

REPORT NO.

**367**



सत्यमेव जयते

**PARLIAMENT OF INDIA**  
**RAJYA SABHA**

**DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE  
ON TRANSPORT, TOURISM AND CULTURE**

**THREE HUNDRED SIXTY SEVENTH REPORT**

**‘Operation and Maintenance of National Highways and  
Management of Toll Plazas’**

*(Presented to the Rajya Sabha on 08<sup>th</sup> February, 2024)*

*(Laid on the Table of Lok Sabha on 08<sup>th</sup> February, 2024)*



**Rajya Sabha Secretariat, New Delhi**  
**February, 2024 / Magha 1945 (Saka)**

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# PARLIAMENT OF INDIA RAJYA SABHA

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**RAJYA SABHA SECRETARIAT  
NEW DELHI**

**February, 2024 / Magha 1945 (Saka)**

# CONTENTS

	PAGES
1. COMPOSITION OF THE COMMITTEE	i
2. INTRODUCTION	ii
3. ACRONYMS	iii
4. REPORT	1-28
5. RECOMMENDATIONS/OBSERVATIONS-AT A GLANCE	29-38
6. ANNEXURES	39-45
7. *MINUTES	

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\*To be appended

**COMPOSITION OF THE COMMITTEE**  
**(2023-24)**  
*(Constituted on 23<sup>rd</sup> September, 2023)*

**1. Shri V. Vijayasai Reddy - Chairman**

**Rajya Sabha**

2. Shri Mohammed Nadimul Haque
3. Shrimati S. Phangnon Konyak
4. Shri Manas Ranjan Mangaraj
5. Dr. Sonal Mansingh
6. Shrimati Rajani Ashokrao Patil
7. Shri A. A. Rahim
8. Dr. C. M. Ramesh
9. Shri Zala Kesridevsinhji
10. Shri Surendra Singh Nagar

**Lok Sabha**

11. Shri Anto Antony
12. Shri Ram Margani Bharat
13. Shri Tapir Gao
14. Shri Rahul Kaswan
15. Shri Ramesh Chandra Majhi
16. Shri Sunil Baburao Mendhe
17. Shri K. Muraleedharan
18. Shri S. S.Palanimanickam
19. Shri Chhedi Paswan
20. Shri Kamlesh Paswan
21. Shri Sunil Kumar Pintu
22. Shri Prince Raj
23. Shri Tirath Singh Rawat
24. Shrimati Mala Roy
25. Shri Rajiv Pratap Rudy
26. Shri Dushyant Singh
27. Shri Rajbahadur Singh
28. Shri Ramdas Chandrabhanji Tadas
29. Shri Manoj Kumar Tiwari
30. Shri Krupal Balaji Tumane
31. Shri Dinesh Lal Yadav "Nirahua"

**SECRETARIAT**

Shri D S Prasanna Kumar, Joint Secretary  
Shrimati Monica Baa, Director  
Shrimati Subha Chandrashekar, Deputy Secretary  
Shri Ranajit Chakraborty, Deputy Secretary  
Shri Raj Kamal Singh, Committee Officer

## INTRODUCTION

I, the Chairman, Department-related Parliamentary Standing Committee on Transport, Tourism and Culture, having been authorized by the Committee to present on its behalf, do hereby present this Three Hundred Sixty Seventh Report on ‘Operation and Maintenance of National Highways and Management of Toll Plazas’.

2. The Committee heard the views of the representatives of the Ministry of Road Transport and Highways and National Highways Authority of India (NHAI), on the subject, in its meeting held on 5<sup>th</sup> October, 2023. The Committee discussed the subject with the representatives of two private companies Oriental Structural Engineers Pvt. Ltd (Delhi based) PNC Infratech Pvt. Ltd. (Agra based) in its meeting held on 14<sup>th</sup> December, 2023. The Committee also heard the views of Ministry of Road Transport and Highways; NHAI; NHIDCL; BRO and the State Governments of Sikkim and Arunachal Pradesh during its Study Visit to Gangtok, Guwahati and Tawang on 9<sup>th</sup> and 11<sup>th</sup> January, 2024.

