.66)	(87.52)	(689.00)	(776.51)	(20.05)	(1,275.36)	(1,295.41)
Tax Expense:													
(1) Current tax		-		-	-		-	-		-	-	-	-
(2) Deferred tax		-		-	-		-	-		-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-
Profit (Loss) for the year/period		(1,809.65)	11.88	(1,797.77)	(279.01)	(2,022.65)	(2,301.66)	(87.52)	(689.00)	(776.51)	(20.05)	(1,275.36)	(1,295.41)
Other Comprehensive Income													
Items that will not be reclassified to profit or loss		-	(1.86)	(1.86)	(1.95)		(1.95)	(4.69)		(4.69)	(1.29)		(1.29)
Income tax relating to items that will not be reclassified to profit or loss		-		-	-		-	-		-	-		-
		-	(1.86)	(1.86)	(1.95)	-	(1.95)	(4.69)	-	(4.69)	(1.29)	-	(1.29)
Items that will be reclassified to profit or loss		-			-			-					
Income tax relating to items that will be reclassified to profit or loss		-		-	-		-	-		-			-
		-	-	-	-	-	-	-	-	-	-	-	-
Total Comprehensive Income for the period		**(1,809.65)**	**10.02**	**(1,799.63)**	**(280.96)**	**(2,022.65)**	**(2,303.61)**	**(92.21)**	**(689.00)**	**(781.20)**	**(21.34)**	**(1,275.36)**	**(1,296.70)**

Summary adjustments

Note 1: Intangible assets and Depreciation

Adjustment on account of following:

(a) Toll Collection Rights (Intangible Assets) were being amortised in the audited financial statements on the basis of the traffic projections by the management of the Company. Projected traffic was replaced by actual traffic for the year ended March 31, 2020 and March 31, 2021, resulting in decrease of Rs. 219.59 lacs and increase of Rs. 7.71 lacs in amortisation expense for the year ended March 31, 2020 and March 31, 2021 respectively and consequential adjustment in the carrying value of Intangible Assets as at March 31, 2020, March 31, 2021 and December 31, 2021 in the Special Purpose Combined Financial Statements.

(b) Non-capitalization of Intangible Assets under development and amortization thereof, resulting in increase in carrying value of Intangible Assets by Rs. 2,246.60 lacs and decrease in carrying value of Intangible Assets under development by Rs. 2,248.13 lacs as on December 31, 2021 and increase in amortisation expense by Rs. 1.72 lacs for the period ended December 31, 2021.

(c) Fees paid to Independent Engineer of National Highway Authority of Indian (NHAI) has now been decapitalised resulting in decrease in carrying value of Intangible Assets as at December 31, 2021 and decrease in Revenue from construction services for the period ended December 31, 2021 by Rs. 82.48 lacs each.

Note 2: Intangible assets under development

Adjustment on account of following:

(a) Since the borrowings from senior lenders was refinanced during the year ended March 31, 2018, Unamortised loan processing in respect to such borrowings amounting to Rs. 1,294.83 lacs which was written off by the Project SPV during the year ended March 31, 2020 has been reduced from the opening retained earnings as on April 1, 2018, which inturn resulted in an increase of Rs. 168.58 lacs and decrease of Rs. 14.82 and Rs. 153.76 in the Intangible Assets under development as on April 1, 2018, March 31, 2019 and March 31, 2020 respectively.

(b) Change in computation of effective interest rate charged on borrowing from the Senior lenders in the Special Purpose Combined Financial Statements resulting in decrease in finance cost and consequential decrease in Intangible Assets under development as on April 1, 2018, March 31, 2019, March 31, 2020, March 31, 2021 and December 31, 2021 by Rs. 5.10 lacs, Rs. 8.39 lacs, Rs. 6.67 lacs, Rs. 4.71 lacs and Rs. 2.41 lacs respectively.

Note 3: Other non current assets and Other current assets

Reclassification on account of the following:

(a) Reclassification of capital advances from "Current assets" to "Other non current assets".

(b) “Cos recoverable from NHAI (net)” and “Cos recoverable from NHAI-Bridges & others” disclosed under “Other Current Assets” have been reclassified as “Other recoverable” and disclosed under “Other Current Assets”.

Note 4 : Trade receivable

Reclassification on account of the following:

(a) Decrease in Revenue and Trade receivable of Rs. 41.10 lacs on account of non-collection of toll revenue during the period ended December 31, 2021.

Note 5: Cash & cash equivalents and Other bank balance

Reclassification of Term deposit with original maturity of more than three months but less than twelve months reclassified from "Cash and cash equivalents" to "Other bank balance".

Note 6: Other equity and consequent tax impact on adjustments

Adjustment on account of following:

(a) Other equity as on April 1, 2018 has been adjusted on account of Major maintenance provision of Rs. 1,494.02 lacs, change in computation of effective interest rate of Rs. 26.19 lacs and charging off the unamortised loan processing in respect to borrowings from senior lenders refinanced during the year ended March 31, 2018 amounting to Rs. 1,126.23 lacs.

(b) Adjustments in Other equity and Combined Statement of Profit and Loss has been made consequent to the adjustments (explained in this note) along with corresponding impacts to 'tax expense', wherever applicable.

Note 7: Long term borrowings

Adjustment on account of following:

(a) Since the borrowings from senior lenders was refinanced during the year ended March 31, 2018, Unamortised loan processing in respect to such borrowings amounting to Rs. 1,294.83 lacs which was written off by the Project SPV during the year ended March 31, 2020 has been reduced from the opening retained earnings as on April 1, 2018, and its consequential impact on borrowings during the year ended March 31, 2019 and March 31, 2020.

(b) Change in computation of effective interest rate charged on borrowing from the Senior lenders in the Special Purpose Combined Financial Statements resulting in decrease in finance cost by Rs. 18.98 lacs, Rs. 36.14 lacs, Rs. 51.24 lacs and Rs. 57.86 lacs respectively for the period ended December 31, 2021, year ended March 31, 2021, March 31, 2020 and March 31, 2019 and its consequential impact on borrowings.

(c) Loan availed from one of the financial institutions and debt reserve maintained for the same, resulting in increase in non-current borrowings and other current assets by Rs. 383.42 lacs as at March 31, 2019, Rs. 413.51 lacs as at March 31, 2020 and Rs. 122.49 lacs each as at March 31, 2021 and December 31, 2021 and its consequential impact on finance cost, resulting in increase in finance cost by Rs. 15.25 lacs, Rs. 49.60 lacs, Rs 314.45 lacs and Rs. 4.24 lacs for the period/year ended December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 respectively and corresponding increase in other financial liabilities.

Reclassification on account of the following:

(a) Unsecured loan with tenure of upto one year of Rs. 6,391.62 lacs, Rs. 6,391.62 lacs, Rs. 6,326.88 lacs and Rs. 6,167.93 lacs as at December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 respectively have been reclassified from “Non-current financial liabilities” to “Current financial liabilities” basis the repayment schedule of the loan.

(b) Reclassification of current maturities of loan from senior lender and financial instituion.

Note 8: Other non-current financial liability and other non-current liabilities

Reclassification on account of the following:

(a) Borrowing cost on yield to maturity on borrowings taken from financial institution amounting to Rs. 2,504.40 lacs, Rs. 1,524.97 lacs and Rs. 320.48 lacs as at December 31, 2021, March 31, 2021 and March 31, 2020 respectively, have been reclassified from “Other Non Current Liabilities” to “Other non-current financial liability”.

(b) Borrowing cost on yield to maturity on borrowings taken from related parties amounting to 2,679.65 lacs, Rs. 1,933.22 lacs and Rs. 948.98 lacs as at December 31, 2021, March 31, 2021 and March 31, 2020 respectively, have been reclassified from “Other Non Current Liabilities” to “Other current financial liability”.

Note 9: Provision for major maintenance obligation

Adjustment on account of following:

(a) Accrual of provision for major maintenance obligation on each of the reporting dates. As per provision of Ind AS 37, the Trust Group has accounted for liability towards major maintenance expenditure and reduced Retained Earning as at April 1, 2018 by ₹1,492.85 lacs and recognised/(derecognised) major maintenance expenditure amounting to ₹1,268.04 lacs, ₹1,537.02 lacs, ₹1,397.30 lacs and ₹1,270.27 lacs in period/years ended December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 respectively. Further, the Group has also accounted for interest expense on financial liability measured at amortized cost of ₹ 494.85 lacs ₹ 460.09 lacs, ₹291.24 lacs and ₹149.29 lacs in period/years ended December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 respectively.

Note 10: Short term borrowings

Reclassification on account of the following:

(a) Unsecured loan with tenure of upto one year have been reclassified from “Non-current financial liabilities” to “Current financial liabilities” basis the repayment schedule of the loan..

Note 11: Trade payables

Adjustment on account of following items

(a) Capital creditors amounting to Rs. 474.92 lacs as at March 31, 2020 (Rs. 261.60 lacs as at March 31, 2019) and Retention Money amounting to Rs. 490.28 lacs as at March 31, 2020 (Rs. 429.04 lacs as at March 31, 2019) have been reclassified from "Trade payable" to "Other financial liabilities".

(b) Liability for expenses of Rs. 51.17 lacs and Rs. 70.32 lacs as at March 31, 2020 and March 31, 2019 have been reclassified from "Other financial liabilities" to "Trade payables".

Note 12: Other current financial liabilities

Adjustment on account of :

(a) Since the borrowings from senior lenders was refinanced during the year ended March 31, 2018, Unamortised loan processing in respect to such borrowings amounting to Rs. 1,294.83 lacs which was written off by the Project SPV during the year ended March 31, 2020 has been reduced from the opening retained earnings as on April 1, 2018 and its consequential impact on "Current Maturities of Long Term borrowings from banks" under the head Other current financial liabilities

(b) Change in computation of effective interest rate charged on borrowing from the Senior lenders in the Special Purpose Combined Financial Statements resulting in decrease in finance cost and its consequential impact on "Current Maturities of Long Term borrowings from banks" under the head Other current financial liabilities

Reclassification on account of

(a) Borrowing cost on yield to maturity on borrowings taken from related parties amounting to Rs. 2,679.65 lacs, Rs. 1,933.22 lacs and Rs. 948.98 lacs as at December 31, 2021, March 31, 2021 and March 31, 2020 respectively, have been reclassified from “Other Non Current Liabilities” to “Other current financial liability”.

(b) Current maturities of Unsecured loan from financial institution of Rs. 2,656.93 lacs as at December 31, 2021 and Rs. 2,121.46 lacs each as at March 31, 2021, March 31, 2020 and March 31, 2019 reclassified to "Other current financial liability" from "Non current financial liabilities-Borrowings", basis the repayment schedule of the loan..

(c) Capital creditors amounting to Rs. 474.92 lacs as at March 31, 2020 (Rs. 261.60 lacs as at March 31, 2019) and Retention Money amounting to Rs. 490.28 lacs as at March 31, 2020 (Rs. 429.04 lacs as at March 31, 2019) have been reclassified from “Trade payable” to “Other current financial liabilities”.

(d) Liability for expenses of Rs. 51.17 lacs and Rs. 70.32 lacs as at March 31, 2020 and March 31, 2019 have been reclassified from “Other financial liabilities” to “Trade payables”.

(e) Reclassification of current maturities of loan from senior lender disclosed under "Other current financial liability" to non-current borrowings

Note 13: Other current liabilities

Reclassification on account of

(a) Capital creditors amounting to Rs. 297.48 lacs as at December 31, 2021 and Rs. 453.13 lacs as at March 31, 2021 and Retention Money amounting to Rs. 598.06 lacs as at December 31, 2021 and Rs. 549.11 lacs as at March 31, 2021 were disclosed under “Other current liabilities”. The same has now been reclassified as Capital creditors and Retention money respectively under the head “Other financial liabilities”.

Note 14: Revenue from operations

Adjustment on account of :

(a) Since the borrowings from senior lenders was refinanced during the year ended March 31, 2018, Unamortised loan processing in respect to such borrowings amounting to Rs. 1,294.83 lacs which was written off by the Project SPV during the year ended March 31, 2020 has been reduced form the opening retained earnings as on April 1, 2018, which inturn resulted in decrease of Rs. 14.82 and Rs. 153.76 in the Revenue from Construction services for the year ended March 31, 2019 and March 31, 2020 respectively.

(b) Change in computation of effective interest rate charged on borrowing from the Senior lenders in the Special Purpose Combined Financial Statements resulting in decrease in finance cost and consequential decrease in Revenue from Construction services for the year ended March 31, 2019, March 31, 2020, March 31, 2021 and December 31, 2021 by Rs. 8.39 lacs, Rs. 6.67 lacs, Rs. 4.71 lacs and Rs. 2.41 lacs respectively.

(c) Decrease in Revenue and Trade receivable of Rs. 41.10 lacs on account of non-collection of toll revenue during the period ended December 31, 2021.

Reclassification on account of

(a) Revenue and corresponding expense of Rs. 459.64 lacs in respect of Change of Scope services which were adjusted against each other during the year ended March 31, 2019, has now been disclosed under “Revenue from operations” and “Other expenses”.

(b) Revenue and corresponding expense of Rs. 4.54 lacs and Rs. 109.28 lacs year for the year ended March 31, 2020 and March 31, 2019 in respect of Utility Shifting Services which were adjusted against each other in respective financial years, has now been disclosed under “Revenue from operations” and “Other expenses” in those respective years in the Special Purpose Combined Financial Statements.

Note 15: Employee benefit expense

Adjustment on account of recognition of provision for Gratuity and compensated expense.

Note 16: Finance cost

Adjustment on account of :

(a) Since the borrowings from senior lenders was refinanced during the year ended March 31, 2018, Unamortised loan processing in respect to such borrowings amounting to Rs. 1,294.83 lacs which was written off by the Project SPV during the year ended March 31, 2020 has been decreased from the opening retained earnings as on April 1, 2018 and its subsequent adjustments during the year ended March 2019 and March 2020.

(b) Change in computation of effective interest rate charged on borrowing from the Senior lenders in the Special Purpose Combined Financial Statements resulting in decrease in finance cost by Rs. 14.34 lacs, Rs. 36.14 lacs, Rs. 51.24 lacs and Rs. 57.86 lacs respectively for the period ended December 31, 2021, year ended March 31, 2021, March 31, 2020 and March 31, 2019.

(c) The Trust Group has accounted for interest expense on financial liability (Provision for MMR) measured at amortized cost of ₹ 494.85 lacs ₹ 460.09 lacs, ₹291.24 lacs and ₹149.29 lacs in period/years ended December 31, 2021, March 31, 2021, March 31, 2020 and March 31, 2019 respectively.

Reclassification on account of

(a) Interest on TDS reclassified from "Other expense" to "Finance cost"

Note 17: Other expenses

Adjustment on account of :

(a) Income tax asset of Rs. 10.03 lacs as on December 31, 2021 written off basis the income tax assessment concluded with the Income tax department prior to December 31, 2021 and its consequential impact on Other expenses.

Reclassification on account of

(a) Revenue and corresponding expense of Rs. 459.64 lacs in respect of Change of Scope services which were adjusted against each other during the year ended March 31, 2019, has now been disclosed under “Revenue from operations” and “Other expenses”.

(b) Revenue and corresponding expense of Rs. 4.54 lacs and Rs. 109.28 lacs year for the year ended March 31, 2020 and March 31, 2019 in respect of Utility Shifting Services which were adjusted against each other in respective financial years, has now been disclosed under “Revenue from operations” and “Other expenses” in those respective years in the Special Purpose Combined Financial Statements.

(c) Interest on TDS reclassified from "Other expense" to "Finance cost".

Note 18: Changes in Cash flow statements

Certain loan transactions from financial institutions and related parties which were non cash in nature were disclosed in the Cash flows from Financing Activities in the Cash flow statement of the audited financial statements. The same has been rectified in the cash flow statements of the Special Purpose Combined Financial Statements

Proceeds from short-term borrowings

Party name	As per audited financial Statements	As per Special Purpose Combined financial Statements
Simplex Infrastructures Limited	2,374.50	-
Simplex Infra Development Private Limited	6,075.82	-

Repayment of short-term borrowings

Party name	As per audited financial Statements	As per Special Purpose Combined financial Statements
Simplex Infrastructures Limited	6,308.87	308.87

Proceeds from long-term borrowings

Party name	As per audited financial Statements	As per Special Purpose Combined financial Statements
SREI Equipment Finance Limited (Unsecured)	56.04	-
SREI Equipment Finance Limited (Secured)	8,386.94	-

Repayment of long-term borrowings

Party name	As per audited financial statements	As per Special Purpose Combined financial Statements
SREI Equipment Finance Limited (Unsecured)	3,771.31	-

Interest paid

Party name	As per audited financial statements	As per Special Purpose Combined financial Statements
Simplex Infrastructures Limited	1,329.11	-
Simplex Infra Development Private Limited	2,235.70	-
SREI Equipment Finance Limited (Unsecured)	2,689.49	-
SREI Equipment Finance Limited (Secured)	3,184.95	-

Note 19: Diclosure of Contingent liabilities

Disclosure of Litigations filed against the Project SPV not disclosed in audited financial statements of the Project SPV for the respective years (refer note 31).

As per our report of even date

For S.R.Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Amit Gupta
Partner
Membership number: 501396

Place: Gurugram
Date: June 07, 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 & Director
DIN: 00031034

Place: Dehradun
Date: June 07, 2022

Saurabh Agarwal
Director
DIN: 06518876

Place: Chicago
Date: June 07, 2022

Ankit Dewan
Compliance Officer

Place: Mumbai
Date: June 07, 2022

PROJECTIONS OF REVENUE AND OPERATING CASH FLOW

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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
(formerly CLP Power India Private Limited)
6th Floor, Chanakya, Off. Ashram Road, Ahmedabad,
Gujarat 380009

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') and Shree Jagannath Expressways Private Limited (the "Project SPV") (collectively referred to as 'Trust Group') for the years ending March 31, 2023, March 31, 2024 and March 31, 2025 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 May 6, 2021 and amendments thereto dated March 01, 2022 requesting us to carry out work on the projected information, proposed to be included in the placement memorandum in connection with the proposed issue of unlisted units of the Trust on a private placement basis.

   The Statement of Projections of the Trust Group has been prepared in relation to the proposed transfer of Project SPV to the Trust pursuant to issuance of unlisted units of the Trust on a private placement basis (the "Private Placement"), as required under 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").

2. 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 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.

3. 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. 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 certain matters included therein, including but not limited to, estimates of future tariff and traffic based on traffic study conducted by an expert, are of technical nature.

4. Based on our examination of the evidence supporting the assumptions, 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 historical Special Purpose Combined Financial Statements as required by the InvIT Regulations and included in the placement 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.

5. 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.

6. We draw attention to note 3 of the Statement of Projections which describes the uncertainties and Investment Manager's assessment of the impact of Covid-19 pandemic on the projections of revenue from operations and cash flow from operating activities and the underlying assumptions of the Trust Group for the years ending March 31, 2023, March 31, 2024 and March 31, 2025, for which a definitive assessment of the impact in subsequent period is highly dependent on the future developments and circumstances as they evolve.

7. We draw attention to note 4 of the Statement of Projections which describes the uncertainty of possible impact of delay in completion of 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.

8. 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 proposed private placement 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.

9. We have no responsibility to update our report for events and circumstances occurring after the date of the report.

10. This report is addressed to and is provided to Investment Manager solely for inclusion in the placement memorandum in connection with the proposed Issue of unlisted Units of the Trust on a Private Placement basis 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: 22501396AKLMOZ6617
Place of Signature: Gurugram
Date: June 7, 2022

Projections of revenue from operations and cash flow from operations for the Project SPV

(All amounts in INR lakhs unless otherwise stated)

Particulars	31 March 2023	31 March 2024	31 March 2025
Projected revenue from operations:			
Toll income from expressways	23,497.82	25,872.35	28,142.31
	23,497.82	**25,872.35**	**28,142.31**
Projected cash flow from operations:			
Cash inflow from revenue from operations	23,497.82	25,872.35	28,142.31
Less:			
Actual outflow for operating and maintenance cost	(2,197.45)	(2,304.69)	(2,424.30)
Immediate repairwork+MMR	(11,428.44)	(1,892.79)	-
Management expenses	-	-	-
CSR expenses	-	-	(18.92)
	(13,625.89)	**(4,197.48)**	**(2,443.22)**
Cash generated from operations	9,871.93	21,674.87	25,699.09
Less : Direct taxes paid (net of refunds)	-	(730.02)	(1,170.14)
Net cash flow from operating activities	**9,871.93**	**20,944.84**	**24,528.95**

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	**Saurabh Agarwal**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

Projections of revenue from operations and cash flow from operations for the Trust Group
(All amounts in INR lakhs unless otherwise stated)

Particulars	31 March 2023	31 March 2024	31 March 2025
Projected revenue from operations:			
Toll income from expressways	23,497.82	25,872.35	28,142.31
	23,497.82	**25,872.35**	**28,142.31**
Projected cash flow from operations:			
Cash inflow from revenue from operations	23,497.82	25,872.35	28,142.31
Less:			
Actual outflow for operating and maintenance cost	(2,197.45)	(2,304.69)	(2,424.30)
Immediate repairwork+MMR	(11,428.44)	(1,892.79)	-
Management expenses	(2,178.07)	(2,332.33)	(2,497.57)
CSR expenses	-	-	(18.92)
	(15,803.96)	**(6,529.81)**	**(4,940.79)**
Cash generated from operations	7,693.87	19,342.54	23,201.52
Less : Direct taxes paid (net of refunds)	-	(730.02)	(1,170.14)
Net cash flow from operating activities	**7,693.87**	**18,612.51**	**22,031.38**

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	**Saurabh Agarwal**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

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 duly registered on November 13, 2019 in the office of the Sub-Registrar -V(1), New Delhi and was subsequently amended by Amended and Restate 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 (formerly known as CLP Power India Private Limited) (the "Investment Manager") and the designated Project Manager for the Trust is Maple Highway Project Management Private Limited (formerly known as CLP Wind Farms (Theni - Project III) 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.

2. Basis of preparation of projections

The projection of revenue from operations and cash flows from operating activities of Shree Jagannath Expressway Private Limited (the "Company" or the "Project SPV") and the Trust alongwith Project SPV (collectively referred to as "Trust Group") for the financial years ending March 31, 2023, March 31, 2024 and March 31, 2025 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 placement memorandum in connection with the proposed issue of unlisted units of the Trust private placement basis. 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 Special Purpose Combined 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 and the Guidance Note on Combined and Carve-Out Financial Statements issued by the Institute of Chartered Accountants of India.

Though the aforesaid Projections are prepared under the Ind AS framework, they do not provide for all the detailed disclosures as required under Ind AS. Projected operating cash flows of the Project SPV 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 Statement of Projections have been prepared based on the assumption that once the proposed private placement of unlisted units of the Trust is complete, the Trust will acquire equity interests in the Project SPV on July 01, 2022. Thus, the net proceeds of the issue will be used for acquiring the equity interests of Project SPV as well as to replace the entire secured and unsecured loans and advance from selling shareholders, holding company of selling shareholders and a Non-Banking Financial Institution, availed by Project SPV.

The Projections include the following information:

a) Projections of revenue from operations and operating cash flows for the Project SPV for the financial years ending March 31, 2023, March 31, 2024 and March 31, 2025;
b) Projections of revenue from operations and operating cash flows of Trust Group for the financial years ending March 31, 2023, March 31, 2024 and March 31, 2025; 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, 2023, March 31, 2024 and March 31, 2025 ('Projections Period'). However, the assumed date of acquisition (July 01, 2022) may be postponed and accordingly, the actual result in the first financial period of the Trust may be different from the Projections Period in the Statement of Projections.

The Statement of Projections for the Projections Period are derived assuming post Issue capital structure and corporate structure of the Trust Group being in existence from July 01, 2022.

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).

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 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.

3. Impact of COVID 19

The outbreak of Coronavirus ("COVID -19") pandemic globally and in India has caused significant disturbance and slowdown of economic activities.
The Investment Manager has assessed the possible impact of COVID 19 and resulting future uncertainties on various aspects of its business operations and financial position based on the information available including discussions with various stakeholders, views from experts and industry participants, forecasts by various agencies and organizations, and market estimates, etc.

Basis above, Investment Manager has made assumptions of future cash flows for the Project SPV and the Trust Group which indicates no major change in the financial performance as estimated prior to COVID-19 impact. However, the extent to which the COVID-19 pandemic will impact the Trust Group in future years will depend on future developments such as the extent, spread severity, government actions etc. which are uncertain as of date.

Due to the nature of the pandemic, the Trust Group will continue to monitor developments to identify significant uncertainties in future periods, if any and shall take necessary action based on how the situation evolves.

4. Delay in completion of Project Highway

The Project SPV entered into a Concession Agreement ('CA') on August 06, 2010 with NHAI for augmentation and expansion of existing 4 lane highway to 6 lane highway on the Chandikhole – Bhubaneshwar section of NH 5 in Odisha for 67 Kms of toll project road ('Project Highway') on Design Build Finance Operate and Transfer (DBFOT) model for a period of 26 years starting from December 14, 2011 being the Appointed Date. Further, the Project SPV was granted right to collect toll on existing 4 lane highway from the Appointed Date.

In accordance with the CA, the Project SPV was obligated to complete the above-mentioned augmentation and expansion work within a period of 910 days from the 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. The Project SPV was granted Provisional Completion Certificate by Independent Engineer on January 12, 2017 for 56.878 Kms of the total 67 Kms of the Project Highway. Accordingly, proportionate project cost pertaining to 56.878 Kms was capitalised as "Intangible Asset" by the Project SPV in its annual statutory financial statements for the year ended March 31, 2017.

Further, the Project SPV was required to complete the balance construction work within 90 days of receipt of Provisional Completion Certificate. However, due to various reasons as cited by the Project SPV to the NHAI and the Independent Engineer, the balance construction could not be completed till June 30, 2021 being the latest extension date as recommended by Independent Engineer.

Though Independent Engineer had recommended for extension of time for completion of project till June 30, 2021, no formal approval from NHAI in this regard was received by the Project SPV post March 31, 2017.

In accordance with provision of Article 37Article /14.4.2 of 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 the Project SPV. The same has also been imposed by NHAI while granting the In-principal approval for change in shareholding by the Project SPV as more detailed in Note 31(d) of Special purpose combined financial statements. The management of the Project SPV, based on its assessment, believes that delay in completion is not on any grounds attributable to the Project SPV, and since recommendations of Independent Engineer for extension of time have been received from time to time, no liability in this regard shall devolve upon the Project SPV. Further, pursuant to the SPA, the Trust Group is indemnified for any liability which may devolve upon the Trust in this regard.

During the period ended December 31, 2021, post completion of the balance construction work for the Project Highway, the Project SPV carried out a joint inspection of the Project Highway along with the Independent Engineer. Basis the same, the Independent Engineer has issued a letter dated December 24, 2021 to the Project Director, NHAI on the status of the updated punch list items. As per the said letter, the Project SPV has completed majority of the punch list items as specified in the Provisional Completion Certificate dated January 12, 2017 and the balance punch list items are either pending due to extraneous factors or the Project SPV has applied to NHAI for de-scoping of the same.

The Project SPV has completed the substantial balance construction for the Project Highway. Also. Project SPV has the right to collect user fees for the entire project stretch, including the items as mentioned in the punch list and the Project SPV is expected to receive the future economic benefits in terms of extension of concession period in accordance with the Concession Agreement, the Project SPV has capitalized the intangible assets under development as Intangible assets

on December 24, 2021. The management of Project SPV and Board of Investment Manager, acting on behalf of the Trust, believes that obtaining the Final completion certificate from NHAI is only procedural in nature and all the activities necessary to prepare the qualifying asset for its intended use have substantially completed (even though routine administrative work might continue) and thus, the capitalization is appropriate.

5. 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 Davies Gleave India Private Limited") ("Traffic Consultant") and third-party technical consultant expert ('Ramboll India Private Limited') ('Technical Consultant') in assessment of the assumptions, market fundamentals, industry drivers and outlook amongst other things for the preparation of the Statement of Projections. 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 SPV, eliminating transactions (viz, interest on loan) between the Trust and Project SPV and after considering the following assumptions:

Revenue from operations
Revenue from operations of the Trust Group primarily consist of toll collection income from the project road. 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 projected future.

i. Toll income from expressways

The base data for the projections of revenue from operations is based on traffic report of the external expert who has based its report on the actual traffic data for the period from December 1, 2011 to August 31, 2021 and toll tariff rates for the financial year ended March 31, 2022. The key variables for toll income growth, tollable traffic growth and the Wholesale Price Index ('WPI') are based on the Traffic Report obtained from Traffic consultants (the "Traffic Report") for the Project SPV. Summary of estimates and details of the assumptions are as set forth below:

Project	March 31, 2023		March 31, 2024		March 31, 2025	
	Average tollable traffic growth rate	WPI rate	Average tollable traffic growth rate	WPI rate	Average tollable traffic growth rate	WPI rate
SJEPL	14.19%*	5.17%	5.47%	4.77%	5.28%	4.88%

*Based on Average Actual Daily Traffic data for FY 2021-2022 till March 2022 and Projected Traffic for FY 2022-2023 as per Traffic Report

The source for WPI growth rates is Oxford Economics data as provided in Traffic Report.

Further, below are the assumptions for the Traffic mix for Project SPV; considered by the Traffic Consultant and Board of Directors of the Investment Manager:

Average Annual Daily Traffic (AADT)			
Particulars	**March 31, 2023**	**March 31, 2024**	**March 31, 2025**
Car/Jeep/Van	11,616 (52.79%)	12,403 (53.44%)	13,215 (54.09%)
Light Commercial Vehicle	805 (3.66%)	819 (3.53%)	832 (3.41%)
Bus or Truck	2,946 (13.39%)	3,104 (13.38%)	3,266 (13.37%)
Multi Axle Vehicle (3 to 6 axles) including oversized vehicles	6,636 (30.16%)	6,881 (29.65%)	7,119 (29.14%)

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 except as explained below. 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.

Since, December 31, 2019, the outbreak of COVID-19 and related global responses have caused material disruptions to businesses around the world, leading to an economic slowdown. The slowdown of traffic and the resultant impact on project toll income from expressways saw significant volatility and weakness on the infrastructure road assets operations of the Project SPV during the Financial year ended March 31, 2021 and financial year ending March 31, 2022.

We confirm that the traffic for these projections has been estimated by the Traffic Consultant and derived from the Traffic Report.

ii. Operation and maintenance cost:

For Project SPV

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 SPV.

b) Major Repair and Maintenance expenses

We confirm that Major Maintenance Repair / Operation and Maintenance obligation costs as estimated by the independent third -party Technical Consultant in the Technical Report is complete in all respects which Project SPV 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 the independent third -party Technical Consultant. 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 in FY 22 in its Technical Report has been assumed in the projections in FY 23 with an inflation of 4.77%. Similarly, one -time immediate repair expenses of Rs. 3,096.40 lacs as estimated by the Technical Consultant to be incurred in FY 22 in its Technical Report has been assumed by the Trust Group to be incurred in FY 23 with an inflation of 4.77 %.

It has been further assumed that post the acquisition of Project SPV by the Trust, manpower for toll collections will be provided by a third -party agency and accordingly cost estimates have been projected.

Insurance expense considered in the Statement of Projections are based on premiums currently being paid by the Project SPV 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 Project SPV. 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 Project SPV has received provision completion certificate on January 12, 2017 and final completion certificate is yet to be received. The Project SPV has completed the substantial balance construction work and has also capitalized the balance Project w.e.f. December 24, 2021. However, an additional capital expenditure of Rs. 123.25 lacs is estimated by the Project SPV till the end of financial year ending March 31, 2022.

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. The Project SPV 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

CSR expense includes expenditure incurred by the SPV on the activities relating to corporate social responsibility referred to in section 135 of the Companies Act, 2013 i.e. 2% of the average net profits made during the 3 immediately preceding financial years.

vi. Grant from NHAI

The Project SPV 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 Project SPV will not receive any balance amount of ₹ 2,260.00 lacs Grant during the projections period.

For Trust

vii. Management Expenses

a. Investment Manager fees

The Investment Manager is entitled to Investment Manager fee of ₹ 2,118.07 lacs per annum for FY23 in accordance with the Investment Manager Agreement. The amount is escalated on a year on year by 7%, as estimated by the Investment Manager as per the Investment Management Agreement.

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 to be paid to traffic consultant, technical consultant, audit, compliance, valuer fees, legal fees etc. at the Trust level. The Trust has estimated other expense of ₹60.00 lacs for FY 23. This amount is escalated on a year on year by 10 %, as estimated by the Investment Manager.

viii. Finance costs

It is assumed that the proceeds from issue shall be utilised for full repayment of Project SPV loans from selling shareholders, holding company of selling shareholders and a Non -Banking Financial Institution outstanding as on June 30, 2022. Above referred loans shall be replaced by the loans issued by the Trust to the Project SPV carrying a coupon rate at 14% per annum w.e.f. July 01, 2022. Interest has been calculated on total debt of the Project SPVs, 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 Project SPV.

ix. Changes in working capital

For Project SPV

Collection of tolls in the Project SPV 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.

For Trust

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 SPV and Trust during the Projection Period.

x. Direct taxes (net of refunds)

For Project SPV

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 SPV 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 SPV. 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.

For Trust

It has been assumed that Trust will receive interest income and / or dividends from the Project SPV 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.

xi. 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 SPV, and since the Revenue of Trust includes interest income from Project SPV 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 SPV is assumed to remain unchanged throughout the Projection period. No further assets (apart from Project SPV) is assumed to be acquired or no assets are assumed to be divested during the projections period, even though the Trust

    a. has signed a Securities Purchase Agreement for acquisition of 100% equity shares of Durg Shivnath Expressways Private Limited for Toll Road Assets of 18.50 kms.
    b. has been awarded a "Letter of Award" dated March 31, 2022 by NHAI for tolling, operation, maintenance and transfer of Eastern Peripheral Expressway Project of 135 kms in the National Capital Region.

    Further, it has been assumed that the proposed Trust structure has been adopted from July 01, 2022. The actual structure may come into existence at a later date after the proposed private placement of units of the Trust.

3. 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.

4. It has been assumed that no liability or liquidated damages on account of default in concession agreement shall devolve upon the Project SPV during the Projections Period.

5. 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.

6. No change in fair value of all financial instruments has been assumed during the Projections Period.

7. No gain or loss has been considered on account of changes in foreign exchange rates, interest rates and derivative instruments.

8. 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.

9. 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 nine-months period ended December 31, 2021. The Statement of Projections do not take into account the impact of any new Ind AS standards or interpretation not effective as at December 31, 2021. Ind AS standards or interpretations issued but not effective or not issued as at December 31, 2021 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.

10. 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.

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	**Saurabh Agarwal**	**Ankit Dewan**
Chairman & Director	Director	Compliance Officer
DIN: 00031034	DIN: 06518876	
Place: Dehradun	Place: Chicago	Place: Mumbai
Date: June 07, 2022	Date: June 07, 2022	Date: June 07, 2022

MATERIAL CONTRACTS AND DOCUMENTS FOR INSPECTION

The following contracts, which are or may be deemed material have been entered or are to be entered into in due course. These contracts and also the documents for inspection referred to hereunder, may be inspected by Eligible Investors who have received this Preliminary Placement Memorandum 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 Preliminary Placement Memorandum until the date of Allotment of the Units pursuant to this Issue. Any of the contracts or documents mentioned in this Preliminary Placement 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 Unitholder, subject to compliance with applicable law and Trust Documents.

1. Indenture of Trust entered into between Megha Sethi and the Trustee dated October 4, 2021.

2. SEBI registration certificate for the Trust bearing number IN/InvIT/19-20/0013 dated February 24, 2020, as an infrastructure investment trust.

3. The Investment Management Agreement entered into between the Trustee (acting on behalf of the Trust) and the Investment Manager dated October 9, 2021.

4. The Project Implementation and Management Agreement entered into between Trustee, the Project Manager, the Investment Manager and the Project SPV, dated June 8, 2022, 2021.

5. The Securities purchase agreement dated January 20, 2021 entered into between the Trust (acting through the Investment Manager (acting on behalf of the Trustee)) the Project SPV, 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), the Project SPV, Simplex Infra Development Private Limited, Galfar Engineering & Contracting (India) Private Limited, Bharat Road Network Limited and Galfar Engineering & Contracting SAOG.

6. The claims management agreement dated January 20, 2021 entered into between the Project SPV, 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 Project SPV, 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)).

7. 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

8. The Earn Out Agreement dated January 20, 2021 entered into between the Project SPV, 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)).

9. Claims Benefit Assignment Agreement dated June 7, 2022, entered into between the Project SPV 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)).

10. The Cash Escrow Agreement entered into between the Trust (acting through its Trustee), the Investment Manager, the Trustee and the Escrow Collection Bank, dated January 21, 2022.

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 the Project SPV.

12. The Tripartite Agreement dated November 23, 2021 entered between NHAI, the Project SPV and the Trust (acting through the Investment Manager (acting on behalf of the Trustee)).

13. The tripartite agreement dated June 3, 2022, between NSDL, the Trust and the Registrar.

14. The tripartite agreement dated June 3, 2022, between CDSL, the Trust and the Registrar.

15. The certified copies of the updated Memorandum and Articles of Association of the Investment Manager.

16. The board resolution of the Investment Manager dated June 7, 2022, authorising this Issue.

17. Approval from NHAI for change in shareholding of the Project SPV dated October 21, 2021 bearing reference number NHAI/BOT/CGM(T)/Shareholding/Chandikhole-Jagatpur/2021/239.

18. The consents from the (i) Legal counsel to the Issue as to Indian law; (ii) Trustee, the Sponsor and the Investment Manager; (iii) Valuer; (iv) Registrar; (v) Technical Consultant, (vi) Compliance Officer of the Trust; (vii) Escrow Collection Bank; and (vii) Traffic Consultation and (viii) Industry report expert.

19. The Special Purpose Combined Financial Statements and the report thereon.

20. The financial statements of the Sponsor as of and for the financial years ended December 20, 2021, December 30, 2020, and December 30, 2019.

21. The financial statements of the Investment Manager for financial period or years ended March 31, 2021, March 31, 2020 and March 31, 2019 along with the report thereto.

22. The Projections of Revenue and Operating Cash Flow and the report thereon.

23. The statement of tax benefits dated June 7, 2022 from the Auditors.

24. Corporate governance policies of the Investment Manager.

DECLARATION

The Investment Manager declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Romesh Sobti
Chairman and Director

Date: June 10, 2022
Place: Dehradun

DECLARATION

The Investment Manager declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Anil Aggarwal
Independent Director

Date: June 10, 2022
Place: Delhi

DECLARATION

The Investment Manager declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Saurabh Agarwal
Director

Date: June 10, 2022
Place: Delhi

DECLARATION

The Investment Manager declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Maple Infra InvIT Investment Manager Private Limited**

Sd/-
Yudhvir Singh Malik
Independent Director

Date: June 10, 2022
Place: Delhi

DECLARATION

The Trustee declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Axis Trustee Services Limited**

Sd/-

Authorised Signatory

Date: June 10, 2022
Place: Mumbai

DECLARATION

The Sponsor declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Maple Highways Pte. Ltd.**

Sd/-
Cyril Sébastien Dominique Cabanes
Director

Date: June 10, 2022
Place: Singapore

DECLARATION

The Sponsor declares and certifies that 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) have been complied with and no statement made in this Preliminary Placement 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 Preliminary Placement Memorandum are material, true, correct, not misleading and adequate in order to enable the Bidders to make an informed decision.

For **Maple Highways Pte. Ltd.**

Sd/-
Leong Wai Leng
Director

Date: June 10, 2022
Place: Singapore

ANNEXURE A - VALUATION REPORT

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Valuation Report

Indian Highway Concessions Trust ("the Trust")
&
Maple Highways Pte. Ltd. (in its capacity as "Sponsor" of 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

May 2022

Tel: +91 22 33321600
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BDO Valuation Advisory LLP
The Ruby, Level 9, North West Wing
Senapati Bapat Marg, Dadar (W)
Mumbai 400028, India

Ref: LM/May24-16/2022
Date: May 24, 2022

To,
Indian Highway Concessions Trust
C-5, Defence Colony,
New Delhi -110 024

To,
Maple Highways Pte. Ltd. ,
(in its capacity as "**Sponsor**" of the Trust)
One Raffles Quay, #21-01,
North Tower,
Singapore 048 583

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: Enterprise Valuation of Shree Jagannath Expressways Private Limited ("SJEPL") as per Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014, as amended

We refer to the engagement letter dated May 25, 2021 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 determination of enterprise value of Shree Jagannath Expressways Private Limited ("**SJEPL**" or "**the SPV**" or "**InvIT Asset**") 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 connection with the issuance of units of the Trust by way of a private placement (the "**Issue**"). 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 dated May 24, 2022 ("**the Report**" or "**this 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 Sponsor and the Investment Manager. We have considered the cut-off date for the current valuation exercise to be December 31, 2021 ("**Valuation Date**") and market factors, have been considered up to December 31, 2021.

This valuation report has been prepared solely for the purpose of inclusion as a part of the Preliminary Placement Memorandum ("**PPM**") and Placement Memorandum ("**PM**") and combined financial

statements and such other documents as well as for submission to Securities and Exchange Board of India ("**SEBI**") or any other regulatory or statutory authority as may be required for the Issue and in accordance with the SEBI InvIT Regulations guidelines requiring an independent valuation. 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 SPV, 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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BDO VALUATION ADVISORY LLP

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

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1. Definitions, abbreviations & glossary of terms

BOT	Build, Operate and Transfer
BDO Val	BDO Valuation Advisory LLP
BE	Budgeted Estimate
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, Transfer
DCF	Discounted Cash Flow
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
IRR	Internal rate of return
Issue	The initial offer of units by the Trust by way of private placement in accordance with the SEBI InvIT Regulations.
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
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 or InvIT Asset or the Company or SPV	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	December 31, 2021
WACC	Weighted Average Cost of Capital
WPI	Wholesale Price Index

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2. Executive Summary

2.1 Brief Background and Purpose of Valuation

2.1.2 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/InvIT/19-20/0013. Axis Trustee Services Limited is the Trustee of the Trust.

2.1.3 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.

2.1.4 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. ("**Sponsor**").

2.1.5 Maple Highways Pte. Ltd., ("**the Sponsor**"), is an Exempt Private Company limited by Shares, incorporated on April 5, 2019 in Singapore. It is wholly owned by Caisse De Dépôt Et Placement Du Québec ("**CDPQ**"), an institutional investor that manages several public and parapublic pension plans and insurance programs in Quebec, Canada.

2.1.6 The Management of the Investment Manager ("**the Management**") has informed that the Trust will acquire 100% equity stake in Shree Jagannath Expressway Private Limited ("**SJEPL**" or "**SPV**") ("**Proposed Transaction**").

2.1.7 As per the SEBI InvIT Regulations, the establishment of an InvIT requires Preliminary Placement Memorandum ("**PPM**") and the Placement Memorandum ("**PM**") to include a valuation report from an independent valuer in accordance with the terms specified in the SEBI InvIT Regulations ("**Purpose**").

2.1.8 The Trust has appointed BDO VAL to undertake the enterprise valuation of the InvIT Asset 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 connection with issuance and allotment of units of the Trust by way of a private placement ("**Issue**").

2.2 Valuation Methodology Adopted

2.2.1 Considering the nature of the business and facts of the assignment, the InvIT Asset 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 Asset. Further, the value of the SPV would be reflected in its future earnings potential.

2.3 Valuation Conclusion

2.3.1 The enterprise value of the SJEPL or InvIT Assets is arrived at INR 22,632.9 Mn.

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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 Asset on a going concern basis as per SEBI InvIT Regulations.

3.1.2 This Report has been prepared pursuant to terms of engagement letter between BDO Val and the Trust dated May 25, 2021 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/InvIT/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. (**"Sponsor"**).

3.2.4 Maple Highways Pte. Ltd., (**"the Sponsor"**), is an Exempt Private Company limited by Shares, incorporated on April 5, 2019 in Singapore. It is wholly owned by Caisse De Dépôt Et Placement Du Québec ("CDPQ"), an institutional investor that manages several public and parapublic pension plans and insurance programs in Quebec, Canada.

3.2.5 The Management of Investment Manager (**"the Management"**) has informed that the Trust will acquire 100% equity stake in Shree Jagannath Expressway Private Limited ("**SJEPL**" or "**SPV**") (**"Proposed Transaction"**).

3.2.6 The Trust has appointed BDO Val to undertake the valuation of InvIT Asset to comply with the SEBI InvIT Regulations for determination of the enterprise value of SJEPL and the inclusion of the Report in the PPM, PM and such other documents as well as for submission to SEBI or any other regulatory/ statutory authority as may be required under the applicable laws for the Issue (**"Purpose"**).

3.2.7 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) Audited Financial Statements of SJEPL for Financial Year ("FY") FY2019, FY2020 and FY2021;

b) Audited Financial Statements of the SJEPL for the period of 9 months ended at December 31, 2021;

c) Projected profit & loss statement, balance sheet and cash flow statement of the SJEPL from January 1, 2022 to the Concession end date;

d) Concession Agreements entered with NHAI for the SJEPL;

e) Technical Due Diligence/Technical Advisory Services Reports issued by independent consultant for the SPV dated December 2021;

f) Traffic Study Reports issued by independent consultant dated January 2022;

g) List of one-time sanctions/approvals which are obtained or pending for the SPV; and

h) On-going material litigations including tax litigations in relation to the SPV.

ii. Data points from Crisil Draft Report dated January 2022 ("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. This report and summary of valuation included herein can be reproduced and included in the PPM and PM proposed to be filed in connection with the Issue and may be made available for inspection in the manner specified therein and may be relied upon by the placement agent in connection with the Issue. 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.

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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 SPV 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 SPV 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 the Proposed Transaction or the 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 for the Offering. 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 SPV and also no consideration has been given to litigation and other contingent liabilities that are not recorded in the financial of the SPV 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 SPV 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 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.

4.2.20 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.

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5. Assignment Approach

The overall approach that has been followed to arrive at enterprise value of SPV is summarized below:

i. Submission of detailed information checklist for valuation of the InvIT Asset;

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 SJEPL;

iii. A site visit of the SPV was conducted by our Team Member Puneet H on April 19, 2021;

iv. Analysis of additional information received post preliminary discussion and site visit. We had several meetings with the Management to discuss the business model, assumptions considered and future business outlook;

v. Obtained various disclosures from the Management pertaining to approvals and litigations of the SPV as required under the SEBI InvIT Regulations; and

vi. 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.

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6. Overview of the SPV

6.1 Shree Jagannath Expressway Private Limited ("SJEPL" or "the SPV" or "the InvIT Asset")

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, 09 flyovers etc.)
Toll Plaza	1 Toll Plaza at Km 34+624

6.1.4 The shareholding pattern of SJEPL as on December 31, 2021 is as follows:

Name of the Shareholder	Number of Shares held	Stake %
Bharat Road Network Ltd.	5,91,48,000	40%
Simplex Infra Development Private Ltd.	5,02,75,800	34%
Galfar Engineering and Contracting SOAG, OMAN	86,00,000	6%
Galfar Engineering and Contracting (India) Private Limited	2,98,46,200	20%
Total	**14,78,70,000.0**	**100%**

6.1.5 For the list of approvals please refer Annexure I.

6.1.6 For disclosure on litigations please refer Annexure II.

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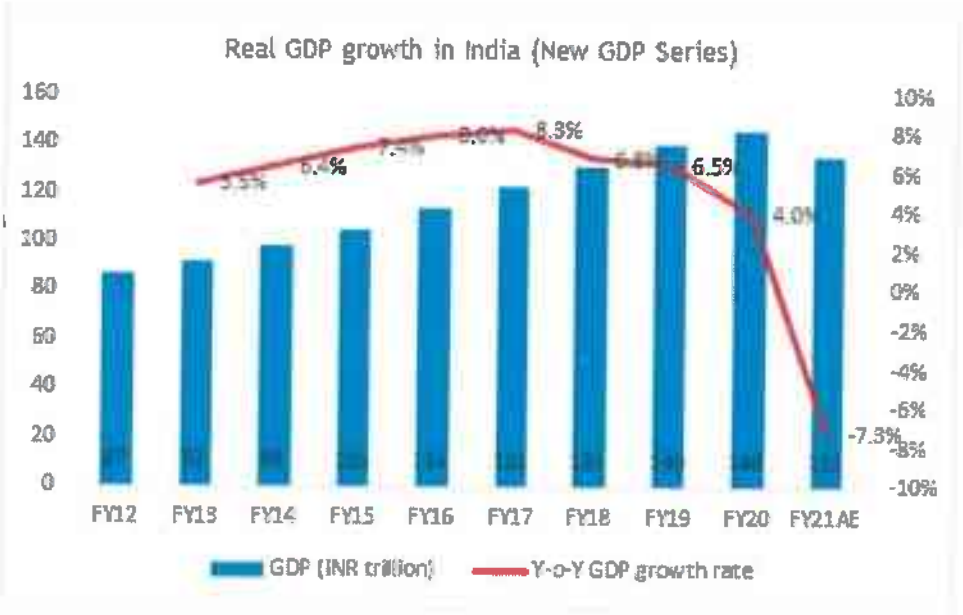
7. Industry Overview

The data points in this section is derived from the report "An assessment of the roads sector in India", August 2021 -Addendum Jan 2022 (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 145.7 trillion in FY2020. India's GDP stood at INR 135.1 billion in FY2021 below the fiscal 2019 level of INR 140.0 billion.



Note: AE: Advanced estimates published on August 2021

Source: Crisil Report

7.2 Roads Infrastructure in India

7.2.1 India has the second-largest road network in the world, spanning 6.2 million km. Road transportation is the most frequently used mode of transportation in India, accounts for about 86% of passenger traffic and close to 67% of freight traffic. The national highways span nearly 136,440 km which constitutes just 2% of road length, however, they accounted for about 40% of total road traffic in fiscal 2021. The secondary system of roads comprise state roads and major district roads, which accounted for the remaining 60% of traffic and 98% of road length.

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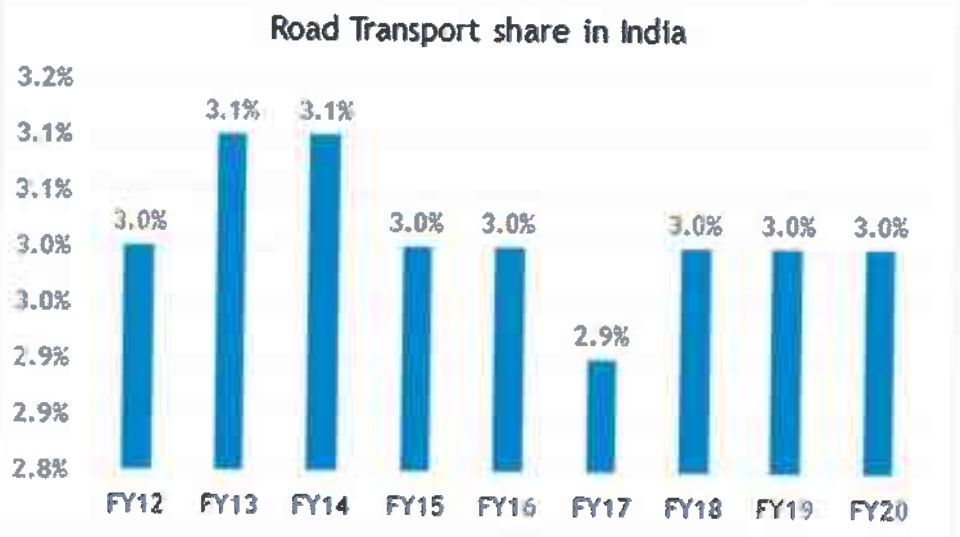
Road Network	Length ('000Km)	% of total length	% of total traffic	Connectivity to
National Highways	136.4	2%	40%	Union capital, state capitals, major ports, foreign highways
State Highways	176.8	3%		Major centres within the states, national highways
Other Roads	5,902.5	95%	60%	Major and other district roads, rural roads - production centres, markets, highways, railway stations

7.2.2 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 3.1% in fiscal 2020. The share of road transport in India's GDP has hovered between 2.9% to 3.1% from fiscals 2012 to 2020.



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

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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	Revenue for private	Concession period	Award criteria
BOT toll	Private party builds road, undertakes O&M and collects toll	Concessionaire	Concessionaire	Concessionaire	No	Toll	Around 20-25 years for the NHAI**	Highest revenue sharing bid / highest premium
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 20-15 years for NHAI	Lowest annuity
BOT-HAM	Private party builds road, undertakes O&M. Gets 40% of payment during construction and 60% as annuity	Concessionaire	Concessionaire	Authority	40% during construction and 60% as semi-annual annuity, net of toll collected	Construction grant plus annuity payments	Around 15 years of operations	Lowest project cost plus O&M cost
EPC	Private party builds road, money is spent by the government	Concessionaire	Authority	Authority	Yes	Contract amount	Not required	Lowest tariff requested
OMT	Private party collects toll and undertakes O&M	No development except in case of paved shoulders	Concessionaire	Concessionaire	No	Toll	Around nine years for NHAI projects	Highest % of toll revenues 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 the estimated toll upfront to the authority, undertakes O&M and collects the toll during concession period	Authority (in case upgradation of lanes is taken up during the concession period)	Concessionaire	Concessionaire	Yes	Toll	30 Years	Highest Upfront Payment

*** National Highways Authority of India*
**Operations & Maintenance*
Source: Crisil Report

7.3.2 Electronic toll collection (ETC) is a upcoming technology for 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 November 2019, MoRTH directed NHAI that 100% of toll lanes on national highways must have electronic toll collection (ETC). However, in December 2019, the ministry relaxed the rule temporarily to have 75% of the lanes to have ETC.

7.4 Key challenges faced by road sector in India

i. Public-Private Partnership (PPP) road developers face issues related to financial viability. Issue pertaining to subdued financing, lower traffic and delayed execution have resulted in high leverage ratio for these developers. As a result, PPP toll projects are now unable to attract further bidders on account of the stressed balance sheet of the developers, resulting from unavailability of financing from banks and stuck equity of the developers in existing projects.

ii. Low bidding from private sector in PPP projects has forced the government to shift to government-funded engineering, procurement, and construction (EPC)/cash contract mode. EPC contracts awarded by the government have issues such as low quality of roads constructed, poor maintenance of roads after handover to the government.

iii. 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. Delays are mainly caused by land acquisition issues, environmental clearances, forest clearances, railway clearances, shifting of utilities, religious structures and encroachments.

iv. Road sector projects are facing funding constraints as banks are reluctant to fund road sector projects as they are approaching the sector exposure limits. Banks demand 80%-100% of the land availability with the developer at the time of awarding to ensure project completion on time.

v. The Indian population has not yet completely accepted the importance of toll for road construction and improvement of service delivery. There have been several instances of people, backed by various political groups, opposing toll plazas for reaping political gains in the country.

7.5 Key policy measure to boost private participation

i. Amendments made to Engineering, Procurement and Construction (EPC) Model Concession Agreement: NHAI and the ministry introduced changes to the BOT MCA aimed at key issues such as land acquisition, revenue assessment in case of traffic shortfall and stuck projects to improve private participation via the BOT-toll mode. The key amendments to the MCA are as below:

- Land acquisition: Minimum 90% Right of Way before issue of Appointed Date as against 80% earlier; balance 10% to be granted within 180 days of appointed date, else it would be removed from the scope of work; and termination clause if appointed date is not received within one year of concession signing date.
- Deadline reduced from 240 days to 180 days for approval/ clearances for area under forest or sanctuary;
- 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;
- Higher interest on mobilization advance paid to authority. Earlier recovery of mobilization advance by the authority. Release of retention money against bank guarantees discontinued; and
- Lower compensation and longer tenure for maintenance obligations of contractor. Defect liability period increased from 4 years to 10 years.

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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.

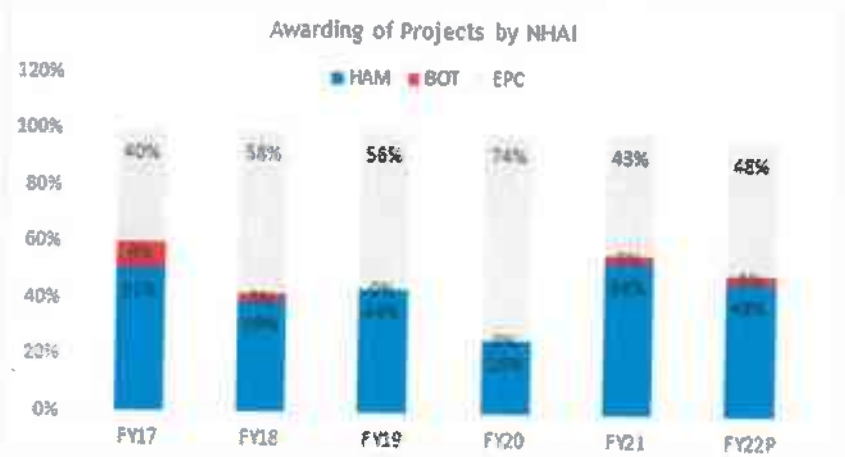
iv. Exit Policy was introduced in 2015 by the Cabinet Committee on Economic Affairs (CCEA) which allows 100% equity divestment in projects after two years of completion for all BOT projects, irrespective of year of award and the proceeds can be used to complete any highway projects, any power sector 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.

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. The projects under the existing NHDP phases involves 5,000-5,500 km which are to be awarded by fiscal 2021. These residual projects would dominate 50% of investments over the next five years.

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. The trend is expected to continue in fiscal 2022 with awards to be in the range of 4400-4800 kms.