3. The Committee wishes to express its thanks to the officers of the Ministry of Road Transport and Highways, NHAI, NHIDCL, BRO, State Governments of Sikkim and Arunachal Pradesh, Oriental Structural Engineers Pvt. Ltd and PNC Infratech Pvt. Ltd. for placing before the Committee, the material and information desired in connection with the subject and for clarifying the points raised by the Members.

4. The Committee considered and adopted the Report in its meeting held on the 6<sup>th</sup> February, 2024.

**NEW DELHI;**  
*February 06 , 2024*  
*Magha 17, 1945 (Saka)*

**(V. Vijayasai Reddy)**  
*Chairman,*  
*Department-related Parliamentary Standing*  
*Committee on Transport, Tourism and Culture,*  
*Rajya Sabha*

## ACRONYMS

ANPR	Automatic Number Plate Recognition
BOT	Build, Operate, Transfer
BRO	Border Roads Organization
CAG	Comptroller and Auditor General of India
CCEA	Cabinet Committee on Economic Affairs
COS	Cost of Service
Cr	Crore
DLP	Defect Liability Period
DISHA	District Development Coordination and Monitoring Committee
DPR	Detailed Project Report
EPC	Engineering, Procurement, Construction
ETC	Electronic Toll Collection
FASTag	Fast and Secure Tag (RFID-based electronic toll collection system)
FY	Financial Year
GLOF	Glacial Lake Outburst Flood
GNSS	Global Navigation Satellite System
GST	Goods and Services Tax
HAM	Hybrid Annuity Model
IHMCL	Indian Highways Management Company Limited
IECV	Independent Engineer's Certifying Valuation
IMS	Incident Management Services
InvIT	Infrastructure Investment Trusts
M&R	Maintenance and Repair
MoEFCC	Ministry of Environment, Forest and Climate Change
MoRTH	Ministry of Road Transport & Highways
NCRPB	National Capital Region Planning Board
NETC	National Electronic Toll Collection
NH	National Highway
NHAI	National Highways Authority of India
NHIDCL	National Highways and Infrastructure Development Corporation
NITI Aayog	National Institution for Transforming India Aayog
NPCI	National Payments Corporation of India
O&M	Operation and Maintenance
OMT	Operate, Maintenance and Transfer
PBMC	Performance Based Maintenance Contract
PPP	Public-Private Partnership
PWD	Public Works Department
RFID	Radio-Frequency Identification
RFP	Request for Proposal
RSCE	Road Safety and Capacity Enhancement
SOP	Standard Operating Procedures
SP	Standards and Practices
STMC	Short Term Maintenance Contract
TOT	Toll-Operate-Transfer
UT	Union Territory

## Report

### Operation and Maintenance of National Highways and Management of Toll Plazas

National Highways serve as critical arteries of a country's transportation infrastructure, facilitating the efficient movement of goods and people across regions. The operation and maintenance of these highways, coupled with the management of toll plazas, are essential components to ensure their sustainability, safety, and optimal functionality. It forms the backbone of transportation networks, providing essential links between cities, towns, rural areas, and various economic centres. Well maintained National Highways reduce travel time, enhance accessibility, and open up new growth opportunities for individuals and communities. Today, India has over 1.3 million km of roads. National highways constitute less than 2 per cent of the road length of the country but carry about 40 % of the road based traffic. This is a testament to their importance in facilitating the movement of goods, people and services, both within states and across state boundaries. Additionally, well-designed and well-maintained Highways play a crucial role in public safety and emergency response. They enable timely access to emergency services, such as ambulances, fire trucks, and law enforcement, potentially saving lives and minimizing damages during critical situations.

2. Since toll collection is a key revenue source for the maintenance and improvement of National Highways, effective management of toll plazas become the mainstay. Ensuring the smooth flow of vehicles through toll plazas is crucial to prevent congestion and delays. This requires efficient toll booth designing, staffing, and utilization of modern toll collection methods.

3. The Committee during its study visit to Kochi, Thiruvananthapuram and Bekal in Kerala during 4<sup>th</sup> to 8<sup>th</sup> September, 2023 observed that toll prices widely vary from one toll to the other. Also, there are instances of toll collection in perpetuity beyond the break- even point. Further, the Committee noted that the provision of 60 km spacing between two adjacent toll plazas as provided in the National Highways Fee (Determination of Rates and Collection) Rules, 2008, was followed more in breach than in observance.

4. Cognizant of these facts, the Committee decided to take up the subject 'Operation and Maintenance of National Highways and Management of Toll Plazas' for detailed examination. The Ministry of Road, Transport and Highways (MoRTH), its attached office of the National Highways Authorities of India (NHAI) and National Highways and Infrastructure Development Corporation (NHIDCL) are the nodal organizations concerned with the Operation and Maintenance of National Highways and Management of Toll Plazas. During the course of examination, the Committee heard the MoRTH; NHAI and NHIDCL in its meetings held on 5<sup>th</sup> October, 2023. The Committee also discussed the subject with the representatives of



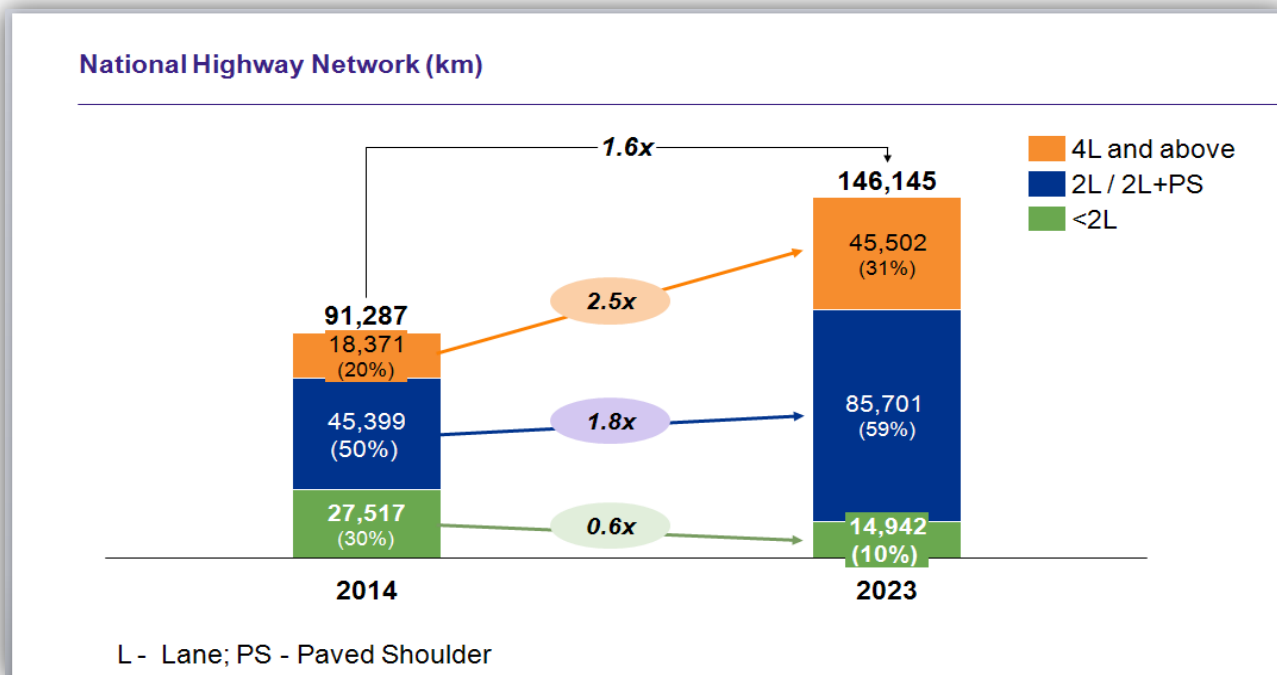
two private companies Oriental Structural Engineers Pvt. Ltd (Delhi based) PNC Infratech Pvt. Ltd. (Agra based) in its meeting held on 14<sup>th</sup> December, 2023. The Committee also heard the views of MoRTH; NHAI; NHIDCL; BRO and the State Governments of Sikkim and Arunachal Pradesh during its Study Visit to Gangtok, Guwahati and Tawang on 9<sup>th</sup> and 11<sup>th</sup> January, 2024, respectively.