Source: NHAI, Crisil Report *P: Projected*

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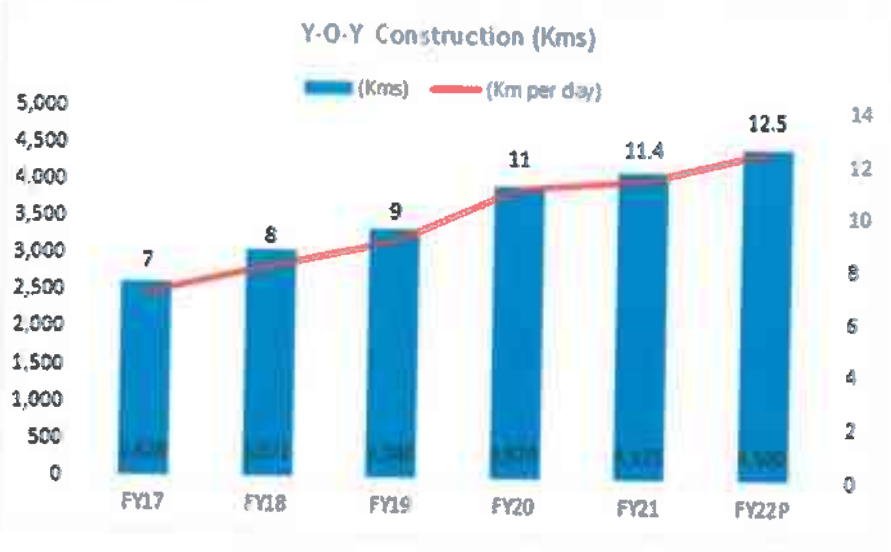
iii. Despite the lockdowns and labour-related issues, the construction at NHAI projects rose 5% on-year to 4,175 kms in fiscal 2021.



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

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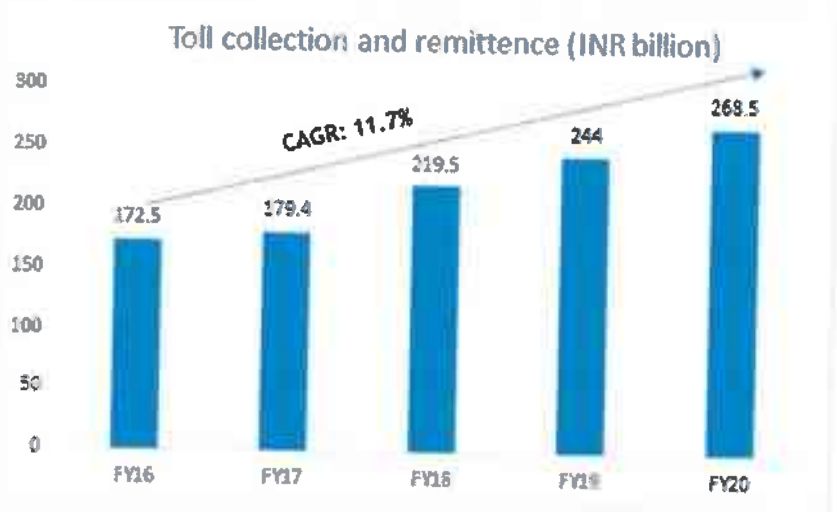
7.8 Toll Traffic at National Highways

Toll collections and remittances on national highways have grown 11.7% in the past five fiscal Years. It stood at INR 268.5 billion in fiscal 2020. The increase in toll traffic is attributable to:

i. Higher execution of national highways. Execution of national highways increased at 18.9% CAGR over the five-year period. The NHAI executed 3,979 km of national highways in fiscal 2020 as against 1,988 km in fiscal 2016.

ii. Population of cars and utility vehicles increased at 7% CAGR and commercial vehicles (CVs) at 67% CAGR from fiscals 2016 to 2020.



Source: NHAI, Crisil Report

7.9 Key Budget Announcements for the infrastructure sector in Union Budget 2021-2022

The budget announced for a massive push to infrastructure creation by taking the lead in capex for fiscal 2022. The budget intends to augment funds for the flagship National Infrastructure Pipeline, and lays down a roadmap to do so by increasing capital expenditure, monetizing assets and developing instruments for infrastructure financing.

i. Budgeted capex allocation for fiscal 2022 is increased by 26% over fiscal 2021RE, to INR 5.54 trillion. But including Internal and extra budgetary resources, capex is up only 5%.

ii. Budgeted infrastructure allocation for nine core sectors is increased by 15% on-year over fiscal 2021RE.

iii. Innovative modes to finance infrastructure build-out are proposed such as a dedicated development finance institution, zero-coupon bonds by infrastructure debt funds, and debt financing of investment trusts and real estate investment trusts.

iv. The infrastructure segment occupies a share of 48.56% of the total capital outlay provided in the budget estimates for fiscal 2022. In the infrastructure segment, majority of the capital outlay of 40.21% was allocated to the Ministry of Road transport and Highways with a value of INR 1,082.3 billion:-

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Capital Outlay (in INR billion)	FY16	FY17	FY18	FY19	FY20	FY21RE	FY22BE	% o growth
Ministry of Road, Transport and Highways	275.33	411.93	507.52	676.46	683.74	920.53	1,082.30	

Source: Crisil Report

v. 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.

vi. The Union Finance Minister announced "National Monetization Pipeline" of potential brownfield infrastructure assets under the union budget 2021-22. NHAI is planning 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.

8. Valuation Approach

The present valuation analysis exercise is being undertaken to arrive at the enterprise value of InvIT Asset 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. **Discounted Cash Flow Method**

- 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. **Market Price Method**

- 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. **Comparable Companies Multiple Method**

- 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

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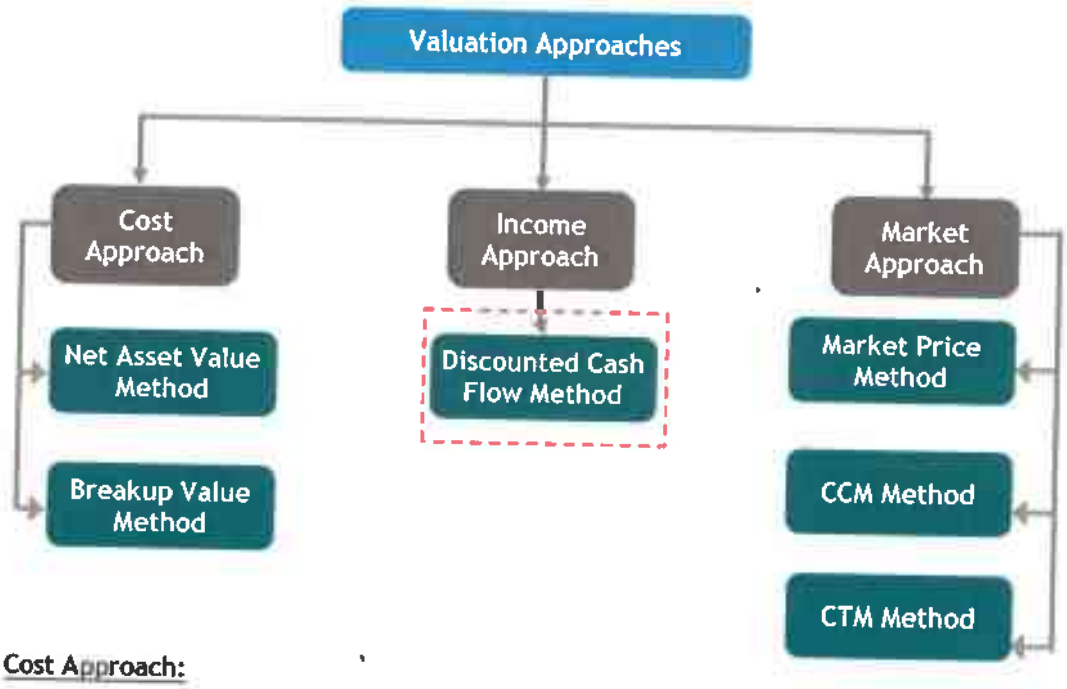
relevant to valuation. Relevant multiples need to be chosen carefully and adjusted for differences between the circumstances.

- 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. Comparable Transactions Multiple Method

- 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. Cost Approach:

This valuation approach is mainly used in cases where the asset base dominates earnings capability and hence has not been considered for current valuation.

ii. Income Approach:

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 SPV 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. Market Approach:

The SJEPL is 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.

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9. Valuation Analysis

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 SPV 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 assumptions 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 SPV 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 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 present value is determined by discounting the net free cash flows to equity shareholders by Ke.
- 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 6.63% is based on yields of 10-year zero coupon bond yield as on December 31, 2021 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 8.37%.

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 Infrastructure Developers Limited
Ashoka Buildcon Limited
PNC Infratech Limited

WACC

- 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 the valuation of SJEPL is presented in the below table:

Particulars	Nil Tax	MAT	Full Tax	Explanation
Risk free return (Rf)	6.6%	6.6%	6.6%	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	8.4%	8.4%	8.4%	Risk Premium = Market Return (Rm) - Risk Free Rate (Rf)
Relevered Beta (B)	0.66	0.60	0.54	We have considered 5 years beta for comparable companies
Cost of equity (Ke)	12.2%	11.7%	11.2%	Ke = Rf + B x (Rm-Rf)
Company Specific Risk Premium (Ksp)	2.0%	2.0%	2.0%	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)	14.2%	13.7%	13.2%	Ke = Rf + B x (Rm-Rf) + Ksp
Cost of debt (I)	10.4%	10.4%	10.4%	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)	10.4%	8.6%	6.8%	I * (1 - t)
Debt / (Debt +Equity)	50.0%	50.0%	50.0%	Target long-term debt equity ratio of the comparable companies
WACC	12.3%	11.1%	10.0%	WACC = Ke*(E/(D+E))+Kd*(D/(E+D))
WACC Adopted	12.3%	11.1%	10.0%	After rounding off

10. Valuation of SJEPL

10.1 The audited balance sheet and profit and loss account of SJEPL as on December 31, 2021 has been considered for the purpose of valuation.

10.2 The financial projections as provided by the Management for the period from January 1, 2022 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 consultant.

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".*

- Thus, the Concession period of 26 years as per Concession Agreement between NHAI and SJEPL as provided by the Management is increased as per the above clause as given below.

Particulars	Unit	Details
Target date as per CA	Date	April 1, 2020
Target traffic as per CA	PCUs	56,937
Actual traffic as on Target Date	PCUs	44,714
Comparison of average traffic at test date with target	%	-21.5%
Original concession period	years	26
Increase in concession period	%	20%
Change in concession period	years	5.20
Revised concession period	years	31.20
Appointed date	Date	December 14, 2011
Original concession end date	Date	December 13, 2037

- Actual Traffic as on the Target date is as per the letter submitted by SJEPL to NHAI "SJEPL/AM/1-2500" dated July 28, 2021- for " Effect of variations in traffic growth - Traffic sampling under CA Article 29.1-Request for extension of 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 January 1, 2022 to December 13, 2037.

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b) Traffic Volume

- Traffic volumes as received from the Management supported by Traffic Due Diligence report carried out by Steer dated January 2022 is considered.

c) Toll rates

- The toll rates derivation has been verified from the Traffic Study Report dated January 2022;
- 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 December 2021 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 current assets as on December 31, 2021 will be transferred to the erstwhile shareholders as and when realized. Therefore, we have not considered opening balance of current assets in our valuation. Whereas the current liabilities as on December 31, 2021 will be obliged by the Trust in future. Therefore, the current liabilities are adjusted from the enterprise value as below line adjustment.

g) The estimated toll income for FY22 is INR 1,731.2 Mn which is expected to grow by 35.7% to INR 2,349.8 Mn in FY23. As discussed with the Management the traffic in FY22 was less than estimated due to various reasons as discussed below:

- The average PCUs in FY22 was 42,159 whereas, the estimated PCUs for FY22 is 47,725. As informed by the Management, the Project road had good performance in the beginning of FY22. Against a model PCU of 47,725, April 2021 had a PCU of 49,907. The COVID wave 2 impacted traffic in May 2022, mostly affecting passenger modes and overall PCU got affected. The actual traffic in FY22 is as follows:

Months	PCUs	Months	PCUs
Apr-21	49,907	Oct-21	42,663
May-21	36,878	Nov-21	39,863
Jun-21	40,810	Dec-21	42,384
Jul-21	41,704	Jan-22	41,362
Aug-21	41,654	Feb-22	44,404
Sep-21	39,475	Mar-22	44,806
Average PCUs			42,159

- The increase in diesel prices combined with no or little increase in freight rates has resulted in lower movement of trucks/traffic in FY22; and
- Uncertainty on Government policies with respect to export restriction on higher quality ore, introduction of new licensing system for iron ore extraction etc. have also resulted in drop in iron ore movement.
- Automobile sales in FY22 was impacted due to shortage of semi-conductors. The reduction in sales has cascading effect on the entire value chain and thus the traffic volume was also impacted across road transportation in India.
- Iron ore export from Pradip port accounts for 25% of MAV traffic on SJEPL project road. The reduction in iron ore traffic due to host of issues resulted in further reduction of traffic in FY22. As informed by the Management, iron ore export is improving steadily after December 2021 from 9,48,811 metric ton to 20,68,739 metric ton in March 2022. However, the iron ore export in March 2022 is 20,68,739 metric ton only which is lower than 31,11,068 metric ton in March 2021. Therefore, further increase in iron ore export is expected in FY23.

  As informed by the Management, the above issues are temporary in nature and will not have impact on the traffic in future years. The issues related to impact of coronavirus pandemic on the country and uncertainty of Government policies on iron ore extraction are expected to be resolved soon. The volume of trucks on the project road is expected to normalize as the freight rates will be revised to compensate for increase in diesel prices. As represented by the Management, the traffic for FY22 is not a representative base for FY22. COVID and iron ore related issues have affected traffic till December 2021. Post December 2021, the traffic numbers gives a good proxy for this observation. March 2022 has a PCU of 44,806 against estimated PCU of 47,725 for FY22.

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 January 1, 2022 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 through-out the concession period. Therefore, WACC at MAT rate i.e. 11.1% is used to discount the free cash flows to firm.
- The Enterprise Value of SJEPL as on December 31, 2021 is arrived at INR 22,632.9 Mn (Refer Annexure 1).

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11. Valuation Summary

11.1 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.

11.2 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.

11.3 The derived Enterprise Value of the SPV, based on valuation approach and methodology as discussed herein, as on December 31, 2021 is arrived at INR 22,632.9 Mn.

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12. 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, the list of various one-time sanctions/approvals which are obtained and pending along with up to date/overdue periodic clearances of the SPV are included in earlier sections in the Report and detailed in the Annexures II.

b) **Statement of assets**

As informed by the Management, all assets and liabilities of the SPV 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 December 31, 2021 will be transferred to erstwhile shareholders of the SPV as and when realized.

Particulars (INR Mn)	Tangible Assets	Net Intangible Assets	Intangible Assets under Development	Non Current Assets	Current Assets
SJEPL	13.3	12,459.8	40.0	58.1	1,656.9

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 SPV is given in Annexure IV.

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 SPV.

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 SPV, have been given in Annexure III.

As discussed with the management, all the claims (receivables and payables) except tax matters as disclosed in Annexure III are pass through to erstwhile promoters as and when realized.

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 SPV.

g) **Site Visit Photographs**

Site visit of SJEPL was conducted as given in Para 5.1.3. Photographs taken during the site visit have been included in Section 6 of the Report.

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.

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Annexure I - Enterprise Valuation of SJEPL as per DCF Method

Valuation as per Discounted Cash Flow Method (INR Mn)																		
WACC at Nil Tax rate	12.3%																	
WACC at MAT rate	11.1%																	
WACC at Income Tax rate	10.0%																	
Year Ending	FY22#	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38*	
Revenue	442.4	2,349.8	2,587.2	2,814.2	3,126.3	3,444.9	3,818.9	4,177.9	4,600.9	5,026.8	5,517.3	6,024.2	6,566.7	7,159.0	7,820.3	8,490.0	6,479.9	
Cash EBITDA	390.7	1,805.6	2,356.8	2,571.8	2,872.4	3,178.9	3,541.0	3,887.8	4,299.0	4,713.2	5,191.6	5,685.5	6,214.4	6,793.2	7,440.8	8,096.3	6,192.2	
EBITDA Margins	*88.3%*	*76.8%*	*91.1%*	*91.4%*	*91.9%*	*92.3%*	*92.7%*	*93.1%*	*93.4%*	*93.8%*	*94.1%*	*94.4%*	*94.6%*	*94.9%*	*95.1%*	*95.4%*	*95.6%*	
Less : Outflows																		
Capital Expenditure	(12.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Major Maintenance Expenses	-	(818.4)	(189.3)	-	-	(767.2)	-	-	-	(257.6)	(2,418.9)	-	-	-	-	-	(1,450.7)	
Change in MMR Reserve	(282.8)	463.7	(8.2)	(196.9)	(197.2)	570.4	(541.7)	(541.1)	(541.1)	(283.3)	1,876.8	(248.5)	(68.1)	(241.8)	(241.8)	(241.8)	1,208.9	
CSR Expense	-	-	-	(1.9)	(6.5)	(14.0)	(20.3)	(25.4)	(31.0)	(37.6)	(47.3)	(58.1)	(71.4)	(85.9)	(101.1)	(115.5)	(91.9)	
Taxation	(46.5)	(193.2)	(282.1)	(315.4)	(362.3)	(410.1)	(407.3)	(461.7)	(527.3)	(593.2)	(670.1)	(800.9)	(886.4)	(980.4)	(1,086.3)	(1,193.4)	(920.8)	
Free Cash Flows to Firm (FCFF)	49.1	1,257.7	1,877.2	2,057.6	2,306.4	2,558.1	2,571.7	2,859.6	3,199.6	3,541.6	3,932.0	4,578.0	5,188.6	5,485.1	6,011.6	6,545.6	4,937.6	
Partial Period Factor	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	
Midpoint	0.1	0.8	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	9.8	10.8	11.8	12.8	13.8	14.8	15.6	
Present Value Factor	1.0	0.9	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	
Present Value of Cash Flows	48.4	1,162.2	1,561.4	1,540.5	1,554.2	1,551.6	1,404.0	1,405.2	1,415.2	1,409.9	1,409.0	1,476.6	1,506.3	1,433.3	1,413.9	1,385.7	955.6	
Enterprise Value (EV)	22,632.9																	

Represents period from January 01, 2022 to March 31, 2022

* Represents period from April 1, 2037 to December 13, 2037

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Annexure II - List of one time sanctions/ approvals

S. No.	Name of the Approval/ Registration/ License	Purpose	Issuing Authority	Registration/ Reference/ License Number	Relevant Provision of the Act/Rules/Regulations under which Approval Has Been Obtained/Sought	Remarks
1	Air Consent	DG Set	Regional Officer	Not Applicable	Air(Prevention And Control Of Pollution)Act,1981	Not Applicable. The project has a 120 kvA DG set installed at the toll plaza, which is the only source of air emission. The capacity of DG set installed is not categorised as per the CPCB guidelines and hence deemed not applicable.
2	Water Consent	Water	Regional Officer	Not Applicable	Water(Prevention And Control Of Pollution)Act,1974	Not Applicable The project has two septic tanks for collection of toilet sewage and does not has any major source of water pollution which is detrimental to environment.
3	Water Consent	Water	Regional Officer	Not Applicable	Water(Prevention And Control Of Pollution)Act,1974	Not Applicable The project has two septic tanks for collection of toilet sewage and does not has any major source of water pollution which is detrimental to environment.
4	Authorization Of Disposal Or Recycling Or Utilization Or Co Processing	Waste & Disposal	Odisha Pollution Control Board	Not Applicable	Hazardous And Other Waste(Management And Tran Boundary Movement) Rules,2016	Not Applicable The project site has only one DG set of capacity 120 kvA installed at the toll plaza. The hazardous waste generated in the project is used oil from DG set, cotton rags and cleaning materials which is handled by the maintenance agency of DG set.
5	Environmental impacts and risks on air, water, biodiversity and social environment	Air, water, biodiversity and social environment	Ministry of Environment Forest and Climate Change (MoEFCC)	Not Applicable	The Environment (Protection) Act, 1986	Not Applicable The project does not attract the requirement of Environmental Clearance since the since the road stretch is less than 100 km (67 km).
6	Noise pollution regulation and control	Noise pollution	Odisha Pollution Control Board	Not Applicable	Noise Pollution (Regulation and Control) Rules, 2000 (Noise Rules 2000)	There is no source of noise in the project except for one DG set installed. The DG set is equipped with Acoustic Enclosure.
7	Forest Clearance	Diversion of forest land	MoEFCC	Not Applicable	The Forest (Conservation) Act, 1980	Not Applicable The project does not involve any diversion of forest land and hence forest clearance deemed not applicable.
8	Tree Cutting Permission	Cutting of tress	Odisha Forest Department	Obtained vide letter dated April 06, 2011	Indian Forest Act, 1927	Obtained NHAI had Obtained the required permission for felling of trees from the City Forest Division, Bhubaneshwar vide letter dated 6th April, 2011.
9	Groundwater abstraction approval	Abstraction and usage of ground wate	Central Ground Water Authority (CGWA)		Groundwater abstraction approval	Not Obtained The project has installed a 0.5 HP bore well at the toll plaza which is operational. They have signed an agreement with the state government for withdrawal of ground water. However, they have not obtained NOC from CGWA.
10	Contract Labor License	Labor	Assistant Labor Commissioner Central		Contract Labor(Regulation And Abolition) Act,1970	SJEPL has obtained the Contract Labour Registration certificate dated 15.4.2011. The site representative has shared the list contractors which were hired for the different scope of work during the construction phase along with the details of number of workers required. The certificate has also mentioned the date of commencement and date of completion of contract labour license. All these license remain in force till 31th March, 2015. As per the present scenario, it is understood that 95.77% of road work is completed and project is in the maintenance stage due to which the SJEPL has not hired any EPC, instead they have engaged third party workers on purchase order.

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S. No.	Name of the Approval/ Registration/ License	Purpose	Issuing Authority	Registration/ Reference/ License Number	Relevant Provision of the Act/Rules/Regulations under which Approval Has Been Obtained/Sought	Remarks
11	Employees Provident Fund Code Number	Employee & Employer PF	Assistant Provident Fund Commissioner	'4400011246000100	Employees Provident Funds And Miscellaneous Provisions Act,1952	Employee Provident Fund Act, ESIC: PF and Medical & Insurance policy is provided to the employees and to the contract labourer as well. Same is confirmed during the site consultation. The sample of payslip of employees and contractors (Security Guard) was made available on site, where EPF and ESI is deducted from the salary. The registeration Code:-44000112460001009
12	Employees State Insurance Code Number	Employee Medical Treatment Facility	Dy.Director(Esic)	'4400011246000100	Employees State Insurance Act,1948	Employee Provident Fund Act, ESIC: PF and Medical & Insurance policy is provided to the employees and to the contract labourer as well. Same is confirmed during the site consultation. The sample of payslip of employees and contractors (Security Guard) was made available on site, where EPF and ESI is deducted from the salary. The registeration Code:-44000112460001009
13	Quantum and components to regulated wage payment	Wage payment	Ministry of Labour & Employment: Odisha		Minimum Wages Act, 1948 and Rules 1960; Payment of Wages Act, 1936 Equal Remuneration Act, 1976 Payment of Bonus Act 2015 Payment of Gratuity Act 1972	1. No permits / licences is required to obtain .However, at site, SJEPL has maintained a wage register for its employees and same has been shared with the ERM team for review. The contractors are paying wages as per Minimum Wages notification, which is applicable from 1.April.2020 and same has been confirmed during the site consultation with employee and contract Supervisor of M/SDDM Infrastructure & Project Pvt Ltd, though no third party services documents(wage slip, attendance register) was made available for review. 2. Additionally, abstract of the provisions of the Payment of Wages Acts is displayed on the notice board of the site office. As per the information by site representative they are following the Minimum Wages Notification provided by the Centre government and documents of employees were made available on site for verification.
14	Shops, commercial establishments Registeration	Registration of Office	Odisha Labour Department		Shops and Establishments Act, 1948	Obtained SJEPL is registered under the Shops and Commercial Establishment Rules, 1959. As per the document review, it is noted that document got renewed on 01.01.2019 and has got expired on 31.12.2019. No further information was made available on the renewal of document.
15	Child Labour	Protection of Child (<15 years) workers	Labour Department		Child Labour (Prohibition and Regulation) Act, 1986 as amended in 2016 Child Labour Rules 1995	Applicable The HR policy of SJEPL doesn't have any policy on prohibit the engagement of Child labour. Although, it does not employ any child labour presently and same is verified during the site visit
16	Prohibition of forced labour system in any form	Bonded Labour	Ministry of Labour & Employment: Odisha		Bonded Labour System (Abolition) Act 1976	No instances of bonded labour or forced labour were identified during the site visit. Also no bonded labour are deployed by SJEPL, as reported
17	Security Agencies Regulation	Provision of security	Department of Police		The Private Security Agencies (Regulation) Act, 2005	SJEPL has engaged M/S SIS as the security agency. The agency has the licence: - Sr no. 215, dated 29.8.2017 and it is valid till 28.08.2022.
18	Employee Benefits				Workers Compensation Act, 1923 Maternity Benefits Act, 1961	HRA, maternity benefit, PF and Medical & Insurance policy is provided to the employees and all the contractors have enrolled with the EPFO and ESIC. Here are the following details Maternity Benefit No specific licences required. The feedback from SJEPL that presently, no female workers are employed by them due to which the maternity benefits is not availed. However, in HR manual the policy of maternity leave is included and abstracts of Maternity Benefit Act, 1961 Acts11 were displayed on the notice board of Toll Plaza office. Furthermore, as reported by the HR personnel, if in near future any female employee is employed, it will be ensured that all the maternity benefits as mentioned in the Act should be availed.

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Annexure III : List of ongoing material litigations - Shree Jagannath Expressways Pvt. Ltd.

S. No.	Issue	Nature of Claim (Classification and Categorisation)	Status	Remarks	Claim Amount (INR Millions)
1	Proposal for imposing penalty on account of negative COS	Payable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	36.52
2	Proposal for imposing penalty on account of deficient in pavement crust	Payable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	94.91
3	Proposal for imposing penalty on account of delay in completion of punch list	Payable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	103.38
4	Proposal for imposing penalty on account of maintenance of Project Highway	Payable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	0.80
	Revenue Claims (Receivable and payable) - Quantified				
1	Toll Revenue Loss - Demonetisation for 24 Days	Receivable	The matter is referred to CCIE	Rs 7.11 Cr Claimed and Rs 5.66 Cr received from NHAI till date. Balance amount of INR 1.45 Cr to be received.	1.45
2	Overstay claim due to cost over run due to delay in handover of ROW/Land etc.	Receivable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	6,996.40
3	Request for reimbursement of additional costs incurred due to Change in Law	Receivable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	222.67
4	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	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	34.70
5	Request for compensation of loss of revenue due to non-repayment of user fee by various classes of vehicles	Receivable	The matter is referred to CCIE	NHAI Vide lt. NHAI/BOT/CGM (T)/Shareholding/ Chandikhole-Jagatpur/2021/177 dt. 23/07/2021	1,112.68
6	Arbitration was invoked by SJEPL due to rejection by NHAI for collection of toll at the increased rates after the completion of construction of the new Mahanadi Bridge. SJEPL has filed for (1) Reimbursement of the toll amount from the opening of the Mahanadi Bridge on 8th April 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	NHAI has filed an appeal against the arbitration order passed on September 29, 2017 by Arbitral Tribunal in the High Court of Delhi. The High Court of Delhi vide its order dated March 7,2022, has set aside the above arbitration order. The management of the Project SPV is contemplating to file an appeal with the Special Bench of the High Court against the aforesaid order ,which is currently pending.	INR 123 Cr (till March 2018 as per NHAI's calculation)

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Annexure IV - Estimates of major repairs & improvements

Particulars (INR Mn)	SJEPL	Particulars (INR Mn)	SJEPL
FY 17(A)	-	FY 28(P)	-
FY 18(A)	-	FY 29(P)	-
FY 19(A)	-	FY 30(P)	-
FY 20(A)	-	FY 31(P)	257.6
FY 21(A)	-	FY 32(P)	2,418.9
FY 22(P)	-	FY 33(P)	-
FY 23(P)	818.43	FY 34(P)	-
FY 24(P)	189.28	FY 35(P)	-
FY 25(P)	-	FY 36(P)	-
FY 26(P)	-	FY 37(P)	-
FY 27(P)	767.22	FY 38(P)	1,450.7

(A): Actual

(P): Projected

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ANNEXURE B - TECHNICAL REPORT

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Intended for
CDPQ

Document type
Report

Date
December, 2021

TECHNICAL DUE DILIGENCE CHANDIKHOLE-JAGATPUR-BHUBANESHWAR SECTION OF NH-5

RAMBOLL

TECHNICAL DUE DILIGENCE CHANDIKHOLE-JAGATPUR-BHUBANESHWAR SECTION OF NH-5

Project name	**Technical Due Diligence Chandikhole-Jagatpur- Bhubaneshwar Section of NH-5**
Recipient	**CDPQ**
Document type	**Report**
Version	**V1**
Date	**December 29, 2021**
Prepared by	**Manish Kumar Srivastava**
Checked by	**Manish Kumar Srivastava**
Approved by	**Sanjay Srivastava**
Description	**Technical Due Diligence Chandikhole-Jagatpur- Bhubaneshwar Section of NH-5**

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BBD	Benkelman Beam Deflection	LHS	Left hand side
BC	Bituminous Concrete	LIE	Lenders' Independent Engineer
BOT	Build, Operate and Transfer	LT	Low Tension
C & G	Clearing and Grubbing	MOEF	Ministry of Environment and Forest
CA	Concession Agreement	MORT&H	Ministry of Road Transport & Highways
COD	Commercial Operation Date	MSA	Million Standard Axle
CRMB	Crumb Rubber Modified Bitumen	NCR	Non Compliance Report
CUP	Cattle Under Pass	NH	National Highways
DBM	Dense Bituminous Macadam	MPRDC	National Highways Authority of India
DFO	Divisional Forest Office	NHDP	National Highway Development Programme
DG	Diesel Generat0r	NOC	No Objection Certificate
DLC	Dry Lean Concrete	NRMB	Natural Rubber Modified Bitumen
DLP	Defect liability period	O&M	Operation and Maintenance
DPR	Detailed Project Report	OFC	Optical Fibre Cable
EIA	Environment Impact Assessment	OPEX	Operation Expenditure
EMP	Environment Management Plan	PCC	Plain Cement Concrete
EPC	Engineering Procurement & Construction	PD	Project Director
		PIU	Project Implementation Unit
FCI	Food Corporation of India	PLR	Prime lending rate
FRL	Finished Road Level	PMB	Polymer Modified Bitumen
FWD	Falling Weight Deflectometer	PMC	Project Management Consultant
GAD	General Arrangement Drawing	PPE	Personal Protection Equipment
GFC	Good for Construction	PPP	Public-Private/Public Sector Partnership
GOI	Government of India	PQC	Pavement Quality Concrete
GSB	Granular Sub Base	PUP	Pedestrian Under pass
HMP	Hot Mix Plant	PWD	Public Works Department
HT	High Tension	QA/QC	Quality Assurance/Quality Control
IC	Independent Consultant	SDBC	Semi-dense Bitumen Concrete
IE	Independent Engineer	SPV	Special Purpose Vehicle
IPC	Interim Payment Certificate	VDF	Vehicle Damage Factor
IRC	Indian Road Congress		

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Annexures-1

HEALTH ASSESSMENT OF MAJOR BRIDGES

1. EXECUTIVE SUMMARY

1.1 Introduction

NHAI awarded the project six laning of NH-5 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 evaluation for a transaction for transfer of the SPV. M/s Maple Highways Pte. Ltd (Client) appointed Ramboll India Private Limited for carrying out this study to evaluate the project in line with the scope of work mentioned in Chapter 2 of this report.

Ramboll carried 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.

The present report is updated to include the findings from the detailed investigations carried out by M.s AECOM (refer Annexure 1). Further, the cost estimates have been updated based on the WPI data as per Oxford Economics.

1.2 Salient Features of the project

1.2.1 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 has to be adjusted to fit into appropriate plans and cross-sections developed in accordance with Schedule D of the Concession Agreement. There are 13 typical cross-sections listed in the table 'Type of Road Cross Sections along Project Highway' of Appendix B-1 of CA.
- 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 have been provided as per detail given in Table 5-1 and Table 5-2.

1.2.2 Project Facilities

Following project facilities form part of the scope of work under this concession.

- Toll plaza – One existing toll plaza at Km 34+624 functioning at site (5 lanes in either direction). Proposed toll plaza @ Km 40+500 is delayed due to delay in land acquisition.
- Bus-bays and Bus shelters – 35 locations (LHS+RHS)
- Junctions – 180 junctions - 13 junctions are major junctions and 167 are minor junctions
- Truck lay-bys – 6
- Other project facilities are roadside furniture, pedestrian facilities, landscaping and tree plantation, street lighting, highway patrol, ambulances, cranes etc.

1.2.3 Structures

Total numbers of existing structures at the site were as under:

- Major bridges 13
- Minor bridges 27
- Culverts 79
- ROB 01
- FOB : Nil
- Flyover 09
- VUP 20
- PUP/CUP 23

1.2.4 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.

1.3 Key dates of the project

Table 1-1: Key dates of the project

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

1.4 Contractual Issues

Land acquisition is yet not complete. This has led to pendency in structures and even the proposed toll plaza. Utility Shifting is incomplete. Even the items of work in punch lists issued along with Provisional Completion Certificate are also incomplete. All these pending works and especially the pending items in punch lists can lead to serious financial implications due to damages specified in Clause 14.4.1 of CA or even risk of termination as per Clause 14.4.2 of CA.

This matter was highlighted in a recent email exchange with the client. The reply received asserted that all the balance works, including works related to COS (positive or negative), will be responsibility of the existing sponsors of the Project and will be completed as per "CP" (*this abbreviation is being hereby interpreted as 'as per conditions precedent'*)

1.5 Condition of Project Road and Facilities

- Pavement –

- The visual condition of the pavement was found to be FAIR to GOOD.
- Few specific distresses are like alligator cracks, ravelling and de-bonding of layers/ slippage was observed on the project road.
- Based on the obtained distresses and its seniority level, the repairing/ rehabilitation techniques are recommended in Chapter 9.
- The obtained remaining life of pavement are as given below: -

Direction	Remaining Life (MSA)		
	Minimum	Maximum	Average
Chandikhol - Bhubaneswar direction (LHS)	14	50	**25**
Bhubaneswar - Chandikhol direction (RHS)	14	55	**29**

- The Bump Integrator test results are well within the limit specified in IRC: SP: 16-2004 and Schedule-K of CA (2500mm/km) except at the following very few locations which are tabulated in Table 8-15
- Based on Bump Integrator test results it is recommended to carry out milling at the locations listed in Table 8-15 to remove 30 mm thickness of top layer and to provide a renewal layer of 30mm BC to match the existing FRL
- Service Roads – 3.275 Km out of 32.436 Km service road on LHS and 15.082 Km out of 31.854 Km service road on RHS has not been constructed as yet. Present pavement condition of the service road is good. The covers of drains are broken at some locations.

- Earthen shoulder –Around 40% of the earthen shoulders need to be raised to correct the edge drop issue.
- Road marking and signage – Road marking with thermoplastic paint has been done on the project road. Road sign boards, traffic lights etc. safety features are provided at site, however, some of the signboards and traffic lights are missing/ damaged/ stolen and need to be repaired/ replaced. Also, there are stretches in which road marking is yet pending. There are some locations where pavement markings have begun to fade.
- Toll Plazas – Proposed toll plaza @ Km 40+500 has been delayed due to land acquisition problems. So even today the tolling is being done at the existing toll plaza @ 34+624. The entire TMS at existing toll plaza needs to be overhauled by immediately replacing/ repairing the faulty equipment and re-doing the cabling work requiring immediate repair cost of INR 1,86,50,000.00/ total replacement cost of (the entire TMS for 10 lanes TP) INR 4,64,50,000.00 and annual maintenance cost of INR 46,45,000.00. The current cost of repairs under maintenance is calculated as INR 22,57,500.00
- HTMS System – Concessionaire has not installed HTMS.
- Other facilities are generally maintained in reasonably good condition.

1.6 Condition of Structures

There are 06 major bridges along the project road. 04 out of these 06 bridges have 03 separate structures. The oldest bridges out of these 03 (built around 1950) and they have not been included in the scope of improvement of major bridges, so they are all in bad shape. Major failure/distresses were observed on the oldest bridges while the newly built bridges were found to have no noticeable distress/failure

Similarly, major failure/distresses were observed on the oldest minor bridges while the newly built minor bridges were found to have no noticeable distress/failure.

Other structures were found to be in good condition.

1.7 Maintenance Works

Based on the evaluation of the pavement condition Ramboll has recommended major/ periodic maintenance strategy in Table 10-5 which includes -

- Main Carriageway

  Immediate repair in 2019/20, 1st renewal layer in 2922/23, 2nd renewal layer in 2027/28, 1st structural overlay in 2032/33, 3rd renewal layer in 2938/39 and handover of asset in February 2043.

- Service road

  Micro Surfacing over whole length in 2022/23, Micro Surfacing over 50% length in 2027/28, 30 mm BC over whole length in 2032/33, Micro Surfacing over 50% length in 2038/39 and handover of asset in February 2043.

- Pavement over structures (Major/Minor Bridges)

  Milling and inlay of 25mm BC in 2022/23, 2032/33, 2038/39 and handover of asset in February 2043.

1.8 Cost Estimates

Based on the assumptions, details of rate analysis and other details specified in Chapter11, Ramboll has worked out costs as under

- Immediate repair cost for pavements works : INR 15.57 Million
- Immediate repair cost for Existing TMS : INR 18.65 Million
- Immediate repair structures (based on Visual observation)
  - Structures which are part of CA scope : INR 132.39 Million
  - Structures not part of CA Scope but are being maintained (as conveyed by Company's site team : INR 94.54 Million
  - Total : INR 226.93 Million
- Annual O&M Expenditure : INR 176.54 Million

Year-wise O&M estimates with escalation have been worked out and are presented below.

Duration		**Major Maintenance Cost**		**O&M Cost**			
From	To	Periodic Maintenance	ATMS/ TMS Replacement	Routine Maintenance	Operation & Tolling Cost	Energy Charges	Total for O&M
				(Value in Mn)			
Apr-19	Mar-20						
Apr-20	Mar-21			34.77	115.35	27.58	177.70
Apr-21	Mar-22	697.48		36.57	121.31	29.01	186.89
Apr-22	Mar-23			38.31	127.10	30.39	195.80
Apr-23	Mar-24		168.99	40.29	133.67	31.96	205.92
Apr-24	Mar-25			42.27	140.22	33.53	216.02
Apr-25	Mar-26			44.26	146.84	35.11	226.21

Duration		Major Maintenance Cost		O&M Cost			
From	To	Periodic Maintenance	ATMS/ TMS Replacement	Routine Maintenance	Operation & Tolling Cost	Energy Charges	Total for O&M
Apr-26	Mar-27	685.02		46.36	153.82	36.78	236.96
Apr-27	Mar-28			48.59	161.19	38.54	248.32
Apr-28	Mar-29			50.59	167.83	40.13	258.54
Apr-29	Mar-30			52.64	174.64	41.76	269.04
Apr-30	Mar-31		229.97	54.68	181.40	43.37	279.45
Apr-31	Mar-32	2,159.74		56.95	188.93	45.18	291.06
Apr-32	Mar-33			59.07	195.95	46.85	301.88
Apr-33	Mar-34			61.42	203.77	48.72	313.92
Apr-34	Mar-35			63.79	211.62	50.60	326.01
Apr-35	Mar-36			66.35	220.11	52.63	339.09
Apr-36	Mar-37			68.65	227.74	54.46	350.85
Apr-37	Mar-38	995.63	299.66	71.25	236.38	56.52	364.14
Apr-38	Mar-39			73.96	245.36	58.67	377.98
Apr-39	Mar-40			76.76	254.66	60.89	392.31
Apr-40	Mar-41			79.64	264.21	63.17	407.02
Apr-41	Mar-42			82.62	274.09	65.54	422.24
Apr-42	14-Feb-43			75.38	250.06	59.79	385.23
Total Cost (Mn.)		**4,537.87**	**698.62**	**1,325.16**	**4,396.25**	**1,051.18**	**6,772.59**

1.9 Other issues/observations

There is a sharp difference in the assessment of total value of COS items as assessed by the Independent Engineer. The total change of scope claims as per Concessionaire adds up to **(+)** INR **1454.76 Million** (Table 4-2 and Table 4-3 of this report). But IE has worked out the net value of positive and negative change of scope as **(-) INR 28.33 Million** (Table 4-4 of this report).

2. SCOPE OF DUE DILIGENCE AND COMPLIANCE

2.1 Objectives

The objectives of the technical due-diligence are:

- To ensure that construction is as per the standards specified in the respective contract documents and in compliance with local regulations
- Document the existing asset condition and provide comments on the expected condition of each element of the facilities at COD
- To assess physical and financial progress to date and estimate time required to COD and estimate remaining cost to completion – not applicable for this project as COD already achieved.
- To validate the O&M costs (forecast has been provided by the road holding company) to be incurred over the term of the concession
- To assess physical and financial/progress/plan to date of the various O&M activities to be/already undertaken
- To document and validate the cost of any hand back requirements at the end of the concession term
- To document and comment on the adequacy of management systems.

2.2 Scope of Work and Compliance

The Adviser will assess the following aspects of Project on behalf of the Client

#		Terms of Reference
Primary Technical Investigation		
The scope of work		
1		The Consultant shall carry out a detailed reconnaissance of the project area and shall record and highlight important features and point out any issue that may be of importance to the Client in terms of operation & maintenance of the project.
2		Based on the preliminary investigations, the Consultant shall prepare a preliminary project road details indicating the following elements:
	a	Broad indication of existing pavement condition
	b	Intersecting/Crossroads
	c	Major water bodies
	d	Major CD structures
	e	Bottlenecks in road alignment
	f	Operational Issue, if any
	g	Review of existing design
3		Initial and final design and design basis / criteria reports, drawings, deviation in the design/ drawings, related approval letters, all As-Built Drawings, records and correspondence related to rejection of material and work (Non-Conformity Reports)
4		Confirmation that the project has been designed and built in conformity with the CA requirements

5		Details of remedial actions taken; details of all material testing and mix designs
6		Confirmation of compliance with Technical Schedules of the respective executed Concession Agreements - The Horizontal & Vertical profile shall be critically reviewed from the point of view of conformance to standards
7		Where project stretch / structures / service roads / ancillary works are pending, detailed status: land acquisition, approvals, timelines for completion, etc. along with cost forecasts.
8		Visual inspection and assessment of the condition of the pavement surface. Please refer to Annexure A for details
9		Visual inspection and assessment of the condition of all major structures such as Bridges, ROBs, Flyovers, underpass and cross drainage structures in accordance with IRC: SP 18. Please refer to Annexure A for details
9		Review and assessment of Highway Traffic Management System (HTMS), if provided
10		Review and assessment of Toll Management System (TMS) along with scope of WIM and ETC (including AVCC systems)
11		Assessment of Toll operation and integration with TMS
12		Identifying critical outcomes by reviewing technical correspondences between concessionaire, independent consultant and authority
13		Review and assessment of technical documents like CA, pavement design report, O&M report, DPR, As built drawings, O&M manual etc.
14		Carrying out Axle Load Survey
15		Analysing the traffic loading and the travel pattern on the project highway.
16		Determination of design traffic in terms of Million Standard Axles (MSA) for remaining Concession Period
17		Undertaking Falling Weight Deflectometer Survey and Functional Condition Survey using Network Survey Vehicle
18		Formulating a maintenance strategy (Routine and Periodic) by analyzing –
	a	Structural condition of pavement using characteristic deflection and remaining life of pavement in terms of fatigue and rutting failure determined by Falling Weight Deflectometer
	b	Functional condition of pavement with the help of roughness, rutting and skid resistance
19		Review of the existing pavement composition with the help of data provided by client
20		Evaluating material properties of different pavement layers with help of following survey data by carrying out test pits at regular interval on the Project Road:
	a	Field moisture content and field dry density of subgrade soil
	b	Soil classification, 4 days soaked CBR value, free swell index of subgrade soil
	c	Gradation, 4 days soaked CBR value and specific gravity of GSB Material
	d	Gradation, binder content, existing moisture content, water content and bulk density of bituminous layer

21	Validation of project inventory and condition of highway asset with the schedules of CA and As-built Drawing. This shall identify gaps, if any, between project scope as given in CA and that implemented on the ground.
22	Assessment of any Major Maintenance carried out of the project by seller.
23	Estimation of Routine O&M and Periodic Maintenance expenditure for rest of the Concession Period based on technical diligence. Please refer to Annexure B for details
24	Comparison of O&M estimates with those provided by the Company
25	Estimation of initial expenditure to be incurred due to deficiencies observed during diligence, if any
26	Assessment of all the change of scope (COS)- negative/positive

Assessment of Balance Construction Work if any	
1	Review and assessment of design, drawing – (plan and profile) of balance construction work
2	Physical verification of balance construction work
3	Estimation/validation of quantities of various items to be required for balance work.
4	Analysis of rate of various items with the help of local market rates
5	Estimation of total cost for balance construction work
6	Assessment on the timeline of the completion
7	Assessment of LA and approvals pending, if any

Annexure A (Inspection and assessment of highway)	
a.	Structures
i	To check - damage or settlement to embankment fill slope
ii	Functioning of drainage facility
iii	Detailed review of damage to structures and cost of repairs
b.	Details of Structures including:
i	Type of Bridge
ii	Type of Widening
iii	Total Length
iv	Width of Bridge
v	Conditions of road shoulders
c.	Protection works
i	Settling of slope and pitching
d.	Waterway
i	Any change in flow pattern both u/s and d/s
ii	Any obstruction of waterway
iii	Any blockage at any span
iv	Maximum flood level observed

e.	Foundation
i	Condition of foundation w.r.t. decay, cracks or any type of damage
ii	Structural Cracks due to settlement of Foundations
iii	Cracks around the Reinforcement. These will be checked by Rust Stains visible on Concrete Surface. Immediate attention is required as corrosion in Reinforcement leads to rapid deterioration of Concrete.
f.	Substructure (abutment, pier and wing/return wall)
i	Damage or settlement due to impact, cracks or spalling
ii	Any impact or distress due to moisture on exposed surface
iii	Any bulge on surfaces
g.	Superstructure
A.	RCC Superstructure
i	Any crack, spall or pothole on deck slab
ii	Any sign of deterioration
iii	Visual inspection for any large cracks on wearing coat
iv	Any evidence of water passing through cracks of deck slab
B.	PSC structures
i	Any excessive deflection
ii	Any corrosion of pre-stressing wires
C.	Steel structures
i	Extent of Corrosion to check
ii	Condition of paint
iii	Condition of bolt, rivet and weld
h.	Bearings
i	Condition of bearing like cleanliness, rust to check and anchor bolts are in position or not
ii	Proper function of rollers to observe
iii	Elastomeric bearing to be inspected to ascertain physical condition of pads.
i.	Pavement
i	Visual condition survey of assets through site visit for review of condition of main carriageway, structures, service roads, toll collection infrastructure, etc., components along with review of as- built drawings, to include:
ii	Recording undocumented asset details
iii	Reviewing of test certificates such as FWD / BBD, axle load survey, pavement condition, roughness tests, structure health tests, etc., as conducted in past few years (only if carried out by the Developer)
j.	Misc.
i	Whether expansion joints are working properly. To check debris in joints resulting improper functioning / lack of expansion gap.
k.	Handrails to check corrosion, paint, any damage due to traffic, deterioration of concrete for concrete railings, exposed reinforcement for concrete railing, any crack.

Annexure B	
1	Capex and Infrastructure Planning
a)	Assess available data, reports and information describing the current condition, residual life and expenditure for each component of the concessions (primarily pavement, structures, toll and travel plazas);
b)	Review technical information pertaining to historical capital works and rehabilitation projects along with review of actual historical expenditure and budgets
c)	Confirm that mandatory capital works have been completed and accepted by the authorities;

3. APPROACH AND METHODOLOGY

3.1 Approach

Our approach is to understand objectives of client and terms of reference set forth. The study report should assist the client in achieving their objective.

3.2 Methodology

Our methodology for achieving objectives of the study flows as under.

- Identification of objectives of client through study of terms of reference and discussions with client.
- Identification of Assignment specific team of professionals covering all the skills and specializations required and involving with the assignment from day one.
- A Team Leader is assigned to coordinate various events / activities of various team members and other testing agencies
- Assessment of data / information required is made at the time of Proposal / Engagement latter and the list is shared with the Client.
- On the basis of initial review of available data requirement of additional data from site visit and other sources is identified.
- Site visit is conducted by the team to carry out visual inspection of Road assets to get a real-time flavour of the project.

3.3 Site visit

Site Visit was conducted as follows.

- Site visit team to consist the team leader, bridge engineer, highway engineer, pavement specialist, Toll Plaza / HTMS expert and testing teams.
- Various aspects of the project features are studied on ground by respective experts and site related data is collected.
- Attempt was also made to meet the IE and MPRDC PD to understand their thought about various project issues.

3.3.1 Visual inspection

(a) Pavement

Cracking, Rutting, Corrugations and Shoving, Settlement or Grade Depressions, Upheaval or Swell, Raveling, Potholes, Bleeding or Flushing, Longitudinal/ Transverse Streaking, etc.

(b) Earthen Shoulder

Material loss, Corrugation, Edge drop, etc.

(c) Structures

Assessment of various distresses and deficiencies through visual inspection

(d) Project Facilities

Toll plaza, Bus-bays, Bus shelters, Truck lay-byes, Major and minor junctions and other project facilities like roadside furniture, pedestrian facilities, lighting, landscaping and tree plantation, rainwater harvesting, highway patrol, ambulances, cranes etc.

(e) Toll Plaza and Related

TMS, HTMS, ATMS, WIM, SWB, ECBs, etc.

3.3.2 Tests

Following tests have been conducted as per agreed scope:

- Roughness
- FWD
- Test Pits
- Core Cutting

Videography and Photography has also been conducted.

3.4 Study

Our study includes the following:

- Data provided by Client and collected during site visit are collated.
- Detail Pavement Analysis is carried after study of existing pavement report and test results.
- Assessment of Immediate repair requirements is worked out.
- Cost for construction of balance work / defective work requiring immediate attention are worked out.
- Project specific O&M strategy is developed.
- Cost for maintenance and operations are worked out.
- Project technical risks are identified and analysed. Risk mitigation measures are formulated.

3.5 Delivery

Delivery follows the following flow:

- Formats of agreed deliverables are formalized and shared with Client, where required.
- Deliverables are shared with the within agreed timelines.

3.6 Feedback

Regular and end-of-the-assignment feedbacks are obtained from the client for further enhancing the quality of service.

4. REVIEW OF DOCUMENTS

4.1 Ramboll Limitation

Our review of data provided by Client and information collected during site visit in the last week of May 2019 and discussions with Site Staff of M/s Shree Jagannath Expressways Private Limited (SJEPL), the concessionaire.

4.2 General

Major basis of this study are the project documents provided by the concessionaire. The documents have been provided in the form of soft copies from middle of May onwards and are still being provided progressively. Consultant's team has studied the documents as per the relevance to the scope of the study and salient points have been discussed and presented in the following paragraphs.

4.3 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 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.

Some important provisions of the CA are as follows: -

4.3.1 Additional Check Posts

If any bye-pass/road is built which results in loss of toll fees and leakage of revenue the Concessionaire may be allowed to shift the toll plazas and construct new check-posts to minimize such leakage of revenue.

4.3.2 Performance Standards

- Schedule M - Imposes performance standard, w.r.t., operation and maintenance activities.
- Clause 30.2 - Imposes performance standards that have to be met by Concessionaire in order to fulfil the divestment requirements. Failure to fulfil the divestment requirements will result in non-issue of Vesting Certificate by MPRDC which in turn will deny release of Termination Payment to Concessionaire
- Clause 18 – This clause and Schedule L impose performance standard w.r.t. safety requirements.

4.4 Codes and Standards

The codes and standards applicable for the design of the Project and Project Facilities are as per following order of priority:

1. Technical circulars issued by MOSRTH
2. Specifications for Road and Bridge Works issued by the Ministry of Shipping, Road Transport & Highways
3. Indian Roads Congress (IRC) Codes and Standards
4. Bureau of Indian Standards (BIS)

A list of IRC codes/ MORTH and BIS publications is provided in Appendix D-1 of Schedule D of Concession Agreement.

4.5 O&M Manual and Maintenance Programme

4.5.1 O&M Manual

The project O&M Manual has not been shared by the Concessionaire.

4.5.2 Maintenance Programme

Concessionaire has not shared the Maintenance Programme/s.

4.6 O&M Contracts

Concessionaire has not shared details of operation and maintenance contracts.

4.7 Independent Engineer Monthly Report

Concessionaire has not shared any recent monthly report by Independent Engineer. The latest such report available is the report for the month of June 2017.

4.8 Claims

4.8.1 Change of Scope

The Project has large number of COS Items. Summary is as under.

Table 4-1: Change of Scope Claims

#	Description	IE Estimate (₹)	Concessionaire Estimate (₹)
COS-I			
1.1	(a) VUP at Km 20.083, 19.100 and 24.655	32,478,312	85,456,028
	(b) VUP at 38.399	(101,003,615)	(41,000,000)
1.2	Pedestrian Underpass	(19,926,357)	186,833,071
1.3	Service Road	73,247,889	73,247,889
1.4	Minor Bridge	55,371,465	60,311,464
1.5	Major Bridge	-	13,144,200
1.6	Inter-change / Flyover	(35,218,241)	32,830,825
1.7	Culverts	59,220,125	162,226,654
1.8	R.O.B.	-	10,898,965
1.9	Entry Exit Ramp	(193,678,182)	(97,326,085)
COS-II			
2.01	VUP at Balikuda	23,900,000	83,033,215
2.02	Puri Junction Flyover	184,200,000	279,725,300
COS-III			
3.01	Retaining Wall & Rehabilitation		450,245,629
	Grand Total	78,591,396	1,299,627,155

Authority has approved COS-II amounting to INR 208.1 million. As per Concessionaire's monthly progress report for the month of December 2018, in-principle approval has been issued for COS-I but no document has been shared by Concessionaire to support this assertion.

Concessionaire and NHAI had a discussion about Change of Scope (COS) issues on 12th September 2018 at NHAI Headquarter and subsequently Concessionaire resubmitted COS documents vide letter no. SJEPL/ASP/1-1946 dated 08.10.2018 to PD NHAI for review and necessary action as per the Clause 16.1 of Volume-I of the Concession Agreement.

Table 4-2: Resubmission of Change of Scope claims

#	Description	Cost as per Concessionaire (INR Millions)
1	Positive Change of Scope - Under High Court Order (Works Completed)	129.67
2	Positive Change of Scope - Other Than High Court Order (Works Completed)	1231.28
3	Positive COS - Other Than High Court Order (Works Not Taken up in absence of Approval)	216.25
4	De-scoping - Works Wouldn't be Taken up due to Various Issues like Land Unavailability, Site Constraints etc	-156.67
	Total	1420.53

Further, Concessionaire submitted letter vide no. SJEPL/ASP/1-1951 dated 16.10.2018 regarding Change of Scope claims related to miscellaneous works completed.

Table 4-3: Change of Scope claims miscellaneous works completed

#	Description	Cost as per Concessionaire (INR Millions)
1	Repairing of Approach/Canal road near Rasulgarh	2.31
2	Repair and Maintenance works	2.43
3	Erection of sign board	0.65
4	Temporary Concrete Road from Ch. 1+400 to 1+650	1.06
5	Closing & opening of Median Opening (35 meter) at Shikharpur Chawk (Km.24+260)	0.79
6	Repairing and maintenance of At- grade road at Rasutgarh (from Ch. 2+650 to Ch 3+135 at LHS and Ch 2+650 to Ch 3+050 at RHS)	23.90
7	Repair of At-grade Roads near Madhupatna on LHS	0.93
8	Repair to *Service* Roads at Taldanda RHS & its U-Turn portion	2.16
Total		34.23

No document is available about status of the resubmission of COS items.

However, there is a sharp difference in the assessment of total value of COS items as assessed by the Independent Engineer. As seen in the "Table 4-2: Resubmission of Change of Scope claims" and "Table 4-3: Change of Scope claims miscellaneous works completed" above the total change of scope claims as per Concessionaire adds up to INR 1454.76 Million. But the "Table 4-4: Change of Scope claims as per IE" shows that IE has worked out the net value of positive and negative change of scope as a negative value of INR 28.33 Million.