I

Operation and Maintenance of National Highways

Status of NHs in the country

5. The Ministry of Road Transport and Highways informed that the length of India’s NH network expanded ~1.6x, from 91,287 km in April, 2014 to 1,46,145 km at present. Further, the length of 4-lane and above NHs has increased ~2.4x from 18,371 km (20% of total) to 44,654 km (31% of total) between 2014-15 and 2022-23. Similarly, the length of 2-lane/2-lane with paved shoulder NHs has increased ~1.8x from 45,399 km (50% of total) to 83,941 km (58% of total). However, the length of Single- and Intermediate-lane NHs has declined ~0.6x from 27,517 km (30% of total) to 16,645 km (11% of total). The Ministry also informed that it not only focuses on increasing the coverage of NH, but also on enhancing the lane configuration of existing as well as new roads.



Expansion of National Highway

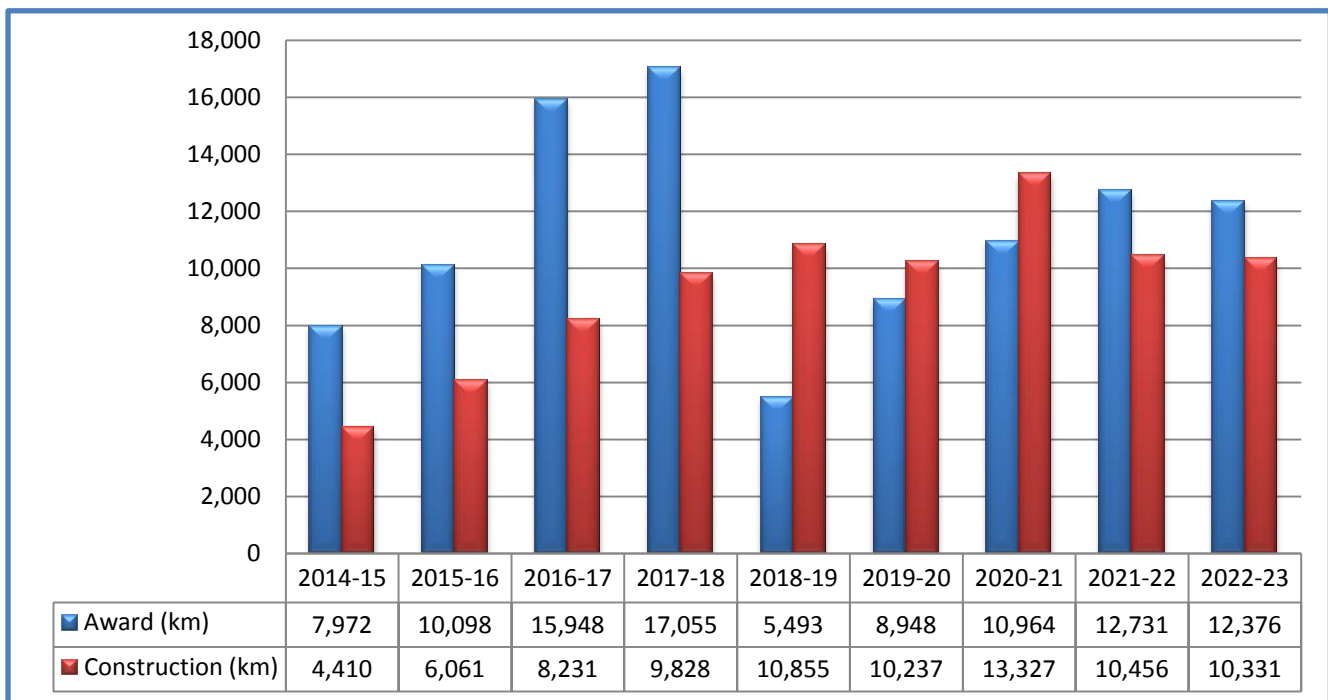
Courtesy: Ministry of Road, Transport and Highways

## 6. Committee's observations/recommendations

**6.1.** The Committee notes that the completion of hundreds of NHs is running behind the schedule. The Committee, therefore, recommends that the Ministry should expedite the construction process and focus on timely completion of all the NHs.

**6.2.** The Committee would also like to know the manner in which the Ministry is planning to dispose of the Single and Intermediate-lane NHs.

7. The Ministry of Road Transport and Highways apprised the Committee about the year-wise awarding and construction of NHs in the country which is depicted in the following graph:



Courtesy: Ministry of Road, Transport and Highways

## 8. Committee's observations/recommendations

The Committee notes that the construction and expansion of National Highways till November end, the first nine months of current financial is around 10 per cent more than the corresponding period of 2011-23. However, the award of new projects for construction fell by almost 52 per cent during this year. The Committee recommends that the Ministry should match up with targets set up and strive hard to achieve the declared targets

## Operation, Maintenance & Repair (M&R) of National Highways (NHs) Network:-

9. The Ministry of Road Transport and Highways informed that the M&R of NH stretches are carried out for the stretches which are not covered under any programme or for completed stretches where there are no liabilities of contractors to maintain such stretches. M&R works are undertaken on NHs in a systematic manner as under:-

- i. State Governments undertake various types of M&R works on NHs, which are as follows:
  - Ordinary Repairs (OR) involves routine maintenance, such as maintenance of culverts, patch/ pot-hole repairs, crack sealing, roadside drainage, repairing of shoulders, etc.
  - Periodic Renewal (PR) involves provision of renewal coat to the wearing surface at a predetermined frequency. This is done to safeguard the road crust and at the same time giving pavement a better riding surface.
  - Special Repairs (SR) works are urgent works of original nature, such as repairs to culverts, bridges, etc.
  - Emergent / Flood Damage Repair (FDR) works are immediate repairs to roads affected by heavy rains/ flood, cyclone, landslides, sand dunes, etc. to restore traffic.
- ii. For the NH stretches developed on EPC mode (Engineering, Procurement, Construction), the Contractor is responsible for remedying the defects and concurrent maintenance of project highway during the defect liability period after completion of the work.
- iii. For NH stretches developed on BOT / HAM mode, the Concessionaire is responsible for the maintenance of the project highway during the concession period.
- iv. For NH stretches with NHAI, maintenance works are carried out largely through contract maintenance.
- v. For some of the NH stretches developed through public funding, maintenance contracts have been taken up for a definite time period (4 to 9 years) on Operate, Maintenance and Transfer (OMT) basis by NHAI. The maintenance of the project highway under OMT contracts is the responsibility of the Concessionaire.
- vi. For some of the developed NH Stretches through public funding, maintenance contracts have been taken up for a longer period of 20-30 years under Monetisation of NHs.
- vii. Strategic and border roads entrusted with Border Roads organisation were executed through departmental mode being uniqueness of maintenance requirement in such areas.

Mode of Development	Responsibility	Concession/Contract period
<b>EPC</b>	Contractor	5/10 years post completion
<b>BOT</b>	Concessionaire	20/25/30 years
<b>HAM</b>	Concessionaire	15 years
<b>OMT</b>	Contractor - OMT basis	10 to 15 years
<b>Other</b>	Stretches with NHAI – Contractor through contract maintenance	As per contract period
	Stretches with BRO – Departmental mode	
	Repair of other NHs	

## 10. Committee's observations/recommendations

The Committee notes that the Committee on Revisiting and Revitalising the PPP Model of Infrastructure Development (2015) recommended setting up an independent regulator for the roads sector to encourage private participation and regulate their activity. It had also noted that service delivery, such as constructing roads meant for citizens is the responsibility of the government, and should not be evaded through PPPs. The Committee would like to know the action taken by the Ministry in this regard.

### Systematic improvement in Policy / Approach for M&R of NH Network:-

11. The Ministry submitted that although the existing mechanism of Maintenance and Repair of NHs was largely catering for maintenance need of NHs. However, some NH stretches remained left out for maintenance as entire system was reactive and need based. The Ministry also informed that the utilisation of funds for NH stretches under maintenance through State government under Ordinary Repair and Flood Damage Repair remained a challenge.