Table 4-4: Change of Scope claims as per IE

Description	Cost as per IE (INR in Millions)		Remarks
i. a. New VUP (Km 20+083) at Gopalpur b. Relocating VUP from km 1+830 (as per CA) c. Extension of service road from km 19+950 to 20+083 (RHS) & km 18+196 to km 20+083(LHS) ii. New PUP at Nuaghar UP school at (km 14+950) iii. Service road at vanpur km 16+415 iv) Extra widening of Minor bridge at 16+682		113.9	Change of scope notice issued by Authority
i. Puri juntion flyover. ii. Double cell Balikuda VUP at 19+100 by relocating VUP at 34+930		208.1	Change of scope notice issued by Authority
New VUP at km 24+655		13.45	Recommended by IE
Deletion of VUP at km 38+399	-89.24		- do -
New PUP at 60+800		3.82	- do -
Deletion of PUP at km 416+704		54.2	- do -
Deletion of Subway at km 418+550	-9.03		- do -
Deletion of Subway at km 2+450	-9.03		- do -
Deletion of Subway at km 6+050	-9.03		- do -
Deletion of Subway at km 21+830	-9.03		- do -
Deletion of Subway at km 23+195	-9.03		- do -
Deletion of Subway at km 31+250	-9.03		- do -
Extra service road beyond CA			
i. 5+362 to 5+570		4.2	- do -
ii. 5+370 to 5+530		3.23	- do -
iii. 15+240 to 15+250		0.2	- do -
iv. 15+026 to 15+682		13.23	- do -
Minor bridge			
i. Khapuriya inter change at km 21+590(Change in length)	-42.3		- do -
ii. Rasulghar Fly over (Change in length)	-146.35		- do -
iii. 0+562		4.51	- do -
iv. Daya canal		19.36	- do -
Culverts			
i. New culverts including deletion of culvert at 45+811		59.22	- do -
ii. Entry exit ramp	-193.68		- do -
Total	-28.33		

4.8.2 Extension of Time

Table 4-5: Some Important Dates

Description	Date	Remark
Date of Agreement	August 06, 2010	
Appointed Date	December 14, 2011	
Scheduled Project Completion Date	June 11, 2014	910 days from Appointed Date
Provisional completion certificate Date Commercial Operation Date (COD)	January 12, 2017	
Completion Certificate Date	NA	
Scheduled Concession Period End Date	December 13, 2037	26 years from Appointed Date
Extension of time up to	March 31, 2019 *	

As per Concessionaire's monthly progress report for the month of December 2018, EOT recommended vide IE vide letter No. NOD-SAICPL/IC-Orissa/NH-5/2018/Tech/2198 dated 03.12.2018 up to 31.03.2019

As per the financing document the project completion date was planned to be 31st July 2013. This was later revised to the Scheduled Project Completion Date i.e. 11th June 2014. Further, the EOT was successively revised to 31st March 2016, 31st March 2017 and now to 31st March 2019.

However, it is clarified that the above information about EOT till 31st March 2019 has been collected from the monthly progress reports shared by Concessionaire. The actual letters granting the extensions of time have not been made available to us.

4.9 Open Issues

Open issues have been highlighted as per the detail given in Concessionaire's latest monthly progress report i.e. the report for December 2018.

4.9.1 Land Acquisition

Acquisition of land is not yet complete. Summary of land acquisition status is as follows: -

Table 4-6: Land Acquisition Status

Description	Required (ha)	in possession at start (ha)	To be acquired (ha)	Yet to be acquired (ha)
Existing ROW	452	452	0	0
Pvt. Land	54.78	42.26	12.52	3.87
Public Land	0	0	0	0
Grand Total	506.78	494.26	12.52	**3.87**

Even the Toll Plaza at Km 40+500 is affected by land acquisition issues. Few Land owners are still creating problem in acquisition of land needed for construction of Administrative Building.

Another issue is the non-acquisition of land needed for construction of VUP at Km 5+074 due to pending resettlement of scheduled caste community people residing at Naharkanta. A length of 0.600 Km (from Km 5+370 to Km 5+970) is affected due to this issue.

4.9.2 Utility Shifting

4.9.2.1 Electrical utility shifting

Electrical utility shifting is yet not complete. Summary of locations where electrical utility shifting is pending is as follows: -

Table 4-7: Status of Electrical Utility Shifting

Location	Department Name	Remarks
Between Rasulgarh Chowk to Palasuni Kalinga House on both side of the NH-5	CESU, BED, Bhubaneswar.	60 % shifting still balance & in progress
At Fulnakhara on both side of the NH-5	CESU, BED, Bhubaneswar.	20% still balance
Between Fulnakhara to Kathajodi Bridge on both side of the NH-5	CESU, Balikuda Section of Gopalpur, CED, Cuttack.	30 % shifting still balance & in progress
Between Birupa Bridge to Manguli Chhack on both side of the NH-5 under Tangi Section of Choudwar sub division, CED, Cuttack.	CESU, Choudwar, CED, Cuttack.	Balance due to Manguli Flyover
At Manguli Chhack on both side of the NH-5 under Tangi Section of Choudwar sub division, CED, Cuttack.	CESU, Choudwar, CED, Cuttack.	Balance due to Manguli Flyover Yet to be approved by Authority.
Between Kathajodi Bridge to Taladanda Canal on both side of the NH-5 under SDO, Badambadi, CDD II, Cuttack.	CESU, Kathajodi, CDD II, Cuttack.	In progress in priority basis
At ROB, Link Road on the NH-5	CESU, under SDO, Badambadi, Kathajodi, CDD II, Cuttack.	Land acquisition problem
Between Taladanda Canal to Mahanadi Bridge on both side of the NH-5	CESU, under SDO, Mahanadi Vihar, Mahanadi, CDD II, Cuttack.	In progress.
At Sikharpur Chowk on both side of the NH-5	CESU, under SDO, Mahanadi Vihar, Mahanadi, CDD II, Cuttack.	In progress.
Between Mahanadi Bridge to Jagatpur End and Jagatpur End to Jagatpur Golei Chhack on both side of the NH-5	CESU, CDD II, Cuttack.	Still in progress
Between Bainchuan on Bandalo Chhak on both side of the NH-5	CESU, under Chhatia Section of Badachana Sub division CED Cuttack	Work in progress.
Between Bandalo Chhak to Chandikhole on both side of the NH-5	CESU, under Badachana Section of Badachana Sub division CED Cuttack	In progress.

Location	Department Name	Remarks
Between Left Side near Chandikhole Chhak on both side of the NH-5	NESCO, under Neulpur Section of Dharmasala Sub division E.C., JRED, Jajpur Road	Not started
Between Right Side near Chandikhole Chhak on both side of the NH-5	NESCO, under Neulpur Section of Dharmasala Sub division E.C., JRED, Jajpur Road	Not started

4.9.2.2 PHED utility shifting

PHED utility shifting is yet not complete. Summary of locations where PHED utility shifting is pending or there are other issues is as follows: -

Table 4-8: Status of PHED Utility Shifting

Location	Department Name	Remarks
Shifting of Sewer Pipe Line for Six Laning of N.H.-5 Bhubaneswar – RBI CHOWK TO CRP SQUARE at IRC Village, LHS, Nayapalli, Bhubaneswar	PH Div-II BBSR	95% complete. Held up due to encroachment.
Shifting of water supply pipeline near Paikasahi LHS, Cuttack	PH Div-I Cuttack	Work completed but estimate pending with PHED Div-I Cuttack

4.9.3 Status of NCRs

Concessionaire has shared two letters regarding status of NCRs -

- Letter no. NOD-SAICPL/IC-Orissa/NH-5/2016/Tech./1376 dated 26.04.2016 for the RKD stretch - As per the contents of this letter 13 NCRs out of a total of 39 NCRs were closed by IE in 2016.
- Letter no. NOD-SAICPL/IC-Orissa/NH-5/2016/Tech./1378 dated 26.04.2016 for the Simplex stretch - As per the contents of this letter 42 NCRs out of a total of 51 NCRs were closed by IE in 2016.

Since Completion Certificate is yet to be issued it very important to understand the status of remaining NCRs and also if some more NCRs were issued after 2016. But Concessionaire has not shared any document to inform about the closure of remaining NCRs or the latest status of NCINR

4.9.4 Balance Works

4.9.4.1 Cost of Balance Works as per IPC 87 for November 2018

The latest IPC shared by Concessionaire is the IPC 87. In order to understand the change in status as per the payments released by Concessionaire, cost of balance works has been worked out using the contents of this IPC.

Table 4-9: Cost of Balance Works as per IPC 87 for November 2018

Item in Brief	RKD		SIL		Total Balance Amount (₹)
	Balance %	Balance Amount (₹)	Balance %	Balance Amount (₹)	
Preliminary Investigation and carrying out survey (Geotechnical & Topographical Survey) and Design	0.00%	0	0.00%	0	0

Item in Brief	RKD		SIL		Total Balance Amount (₹)
	Balance %	Balance Amount (₹)	Balance %	Balance Amount (₹)	
Installation of Camps, Key Plants and Equipments, Utility Shifting & Coordination with Employer/Concession Authority	0.00%	0	0.00%	1	1
Installation of Crusher & Quarries	0.00%	0	0.00%	0	0
HMP, Concrete Batch Mix Plant Installation	0.00%	0	0.00%	0	0
Aggregate Crushing	0.00%	0	0.28%	42,11,212	42,11,212
Site Clearance & Earthwork	0.74%	23,36,680	4.62%	1,75,85,016	1,99,21,696
Granular Sub Base	1.25%	15,15,987	7.31%	1,44,39,257	1,59,55,244
Wet Mix Macadam	1.35%	17,95,570	6.64%	1,28,01,798	1,45,97,368
DBM & BM with Tack coat	1.38%	72,27,725	8.04%	5,24,67,238	5,96,94,963
BC with Tack coat	1.84%	62,91,075	7.73%	3,07,20,010	3,70,11,085
Construction of Slab/Box Culvert	8.67%	68,46,420	13.88%	30,50,084	98,96,504
Construction of Minor Bridges	2.04%	6,16,936	5.32%	92,87,987	99,04,923
Construction of Under Passes	29.86%	4,03,64,816	22.31%	4,85,11,260	8,88,76,076
Flyovers	0.00%	0	0.53%	86,72,904	86,72,904
Major Bridges	0.00%	0	0.00%	0	0
RE Wall/Retaining wall/RCC Walls	0.00%	0	0.00%	0	0
Drainage/Footpath	12.58%	1,21,28,971	52.10%	23,19,43,745	24,40,72,716
Project Facilities & Junction Improvement	8.20%	45,65,883	35.64%	7,11,89,203	7,57,55,086
Road Project development Facilities, Bus Bay, Truck Bay, Car Parking, project Facility etc. including Tree Plantation & Materials for Developing and Lengthening of Road	7.75%	20,75,933	24.93%	4,39,19,395	4,59,95,328

Item in Brief	RKD		SIL		Total Balance Amount (₹)
	Balance %	Balance Amount (₹)	Balance %	Balance Amount (₹)	
Road Project development Facilities, traffic marking, road side furniture and other appurtenances & Materials for Developing and Lengthening of Road	13.76%	1,05,26,964	0.00%	0	1,05,26,964
Toll Plaza & HTMS	48.83%	4,45,03,637	100.00%	4,20,85,803	8,65,89,440
Total Amount in INR	**5.52%**	**14,07,96,597**	**5.93%**	**59,08,84,913**	**73,16,81,510**
				(₹ Million)	**731.7**

4.9.4.2 Cost of balance works as per IPC 87 for November 2018

Table 4-10: Cost of Balance Works as per IPC 87 for Nov. 2018

Work Type	Cost of Balance Works (IPC 87 for November 2018)	
	Particulars	(₹)
Preparatory works	Preliminary Investigation and carrying out survey (Geotechnical & Topographical Survey) and Design	0
	Installation of Camps, Key Plants and Equipments, Utility Shifting & Coordination with Employer/Concession Authority	1
	Installation of Crusher & Quarries	0
	HMP, Concrete Batch Mix Plant Installation	0
	Aggregate Crushing	42,11,212
Road Works	Site Clearance & Earthwork	1,99,21,696
	Granular Sub Base	1,59,55,244
	Wet Mix Macadam	1,45,97,368
	DBM & BM with Tack coat	5,96,94,963
	BC with Tack coat	3,70,11,085
Structure Works	Construction of Slab/Box Culvert	98,96,504
	Construction of Minor Bridges	99,04,923
	Construction of Under Passes	8,88,76,076
	FLYOVERS	86,72,904
	MAJOR BRIDGES	0
	RE Wall/Retaining wall/RCC Walls	0
	Drainage/Footpath	24,40,72,716
	Project Facilities & Junction Improvement	7,57,55,086
	Road Project development Facilities, Bus Bay, Truck Bay, Car Parking, project Facility etc. including Tree Plantation & Materials for Developing and Lengthening of Road	4,59,95,328

Work Type	Cost of Balance Works (IPC 87 for November 2018)	
	Particulars	**(₹)**
	Road Project development Facilities, traffic marking, road side furniture and other appurtenances & Materials for Developing and Lengthening of Road	1,05,26,964
	Toll Plaza & HTMS	8,65,89,440
	Total Cost of Balance Works as per Concessionaire (as per IPC 87 November 2018)	**73,16,81,510**
	Say INR	**731.68 Mn**

4.9.4.3 Status of Punch List items

As obvious from the above the Project seems to have a lot of balance works. So it is deemed advisable to understand the position of Punch List items. As per Clause 14.4.1 of CA

"All items in the Punch List shall be completed by the Concessionaire within 90 (ninety) days of the date of issue of the Provisional Certificate and for any delay thereafter, other than for reasons solely attributable to the Authority or due to Force Majeure, the Authority shall be entitled to recover Damages from the Concessionaire to be calculated and paid for each day of delay until all items are completed, at the lower of (a) 0.1 % (zero point one per cent) of the Performance Security, and (b) 0.2% (zero point two per cent) of the cost of completing such items as estimated by the Independent Engineer. Subject to payment of such Damages, the Concessionaire shall be entitled to a further period not exceeding 120 (one hundred and twenty) days for completion of the Punch List items".

In fact, Clause 14.4.2 of CA says that

"Failure of the Concessionaire to complete all the Punch List items within the time set forth in Clause 14.4.1 for any reason, other than conditions constituting Force Majeure or for reasons solely attributable to the Authority, shall entitle the Authority to terminate this Agreement".

Since Provisional Certificate was issued on 12th January 2017 so the period of 90 days ended on 11th April 2017. Even the further period of 120 days is considered, it ended on 9th August 2017. But, as seen above, large quantum of work has remained incomplete much beyond the dates mentioned above. It is not clear from documents shared whether the incomplete works were hindered by reasons attributable to Authority/ force Majeure or by reasons attributable to Concessionaire. Even some works have been reported as 'de-scoped' or 'not required' or 'completed as per changed drawings'.

Concessionaire has also not shared any documents wherein such de-scoping or redundancy or changes have been approved by authority or IE.

Punch List items needs deeper scrutiny on basis of correspondence shared between the stakeholders. In absence of the same it is not possible to understand the financial implications due to Damages specified in Clause 14.4.1 of CA or even risk of termination as per Clause 14.4.2 of CA. This matter was highlighted in a recent email exchange with the client. The reply received asserted that all the balance works, including works related to COS (positive or negative), will be responsibility of the existing sponsors of the Project and will be completed as per "CP" (this abbreviation is being hereby interpreted as 'as per conditions precedent')

Present status of works, as recorded during the site visit during the last week of May 2019, has been captured in the Chapter 5, Chapter 6 and Chapter 7.

A number of items of work are incomplete at site and Concessionaire has not shared any document/s wherein it has been approved by IE / NHAI that the respective item of work can be

left unexecuted. Absence of such document/s creates a risk of additional financial burden on the Concessionaire at some later stage due to pressure from NHAI to construct the items of work left unexecuted earlier.

4.10 Registration, licenses, approvals, clearance and permits

Provisional Certificate for Completion was issued on 12th January 2017 and project is already in Operation and Maintenance stage. As per the records all the state permits, registration, licenses, clearances and approvals had been obtained during construction period and there is no pending compliance.

5. PROJECT ROAD CONDITION

5.1 Introduction

The documents provided by the Concessionaire were studied by Ramboll and a site visit was conducted to assess the condition of the project assets

5.2 Background

National Highways Authority of India (NHAI) had decided to undertake six laning of NH-5 from Chandikhole to Bhubaneshwar (Km 413 to Km 418 & from 0 to Km 62) in the state of Orissa to be executed as DBFOT (Toll) project. NHAI awarded the project to Shree Jagannath Expressways Private Limited (SJEPL), ("the Concessionaire") on design build, operate and transfer ("DBFOT") basis through Public- Private/ Public Sector Partnership (PPP).

Figure 5-1: Project start point – Km 413+000 (Bhubneshwar)

5.3 Project Description

The location map of the project stretch is shown below:

Figure 5-2: Project Location

5.4 General – project highway

As per Concession Agreement (CA) the paved carriageway has to be widened to a width of 24.5 metres excluding median. However, the width has to be adjusted to fit into appropriate plans and cross-sections developed in accordance with Schedule D of the Concession Agreement.

There are 13 typical cross-sections listed in the table 'Type of Road Cross Sections along Project Highway' of Appendix B-1 of CA.

5.4.1 Pavement

The road is constructed with flexible pavement except for Toll plaza where rigid pavement, 300m in length, has been provided.

- Main carriageway : Flexible pavement 10.5 m wide (7.0 m at some places)
- Shoulder :1.5 m paved shoulder and 2.0 m wide earthen shoulder
- Median : 2.0 m wide in urban area to 5.0 m wide on outskirts

- Service Roads : 7.0 m wide

5.4.2 Bypass and Realignment

There are no bypasses or realignments in Schedule B of CA.

5.5 Service Roads

As per Appendix – III of Schedule B of CA 32.436 Km service road is to be provided on LHS and 31.054 Km service road is to be provided on RHS. Table 5-1 and Table 5-2 below provide detailed information about scope of work as per CA and actual length of service road constructed till now. The service road is provided with footpath over drain of 2.5m width and 0.5 m to 1.5 m wide paved shoulder. At the sections where service roads have been provided, the MCW has been separated from the Service Road by a buffer strip so as to avoid people coming on to main carriageway.

Table 5-1: Left hand side service road

Chainage (Km)		CA Length (m)	Balance Length (m)
From	To		
413+000	413+250	250	
415+200	416+400	1200	
1+165	1+700	535	380
1+830	2+335	505	
3+190	3+590	400	230
5+570	10+500	4930	230
11+820	15+240	3420	200
15+748	18+196	2448	716
21+072	21+725	653	58
22+120	24+655	2535	
27+550	27+650	100	
27+900	28+675	775	45
31+840	34+930	3090	280
37+850	38+700	850	850
41+520	42+900	1380	
44+260	45+520	1260	
46+381	48+654	2273	94
50+900	51+600	700	
53+900	55+000	1100	
56+800	57+900	1100	
59+068	62+000	2932	192
		32436	3275

Table 5-2: Right hand side service road

Chainage (Km)		CA Length (m)	Balance Length (m)
From	To		
413+000	413+250	250	
415+200	416+400	1200	
1+165	1+700	535	60
1+830	2+335	505	
3+190	3+590	400	
5+530	9+720	4190	690
13+760	14+600	840·	70
15+840	19+950	4110	1620
21+380	21+790	410	
22+070	24+655	2585	170
27+130	28+709	1579	589
32+270	35+300	3030	650
37+850	39+400	1550	1550
40+790	42+800	2010	
44+260	45+520	1260	9683
46+400	48+773	2373	
51+100	51+500	400	
54+000	55+200	1200	
57+250	57+800	550	
59+083	62+000	2917	
		31854	15082

As seen above service roads are yet to be completed/ started at many locations. Some such locations are shown in Figure 5-3.

Service road at 13+975 VUP

Service road at 17+850

Service road at 22+394 MJB

Service road at 28+910 MNB Jagatpur canal

Figure 5-3: Incomplete Service Roads

5.6 Paved/Earthen Shoulders

The project road has been provided with 2.0 m earthen shoulder. In general, 40% of the earthen shoulders need immediate attention. In most of the stretches edge drop has been observed.

Rain cut in shoulder at 15+695 MNB

Shoulder drop in shoulder at 17+850

Figure 5-4: Paved/ Earthen Shoulder

5.7 Junctions & Intersections

There are total 180 junctions along the project road. Out of these, 13 junctions were classified as major junctions and 167 as minor junctions. Details of major junctions are as given in Table 5-3.

Table 5-3: List of major junctions

SI. No.	Chainage (km)	Improvement	Type of Intersection	Name of Intersection	Remarks
1	413+650	6-lane Flyover	+	Fire Station Chawk	LHS-Baramunda RHS-Delta Square
2	414+725	6-lane Flyover	+	CRP Chawk	LHS-Nayapally RHS-Dav School
3	416+850	At Grade Improvement	+	Joydev Vihar	LHS-Nandan Kanan RHS-Indira Park
4	417+785	6-lane Flyover	+	Acharya Vihar	LHS-Railway Colony RHS-Sachivalaya Marg
5	0+710	6-lane Flyover	T	Vani Vihar	RHS-Shahid Nagar
6	2+335	6-lane Flyover	+	Rasulgarh	LHS-Mancheswar RHS-Puri
7	11+140	6-lane Flyover	Y	Phulnakhra	RHS-Niali
8	21+380	6-1ane Flyover	T	Khapuria	RHS-Naya Bazar
9	21+725	6-lane Flyover	T	Link Road	LHS-Badam Bari
10	22+765	At Grade Improvement	+	OMP Chawk	LHS-Cuttack RHS-Paradip
11	27+550	6-lane Flyover	+	Jagatpur Rotary	LHS-Dhenkanal RHS-Kendrapara
12	31+840	Interchange	T	Manguli Chawk	LHS-Sambalpur/Angul
13	61+140	Interchange	+	Chandikhol Junction	LHS-Daitari RHS-Paradip

It is observed that junction improvement work is yet not complete.

5.8 Road Geometry

On visual inspection, the geometrics of the road seems good and adhering to the standards.

5.9 Slope Protection and Drainage

In general, side slopes have been protected by stone pitching and retaining walls which are affected by growth of vegetation. As per Appendix XIV of Schedule B, slope protection works have to be finalised in consultation with NHAI & Independent Engineer. There are locations where it seems slope protection works may be mandated by the specifications, but no such protection has been provided. It may be either pending or may have been approved by NHAI & IE. This needs to be checked with the Concessionaire.

Appendix XIII of Schedule B of CA provides details of longitudinal drains according to which 121.34 Km of drain has to be provided on site. However, length of drain found at site during site inspection was only 62.19 Km - Table 5-4.

In urban sections where service roads have been provided, longitudinal drains have been constructed but they are still pending in some stretches. Drain covers have been damaged at number of locations.

Table 5-4: Longitudinal drains found at site

#	LHS Chainage, km		Drain Length (m)	RHS Chainage, km		Drain Length (m)
	From	To		From	To	
1	413+000	418+000	5000	413+000	418+000	5000
2	0+000	1+000	1000	0+000	1+000	1000
3	2+320	3+780	1460	2+360	3+160	800
4	4+200	4+400	200	3+180	3+620	440
5	5+735	5+860	125	5+550	5+670	120
6	6+090	9+080	2990	6+480	7+000	520
7	9+200	9+660	460	7+300	7+330	30
8	9+770	9+920	150	7+360	8+020	660
9	9+960	10+150	190	8+220	9+660	1440
10	10+660	11+830	1170	10+150	11+040	890
11	13+760	13+880	120	13+800	14+140	340
12	14+240	15+150	910	15+910	16+765	855
13	16+080	16+360	280	17+480	18+000	520
14	16+470	17+950	1480	18+320	19+750	1430
15	18+980	19+220	240	21+440	22+300	860
16	21+130	22+360	1230	22+600	22+800	200
17	22+440	23+260	820	22+830	24+660	1830
18	23+260	24+640	1380	27+140	27+550	410
19	27+040	27+170	130	27+600	28+600	1000
20	27+170	27+480	310	31+790	33+380	1590
21	27+570	28+350	780	33+430	33+900	470
22	31+810	33+440	1630	40+070	40+960	890
23	33+430	33+900	470	42+100	42+830	730
24	40+070	40+960	890	44+310	45+460	1150
25	41+640	42+650	1010	47+080	48+360	1280
26	44+310	45+460	1150	48+700	49+060	360
27	46+510	48+360	1850	50+820	51+520	700
28	50+820	51+520	700	54+120	54+240	120
29	53+830	55+240	1410	55+040	55+310	270

30	56+800	57+240	440	57+320	57+800	480
31	57+250	57+880	630	59+360	61+900	2540
32	59+340	62+000	2660			
		Total	33265		Total	28925
Grand total						**62190**

Stone pitching at 39+788 MNB

Stone pitching at 51+300 VUP

Retaining wall at 61+564 VUP

U shape drains at 44+760 VUP

Water stagnation at 413+000 start point

Improper drainage adjacent to 2+402 flyover

Improper drainage 415+160 PUP Jaidev Vihar

Figure 5-5: Slope protection and drainage

5.10 Safety Features

5.10.1 Traffic Signs, Traffic Lights and Pavement Marking

Road marking with thermoplastic paint has been done on the project road. Road sign boards, traffic lights etc. safety features are provided at site, however, some of the signboards and traffic lights are missing/ damaged/ stolen and need to be repaired/ replaced. Also, there are stretches in which road marking is yet pending. There are some locations where pavement markings have begun to fade.

Damaged sign board at 31+520 MNB

Pending road marking at 2+402 flyover

Pending road marking at 4+558 flyover

Damaged traffic light at 15+695 MNB

Figure 5-6: Traffic Signs, Traffic Lights and Road Marking

5.10.2 Safety Barriers

Metal beam crash barrier has been provided at the location of bridge approaches and high embankment (3m or more) and at curve on both sides. Concrete crash barrier has been provided at bridges, ROB, Culverts, Underpasses & Retaining wall. There are many locations with damaged crash barriers.

Damaged crash barrier at 1+640

Damaged crash barrier at 57+650

Figure 5-7: Damaged Metal Beam crash barriers

5.10.3 Railing Separators and Pedestrian Guard Rail

Pedestrian guard rails have been provided where ever pedestrian activity is high. Such areas are like urban areas, bus stops etc. Some photographs showing the pedestrian guard rails are as shown below.

PGR at 413+718 Flyover Fire Station

PGR at 417+828 Flyover Acharya Vihar

Railing separator at 61+000

Railing separator at 48+190 Bus stop

Damaged median railing at 31+700 Manguli Jn

Unconventional railing at 23+000

Figure 5-8: Pedestrian Guard Rail

5.10.4 Delineators and Guard Posts

Guard posts have been provided on either side of the carriageway, at location where embankment height varies between 2 to 3m. But delineators have not been provided.

5.11 Landscaping

The project stretch has inadequate landscaping, median plantation and avenue plantation on the open land along the road.

5.11.1 Landscaping and Median Plantation

Median plantation has been provided along the road. The plantation has developed well in some sections but generally it is inadequate. Landscaping of islands under the flyovers in urban area is better but there is lot to be improved. Some pictures of the median plantation and landscaping are as shown below.

Landscaping at 413+718 Flyover Fire Station

Landscaping at 417+828 Flyover Acharya Vihar

Median plantation at 19+650

Median without plantation at 61+000

Figure 5-9: Median Plantation

5.11.2 Road Side Plantation

Avenue plantation is seen to some extant in urban area but is totally missing in rural stretches. Some pictures of the avenue plantation are as shown below

Avenue plantation at 416+908 Flyover Jaidev Vihar

Project stretch at 31+850 with no plantation

Figure 5-10: Avenue Plantation

5.12 Kilometre stone/Hectometre stones

Kilometre and hectometre stones have been provided and are visible along most of the stretch.

Figure 5-11: Kilometre Stones & Hectometre Stones

5.13 Environmental Management

Provisional Completion Certificate was issued on 12.01.2017 and project is already in Operation and Maintenance stage. Concessionaire has not shared any information related to environmental issues. So, we cannot comment on the management of such issues during construction stage.

5.14 Bus Bays/ Shelter

As per Appendix III of Schedule C of CA bus bays and bus shelters have to be provided at 20 locations on LHS and 17 locations on RHS. It is seen that this work is still not complete at the Project Site. Also, it is noticed that at least 3 different types of designs have been followed in construction of bus shelters. Locations of bus bays / bus shelters are also in variance from the locations indicated in CA. Some bus shelters have been constructed without bus bays. It is not clear whether all the different designs and changes in locations have been approved by NHAI & IE or there is some conflict between them on this issue. The Table 5-5 gives list of bus bays in the Project-

Table 5-5: List of bus bays and bus shelters

Left				Right			
#	Chainage, km			#.	Chainage, km		
	Proposed	Actual			Proposed	Actual	
1	414+950	413+400	Shelter only	1	415+830	413.400	Shelter only
2	415+950	413+770	Shelter only	2	0+240	413.690	Shelter only
3	417+370	413+960	Bus bay & shelter	3	2+500	414.700	Shelter only
4	2+500	414+830	Bus bay & shelter	4	5+770	417.750	Shelter only
5	5+640	415+200	Bus bay & shelter	5	8+200	0.710	Shelter only
6	8+180	416+100	Bus bay & shelter	6	11+820	3.350	Shelter only
7	8+830	417+900	Bus bay & shelter	7	14+370	4.650	Shelter only
8	10+380	2+180	Bus lay bye only	8	16+120	5.560	Shelter only

Left				Right			
#	Chainage, km			#.	Chainage, km		
	Proposed	Actual			Proposed	Actual	
9	14+370	2+360	Shelter only	**9**	17+535	6.070	Shelter only
10	15+450	4+440	Shelter only	**10**	18+195	11.060	Shelter only
11	17+445	5+650	Shelter only	**11**	19+675	27.560	Shelter only
12	18+250	8+120	Shelter only	**12**	21+510	47.980	Bus bay & shelter
13	19+700	14+020	Shelter only	**13**	24+095	51.380	Bus bay & shelter
14	21+490	27+420	Bus bay & shelter	**14**	47+920	56.920	Bus bay & shelter
15	22+975	27+580	Shelter only	**15**	51+770	61.140	Bus bay & shelter
16	2 +055	31+640	Bus bay & shelter	**16**	56+030		
17	32+280	32+220	Bus bay & shelter	**17**	56+950		
18	47+965	48+020	Bus bay & shelter				
19	51+770	51+380	Bus bay & shelter				
20	56+030	61+180	Bus bay & shelter				

Bus Bay & Shelter at 413+718 Flyover Fire Station

Bus Shelter at 413+718 Flyover Fire Station

Bus Shelter 414+788 CRP Chowk

Bus Shelter at 416+100

Bus Bay & Shelter at 417+828 Flyover Acharya Vihar

Bus Shelter at 417+828 Flyover Acharya Vihar

Incomplete bus shelter at 2+402 Flyover

Incomplete bus shelter at 5+700 Junction

Non-standard bus shelter 22+800 Flyover OMP

Neglected bus shelter at 27+580 Flyover Jagatpur

Incomplete bus shelter at 48+190 PUP

Bus bay and bus shelter at 51+300 VUP

Figure 5-12: Bus bays and bus shelters

5.15 Truck Lay byes

As per Appendix II of Schedule C of CA truck lay byes have to be provided at 9 locations. It is seen that this work is still not complete at the Project Site. Some truck lay byes don't have separator islands to separate the main carriageway from lay-byes, others have incomplete structures in them and almost all of them lack the necessary road markings, lighting and other facilities.

Table 5-6: List of truck lay-byes

	As per CA		Actual position at Site		
#	**Chainage, km**	**Side**	**Chainage, km**	**Side**	**Remark**
1	6+330	Right	19.150	Left	Without any facility
2	6+360	Left	33.840	Left	Without any facility
3	28+600	Left	34.315	Right	Facility under construction
4	28+600	Right	48.925	Right	
5	33+840	Left	61.800	Left	
6	34+315	Right	61.800	Right	
7	48+925	Right			
8	61+800	Left			
9	61+800	Right			

LHS 19+000 Truck Lay Bye

RHS 19+000 Truck Lay Bye

Incomplete structures in 34+500 Truck lay bye

Incomplete structures in 61+800 Truck lay bye

Figure 5-13: Truck lay-byes

5.16 Median Openings

Most of these openings have been provided considering the junctions/toll plaza/service roads locations. However, there are a few locations along the road where local public has created unauthorised median cuts which are traffic hazards.

Unauthorized median cut near 31+850 Loop

Unauthorized median cut near 39+788 MNB

Figure 5-14: Unauthorized median cuts

5.17 Entry Exit Ramps

As per Appendix II of Schedule B of CA entry and exit ramps have to be provided at 80 locations along the Project Road. This work is yet not complete. Lot of entry exit ramps are at variance from the CA in their layout. This matter was discussed at site and the site staff of SPV has

informed that drawings have been modified in consultation with IE and NHAI. However no such document has been shared with us to support that changes have been approved by IE and NHAI.

5.18 Illumination

As per Appendix I b of Schedule C of CA street lights have to be provided in 31 stretches along the Project Road. Also Concessionaire has to provide street lighting at all entry-exit ramps and underpass locations. Double arm street light poles have been provided in median and single arm street light poles have provided in service roads.

As per the site inspection 834 single arm lamps-on-post, 799 double arm lamps-on-post, 32 canopy lights and 200 structure lights have found at site.

Table 5-7: Project stretches to be provided with street lights as per CA

CA Chainage (km)		CA Chainage (km)	
From	**To**	**From**	**To**
413+000	3+780	19+900	21+000
3+780	4+020	21+000	24+380
4+500	5+490	24+380	27+200
5+500	5+900	27+200	27+800
6+130	6+560	28+400	28+800
8+050	8+330	29+700	30+870
8+700	8+950	31+700	32+400
10+250	10+510	33+640	34+515
10+640	11+500	47+750	48+100
11+690	11+950	48+725	49+125
13+770	14+500	51+650	51+900
15+325	15+700	55+900	56+150
16+000	16+250	56+600	56+800
17+320	18+375	56+800	57+100
18+750	19+450	60+000	62+000
19+450	19+825		

As per Appendix I a of Schedule C of CA high mast lights have to be provided in 14 locations along the Project Road. Seventeen high mast lights have been found installed at site.

Table 5-8: Locations to be provided high mast lights as per CA

#	Chainage (km)	Location	#	Chainage (km)	Location
1	413+650	Fire Station Chawk	8	19+1 50	Toll Plaza at Gopalpur
2	414+725	CRP Chawk	9	21+380	Khapuria
3	416+850	Joydev Vihar	10	21+725	Link Road
4	417+785	Acharya Vihar	11	22+765	OMPChawk
5	0+710	Vani Vihar	12	27+550	Jagatpur Rotary

#	Chainage (km)	Location	#	Chainage (km)	Location
6	2+335	Rasulgarh	13	31+840	Manguli Chawk
7	11+140	Phulnakhra	14	61+140	Chandikhol Junction

5.19 Roadside Facilities

5.19.1 Administrative & Operation Offices

Administrative and Operation offices have been provided at existing toll plaza at Km 34+624. But the new toll plaza has to come up at Km 40+500. Due to delay in land acquisition construction of toll plaza at new location has been delayed. Owners of land over which administrative and operation offices have be built are still creating problems in handing over of land.

Control room at 34+624 Toll plaza old

Admin office at 34+624 Toll plaza old

Figure 5-15: Administration and operation offices at old toll plaza

5.19.2 Toilet Block

Concessionaire has provided toilet blocks at existing toll plaza at Km 34+624. The toilet blocks were functioning and were generally clean.

Toilet block at 34+624 Toll plaza old

Figure 5-16: Administration and operation offices at old toll plaza

5.20 Right of Way and Overall Upkeep

Initial ROW, before the start of this Project varied between 20 m to 162 m but, in general, 60m ROW was available all along the length. In some areas where it went below the required ROW suitable changes were done in the cross-section to accommodate the lesser width of ROW.

The overall upkeep is not up to the mark. Project stretch is not being swept regularly as obvious from accumulation of dust and debris along the edges at many places along the road. Road marking has faded, road furniture items are damaged and missing at number of places.

Figure 5-17: End of the Project - Km 62+000 (Chandikhole)

6. TOLL MANAGEMENT SYSTEM

6.1 Toll Plaza

Table 6-1: Toll Plaza Location

#	Name of Toll Plaza	Chainage
1	Proposed Toll Plaza	Km 40+500
2	Existing Toll Plaza	Km 34+624

Proposed toll plaza has been delayed due to land acquisition problems. So even today the tolling is being done at the existing toll plaza.

6.1.1 No. of Lanes at the Toll Plazas

Five lanes are provided in either direction of travel. All are hybrid and there is no reversible lane in the middle even though there such requirement as per CA Vol II, Clause no. 4.9.2. No two wheeler lanes have been provided which reduces the system efficiency in the extra-wide lanes.

6.2 Toll System Maintenance

Toll system maintenance has been entrusted by the Concessionaire to M/s Efkon

6.3 HTMS System

HTMS System has not been installed by Concessionaire.

6.4 Weigh In Motion System

There is provision of installation of Weigh In Motion system vide CA Vol II, Clause no. 4.9.14. No Weigh In Motion system has been installed.

6.5 Static Weigh Bridge

There is provision of installation of Static Weigh Bridge vide CA Vol II, Clause no. 4.9.14.. No Static Weigh Bridge has been installed

6.6 TMS along with scope of ETC (incl. AVCC Systems)

- TMS maintenance including Hybrid ETC are being maintained by M/s Efkon with open tolling technology.
- Lane hardware is as as per the industry standards but not maintained properly, the cables are loose and exposed need immediate maintenance. They are prone to tampering.
- The audit systems are in place and are in good working condition.
- Equipment maintenance is not up to the mark.
- The network is ethernet based.
- WIM and SWB are not installed

6.7 Assessment of Toll Operation and integration with TMS

- Toll operations are fairly ok. There is not much traffic and so the TMS, inspite of its being of low performance standards, is running fine. The local staff is well adapted to the system. But the downside is that TMS can be easily tampered.
- If a lane is down for maintenance it shall not record any traffic as the AVC system is connected with TLC and it does not record transactions locally.Thus entire AVC data is dependent on TLC performance. This makes the system prone to data losses in case of TLC being logged out or down for maintenance.
- The plaza supervisor has been provided with an LSDU i.e. Lane Status Display Unit to monitor entire hardware of each lane.

- Power is supplied through a central UPS i.e. the entire system is at a risk of failure in case the central UPS breaks down.
- Spares control is with the TMS vendor and Concessionaire only monitors the overall uptime of the TMS.
- AVC accuracy is approx. 81 % which seems too low as per Good Industry Practice.
- The TMS does not indicate any signal for data completeness.
- No mechanism was found to record manual transactions in the TMS in case of lane failure.
- Float assignment is not through the system and is not a good feature.
- The support from Efkon is through one engineer only present during the day time. Other than day-time he is on call. With such arrangement it is difficult to meet SLA requirements and it needs to the thoroughly reviewed.

6.8 Back-office TMS review

- The TMS is controlled through the control room which is housed with the validator performing real time transaction validations.
- LSDU as stated above is in use and equipment status / failure is known to the shift supervisor for maintenance technician to report the faults further.
- The TMS is not in a domain environment, putting the entire network at risk.
- There is no backup policy in place although one Backup Server is present at site.
- No fake note detectors installed in the lane to detect counterfeit currency.
- The Plaza Server is put in the domain environment which is good and secure in terms of network hacking.

6.9 Conclusion

The entire TMS needs to be overhauled by immediately replacing/ repairing the faulty equipment and re-doing the cabling work.

6.10 Assessment of Immediate Repair Cost

To keep the plaza equipment in optimum running condition, Concessionaire needs to install some additional equipment, which is also required as per CA. The estimated cost of such equipment works out to around INR 1,86,50,000.00

6.11 Assessment of Total Replacement Cost

The estimated replacement cost** of the entire TMS for 10 lanes TP works out to: INR 4,64,50,000.00

** Refer the detailed equipment status report which defines the equipment wise details of costs considered for immediate repair and replacement costs.

6.12 Annual Maintenance Costs

The AMC cost as a thumb rule is taken @ 10% of the total equipment cost i.e. INR 46,45,000.00. The current cost of repairs under maintenance is calculated as INR 22,57,500.00

Existing Toll plaza at Km 34+624

Existing Toll booth at Km 34+624

Figure 6-1: Toll Plaza & Building @ Km 34+624

Admin building in progress at Km 40+500

Tunnel in progress at Km 40+500

Figure 6-2: Proposed Toll Plaza & Building @ Km 40+500

7. STRUCTURES

A condition survey to assess the distress and maintenance needs of structures was carried out by way of visual observations. Superstructure and substructure were inspected to check any visible distresses. The wing walls, Toe wall and return walls were inspected to locate any separation of these from the abutment. Any unusual differential settlement which gives rise to cracks in the return or wing walls were looked for along with pitching. The detailed observations are discussed in the subsequent paragraphs.

Table 7-1: Number of structures

#	Type of structure	As per CA			As per Site	Balance
		New	Improvement	Total		
1	Major Bridges	5	8	13	13	-
2	Minor Bridges (Main carriageway + service road)	16	15	31	27	4
3	ROB	-	01	01	01	-
4	Flyover	09	-	09	09	-
5	Vehicular underpasses	17	8	25	20	5
6	Pedestrian/cattle underpass	19	14	33	23	11
7	Culverts (Main carriageway + service road)	49	68	117	79	38

7.1 Major Bridges

There are 06 major bridges along the project roads –

1. Palasuni Bridge @ 03+897 (CA chainage 3+780)
2. Kuakhai River Bridge @ 05+100 (CA chainage 4+840)
3. Kathjodi River Bridge @ 20+588 (CA chainage 20+135)
4. Taldanda River Bridge @ 22+394 (CA chainage 22+300)
5. Mahanadi River Bridge@ 25+910 (CA chainage 24+672)
6. Birupa River Bridge @ 30+100 (CA chainage 29+850)

Palasuni Bridge	This bridge has 2 separate two-laned structures (Table 7-4: Improvement of major bridge with no widening on) each catering to unidirectional traffic movement, separated by a space of about 10m.

Kuakhai RiverBridge	This bridge has 3 separate two-laned structures. Leftmost structure (oldest of thethree -Table 7-4) and central structure (Table 7-4) are being used by traffic moving from Bhubaneshwar to Chandikhole and right bridge, the newly built 3 lane structure (Table 7-3: New major Bridges on main carriageway), carries the traffic towards Bhubaneshwar
Taldanda RiverBridge	This bridge has 2 separate structures. Structure on RHS (older of the two - Table 7-4) is being used by traffic moving from Chandikhole to Bhubaneshwar, and the newly built 3 lane structure (Table 7-3), carries the traffic from Chandikhole to Bhubaneshwar
Kathjodi RiverBridge Mahanadi River Bridge	All the thee bridges have 3 separate two-laned structures. The leftmost bridge and thecentral bridge (Table 7-4) at all 3 locations are two laned each and are used by traffic moving from Bhubaneshwar towards Chandikhole.
Birupa River Bridge	The rightmost bridge (Table 7-3) is a newly built 3 lane structure that carries the traffic towards Bhubaneshwar. The leftmost bridge is the oldest of the three at all 3 locations, but it has not been included in the scope for improvement of bridges.

As the leftmost bridges are the oldest bridges (built around 1950) and they have not been included in the scope of improvement of major bridges so they are all in bad shape. Major

failure/distresses were observed on the oldest bridges while the newly built bridges were found to have no major distress/failure.

But here it may be noted that the oldest bridges have been considered as part of the carriageway and that is why Concessionaire's scope consists of only one three-lane bridge on the RHS. If the oldest is not considered part of carriageway then LHS will have only two lanes which cannot be the case.

Table 7-2: Issues observed in major bridges

Description of issues	Left Bridge	Central Bridge	Right Bridge
Structural support system in distress	Kuakhai		
Extensive epoxy grouting of substructure	Kathjodi,	Kathjodi	
Extensive epoxy grouting of girder	Palsuni		
Exposed reinforcement bars in substructure and superstructure	Kuakhai, Taldanda		
Exposed reinforcement bars in foundation			Kuakhai
Scouring of foundation	Kuakhai	Kuakhai	Kuakhai
Minor cracking of foundation		Kuakhai	
Damaged expansion joints	Kuakhai		
Expansion joint filled with debris			
Damaged or rusted bearing	Kathjodi	Kathjodi	Taldanda
Missing tiles in footpath	Kuakhai		Kathjodi
Damaged or cracked RCC railing	Palsuni		
Drainage inlets clogged with debris	Palsuni, Kuakhai, Kathjodi		Palsuni, Taldanda

Table 7-3: New major Bridges on main carriageway

#		1	2	3	4	5
Chainage (km)		**4+840**	**20+135**	**22+300**	**24+672**	**29+850**
Name of stream		Kuakhai River	Kathjodi River	Taldanda River	Mahanadi River	Birupa River
Span arrangement		2xl6.15 + 15x32.31	2x16.5+17x 48.76	2x16.0+ 2x32.0	2x15.54+ 45x49.38	2x10.0+24.63+ 15x32.92
Width (m)	Carriageway	1 X 10.5	1 X 10.5	1 X 10.5	1 X 10.5	1 X 10.5

Type of structure	Outer to outer	1x 14.25	1x 14.25	1x 12.50	1x 14.25	1x 14.25
	Superstructure	PSC-T Girder with end two span RCC-T Girder	PSC-Box Girder with end two span RCC-T Girder	PSC-T Girder with end two span RCC-T Girder	PSC-Box Girder with end two span RCC-T Girder	PSC-T Girder with end two span PSC Solid slab
	Substructure	RCC Wall type	RCC Wall Type	RCC Wall Type	RCC Wall Type	RCC Wall Type
	Foundation	Pile Foundation	Well Foundation	Pile Foundation	Well Foundation	Pile Foundation
Wing wall/ Return wall/ Trough		RCC Wing Wall	RCC Wing Wall	RCC Wing Wall	RCC Wing Wall	RCC Wing Wall
Approach slab		300 mm thk. & 3.50m long	300mm thk. & 3.50m long	300 mm thk. & 3.50m long	300 mm thk. & 3.50m long	300 mm thk. & 3.50m long
Crash Barrier		Provided towards outer sides as per Fig. 4(a) of IRC: 5-1998				
Wearing Coat (mm)		50 BC over 12 Mastic	50 BC over 12 Mastic	50 BC over 12 Mastic	50 BC over 12 Mastic	50 BC over 12 Mastic

Table 7-4: Improvement of major bridge with no widening on MCW

#	Existing Chainage (km)	Str.	Stream/ Feature Characteristics	Length of structure (m)	Action specified as per scope in CA
1	3+780	Left (New)	Palasuni	240.00	Bearings are rusted, cleaning and painting required; other minor repairs to be carried out.
2	3+780	Right (New)	Palasuni	240.00	Bearings are corroded, cleaning and painting required; other minor repairs to be carried out.
3	4+840	A (Left) (Old)	Kuakhai	517.73	New Wearing course to be laid. Deck slab and parapet to be repaired, other minor repair works to be done.

#	Existing Chainage (km)	Str.	Stream/ Feature Characteristics	Length of structure (m)	Action specified as per scope in CA
4	4+840	Right (New)	Kuakhai	516.95	New Wearing course to be laid, damaged portions of footpath and railing to be repaired, other minor repairs to be made.
5	20+135	Right (New)	Kathjodi	861.92	Minor repair works to be done
6	22+300	Right (New)	Taldanda	96.00	Minor repairing work is required.
7	24+672	B (Right) (New)	Mahanadi	2253.20	Part of railing to be repaired; other minor repair works to be done
8	29+850	B (Right) (New)	Birupa Bridge	538.40	Minor repair works to be done

Encroachment under the bridge

Pier and girder View

Figure 7-1: Typical site photographs of Palsuni Bridge @ 3+897

Side view

Structural support system in distress

Exposed reinforcement bars in substructure

Exposed reinforcement bars in pile foundation

Extensive epoxy grouting of substructure

Damaged expansion joint

Figure 7-2: Typical site photographs of Kuakhai Bridge @ 05+100

View from below

Extensive epoxy grouting of substructure

Expansion joint clogged with debris

Expansion joint clogged with debris

Figure 7-3: Typical site photographs of Kathjodi Bridge @ 20+588

View of pile foundation and substructure

Water flowing through pile foundation

Extensive epoxy grouting of substructure

Extensive epoxy grouting of girder

RCC bridge followed by steel bridge

Exposed reinforcement on retaining wall

Figure 7-4: Typical site photographs of Taldanda Bridge @ 22+394

View from bottom

Extensive epoxy grouting of substructure

Damaged railing

Rusted bearings

Missing tiles in footpath

Exposed reinforcements in superstructure

Figure 7-5: Typical site photographs of Mahanadi Bridge @ 25+910

Side view of bridge

Extensive epoxy grouting of substructure

Extensive epoxy grouting of substructure

Missing tiles in footpath

Rusted bearing

Damaged railing

Expansion joint clogged with debris

Exposed reinforcement in superstructure

Figure 7-6: Typical site photographs of Birupa Bridge @ 30+100

As described above, major bridges are under severe distress and require detailed investigations to arrive at repair and rehabilitation measures. A separate study by specialist agency was initiated by SJEPL. The details and findings of such study are presented in **Annexure 1.**

7.2 Rail Over Bridge

The project has only one ROB at Km 1+780 (LHS & RHS). The structure on LHS is the older of the two and it has four concrete girders under the deck. Its wing wall is broken at tip at one end. The structure on RHS is new and has five I-section steel girders. Overall, both the structures are in good condition.

LHS Steel girder ROB

RHS ROB RCC girder widened with Steel girder

RCC and steel girder

LHS carriageway

Figure 7-7: Typical site photographs of ROB @ 1+780

7.3 Minor Bridge

There are 27 minor bridges along the project road.

During the condition survey, major failure/distresses were observed on the oldest bridges while the newly built bridges were found to have no major distress/failure. Various kinds of major issues observed during condition survey are listed in Table 7-5. Other general issues noticed were honeycombing, stone pitching damage, floor protection damage, clogging of drainage spouts, vegetation.

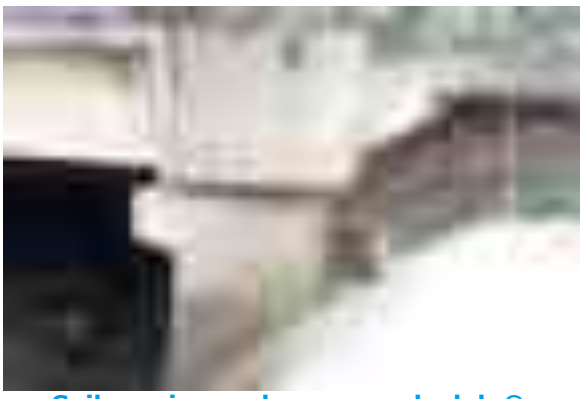
Table 7-5: Some issues in Minor Bridges

#	Issues	Chainage (Km)				
		LHS			RHS	
		MCW	Service Road	Center Main Carriageway	Main Carriageway	Service Road
1	Superstructure and substructure reinforcement exposed	28+910, 29+500, 31+520, 46+240, 55+890			46+240	
2	Incomplete footpath work	22+370, 22+414			22+414	
3	Incomplete approach slab				22+370	
4	Bearings rusted	31+520			28+910	
5	Cracks in substructure			28+910, 29+500		
6	Expansion joint buried under bitumen / clogged with debris	6+005, 22+370, 28+910, 29+500	6+005	28+910, 29+500, 31+520	6+005, 28+910, 29+500, 31+520, 51+630, 55+890	6+005

#	Issues	Chainage (Km)				
		LHS		Center Main Carriageway	RHS	
		MCW	Service Road		Main Carriageway	Service Road
7	RCC railing damaged or missing or its reinforcement exposed	0+562, 3+230, 15+695, 29+500, 30+700, 31+520, 51+630, 57+950		28+910	0+562, 3+230, 15+695, 51+630, 57+950	
8	Soil erosion under approach slab				39+825	15+695
9	Garbage on footpath	22+370,			22+370	

Floor protection damage @ 0+562

Heavy vegetation and debris @ 3+230



Soil erosion under approach slab @ 15+695

Incomplete footpath on SR @ 22+370

Incomplete approach slab on SR @ 22+370

Incomplete footpath on SR @ 22+414

Damaged RCC railing @ 28+910

Abutment cap steel exposed @ 28+910

Bearing rusted @ 28+910

Reinforcement exposed on girder @ 29+500

Reinforcement exposed under slab @ 29+500

Reinforcement exposed on girder @ 31+520

Heavy vegetation growing on structure @ 31+520

Damaged railing @ 51+ 630

Figure 7-8: Typical site photographs of issues observed in minor bridges

7.4 Grade Separator

As per Appendix IV of Schedule B of CA flyovers have to be constructed at 9 locations along the Project Road as listed in

Table 7-6 below. All the flyovers have been constructed. Further, as seen in Appendix VI of Schedule A of CA there were two existing flyovers on the Project Road -

1. 6 Lane Flyover at Joydev Bihar at CA chainage Km 416+850
2. O.M.P Flyover at CA chainage 22+800

Out of these two only O.M.P. flyover has been included in the list of structures to be improved as per Appendix VB of Schedule B of CA.

In general the flyovers are in good structural condition. But the expansions joints and inlets to drainage outlets are clogged with debris. At some locations the treatment of expansion joints is shabby so that edges of slab, as visible from ground have suffered damages and have been repaired. Pipe railings over crash barriers on flyovers have not been painted as on the date of our site visit.

Table 7-6: New Flyovers

Chainage (km)	Span Arrangement	Total Deck width (m)	Remarks
413+650	2:x25m+ 1x30m+2x25m	2 X 12.75m	Fire Station Chawk Flyover
414+725	2x25m+ lx30m+2x25m	2 X 12.75m	CRP Chawk Flyover
417+785	2x25m+1x30m+2x25m	2 X 12.75m	Acharya Vihar Flyover
0+710	2x25m+ lx30m+2x25m	2 X 12.75m	Vani Vihar Flyover
2+400	5x25m+lx30m+2x25m+ 1x30m+7x25m+lx30m+7x25m+ lx30m+2x25m	2 X 12.75m	Rasulgarh Flyover
11+143	3x25m+ lx30m+3x25m	2 X 12.75m	Phulnakhra Flyover
21+590	16x30m	2 X 9.25m	Khapuria-Link Road Flyover . With 5.5m wide carriageway on western side of approach of existing (old) 2 lane Kathjori bridge at its north end, . With 5.5m wide carriageway on eastern side of new flyover on northern side of Kathjori bridge.
27+552	7x25m	2 X 12.75m	Jagatpur Flyover
31+874	4x25m	2 X 9.25m	Manguli Chawk Intechange - Viaduct across NH-5

Flyover at 2+402

Water collected through spouts into catch basins

Flyover at 4+558

Choked catch water drain under flyover at 27+580

Figure 7-9: Typical site photographs of flyovers

7.5 Vehicular Underpass

As per Appendix VII of Schedule A of CA there were existing VUPs at five locations. All the five were included in the list of eight (08) structures taken up for improvement vide Appendix V B of Schedule B of CA. Further 17 new VUPs have been stipulated in Appendix V of Schedule B of CA. This adds up to a total of 25 VUPs (17+08). But only 20 VUPs have been found at site. Apart from these 20 there is one incomplete VUP at Km 5+740, held-up due to non-acquisition of land needed for its construction because of pending resettlement of scheduled caste community people residing at Naharkanta.

As evident from scrutiny of COS calculation by IE and also as mentioned by SPV staff during site visit, a number of VUPs have been shifted from there CA locations/ de-scoped. Concessionaire has not shared any document to establish that such shifting or de-scoping of structures has been approved by IE/ NHAI.

Structural condition of all the VUPs is good.

VUP with stone pitching at approaches at 8+001

VUP at 21+116

Chute arrangement in approach of VUP at 54+560

VUP at 61+564

Figure 7-10: Typical site photographs of VUPs

7.6 Pedestrian/Cattle Underpass/Subway

As per Appendix VII of Schedule A of CA there were existing PUPs/CUPs at 14 locations. All the 14 were included in the list of structures taken up for improvement vide Appendix VI B of Schedule B of CA. Further 19 new PUPs/ Subways have been stipulated in Appendix VI A of Schedule B of CA. This adds up to a total of 33 PUPs/CUPs/Subways. But only 23 PUPs/CUPs/Subways have been found at site. Concessionaire has not shared any document to establish that de-scoping of structures has been approved by IE/ NHAI.

Structurally the PUPs/CUPs/Subways are in good condition but need maintenance works like cleaning and removal of vegetation etc.

PUP with wing walls at 4+180

PUP at 11+307

PUP with choked entrance/ inadequate height

PUP at 60+770

Figure 7-11: Typical site photographs of PUPs/CUPs/Subways

7.7 Box Culverts

There are 79 culverts along the project road. All culverts are box culverts. No major distresses have been observed in them. All the culverts are in good condition. Minor maintenance activities such as removal of vegetation, cleaning of water way etc. are needed.

8. PAVEMENT EVALUATION STUDIES

8.1 Pavement Condition Survey

Detailed field study was carried out to identify the surface distresses and its conditions. Data covered the following distress and the affected area was also recorded for needful repairing technique;

Pavement

- Cracking
- Rutting
- Corrugations and Shoving
- Settlement or Grade Depressions
- Upheaval or Swell
- Raveling
- Pot holes
- Bleeding or Flushing and
- Longitudinal/ Transverse Streaking

Earthen Shoulder

- Material loss
- Corrugation
- Edge drop

8.1.1 Pavement Condition Summary

All the distresses listed above were identified and recorded on kilometer basis wherever present on Project Road along with their severity rating - Table 8-1 (LHS) and Table 8-2 (RHS). Representative test stretches were identified for Roughness and FWD testing on basis of distresses listed in these tables.

Table 8-1: Kilometre wise Pavement Condition on LHS Direction of NH-5

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
1	218+000	219+000	61.900	61.000	Poor	Alligator Cracking up to 10-12% @Km.218+000 to Km.218+150 on Inner Lane, Raveling up to 3-5% on Inner Lane and Middle Lane, Alligator Cracking up to 5-7% @Km.218+300 to Km.218+350 on Inner lane and Middle Lane, Alligator Cracking up to 10-15% @Km.218+500 to Km.218+600 on Middle Lane, Alligator Cracking up to 7-10% @Km.218+700 to Km.218+800 on Inner Lane, Alligator Cracking up to 7-10% @Km.218+850 to Km.218+950 on Inner Lane,

#	Existing Chainage		CA Chainage		Pavement	Remarks/Distress Description
	From	To	From	To	Condition	
						Raveling up to 7-10% @Km.218+800 to Km.218+900 on Inner and Middle Lane
2	219+000	220+000	61.000	60.000	Fair	Overlay @Km.219+000 to Km.219+400, Rutting of 10-15mm on inner lane of 219+200 to 219+350. Raveling up to 7-10% @Km.219+000 to Km.219+150 on Middle Lane, Alligator Cracking up to 7-10% @Km.219+450 to Km.219+600 on Inner and Middle Lane, Raveling up to 5-7% on Outer Lane, Overlay @Km.219+600 to Km.220+000 on Middle Lane
3	220+000	221+000	60.000	59.000	Fair	Alligator/Longitudinal Cracking up to 7-10% @Km.220+550 to Km.220+600 on Inner and Middle Lane, Rutting 10-15mm @Km.220+500 to Km.220+850 on Inner Lane, Raveling up to 5-7% @Km.220+700 to Km.221+000 on Inner Lane and Middle Lane
4	221+000	222+000	59.000	58.000	Good	Alligator Cracking upto<5% @Km.221+250 to Km.221+300 on Inner Lane, Raveling up to 5-7% @Km.221+200 to Km.221+300 on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.221+730 to Km.221+800, Raveling up to 5-7% @Km.221+750 to Km.221+800 on Inner Lane, 1 No's Pothole @Km.221+750 on Inner Lane
5	222+000	223+000	58.000	57.000	Fair	Alligator Cracking upto<5% @Km.222+000 to Km.222+050 on Outer Lane, Raveling up to 3-5% @Km.222+000 to Km.222+100 on Outer Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.222+700 to Km.222+800 on Inner Lane, Raveling up to 5-7% @Km.222+700 to Km.222+800 on Inner and Middle Lane, Alligator Cracking up to 5-7% @Km.222+800 to Km.222+850 on Inner Lane

	Existing Chainage		CA Chainage		Pavement	Remarks/Distress Description
#	From	To	From	To	Condition	
6	223+000	224+000	57.000	56.000	Fair	Alligator/Longitudinal Cracking up to <5% @Km.223+200 to Km.223+250 on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 5-7% @Km.223+400 to Km.223+600 on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.223+800 to Km.223+900 on Inner and Middle Lane, Raveling up to 5-7% @Km.223+850 to Km.223+900 on Inner and Middle Lane
7	224+000	225+000	56.000	55.000	Poor	Alligator/Longitudinal Cracking up to 5-7% @Km.224+000 to Km.224+200 on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.224+200 to Km.224+400 on Inner and Middle Lane, Raveling up to 5-7% on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 5-7% @Km.224+500 to Km.224+600 on Inner and Middle Lane, Alligator/Longitudinal Cracking Km.224+900 to Km.224+950
8	225+000	226+000	55.000	54.000	Fair	Raveling up to<5% @Km.225+000 to Km.225+100 on Inner and Middle Lane, Raveling up to 5-7% @Km.225+400 to Km.225+600 on Inner Lane, Alligator/Longitudinal Cracking up to 5-7% @Km.225+900 to Km.226+000 on Inner and Middle Lane
9	226+000	227+000	54.000	53.000	Fair	Alligator/Longitudinal Cracking up to 7-10% @Km.226+000 to Km.226+200 on Inner and Middle Lane, Alligator/Longitudinal Cracking upto<10% @Km.226+600 to Km.226+800 on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 10-13% @Km.226+800 to Km.227+000 on Inner and Middle Lane
10	227+000	228+000	53.000	52.000	Good	Alligator Cracking up to 7-10% @Km.227+200 to Km.227+400 on Inner and Middle Lane, Raveling up to 5-7% @Km.227+200 to Km.227+400 on Inner and Middle Lane
11	228+000	229+000	52.000	51.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.228+100 to Km.228+200 on Inner and Middle Lane, Raveling up to<5% @Km.228+100 to Km.228+200 on Middle Lane, Alligator Cracking

	Existing Chainage		CA Chainage		Pavement	Remarks/Distress Description
	From	To	From	To	Condition	
						upto<5% @Km.228+550 to Km.228+600 on Inner Lane, Raveling up to 5-7% @Km.228+500 to Km.228+600 on Inner and Middle Lane
12	229+000	230+000	51.000	50.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.229+600 to Km.229+800 on Inner and Middle Lane, Raveling up to 5-7% @Km.229+600 to Km.229+800 on Inner and Middle Lane
13	230+000	231+000	50.000	49.000	Fair	Alligator/Longitudinal Cracking up to 5-7% @Km.230+200 to Km.230+230 on Inner and Middle Lane, Ravellignup to 5-7% @Km.230+200 to Km.230+300 on Inner and Middle Lane, Alligator Cracking up to 5-7% @Km.230+400 to Km.230+500 on Inner and Middle Lane
14	231+000	232+000	49.000	48.000	Fair	Alligator/Longitudinal Cracking up to 10-15% @Km.231+050 to Km.231+200 on Inner and Middle Lane, Raveling up to<5% @Km.231+050 to Km.231+200 on Inner and Middle Lane, Alligator Cracking up to 5-7% @Km.231+250 to Km.231+400 on Inner and Middle Lane, Alligator/Cracking upto<10% @Km.231+500 to Km.231+600 on Inner and Middle Lane, Alligator Cracking upto<5% @Km.231+950 to Km.232+000
15	232+000	233+000	48.000	47.000	Good	Alligator/Longitudinal Cracking up to 3-5% @Km.232+300 to Km.232+400
16	233+000	234+000	47.000	46.000	Good	
17	234+000	235+000	46.000	45.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.234+900 to Km.235+000 on Inner and Middle Lane, Raveling up to 5-7% @Km.234+800 to Km.234+900 on Middle Lane
18	235+000	236+000	45.000	44.000	Good	Alligator Cracking up to 5-7% @Km.235+600 to Km.235+700 on Middle Lane, Raveling up to 5-7% @Km.235+900 to Km.236+000
19	236+000	237+000	44.000	43.000	Good	Raveling up to 5-7% @Km.236+250 to Km.236+300 on Inner and Middle Lane
20	237+000	238+000	43.000	42.000	Good	Raveling up to<5% @Km.237+500 to Km.237+600 on Inner and Middle Lane
21	238+000	239+000	42.000	41.000	Good	
22	239+000	240+000	41.000	40.000	Good	
23	240+000	241+000	40.000	39.000	Good	

	Existing Chainage		CA Chainage		Pavement	Remarks/Distress Description
#	From	To	From	To	Condition	
24	241+000	242+000	39.000	38.000	Fair	Alligator/Longitudinal Cracking up to 7-10% @Km.241+000 to Km.241+100 on Inner Lane, Raveling up to<10% @Km.241+000 to Km.241+100 on Inner and Middle Lane, Alligator Cracking up to 5-7% @Km.241+200 to Km.241+300 on Inner Lane, Raveling up to 5-7% @Km.241+200 to Km.241+250 on Inner and Middle Lane, Raveling up to<5% @Km.241+600 to Km.241+650 on Inner and Middle Lane
25	242+000	243+000	38.000	37.000	Good	Alligator/Longitudinal Cackingupto<5% @Km.242+850 to Km.242+900 on Inner and Middle Lane, Raveling up to 5-7% @Km.242+800 to Km.242+900 on Inner Lane
26	243+000	244+000	37.000	36.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.243+600 to Km.243+750 on Inner Lane
27	244+000	245+000	36.000	35.000	Fair	Alligator Cracking up to 7-10% @Km.244+200 to Km.244+350 on Inner and Middle Lane, Raveling up to 10-15% @Km.244+200 to Km.244+350 on Inner and Middle Lane, Raveling up to 5-7% @Km.244+400 to Km.244+500 on Middle Lane
28	245+000	246+000	35.000	34.000	Fair	Alligator/Longitudinal Cracking up to 10-13% @Km.245+050 to Km.245+180 on Inner Lane and Middle Lane, Alligator/Longitudinal Cracking upto<10% @Km.245+200 to Km.245+300 on Inner and Middle Lane, Raveling up to 7-10% @Km.245+200 to Km.245+300 on Inner and Middle Lane
29	246+000	247+000	34.000	33.000	Fair	Alligator Cracking up to 5-7% & Rutting of 10-15 mm @Km.246+400 to Km.246+550 on Inner Lane, Alligator Cracking upto<10% Km.246+800 to Km.247+000 on Inner and Middle Lane, Raveling<10% @Km.246+800 to Km.247+000 on Inner and Middle Lane
30	247+000	248+000	33.000	32.000	Good	Alligator Cracking up to 7-10% @Km.247+500 to Km.247+600 on Inner and Middle Lane
31	248+000	249+000	32.000	31.000	Good	Raveling up to 5-7% @Km.248+600 to Km.248+800 on Outer Lane
32	249+000	250+000	31.000	30.000	Good	

#	Existing Chainage From	Existing Chainage To	CA Chainage From	CA Chainage To	Pavement Condition	Remarks/Distress Description
33	250+000	251+000	30.000	29.000	Good	
34	251+000	252+000	29.000	28.000	Good	
35	252+000	253+000	28.000	27.000	Good	
36	253+000	254+000	27.000	26.000	Good	
37	254+000	255+000	26.000	25.000	Good	
38	255+000	256+000	25.000	24.000	Good	Alligator Cracking upto<5% @Km.255+900 to Km.255+950 on Inner Lane
39	256+000	257+000	24.000	23.000	Good	
40	257+000	258+000	23.000	22.000	Good	
41	258+000	259+000	22.000	21.000	Good	
42	259+000	260+000	21.000	20.000	Good	
43	260+000	261+000	20.000	19.000	Fair	Alligator/Longitudinal Cracking <10% @Km.260+450 to Km.260+600 on Inner and Middle Lane, 7 No's of Patches @Km.260+450 to Km.260+600 on Inner and Middle Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.260+600 to Km.260+800 on Inner and Middle Lane, Raveling up to<10% @Km.260+600 to Km.260+800 on Inner and Middle Lane, Alligator Cracking up to 10-13% @Km.260+900 to Km.261+000 on Inner and Middle Lane, Raveling up to 5-7% @Km.260+900 to Km.261+000 on Inner and Middle Lane
44	261+000	262+000	19.000	18.000	Good	Alligator Cracking up to 5-7% @Km.261+100 to Km.261+200 on Inner and Middle Lane, Raveling up to<10% @Km.261+100 to Km.261+200 on Inner and Middle Lane
45	262+000	263+000	18.000	17.000	Good	
46	263+000	264+000	17.000	16.000	Good	Alligator/Longitudinal Cracking up to 3-5% @Km.263+250 to Km.263+300, Alligator Cracking upto<3% @Km.263+550 to Km.263+600 on Inner Lane
47	264+000	265+000	16.000	15.000	Good	Raveling up to 7-10% @Km.264+000 to Km.264+200 on Inner and Middle Lane
48	265+000	266+000	15.000	14.000	Good	
49	266+000	267+000	14.000	13.000	Good	1 No's Patch @Km.266+550 to Km.266+600

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
50	267+000	268+000	13.000	12.000	Good	1 No's Patch @Km.267+750 on Outer Lane
51	268+000	269+000	12.000	11.000	Good	
52	269+000	270+000	11.000	10.000	Good	Alligator/Longitudinal Cracking up to<5% @km.269+300 to Km.269+350 on Inner and Middle Lane, Alligator/Longitudinal Cracking upto5-7% @Km.269+400 to Km.269+500 on Middle Lane, 8 No's Patches @Km.269+400 to Km.269+500
53	270+000	271+000	10.000	9.000	Good	Alligator Cracking up to 3-5% @Km.270+550 to Km.270+600 on Inner Lane, Raveling up to<5% @Km.270+550 to Km.270+600 on Inner Lane, Alligator Cracking upto<5% @Km.270+800 to Km.270+850 on Inner Lane
54	271+000	272+000	9.000	8.000	Good	Alligator/Longitudinal Cracking upto<7% @Km.271+900 to Km.272+000 on Middle Lane
55	272+000	273+000	8.000	7.000	Good	
56	273+000	274+000	7.000	6.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.273+000 to Km.273+150 on Inner Lane, Raveling up to 5-7% @Km.273+000 to Km.273+100 on Inner and Middle Lane, Alligator Cracking up to 3-5% @Km.273+900 to Km.273+950 on Middle Lane
57	274+000	275+000	6.000	5.000	Good	Raveling up to<10% @Km.274+400 to Km.274+500 on Inner and Outer Lane De-lamination/ Deboning of Pavement Layers @ 274+200 to Km 274+225
58	275+000	276+000	5.000	4.000	Good	
59	276+000	277+000	4.000	3.000	Good	Alligator Cracking up to 3-5% @Km.276+600 to Km.276+650 on Inner Lane
60	277+000	278+000	3.000	2.000	Good	
61	278+000	279+000	2.000	1.000	Good	Raveling up to 5-7% @Km.278+900 to Km.279+000 on Inner and Middle Lane
62	279+000	280+000	1.000	414.000	Fair	Alligator Cracking up to 3-5% @Km.279+370 to Km.279+400 on Inner and Middle Lane, Alligator Cracking upto<10% @Km.279+400 to Km.279+470 on Inner and Middle Lane, Raveling up to 5-7% @Km.279+400 to Km.279+470 on Inner and Middle Lane,

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
						Raveling up to 5-7% @Km.279+900 to Km.280+000 on Inner and Middle Lane
63	280+000	281+000	414.000	415.000	Good	
64	281+000	282+000	415.000	416.000	Good	
65	282+000	283+000	416.000	417.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.282+050 to Km.282+150 on Inner and Middle Lane, Alligator Cracking upto<5% @Km.282+600 to Km.282+650 on Middle Lane
66	283+000	284+000	417.000	418.000	Good	Alligator/Logitudinal Cracking up to 5-7% @Km.283+400 to Km.283+480 on Inner and Middle Lane, Rutting 7-10mm @ Km.283+450 to Km.283+480 on Inner Lane
67	284+000	285+000	418.000	419.000	Good	Alligator/Longitudinal Cracking 7-10% @Km.284+400 to Km.284+500 on Inner and Middle Lane

Table 8-2: Kilometre wise Pavement Condition on RHS Direction of NH-5

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
1	285+000	284+000	419.000	418.000	Fair	Alligator Cracking up to 3-5% @Km.284+900 to Km.284+850 on Inner Lane
2	284+000	283+000	418.000	417.000	Fair	Raveling up to 3-5% @Km.283.800 to Km.283.750 on Inner Lane Alligator/Longitudinal Cracks up to 7-10% @Km.283.400 to Km.283.350 on Inner Wheel Path of Inner Lane and Inner Wheel Path of Middle Lane
3	283+000	282+000	417.000	416.000	Fair	Alligator/Longitudinal Cracking up to 7-10% @Km.282+600 to Km.282+500 on Inner Wheel Path of Inner Lane
4	282+000	281+000	416.000	415.000	Fair	5-7 mm Rutting on Inner Lane @Km.281+850 to Km.281+800, Alligator/Longitudinal Cracks up to 5-7% @Km.281+180 to Km.281+140 on Inner Lane and @Km.281+150 to Km.281+000 on Middle Lane, 1 No's of Patch Work @Km.281.180 to Km.281.140 on Outer Lane
5	281+000	280+000	415.000	414.000	Good	Raveling up to 5-7% @Km.280+750 to Km.280+700 on Middle Lane, 1 No's Patch Work @Km.280+700 on Middle Lane, De-lamination spot @Km.280+700 on Middle Lane

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
6	280+000	279+000	414.000	1.000	Good	1 No's Fatspots @Km.279+800 on Middle Lane, 1 No's Patch Work @Km.279.200
7	279+000	278+000	1.000	2.000	Good	
8	278+000	277+000	2.000	3.000	Good	Alligator/Longitudinal Cracks up to 5-7% @Km.277+950 to Km.277+900 on Outer Lane, Bleeding @Km.277+950 to Km.277+900 on Outrer Lane
9	277+000	276+000	3.000	4.000	Good	Alligator Cracking up to 3-5% @Km.276+950 to Km.276+900 on Inner Lane
10	276+000	275+000	4.000	5.000	Good	Raveling up to 3-5% @Km.275+600 to Km.275.500 on Inner Lane and Outer Lane
11	275+000	274+000	5.000	6.000	Good	
12	274+000	273+000	6.000	7.000	Good	Alligator Cracking up to 5-7% @Km.273+200 to Km.273+150 on Inner and Middle Lane, 1 No's Patch Work @Km.273+200 to Km.273+180 on Middle Lane
13	273+000	272+000	7.000	8.000	Fair	Bleeding on Pavement Surface @Km.272+800 to Km.272+700 on Middle Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.272+600 to Km.272+500 on Middle Lane, Alligator/Longitudinak Cracking up to 5-7% @Km.272+400 to Km.272+300 on Middle Lane, Alligator/Longitduinal Cracking up to 7-10% @Km.272+080 to Km.272+000 on Middle Lane, Raveling up to 5-7% @Km.272+050 to Km.272+000 on Middle Lane
14	272+000	271+000	8.000	9.000	Good	Raveling up to 3-5% @Km.271+800 to Km.271+700 on Middle Lane, Alligator/Longitudinal Cracking upto<5% @Km.271+600 to Km.271+570 on Middle Lane
15	271+000	270+000	9.000	10.000	Good	
16	270+000	269+000	10.000	11.000	Good	Raveling up to 5-7% @Km.269+400 to Km.269+300 on Middle La ne, Alligator/Longitudinal Cracking up to 10-13% @Km.269+150 to Km.269.050 on Inner and Middle Lane
17	269+000	268+000	11.000	12.000	Fair	Alligator Cracking up to 5-7% @Km.268+750 to Km.268+600 on Middle Lane, 2 No's Patches Km.268+750 to Km.268+700 on Middle Lane, Raveling up to 5-7% @Km.268+700 to Km.268+600 on Middle and Outer Lane,

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
						Alligator Cracking up to 3-5% @Km.268+150 to Km.268+050 on Inner and Middle Lane
18	268+000	267+000	12.000	13.000	Good	Bleeding on Pavement Surface @Km.268+000 to Km.267+900 on Inner and Middle Lane, Raveling up to 3-5% on Middle Lane
19	267+000	266+000	13.000	14.000	Good	
20	266+000	265+000	14.000	15.000	Fair	Alligator/Longitudinal Cracking up to 7-10% @Km.265+900 to Km.265+850 on Inner Lane, Raveling up to 7-10% @Km.265+900 to Km.265+800 on Inner and Middle Lane, Alligator/ Longitudinal Cracking up to 5-7% @Km.265+600 to Km.265+400 on Inner and Middle Lane, Raveling up to 5-7% @Km.265+600 to Km.265+400 on Middle Lane. De-lamination/ de-bonding spot @ Km 265+700
21	265+000	264+000	15.000	16.000	Fair	Bleeding on Pavement Surface @Km.264+600 to Km.264+400 on Inner and Middle Lane, Bleeding on Pavement Surface @Km.264+080 to Km.264+020 on Inner and Middle Lane
22	264+000	263+000	16.000	17.000	Good	Raveling up to 5-7% on Middle Lane
23	263+000	262+000	17.000	18.000	Good	
24	262+000	261+000	18.000	19.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.261+600 to Km.261+550 on Middle Lane, 3 No's Patch Work @Km.261+250 to Km.261+200 on Inner Lane
25	261+000	260+000	19.000	20.000	Fair	Alligator Cracking up to 3-5% @Km.260+950 to Km.260+900 on Inner Lane, 2 No's Patches @Km.260+900 to Km.260+800 on Inner Lane, Alligator/Longitudinal Cracking up to 10-13% @Km.260+600 to Km.260+500 on Inner and Middle Lane, Raveling up to 10-15% @Km.260+600 to Km.260+400 on three Lanes, 3 No's Patches @Km.260+600 to Km.260+400 on Inner and Middle Lane
26	260+000	259+000	20.000	21.000	Good	
27	259+000	258+000	21.000	22.000	Good	Raveling up to<13% @Km.258+050 to Km.258+000 on Inner and Outer Lane, Delamination Spots @Km.258+050 on Inner Lane,

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
						Alligator/Longitudinal Cracking up to 10-13% @Km.258+050 to Km.258+000 on Inner and Outer Lane
28	258+000	257+000	22.000	23.000	Good	
29	257+000	256+000	23.000	24.000	Good	
30	256+000	255+000	24.000	25.000	Good	
31	255+000	254+000	25.000	26.000	Good	Alligator Cracking up to 3-5% @Km.254+900 to Km.254+800 on Inner Lane
32	254+000	253+000	26.000	27.000	Good	
33	253+000	252+000	27.000	28.000	Good	
34	252+000	251+000	28.000	29.000	Good	
35	251+000	250+000	29.000	30.000	Good	
36	250+000	249+000	30.000	31.000	Good	
37	249+000	248+000	31.000	32.000	Good	1 No's Patchwork @Km.248+230 to Km.248+200 on Inner Lane
38	248+000	247+000	32.000	33.000	Good	Raveling up to 5-7% @Km.247+300 to Km.247+200 on Outer Lane
39	247+000	246+000	33.000	34.000	Good	Alligator Cracking upto<5% @Km.246+450 to Km.246+430
40	246+000	245+000	34.000	35.000	Good	
41	245+000	244+000	35.000	36.000	Good	
42	244+000	243+000	36.000	37.000	Good	
43	243+000	242+000	37.000	38.000	Good	
44	242+000	241+000	38.000	39.000	Good	Overlay @Km.242+000 to Km.241+400 on Inner Lane
45	241+000	240+000	39.000	40.000	Good	Alligator Cracking up to 5-7% @Km.240+200 to Km.240+150 on Inner Lane
46	240+000	239+000	40.000	41.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km. 240+000 to 239+960 on Inner and Middle Lane, Bleeding on Pavement Surface @Km. 239+950 to 239+900, Raveling up to 5-7% @Km. 240+000 to 239+950 on Inner and Middle Lane,From 239+900 to 239+300 Rigid Pavement
47	239+000	238+000	41.000	42.000	Good	
48	238+000	237+000	42.000	43.000	Good	Overlay @Km.237+840 to Km.237+800 on Middle Lane, Overlay @Km.237+800 to Km.237+700 on Inner Lane, Overlay @Km.237+600 to Km.237+500 on Inner Lane

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
49	237+000	236+000	43.000	44.000	Good	
50	236+000	235+000	44.000	45.000	Good	
51	235+000	234+000	45.000	46.000	Good	
52	234+000	233+000	46.000	47.000	Good	Alligator Cracking up to 3-5% @Km.233+550 to Km.235+500. Bleeding spot from Km 233+900 to 233+850 on Inner & Middle lane
53	233+000	232+000	47.000	48.000	Good	Alligator/Longitudinal Cracking up to 3-5% @Km.232+100 to Km.232+050 on Inner Lane, 2 No's Patches @Km.232+150 to Km.232+100 on Inner and Middle Lane, Raveling up to 7-10% @Km.232+150 to Km.232+100 on Inner, Middle and Outer Lane
54	232+000	231+000	48.000	49.000	Good	Alligator/Longitudinal Cracking up to 7-10% @Km.231+150 to Km.231+050 on Inner Lane, Raveling up to 3-5% @Km.231+400 t o Km.231+300 on Middle Lane
55	231+000	230+000	49.000	50.000	Good	
56	230+000	229+000	50.000	51.000	Good	
57	229+000	228+000	51.000	52.000	Good	Bleeding on Pavement Surface @Km.228+850 to Km.228+800
58	228+000	227+000	52.000	53.000	Good	
59	227+000	226+000	53.000	54.000	Good	
60	226+000	225+000	54.000	55.000	Good	Alligator/Longitudinal Cracking up to 5-7% @Km.226+000 to Km.225+900 on Inner Lane, Raveling up to 5-7% @Km.225+600 to Km.225+400 on Middle Lane, Longitudinal Cracking up to<5% @Km.225+100 to Km.225+050 on Middle Lane
61	225+000	224+000	55.000	56.000	Good	Alligator/Longitudinal Cracking up to 10-12% @Km.224+700 to Km.224+600 on Inner Lane, Raveling up to 7-10% @Km.224+750 to Km.224+650 on Inner Lane and Middle Lane, Alligator Cracking up to 3-5% @Km.224+050 to Km.224+000 on Outer Lane, Overlay @Km.224+300 to Km.224+800 on Inner and Middle Lane
62	224+000	223+000	56.000	57.000	Good	
63	223+000	222+000	57.000	58.000	Good	Raveling up to 3-5% @Km.222+850 to Km.222+800 on Inner and Middle Lane

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
64	222+000	221+000	58.000	59.000	Good	
65	221+000	220+000	59.000	60.000	Good	
66	220+000	219+000	60.000	61.000	Good	Alligator Cracking up to 5-7% @Km.219+600 to Km.219+500 on Middle Lane
67	219+000	218+000	61.000	61.900	Fair	Alligator Cracking up to 7-10% @Km.219+000 to Km.218+900 on Inner Lane, Raveling up to 5-7% @Km.219+000 to Km.218+900 on Inner and Outer Lane, Alligator/Longitudinal Cracking up to 10-15% @Km.218+800 to Km.218+600 on Middle and Inner Lane, Raveling up to 7-10% @Km.218+800 to Km.218+600 on Middle and Outer Lane, Alligator/Longitudinal Cracking up to 7-10% @Km.218+600 to Km.218+400 on Inner Lane and Middle Lane, Raveling up to 5-7% @Km.218+600 to Km.218+400 on Middle and Outer Lane, Alligator Cracking up to 5-7% @Km.218+200 to Km.218+000 on Inner and Middle Lane, Raveling up to 3-5% @Km.218+050 to Km.218+000 on Inner and Middle Lane

8.1.2 Distress Identification for Immediate Repair

Based on Table 8-1: Kilometre wise Pavement Condition on LHS Direction of NH-5 and Table 8-2: Kilometre wise Pavement Condition on RHS Direction of NH-5 some distressed sections were identified as sections that need immediate repair. Such sections and technique(s) proposed to be used are listed in Table 8-3 and

Table 8-4 respectively for LHS and RHS directions.

Table 8-3: Distresses Location for Immediate Repair on LHS direction

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
1	218.000	218.150	0.150	61.900	61.750	Alligator Cracking up to 10-12% on Inner Lane
2	218.500	218.600	0.100	61.500	61.400	Alligator Cracking up to 10-15% on Middle Lane
3	218.700	218.800	0.100	61.700	61.600	Alligator Cracking up to 7-10% on Inner Lane
4	218.850	218.950	0.100	61.150	61.050	Alligator Cracking up to 7-10% on Inner Lane
5	219.200	219.350	0.150	60.800	60.650	Rutting 10-15mm on Inner Lane
6	219.450	219.600	0.150	60.650	60.500	Alligator Cracking up to 7-10% on Inner and Middle Lane

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
7	220.500	220.850	0.350	59.500	59.150	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane and Rutting 10-15mm on Inner Lane
8	222.700	222.800	0.100	57.300	57.200	Alligator/Longitudinal Cracking up to 7-10% on Inner lane
9	223.800	223.900	0.100	56.200	56.100	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane
10	224.200	224.400	0.200	55.800	55.600	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane
11	226.000	226.200	0.200	54.000	53.800	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane
12	226.800	227.000	0.200	53.200	53.000	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
13	227.200	227.400	0.200	52.800	52.600	Alligator Cracking up to 7-10% on Inner and Middle Lane
14	231.050	231.200	0.150	48.950	48.800	Alligator/Longitudinal Cracking up to 10-15% on Inner and Middle Lane
15	241.000	241.100	0.100	39.000	38.900	Alligator/Longitudinal Cracking up to 7-10% on Inner Lane
16	244.200	244.350	0.150	35.800	35.650	Alligator Cracking up to 7-10% on Inner and Middle Lane
17	244.200	244.350	0.150	35.800	35.650	Raveling Up to 10-15% on Inner and Middle Lane
18	245.050	245.180	0.130	34.950	34.820	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
19	246.400	246.550	0.150	33.600	33.450	Rutting 10-15mm on Inner Lane
20	247.500	247.700	0.200	32.500	32.300	Alligator Cracking up to 7-10% on Inner and Middle Lane
21	260.900	261.000	0.100	19.100	19.000	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
22	264.000	264.200	0.200	16.000	15.800	Raveling Up to 7-10% on Inner and Middle Lane
23	274.200	274.225	0.025	5.800	5.775	De-lamination/ Deboning of Pavement Layers on inner and middle lane
24	284.400	284.500	0.100	418.400	418.500	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane

Table 8-4: Distresses Location for Immediate Repair on RHS direction

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
1	285.600	285.500	0.100	419.600	419.500	Alligator Cracking up to 7-10% on Middle Lane
2	283.400	283.350	0.050	417.400	417.350	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane
3	282.600	282.500	0.100	416.600	416.500	Alligator/Longitudinal Cracking up to 7-10% on Inner wheel path of Inner Lane
4	280.700	280.675	0.025	414.700	414.675	De-lamination/ Deboning of Pavement Layers on inner and middle lane
5	272.800	272.700	0.100	7.200	7.300	Bleeding on Pavement surface on Middle Lane
6	272.080	272.000	0.080	7.920	8.000	Alligator/Longitudinal Cracking up to 7-10% on Middle Lane
7	269.150	269.050	0.100	10.850	10.950	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
8	265.600	265.570	0.030	14.600	14.630	De-lamination/ Deboning of Pavement Layers on inner and middle lane
9	265.900	265.850	0.050	14.900	14.950	Alligator Cracking up to 7-10% on Middle Lane
10	264.080	264.020	0.060	15.920	15.980	Bleeding on Pavement surface on Middle Lane
11	260.900	260.800	0.100	19.100	19.200	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
12	260.600	260.400	0.200	19.400	19.600	Raveling Up to 10-15% on Inner and Middle Lane
13	258.050	258.000	0.050	21.950	22.000	Raveling Up to 10-13% on Inner and Middle Lane & Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
14	233.900	233.850	0.050	46.100	46.150	Bleeding on Pavement surface on Inner and Middle Lane
15	231.150	231.050	0.100	48.850	48.950	Alligator Cracking up to 7-10% on Inner Lane
16	228.850	228.800	0.050	51.150	51.200	Bleeding on Pavement surface on Inner Lane
17	224.750	224.650	0.100	55.250	55.350	Raveling Up to 7-10% on Inner and Middle Lane & Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane
18	219.000	218.900	0.100	61.000	61.100	Alligator Cracking up to 7-10% on Inner Lane

#	Existing Chainage		CA Chainage		Pavement Condition	Remarks/Distress Description
	From	To	From	To		
19	218.800	218.600	0.200	61.200	61.400	Raveling Up to 7-10% on Inner and Middle Lane & Alligator/Longitudinal Cracking up to 10-15% on Inner and Middle Lane

Figure 8-1: Photos of Pavement Condition and Surface Distress

Observations:

- The visual condition of the pavement was found to be FAIR to GOOD.
- Few specific distresses are like alligator cracks, ravelling and de-bonding of layers/ slippage was observed on the project road.
- Based on the obtained distresses and its seniority level, the repairing/ rehabilitation techniques are recommended in Chapter 9.

8.2 Structural Evaluation of Pavement by using FWD

The structural evaluation and analysis of remaining life of project was carried out in conformity with IRC: 115-2014, "Guidelines for Structural Evaluation and Strengthening of Flexible Road Pavements Using Falling Weight Deflectometer (FWD) Technique".

8.2.1 Principle of Pavement Evaluation Using FWD

Performance of flexible pavements can be evaluated by applying loads on the pavements that simulate the traffic loading, recording the response to such loading by measuring the elastic deflection under such loads, and analysing these data duly considering the factors influencing the performance such as subgrade strength, thickness and quality of each of the pavement layers, drainage conditions, pavement surface temperature etc.

Among the 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.

The resulting load-deflection data can be interpreted through appropriate analytical techniques, such as back calculation technique, to estimate the elastic moduli of the pavement layers. The computed moduli are, in turn, used for (i) the strength evaluation of different layers of in-service pavements (ii) the estimation of the remaining life of in-service pavement (iii) determination of strengthening requirement, if any and (iv) evaluation of different rehabilitation alternatives (overlay, recycling, partial reconstruction, etc).

8.2.2 Brief Description of Falling Weight Deflectometer (FWD)

Falling Weight Deflectometer is an impulse-generating device with a guide system. This device allows a variable weight to be dropped from a variable height. The apparatus has a loading plate which is used for uniform force distribution on the test layer. When the weight affects this plate, this loading plate ensures that the resulting force is applied perpendicularly to the test layer's surface. It also has a load cell for measuring the actual applied impulse. It also has one or more deflection sensors. (Note: Deflection basin tests require at least seven sensors.) It also has a system for collecting, processing, and storing deflection data. Structural evaluation of pavements involves application of a standard load to the pavement and measuring its response in terms of stress, strain or deflection.

Benkelman beam has been among the earliest equipment used for measuring deflection and structural evaluation of pavements. In this technique, a static load is applied to the pavement surface and rebound deflections are measured at one or more locations. Measurement of deflection under a static load does not simulate the loading conditions produced in pavements by a moving vehicle. The evaluation of pavements by such methods is labor-intensive and, in general, time consuming. Impulse loading equipment commonly known as Falling Weight Deflectometer (FWD) have been developed, which closely simulates the duration and amplitude of the load pulses produced by moving wheel loads.

The basic working principle of the impulse loading equipment is to drop a mass on the pavement to produce an impulse load and measure the surface deflections. The mass is dropped on a spring system, which in turn transmits the load to the pavement through a loading plate. The resulting

deflection bowl characteristics are observed and used in the back calculation of pavement material properties. The principle is illustrated in Figure 8-2

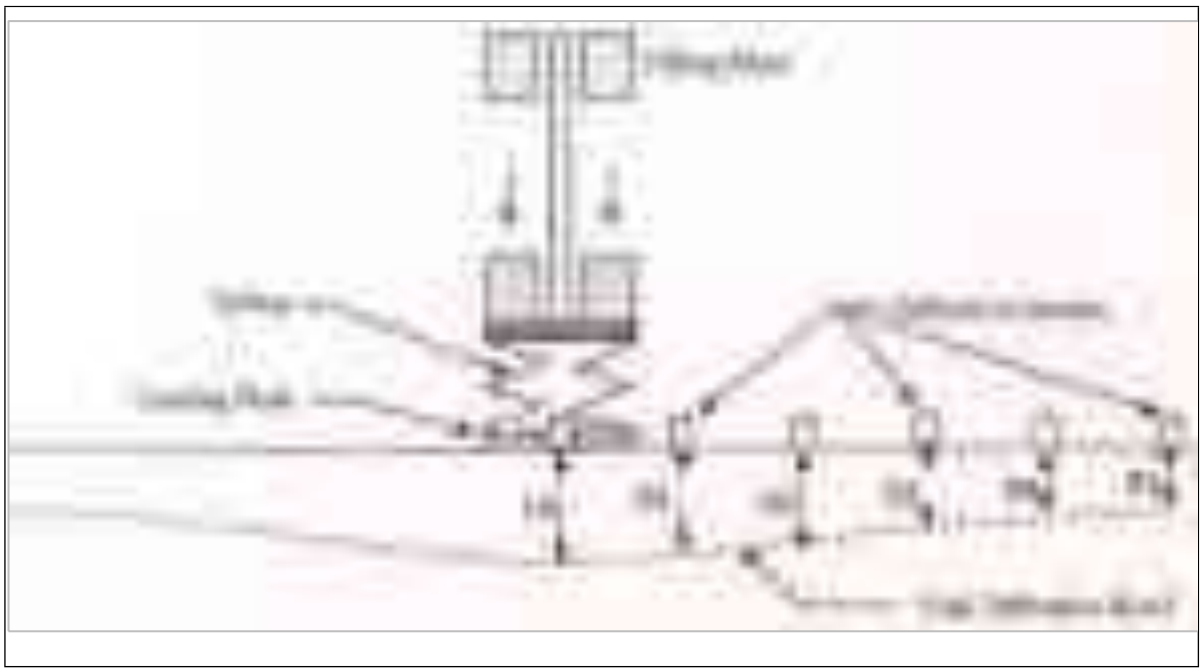


Figure 8-2: Working Principle of FWD

Performance of flexible pavements can be evaluated by applying loads on the pavements that simulate the traffic loading, recording the response to such loading by measuring the elastic deflection under such loads, and analysing these data duly considering the factors influencing the performance such as subgrade strength, thickness and quality of each of the pavement layers, drainage conditions, pavement surface temperature etc.

8.2.3 FWD Instrument Used for the Deflection Survey: ERAY-FWD20MT

For the purpose of conducting FWD survey on the project road ERAY-FWD20MT Fully-Automatic Trailer-mounted FWD was used. ERAY-FWD20MTwas developed by Suzhou ERAY Machinery. The FWD can apply a loading in the range of 12-150 KN, enabling it to simulate all type of vehicle loads on pavement surface. This model is complete with back-up battery and trailer mounted with all other accessories for evaluation of pavements.
Moreover, this particular instrument mostly exceeds or matches all the criteria given in the IRC: 115-2014. Following Table 8-5 summarizes the technical specifications of the instrument against the specifications of FWD mentioned by IRC: 115-2014.

Table 8-5: Comparison of IRC and ERAY-FWD20MT Specifications

S. No.	FWD Components	IRC Recommended Specification for FWD	ERAY-FWD20MT Specification	Remarks
1	Plate Diameter	300/450 mm	300 mm	In IRC:115-2014, 300 mm dia plate is recommended
2	Mass System	Single Mass	Single Mass	Matched
3	Falling Weight Mass	50 to 700 Kg	50 to 350 Kg	To produce standard axle wheel load of 40 KN, falling weight mass and height of

				fall will be adjusted automatically
4	Height of fall	100 to 600 mm	Variable	Matched
5	Target Peak Load	40 KN	40 KN	Matched
6	Load Pulse Time	15 – 50 ms	20 -30 ms	Matched
7	Load Cell Accuracy	± 2 %	± 1 %	Matched
8	Number of Deflection Transducers	6 to 9	9	Matched
9	Deflection Sensor Types	Geophones	Geophones	Matched
10	Reading Resolution of Deflection Transducers	Min 1um	1 um	Matched
11	Deflection Transducers Accuracy	± 2 %	± 1 %	Matched

8.2.4 Testing Procedure and Methodology

The detailed test methodology and procedure was described in IRC: 115-2014, "Guidelines for Structural Evaluation and Strengthening of Flexible Road Pavements Using Falling Weight Deflectometer (FWD) Technique". However, as per the client's requirement the sampling procedure was customized in this project by collecting data on 1/3 length of the project stretch. In adherence to the same, structural evaluation of the existing 'pavement and subgrade system' by measuring its response in terms of deflection was carried out using FWD for the project road in the month of March 2019 (08/03/2019 – 09/03/2019).

Evaluation of pavement structural strength would be carried out in accordance with requirements of TOR and IRC: 115-2014.

(a) Testing Equipment

The equipment used for the testing is:

- **ERAY-FWD20MT** Trailer Mounted Falling Weight Deflectometer with 1 loading plate and 9 numbers of geophones placed at the spacing of 0, 200, 300, 450, 600, 900, 1200, 1500 and 1800mm from the center of the loading plate.
- Towing Vehicle
- GPS, Air Temperature and Pavement Surface Temperature sensors as part of the FWD instrument.
- Glycerol and digital thermometer
- Red flags and red cones and flashing lamps for traffic arrangement.

(b) Testing Frequency – as per IRC:115-2014

Though the length of uniform section divided by calculated sample size results the interval of FWD test, however the deflection measurement scheme depends upon the type of carriageway, number of lanes and the measurement along a lane. The same is detailed in Table 2 of IRC: 115-2014 and the same has been followed by the Consultant, and the same is presented in Table 2.6 below;

Table 8-6: Guidelines for Selection of Deflection Measurement Scheme (for 4-lane dual (divided) carriageway)

Recommended Measurement Scheme	Maximum Spacing(m) for test points along selected wheel path for pavements of different classification		
	Poor	Fair	Good
(i) measure along outer wheel paths of outer lanes	30	65	250
(ii) measure along the outer wheel path of inner lane	60	130	500
(iii) measure along the centre line of paved shoulder (in case of widening projects)	120	260	500

Courtesy: Table 2 of IRC: 115-2014

8.2.5 FWD Deflection Testing Points and Measurement

In line with TOR & based on existing pavement condition, the number of FWD test points was finalized on 1/3 length of project stretch.

FWD deflection measurement has been carried out for each carriageway at test points along outer wheel path of each lane which is at an offset of 1m from the outer edge of outer lane as specified in section 5.4.5 of IRC: 115-2014. At every measurement location, four drops were made, such that the first drop was the 'seating drop' and with the remaining three drops deflections were recorded.

Figure 8-3: Photographs showing FWD test under progress

Also, during survey, pavement temperature of bituminous layer has been recorded as per the procedure specified in section 5.4.7 of IRC: 115-2014. FWD data collected are presented in Annexure 8.1. Photographs of FWD Test under progress at some locations were shown in Figure 8-3

Following procedure is followed for measuring deflections at a test point:

i. Mark the test point on the pavement
ii. Centre the load plate over the test point
iii. Lower the loading plate onto the pavement ensuring there should be no standing water on the pavement surface. The loading plate should be in proper contact with pavement surface. The longitudinal and transverse slope of the pavement should not exceed 10 percent at the test location.
iv. Lower the frame holding the geophones so that the transducers are in contact with pavement surface.
v. Raise the mass to a pre-determined height required for producing a target load of 40 kN (+10%).
vi. Drop one seating load, load and deflection data for which need not be recorded.
vii. Raise the mass and drop. Record the load and deflection data into the computer through data acquisition system. While peak load and peak deflections at different selected radial positions must be recorded. At least 2 drops should be made at one location for precision.
viii. If, during previous 2 steps, the deflections measured are giving variations or the deflections/load pulses are not proper, repeat the drop.
ix. Raise the geophone frame and load plate and move to the next test location
x. Deflection measurements should not be made when the pavement temperature is more than 45°C.

8.2.6 Existing Pavement Composition Details

During test pit investigation, the existing pavement composition details are obtained, and the details are presented in Soil & Materials Investigation Report. However, the same is presented in Table 8-7 below. For back calculation of E values, the same is used.

Table 8-7: Summary Pavement Crust Details along the project corridor

#	Existing Chainage (Km.)	CA Chainage (Km)	Side (RHS/LHS)	Pavement Composition (mm)		
				Bituminous Layer (mm)	Granular Layer (mm)	Total Thickness (mm)
1	218+300	61.600	LHS	160	420	580
2	224+500	55.500	RHS	200	430	630
3	230+900	49.100	LHS	180	420	600
4	236+000	44.000	RHS	220	450	670
5	239+100	40.900	RHS	150	490	640
6	245+100	34.900	RHS	170	390	560
7	248+600	31.400	LHS	220	450	670
8	259+500	20.500	LHS	210	430	640
9	263+200	16.800	RHS	170	480	650
10	267+900	12.100	LHS	130	450	580
11	273+000	7.000	RHS	240	420	660
12	276+900	3.100	LHS	110	490	600
13	285+050	419.050	RHS	240	440	680

8.2.7 In-put Data for BACK Calculation Analysis

(a) Processing of Load and Deflection data

The FWD test data collected from different drops at each test point primarily consists of peak load and peak deflections at different radial locations. Unrealistic deflection values and obviously erroneous data must be removed.

Average values of load and deflections are calculated from the three drop test data collected. FWD tests were carried out using 40 kN impulse load. However, since the FWD equipment does not impart exactly the same load at every test point, normalization of all measured deflections was carried out to a common test load of 40 kN. Such 'normalization' of the data was carried out using the following formula:

Dn= 40 kN/Lm× Dm

Where, Dn = Normalized Deflection;
Lm = Imparted Load and
Dm = Measured Deflection

The "normalized deflection data" was then used for determining deflections, deflection bowl and finally in framing of homogeneous sections and calculation of overlay requirements.

(b) Back-calculation of Layer Moduli

Layer moduli have been back-calculated using KGPBACK program. The pavement has been modelled as a three-layer system with bituminous layer, granular layer and subgrade. The following inputs have been provided for back analysis.

(i). Single wheel load 40 kN and contact pressure 0.56 MPa(ii).
No. of deflection sensors: 9

(iii). Radial Distances of the Geophones i.e. 0, 200, 300, 450, 600, 900, 1200, 1500 and 1800mm
(iv). Measured Surface Deflections normalized to 40kN in mm
(v). Pavement Layer Thicknesses (as measured from Trial Pits)
(vi). Poisson's ratio for different layers i.e. 0.5 for bituminous and 0.4 for granular and subgrade
(vii). Range of Possible modulus value (Min.- Max.) of bituminous layer, granular layer and subgrade

Ranges of different layer moduli have been given as input to KGPBACK for back-calculation. These ranges have been selected judiciously by experienced pavement engineering taking into considerations the approximate age of pavement, visual assessment of the condition of bituminous layer, climatic conditions prevailing at the time of deflection measurements and information available from test pits, and laboratory tests conducted as detailed below:

(c) Range of modulus value of existing subgrade:

The range of moduli of existing subgrade is based clause II.8.4 (i) of IRC 115-2014. i.e 5 times to 20 times of subgrade CBR value.

(d) Range of modulus value of existing granular layers i.e. base and sub base:

The range of moduli of existing granular layers is based on clause II.8.4 of IRC 115-2014.The range for combined (base and sub-base) is taken as 100-500 MPa.

(e) Range of modulus value of existing thick bituminous layers:

The range of moduli of existing thick bituminous layer has been determined on the basis of condition data. If the road condition is good the range is considered as 750MPa to 3000MPa, for sections with pavement condition is Fair- Poor, the range specified for thick bituminous layer 400 MPa to 1500 MPa as stipulated in section III.8.4 of IRC: 115-2014 has been taken into consideration.

8.2.8 Correction for Temperature

Back-calculated moduli values of the bituminous layers evaluated by FWD survey are influenced by the pavement temperature. The standard pavement temperature for India is recommended as 35°C, hence the back-calculated moduli obtained at temperatures other than the identified standard temperature will have to be corrected using a suitable correction factor using equations 4 and 5 of IRC:115-2014 and the same is extracted below for ready reference.

$ET1 = \lambda ET2$

Where,

λ is temperature correction factor, is given as

λ	**=**	**(1-0.238 lnT1) / (1-0.238 lnT2)**
ET1	=	Back-calculated modulus (MPa) at temperature T1 (OC)
ET2	=	Back-calculated modulus (MPa) at temperature T2 (OC)

However, in few sections, after applying the temperature correction the E value of bituminous layers are coming more than 3000MPa. As the project road was constructed with VG-30/ VG-40

grade bitumen, it is restricted to keep the maximum E value of 3000MPa, wherever it is exceeding. In these locations, the temperature correction factor was applied as 1.

8.2.9 Correction for Seasonal Variation

Moisture content affects the strength of subgrade and granular sub base/base layers. Since the deflection measurements have been carried out in the month of March during Summer, hence seasonal correction factor applicable for Summer has been applied. Therefore, the back-calculated modulus of subgrade and granular layer have been corrected using equation 7 for subgrade and equation 8 for granular layer as recommended in IRC:115-2014. Seasonal correction equations 6 to 9 of IRC: 115-2014 has been extracted below for ready reference.

Esub-mon = 0.8554*(ESub-Sum)-8.461 ……. (7) as per IRC:115

Esub-mon = 3.351*(ESub-Win)0.7688-28.9 ….. (6) as per IRC:115

Where, E sub-mon = subgrade modulus in monsoon (MPa)

E sub-win = subgrade modulus in Summer (MPa)

E sub-win = subgrade modulus in Winter (MPa)

Egran-mon = -0 03*(Egran-Sum)2+0.9584*(Egran-Sum)-32.989 …..(8) as per IRC:115

Egran-mon = 10.5523*(Egran-win)0.624 -113.857 …… (9) as per IRC:115

Where, E gran-mon = granular layer modulus in monsoon (MPa)

E gran-Sum = granular layer modulus in Summer (MPa)

E gran-Sum = granular layer modulus in Winter (MPa)

As the survey is conducted in Summer period, correction is required as per IRC: 115-2014 for granular & subgrade.

The 15th percentile value (as the same has been recommended by IRC: 115-2014 for purpose of design) of back-calculated & corrected layer moduli of each identified homogeneous sub-sections of each carriageway separately are presented below.

8.2.10 Results of E Modulus of Pavement Layers

The summary of back calculated E values is presented in Annexure 8.2. The graphical representations of layer E values for both directions are presented in Figure 8-4 & Figure 8-5, and the summary of 15th Percentile Elastic Moduli is presented in Table 8-8 and Table 8-9 below;

Table 8-8: 15th Percentile Elastic Moduli of Pavement Layers on LHS

#	Existing Chainage		CA Chainage		15th Percentile E Value		
	From	To	From	To	Bituminous Layer	Granular Layer	Subgrade
1	218.000	219.000	61.900	61.000	LHS	1279.71	238.9
2	222.000	223.000	58.000	57.000	LHS	1399.27	203.8
3	223.000	224.000	57.000	56.000	LHS	1407.61	192.15
4	228.000	229.000	52.000	51.000	LHS	1804.16	168.55
5	229.000	230.000	51.000	50.000	LHS	1439.89	147.25

#	Existing Chainage		CA Chainage		15th Percentile E Value		
	From	To	From	To	Bituminous Layer	Granular Layer	Subgrade
6	232.000	233.000	48.000	47.000	LHS	1644.95	154.67
7	233.000	234.000	47.000	46.000	LHS	1250.4	221
8	238.000	239.000	42.000	41.000	LHS	1141.24	289.35
9	239.000	240.000	41.000	40.000	LHS	1314.74	216.56
10	244.000	245.000	36.000	35.000	LHS	802.8	150.45
11	245.000	246.000	35.000	34.000	LHS	1140.33	142.7
12	249.000	250.000	31.000	30.000	LHS	1101.69	134.64
13	256.000	257.000	24.000	23.000	LHS	1290.37	236.64
14	257.000	258.000	23.000	22.000	LHS	1493.35	192.26
15	262.000	263.000	18.000	17.000	LHS	1311.58	166.07
16	263.000	264.000	17.000	16.000	LHS	1057.15	137.15
17	268.000	269.000	12.000	11.000	LHS	2705.42	206.98
18	269.000	270.000	11.000	10.000	LHS	2320.01	274
19	273.000	274.000	7.000	6.000	LHS	3109.01	368.11
20	280.000	281.000	414.000	415.000	LHS	2904.14	271.54
21	281.000	282.000	415.000	416.000	LHS	3176.7	338.18
22	285.000	285.850	419.000	419.850	LHS	3213.84	363.83

Table 8-9: 15th Percentile Elastic Moduli of Pavement Layers on RHS

#	Existing Chainage		CA Chainage		15th Percentile E Value		
	From	To	From	To	Bituminous Layer	Granular Layer	Subgrade
1	219.000	220.000	61.000	60.000	RHS	1009.66	164.03
2	220.000	221.000	60.000	59.000	RHS	1213.01	161.97
3	224.000	225.000	56.000	55.000	RHS	1028.57	178.4
4	225.000	226.000	55.000	54.000	RHS	945.53	166.97
5	230.000	231.000	50.000	49.000	RHS	1324	125.13
6	235.000	236.000	45.000	44.000	RHS	1054.24	159.5
7	236.000	237.000	44.000	43.000	RHS	851.61	201.89
8	241.000	242.000	39.000	38.000	RHS	2354	263.78
9	242.000	243.000	38.000	37.000	RHS	1296.24	207.01
10	247.000	248.000	33.000	32.000	RHS	2733.81	209.34
11	248.000	249.000	32.000	31.000	RHS	2796.41	176.38
12	250.000	251.000	30.000	29.000	RHS	2308.35	214.77
13	251.000	252.000	29.000	28.000	RHS	1879.55	265.77
14	252.000	253.000	28.000	27.000	RHS	1682.52	215.83

#	Existing Chainage		CA Chainage		15th Percentile E Value		
	From	To	From	To	Bituminous Layer	Granular Layer	Subgrade
15	258.000	259.000	22.000	21.000	RHS	1906.8	236.4
16	260.000	261.000	20.000	19.000	RHS	1439.62	165.23
17	265.000	266.000	15.000	14.000	RHS	1654.9	173.3
18	266.000	267.000	14.000	13.000	RHS	2289.22	193.03
19	270.000	271.000	10.000	9.000	RHS	1014.71	206.49
20	271.000	272.000	9.000	8.000	RHS	1014.26	101.24
21	272.000	273.000	8.000	7.000	RHS	1299.01	135.74
22	276.000	277.000	4.000	3.000	RHS	905.97	120.78
23	277.000	278.000	3.000	2.000	RHS	1120.79	130.62
24	278.000	279.000	2.000	1.000	RHS	979.97	206.12
25	283.000	284.000	417.000	418.000	RHS	930.38	124.67
26	284.000	285.000	418.000	419.000	RHS	746.91	114.34

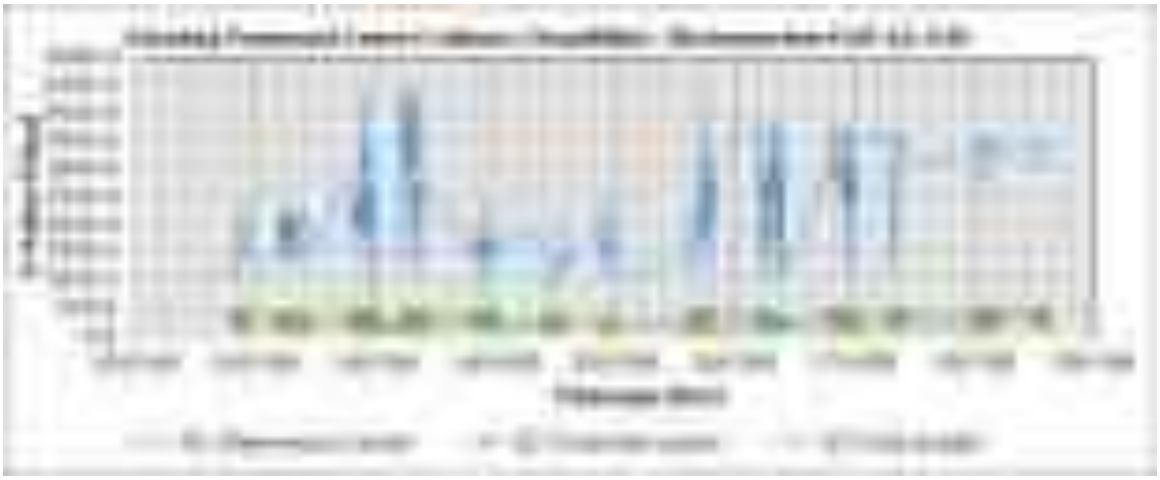


Figure 8-4: Existing Pavement Layers E Value on LHS

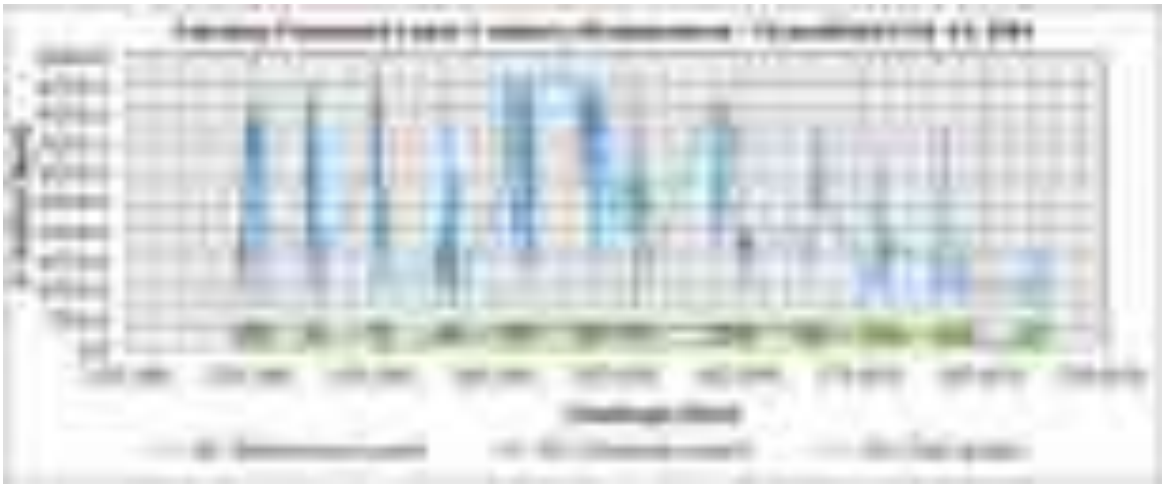


Figure 8-5: Existing Pavement Layers E Value on RHS

Remaining Life Estimation

The in-service three-layer pavement system has been analysed with the back-calculated corrected layer moduli and layer thicknesses. The critical strains have been calculated by IITPAVE program. From the performance criteria equations, the residual/remaining rutting and fatigue life have been estimated.