12. The Ministry informed that following steps have been taken for improvement in Policy/approach for M&R of NH network:

(i) Optimal utilisation of the funds released to State Governments for maintenance of NHs stretches entrusted to them under OR by spreading the maintenance works in subsequent years.

(ii) For adequately addressing the issue of funds under Maintenance and Repair, expenditure for renewal/improvement of rising quality works are allowed under Capital head. This leads to augmented availability of resources for M&R works.

(iii) NHA also gives the stretches on Toll Operate and Transfer Mode / Through Investment Trust Mode serving dual purpose of monetisation and maintenance of NHs.

(iv) The Ministry also introduced contract maintenance in 2021 for stretches being maintained through State PWD.

(v) Further, in order to tackle the challenges under M&R which always remained a need based maintenance system and making the entire NH system to a Pot Hole free system, the Ministry has decided that, from 2023-24 onwards:

- All NHs stretches are to be invariably covered either under ongoing works of development or maintenance or Defect Liability Period (DLP) / Concession Period, with the responsibility of maintenance of such NHs stretch lying with the concerned Contractor/Concessionaire.
- All maintenance works on NHs shall be carried out through contract based maintenance i.e.
  - i. Performance based Maintenance Contract (PBMC) and
  - ii. Short Term Maintenance Contract (STMC).

- No NH stretch shall remain unattended for want of M&R intervention.
- To phase out Need Based Maintenance through Ordinary Repair and Flood Damage Repair.

13. The Ministry also explained about the difference between PBMC and STMC, provided below in tabular format:

Short Term Maintenance Contract (STMC)	Performance Based Maintenance Contract (PBMC)
Projects where DPR has been completed/in advance stage of completion/not required and development work is likely to commence shortly.	Projects where DLP of Contractor/Concessionaire has been expired after development work and no further expansion has been planned Development work is likely to start after 3-4 years.
Contract period is generally 1-2 years	Contract period is for 5-7 years.
Maintenance work to be executed against the defined maintenance parameters and quantities	Payment linked to the output deliverables as per desired service levels.  Provision for deductions in payment of routine maintenance services for non-fulfilment of desired service levels.

14. The Ministry also submitted year-wise details of expenditure under Maintenance and Repair (M&R) during the last three years and the current year as placed below: -

Sl. No.	Year	Expenditure (In crore)
1	2020-21	5,922
2	2021-22	5,091
3	2022-23	5,374
4	2023-24	1662* (Upto August)

#### 15. Committee's observations/recommendations

The Committee notes that the amount of funds allocated for maintaining NHs is miniscule, given the vast length of highways across the country. Several committees, including NITI Aayog, have recommended that maintaining existing roads should be prioritised over constructing new NHs. In 2023-24, the Ministry has been allocated Rs 2,600 crore for maintaining highways (1% of the Ministry's budget). The Committee recommends that the expenditure on O&M should be increased in view of the huge toll tax collected by the authorities from the road users.

## Management of Toll Plazas

16. The Ministry informed that there are a total of 929 fee plazas operational on National Highways as on date. The National Highways Act, 1956 was enacted to provide for the declaration of certain highways to be national highways and for matters connected therewith. Section-7 of the Act empowered the Government to levy fees for services or benefits rendered on National Highways and Section 9 of the National Highways Act, 1956 empowers the Central Government to make rules in this regard.

17. With reference to the private partnership in the highway construction, Government decided to bring in the amendment in the National Highways Act, 1956 in 1995 and incorporated Section 8A, which states that “notwithstanding anything contained in this Act, the Central Government may enter into an agreement with any person in relation to the development and maintenance of the whole or any part of a National Highway. The person will be entitled to collect and retain fees at such rate, for services or benefits rendered by him as the Central Government may, by notification in the Official Gazette, specify having regard to the expenditure involved in building, maintenance, management and operation of the whole or part of such national highway, interest on the capital invested, reasonable return, the volume of traffic and the period of such agreement”.

### National Highways (Fee for the Use of National Highways Section and Permanent Bridge – Public Funded Project) Rules, 1997

18. The Ministry informed that these rules were published in the Gazette of India vide G.S.R. 490 (E) dated 27th August, 1997 and came into force on the date of their publication in the official Gazette. Rate of fee levied and paid to the executing authority on behalf of the Government of India on mechanical vehicles for use of National Highways section or Permanent Bridge or Both at the rates notified by the Central Government, in the official Gazette in respect of such National Highways section or Permanent Bridge or Both.