Performance Criteria

The layer moduli of in-service pavement back calculated from FWD deflection data are used to analyses the pavement for critical strains which are indicators of pavement performance in terms of rutting and fatigue cracking. The approach proposed for design of bituminous overlays for existing flexible pavements is the mechanistic criteria (fatigue and rutting) adopted in the Indian Roads Congress guidelines (IRC:37-2012) for design of flexible pavements which forms the basis for the overlay design method. Performance models adopted in these guidelines are given below.

a) Fatigue in Bituminous layer:

As it specified in IRC: 37-2012, the fatigue model for 80 percent reliability was used (because, the road was designed and constructed with 80% reliability) as below -

$$N_f = 0.711 * 10^{-04} \times [1/\varepsilon_t]^{3.89} * [1/M_R]^{0.854}$$

Where,

N_f = fatigue life in standard axle load repetitions; ,

ε_t = Maximum Tensile strain at the bottom of the bituminous layer;

M_R = resilient modulus of the bituminous layer, MPa

b) Rutting in Subgrade:

$$N = 1.41 \times 10^{-08} [1/\varepsilon_v]^{4.5337}$$

Where,

N = Number of cumulative standard axle load repetitions, and

ε_v = Maximum Vertical strain in the subgrade

The detailed analysis was presented in Annexure 8.2, and the obtained remaining life for both directions are presented in Figure 8-6 & Figure 8-7 and summary of it presented in Table 8-10 and Table 8-11

Table 8-10: Obtained Remaining Life of Pavement (MSA)on LHS

#	Existing Chainage		CA Chainage		Fatigue Residual Life
	From	To	From	To	
1	218.000	219.000	61.900	61.000	58.10
2	222.000	223.000	58.000	57.000	46.32
3	223.000	224.000	57.000	56.000	43.86
4	228.000	229.000	52.000	51.000	71.20
5	229.000	230.000	51.000	50.000	46.41
6	232.000	233.000	48.000	47.000	55.85
7	233.000	234.000	47.000	46.000	72.03
8	238.000	239.000	42.000	41.000	114.01
9	239.000	240.000	41.000	40.000	93.47
10	244.000	245.000	36.000	35.000	50.71
11	245.000	246.000	35.000	34.000	77.01
12	249.000	250.000	31.000	30.000	66.78
13	256.000	257.000	24.000	23.000	154.70
14	257.000	258.000	23.000	22.000	136.55
15	262.000	263.000	18.000	17.000	92.13
16	263.000	264.000	17.000	16.000	48.27
17	268.000	269.000	12.000	11.000	50.56
18	269.000	270.000	11.000	10.000	67.21
19	273.000	274.000	7.000	6.000	97.25
20	280.000	281.000	414.000	415.000	50.87
21	281.000	282.000	415.000	416.000	85.13
22	285.000	286.000	419.000	419.850	98.89

Table 8-11: Obtained Remaining Life of Pavement (MSA) on RHS

#	Existing Chainage		CA Chainage		Fatigue Residual Life
	From	To	From	To	
1	219.000	220.000	61.000	60.000	51.10
2	220.000	221.000	60.000	59.000	64.27
3	224.000	225.000	56.000	55.000	59.87
4	225.000	226.000	55.000	54.000	47.67
5	230.000	231.000	50.000	49.000	76.19
6	235.000	236.000	45.000	44.000	77.53

#	Existing Chainage		CA Chainage		Fatigue Residual Life
	From	To	From	To	
7	236.000	237.000	44.000	43.000	89.11
8	241.000	242.000	39.000	38.000	112.39
9	242.000	243.000	38.000	37.000	55.12
10	247.000	248.000	33.000	32.000	152.33
11	248.000	249.000	32.000	31.000	126.99
12	250.000	251.000	30.000	29.000	122.64
13	251.000	252.000	29.000	28.000	133.28
14	252.000	253.000	28.000	27.000	80.63
15	258.000	259.000	22.000	21.000	110.83
16	260.000	261.000	20.000	19.000	42.44
17	265.000	266.000	15.000	14.000	56.03
18	266.000	267.000	14.000	13.000	104.67
19	270.000	271.000	10.000	9.000	170.38
20	271.000	272.000	9.000	8.000	60.03
21	272.000	273.000	8.000	7.000	131.74
22	276.000	277.000	4.000	3.000	65.90
23	277.000	278.000	3.000	2.000	98.01
24	278.000	279.000	2.000	1.000	159.80
25	283.000	284.000	417.000	418.000	68.56
26	284.000	285.000	418.000	419.000	43.51

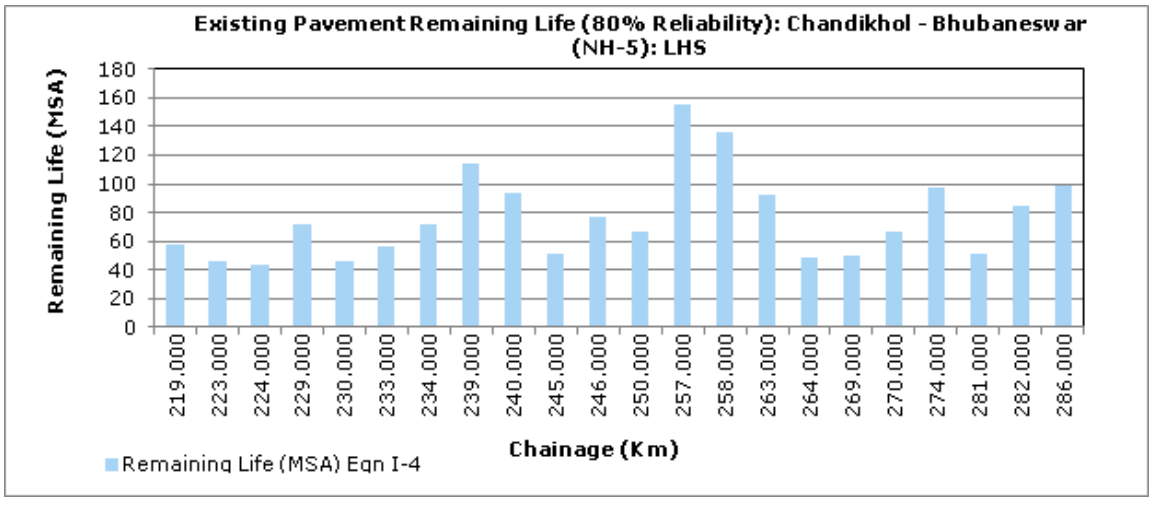


Figure 8-6: Remaining life of existing pavement on LHS

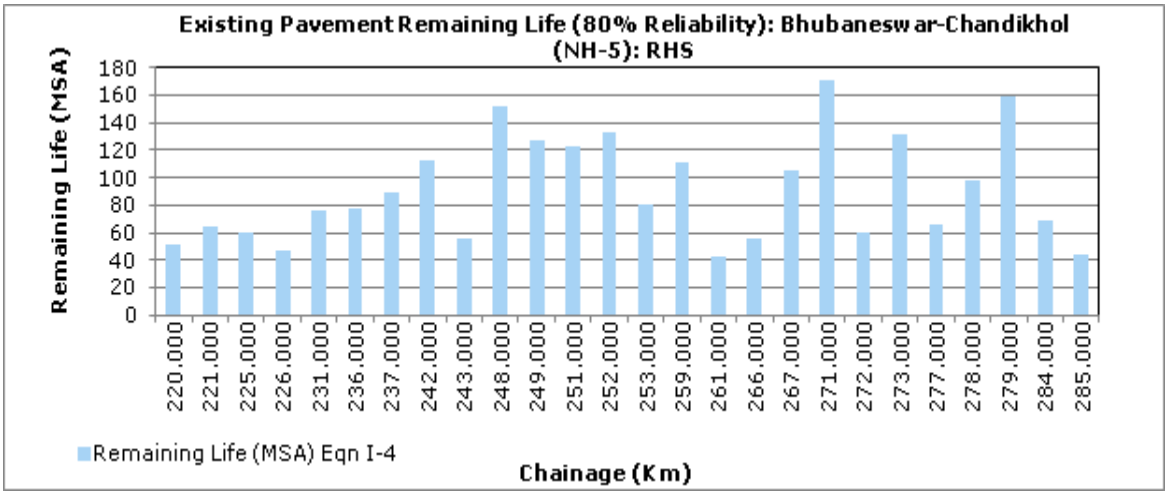


Figure 8-7: Remaining life of existing pavement on RHS

Observations and Conclusions:

The obtained remaining life of pavement based on both options are as given below:-

Direction	Remaining Life (MSA)		
	Minimum	Maximum	Average
Chandikhol - Bhubaneswar direction (LHS)	14	50	**25**
Bhubaneswar - Chandikhol direction (RHS)	14	55	**29**

8.3 Functional Evaluation of Pavement

(Using 5th Wheel Bump Integrator)

It is an accepted principle that all pavement surfaces should be as even as possible so that ride is comfortable, fatigue free and safe to users as well as stresses in both pavement structure & vehicles are minimum. The quality of construction & maintenance of a road is reflected in the riding quality. Vehicle speed, road safety & VOC (vehicle operating costs) are function of road roughness. A periodic measurement of roughness is, therefore, of vital importance to a highway engineer.

The discomforts & disturbances to which road users are subjected are influenced to some extent by the vehicle characteristics, but are essentially a function of road surface irregularity & hence it is necessary to evaluate the same for necessary action & correction. A careful consideration during initial construction & subsequent maintenance is mandatory.

8.3.1 Speed

As per IRC:SP:16 - 2004, a standard speed of 32± 1km/hr. has an important meaning in roughness measurements. The road roughness is affected by the vehicle speed. A bump gets magnified if the vehicle speed is not maintained. A standard pneumatic tyre wheel inflated to a tyre pressure of 2.1 kg/sqcm is mounted within the trailer chassis. The distance travelled is measured by a distance measuring unit. The test is conducted at a speed of 32±1 km/hr. Unevenness/roughness Index is defined as the ratio of the cumulative vertical displacement to the distance travelled and is expressed in mm/km.

8.3.2 Calibration and Roughness Survey Methodology

The Bump Integrator Equipment used for this study is calibrated at Central Road Research Institute, New Delhi.

For measurement of roughness, one round on each lane of each direction was recommended on the outer wheel path.

8.3.3 Recommended Standard for Roughness Values

The bump integrator gives BI values for different surfaces. Maximum permissible values, BI in mm/km as per IRC-SP: 16-2004 guidelines, are given in the table herein. Condition of the road surface is categorized in three groups, 'good', average & 'poor' based on BI values.

Good category indicates newly constructed surfaces with respect to roughness values. Values under 'Average' & 'Poor' correspond to level of service & intervention level for maintenance. Surfaces with very low roughness values lose skid resistance & are dangerous as regards safety.

Table 8-12: Maximum Permissible Roughness Values (BI) (mm/km)

#	Type of Surface	Condition of Road Surface		
		Good	Average	Poor
1.	Bituminous Concrete	< 2000	2000 – 3000	> 3000

8.3.4 Overall Observations

Accuracy of Bump Integrator was checked by calibrating it with ARUR-IU (mm/Km) at Central Road Research Institute (CRRI), New Delhi.

UI=1.346 (BI) + 537.6
R^2 (Regression Coefficient) = 0.996

Where

UI Calibrated Roughness – mm/Km
BI Observed roughness with ARUR (STECO-CMBI-26) mm/Km

Axle mounted Bump Integrator was used on site to get BI values for every 100 m.

The survey was carried out along the wheel path. Average of readings represents BI for that particular kilometer. The speed must be maintained at 32±1km/hr.

Roughness survey is done to obtain the following:

- Degree of surface finish or the riding quality of the road can be assessed,
- Surface irregularities of highways can be immediately attended for rectification,
- Classifying pavement surfaces for serviceability of the pavement and stage for repair or up gradation,
- Evaluates the performance of the Specifications adopted for roads and the developments of unevenness of the pavement with age and under traffic.

Figure 8-8: Photographs of Roughness Survey Under Progress

8.3.5 Results and Discussions

Bump integrator readings are converted into Uneven Index (UI) values and summarized in Table 8-13 & Table 8-14 below. The detailed calculations are presented in Annexure 8.3. Survey was conducted on along the project road, and the results are also shown in graphical representation in Figure 8-9 and **Error! Reference source not found.** for both LHS and RHS directions respectively

Table 8-13: Summary of Road Surface Roughness on LHS

Existing Chainage, Km		CA Chainage, Km		Roughness Index (mm/Km) - LHS		
From	To	From	To	Inner Lane	Middle Lane	Outer Lane
218+000	219+000	61.900	61.000	1503	1982	1815
219+000	220+000	61.000	60.000	1578	1494	1616
220+000	221+000	60.000	59.000	1419	1259	1269
221+000	222+000	59.000	58.000	1441	1378	1284
222+000	223+000	58.000	57.000	1541	1400	1541
223+000	224+000	57.000	56.000	1456	1351	1304
224+000	225+000	56.000	55.000	1680	1389	1305
225+000	226+000	55.000	54.000	1534	1326	1420
226+000	227+000	54.000	53.000	1803	1391	1316

Existing Chainage, Km		CA Chainage, Km		Roughness Index (mm/Km) - LHS		
From	To	From	To	Inner Lane	Middle Lane	Outer Lane
227+000	228+000	53.000	52.000	1700	1475	1306
228+000	229+000	52.000	51.000	1389	1441	1253
229+000	230+000	51.000	50.000	1372	1559	1363
230+000	231+000	50.000	49.000	1493	1524	1389
231+000	232+000	49.000	48.000	1175	1353	1353
232+000	233+000	48.000	47.000	1531	1381	1278
233+000	234+000	47.000	46.000	1430	1503	1368
234+000	235+000	46.000	45.000	1482	1451	1305
235+000	236+000	45.000	44.000	1278	1334	1353
236+000	237+000	44.000	43.000	1327	1210	1339
237+000	238+000	43.000	42.000	1702	1269	1292
238+000	239+000	42.000	41.000	1327	1409	1374
239+000	240+000	41.000	40.000	1784	1269	1363
240+000	241+000	40.000	39.000	1212	1337	1326
241+000	242+000	39.000	38.000	1316	1543	1516
242+000	243+000	38.000	37.000	1249	1262	1369
243+000	244+000	37.000	36.000	1305	1461	1420
244+000	245+000	36.000	35.000	1222	1625	1344
245+000	246+000	35.000	34.000	1222	1441	1378
246+000	247+000	34.000	33.000	1466	1634	1400
247+000	248+000	33.000	32.000	1243	1472	1472
248+000	249+000	32.000	31.000	1961	2315	1524
249+000	250+000	31.000	30.000	2150	2084	2122
250+000	251+000	30.000	29.000	2253	2112	1667
251+000	252+000	29.000	28.000	1618	1826	1482
252+000	253+000	28.000	27.000	1691	2093	1559
253+000	254+000	27.000	26.000		Bridge	
254+000	255+000	26.000	25.000			
255+000	256+000	25.000	24.000	2159	2331	1800
256+000	257+000	24.000	23.000	1662	1981	1728
257+000	258+000	23.000	22.000	2112	2150	2271
258+000	259+000	22.000	21.000	2412	2112	2112
259+000	260+000	21.000	20.000		Bridge	
260+000	261+000	20.000	19.000	1915	2150	1990
261+000	262+000	19.000	18.000	2242	**2596**	2076
262+000	263+000	18.000	17.000	1901	1983	1620

Existing Chainage, Km		CA Chainage, Km		Roughness Index (mm/Km) - LHS		
From	To	From	To	Inner Lane	Middle Lane	Outer Lane
263+000	264+000	17.000	16.000	1527	1761	1480
264+000	265+000	16.000	15.000	1609	1796	1374
265+000	266+000	15.000	14.000	1541	1578	2262
266+000	267+000	14.000	13.000	1475	1681	1709
267+000	268+000	13.000	12.000	1732	1909	2149
268+000	269+000	12.000	11.000	1747	1981	1981
269+000	270+000	11.000	10.000	1906	1859	2253
270+000	271+000	10.000	9.000	1691	1866	2300
271+000	272+000	9.000	8.000	1503	1709	1438
272+000	273+000	8.000	7.000	1728	1681	1934
273+000	274+000	7.000	6.000	1940	1836	1909
274+000	275+000	6.000	5.000	2373	2119	1516
275+000	276+000	5.000	4.000	2089	2206	**2674**
276+000	277+000	4.000	3.000	2221	2128	1972
277+000	278+000	3.000	2.000	1840	2009	2103
278+000	279+000	2.000	1.000	1691	2190	2044
279+000	280+000	1.000	414.000	1756	1897	1962
280+000	281+000	414.000	415.000	1700	1747	1691
281+000	282+000	415.000	416.000	1700	1653	1428
282+000	283+000	416.000	417.000	1953	2159	1915
283+000	284+000	417.000	418.000	1681	1812	2122
284+000	285+000	418.000	419.000	1850	1634	1869
285+000	286+850	419.000	419.850	1466	1512	1559

Table 8-14: Summary of Road Surface Roughness on RHS

Existing Chainage, Km		CA Chainage, Km		Roughness Index (mm/Km) - LHS		
From	To	From	To	Inner Lane	Middle Lane	Outer Lane
285+850	285+000	419.850	419.000	1840	1925	1775
285+000	284+000	419.000	418.000	1728	1719	1915
284+000	283+000	418.000	417.000	1569	1850	2140
283+000	282+000	417.000	416.000	1906	1990	2112
282+000	281+000	416.000	415.000	1681	1634	1409
281+000	280+000	415.000	414.000	1803	1850	1878
280+000	279+000	414.000	1.000	1737	1672	2037
279+000	278+000	1.000	2.000	1638	1836	2128
278+000	277+000	2.000	3.000	2028	2075	2000

Existing Chainage, Km		CA Chainage, Km		Roughness Index (mm/Km) - LHS		
From	To	From	To	Inner Lane	Middle Lane	Outer Lane
277+000	276+000	3.000	4.000	2284	2440	2190
276+000	275+000	4.000	5.000	2089	2370	2323
275+000	274+000	5.000	6.000	2413	2494	2132
274+000	273+000	6.000	7.000	1805	2086	1930
273+000	272+000	7.000	8.000	1531	2234	2028
272+000	271+000	8.000	9.000	1709	1953	1428
271+000	270+000	9.000	10.000	1866	2182	2182
270+000	269+000	10.000	11.000	1850	1981	2168
269+000	268+000	11.000	12.000	1662	1831	1972
268+000	267+000	12.000	13.000	1524	1826	2034
267+000	266+000	13.000	14.000	1550	1662	1691
266+000	265+000	14.000	15.000	1700	2056	2253
265+000	264+000	15.000	16.000	1550	1761	1562
264+000	263+000	16.000	17.000	1445	1702	1597
263+000	262+000	17.000	18.000	1363	1749	1655
262+000	261+000	18.000	19.000	1638	2003	1920
261+000	260+000	19.000	20.000	1990	**2581**	2000
260+000	259+000	20.000	21.000		Bridge	
259+000	258+000	21.000	22.000	2103	2318	2150
258+000	257+000	22.000	23.000	2047	1569	2206
257+000	256+000	23.000	24.000	1381	2281	1653
256+000	255+000	24.000	25.000	2237	1940	2034
255+000	254+000	25.000	26.000		Bridge	
254+000	253+000	26.000	27.000	2440	1691	**2534**
253+000	252+000	27.000	28.000	1541	1569	1784
252+000	251+000	28.000	29.000	1607	1701	1638
251+000	250+000	29.000	30.000	2159	2112	2253
250+000	249+000	30.000	31.000	2103	2018	2187
249+000	248+000	31.000	32.000	2180	1784	1836
248+000	247+000	32.000	33.000	1139	1441	1378
247+000	246+000	33.000	34.000	1297	1353	1250
246+000	245+000	34.000	35.000	1409	1284	1175
245+000	244+000	35.000	36.000	1231	1316	1288
244+000	243+000	36.000	37.000	1191	1295	1232
243+000	242+000	37.000	38.000	1128	1302	1289
242+000	241+000	38.000	39.000	1356	1342	1717

Existing Chainage, Km		CA Chainage, Km		Roughness Index (mm/Km) - LHS		
From	To	From	To	Inner Lane	Middle Lane	Outer Lane
241+000	240+000	39.000	40.000	1160	1337	1212
240+000	239+000	40.000	41.000	1316	1316	1269
239+000	238+000	41.000	42.000	1281	1245	1187
238+000	237+000	42.000	43.000	1456	1433	1480
237+000	236+000	43.000	44.000	1257	1269	1175
236+000	235+000	44.000	45.000	1325	1297	1250
235+000	234+000	45.000	46.000	1316	1368	1170
234+000	233+000	46.000	47.000	1316	1441	1107
233+000	232+000	47.000	48.000	1400	1438	1334
232+000	231+000	48.000	49.000	1110	1025	1119
231+000	230+000	49.000	50.000	1305	1368	1430
230+000	229+000	50.000	51.000	1288	1344	1138
229+000	228+000	51.000	52.000	1368	1378	1503
228+000	227+000	52.000	53.000	1363	1400	1128
227+000	226+000	53.000	54.000	1203	1372	1344
226+000	225+000	54.000	55.000	1274	1368	1264
225+000	224+000	55.000	56.000	1847	1524	1711
224+000	223+000	56.000	57.000	1597	1374	1597
223+000	222+000	57.000	58.000	1166	1110	1156
222+000	221+000	58.000	59.000	1170	1378	1170
221+000	220+000	59.000	60.000	1297	1391	1269
220+000	219+000	60.000	61.000	1288	1259	1297
219+000	218+000	61.000	61.900	1326	1586	1857

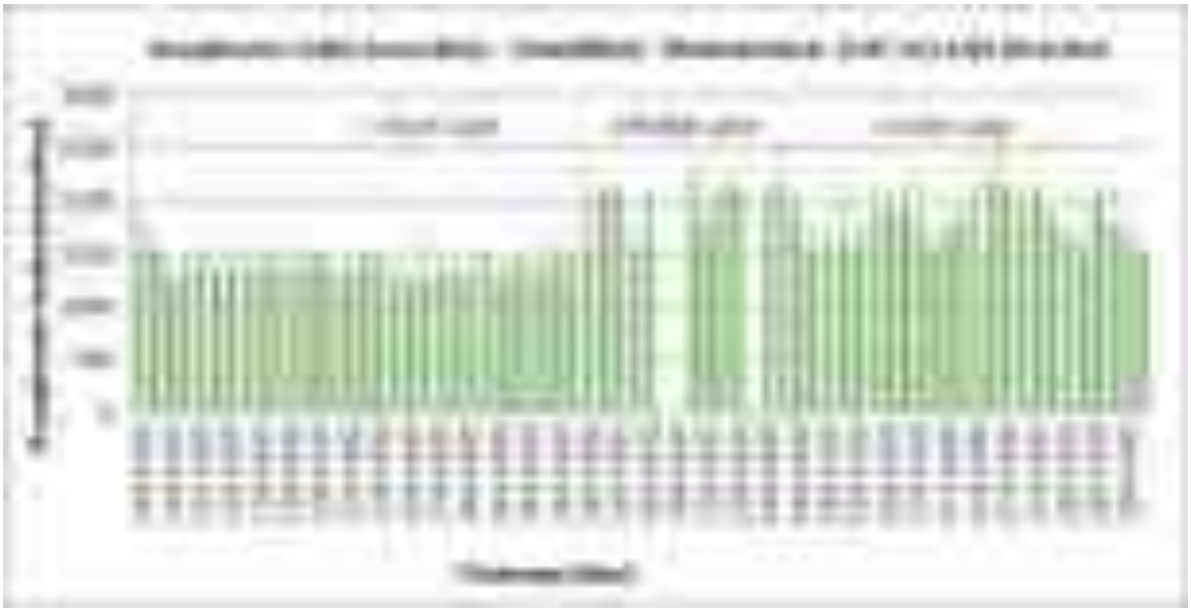


Figure 8-9: Illustrative Summary of Road Surface Roughness on LHS

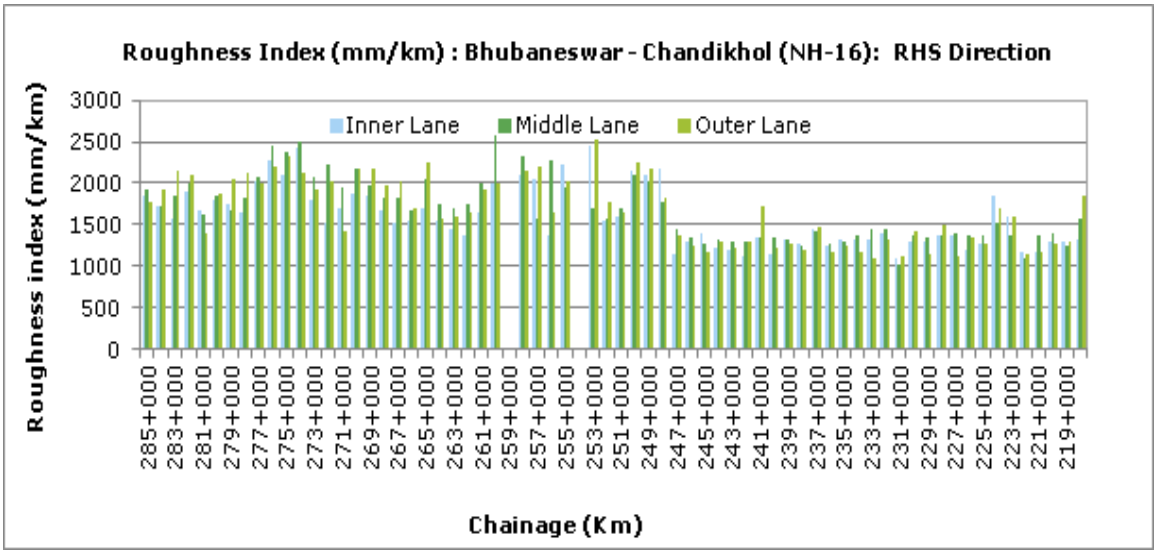


Figure 8-10: Illustrative Summary of Road Surface Roughness on RHS

Observations

- The test results are well within the limit specified in IRC: SP: 16-2004 and Schedule-K of CA (2500mm/km) except at the following very few locations which are tabulated in Table 8-15
- It is recommended to carry out milling at the locations listed in Table 8-15 to remove 30 mm thickness of top layer and to provide a renewal layer of 30mm BC to match the existing FRL

Table 8-15: Locations exceeding Roughness values of 3000 mm/km

#	Existing Chainage (Km)	CA Chainage (Km)	Side	Lane	Recommended renewal layer

	From	To	From	To	Inner	Outer	after milling (mm)
1	261	262	19	18	LHS	Middle Lane	Milling and in-lay of 30mm BC
2	275	276	5	4	LHS	Outer Lane	
3	253	254	27	26	RHS	Outer Lane	
4	260	261	20	19	RHS	Middle Lane	

9. PAVEMENT DESIGN

9.1 Review of provisions of Concession Agreement

This chapter deals with the CA provisions pertaining to pavement design.

Clause 2.2 of Schedule-B dictates that "Six-Laning shall be undertaken and completed by the Concessionaire in conformity with the Specifications and Standards set forth in Annex-I of Schedule-D.

In section 4.4 of Schedule-D, the following specifications are related to pavement design

- Unless otherwise specified in schedule-B, the concessionaire may adopt any type (flexible/ rigid) pavement structure for new construction. However, as it specified in TCS, flexible pavement is recommended for main carriageway in widening area
- In section 4.4.2 of schedule-D, the design life is recommended as "design life of 20 years for the concession period of 15 years and above"
- In section 4.4.3, it is recommended to design the new flexible pavement with IRC:37, Overlay with IRC:81 and rigid pavement with IRC:58.

9.1.1 Pavement Performance Indicators and Requirements:

i. The pavement performance and structural capacity shall be measured in terms of objective measurable performance and strength indicators, i.e., roughness, cracking and deflection.

ii. The new or strengthened flexible pavement surface on completion shall satisfy the following standards:

- Roughness in each lane measured by Bump Integrator (BI) - Not more than 2000 mm/km for each lane in km length
- Rutting in wheel path measured by 3m Straight Edge - No Rutting
- Cracking - No Cracking
- Deflection to be determined as per IRC: 81 - Not more than 0.5 mm characteristic deflection
- Other distresses - Nil

iii. The new or strengthened rigid pavement surface on completion shall satisfy the following standards:

- Roughness in each lane measured by Bump Integrator (BI) - Not more than 2000 mm/km for each lane in km length
- Cracking - No Cracking other than shrinkage cracks
- Other distresses such as scaling, ravelling, spalling at edges – Nil

9.1.2 Review of Tests Conducted during PCOD:

- IE conducted roughness survey on the project road in the period 23rd to 26th June 2016. As per the test results roughness was found to be less than 2000 mm/km.
- As per Schedule-D, BBD survey haa to be carried out and the Characteristic Deflection has to be less than 0.5mm. ***However, BBD Test reports for the BBD carried out at the time of PCOD have not been made available by Concessionaire for our review.***

9.1.3 Salient Points of Schedule K (Operation and Maintenance)

During Operations period, all the road works and pavements contained in the projects Facilities (including those in the ancillary facilities) shall be maintained to traffic worthy Condition as stated in Annexure-I of Schedule-K (Repairing/Rectification of Defects and Deficiencies) through the various maintenance activities listed in Schedule-K and is presented in Table 9-1 below.

Table 9-1: Repair/ Rectification of Defects and Deficiencies

#	Nature of Defect or deficiency	Time limit for repair/ rectification
1.	Roughness value exceeding 2,500mm in a stretch of 1 km (as measured by a standard roughometer/bump integrator)	180 days
2.	Pot holes	48 hours
3.	Cracking more than 5% of road surface in a stretch of 1km	30 days
4.	Rutting exceeding 10mm in more than 2% of road surface in a stretch of 1km (measured with 3m straight edge)	30 days
5.	Bleeding/ Skidding	7 days
6.	Raveling/ Stripping of bituminous surface exceeding 10 sq m	15 days
7.	Damage to pavement edges exceeding 10 cm	15 days

9.1.3.1 Pavement Distress & Repairing Techniques during O&M Period

Most likely distresses accrue in flexible pavement was described with severity index, and also repairing measures are given. The same is conforming to IRC: 82-2015 recommendations. The details of distress and its repairing measures are discussed below;

(a) Cracking

Cracking of bituminous pavements shall include all types of cracks such as hairline, alligator, longitudinal, transverse, shrinkage, reflective and edge cracking linear and slippage etc. The minimum requirement and criteria for crack sealing shall be as under.

- If the width of the cracks is less than 3 mm and is causing settlement of Pavement of up to 10 mm in depth and exceeding an area of more than 1 Sqm at any place then such cracking shall be sealed by fog sealing in accordance with the MORTH & H specification 2004-3.
- If the width of the cracks is more than 3 mm and is causing settlement of the pavement up to 10 mm and the area of cracked surface exceeds 0.5 sqm at any place then such cracked surface shall be repaired by slurry sealing in accordance with MORTH &H Specification 516.
- If the cracked portion has settled more than 10 mm and its area exceeds 0.5 sqm such areas shall be repaired by patching as per MOST Specifications. In case of alligator cracks, the permanent repair by full depth patching shall be carried out. The slippage crack shall be repair by removing the affected bituminous layer and replacing it with surface patch in edge cracking. In edge cracking, if shoulders are not providing adequate lateral support. The shoulder shall be reconstructed with good quality material.

(b) Rutting

If the depth of rut exceeds 10 mm with a length of 10 m at a place in the wheel track on pavement surface, the same shall be repaired by full depth patching.

(c) Corrugations and Shoving

If corrugations and shoving in the pavement area exceeds 1 sq. m at a place and depth/height of corrugation/shoving exceeds 10mm the same shall be treated by full depth patching.

(d) Settlement of Grade Depressions

If the settlement and grade depressions exceed 1 sq m in area and their depth is within 10mm such defects shall be treated by skin\full depth patching

(e) Upheaval or swell

If upheaval or swell exceeds 0.5 sq m in area and its height is more than 10 mm such defects shall be treated.

(f) Raveling

If the ravelling of bituminous pavement exceeds 1 sq m in area, slurry seal treatment shall be applied in accordance with the MOST Specifications.

(g) Pot holes

If the bowl shaped pot hole in the pavement exceeds 0.5 sqm in area and 10 mm in depth irrespective of the numbers on the pavement shall be repaired by patching\pothole filling in accordance with MOST Specifications 3004-1.

(h) Skid Hazards

Skid hazards irrespective of size shall be corrected by improving the surface drainage and skid resistance including cleaning the surface of contamination. Surface treats or milling or resurfacing.

(i) Bleeding or Flushing

Bleeding or flushing of the pavement irrespective of the area shall be repaired by application of hot sand.

(j) Longitudinal/ Transverse streaking

If the longitudinal and transverse streaking appears on the pavement surface in area exceeding 5 sq. m, the same shall be treated by application of new surface treatment or by a second treatment over the streak surface.

If any defects other than those mentioned above occur on the pavement of the project highway, the same shall be rectified/corrected by the concessionaire as per directions laid out in IRC: 82-1982/ IRC: 82-2015 or based on sound engineering practice.

9.2 Review of Pavement Design Report

Pavement design report has been shared by Concessionaire.

9.2.1 Design Life of Pavements

As per Clause 5.3.5 of Pavement Design Report. design life has been adopted as follows-

For New Flexible Pavement:	20 Years
For Overlay Design:	20 Years

9.2.2 Annual Average Daily Traffic (AADT)

As it specified in clause 5.3.4.1 of pavement design report, the project road is divided in to 4 homogeneous sections, and traffic surveys are carried out accordingly.

The detailed traffic survey for the project road were conducted in January 2014.The project road is sub-divided into four traffic homogeneous links on the basis of traffic generation and dispersal nodes located along the project road. The traffic homogeneous links are as below:

Section-I: Baramunda to RasulgarhChowk(Km 414 to km 3)
Section-II: Rasulgarh Chowk to Jagatpur Chowk (Km 3 to Km 22)
Section-III: Jagatpur Chowk to Manguli Chowk (Km 22 to Km 32)
Section-IV: Manguli Chowk to Chandikhole (Km 32 to Km 62)
The considered data is specified in section 5.3.4.1 of pavement design report is presented in Table 9-2 below.

Table 9-2: Annual Average Daily Traffic (AADT) in year 2014

Count Location	Carriage -way	Traffic Link		Representing section			Commercial Vehicle				
		From	To	From (Km)	To (Km)	Length (Kms)	Standard Bus	LCV	2-Axle Truck	3-Axle Truck	Multi-Axle Truck
Km 2	Left	Baramu-nda	Rasulga-rh Chowk	414	3	8	1246	1503	1550	1972	831
	Right						954	1579	1208	1838	537
Km 13	Left	Rasulga-rh Chowk	Jagatpu-r Chowk	3	22	19	1099	603	1326	1429	336
	Right						829	419	1304	1475	318
Km 28	Left	Jagatpu-r Chowk	Manguli Chowk	22	32	8	793	394	1310	1449	476
	Right						1034	589	1007	1349	370
Km 39	Left	Manguli chowk	Chandik-ole	32	62	30	551	592	518	1331	484
	Right						575	615	496	1288	461

9.2.3 Design Sub-grade CBR

In section 5.3.3 of pavement design report, it is stated that subgrade CBR value equal to 10% has been considered for design purpose.

9.2.4 Vehicle Damage Factor

Table 9-3: VDF values considered in Pavement Design Report

Vehicle Code	Description	Location-Km 19+200		Location-Km 35+640	
		Bhubaneswar-Chandikole Direction	Chandikole-Bhubaneswar Direction	Bhubaneswar-Chandikole Direction	Chandikole-Bhubaneswar Direction
1	LCV	0.37	0.18	0.21	0.46
2	2-Axle Truck	1.60	3.59	1.76	4.60
2B	BUS	1.00	2.64	0.83	0.83
3T/3	3-Axle Truck	2.84	3.60	2.77	3.56
4T/5T/6T	Multi Axle Truck	4.84	5.92	5.21	6.08

9.2.5 Traffic Growth Rates

As it specified in section 5.3.4.2 of pavement design report, growth rate of 5.0% was considered for analysis.

9.2.6 Design Traffic (MSA)

In section 5.3.4.6 of Pavement Design Report, design consultants summarized the calculated design traffic for the next 24 years (i.eup to 2037), and the same is listed in Table 9-4 below;

Table 9-4: Recommended Design Traffic for Pavement Design

Design Period	Design Lane MSA							
	Traffic Homogeneous link; Baramunda-Rasulgarh Km 414 to Km 3		Traffic Homogeneous link;Jagatpur-Manguli Km 22 to Km 32		Traffic Homogeneous link; Manguli-Chandikole Km 22 to Km 32		Traffic Homogeneous link; Manguli-Chandikole Km 32 to Km 62	
	Left	**Right**	**Left**	**Right**	**Left**	**Right**	**Left**	**Right**
5th Year (2018)	17	20	11	17	11	16	9	13
10th Year (2023)	38	47	25	39	26	37	21	29
15th Year (2028)	66	80	43	67	45	64	36	49
20th Year (2033)	101	123	66	102	68	98	56	76
Transfer Year (2037)	136	165	89	138	92	132	75	102

9.2.7 Provided Pavement crust details

New Flexible Pavement

Section 5.3.6 of Pavement Design report provides recommended pavement crust thicknesses. The thickness values so specified are given in Table 9-5 below;

Table 9-5: Designed Layer Thickness for New Pavement

Section				Thickness(mm) as per IRC:37-2001				
				Designation of the Pavement Layer				
From (Km)	To (Km)	**Design Lane Traffic Loading**	**4-days soaked CBR of Subgrade (%)**	Bituminous Concrete (BC)	Dense Bituminous Macadam (DBM)	Wet Mix Macadam (WMM)	Granular Sub-base (GSB)	Select Sub-grade (10% CBR, 4-days soaked@97%MDD)
Left Carriageway								
414	3	100	10	50	130	250	200	500
3	22	65	10	50	110	250	200	500
22	32	70	10	50	115	250	200	500
32	62	55	10	50	105	250	200	500
Left Carriageway								
414	3	100	10	50	130	250	200	500
3	22	100	10	50	130	250	200	500
22	32	100	10	50	130	250	200	500
32	62	75	10	50	115	250	200	500

Design Overlay thickness

Section 5.4.1 of Pavement Design report provides recommended pavement crust thicknesses for Overlay. The thickness values so specified are given in Table 9-6 below;

Table 9-6: Design Overlay thickness on Existing Flexible Pavement

#	Chainage		Length	BBD Deflection			Design MSA	Required BM Thickness (mm)	Equivalent thickness of BC/DBM (mm)	Adopted Overlay Thickness (mm)	
	From (Km)	To (Km)		Average	Standard Deviation	Characteristics Deflection (mm)				BC	DBM
Bhubaneswar-Jagatpur-Chandikhole Direction											
1	414.000	419.000	5.000	0.61	0.13	0.87	100	125	88	50	38
2	0.000	3.000	3.000	0.57	0.08	0.73	100	101	71	50	21
3	3.000	4.000	1.000	0.52	0.05	0.62	65	0	0	50	0
4	4.000	6.400	2.400	0.58	0.15	0.88	65	91	64	50	14
5	6.400	14.700	8.300	0.53	0.12	0.77	65	73	51	50	0
6	14.700	17.900	3.200	0.53	0.11	0.75	65	68	48	50	0
7	17.900	22.000	4.100	0.58	0.13	0.84	65	86	60	50	10
8	22.000	27.400	5.400	0.64	0.09	0.82	70	87	61	50	11
9	27.400	30.000	2.600	0.50	0.13	0.76	70	73	51	50	0
10	30.000	32.000	2.000	0.54	0.07	0.68	70	53	37	50	0
11	32.000	40.300	8.300	0.53	0.08	0.69	55	27	19	50	0
12	40.300	43.800	3.500	0.53	0.08	0.69	55	27	19	50	0
13	43.800	62.000	18.200	0.47	0.10	0.67	55	27	19	50	0
Chandikhole -Jagatpur- Bhubaneswar Direction											
1	414.000	419.000	5.000	0.73	0.15	1.03	100	145	102	50	50
2	0.000	3.000	3.000	0.40	0.07	0.54	100	0	0	50	0
3	3.000	3.600	0.600	0.43	0.06	0.55	100	0	0	50	0
4	3.600	15.200	11.600	0.49	0.12	0.73	100	101	71	50	21
5	15.200	20.000	4.800	0.48	0.11	0.70	100	96	67	50	17
6	20.000	22.000	2.000	0.58	0.17	0.92	100	128	90	50	40
7	22.000	30.000	8.000	0.58	0.17	0.92	100	128	90	50	40
8	30.000	32.000	2.000	0.44	0.07	0.58	100	79	55	50	5
9	32.000	36.100	4.100	0.45	0.05	0.55	75	0	0	50	0
10	36.100	47.700	11.600	0.46	0.07	0.60	75	0	0	50	0
11	47.700	62.000	14.300	0.51	0.07	0.65	75	33	23	50	0

Pavement Composition for Project Facilities

In section 5.8 of Pavement Design report the recommended pavement crust thicknesses for project facilities are given in Table 9-7 below.

Table 9-7: Pavement Composition for Project Facilities

Layer	Parking Area at Rest Areas	Truck lay by	Bus Bay
Interlocked Concrete Blocks (M 40)	80	100	80
Sand Levelling Course	30	30	30
WMM	250	250	250
GSB	200	200	200

Observations

The approved pavement design report and IE correspondence is not available for the constructed four lane highway. However, the available soft copy is treated as final with client's conformation.

- As specified and explained by the design consultants in section 5.3.5 of design report, the pavement was designed for maximum traffic of 100MSA due to the limitation of IRC:81 design charts availability for maximum traffic of 100MSA.
- Due to this, on one section from km 0.000 to km 3.000, on RHS, the obtained design traffic for the next 20 years is exceeding (i.e. 123MSA). However, as the length is very less, the same may be improved during periodic renewal layers by providing higher thickness.
- The pavement was designed with 80% reliability equation by using IRC: 37-2001.
- The design thicknesses are cross verified with the respective codal provisions and are found to be satisfactory for the design traffic.

9.3 Review of Pavement History (From PCOD till date)

Concessionaire has not shared any data about pavement history. So we are not in a position to trace out the strengthening or resurfacing activities done earlier. However, we are aware that IE conducted roughness survey on the project road on 23-26th June 2016, and the obtained test results were less than 2000mm/km.

As per Schedule-D, BBD survey has to be carried out before grant of PCOD and the Ch. Deflection should not be more than 0.5mm. However, Concessionaire has not shared the BBD Test reports.

9.4 Traffic Surveys and Analysis

9.4.1 General

For the preparation of comprehensive pavement analysis report, the required 48 hours of axle load survey was carried out at toll plaza location. These survey results have been used to analyse the present traffic volume and its impact on the existing pavement.

9.4.2 Classified Traffic Volume Count

The average daily traffic of May 2019 is available in data room shared by SJPEL. The same is used as AADT for forecasting of future design traffic. However, in the available data LCV & mini Bus, Bus & trucks (2 axle), 3 Axle & MAV are grouped under one category as per the toll collection policy.

In the data room AADT of FY 2017-18 is available with break-up of all individual vehicles. From that, we obtained % of vehicle class from each group and the same has been applied for the May 2019 data for further analysis.

9.4.3 Average Daily Traffic (AADT)

AADT was obtained from the toll data, and the same is presented in **Table 9-8** below;

Table 9-8: AADT from Toll Data (May, 2019)

Location	LCV/ Mini BUS	BUS	2 Axle	3 Axle	MAV
@ Toll Plaza	956		2669		5072
% of Vehicle as per FY 2017-18 AADT	100%	64%	36%	60%	40%
May'2019 AADT	**956**	**1715**	**954**	**3028**	**2044**

9.4.4 Traffic Growth Rates

In the absence of data, 5.0% growth rate was consider as specified in the pavement design report and also in Schedule-D.

9.4.5 Lane Distribution Factor

The lane distribution factors adopted for the project are as given below:

- 6-lane divided carriageway roads: 60 ercent of the number of commercial vehicles in each direction should be considered for design (as per clause 4.5.1 of IRC: 37-2012).

9.4.6 Vehicle Damage Factor

The axle load surveys were conducted at toll plaza location, the spectrum of axle loads and the numbers of equivalent 8.16 t standard axles for the different categories of commercial vehicles have been determined on the basis of the axle load surveys.

The equations for computing equivalency factor for single, tandem and tridem axles given below is used as directed in the IRC:37-2012 for converting different axle load repetitions into equivalent standard axle load repetitions;

- Single axle with single wheel on either side = {axle load in kN / 65}4
- Single axle with dual wheel on either side = {axle load in kN / 80}4
- Tandem axle with single wheel on either side = {axle load in kN /148}4
- Tridem axle with dual wheel on either side = {axle load in kN /224}4

The Axle load data and VDF analysis was presented in Annexure 9.1. The obtained actual VDF values are listed in Table 9-9 below.

Table 9-9: Summary of Vehicle Damage Factor obtained as actual

S. No	Vehicle Type	Direction	
		From Bhubnaeshwar to Chandikhol	From Chandikhol to Bhubneshwar
1	BUS	1.169	1.294
2	LCV	0.507	0.992
3	2-Axle	2.138	3.470
4	3-Axle	5.096	4.953
5	MAV	9.375	10.797

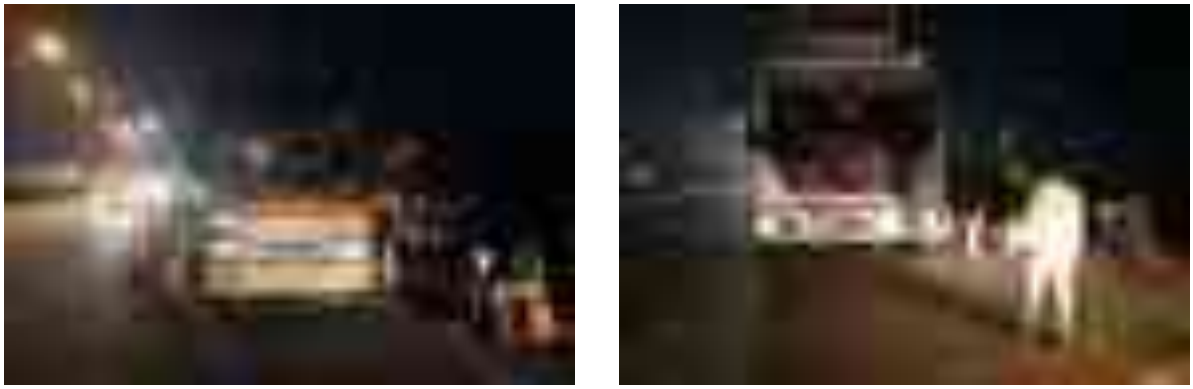


Figure 9-1: Photographs showing Axle load Survey Under Progress

9.4.7 Design Traffic (Cumulative Number of Standard Axles)

The traffic loading in terms of the cumulative number of standard axles for the given period has been computed using the following relationship as given in IRC: 37-2012:

$$N = \frac{365 \times \left\{(1+r)^n - 1\right\}}{r} \times A \times D \times F$$

Where,

N = Cumulative number of standard axles to be catered for the design life in terms of msa.

r = Annual growth rate of commercial vehicles

n = Design life in years

A = Initial traffic in the year of completion of construction in terms of number of commercial vehicles per day exceeding 3 tonnes

D = Lane distribution factor

F = Vehicle Damage Factor

Based on the preceding discussions, the traffic loading in terms of cumulative number of equivalent 8.16 t standard axle loads have been computed till concession period. Design traffic for flexible pavement design is computed and summarized in Table 9-10. The design MSA calculations are furnished in Annexure 3.2

Table 9-10: Design Traffic in Terms of ESALas per Present Study

Design Period	Design Traffic (MSA)	
	From Bhubnaeshwar to Chandikhol	From Chandikhol to Bhubneshwar
10th Year (2023)	19.4	21.6
15th Year (2028)	49.6	55.2
20th Year (2033)	**88.2**	**98.1**
25th Year (2038)	137.3	152.9
30th Year (2043)	200.1	222.8

Design traffic for stage-II (from 2033 to 2043)	**112.0**	**124.6**

9.4.8 Comparison of Traffic (Design Vs Actual)

In this section, the comparison between design traffic considered in design report Vs actual traffic (present traffic) is discussed.

Observations:

- In the design report, traffic projections are made with 5.0% growth till the end of concession period as per Schedule-D, and the same is used in the present analysis.
- The obtained present VDF values are almost twice than the considered VDF values during the design stage.
- Based on the present CVPD and VDF values, the projected design traffic up to 2033 (end of 20 years design life) was found as 88.2 MSA on LHS & 98.1 MSA on RHS respectively. Where, based on the design report analysis, the projected design traffic from 2018 to 2027 is found as 68 MSA on LHS & 98 MSA on RHS at toll plaza location (3rd homogeneous section).
- Due to higher VDF values of present study, the project MSA found to be relatively more comparing to the design stage.

10. MAINTENANCE WORKS

10.1 Immediate Repair/ Rehabilitation Work

10.1.1 Repair/ Rehabilitation based on Visual Condition Survey

Details of visual condition survey are given in Section 8.1 of Chapter 8 above and also the locations needing immediate repair/ rehabilitation are listed in Table 8-3 &

Table 8-4 respectively for LHS and RHS directions.

Types of distresses on the project road were identified. The data was analysed for selection of appropriate repairing/ rehabilitation strategy. Following parameters were considered for the analysis: -

a) Pavement distress & its intensity

b) FWD data

c) Sub-grade soil characteristics like:

- Degree of compaction,
- Dry Density & respective CBR
- Swelling Properties and its limiting values

Based on careful review of the above discussed strength parameters and their inter-relationships with traffic loading considerations, cost-effective and performance-based repairing/ rehabilitation techniques have been proposed in following sections.

10.1.2 Repairing Techniques

The repairing techniques were recommended based on the observed distress intensity. The recommended repairing/ rehabilitation techniques are listed in Table 10-1 & Table 10-2 for LHS & RHS respectively.

Table 10-1: Recommended Repairing/ Rehabilitation Techniques on LHS

#	Existing Chainage (Km)		CA Chainage (Km)		Length (Km)	Effected Width (m)	Remark/ Distress Description	Repairing Proposal
	From	To	From	To				
1	218.000	218.150	61.900	61.750	0.150	3.5	Alligator Cracking up to 10-12% on Inner Lane	Milling and inlay with 30mm BC in the affected area
2	218.500	218.600	61.500	61.400	0.100	3.5	Alligator Cracking up to 10-15% on Middle Lane	
3	218.700	218.800	61.700	61.600	0.100	3.5	Alligator Cracking up to 7-10% on Inner Lane	
4	218.850	218.950	61.150	61.050	0.100	3.5	Alligator Cracking up to 7-10% on Inner Lane	
5	219.200	219.350	60.800	60.650	0.150	3.5	Rutting 10-15mm on Inner Lane	
6	219.450	219.600	60.650	60.500	0.150	7.0	Alligator Cracking up to 7-10% on Inner and Middle Lane	
7	220.500	220.850	59.500	59.150	0.350	7.0	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane and Rutting 10-15mm on Inner Lane	
8	222.700	222.800	57.300	57.200	0.100	3.5	Alligator/Longitudinal Cracking up to 7-10% on Inner lane	
9	223.800	223.900	56.200	56.100	0.100	7.0	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane	
10	224.200	224.400	55.800	55.600	0.200	7.0	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane	
11	226.000	226.200	54.000	53.800	0.200	7.0	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane	
12	226.800	227.000	53.200	53.000	0.200	7.0	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
13	227.200	227.400	52.800	52.600	0.200	7.0	Alligator Cracking up to 7-10% on Inner and Middle Lane	
14	231.050	231.200	48.950	48.800	0.150	7.0	Alligator/Longitudinal Cracking up to 10-15% on Inner and Middle Lane	
15	241.000	241.100	39.000	38.900	0.100	3.5	Alligator/Longitudinal Cracking up to 7-10% on Inner Lane	
16	244.200	244.350	35.800	35.650	0.150	7.0	Alligator Cracking up to 7-10% on Inner and Middle Lane	
17	244.200	244.350	35.800	35.650	0.150	7.0	Raveling Up to 10-15% on Inner and Middle Lane	

#	Existing Chainage (Km)		CA Chainage (Km)		Length (Km)	Effected Width (m)	Remark/ Distress Description	Repairing Proposal
	From	To	From	To				
18	245.050	245.180	34.950	34.820	0.130	7.0	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
19	246.400	246.550	33.600	33.450	0.150	3.5	Rutting 10-15mm on Inner Lane	
20	247.500	247.700	32.500	32.300	0.200	7.0	Alligator Cracking up to 7-10% on Inner and Middle Lane	
21	260.900	261.000	19.100	19.000	0.100	7.0	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
22	264.000	264.200	16.000	15.800	0.200	3.5	Raveling Up to 7-10% on Inner and Middle Lane	
23	274.200	274.225	5.800	5.775	0.025	7.0	De-lamination/ Deboning of Pavement Layers on inner and middle lane	
24	284.400	284.500	418.400	418.500	0.100	7.0	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane	

Table 10-2: Recommended Repairing/ Reha ɔilitation Techniques ɔn RHS

#	Existing Chainage (Km)		CA Chainage (Km)		Length (Km)	Effected Width (m)	Remark/ Distress Description	Repairing Proposal
	From	To	From	To				
1	285.600	285.500	419.600	419.500	0.100	3.5	Alligator Cracking up to 7-10% on Middle Lane	Milling and inlay with 30mm BC in the affected area
2	283.400	283.350	417.400	417.350	0.050	7.0	Alligator/Longitudinal Cracking up to 7-10% on Inner and Middle Lane	
3	282.600	282.500	416.600	416.500	0.100	1.5	Alligator/Longitudinal Cracking up to 7-10% on Inner wheel path of Inner Lane	
4	280.700	280.675	414.700	414.675	0.025	3.5	De-lamination/ Deboning of Pavement Layers on inner and middle lane	
5	272.800	272.700	7.200	7.300	0.100	3.5	Bleeding on Pavement surface on Middle Lane	
6	272.080	272.000	7.920	8.000	0.080	3.5	Alligator/Longitudinal Cracking up to 7-10% on Middle Lane	

#	Existing Chainage (Km)		CA Chainage (Km)		Length (Km)	Effected Width (m)	Remark/ Distress Description	Repairing Proposal
	From	To	From	To				
7	269.150	269.050	10.850	10.950	0.100	7.0	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
8	265.600	265.570	14.600	14.630	0.030	3.5	De-lamination/ Deboning of Pavement Layers on inner and middle lane	
9	265.900	265.850	14.900	14.950	0.050	3.5	Alligator Cracking up to 7-10% on Middle Lane	
10	264.080	264.020	15.920	15.980	0.060	3.5	Bleeding on Pavement surface on Middle Lane	
11	260.900	260.800	19.100	19.200	0.100	7.0	Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
12	260.600	260.400	19.400	19.600	0.200	3.5	Raveling Up to 10-15% on Inner and Middle Lane	
13	258.050	258.000	21.950	22.000	0.050	7.0	Raveling Up to 10-13% on Inner and Middle Lane & Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
14	233.900	233.850	46.100	46.150	0.050	7.0	Bleeding on Pavement surface on Inner and Middle Lane	
15	231.150	231.050	48.850	48.950	0.100	3.5	Alligator Cracking up to 7-10% on Inner Lane	
16	228.850	228.800	51.150	51.200	0.050	3.5	Bleeding on Pavement surface on Inner Lane	
17	224.750	224.650	55.250	55.350	0.100	7.0	Raveling Up to 7-10% on Inner and Middle Lane & Alligator/Longitudinal Cracking up to 10-13% on Inner and Middle Lane	
18	219.000	218.900	61.000	61.100	0.100	3.5	Alligator Cracking up to 7-10% on Inner Lane	
19	218.800	218.600	61.200	61.400	0.200	7.0	Raveling Up to 7-10% on Inner and Middle Lane & Alligator/Longitudinal Cracking up to 10-15% on Inner and Middle Lane	

10.2 Major Maintenance Schedules

10.2.1 Major Maintenance (Structural Overlay)

As discussed in the earlier section, the pavement was designed for full concession period. However, the remaining life of pavement was evaluated by using FWD technique and the same can be seen in Table 8-10 & Table 8-11 of Chapter 8.

In Table 9-10, the projected design traffic from 2019 to 2033 (end of 20 years intial design life) was found as 88.2 MSA & 98.1 MSA on LHS and RHS respectively. The required overlay thickness to sustain the future was calculated for 80 percent reliability equations and have been presented in Table 10-3 & **Error! Reference source not found.** below.

Table 10-3: Overlay Thickness as per FWD Analysis (80% reliability)

#	Existing Chainage (Km)		CA Chainage (Km)		Remaining Life of Pavement 80% reliability	Future Design Traffic, MSA from	Overlay Required	Recommended Overlay (mm)	
	From	To	From	To	(MSA) as on 2019	2019-2033	(	BC	DBM
On LHS									
1	218.000	219.000	61.900	61.000	58.10		Yes	30	-
2	222.000	223.000	58.000	57.000	46.32		Yes	30	-
3	223.000	224.000	57.000	56.000	43.86		Yes	40	-
4	228.000	229.000	52.000	51.000	71.20		Yes	30	-
5	229.000	230.000	51.000	50.000	46.41		Yes	30	-
6	232.000	233.000	48.000	47.000	55.85		Yes	30	-
7	233.000	234.000	47.000	46.000	72.03		Yes	30	-
8	238.000	239.000	42.000	41.000	114.01		No	-	-
9	239.000	240.000	41.000	40.000	93.47		Yes	30	-
10	244.000	245.000	36.000	35.000	50.71		Yes	30	-
11	245.000	246.000	35.000	34.000	77.01	98.1	Yes	30	-
12	249.000	250.000	31.000	30.000	66.78		Yes	30	-
13	256.000	257.000	24.000	23.000	154.70		No	-	-
14	257.000	258.000	23.000	22.000	136.55		No	-	-
15	262.000	263.000	18.000	17.000	92.13		Yes	30	-
16	263.000	264.000	17.000	16.000	48.27		Yes	30	-
17	268.000	269.000	12.000	11.000	50.56		Yes	30	-
18	269.000	270.000	11.000	10.000	67.21		Yes	30	-
19	273.000	274.000	7.000	6.000	97.25		Yes	30	-
20	280.000	281.000	414.000	415.000	50.87		Yes	30	-
21	281.000	282.000	415.000	416.000	85.13		Yes	30	-

22	285.000	286.000	61.900	61.000	98.89	NO	-	-
On RHS								
1	219.000	220.000	61.000	60.000	51.10	Yes	30	-
2	220.000	221.000	60.000	59.000	64.27	Yes	30	-
3	224.000	225.000	56.000	55.000	59.87	Yes	30	-
4	225.000	226.000	55.000	54.000	47.67	Yes	30	-
5	230.000	231.000	50.000	49.000	76.19	Yes	30	-
6	235.000	236.000	45.000	44.000	77.53	Yes	30	-
7	236.000	237.000	44.000	43.000	89.11	No	-	-
8	241.000	242.000	39.000	38.000	112.39	No	-	-
9	242.000	243.000	38.000	37.000	55.12	Yes	30	-
10	247.000	248.000	33.000	32.000	152.33	No		
11	248.000	249.000	32.000	31.000	126.99	No	-	-
12	250.000	251.000	30.000	29.000	122.64	No	-	-
13	251.000	252.000	29.000	28.000	133.28	No	-	-
					88.2			
14	252.000	253.000	28.000	27.000	80.63	Yes	30	-
15	258.000	259.000	22.000	21.000	110.83	No	-	-
16	260.000	261.000	20.000	19.000	42.44	Yes	30	-
17	265.000	266.000	15.000	14.000	56.03	Yes	30	-
18	266.000	267.000	14.000	13.000	104.67	No	-	-
19	270.000	271.000	10.000	9.000	170.38	No	-	-
20	271.000	272.000	9.000	8.000	60.03	Yes	30	-
21	272.000	273.000	8.000	7.000	131.74	No	-	-
22	276.000	277.000	4.000	3.000	65.90	Yes	30	-
23	277.000	278.000	3.000	2.000	98.01	No	-	-
24	278.000	279.000	2.000	1.000	159.80	No	-	-
25	283.000	284.000	417.000	418.000	68.56	Yes	30	-
26	284.000	285.000	418.000	419.000	43.51	Yes	30	-

Note: FWD survey carried on 33% length, and the same proposition of overlay is recommended to consider for 100% project road length for costing purpose.

10.2.2 Periodic Maintenance

As per Annexure I of Schedule-K if roughness value exceeds 2,500 mm in a stretch of 1 km (as measured by a standard roughometer/bump integrator) the stretch needs to be rectified within 180 days by providing a renewal layer.

As per the roughness survey conducted by us in June 2019 (results presented in Table 8-13 and Table 8-14) roughness values exceed 2,500mm/km in four lane kilometers (LHS=2 km of lane length & RHS=2km of lane length). These stretches need a renewal coat of 30mm BC.

Table 10-4: Exceeding the limiting roughness values of 2500mm/km

#	Existing Chainage (Km)		CA Chainage (Km)		Side	Lane	Recommended renewal layer after milling (mm)
	From	To	From	To	Inner	Outer	
1	261	262	19	18	LHS	Middle Lane	Milling and in-lay of 30mm BC
2	275	276	5	4	LHS	Outer Lane	
3	253	254	27	26	RHS	Outer Lane	
4	260	261	20	19	RHS	Middle Lane	

Based on the above details, and in-line with the Schedule-K of CA, the major/ periodic maintenance requirement is given in Table 10-5 below -

Table 10-5: Recommended Major/ Periodic Maintenance Strategy: (Analysis Based on 80% Reliability Equitation)

Year	Description	Major/ Periodic Maintenance		Pavement Over Structures (Major/Minor Bridges)
		Main carriageway	Service Roads	
12th Jan 2017 (PCOD)	-	-	-	-
YR 2019/20	Immediate Repair	Immediate Repair in the section BI value exceeding 2,500mm/km (i.e 30mm BC on 2km on LHS & 2Km on RHS lane length) given in Table 10-4	-	-
		Repair/ Rehabilitation of Section with Poor pavement condition as shown in Table 10-1 & Table 10-2		-
YR 2022/23	1st Renewal Layer	As specified in Table 10-3 and remaining length with 30mm BC	Micro Surfacing	Milling and inlay of 25mm BC
YR 2027/28	2nd Renewal layer	30mm BC on 50% length and micro surfacing on 50% length	Micro Surfacing (50% length)	Milling and inlay of 25mm BC
YR 2032/33	1st Structural Overlay	50mm BC on 50% Length & 30mm BC + 50mm DBM on 50% Length (Both LHS & RHS)	**30mm BC**	**Milling and inlay of 25mm BC**
YR 2038/39	3rd Renewal layer	30mm BC on 60% length and micro surfacing on 40% length	Micro surfacing (50% Length)	Milling and inlay of 25mm BC
Feb 2043 (End of Concessioner Period)	No hand back requirement	-	**-**	**-**

Recommended Binder: VG-40 grade bitumen for both BC & DBM

11. O&M AND OTHER ESTIMATES

11.1 General

Cost Estimates have been worked out for 'Balance Works' (CAPEX) and 'Operations and Maintenance' (OPEX). The cost estimates have been worked out at present rates considering 2019-20 as the Base Year.

11.2 Assumptions

The cost estimates are based on following assumptions:

(a) Bitumen has been assumed to be sourced from IOCL Haldia located approx. 435 km from mid-point of the Project Highway.

(b) Hire charges for the Machinery have been worked out based on the "Revision of Schedule of Rates-2014 on GST dated 16 Sep 2017 for Government of Odisha Works Department.

(c) Manpower rates taken from Central CPWD of India.

(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 Km form 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 and Tapang (Chandhikhole to Dubari) on project highway at approx. 45 km form the mid-point of Project Highway.

(f) Cement is considered to be procured from nearest local market.

(g) Rate of steel is taken from SAIL May-19.

11.3 Rate Analysis Basis

Following have been considered for rate analysis:

(a) Rate analysis is based on material and labour rates 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 have been 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 have been considered based on MOSRT&H Standard Data Book and include all applicable prevailing taxes.

(h) Some of the rates are based on Consultant's experience on the similar ongoing projects in adjacent locations.

11.4 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 CDPQ and Seller)

11.5 Immediate Repairs and Rehabilitation

(a) Immediate repair cost for pavements works and

(b) Immediate repair cost for Existing TMS systems and

(c) Immediate repair Estimates - based on Visual observation on structures

11.5.1 Immediate Repairs

Certain repair and rehabilitation measures have been identified during Visual Condition Survey of the Project Assets as brought out at Section 8.1 of Chapter 8 of the report. Repair Techniques have been suggested at 10.1 of Chapter 10. These have to be undertaken on immediate basis to avoid any breach of the CA provisions.

Estimates for Immediate Repairs are placed atTable 11-1.

Table 11-1: Estimates for Immediate Repair – cost of pavement works

#	Description of works	Unit	Qty	Rate	Amount
1	BI Value exceeding 2,500 mm/Km				
(a)	Qty for Milling	Sqm	14000	65.00	910,000
(b)	Qty of tack coat	Sqm	14000	11.00	154,000
(c)	Qty of BC	Cum	420	9,620.00	4,040,400
2	Recommended Repairing/ Rehabilitation Techniques (BHS)				
(a)	Qty of Milling	Sqm	28693	65.00	1,865,013
(b)	Tack coat for Milled area	Sqm	28693	11.00	315,618
(c)	Inlay for Milled area for BC	Cum	861	9,620.00	8,280,656
Total Cost INR					**15,565,686**
Total Cost INR (Mn.)					**15.57**

Table 11-2: Immediate Repair cost for existing TMS

#	Description of works	Unit	Amount
1	TMS		
(a)	Immediate repair cost for some TMS equipment’	LS	18,650,000
Total Cost INR			**18,650,000**
Total Cost INR (Mn.)			**18.65**

Table 11-3: Immediate Repair based on visual inspection of structures

Type of structure	Nos of Structures	Cost
VUP	20 Nos.	24,35,022
PUP	23 Nos.	2,37,517
ROB	2 Nos.	1915099
Flyover	12 Nos.	71,21,900
Minor Bridges	35 Nos.	3,34,20,415

Type of structure	Nos of Structures	Cost
Major Bridge	16 Nos.	17,57,38,830
Culverts	79 Nos.	60,62,433
	Total Cost INR	**226,931,217**
	Total Cost INR (Mn.)	**226.93**

11.6 O & M Estimates

Operation and Maintenance estimates have been worked out in following heads:

(a) Routine Maintenance
(b) Operations
(c) Major Maintenance

11.6.1 Routine Maintenance Estimates

11.6.1.1 Assumptions

Routine maintenance cost is based on following broad assumptions:

(a) 1.5% of total area of Main Carriageway area is considered for repairs every year for pot holes and sealing of cracks.
(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;

11.6.1.2 Routine Maintenance

Routine Maintenance covers all activities required to maintain the road in traffic worthy condition and 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

11.6.1.3 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 and verges;
(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 piers and abutments.

11.6.1.4 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 road side / median drains;
(c) Removal of vegetation growth on sub structures;
(d) Cleaning of Pipe culverts.

11.6.1.5 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 road side drains;

11.6.2 Operations Estimates

11.6.2.1 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.

11.6.2.2 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.

11.6.2.3 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 and Canopy light 32 Nos. considered.

11.6.2.4 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 of now in July 2019.
(d) Maintenance of ATMS and TMS (adopted as 10% of the capital cost per year for the all the system & components being provided.)

11.6.2.5 Major Maintenance

Major Maintenance strategy/Schedule for residual period has been covered in Chapter 10.

11.6.2.6 Summary of O & M Estimates

Annual O&M estimates at present rates is placed at Table 11-4. Year-wise O&M estimates for the balance duration of concession period with escalation is at Table 11-5.

Table 11-4: Annual O&M estimates

#	Item Head	Annual Cost
1	Routine Maintenance (6 lanes)	34,542,018
2	Street light power expenses	27,400,536
3	Operation expences	17,275,810
4	Administrative expences	17,703,000
5	Tolling Expenses (16 Lane Toll Plaza)	39,100,500
6	IC Fees (Assumed)	13,960,000
7	Insurance policy premium expences	10,797,200
8	Maintenance of ATMS/TMS (10% of the capital cost)	15,757,909
Total (₹)		**176,536,973**
Total (Million)		**176.54**

Table 11-5: Year-wise O&M estimates with escalation

Duration		Major Maintenance Cost		O&M Cost			
		Periodic Maintenance	ATMS/ TMS Replacement Cost	Routine Maintenance	Operation & Tolling Cost	Energy Charges	Total for O&M
From	To	(Value in Mn.)					
Apr-19	Mar-20						
Apr-20	Mar-21			34.77	115.35	27.58	177.70
Apr-21	Mar-22	697.48		36.57	121.31	29.01	186.89
Apr-22	Mar-23			38.31	127.10	30.39	195.80
Apr-23	Mar-24		168.99	40.29	133.67	31.96	205.92
Apr-24	Mar-25			42.27	140.22	33.53	216.02
Apr-25	Mar-26			44.26	146.84	35.11	226.21
Apr-26	Mar-27	685.02		46.36	153.82	36.78	236.96
Apr-27	Mar-28			48.59	161.19	38.54	248.32
Apr-28	Mar-29			50.59	167.83	40.13	258.54
Apr-29	Mar-30			52.64	174.64	41.76	269.04
Apr-30	Mar-31		229.97	54.68	181.40	43.37	279.45
Apr-31	Mar-32	2,159.74		56.95	188.93	45.18	291.06
Apr-32	Mar-33			59.07	195.95	46.85	301.88

Duration		Major Maintenance Cost		O&M Cost			
		Periodic Maintenance	ATMS/ TMS Replacement Cost	Routine Maintenance	Operation & Tolling Cost	Energy Charges	Total for O&M
From	To	(Value in Mn.)					
Apr-33	Mar-34			61.42	203.77	48.72	313.92
Apr-34	Mar-35			63.79	211.62	50.60	326.01
Apr-35	Mar-36			66.35	220.11	52.63	339.09
Apr-36	Mar-37			68.65	227.74	54.46	350.85
Apr-37	Mar-38	995.63	299.66	71.25	236.38	56.52	364.14
Apr-38	Mar-39			73.96	245.36	58.67	377.98
Apr-39	Mar-40			76.76	254.66	60.89	392.31
Apr-40	Mar-41			79.64	264.21	63.17	407.02
Apr-41	Mar-42			82.62	274.09	65.54	422.24
Apr-42	14-Feb-43			75.38	250.06	59.79	385.23
Total Cost (Mn.)		**4,537.87**	**698.62**	**1,325.16**	**4,396.25**	**1,051.18**	**6,772.59**

Note: Escalation is considered based on WPI data as per Oxford Economics.

ANNEXURE 1

HEALTH ASSESSMENT OF MAJOR BRIDGES

1. HEALTH ASSESSMENT OF MAJOR BRIDGES

As discussed in the Chapter 7, major distresses have been observed in Major bridges on the project stretch. This required detailed investigations by a specialist agency. For this purpose, SJEPL appointed AECOM to assess the health condition and to prepare rehabilitation and retrofitting schemes required for the old bridges of this project. The following four major bridges were identified by the team for further detailed investigations.

- Kuakhai Bridge (Left-Oldest) at Km 4+840
- Kathjori Bridge (Left-Oldest) at Km 20+135
- Mahanadi Bridge (Right-Oldest) at Km 24+672
- Birupa Bridge (Left-Oldest) at Km 29+850

AECOM team was directly appointed by SJEP. M/s Maple Highways Pte. Ltd wanted to have a broad review of the works done by AECOM team. Hence, they requested Ramboll India Pvt Ltd to undertake a high-level review of health assessments and associated rehabilitation proposals prepared by AECOM for all the four major bridges. The following scope of work was set out for Ramboll for this purpose.

1.1 Scope

Ramboll's scope is to undertake a high level, board brush, review of the documents produced by AECOM. A Ramboll expert will:

- Review the relevant reports for all four bridges prepared by AECOM
- Prepare one review report covering all four bridges describing his opinion.
- Not perform separate calculations or design checks. The opinion will be based on the reports prepared by AECOM.
- Not be responsible for the accuracy or completeness of the AECOM's work. It is understood that the reports, proposals and designs will be certified by AECOM.
- Attend one meeting with Client/AECOM through virtual platform to provide explanations/ clarifications on his opinion.

The objective is to give the Concessionaire comfort that the adopted approaches and the proposed solutions are realistic and reasonable. For the avoidance of doubt, Ramboll are not taking any responsibility for the accuracy or completeness of the AECOM's work and it is understood that the reports, proposed solutions and designs will be certified by AECOM.

The following reports prepared by AECOM are to be reviewed by Ramboll Expert.

SN	Reports
1	Assessment Basis Report
2	First inspection Report
3	Condition Survey Report
4	As Built GA Drawings
5	Load Test Scheme
6	Draft Analysis report
7	Final Analysis report
8	Rehabilitation and Retrofitting Scheme & Drawings

2. OBSERVATIONS

A comprehensive review report was prepared by bridge expert of Ramboll based on the draft reports prepared by AECOM. This review report was submitted vide e-mail dated 26-Dec-2020.

Comments on each of the reports were presented and for the ease of interpretation these were categorised as follows.

A - Significant Comment; potentially affecting the key conclusions/recommendations of the report and/or compromising future work based on the report. Considered essential to address.

B - Area of Improvement; query or suggested change relating to potential improvement in accuracy, quality or clarity. It is recommended that these are addressed.

C - Minor Comment; to be noted although changes to the reports are not necessarily required.

A meeting was held with officials from Maple Infra Invit Investment Manager Private Limited, SJEPL and AECOM on 07-JAN-2021 to discuss the review comments offered by Ramboll Expert on the draft reports of AECOM. AECOM team informed that the comments offered by Ramboll were already taken care of by AECOM in the final reports submitted. It was discussed that AECOM would provide written response to the review report submitted by Ramboll and would ensure that the comments were addressed appropriately. Thereafter, AECOM submitted the "Comment Response Sheet" report dated 15-Jan-2021 confirming that all comments offered by Ramboll expert were incorporated in the final Reports.

The following may be noted:

- The processes i.e. inspecting the bridge, doing a detailed condition assessment of the bridge through standard methods, conducting load tests, doing detailed analysis based on the condition assessment and suggesting remedial measures are generally the standard processes adopted for such assessment and rehabilitation works for any structure. AECOM has adopted and followed these standard processes in its work.

- There has been no documentation available for the existing bridges. AECOM has relied on the detailed condition assessment, various non-destructive tests such as rebound hammer test, cover meter test, carbonation depth test, half-cell potentiometer test etc. While these tests are relatively easy to perform, these tests have limitations and the quality of test results largely depend on the working conditions and on the quality of concrete itself. The analysis and interpretation of results are not so easy and require involvement of experienced personnel to arrive at acceptable evaluation of concrete properties. It is noted that AECOM has followed a detailed methodology to conduct various tests and implemented a process of detailed checklists related to collection of data at site with every instrument used during NDT tests and interpretation of data.

- The detailed analysis has been done using Limit State Design Philosophy as per current requirements of IRC codes. The structural adequacy of the bridges has been checked for 1 lane of class 70R and 2 lanes of class A train of vehicles as per IRC 6:2017 with the material properties derived from NDT. For simulating and undertaking structural analysis, AECOM has used MIDAS Civil and Adsec software. Based on such detailed analyses, AECOM has confirmed that the structural sections have adequate capacity to carry intended loads.

- Specific repairs and rehabilitation measures have been suggested in reports prepared by AECOM for each bridge.

- It is beyond the scope of Ramboll to consider a detailed review of the analyses performed by AECOM. Ramboll, therefore, does not take any responsibility for completeness and correctness of the works done by AECOM.

- It is important that detailed scrutiny of bridge specific repairs and rehabilitation measures are duly vetted by an independent expert and the execution is continuously monitored to ensure that the parameters adopted in analysis and designs are achieved during execution. Any changes observed in assumed parameters will require rechecking and possibly change in the designs and repair/rehabilitation measures.

- It is noted that Indian Institute of Technology (IIT) Guwahati (Prof Anjan Dutta) has been appointed for providing specialist opinion and doing detailed proof checking for the entire rehabilitation works for all the bridges. This process will ensure a good quality control during design checks and execution.

- It is further noted that all the reports prepared by AECOM have been reviewed by IIT Guwahati. IIT Guwahati has endorsed the findings of AECOM and recommended that the retrofitting/rehabilitation measures as suggested by AECOM must be implemented immediately for all the four bridges.

Based on the recommendations provided by specialist agency AECOM for such rehabilitation measures which have further been endorsed by IIT Guwahati, Client may implement the repairs and rehabilitation measures for all the bridges under consideration. These repairs and rehabilitation measures must be implemented carefully under strict quality control and supervision of experts to ensure that the parameters specified in the analyses and designs are fully satisfied. Any variation observed must be brought to the notice of concerned expert associated with the project for his review and suggestion of remedial measures, if any.

DISCLAIMER

In preparing this report, Ramboll India Private Limited relied, in whole or in part, on data and information provided by Client, 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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ANNEXURE C – TRAFFIC REPORT

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Report
January 2022

Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhole

Maple Highways Pte. Ltd.
Our ref: 23645002
Client ref:

steer

Report
January 2022

Project Chariot: Traffic and Revenue Forecasts for Bhubaneswar-Chandikhole

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Disclaimer

This report has been produced for the sole benefit of Maple Highways Pte. Ltd. The report may only be relied upon by Approved Addressees in accordance with the terms of our engagement letter.

The projections of traffic contained within this document represent Steer's estimates. While they are not precise forecasts, they do represent, in our view, a reasonable expectation for the future, based on the information available as of the date of these estimates. The estimates contained within this document rely on numerous assumptions and judgements and are influenced by external circumstances that can change quickly and that can affect the outcome. In addition, it has been necessary to base most of this analysis on data collected by third parties. Steer does not guarantee the accuracy of this data.

Steer developed the relationships in the models used to produce the forecasts for this Project based on data received through August-2021 during which time the outbreak of the virus known as COVID-19 has continued to spread throughout the world and has been defined by the World Health Organization as a "pandemic". As of the date of distribution of this report, the COVID-19 outbreak is continuing to have a material impact on global economic and political affairs including having a significant impact on all the transportation industries, including toll road traffic, where in particular vehicle volumes have fallen in response to quarantine and self-care measures that governments have imposed including in Africa. The situation remains dynamic and is subject to significant change. In this challenging context, in the first phase of the study, Steer has produced base forecasts (directly produced from models using a combination of pre-COVID-19 and post-COVID-19 data till September 2020) which provide a view on a possible scenario for traffic and revenue recovery from COVID-19-related traffic decrease. Subsequently as new data upto Augu-2021 was availableSteer has been tasked to run comparisons between the actuals and Steer estimates of base year traffic and revenue to validate the assumptions used in the forecasts. However, due to the ongoing spread of COVID-19, it is important to note that there is currently insufficient data available to allow Steer and readers of this report to have much confidence that the scenario and assumptions Steer has identified will prove to be accurate. Outcomes therefore could well differ from those described in this report. Given the uncertainty described here and inherent in this unprecedented pandemic, Steer advises that all readers of this report consider the forecasts in the context of their own assessment of the COVID-19 outbreak and its likely impact before making final decisions related to this Project.

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

1 Introduction

The Assignment

1.1 Steer has been commissioned by Maple Highways (the "Client") to prepare traffic and revenue (T&R) forecasts to support the Client's potential acquisition of the Bhubaneshwar-Cuttack-Chandikhole section of the Shree Jagannath Expressway Limited (SJEPL) toll road in India (the "Asset"). The Asset is currently operated by Simplex Infrastructures Pvt Ltd (the "Vendor"). The following table describes the key characteristics of the Asset.

Table 1.1: Description of Asset

Name of Section	State	NH / SH	Total Length (km)	Toll Plaza	Tolling Since (COD)	Concession Period	Total Project Cost
Bhubaneshwar-Chandikhole	Odisha	NH-16	67	Manguli	December 2011	26 years	INR Cr. 1047

Source: Steer analysis based on NHAI data

1.2 This report constitutes our final deliverable under this study and includes the T&R forecasts for the Asset.

Scope of work

1.3 The initial scope of the 2019 pre-COVID study in the preparation of the T&R forecasts was as follows:

- Review of available data and bid documents;
- Undertaking traffic surveys (and associated analysis), namely:
  - 7 days video based classified traffic volume counts (TVCs) on the Asset;
  - 24 hours OD survey and commodity analysis; and
  - 3 days TVCs on the new toll plaza location.
- Establishing the relationship between traffic growth and socioeconomic trends based on benchmarks, since there was no historical data available;
- Assessing impacts from exogenous factors, including network changes;
- Developing traffic forecasts by vehicle class and ticket-type segmentation categories; and
- Toll revenue estimation for entire concession period.

This report includes our updated analysis based on traffic and revenue data till September 2020, and includes post-COVID analysis.

Our approach

1.4 The approach employed by Steer in the preparation of the traffic and revenue forecasts was developed to take advantage of existing knowledge of the Asset and of available data. It

follows normal practices well established in addressing the issue of forecasting on-going traffic growth on an existing/brownfield project.

1.5 The analysis focused on two sets of issues:

- understanding and verifying the traffic which is at present using the Asset; and
- identifying how and why that traffic will change in the future.

1.6 To understand the current traffic on an Asset, we conducted an analysis of traffic data from multiple sources:

- Vendor data provided for the period of December 2011 to September 2020;
- TVCs conducted by Steer;
- Origin-Destination (OD) surveys conducted by Steer; and
- Benchmarked data from comparable road sections.

1.7 The estimation of future traffic demand on the Asset is driven by:

- Recovery from the COVID pandemic related lockdowns and associated economic impacts;
- **Growth of 'background' traffic**: this depends to a certain extent on the on-going socio-economic and demographic development of the state of Odisha as well as the national growth, given the key national corridor served by the Asset;
- **Change in the local and national industry**: which drives heavy goods traffic on the Asset, like iron-ore production or development of Paradip port; and
- **Change in the competitive position of the Asset**: this reflects changes in highway capacity of connecting or competing roads and the relative changes in service levels (time, congestion, price, etc.) for the Asset, and its feeder and competing routes.

Contents of this report

1.8 This report is divided into 6 chapters, including this introduction:

- Chapter 2 describes the key characteristics of the Asset;
- Chapter 3 presents our survey data analysis;
- Chapter 4 discusses the socio-economic context of the corridors containing the Asset;
- Chapter 5 presents our base year traffic and forecasting assumptions; and
- Chapter 6 presents the traffic and revenue forecasts for the Asset.

2 The Asset

Introduction

2.1 This chapter provides a description of the Asset, prepared using available information, and our own analysis based on site visits and our understanding of the local areas around the Asset. The location of the Asset on the Indian road network is presented below.

Figure 2.1: Asset location

Source: Steer cartography using OpenStreetMap data

2.2 As can be seen in the previous figure, 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.

2.3 This chapter describes the Asset, places of interest which could be attractors/generators of travel demand along the corridor, and any alternate routes.

Asset description

2.4 The Asset is a 67km 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; Bhubaneswar also being the capital of the state.

2.5 The map below shows the location of the toll plaza on the Asset.

Figure 2.2: Location of Bhubaneswar-Chandikhole

Source: Steer cartography using OpenStreetMap data

2.6 Being part of the Golden Quadrilateral, the Asset becomes a key connector of Chennai-Kolkata corridor. At the same time, the east-west highway of NH55 connects to the Asset just south of the toll plaza. Therefore, the traffic moving between Mumbai and Kolkata is also captured on the Asset.

2.7 The asset consists of a significant number of structures, the most prominent being a new bridge over the river Mahanadi and a 7km 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.

2.8 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.

2.9 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.

2.10 The existing toll plaza on the Asset, the Manguli toll plaza which has 10 tolling lanes, was built as part of the previous concession when it was a 4-lane Asset. As per the current concession agreement, a new toll plaza with 16 tolling lanes is being constructed about 6km north of the Manguli plaza. The new toll plaza is expected to be operational by early FY22, after which Manguli plaza will be non-operational.

2.11 The Asset has about five major bridges of lengths within 1km and one 2.2km long bridge over Mahanadi river, costing about INR 102 crores. The construction of Mahanadi bridge was completed in 2015. However, the toll rates were only revised in FY18 to include the cost of the bridge, due to pending works on the rest of the Asset sections.

2.12 The following pictures show typical cross sections of the Asset.

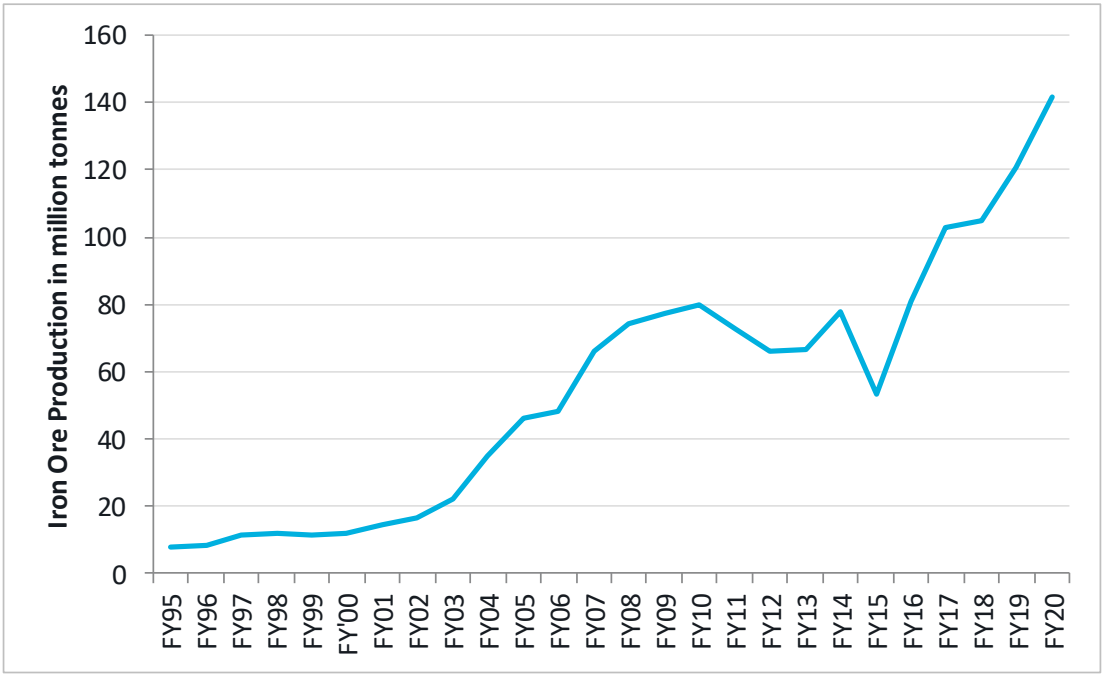
Figure 2.3: Road cross-section on Bhubaneswar-Chandikhole

Source: Steer site visit

Economic activities in the region impacting traffic

2.13 India is a major producer and exporter of iron ore, with ~210 million tonnes of iron ore produced and ~24 million tonnes exported in FY18[1]. Almost 50% of the national production of iron ore comes from the state of Odisha, where SJEPL asset is located. 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 of ~27% in iron ore production since then. Figure 2.4 below shows the annual iron ore production in the state since 1995.

Figure 2.4: Iron ore production in Odisha



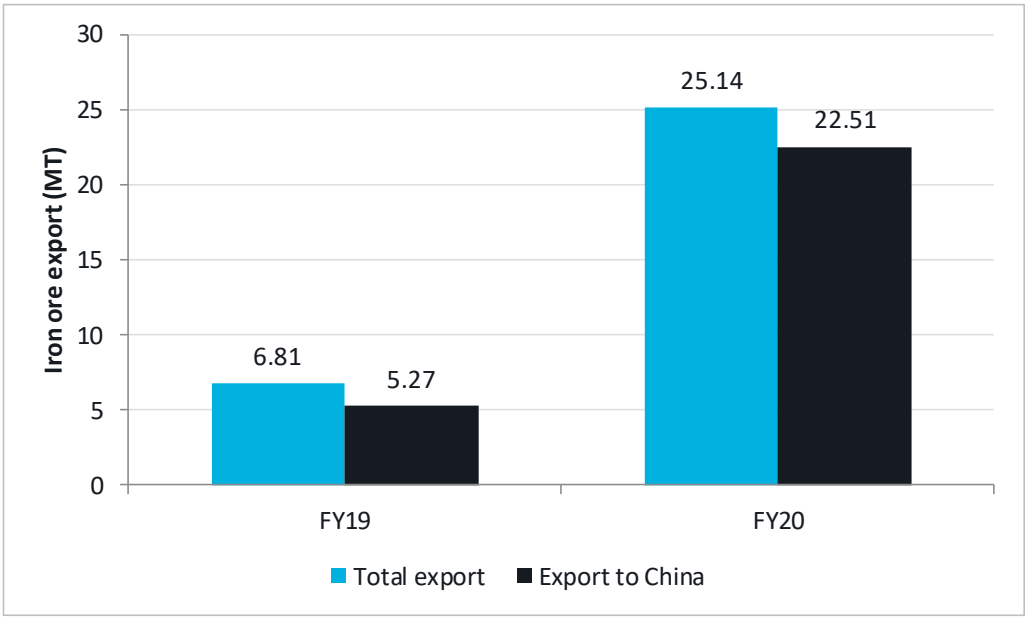
Source: https://www.odishaminerals.gov.in/ResourceStatistics/MineralProduction

2.14 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.

[1] http://www.careratings.com/upload/NewsFiles/Studies/Iron%20Ore%20Report.pdf

2.15 The high growth in iron ore production in the recent years can be partly attributed to increase in exports to China. The iron ore exports from India for the past two years is shown in figure below.

Figure 2.5: Iron ore exports from India



Source: https://steel.gov.in/sites/default/files/March%202020_0.pdf

2.16 The increase in iron ore production and transport has supported the recovery of traffic post lockdown due to COVID, which is over and above the 'normal' economic recovery being experienced in the country.

2.17 Duburi/Kalinganagar region, about 70km north of the Asset, is rich in iron ore deposits and has several steel industries, like Tata steel, VISA steel and Jindal stainless limited. During the site visit, we observed considerable number of trucks carrying iron ore on the Asset

2.18 This Asset is surrounded by industrial clusters around Talcher, Jajpur and Duburi/Kalinganagar. It's connections with Paradip port, one of the largest bulk ports of India, also make it an asset of strategic importance.

2.19 Paradip port is one of the biggest ports of India, and the only port in the state of Odisha. The port is about 100km away from the Asset and significant port-related movement is observed on the Asset.

2.20 Talcher, in Angul district, has significant coal reserves and is one of the fastest growing industrial and coal hubs in the state of Odisha. However, the majority of coal and the by-products are transported by rail in the region.

2.21 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.

2.22 The cities of Puri and Konark, about 90km south of the Asset, are two of the biggest tourist attractions in the state. The annual 'Rath yatra' festival celebrated in Puri in June attracts many pilgrims and tourists alike.

2.23 As mentioned previously, being part of the golden quadrilateral, the Asset also forms key route connecting Kolkata and Andhra Pradesh and Tamil Nadu.

Potential network impacts and competition

2.24 The map below shows the Asset and its feeder routes.

Figure 2.6: Context map of Bhubaneswar-Chandikhole

Source: Steer cartography using OpenStreetMap data

2.25 During our site visit, we observed that three of the feeder sections to the Asset were being upgraded. These sections are shown in the map Figure 2.6.

2.26 Besides these feeder routes, the section of NH53 connecting Duburi and Talcher (Angul), is also expected to be upgraded in the near future. This section, which is currently in poor condition, will become an alternative to some of the traffic on the Asset.

Table 2.1: Details of upgradation of feeder routes and alternate route around the Asset

Section	Highway	Status
Chandikhole-Bhadrak	NH16	6-laning; Expected completion by FY23
Cuttack-Angul	NH55	4-laning; Expected completion by FY23
Chandikhole-Duburi	NH53	4-laning; Expected completion by FY23
Duburi-Talcher	NH53	4-laning; Expected completion by FY23

Source: Steer analysis of NHAI data

2.27 Other than the network improvements, the shifting of the toll plaza location is also expected to have an impact on the local traffic movement.

3 Historical traffic and data analysis

Introduction

3.1 This Chapter outlines the current traffic and revenues on the Asset, the impact of lockdown due to COVID-19 and how these are used to estimate the base year (FY21-FY22) traffic.

3.2 We then present our analysis of Origin Destination (OD) data and traffic count (TVC) data, collected as part of this commission as well as provided by the Vendor. The OD data is used to understand trip lengths/areas of influence in the vicinity of the Asset, as well as, the commodities being moved by goods vehicles. Combined with our understanding of the Asset (based on our site visits), this enables us to identify the key drivers of demand.

3.3 Toll plaza data (as supplied by the Vendor) is used to establish the current/base year demand (in terms of AADTs). We then use our independent traffic volume counts (TVC) to validate the AADTs and estimate shares of toll violations and exemptions.

3.4 The Asset has been operational for over 8 years. The historical traffic was provided by the Vendor from December 2011 to September 2020.

3.5 As agreed with the Client, we conducted the following surveys on the toll plaza;

- **7 days** video based classified **TVC** at the existing toll plaza;
- **OD survey** and commodity movement for 1 day, **24 hours**; and
- In addition to the above, an additional **3-day TVC** was conducted, in consultation with the client, on the new under-construction toll plaza on the Asset.

Historical Analysis

3.6 The reported historical traffic is presented in the table below.

Table 3.1: Historical AADT by vehicle type on the Asset

Vehicle Types	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20	FY-21*	CAGR FY13-FY20	CAGR FY15-FY20
CJVs	7,843	8,010	8,243	9,223	10,784	10,799	10,891	10,661	8,766	4.5%	5.3%
LCV	1,193	1,187	1,081	1,041	971	947	989	935	569	-3.4%	-2.9%
2A/bus	2,258	2,273	2,212	2,465	2,839	2,926	2,896	3,081	2,017	4.5%	6.9%
3A+MAV	4,716	4,626	4,318	4,558	5,024	5,229	5,205	5,817	5,790	3.0%	6.1%
OSV	1	0	0	0	1	0	2	2	1	14.8%	55.2%
Total	**16,010**	**16,096**	**15,854**	**17,288**	**19,618**	**19,901**	**19,983**	**19,983**	**17,144**	**3.6%**	**5.3%**
PCUs*	**33,032**	**32,916**	**31,723**	**34,248**	**38,468**	**39,431**	**39,419**	**41,821**	**36,085**	**3.4%**	**5.7%**

Vehicle Types	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20	FY-21*	CAGR FY13-FY20	CAGR FY15-FY20
Annual Growth Rates											
CJVs		2.1%	2.9%	11.9%	16.9%	0.1%	0.9%	-2.1%	-17.8%	4.5%	5.3%
LCV		-0.5%	-8.9%	-3.7%	-6.8%	-2.5%	4.5%	-5.4%	-39.1%	-3.4%	-2.9%
2A/bus		0.7%	-2.7%	11.5%	15.2%	3.1%	-1.0%	6.4%	-34.5%	4.5%	6.9%
3A+MAV		-1.9%	-6.7%	5.5%	10.2%	4.1%	-0.5%	11.8%	-0.5%	3.0%	6.1%
OSV		-51.3%	-40.1%	75.3%	68.4%	-32.6%	306.1%	11.5%	-66.4%	14.8%	55.2%
Total		**0.5%**	**-1.5%**	**9.0%**	**13.5%**	**1.4%**	**0.4%**	**2.6%**	**-16.4%**	**3.6%**	**5.3%**
PCUs*		**-0.4%**	**-3.6%**	**8.0%**	**12.3%**	**2.5%**	**0.0%**	**6.1%**	**-13.7%**	**3.4%**	**5.7%**

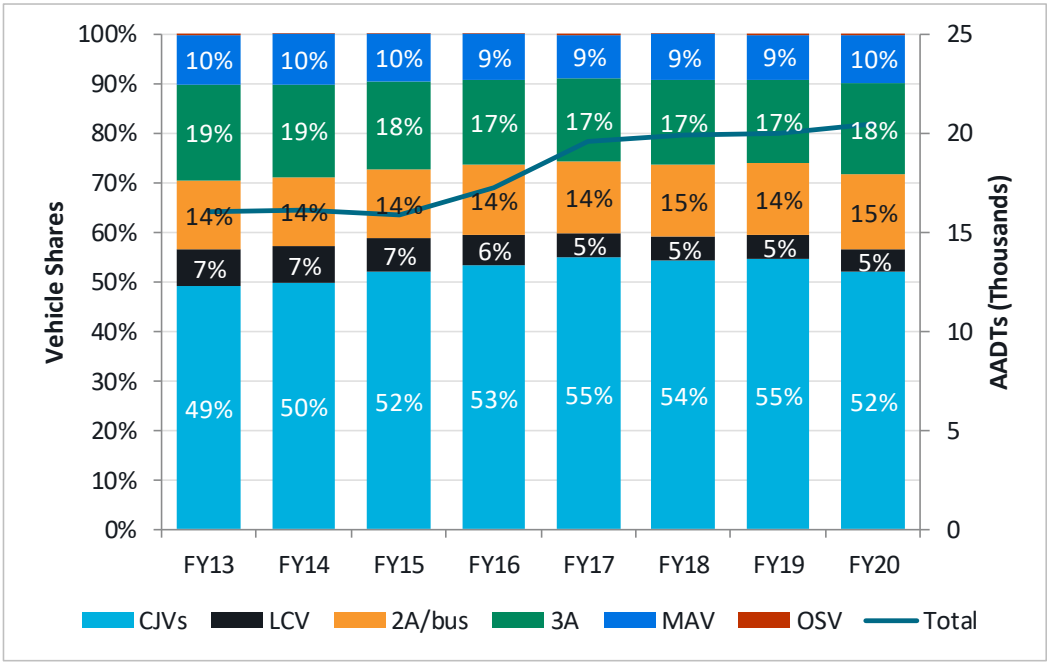
Source: Steer analysis of vendor data
*Note: The PCU estimations are based on a blended PCU factor for 3A-MAVs The actual PCUs values may differ slightly based on the ratio of 3A-MAV trucks.

3.7 FY21 daily traffic is estimated based on traffic till September 2020.

3.8 Since the outbreak of COVID-19 throughout the world (deemed a global pandemic by the World Health Organisation in March 2020), various governments have instituted countrywide "lockdowns". These have often involved a stay at home order, except for certain permitted essential trips and the closure of non-essential businesses. Significant disruption of traffic has resulted from these lockdowns, which was also observed on the Asset under study.

3.9 The tolling across all highways in India was stopped between 25th Mar and 20th Apr for national highways, including SJEPL. Since 20th April, while the tolling became operational, the lockdown restrictions were lifted gradually, with the weekend lockdowns and night time curfews being removed in the state of Odisha in September. With the easing of restrictions, there is a steady recovery in traffic observed on the Asset during later part of FY21.

Figure 3.1: Historical vehicle distribution and variation in total traffic

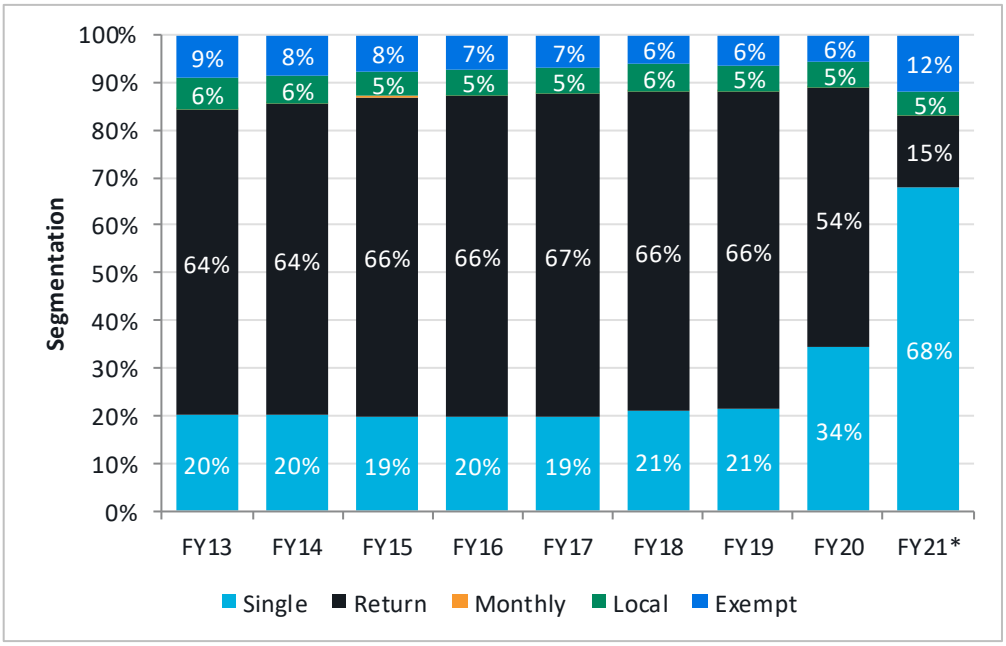


Source: Steer analysis of vendor data

3.10 The vehicle distribution on the asset has remained consistent historically, with cars contributing to over 50% of the total traffic.

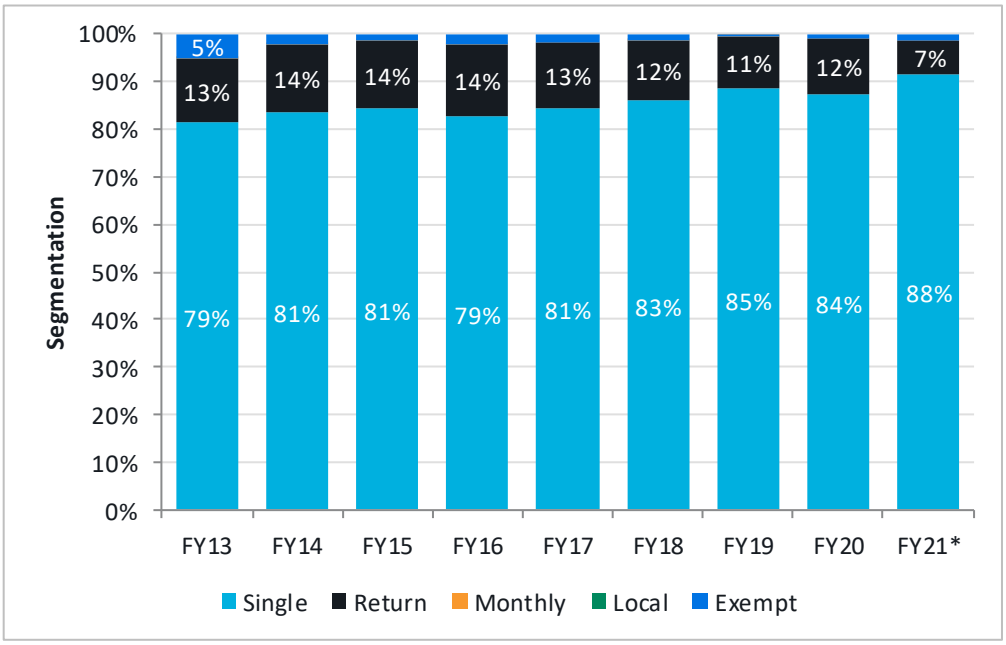
3.11 Figure 3.2 and Figure 3.3 present the historical ticket segmentation for cars and 3A/MAVs, i.e. the average share of different ticket categories bought for the vehicle categories in the respective years.

Figure 3.2: Historical ticket segmentation recorded in cars on SJEPL



Source: Steer analysis of vendor data

Figure 3.3: Historical ticket segmentation recorded in 3A/MAVs on SJEPL



Source: Steer analysis of vendor data

FASTag implementation

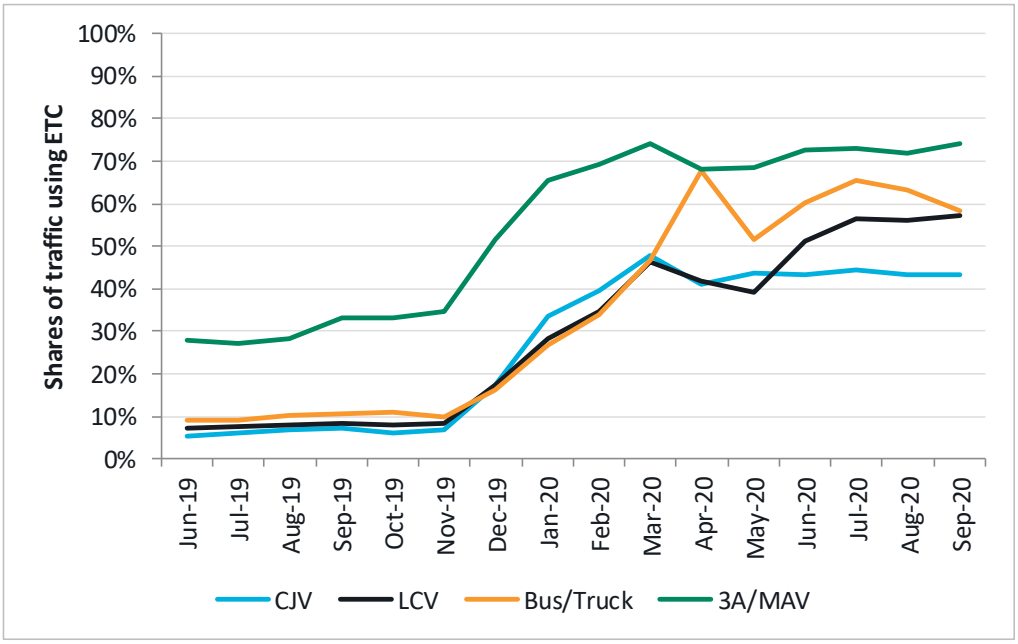
3.12 In December 2019, (FY20), NHAI imposed mandatory use of FASTag for all vehicles, which caused an increase in the ETC-based revenue collection. An additional rule stating that discounted tickets, such as 'Return' or 'Local Pass', can only be availed on FASTag and not cash payment.

3.13 As shown in Figure 3.4 below, cash users still continue to dominate and they are only allowed to buy single ticket which caused a significant jump in the 'Single' Ticket share. This increase is more apparent in Cars where the ETC shares increased from about 7% in Nov-19 to about 45% in Sep-20 which implies cash users are still higher at 55% in Sep-20.

3.14 The increase in single shares on cars is also accompanied with violations going up, which is indicated in drop in traffic volume, as the payment violating cars were not recorded in the toll plaza data.

3.15 We expect that this increase in single shares would be temporary and over the next few years the Return shares would go up as the compliance of FASTag is expected to rise and the cash users reduce. This has been incorporated into our forecast, by assuming FY21 as the base for ticket segmentation and gradually over the four years from FY21 to FY25 the single shares would reduce and return shares would increase. For cars, it is expected that along with the rise in Return shares, violations would reduce with the increase in FASTag penetration over the years. And going forward, FY25 segementation is used for the forecast. This is explained further in Chapter 5. Figure 3.4 shows the variation in ETC before and after the FASTag implementation.

Figure 3.4: Shares of traffic using ETC on SJEPL



Source: Steer analysis of vendor data

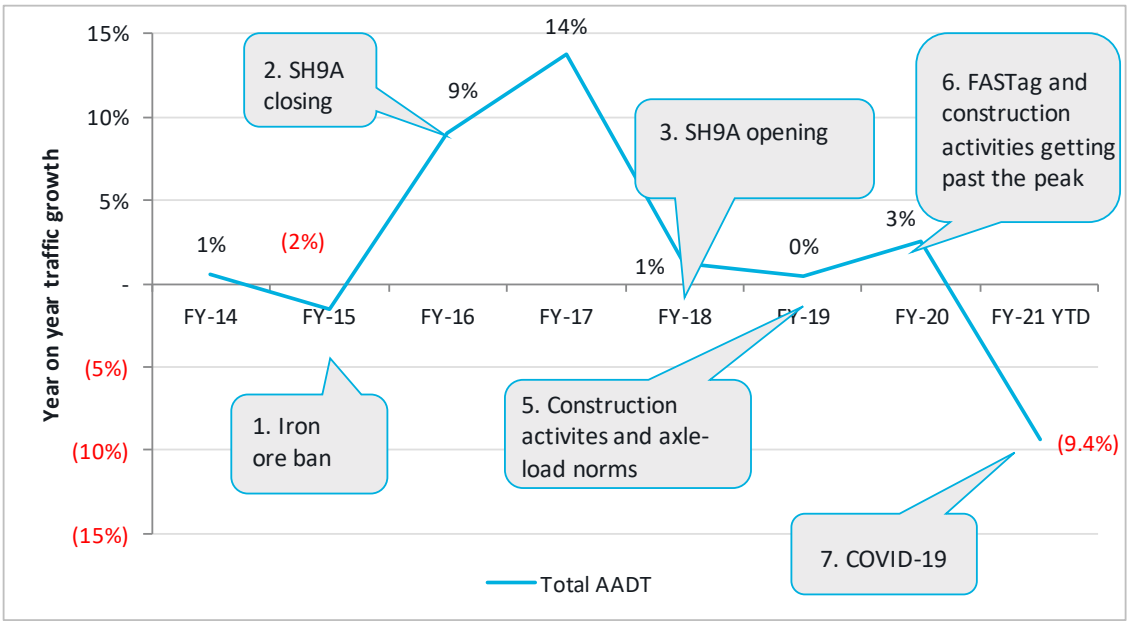
3.16 The total traffic has grown with a CAGR of +3.6% between FY13 and FY20. However, there have been several external factors that have impacted the traffic over the years.

1. A temporary ban on iron ore mining was imposed in May 2014, causing a drop in truck traffic in FY15;

2. 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;
3. In FY18, SH9A was opened to traffic after upgrades, which caused diversion from the Asset to SH9A;
4. 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;
5. 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.
6. 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. Also, the local activies such as constructionacivities on feeder routes surrounding the asset have past the peak in FY20, although the construction is still going on for most of them. This might have attributed to the increase in the traffic as well.
7. In FY21, the traffic was heavily impacted by lockdowns implemented due to COVID-19 pandemic.

3.17 These impacts are shown in the chart below.

Figure 3.5: Historical impacts on the Asset



Source: Steer analysis of vendor data

TVC Analysis

3.18 The TVC surveys were conducted between, and including, 19th June 2019 and 25th June 2019. However, the camera location was moved mid-day on the 20th, after observing that long queues at the plaza were misleading the counts. Therefore, all the TVC-based analysis presented is based on TVC from 20th June to 25th June. The following table shows the average daily traffic (ADT) captured on the plaza.

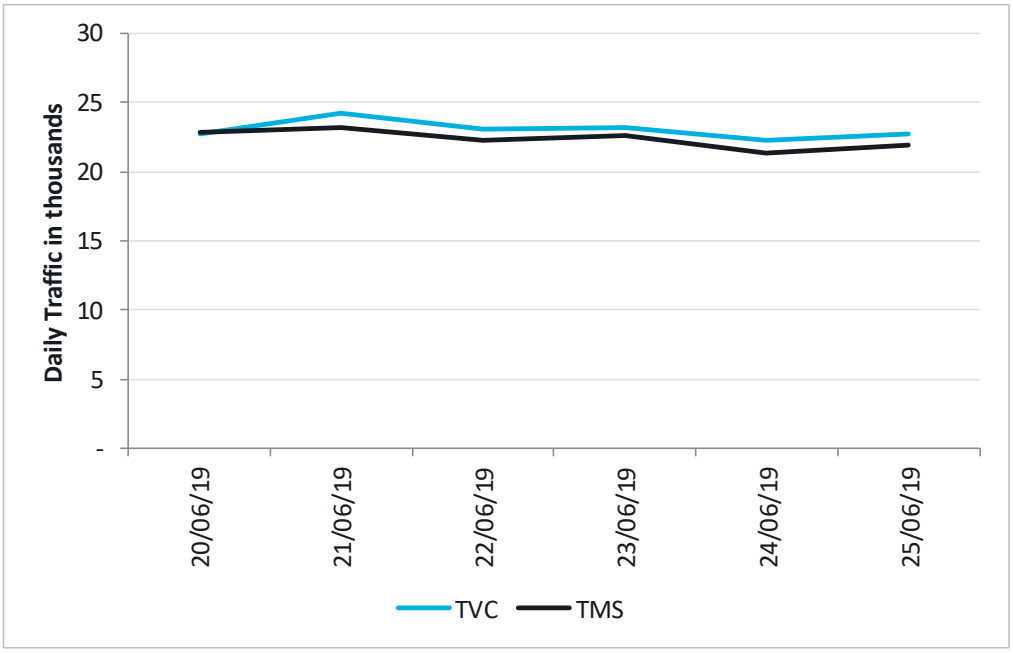
Table 3.2: ADT estimated from TVC data for SJEPL

Vehicle Category	ADT
Car	12,534
LCV / Minibus	1,143
Bus	1,339
2A	2,085
3A	2,196
MAV	3,745
OSV	1
Total	**23,042**

Source: Steer analysis of Steer TVC data

3.19 Figure 3.6 shows the comparison of TVC data and TMS data shared by the vendor for the same days.

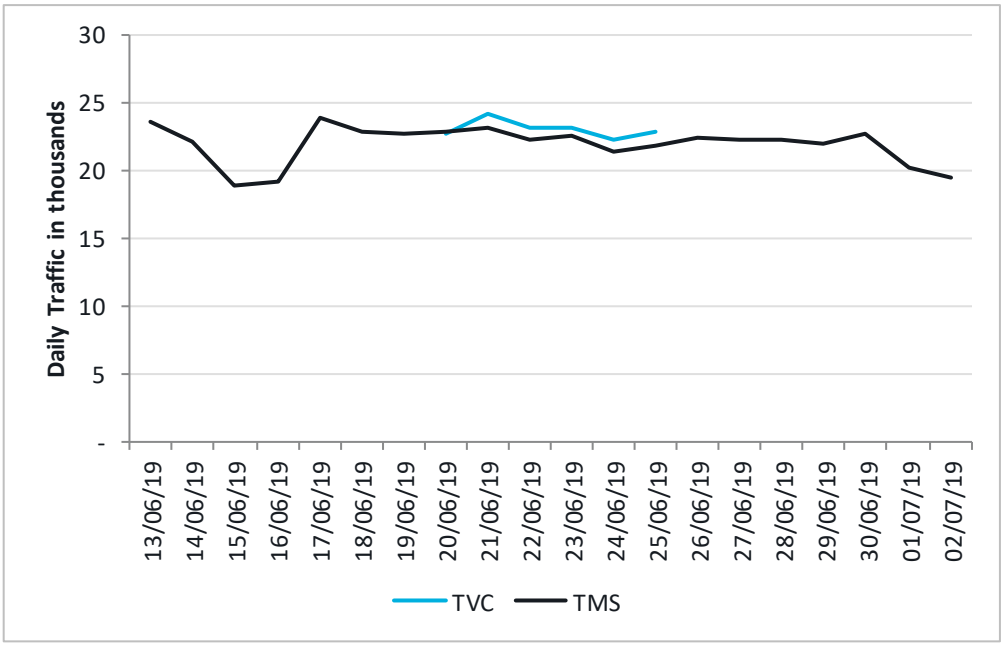
Figure 3.6: Comparison of total traffic from TVC and TMS data on Manguli toll plaza



Source: Steer analysis of Steer TVC data and TMS data shared by the vendor

3.20 From the observations above, the TVC counts in the week from 20/06/2019-25/06/2019 are in line with the corresponding TMS and further we have extended the TMS line, for a week before and after to understand the weekly variationas as shown in Figure 3.67. It is noted that the week after is following a similar trend as of the TVC week while there is a drop in one of the days for the previous week which might be attributed a 3-day long festival in Odisha, Raja Parba, between 15/06/2019 and 18/06/2019. Overall, as the comparison is well within the acceptable range of 3% and the trends are also observed to be following a similar trend over the 2 weeks, TMS data is found to be reliable and we have based our forecast on the TMS data.

Figure 3.7: Comparison of total traffic from TVC and TMS data, a week before and after the TVC counts



Source: Steer analysis of Steer TVC data and TMS data shared by the vendor

3.21 The TVC data is higher by about 3.2% overall. However, this difference 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 and 3A-MAV. For like-to-like comparison, we applied the shares of the individual vehicle categories obtained from TVC.

Table 3.3: Comparison of TVC and TMS data by vehicle category

Source	Car	LCV	Bus	2A	3A	MAV	Total
TVC	12,534	1,143	1,339	2,085	2,196	3,745	23,042
TMS	11,672	987	1,408	2,192	2,246	3,832	22,336
Difference	7.4%	15.9%	(4.9%)	(4.9%)	(2.2%)	(2.3%)	3.2%

Source: Steer analysis of Steer TVC data and TMS data shared by the vendor

3.22 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. These variations may contribute to about 2% error in the comparison. Considering these variations, and the 2% error margin, the revised comparison is as shown below.

Table 3.4: Comparison of TVC-TMS traffic for combined vehicle classification

Source	Car	LCV+2A+Bus	3A+MAV
TVC	12,534	4,567	5,941
TMS	11,672	4,587	6,077
Difference	5.4%	1.6%	(0.2%)

Source: Steer analysis of Steer TVC data and TMS data shared by the vendor

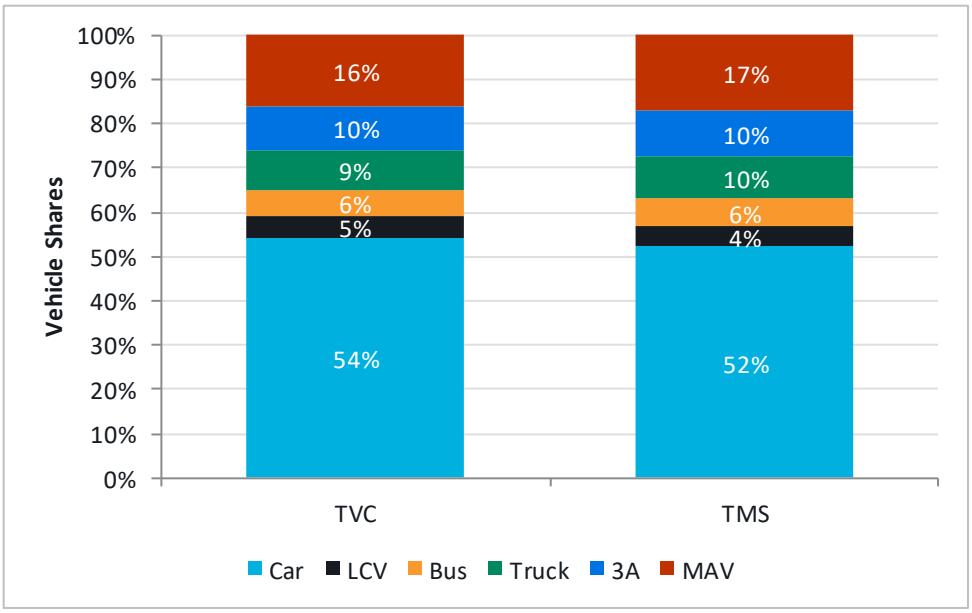
3.23 The combined classification provides a better comparison which is well with in a typical range of 3% except cars. The only major differences are observed on Cars. We believe the difference in cars is due to under reporting of violations/exemptions by car. We, therefore, adjusted the FY21 car traffic to reflect this under reporting. This is further described in Chapter 5.

3.24 The TVC surveys were conducted in June 2019, before mandatory FASTag implementation. It is our view, based on the drop in car traffic recorded in FY20, that the actual unreported number of cars would have increased post the FASTag rule.

3.25 For the purposes of the forecasts presented in this report we applied the TVC factor mentioned in Table 3.4, which is based on 2019 TVC vs TMS comparison. This could potentially imply small underrepresentation of the car traffic level at the existing toll plaza location. However with the potential shift in the toll plaza in FY22 this gap between reported vs. actual is expected to reduce to negligible levels as the new toll plaza will have significantly increased capacity to handle higher volumes of traffic. The location of the new plans is also not in the immediate vicinity of local businesses/users who tend to be the primary segment that claim exemptions/violations.

3.26 The overall vehicle distribution obtained from TVC and TMS are similar, as shown in the figure below.

Figure 3.8: Comparison of vehicle distribution from TVC and TMS data



Source: Steer analysis of Steer TVC data and TMS data shared by the vendor

TVC counts on new toll location

3.27 As discussed earlier the Manguli toll plaza is expected to be closed and new toll plaza location 6km north of the Manguli toll plaza is expected to be operational by early FY22. To understand the impact of this shift 3-day TVC counts were conducted between at the new toll plaza location, and including, 21st June 2019 and 23rd June 2019. The following table shows the comparison of the ADTs on the existing and new plaza location on these 3 days.

Table 3.5: Comparison of TVC on existing and new toll plaza location

Vehicle Category	Existing	New	Difference
Car	12,889	12,573	(2%)
LCV / Minibus	1,153	1,139	(1%)
Bus	1,328	1,281	(4%)
2A	2,183	2,224	2%
3A	2,188	2,175	(1%)
MAV	3,733	3,632	(3%)
OSV	1	1	-
Total	**23,475**	**23,025**	(2%)

Source: Steer analysis of Steer TVC data

3.28 The overall traffic at the new location is 2% lower than the existing plaza. This difference comes from the loss of vehicles that commute between Bhubaneswar/Cuttack and the local towns like Tangi, which are located between the two plaza locations.

Origin-Destination (OD) Analysis

3.29 The OD surveys were conducted on Tuesday, 19^{h} June 2019. The full list of OD zones is presented in Appendix A.

Sample Rates

3.30 The OD sample rates, i.e. the proportion of OD survey records compared with the daily TVC counts, are shown in Table 3.6.

3.31 For the purpose of OD analysis, we have combined the categories of 2A and LCVs as well as the heavy truck categories as these are often carrying similar commodities.

Table 3.6: OD sample rates

Vehicle Class	Sample Rate
Car+MLCV	21%
LCV+2A	77%
3A+MAV+OSV	75%
Total	**45%**

Source: Steer analysis of OD data

3.32 We obtained very high 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.

Top 5 O-D pairs

3.33 Based on the OD zone coding and the data obtained, we summarise below the 5 O-D pairs that have the highest number of trips made by Cars, 3A trucks and MAVs.

Table 3.7: Top 5 O-D pairs of Cars

OD pairs	OD total counts	Share of cars
Bhubaneswar-Jajpur	216	10%
Jajpur-Cuttack	155	7%
Cuttack-Jajpur	123	6%
Bhubaneswar-Bhadrak	111	5%
Bhubaneswar-Chandikhole	81	4%
Total	**686**	**32%**

Source: Steer analysis of OD data

Table 3.8: Top 5 O-D pairs of 3A

OD pairs	OD total counts	Share of 3A trucks
Kolkata-Cuttack	61	4%
Kolkata-Andhra Pradesh	50	3%
Kolkata- Bhubaneswar	49	3%
Chandikhole-Cuttack	49	3%
Kolkata-Hyderabad	36	2%
Total	**245**	**15%**

Source: Steer analysis of OD data

Table 3.9: Top 5 O-D pairs of MAVs

OD pairs	OD total counts	Share of MAVs
Cuttack-Kolkata	82	3%
Andhra Pradesh-Kolkata	71	2%
Bhubaneswar-Kolkata	69	2%
Cuttack-Chandikhole	64	2%
Vishakhapatnam-Kolkata	51	2%
Total	**337**	**11%**

Source: Steer analysis of OD data

3.34 Cuttack, Bhubaneshwar and Jajpur are the main generators of trips on asset. Kolkata and Chandikhole are other major contributors to traffic on asset. The remaining trips are distributed across different origins and destinations.

3.35 These results are consistent with our observations on the site, described in the context in Chapter 2. The Asset forms key connector for vehicle movements between Andhra Pradesh-Kolkata, as well as shorter trips between Bhubaneswar/Cuttack and Chandikhole/Jajpur towns.

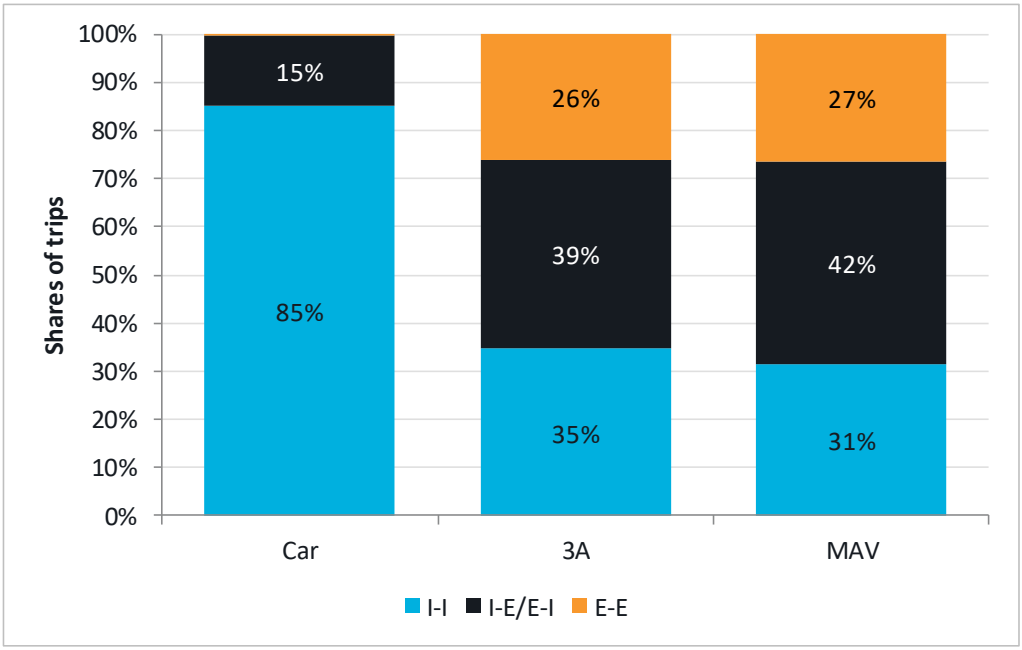
3.36 The OD matrix tables are provided in Appendix B.

Internal-External Zone Distribution

3.37 To understand the high-level distribution of movements, the OD zones were split in two categories: Internal zones and External zones. The Internal zones include all locations on the project corridor, and areas within ~100km. All other zones are considered external. Appendix A provides the definitions of each OD zone.

3.38 The internal-external distribution of trips undertaken by Cars, 3A trucks and MAVs are shown in the figure below. As can be seen, most other vehicles undertake trips within Internal to Internal zones. For all modes, most of trips are either internal or their origin/destination is internal. There are considerable 3 axle/MAV trips from External to External zones reflecting long distance goods movement on asset.

Figure 3.9: Internal-External Zonal Trip Distribution



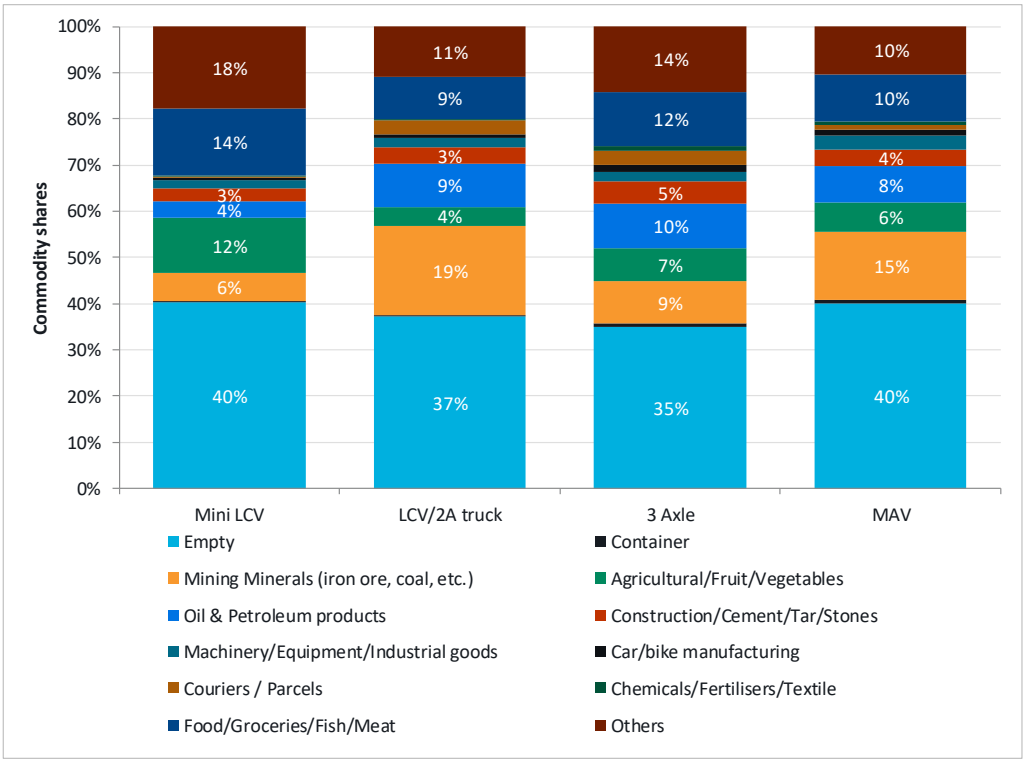
Source: Steer analysis of OD data

3.39 This concurs with our understanding of the Asset, that about 25% of truck movements are long distance, between Andhra Pradesh-Kolkata or Mumbai-Kolkata. About 40% movements have one end of the trip around the Asset, given the iron ore-steel industries, Paradip port and other industries in the vicinity. The short-distance trips come from the inter-urban movements and the influence of Bhubaneswar-Cuttack. Cars showing 85% short-distance movement further confirms the traffic patterns.

Commodity analysis of commercial vehicles

3.40 The commodity distribution of all commercial vehicles is presented in the figure below.

Figure 3.10: Commodity Distribution of all goods vehicles



Source: Steer analysis of OD data

3.41 The commodities distribution highlights that:

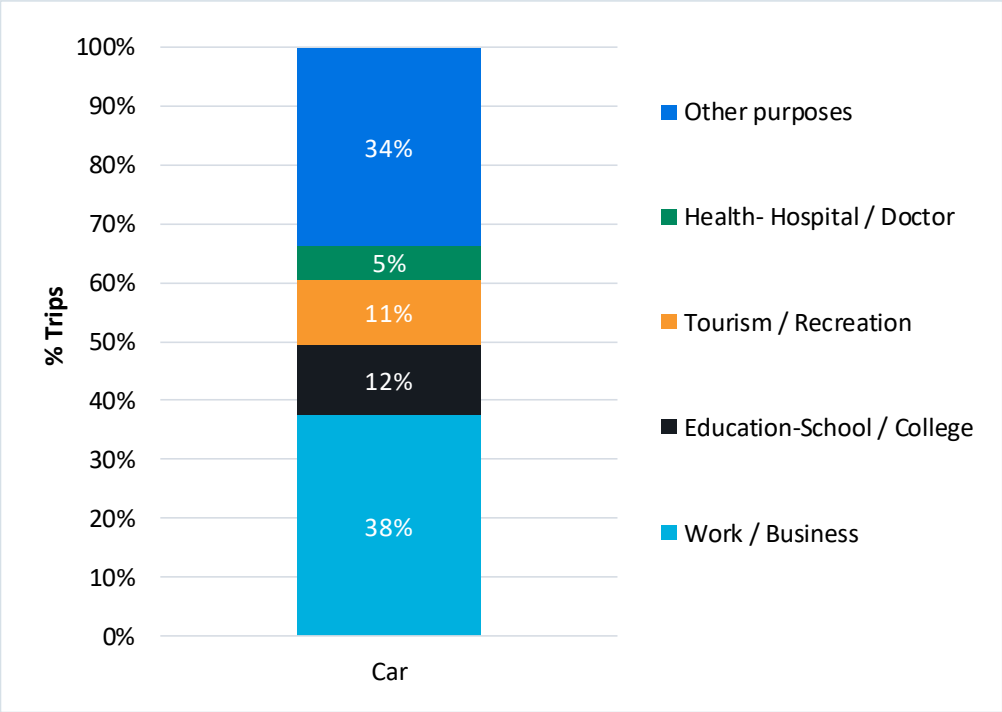
- The main commodities transported are Minerals (15%), Groceries (11%) and Petroleum products (9%);
  - 2 Axle trucks and MAVs have 20% and 15% trips respectively carrying iron-ore as main commodity.
  - Further, 10% of goods trip are either originating or destined to Paradip.
  - Over 12% of 3A/MAVs are carrying finished products and groceries including fish
- Oil and LPG gas is being carried in 2A and MAVs alike constituting 9% of total OD trips;

3.42 The commodity distribution observed are typical of a strategic corridor serving large urban centres, as there isn't any one specific commodity being carried in very high proportions, but instead have a good spread of commodities being carried. Also confirming the zonal/distance distribution, the influence of Bhubaneswar/Cuttack is seen in the shares of agricultural/groceries, while the share of iron-ore/minerals comes from the Duburi-Angul related trips. The heavy machineries/equipment are both carried to the industrial region in the vicinity as well as the long-distance strategic movements.

Trip purpose distribution for passenger vehicles

3.43 The distribution of trip purpose for cars is shown in the chart below.

Figure 3.11: Trip purpose distribution of cars



Source: Steer analysis of OD data

3.44 Figure 3.11 shows that work/business contribute to about 38% of trips on the Asset – confirming high shares of daily commute. Tourism related trips are 11% owing to travel activity to Puri, located in South-East of asset, one of the holiest pilgrimage places in India. The shares of education (~12%) are also significant as Cuttack/Bhubaneshwar have significant number of institutes. This trip distribution for car movements is typical of an urban corridor as the asset links large economic centres like Bhubaneswar/Cuttack to rest of the region.

3.45 We expect the OD results to have largely retained the similar patterns as observed fro the initial study, with some minor variations. For ex, it is likely that the shares of traffic related to iron ore could have gone up, and the shares for trucks moving between internal-to-external zones or external-to-external zones could have been skewed towards internal-to-internal. However, we expect that as traffic volumes slowly recover, the OD patterns would also align with last year patterns.

4 Socio-economic context and growth drivers

Introduction

4.1 The growth of traffic on existing roads depends on two factors: how fast the demand for travel grows (background growth); and how successful the roads are in attracting that traffic (traffic capture). Background travel demand is driven by the socio-economic conditions in the regions where the Asset is located and in the country as a whole. These include:

- Changes in factors such as population, economic growth (regional and national) and industrial growth; and
- Other local factors such as growth in local industries near the Asset.

4.2 In turn, the change in the relative competitive position of the Asset (and thus of the traffic capture it can achieve) derives from network changes, i.e. the travel time savings offered, or the tolls charged on the project road, in comparison to that on competing roads; and whether any competing road facilities are planned.

4.3 In this section we assess trends in the above growth drivers as indicators of the socio-economic conditions in the regions surrounding the Asset. We also discuss factors which influence traffic growth, macro assumptions, and the responsiveness of traffic with respect to economic growth (i.e. “elasticity” of traffic to economic growth).

4.4 The Asset lies in the state of Odisha. To capture state and regional disparities, we have analysed the key socioeconomic drivers of the background traffic demand by state.

Population growth

National level

4.5 As shown in Table 4.1 the rate of population growth in India has decreased in recent decades and this trend is expected to continue. According to the World Bank, while the Compound Annual Growth Rate (CAGR) of population had been at 1.5% between 2000 – 2015, it is forecast 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*

4.6 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

4.7 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. Each state has grown at a rate similar or higher 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

4.8 Due to the complexities of the patterns in which urbanisation takes place, and the very dynamic nature of local population migration (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 to provide a socio-economic context of the state/trends in the regions in which the Asset is located. Instead, we use economic drivers as these are validated and highly relevant to the level of business and leisure travel within the country.

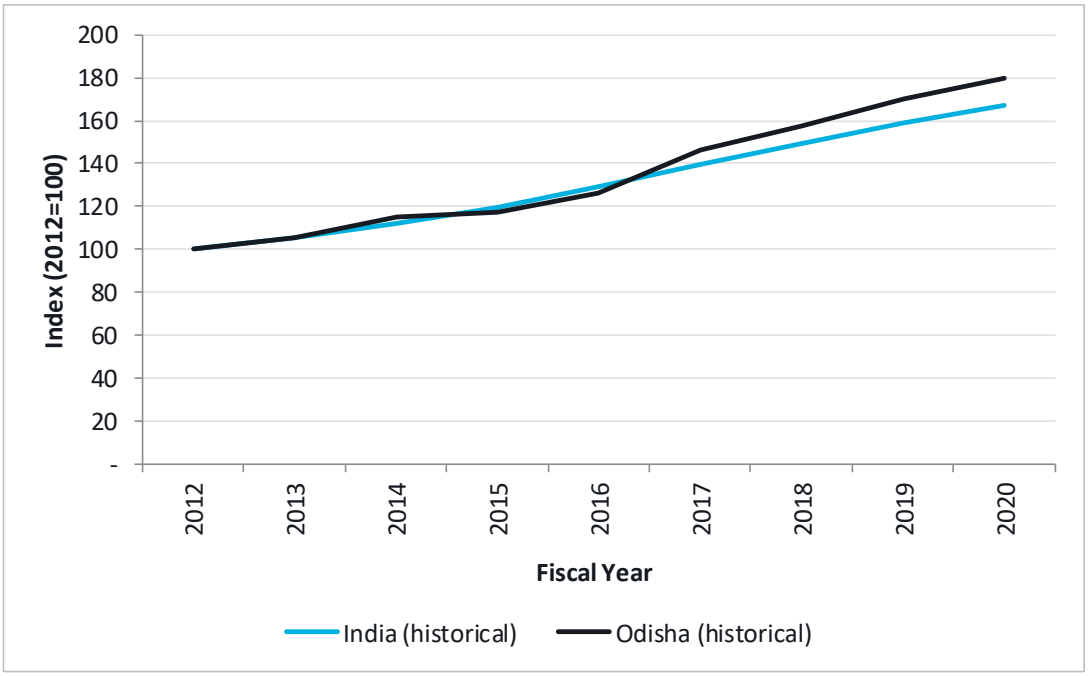
Economic growth

4.9 The Indian economy, as a whole, has grown at a compound annual growth rate (CAGR) of 6.9% over the past ten years (2010-2020), aided by a strong growth in the services and tertiary sectors.

4.10 The Asset is located in the state of Odisha, connecting the capital city of Bhubaneswar and the city of Cuttack. Therefore, significant number of local trips are also observed on the Asset. For this reason, we have incorporated the economy of the state jurisdiction in the analysis.

4.11 The following figure shows that Odisha has grown almost in line with the nation as a whole with a gradual pick-up in growth rate above the national level over the last couple of years.

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

4.12 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.

4.13 In recent years, strong growth in mining and allied industries has spurred higher growth in the economy of the state.

4.14 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 driver forecasts

4.15 In the following sections we describe the assumptions in relation to forecasts of the key socio-economic drivers of traffic.

National GDP

4.16 India's GDP is the core variable that drives our socio-economic forecasts. We have reviewed several independent sources providing national GDP forecasts; some of the key sources are detailed in the table below.

Table 4.3: Summary of Independent Economic Forecasts of India's GDP

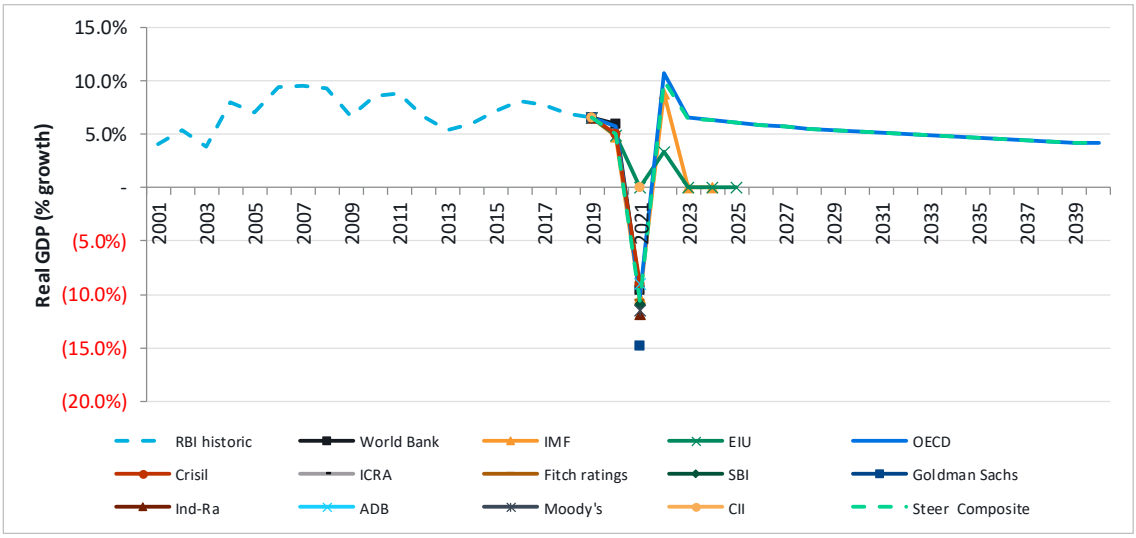
Source	Month/year of data	Forecasted Period
Consensus Forecasts	October 2020	2021 – 2030
World Bank (WB)	October 2020	2021
Organisation for Economic Co-operation and Development (OECD)	September 2020	2021 – 2060
International Monetary Fund (IMF)	October 2020	2021 – 2022

Source: Steer analysis based on third party forecasts

4.17 Based on the information detailed above, we created a composite GDP forecast for India that considers the following assumptions, and is illustrated in Figure 4.2.

- For the years 2019 – 2022, we used the average growth rate obtained from each source, smoothed to avoid minor variations across sources. This resulted in a 7.4% forecast growth rate per annum.
- This implies a -10% drop in FY21 followed by a 10% recovery in FY22.
- We assumed that the growth rate of Indian GDP would stabilise from FY23, starting at 6.5%, reaching 5.6% by 2028.
- We assumed the growth rate would reduce by a further 0.6% over the next five years, stabilizing at 5% in 2032 and constant thereafter.

Figure 4.2: Historic and forecast GDP growth

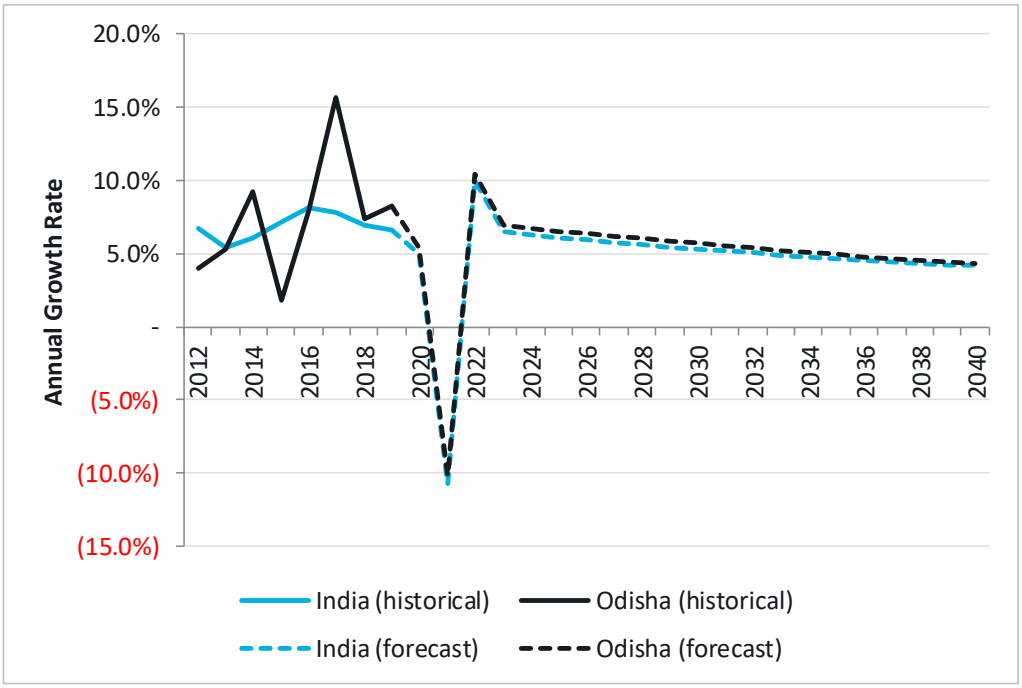


Source: Steer analysis with information using publicly available data from Consensus, WB, OECD, IMF, ICRA and others

State GDP (GSDP)

4.18 Based on the available data, we believe that the relative trend observed between the Odisha state growth and the national economy growth is an appropriate representation of the future and have projected accordingly. Our resulting GSDP forecasts are shown in the following figure.

Figure 4.3: Historic and Forecast GDP Growth, Odisha



Source: Steer analysis based on publicly available data

Traffic growth

4.19 For brownfield assets, it is common practice to use the relationship between historic traffic and key socioeconomic drivers (e.g. GDP, population, employment etc.), in order to forecast future traffic growth. In such cases, a regression-based approach to estimate the elasticity[2] of traffic demand to key macroeconomic variables is employed, where, a time series covering a few years' worth of data is required, to estimate statistical models.

4.20 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.

4.21 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

[2] An elasticity in this context implies the % change in traffic as a result of % change in key drivers. For example, an elasticity of 0.5 of traffic to GDP, implies that a 10% increase in GDP will result in a 5% increase in traffic.

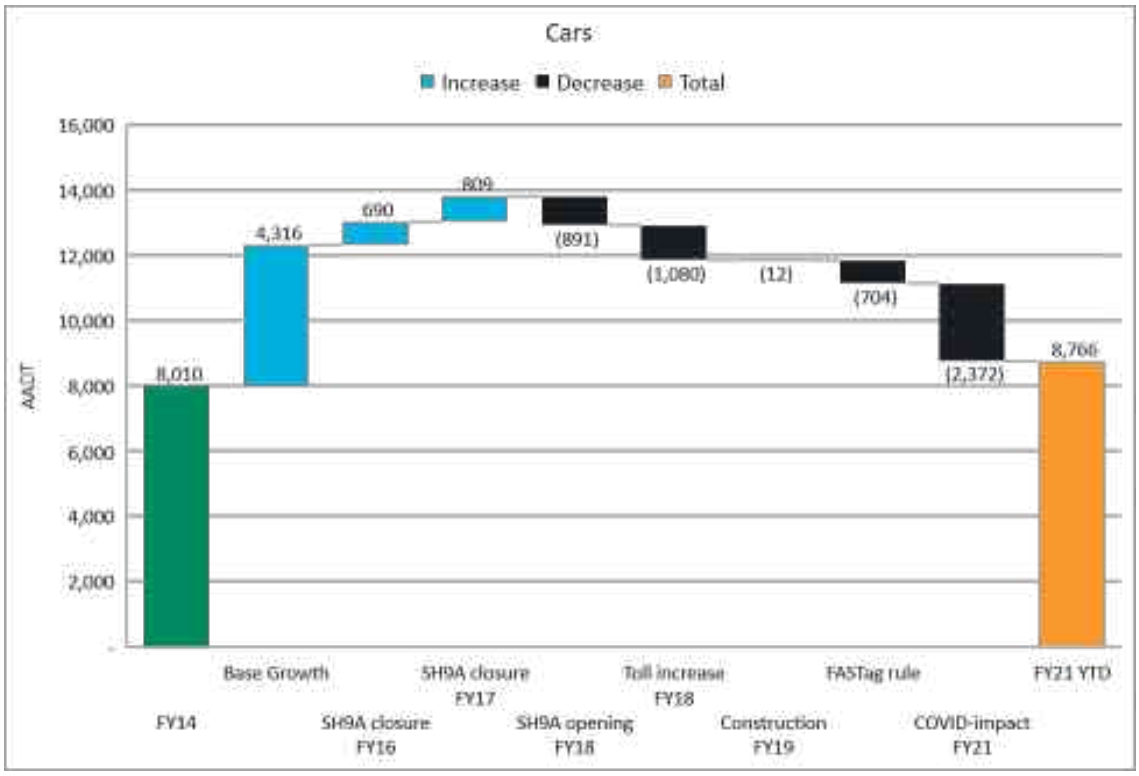
the year where new axle load norms with 20% additional load being allowed on trucks was introduced. This resulted in some dampening of truck growth.

- 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.

4.22 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.

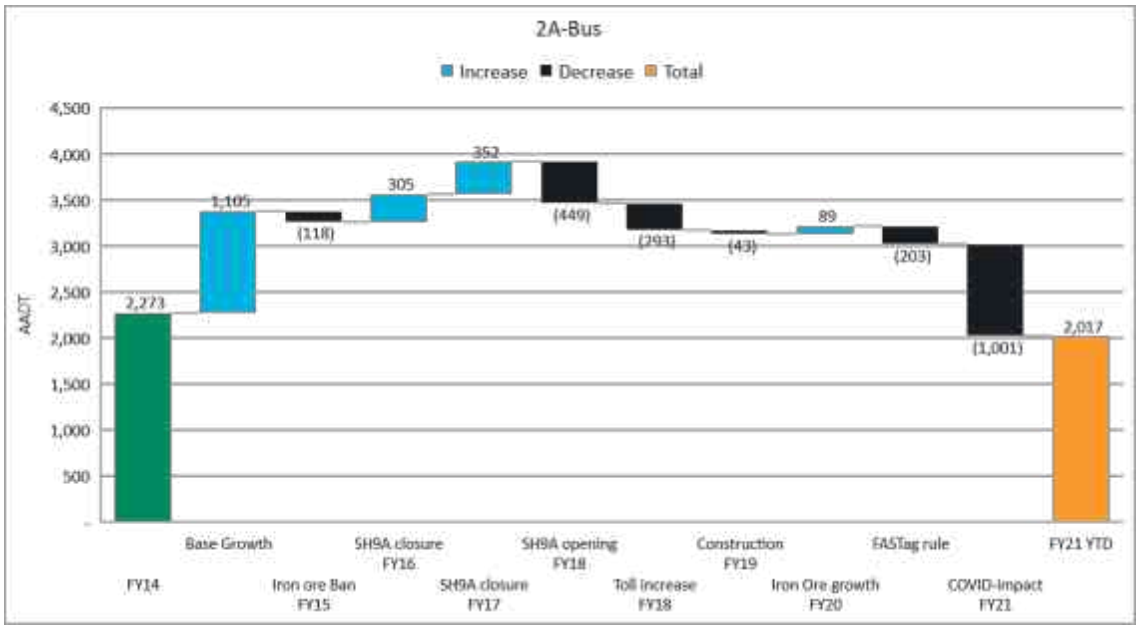
4.23 The following charts show the evolution of traffic on the Asset between FY14 and FY21YTD.

Figure 4.4: Historical growth of Cars on the Asset



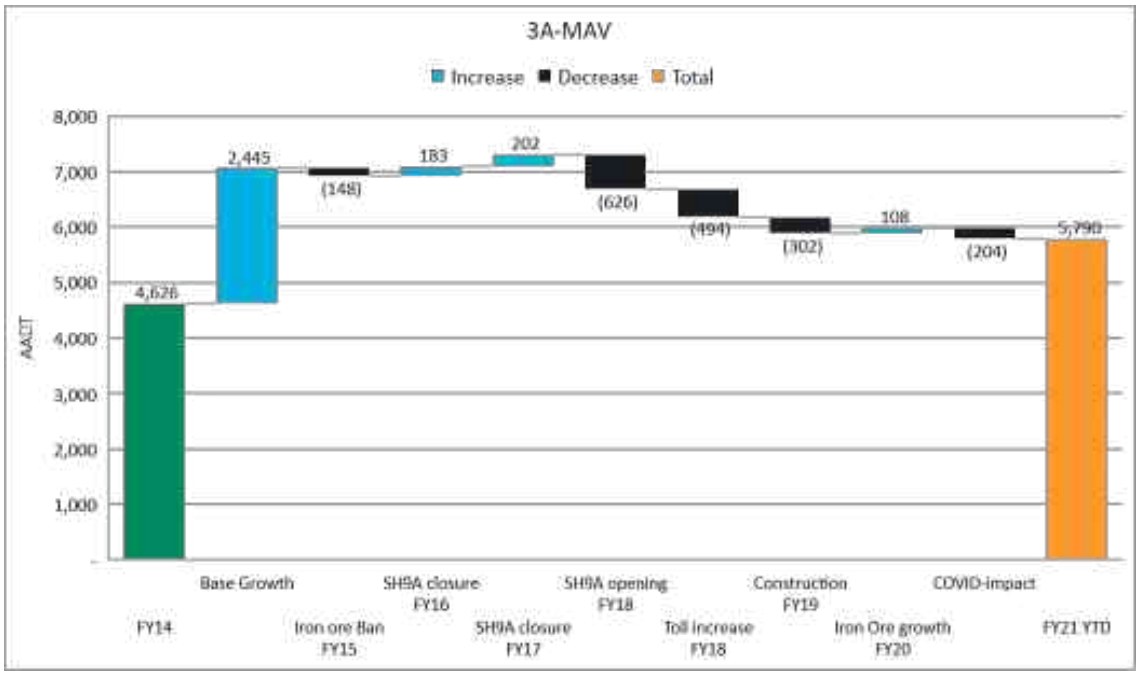
Source: Steer analysis of Vendor data using publicly available information

Figure 4.5: Historical growth of 2A and Buses on the Asset



Source: Steer analysis of Vendor data using publicly available information

Figure 4.6: Historical growth of 3A and MAV on the Asset



Source: Steer analysis of Vendor data using publicly available information

4.24 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 4.4: Estimated base growth of traffic on the Asset

	Cars	2A-Bus	3A-MAV
FY14 traffic	8,010	2,273	4,626
Estimated FY20 base traffic	11,848	3,237	6,894
Base CAGR	6.7%	6.1%	6.9%

Source: Steer analysis of Vendor data

4.25 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 trends 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 4.5: Estimated elasticities on the Asset

	FY14-FY20 CAGR			Elasticity
	Traffic	GSDP Odisha	GDP	
Cars	6.7%	7.7%	-	0.88
2A-Bus	6.1%		-	0.79
3A-MAV	6.9%	-	6.9%	0.99

Source: Steer analysis of Vendor data and publicly available information

4.26 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.

Growth drivers

4.27 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 4.6: 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

Iron Ore Production

4.28 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.

4.29 Historically, iron ore production has grown strongly in Odisha, as shown in the table below.

Table 4.7: Growth in iron ore production in Odisha

FY	2014	2015	2016	2017	2018	2019	2020
Iron Ore production	17%	-32%	52%	27%	2%	15%	17%

Source: https://www.odishaminerals.gov.in/ResourceStatistics/MineralProduction

4.30 To provide a forecast of iron ore production, we established its relation to GDP, which gave us a factor of 1.2. However, the recent boost to iron ore production has caused the factor to be much enhanced than our estimation based on data till FY19 (a factor 0f 0.84). It is expected that the growth in iron ore would slow down in the near future, therefore, we have adopted a factor of 0.97 (computed as 80% of 1.2). We applied this factor to GDP growth year on year, to forecast the iron ore production growth rates going forward.

4.31 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.

Paradip Port

4.32 Similar to iron ore production, we studied the growth in Paradip port historically, shown in the table below.

Table 4.8: Paradip port growth

FY	2014	2015	2016	2017	2018	2019	2020
Paradip port	20%	4%	8%	16%	15%	7%	3%

Source: https://paradipport.gov.in

4.33 The relation of Paradip port growth to GDP was estimated at 1.5.

4.34 As previously stated, the growth in traffic related to 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 Summary

4.35 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.

4.36 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.

4.37 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.

4.38 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 4.9: 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	82% GDP	1
	8% Iron ore production	1
	10% Paradip port growth	1

Source: Steer analysis

4.39 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.

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 assumpions as well as a plausible elasticity assumptions 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 Qaudrilateral) the overall projected PCU growth rates are considered to be reasonable.

Table 4.10: Comparison of historical and forecast growth of traffic based on adopted elasticites.

	FY15 - FY20 CAGR	FY22-FY45 CAGR
CJV	5.3%	5.2%
LCV	-2.9%	1.3%
Bus	6.4%	2.6%
2 Axle	7.2%	4.8%
3A+MAV	6.2%	4.5%
Total	**5.3%**	**4.8%**
PCU	**5.8%**	**4.7%**

Source: Steer analysis

4.40 The forecast CAGRs presented above are base forecasts excluding the external impacts. The detailed traffic and revenue forecasts are presented in Chapter 6 and Appendix F.

5 Forecasting assumptions

Introduction

5.1 In this chapter, we present the forecasting inputs and assumptions used within our modelling framework to develop forecasts for the toll plaza. We cover:

- Exogenous impacts which are expected to influence traffic demand on the Asset, covering:
  - Wider network changes;
  - Shifting of toll plaza location; and
- Revenue parameters.

Base traffic – FY21-FY22 methodology

5.2 The current unprecedented situation has led to unusual and unexpected trends in traffic. The 'normal' relationship of traffic to growth drivers, will prove insufficient in estimating traffic for the next few months. Keeping that in mind, we have estimated the traffic for FY21-FY22 at a month-on-month level to establish a reliable base traffic.

5.3 The traffic, since the gradual 'unlock' process of lifting lockdown restrictions, has slowly started recovering. However, the traffic levels haven't reached the levels, that could be considered as 'Base' of our normal traffic growth projections. Base year traffic is critical as rest of our projections pivot around the 'Base traffic'.

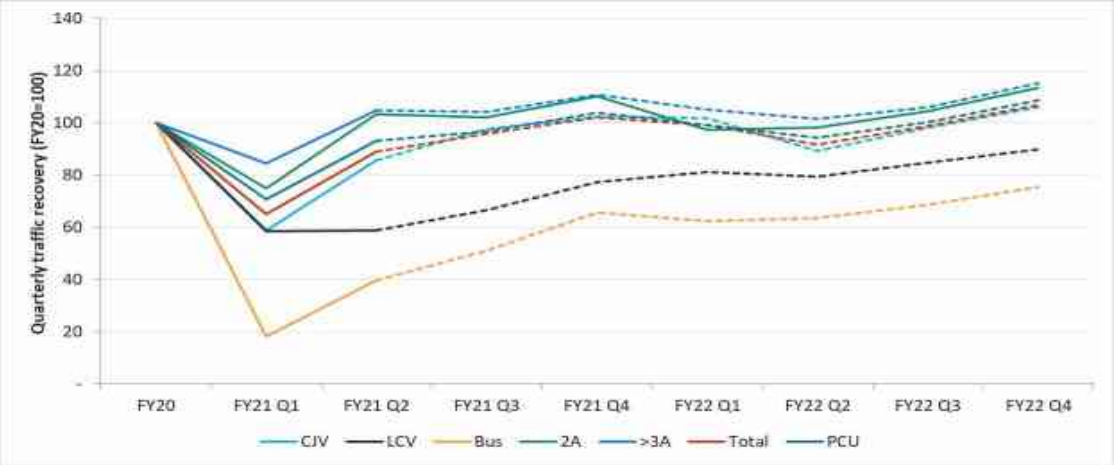
5.4 Therefore, we estimated the traffic recoveries for all vehicle categories individually for the next 12-20 months to get to a 'Base Traffic' position.

5.5 It is important to note that this view is taken based on the actual traffic volumes observed in YTD FY21 and an underlying assumption that there will be no more lockdowns implemented in the country or the regions around the asset.

5.6 Besides the monthly recoveries observed, we have also factored:

- the seasonal variations recorded every year;
- any pent-up demand showing sudden rise in growth, such as migrant movement observed in India; and
- pace of recoveries in the industrial regions/commodities around/on the assets.

Figure 5.1: Comparison of all quarters of FY21 and FY22 indexed against FY20 AADT



Source: Steer analysis based on Vendor data and asset understanding

5.7 The highest revenue generating vehicle categories have suffered the least on the asset with heavy truck traffic in Q1 (April-June) only dropping to 84% of FY20 AADT levels. This level of traffic is remarkably high as compared to other assets in the country. The high level of recovery can be attributed to faster recovery of Odisha led by steel and iron ore sectors which contribute heavily to Odisha's overall economy and more specifically contribute to traffic on the Asset. This has been further supported by the wider recovery in the country, given the strategic nature of the Asset, being part of the Golden Quadrilateral, it has witnessed a strong recovery. This recovery has been further extended to estimate rest of FY21 and FY22 traffic levels.

5.8 Based on our monthly estimation, we expect FY21 3A/MAV volume to be marginally above FY20 AADT, while the growth expected in FY22 would be closer to pre-COVID levels.

5.9 Cars suffered significant loss in Q1 of FY21, but have started to show good recovery. We, therefore, expect the car traffic to be back to FY20 levels in FY22.

5.10 Buses recorded the highest drop in traffic, majorly due to heavy restrictions on group transport, and are expected to recover the slowest.

5.11 Overall, the total PCU traffic volume in FY22 is expected to be close to that of FY20.

5.12 Table 5.1 shows the estimated FY21 and FY22 AADT compared to FY20, i.e. the pre-COVID volume.

5.13 As mentioned earlier, these estimates are based on the assumption that there would be no more lockdowns implemented anywhere in the country. This is the base case scenario that we are presenting in the forecasts discussed below. Alternate scenarios with more lockdowns and more gradual or more chequered recoveries have also been considered but not presented in this report.

Table 5.1: AADT comparison for FY20-FY21-FY22 on SJEPL

	FY20	FY21	FY22	FY21 vs FY20	FY22 vs FY21
CJV	10,661	9,551	10,544	-10.4%	10.4%
LCV	935	622	785	-33.4%	26.0%

	FY20	FY21	FY22	FY21 vs FY20	FY22 vs FY21
Bus	1,205	553	813	-54.1%	47.0%
2A	1,876	1,891	1,940	0.8%	2.6%
>3A	5,820	6,023	6,223	3.5%	3.3%
Total	**20,496**	**18,641**	**20,305**	**-9.1%**	**8.9%**

Source: Steer analysis based on Vendor data and asset understanding

Exogenous Impacts

5.14 The sections below provide detail on the various exogenous impacts which we believe will materially affect traffic on the Asset during its concession period.

5.15 There are 4 exogenous impacts analysed for this Asset:

- Completion of Chandikhole-Bhadrak expansion;
- Completion of Cuttack-Angul expansion;
- Completion of Chandikhole-Duburi upgradation; and
- Completion of Talcher-Duburi upgradation.

5.16 The map below shows the sections under construction.

Figure 5.2: Network around the Asset being upgraded

Source: Steer cartography using OpenStreetMap data

Completion of feeder routes

5.17 As the feeder sections improve, the traffic is expected to increase on the Asset. Following the methodology of GJC analysis described above, we estimated the impacts of completion and therefore improvement of the three feeder sections.

5.18 The three feeders will have influence on specific traffic shares on the Asset, which undertake the respective traffic movements. The improvement 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. The table below shows the GJC influence, the OD shares of traffic and the resulting impacts.

Table 5.2: Impact of construction on feeder routes

		Light vehicles	Heavy vehicles
Chandikhole - Bhadrak	GJC influence	-8.9%	-4.9%
	OD share	2.7%	55.5%
Cuttack - Angul	GJC influence	-2.8%	-11.2%
	OD share	1.1%	7.5%
Chandikhole - Duburi	GJC influence	-6.5%	-17.4%
	OD share	1.1%	6.4%

Source: Steer analysis

Chandikhole-Bhadrak

5.19 This section, immediately north of the Asset along NH-16, is currently being upgraded to 6-lane. The construction is expected to complete in **FY23**, considering the delays due to closure of construction work in lockdown.

5.20 The OD shares of traffic on the Asset, using this section is ~3% of light vehicles and ~55% heavy vehicles, as sown in Table 5.2Table 5.2.

5.21 The estimated difference in GJCs is about 3% in light vehicles and 4% in heavy vehicles.

5.22 The impact of completion of this section is, therefore, about **~0.1%** in light vehicles and **~2%** in heavy vehicles.

Cuttack-Angul

5.23 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 **FY23**.

5.24 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.

5.25 The estimated difference in GJCs is about 3% for heavy vehicles.

5.26 The impact of completion of this section is, therefore, about **~0.2%** in heavy vehicles.

Chandikhole-Duburi

5.27 The third feeder under construction, the section of NH53 connecting Chandikhole to Duburi, is also being expanded to 4-lanes, causing slowdown of traffic movement.

5.28 The OD data for the Asset showed that there are currently ~6% of heavy vehicles using the section. However, the share of light vehicles is less than 1%. Therefore, no impact on light vehicles is expected.

5.29 The GJC variations for heavy vehicles on the section was estimated around 5%.

5.30 We have, thus, estimated a net increase in traffic of ~**0.3%** of heavy vehicles in FY23, when the construction activities are expected to conclude.

Completion of Talcher-Duburi upgradation

5.31 The next section of NH53, Duburi to Talcher, immediately to the west of Chandikhole-Duburi, is also being considered for 4-laning. Currently, the stretch between Duburi and Talcher has very poor road conditions. Thus, many trucks access the Asset and NH55 to reach Angul/Talcher (Route 2, shown in the map below).

5.32 The figure below presents the two routes under consideration.

Figure 5.3: Comparison of two routes between Duburi and Talcher/Angul

Source: Steer cartography using OpenStreetMap data

5.33 Route 2, in Figure 5.3, is about 70km longer than Route 1. It is therefore, expected that improvements to Duburi-Talcher section will have a significant impact on the traffic.

5.34 To analyse this impact, we split the in-scope traffic in 2 parts:

- Part 1: Vehicles commuting exactly between Duburi and Angul/Talcher via the Asset
- Part 2: Long-distance East-west traffic that can either use Route 2 or Route 1 when it improves. For instance, traffic commuting between Kolkata and Mumbai can choose either of the two sections.

5.35 From the OD data, we found that there are about 2% MAVs and OSVs undertaking the Duburi-Talcher route via the Asset, i.e. the Part 1 traffic. We expect all of this traffic to move to Route 1, when upgrades to NH53 will be completed.

5.36 For Part 2 traffic, our OD data showed that of the total MAV traffic on the Asset of 3,123, there are about 19%, i.e. ~590 MAVs in-scope of the analysis.

5.37 To determine the share of MAVs that could move to NH53, we compared the GJCs of the two sections. We then used a logit model on the total traffic which could be in-scope of choosing either of the two routes.

5.38 Based on the logit model, we estimated that post the improvements on NH53, another ~125 MAVs (21% of the in-scope) from the Asset would shift to NH53. This means that there would be a negative impact of ~4% on total MAVs on the Asset.

5.39 The net decrease in MAVs, due to improvement of Talcher-Duburi improvement is estimated to be around **-6%**. We expect that half of this impact would be observed on partial completion of the section, which we estimate to be around **FY24**. The full impact will be seen one year later in **FY25**.

5.40 The table below shows the summary of the estimation of this impact.

Table 5.3: Impact of Talcher-Duburi improvement

Part 1: Duburi-Chandikhole-Angul		
Traffic in-scope	Diversion expected	Impact
2%	100%	2%
Part 2: NH55 vs NH53		
In-scope demand	Share of in-scope to divert	Share of total to divert
590	21%	4%
Net Impact		6%

Source: Steer analysis

Summary of exogenous impacts

5.41 The table below summarises all the impacts described above.

Table 5.4: Summary of exogenous impacts

Impacts Description	Positive/ Negative	CJV	3A-MAV	Timeline
Completion of Chandikhole-Bhadrak section	Positive	0.1%	2.2%	FY23
Completion of Cuttack-Angul section	Positive	no impact	0.2%	FY23
Completion of Chandikhole-Duburi section	Positive	no impact	0.3%	FY23
Completion of Talcher-Duburi section	Negative	no impact	-6% (MAV)	FY25 50% impact in FY24

Source: Steer analysis

Revenue Parameters

Toll Rates

5.42 The base year toll rates, for FY20 and FY21 were sourced from the NHAI website. These toll rates are presented in Appendix B. For future toll rates, we have made calculations based on concession agreement and our assumption of WPI forecast.

Ticket Type Segmentation

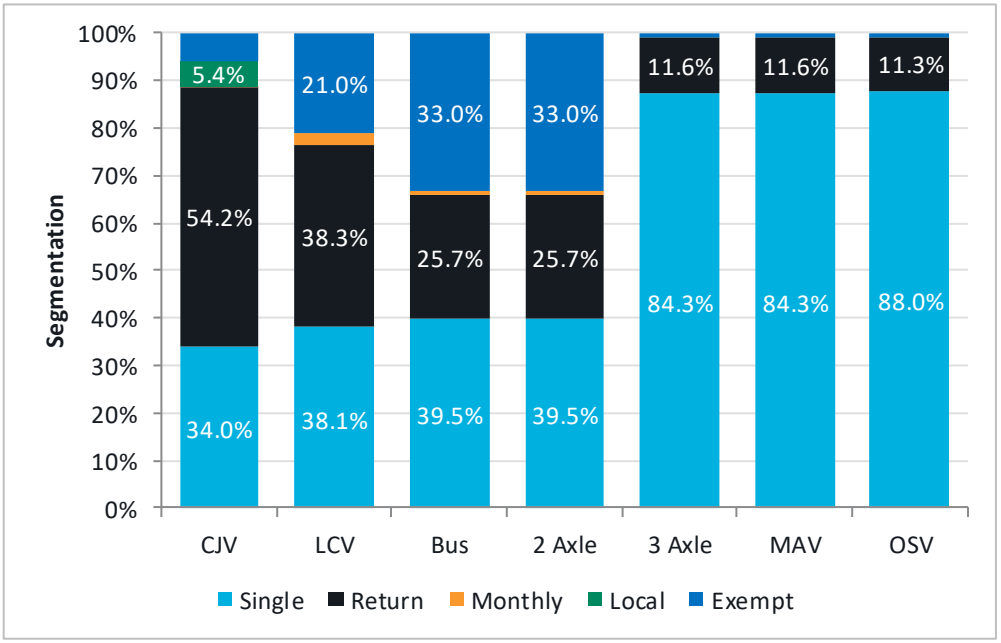
5.43 The frequencies of tickets purchased is an important parameter in estimating revenues.

5.44 However, the past data had combined categories of Bus-2A and 3A-MAV. To determine the individual segmentation, we had to make some assumptions.

- For 3A-MAV, we assumed that the segmentation would be the same for both the categories, as the traffic patterns are generally similar for the two categories.
- For 2A, we used site knowledge and OD data validation to come up with the segmentation.

5.45 The charts below show the segmentation obtained for FY20 traffic.

Figure 5.4: FY20 Segmentation



Source: Steer analysis based on Vendor data

5.46 As mentioned previously, since the implementation of FASTag, the segmentation shares have varied considerably, with 'Single' ticket shares, being the only category available in cash, increasing on all vehicle categories.

5.47 As discussed in Chapter 3 under FASTag implementation in point 3.15, the FY20 segmentation, therefore, cannot be assumed in the forecast. Hence, we used FY21 segmentation as our base to project segmentation till FY25. We expect that as FASTag shares increase and the cash users would reduce therefore the 'single' share would decrease and the following ticket categories would increase in tandem till FY25 and then stabilise:

- the shares of 'Return' tickets across all vehicle categories

- ‘local’ ticket shares increase in CJV
- Increase in other shares (‘Disc A+B’ tickets)

5.48 The extent of this increase was estimated based on increase expected in FASTag shares, as shown in the table below. For ex. the FASTag shares on MAVs in FY21 was 70% and which we estimate to go up to 90% by FY25. Correspondingly, we have increased the Return shares from 15% in FY21 to 39% in FY25.

5.49 The table below shows the assumed ETC shares till FY25 based on FY21 segmentation.

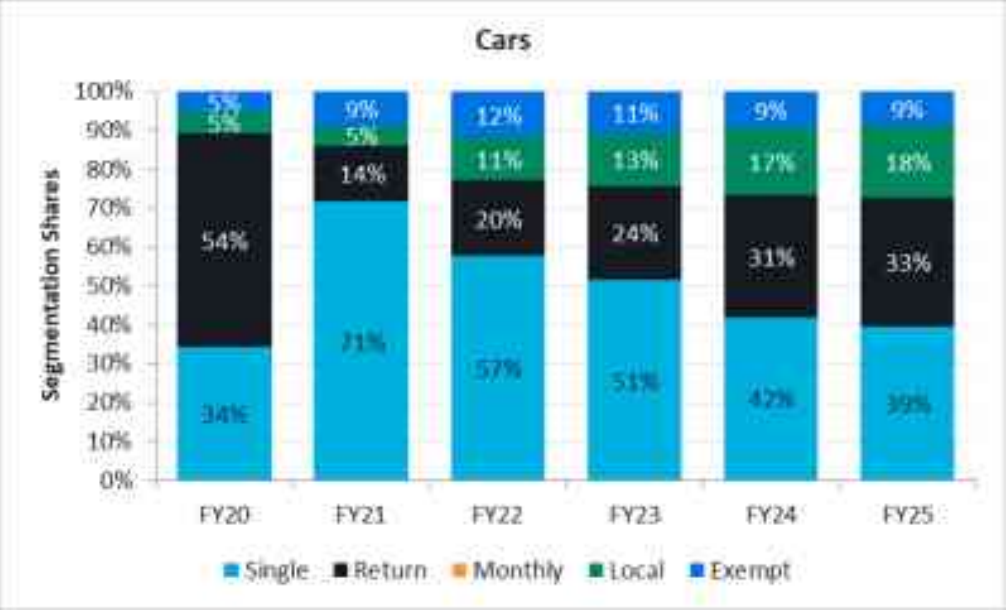
Table 5.5: Assumed future ETC shares till FY25

	FY21	FY22	FY23	FY24	FY25
CJV	43%	55%	60%	68%	70%
LCV	64%	68%	72%	76%	80%
Bus	67%	70%	73%	76%	79%
2A	67%	70%	73%	76%	79%
3A	70%	75%	80%	85%	90%
MAV	70%	75%	80%	85%	90%
OSV	40%	40%	40%	40%	40%

Source: Steer analysis

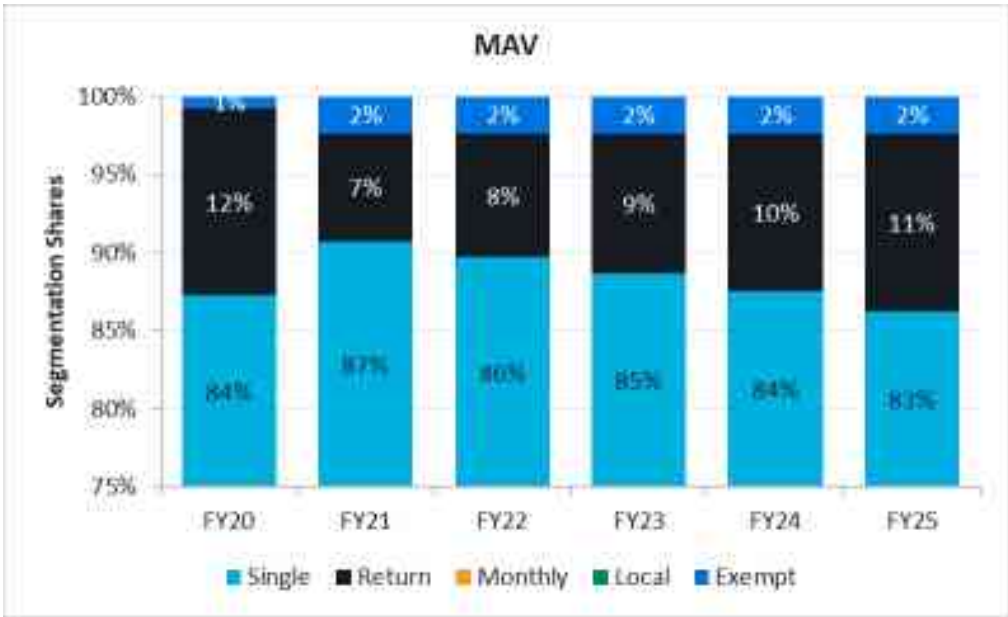
5.50 Figure 5.5 and Figure 5.6 below show the variation in segmentation for cars and MAVs, after adjusting the segmentation over the years till FY25 to compensate the abnormal increase in ‘Single’ ticket shares due to FASTag implementation owing to higher cash users as explained in Chapter 3, shows that return shares and local shares increased over the years for CJV and similarly for MAVs return have increased till FY25. And the shares are expected to stablise from FY25 onwards.

Figure 5.5: Projected segmentation for cars, SJEPL



Source: Steer analysis based on Vendor data

Figure 5.6: Projected segmentation for MAVs, SJEPL



5.51 The charts for other vehicle categories are shown in Appendix D.

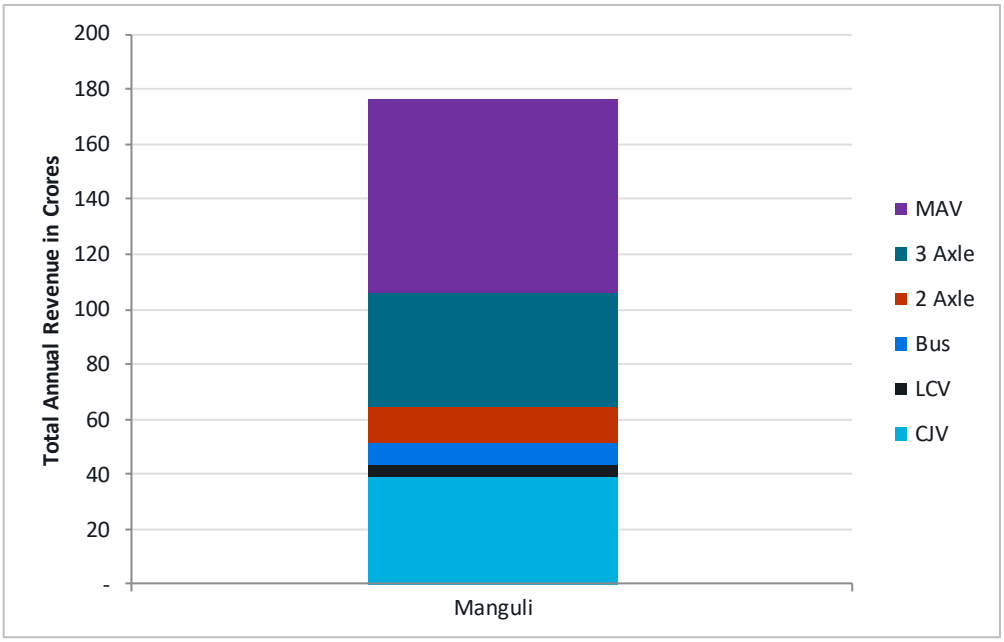
Trip Factors:

5.52 Trip Factors are the ratios of total trips taken to tickets sold. For instance, one return ticket buys two trips; so, the allowable trip factor would be 2. For the Asset, we estimated the trip factors from FY20 and FY21, which were nearly identical and assumed these would remain constant throughout the forecast. We have presented the trip factors in Appendix D**.**

Base Year Revenues

5.53 Using the parameters described above and the base year traffic, the base revenues were estimated. These are presented in the chart below.

Figure 5.7: FY20 Annual Revenues



Source: Steer analysis based on benchmarks

5.54 Using the traffic data, we estimated the FY19 and FY20s revenue amount of INR 156.8 crores and INR 176.5 crores. This matches with the reported revenue of INR 156.2 crores and INR 175.4 crores with a nominal difference 0.4% and 0.6% for the years FY19 and FY20 respectively. We have, thus, validated our assumptions of trip factors and ticket segmentations.

TVC factors

5.55 As described in Chapter 3, The TVC-TMS comparison showed that the car traffic is 5.4% higher than toll paying cars recorded. We have, therefore, applied an increase of 5.4%, as an external impact, on cars in FY21. This additional 5.4% is also adjusted in the 'Exempt' ticket category.

5.56 As mentioned in Chapter 3, the TVC surveys were conducted in June 2019, before mandatory FASTag implementation. It is our view, based on the drop in car traffic recorded in FY20, that the actual unreported number of cars would have increased post the FASTag rule. However, we relied on the data available to us.

5.57 Additionally, and as discussed earlier, the Manguli toll plaza is expected to be closed and new toll plaza location 6km north of the Manguli toll plaza is expected to be operational by early FY22. To understand the impact of this shift 3-day TVC counts were conducted between at the new toll plaza location, and including, 21st June 2019 and 23rd June 2019. We correspondingly applied the difference in TVCs on the two locations, shown in Table 3.5, as an impact. We also reduced the shares of local and exempt categories from the segmentation, to account for shares of locally driven traffic.

Inflation Linked Changes

5.58 The concession agreements and the toll notification specify the toll calculation process for every toll plaza of every Asset. The process allows changes in toll levels at each of the plazas to be directly linked to inflation (WPI) changes. The concession agreement-based toll escalation formula also includes a rounding of the toll levels to the nearest INR 5. The exact formula as prescribed in the latest toll notification notices issued by the government for the concession has been implemented in our forecasting model.

5.59 For this assignment, the Client provided the WPI forecasts to us, sourced from Oxford Economics forecasts. These are used as an input to the toll level calculation.

5.60 Note that the toll level is set in this formula is in nominal terms, hence the total revenue calculated in our forecast model is also the nominal revenue. The following table shows the assumed WPI rates.

Table 5.6: WPI forecast assumptions

Financial Year	Growth rates
FY22	0.7%
FY23	5.2%
FY24	4.8%
FY25	4.9%
FY26	5.2%
FY27	4.7%
FY28	4.8%
FY29	4.5%
FY30	4.4%
FY31	4.1%
FY32	3.9%
FY33	3.9%
FY34	4.0%
FY35	4.0%
FY36	3.9%
FY37	3.7%
FY38	3.8%
FY39	3.8%
FY40	3.8%

Source: Oxford Economics

6 Traffic and Revenue Forecasts

Introduction

6.1 In this chapter we present our traffic and revenue forecasts, from the base year to the end of the concession period for the Asset.

6.2 Assumptions around the expected future values of various parameters (such as changes in GDP, GSDP, and developments in the surrounding road network) have been benchmarked against independent data where possible.

6.3 All traffic is presented as tollable traffic (tollable AADT at the plaza). All revenue is presented as Indian rupees (INR) in nominal terms.

6.4 The reduction in growth rates across all vehicle types is largely related to the slowing growth rates assumed for national GDP and state GSDP, as derived from publicly available data, as these are the primary drivers in our forecasts.

6.5 **Table 6.1** below presents the traffic forecasts summary of the tollable AADT and CAGRs on the Asset.

Table 6.1: AADT and CAGR Forecast on the Asset

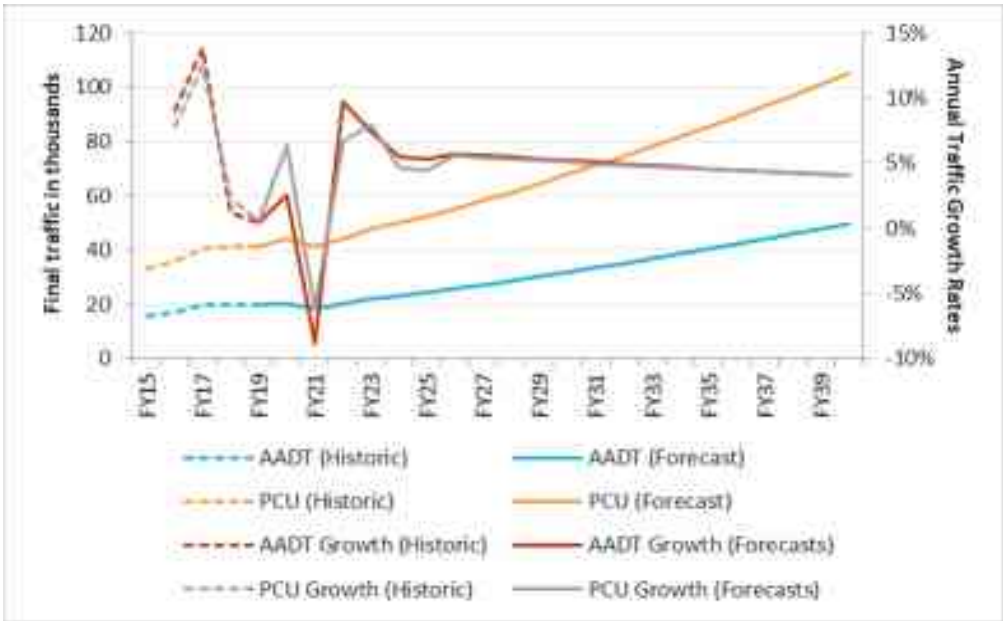
Vehicle Category	AADT							CAGR					
	FY20	FY21	FY22	FY23	FY35	FY40	FY45	FY20-21	FY21-22	FY22-23	FY23-30	FY30-40	FY40-45
CJV	10,661	9,621	10,853	11,616	22,870	28,541	34,744	-9.8%	12.8%	7.0%	6.2%	4.9%	4.0%
LCV	935	624	791	805	957	1,013	1,064	-33.3%	26.8%	1.8%	1.6%	1.2%	1.0%
Bus	1,205	548	784	812	1,145	1,281	1,415	-54.5%	43.1%	3.6%	3.1%	2.4%	2.0%
2 Axle	1,876	1,895	1,955	2,133	3,966	4,883	5,888	1.0%	3.2%	9.1%	5.6%	4.5%	3.8%
3 Axle	2,150	2,223	2,287	2,446	3,771	4,418	5,128	3.4%	2.9%	7.0%	3.8%	3.3%	3.0%
MAV	3,667	3,771	3,817	4,189	7,672	9,629	11,830	2.8%	1.2%	9.7%	5.1%	4.9%	4.2%
OSV	2	1	1	1	1	2	2	-68.7%	-2.0%	9.7%	5.1%	4.9%	4.2%
AADT	**20,496**	**18,682**	**20,488**	**22,003**	**40,383**	**49,767**	**60,072**	**-8.8%**	**9.7%**	**7.4%**	**5.4%**	**4.6%**	**3.8%**
PCU	**44,268**	**41,527**	**44,299**	**47,853**	**85,485**	**105,146**	**126,879**	**-6.2%**	**6.7%**	**8.0%**	**5.1%**	**4.5%**	**3.8%**

Source: Steer analysis

6.6 Growth rates present an overall positive CAGR of +4.7% in PCU within the concession period, which is higher in initial years with exogenous impacts but overall stable.

6.7 The figures presented below illustrate the overall AADT forecasts and growth for the Asset.

Figure 6.1: Historical and forecast AADT and growth rates, FY15-FY45 on SJEPL



Source: Steer analysis

6.8 As described in Chapter 3, FY18 had dual impact of toll rates increasing and alternate SH9A opening. FY19 traffic had the impact of construction activities beginning on three of its feeder routes. These resulted in low growth rates.

6.9 The growth rate of FY21 is a combination of:

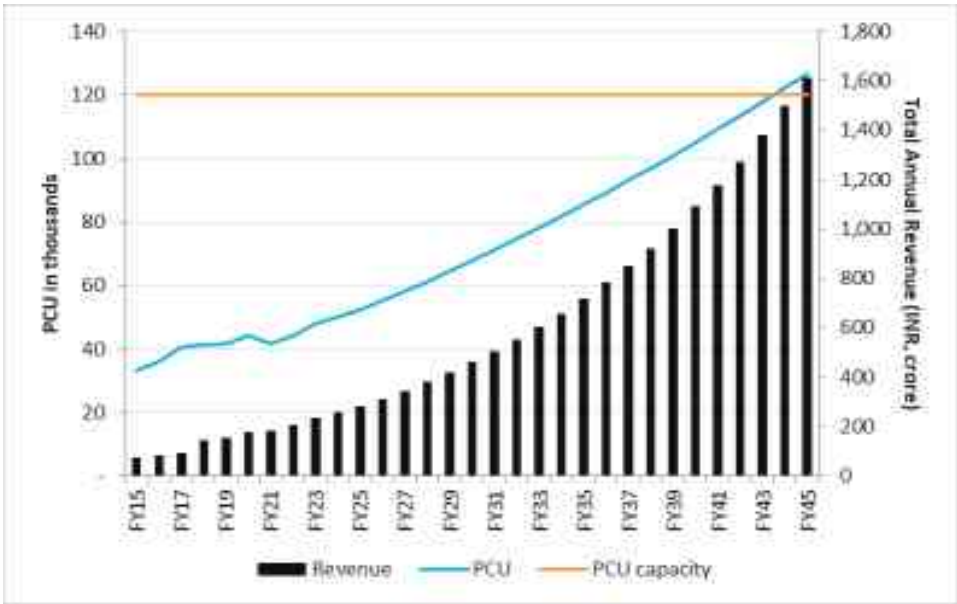
- Impact of COVID-19; and
- 5% increase in car traffic, owing to the TVC factor, described in Chapter 5;

6.10 FY23 has high growth due to the positive impact of completion of three feeder routes of the Asset, shown in Table 5.4.

6.11 FY23 and FY24 have the negative impact of Duburi-Talcher alternate section opening, also shown in Table 5.4.

6.12 The figure below shows the variation of traffic PCUs and total revenue of the Asset.

Figure 6.2: Variation of PCUs and Total Revenues (Nominal) on SJEPL



Source: Steer analysis

6.13 The traffic forecasts for each year are presented in Appendix F.

Concession agreement: effect of variations in target traffic growth

6.14 As per the Concession Agreement (Article 29), the Authority and the Concessionaire refer to a precise traffic volume, "Target Traffic" in PCUs per day, on a specific month and year, "Target Date", to determine variations on the concession period.

6.15 The concession period is renegotiated if the Actual Traffic falls short of the Target Traffic by more than 2.5% thereof or exceeds the Target Traffic by more than 2.5% thereof.

6.16 As per the concession agreement, for every 1% excess target traffic, the concession period shall be reduced by 0.75% with a capping of maximum 10%.

6.17 We have used FY19 seasonality of the month addressed in the Target Date to adjust for seasonal trends and arrive at related monthly traffic from AADT traffic.

6.18 The concession agreement recommends taking counts over three years, i.e. the target year, preceding year, and following year, to verify the traffic levels. We have used the average AADT forecast and the SCFs for the months of March and April to estimate The traffic in those months, as a proxy for Actual Traffic. The SCF values are provided in Appendix G.

6.19 It should be noted that two sets of surveys should have been conducted in March 2019 and March 2020. Surveys were not commissioned last year, nor this year possibly due to COVID.

6.20 This implies that it is unlikely that concession extension would be granted for this Asset. However, NHAI may possibly agree to provide extension based on traffic recorded on toll plaza. We have, therefore, provided the estimated extension.

6.21 The table below provides the variations in the concession periods for the Asset.

Table 6.2: Target traffic: CA vs forecast traffic

Asset	Target Date	Target Traffic	Actual Traffic			Av.	Diff.	Concession End	Extended End
			FY19-FY20	FY20-FY21	FY21-FY22				
SJEPL	1-Apr-2020	56,937	43,849	44,012	43,888	43,950	-22.8%	2038	2043

Source: Steer analysis of concession agreements

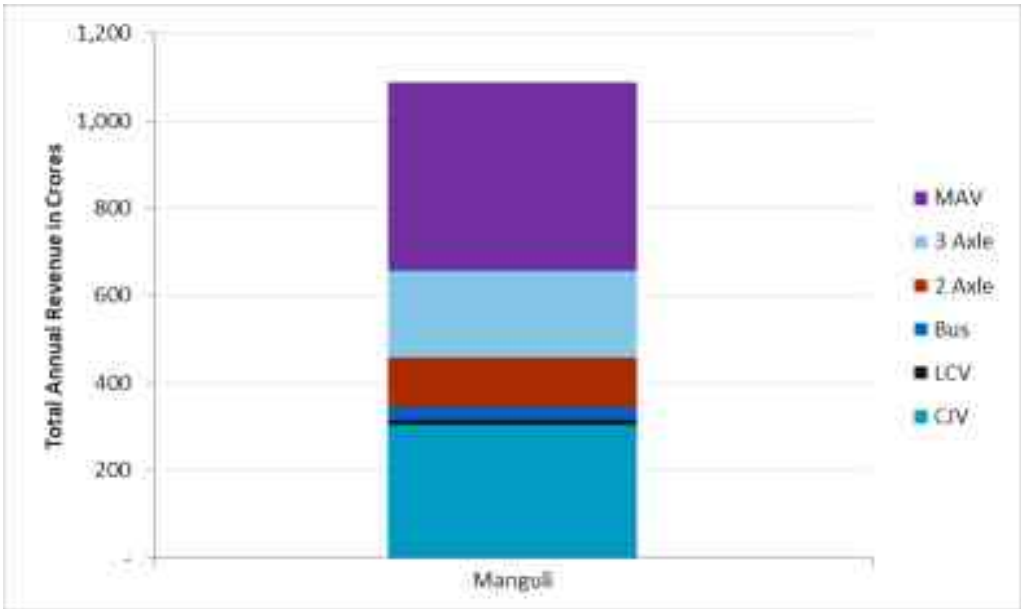
6.22 Considering the traffic of next two years, the expected end of concession would be 2043.

Final Revenues (nominal)

6.23 Figure 6.3 below presents total annual revenues (nominal) by vehicle class for the Asset at the end of the concession period.

6.24 We estimated SJEPL to generate a revenue of about INR 1,145 crores in FY40.

Figure 6.3: Total annual revenues for FY40 (in INR Crores), SJEPL



Source: Steer analysis

Summary outlook

6.25 Overall, the Asset has a mix of local inter-urban, as well as, long-distance traffic patterns. The region around the Asset has industrial characteristics, which becomes a strong growth driver. The network of highways connecting the Asset is at a developing stage. The region, being close to the coast, also has the risks of natural disasters like cyclones.

6.26 The impact of COVID-19 pandemic has been relatively short term on this asset, due to the strategic nature of traffic supported by the stronger recovery of local economy.

6.27 Table 5.4 provides a summary of the exogenous impacts that we have estimated in our forecasts. However, there are some uncertainties in the extent of the impacts which we have highlighted in the section below, along with other risks.

Table 6.3: Summary outlook for SJEPL

CAGR for concession period	Risks		
	Included in the forecasts	Potential Upside	Potential Downside
AADT: 4.5% PCU: 4.4% (FY20-FY40) AADT: 5.1% PCU: 4.9% (FY22-FY40)	Completion of Chandikhole-Bhadrak expansion (~ 2% in FY23)	None	The completion may get delayed.
	Completion of Cuttack-Angul expansion (~ 0.2% in FY23)	The section may attract slightly higher traffic than estimated, given the East-West connectivity it provides to the traffic on the Asset.	The completion may get delayed; there may not be any impact if some other alternate route is developed.
	Completion of Chandikhole-Duburi expansion (~ 0.3% in FY23)	None	There may not be a positive impact of improvement in level of service, given that there are no decent alternatives to this section.
	Completion of Talcher-Duburi expansion (~ -6% in FY25)	The project might be delayed, causing delays in diversion of traffic also.	The extent of the impact on long-distance traffic may be higher.
	Recovery from COVID-19 impact	The recovery of traffic is based on recovery recorded till September 2020 and an understanding of the asset and socio-economic background. The recovery may happen sooner, depending on economic boost.	The pandemic situation is still uncertain, and there maybe more lockdowns implemented which could suppress traffic growth further.
	Overall traffic and revenue growth	The forecasts of growth drivers (GDP/GSDP etc) and WPI are estimated, and may have higher growth.	The forecasts of growth drivers (GDP/GSDP etc) and WPI are estimated, and may have lower growth.

Source: Steer analysis

7 Addendum to traffic report

Introduction

7.1 Steer was commissioned to carry out traffic and revenue due diligence of the Asset under consideration. A traffic report was submitted in Apr-21, which was based on data provided by the client upto Sept-20.

7.2 At the time of these estimates the first wave of COVID-19 related disruptions had subsided and the economy was witnessing a swift recovery, which can be attributed both to the growth in the national and regional economy and the pent up demand oberserved in Q3FY21.

7.3 In the forecasts presented in this report the impact of second wave of the COVID-19 pandemic was not considered as it started impacting the wider economy and traffic performance of these assets from March/April 2021 onwards. More recently the client has shared updated traffic data upto August 2021.

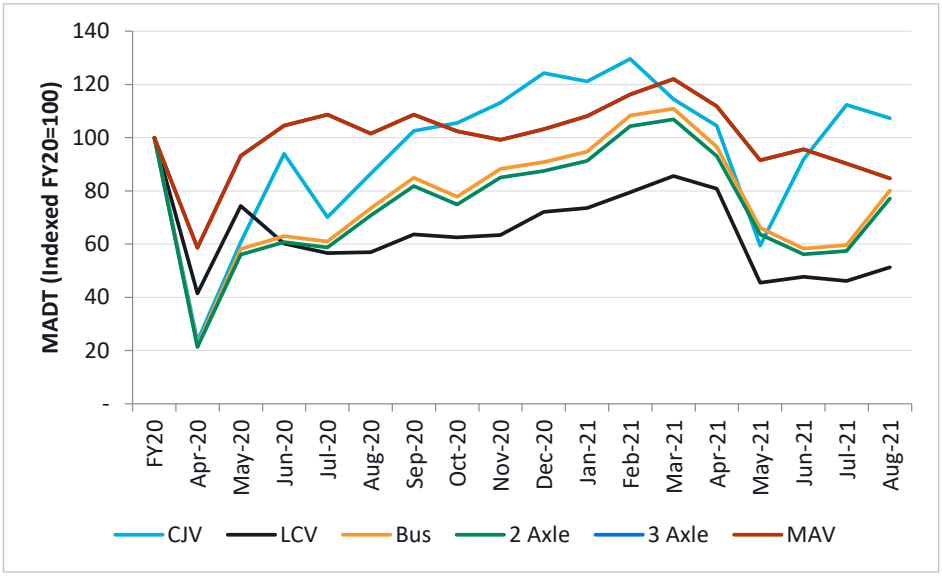
7.4 The sections below present the comparison of evolution of actual traffic versus estimates for FY21. For FY22, a revised FY22 AADT has been estimated based on actual data upto Aug-2021 and subsequently compared to the estimates provided in this report earlier. Since FY22 is a partial year, with data available only from Apr-21 till Aug-21, we have taken reasonable assumptions to build full year traffic and revenue profile for comparing estimates of FY22 that were presented earlier.

Traffic comparison

7.5 Historically, the Asset has shown good traffic recovery and growth despite the seasonal traffic drops observed during rainy season (impacted by monsoons during June-August period), which could be attributed to the strategic location of the Asset. As explained in detail in **Chapter 2**, significant proportion of the traffic on the Asset is contributed by the industrial regions situated in and around cities including Bhubaneswar, Duburi, Talcher. Traffic movement to Paradip port is also captured on the Asset. We are of the view that it is reasonable to assume that a similar recovery in traffic as that was observed in FY21 post the 1st wave of the pandemic will take place in the current year (FY22), once the impact of 2nd wave of COVID-19 and seasonal diruptions subside.

7.6 Evolution of monthly vehicle wise traffic volumes (upto Aug 2021) as compared for FY20 AADT across vehicle categories, is presented in the chart below.

Figure 7.1: Evolution of vehicle wise MADT (indexed to FY20 AADT)



Source: Steer analysis

7.7 As we can see that by Mar-21, vehicle types such as 2A trucks and Buses reached FY20 levels whereas CJVs, 3A/MAVs showed much higher traffic volumes. forCJV the increased traffic volumes can be attributed to the preference for travel by personal vehicles post-COVID-19 whereas the growth on MAVs reflects both the strong and sustained economic recovery in Q4FY21. The variation in LCV volumes is due to the LCV/2A classification issues, with the onset of FASTag based transactions, the LCV/2A category is witnessing variations, this is also been witnessed on other Assets that have been analysed post mandatory implementation of FASTag.

FY21 estimates vs actuals comparison

7.8 At PCU level, Steer estimates are 3% lower compared to actuals. The table below presents the vehicle wise comparison.

Table 7.1: FY21 Steer estimates and Actual AADT comparison

Vehicle Category	FY21 Steer Estimates	FY21 Actuals
CJV	9,621	10,582
LCV	624	628
Bus	548	973
2 Axle	1,895	1,459
3 Axle	2,223	2,249
MAV	3,771	3,836
OSV	1	1
Total	**18,682**	**19,727**
PCUs	**41,527**	**42,830**
Difference		**3%**

Source: Steer analysis of client data

7.9 A higher actual traffic for FY21 could be attributed to the combination of various reasons including the impact of toll plaza relocation, and a robust recovery in traffic volumes obsererved despite Q1 and Q2 FY21 impacted by COVID19 related restrictions.

FY22 estimates

7.10 Actual data upto August 2021 is available for FY22, therefore the balance 7 months MADT have been estimated for FY22 reffered to as FY22*. Steer estimates are referred to as FY22E. The average PCU level for months of Apr-21 till Aug-21 is 39,230. Traffic volumes in May-21 were impacted by the restrictions due to 2nd wave of COVID-19, with traffic recovery witnessed starting June-21. As mentioned earlier, it is a reasonable to assume that traffic volumes are expected to recover in the second half of FY22 with a modest half year growth (2.7%) applied to the Q3 and Q4 of FY21 to arrive at the Q3 and Q4 of FY22. This results in average PCU of 47,964 in the rest of the 7 months of FY22. The resultant FY22* is estimated to be 44,303 PCU. This 2.7% growth is assumed keeping in view the strong recovery observed on the Asset post-COVID-19 first wave and also the long term strong growth trends of over 5% PCU growth observed historically as presented in Chapter 3.

7.11 Steer estimates FY22E , as presented in **Chapter 5**, did not include the second wave impact. despite this FY22* and FY22E PCUs are within 1% of each other and considered reasonable as the growth in traffic could be attributed to robust nature of the Asset in terms of strong growth and recovery historically, which was also witnessed post the first wave of COVID-19 related restrictions.

7.12 Comparison of traffic PCUs, for FY21 and FY22 are presented below.

Table 7.2: Comparison of traffic PCUs between Steer estimates and actuals

	FY21	FY22
Steer	41,527	44,299
Actual	42,830	44,303*
Difference (%)	(3.0%)	(0.0%)

Source: Steer analysis, *FY22 based on data upto Aug'21 and estimats for the balance 7 months

Base revenue comparison

7.13 In this sub-section, base year revenue comparison is discussed where actual and estimated revenues of FY21 and FY22E are analysed and presented.

7.14 For FY21 the difference is at revenue 1.4%, FY21-Steer revenue estimates are marginally higher than the FY21-actual. This could be attributed to the changes in toll segmentation due to improved complienace and recategorization of the ticket type constributions, post mandatory implementation of FASTag from 15th Feb 2021, which was not captured in the previous FY21-Steer estimates.

7.15 In FY22, FY22E estimates are 4.4% higher compared to FY22*. FY22* revenue is estimated using both the actual revenue from Apr-21 to Aug-21 and actual revenue from Sep-20 to Mar-21. Traffic and WPI growth is applied to the revenue between Sep-20 and Mar-21 to reflect FY22 revenue levels, total FY22* revenue is INR 198 Cr.

7.16 Whereas FY22E revenue is INR 207 Cr, higher by 4.4%. The difference could be the result of the toll segmentation assumptions not fully reflecting the existing condition because of the COVID-19 restrictions playing a role at large. It is expected that this would be settling in the

next few years making the revenue position comfortable based on Steer assumptions. Also, toll plaza relocation happened in Apr/May-21 which could be reflecting the operational shifts settling in and revenue not fully realised and therefore not reflecting in FY22E-actual.

7.17 Comparison of total revenue in INR Cr, FY21-Steer & FY21-actual and FY22E-Steer & FY22E-actual is presented in the table below.

Table 7.3: Comparison of total revenue (INR Cr) between Steer estimates and actuals

	FY21	FY22E
Steer	181	207
Actual	178	198
Difference (%)	1.4%	4.4%

Source: Steer analysis

Summary

7.18 **Forecast traffic and revenue:** As presented in **Chapter 6**, a CAGR growth of 4.6% estimated at PCU level till the end of Concession period and the Asset accruing total revenue of INR 1380 Cr. is believed to be reasonable considering the robust nature of the Asset and its strategic location with a mix of long-distance and local movements.

7.19 Given the strong growth observed in this asset, the base traffic and revenue assumptions on which the forecasts are based in this report are considered reliable.

Appendices

A OD zones

Table A.1: OD zones used in OD analysis

Zone Code	Places	State	Internal/External	Zones
101	Bhubaneswar	Odisha	Internal	Local
102	Phulnakhara	Odisha	Internal	Local
103	Cuttack	Odisha	Internal	Local
104	Ramgarh	Odisha	Internal	Local
105	Hadua	Odisha	Internal	Local
106	Kubhei	Odisha	Internal	Local
107	Balibati	Odisha	Internal	Local
108	Chhatia	Odisha	Internal	Local
109	Bandal	Odisha	Internal	Local
110	Ranipokhari	Odisha	Internal	Local
111	Kadai	Odisha	Internal	Local
112	Nuasasan	Odisha	Internal	Local
113	Digapokharihuda	Odisha	Internal	Local
114	Kantachira	Odisha	Internal	Local
115	Panikoli	Odisha	Internal	IAOI
116	Jagatpur	Odisha	Internal	IAOI
117	Kendrapara	Odisha	Internal	IAOI
118	Dhenkanal	Odisha	Internal	IAOI
119	Angul	Odisha	Internal	IAOI
120	Talcher	Odisha	Internal	IAOI
121	Nayagarh	Odisha	Internal	IAOI
122	Kamakhyanagar	Odisha	Internal	IAOI
123	Jajpur	Odisha	Internal	IAOI
124	Bhadrak	Odisha	Internal	IAOI
125	Balasore	Odisha	Internal	IAOI
126	Deogarh	Odisha	Internal	IAOI

Zone Code	Places	State	Internal/External	Zones
127	Konark	Odisha	Internal	IAOI
128	Paradip Port	Odisha	Internal	IAOI
129	Duburi	Odisha	Internal	IAOI
130	Kalingnagar	Odisha	Internal	IAOI
131	Jakhapura	Odisha	Internal	IAOI
132	Khurunti	Odisha	Internal	IAOI
133	Joda	Odisha	Internal	IAOI
134	Angul District	Odisha	External	IAOI
135	Balangir	Odisha	External	Rest of Odisha
136	Baleshwar	Odisha	External	IAOI
137	Bargarh	Odisha	External	Rest of Odisha
138	Bauda	Odisha	External	Rest of Odisha
139	Bhadrak District	Odisha	External	IAOI
140	Cuttack District	Odisha	Internal	IAOI
141	Debagarh District	Odisha	External	Rest of Odisha
142	Dhenkanal District	Odisha	External	IAOI
143	Gajapati	Odisha	External	Rest of Odisha
144	Ganjam	Odisha	External	Rest of Odisha
145	Jagatsinghapur	Odisha	Internal	IAOI
146	Jajpur District	Odisha	Internal	IAOI
147	Jharsuguda	Odisha	External	Rest of Odisha
148	Kalahandi	Odisha	External	Rest of Odisha
149	Kandhamal	Odisha	External	Rest of Odisha
150	Kendrapara District	Odisha	Internal	IAOI
151	Kendujhar	Odisha	External	Rest of Odisha
152	Khordha	Odisha	Internal	IAOI
153	Koraput	Odisha	External	Rest of Odisha

Zone Code	Places	State	Internal/External	Zones
154	Malkangiri	Odisha	External	Rest of Odisha
155	Mayurbhanj	Odisha	External	Rest of Odisha
156	Nabarangapur	Odisha	External	Rest of Odisha
157	Nayagarh District	Odisha	Internal	IAOI
158	Nuapada	Odisha	External	Rest of Odisha
160	Puri	Odisha	Internal	IAOI
161	Rayagada	Odisha	External	IAOI
162	Sambalpur	Odisha	External	Rest of Odisha
163	Subarnapur	Odisha	External	Rest of Odisha
164	Sundargarh	Odisha	External	Rest of Odisha
165	Chilika Lake/Puri District	Odisha	External	Rest of Odisha
166	Telangana	Telangana	External	South India
167	Uttar Pradesh	Uttar Pradesh	External	North India
168	Gujarat	Gujarat	External	Western India
169	Mumbai	Maharashtra	External	Western India
170	Maharashtra	Maharashtra	External	Western India
171	Mizoram	Mizoram	External	Northeast India
172	Rajasthan	Rajasthan	External	North India
173	Kerala	Kerala	External	South India
174	Madhya Pradesh	Madhya Pradesh	External	Central India
175	Uttarakhand	Uttarakhand	External	North India
176	Haryana	Haryana	External	North India
177	Punjab	Punjab	External	North India

Zone Code	Places	State	Internal/External	Zones
178	Rayalaseema	Andhra Pradesh	External	AP
179	Visakhapatnam port	Andhra Pradesh	External	AP
180	Nellore port	Andhra Pradesh	External	AP
182	Coastal AP	Andhra Pradesh	External	AP
183	Jammu & Kashmir	Jammu & Kashmir	External	AP
184	Arunachal Pradesh	Arunachal Pradesh	External	North India
185	Bihar	Bihar	External	Northeast India
186	Chennai Metropolitan Region	Tamil Nadu	External	East India
187	Chennai port	Tamil Nadu	External	South India
188	Rest of Tamil Nadu	Tamil Nadu	External	South India
189	Karnataka	Karnataka	External	South India
190	Assam	Assam	External	Northeast India
191	Haldia	West Bengal	External	West Bengal
192	Haldia Port	West Bengal	External	West Bengal
193	Hugli	West Bengal	External	West Bengal
194	Hugli Port	West Bengal	External	West Bengal
195	Kolkata	West Bengal	External	West Bengal
196	Rest of West Bengal	West Bengal	External	West Bengal
197	Chhattisgarh	Chhattisgarh	External	Central India
198	Himachal Pradesh	Himachal Pradesh	External	North India
199	Manipur	Manipur	External	Northeast India
200	Jharkhand	Jharkhand	External	East India
201	NCT of Delhi	NCT of Delhi	External	North India
202	Chandigarh	Chandigarh	External	North India

Zone Code	Places	State	Internal/External	Zones
203	Dadra & Nagar Haveli	Dadra & Nagar Haveli	External	Western India
204	Daman & Diu	Daman & Diu	External	Western India
205	Tripura	Tripura	External	Northeast India
206	Nagaland	Nagaland	External	Northeast India
207	Sikkim	Sikkim	External	Northeast India
208	Meghalaya	Meghalaya	External	Northeast India
209	Puducherry	Puducherry	External	South India
210	Goa	Goa	External	South India
211	Andaman & Nicobar Island	Andaman & Nicobar Island	External	Islands
212	Lakshadweep	Lakshadweep	External	Islands
212	Bangladesh	Bangladesh	External	Outside of India
212	Kathmandu	Nepal	External	Outside of India

Source: Steer analysis

B OD matrix tables

Table B.1: Trip distribution between zones for CJV (%)

O \ D	Local	IAOI	Rest of Odisha	West Bengal	AP	South India	North India	Western India	Northeast India	Central India	East India	Outside india
Local	15.4%	29.2%	3.9%	0.5%	-	-	0.0%	0.0%	-	-	0.2%	-
IAOI	32.7%	7.8%	0.9%	0.1%	0.1%	-	-	-	-	-	-	-
Rest of Odisha	6.5%	0.8%	0.1%	-	-	-	-	-	-	-	-	-
West Bengal	0.7%	0.3%	-	-	0.0%	0.1%	-	-	-	-	-	-
AP	-	0.0%	-	0.0%	-	-	-	-	-	-	-	-
South India	-	-	-	-	-	-	-	-	-	-	-	-
North India	-	-	-	-	-	-	-	-	-	-	-	-
Western India	-	0.0%	-	0.0%	-	-	-	-	-	-	-	-
Northeast India	-	-	-	-	-	-	-	-	-	-	-	-
Central India	-	-	-	-	-	-	-	-	-	-	-	-
East India	0.2%	0.0%	-	-	-	-	-	-	-	-	-	-
Outside india	-	-	-	-	-	-	-	-	-	-	-	-

Source: Steer analysis based on primary traffic surveys

Table B.2: Trip distribution between zones for 3 Axle (%)

O \ D	Local	IAOI	Rest of Odisha	West Bengal	AP	South India	North India	Western India	Northeast India	Central India	East India	Outside india
Local	3.2%	15.3%	2.4%	5.9%	0.1%	0.1%	0.4%	0.2%	0.3%	0.2%	1.6%	0.4%
IAOI	8.4%	7.7%	2.8%	2.2%	0.6%	1.0%	-	0.1%	-	1.3%	0.6%	-
Rest of Odisha	0.8%	2.1%	0.6%	0.5%	0.2%	0.1%	-	-	-	0.1%	0.1%	-
West Bengal	4.6%	1.7%	1.5%	-	2.5%	4.7%	-	0.6%	-	0.3%	-	-
AP	0.6%	2.8%	0.6%	4.8%	-	-	0.1%	-	0.3%	-	1.0%	-
South India	0.6%	2.8%	0.3%	3.7%	-	-	-	-	0.4%	-	0.8%	0.3%
North India	0.4%	0.3%	-	-	0.1%	0.1%	-	-	-	-	-	-
Western India	-	0.3%	-	0.2%	-	-	-	-	-	-	-	0.1%
Northeast India	-	-	-	-	0.2%	0.1%	-	-	-	-	-	-
Central India	-	-	-	-	-	-	-	-	-	-	-	-
East India	1.7%	0.4%	0.1%	-	0.9%	0.9%	-	-	-	0.1%	-	-
Outside india	-	-	-	-	-	-	-	-	-	-	-	-

Source: Steer analysis based on primary traffic surveys

Table B.3: Trip distribution between zones for MAV (%)

O \ D	Local	IAOI	Rest of Odisha	West Bengal	AP	South India	North India	Western India	Northeast India	Central India	East India	Outside india
Local	4.8%	13.4%	1.6%	5.4%	0.1%	0.2%	0.2%	0.1%	0.3%	0.2%	1.0%	0.1%
IAOI	6.5%	6.7%	4.3%	1.8%	1.8%	1.1%	0.0%	0.3%	0.1%	2.2%	0.4%	0.1%
Rest of Odisha	1.8%	2.9%	2.7%	0.7%	0.4%	0.2%	-	0.0%	0.0%	0.1%	0.3%	0.1%
West Bengal	3.3%	1.1%	1.0%	-	1.9%	3.4%	-	0.2%	-	0.3%	-	-
AP	0.5%	3.2%	0.4%	4.7%	-	-	-	-	0.2%	-	1.3%	0.1%
South India	0.2%	2.8%	0.2%	3.0%	-	-	-	-	0.3%	-	0.7%	0.1%
North India	0.8%	0.3%	0.1%	-	-	0.1%	-	-	-	0.2%	-	-
Western India	0.0%	0.7%	0.1%	0.4%	-	-	-	-	-	-	0.1%	-
Northeast India	-	-	-	-	0.1%	0.2%	-	-	-	0.0%	-	-
Central India	0.0%	0.6%	-	0.1%	-	-	-	-	-	-	-	-
East India	1.7%	0.6%	0.2%	-	1.1%	1.1%	-	0.0%	-	0.2%	-	-
Outside india	-	-	-	-	-	-	-	-	-	-	-	-

Source: Steer analysis based on primary traffic surveys

C FY20 Toll Rates

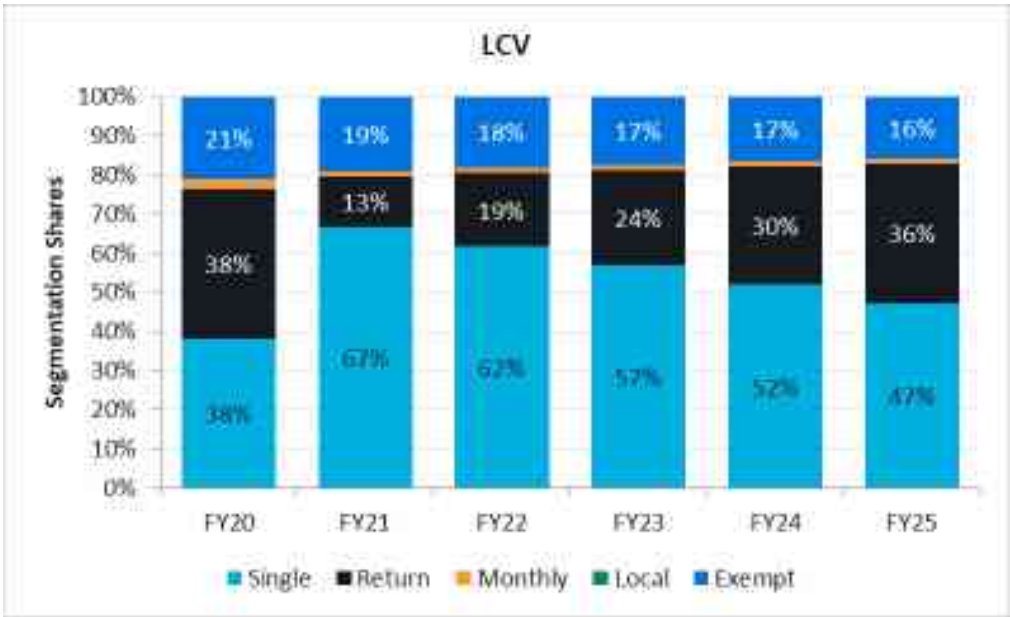
Table C.1: FY20 toll rates

Vehicle	Ticket	FY-20 Toll Rates	FY-21 Toll Rates
CJV	Single	115	120
CJV	Return	173	180
CJV	Monthly	3,836	3,980
CJV	Local Personal	266	275
LCV	Single	181	190
LCV	Return	272	280
LCV	Monthly	6,043	6,270
Bus	Single	374	390
Bus	Return	561	580
Bus	Monthly	12,466	12,930
2 Axle	Single	374	390
2 Axle	Return	561	580
2 Axle	Monthly	12,466	12,930
3 Axle	Single	577	600
3 Axle	Return	866	900
3 Axle	Monthly	19,246	19,965
MAV	Single	577	600
MAV	Return	866	900
MAV	Monthly	19,246	19,965
OSV	Single	725	750
OSV	Return	1,087	1,130
OSV	Monthly	24,167	25,070

Source: NHTIS website

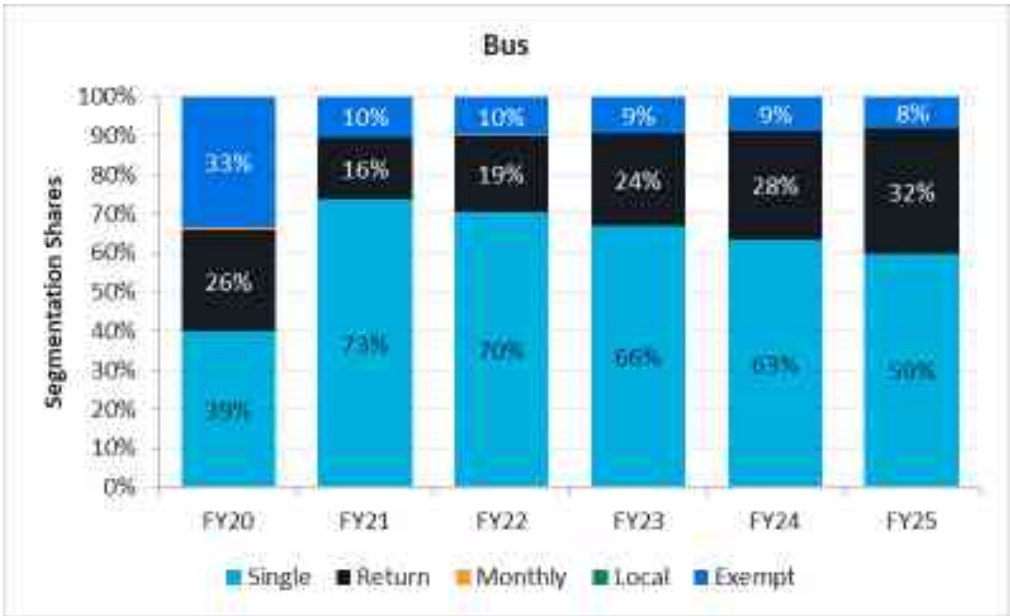
D Projected Segmentation

Figure D.1: Projected segmentation for LCVs, SJEPL



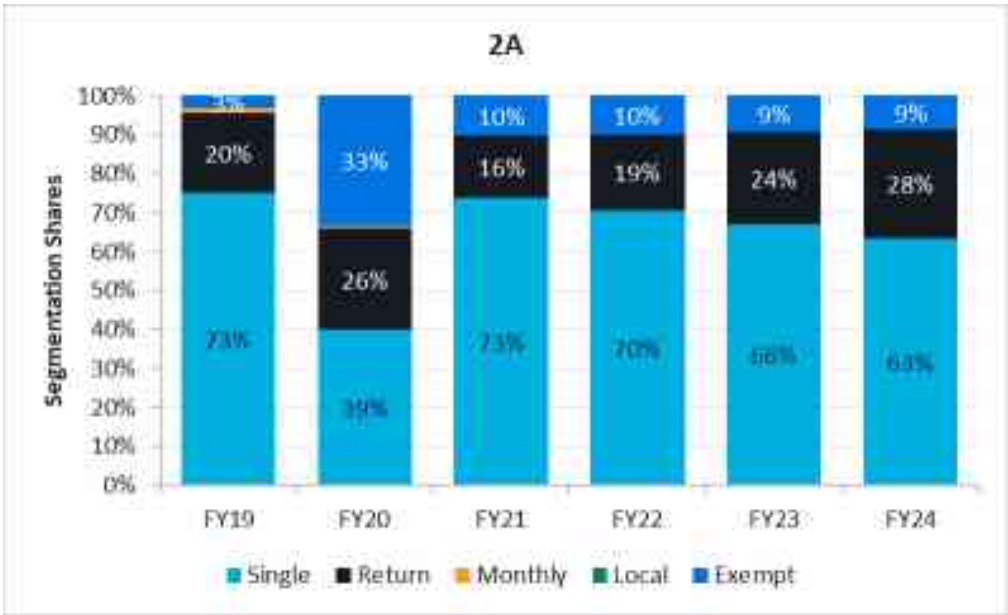
Source: Steer analysis of Vendor data

Figure D.2: Projected segmentation for Buses, SJEPL



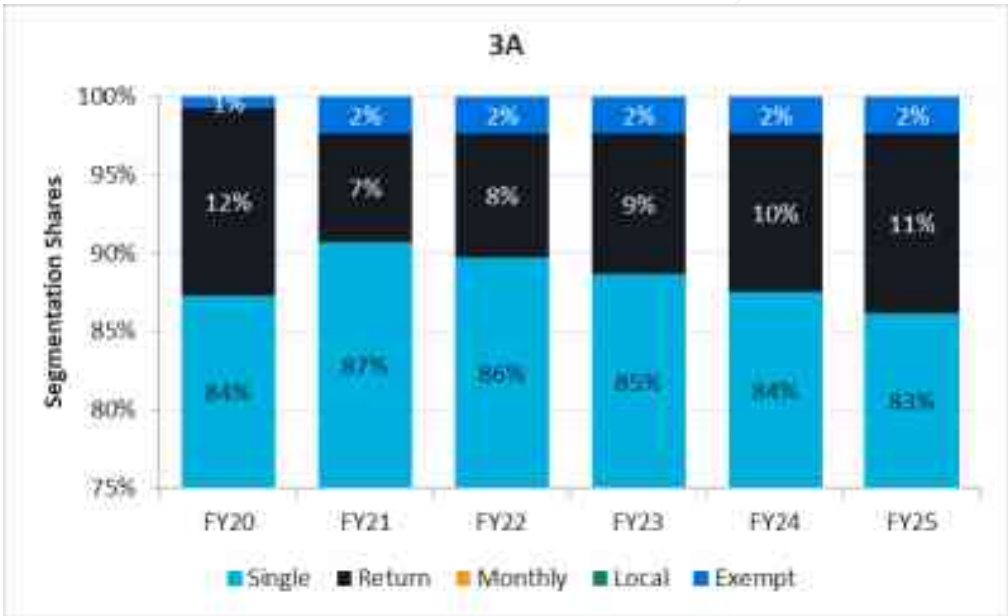
Source: Steer analysis of Vendor data

Figure D.3: Projected segmentation for 2 Axles, SJEPL



Source: Steer analysis of Vendor data

Figure D.4: Projected segmentation for 3 Axles, SJEPL



Source: Steer analysis of Vendor data

E Trip Factors

Table E.1: FY20 Trip Factors

Vehicle	Tickets	Trip Factors
CJV	Single	1
CJV	Return	2
CJV	Monthly	45
CJV	Local Personal	1
LCV	Single	1
LCV	Return	2
LCV	Monthly	45
LCV	Local Personal	1
Bus	Single	1
Bus	Return	4
Bus	Monthly	45
Bus	Local Personal	1
2 Axle	Single	1
2 Axle	Return	4
2 Axle	Monthly	45.0
2 Axle	Local Personal	1
3 Axle	Single	1
3 Axle	Return	2
3 Axle	Monthly	45
3 Axle	Local Personal	1
MAV	Single	1
MAV	Return	2
MAV	Monthly	45
MAV	Local Personal	1
OSV	Single	1
OSV	Return	1
OSV	Monthly	45
OSV	Local Personal	1

Source: Steer analysis

F Traffic and Revenue Forecasts

Table F.1: Forecast Traffic

Year	CJV	LCV	Bus	2 Axle	3 Axle	MAV	OSV	Total	PCU
FY19	10,891	989	1,158	1,738	1,924	3,281	2	19,983	41,609
FY20	10,661	935	1,205	1,876	2,150	3,667	2	20,496	44,268
FY21	9,621	624	548	1,895	2,223	3,771	1	18,682	41,527
FY22	10,853	791	784	1,955	2,287	3,817	1	20,488	44,299
FY23	11,616	805	812	2,133	2,446	4,189	1	22,003	47,853
FY24	12,403	819	840	2,264	2,545	4,335	1	23,206	50,089
FY25	13,215	832	867	2,399	2,646	4,472	1	24,433	52,329
FY26	14,055	845	895	2,537	2,749	4,750	1	25,833	55,245
FY27	14,925	859	923	2,680	2,854	5,036	1	27,278	58,250
FY28	15,825	871	950	2,827	2,961	5,332	1	28,768	61,345
FY29	16,758	884	978	2,979	3,070	5,638	1	30,307	64,539
FY30	17,716	897	1,006	3,134	3,181	5,953	1	31,889	67,820
FY31	18,699	909	1,034	3,293	3,295	6,278	1	33,510	71,184
FY32	19,707	922	1,062	3,456	3,410	6,612	1	35,170	74,633
FY33	20,740	934	1,090	3,623	3,528	6,955	1	36,871	78,168
FY34	21,793	946	1,118	3,793	3,648	7,309	1	38,608	81,784
FY35	22,870	957	1,145	3,966	3,771	7,672	1	40,383	85,485
FY36	23,966	969	1,173	4,143	3,895	8,044	1	42,191	89,258

Year	CJV	LCV	Bus	2 Axle	3 Axle	MAV	OSV	Total	PCU
FY37	25,080	980	1,200	4,323	4,023	8,426	2	44,033	93,111
FY38	26,214	991	1,227	4,507	4,152	8,818	2	45,909	97,044
FY39	27,364	1,002	1,254	4,693	4,284	9,218	2	47,817	101,050
FY40	28,541	1,013	1,281	4,883	4,418	9,629	2	49,767	105,146
FY41	29,740	1,023	1,308	5,077	4,555	10,049	2	51,754	109,325
FY42	30,959	1,034	1,335	5,274	4,694	10,479	2	53,777	113,582
FY43	32,201	1,044	1,361	5,475	4,836	10,919	2	55,839	117,931
FY44	33,463	1,054	1,388	5,680	4,981	11,369	2	57,937	122,362
FY45	34,744	1,064	1,415	5,888	5,128	11,830	2	60,072	126,879

Source: Steer analysis

Table F.2: Forecast Revenues (in INR, lakhs)

Year	CJV	LCV	Bus	2 Axle	3 Axle	MAV	OSV	Total
FY19	3,653	6,230	4	15,684	3,653	6,230	4	15,684
FY20	4,151	7,080	6	17,655	4,151	7,080	6	17,655
FY21	4,232	7,181	2	18,058	4,232	7,181	2	18,058
FY22	4,687	7,825	2	20,672	4,687	7,825	2	20,672
FY23	5,234	8,965	2	23,498	5,234	8,965	2	23,498
FY24	5,688	9,688	2	25,872	5,688	9,688	2	25,872
FY25	6,167	10,421	3	28,142	6,167	10,421	3	28,142
FY26	6,720	11,609	3	31,263	6,720	11,609	3	31,263
FY27	7,303	12,887	3	34,449	7,303	12,887	3	34,449
FY28	7,986	14,380	4	38,189	7,986	14,380	4	38,189

Year	CJV	LCV	Bus	2 Axle	3 Axle	MAV	OSV	Total
FY29	8,609	15,810	4	41,779	8,609	15,810	4	41,779
FY30	9,337	17,473	4	46,009	9,337	17,473	4	46,009
FY31	10,101	19,246	5	50,268	10,101	19,246	5	50,268
FY32	10,931	21,192	5	55,173	10,931	21,192	5	55,173
FY33	11,795	23,253	6	60,242	11,795	23,253	6	60,242
FY34	12,732	25,506	6	65,667	12,732	25,506	6	65,667
FY35	13,718	27,911	7	71,590	13,718	27,911	7	71,590
FY36	14,845	30,656	8	78,203	14,845	30,656	8	78,203
FY37	15,945	33,400	8	84,900	15,945	33,400	8	84,900
FY38	17,136	36,392	9	92,030	17,136	36,392	9	92,030
FY39	18,452	39,707	10	99,998	18,452	39,707	10	99,998
FY40	19,877	43,321	11	108,950	19,877	43,321	11	108,950
FY41	21,329	47,058	12	117,716	21,329	47,058	12	117,716
FY42	22,904	51,131	13	127,336	22,904	51,131	13	127,336
FY43	24,622	55,595	14	137,969	24,622	55,595	14	137,969
FY44	26,490	60,471	15	149,706	26,490	60,471	15	149,706
FY45	28,373	65,454	16	161,174	28,373	65,454	16	161,174

Source: Steer analysis

G Seasonality Correction Factors

Table G.1: Seasonality Correction Factors for the months of March April

Vehicle Category	March SCF	April SCF
CJVs	0.95	1.02
LCV	0.98	0.97
2A/bus	0.92	1.11
3A/MAV	0.93	1.00
OSV	0.93	0.92

Source: Steer analysis of Vendor data

Control Information

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