### National Highways Fee (Determination of Rates and Collection) Rules, 2008 – Background and Salient Features

19. In view of the experience gained from tolling of various stretches/bridges in NHDP under Public funded and BOT projects as well as with an increasing length of the National Highways under NHDP coming under tolling, a need was felt to review the existing toll policy to have a toll regime that provides more predictability, transparency and certainty for private investors. Some critical issues necessitating

review of Toll Policy were:

- i. Concept of continuous corridors instead of standalone sections/bridges.
- ii. Synchronization between BOT and public funded projects to avoid variations in rates, concessions and exemptions.
- iii. Demand from local/frequent users for more appropriate concessions.
- iv. Adoption of a standard category of vehicles and a fee structure.
- v. Miscellaneous other issues arising out of experience with the present toll policy such as rationalisation and indexing of fee rates, vehicle categories, distance between two toll plazas and toll on slow moving vehicles etc.

20. It was, therefore, decided by the Ministry to review the user fee framework. The need for a comprehensive user fee policy had also assumed greater significance in the context of an expanded National Highway Development Programme (NHDP) which envisaged bulk of the investment from Public Private Partnerships (PPPs) where user fee revenues constituted the mainstay of financial viability. The Comparison between previous fee rules of 1997 and extant fee rule of 2008 is given in **Annexure-I**. The list of exemption from payment of toll fee as listed in Section 11 of the Rules is also attached as **Annexure-II**.

### **21. Committee's observations/recommendations**

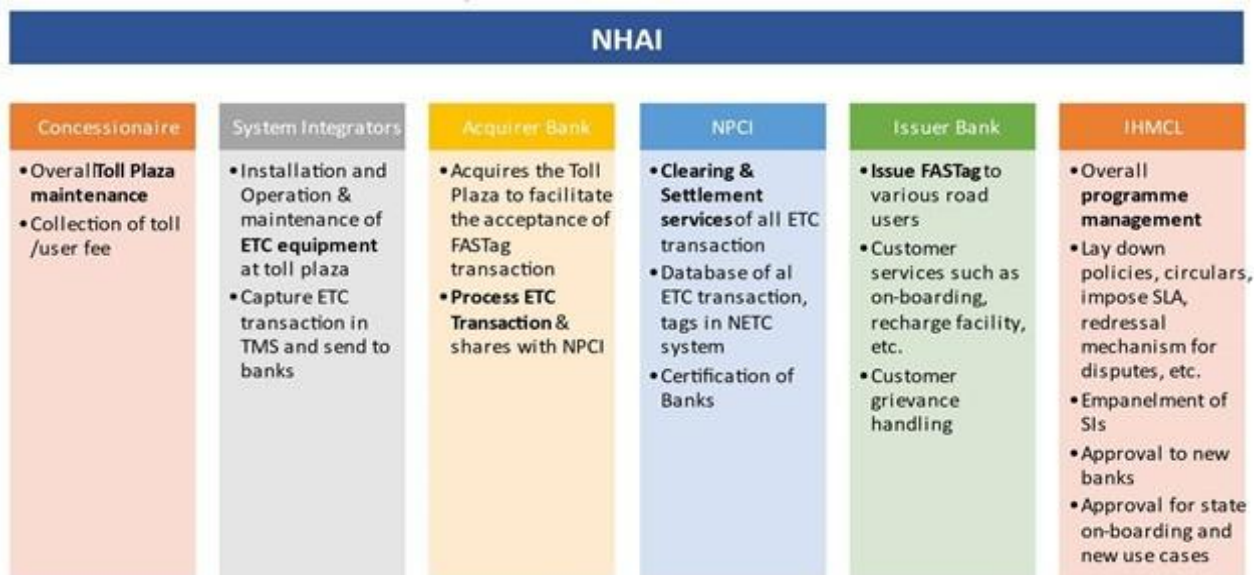
**21.1.** The Committee notes that currently, the Annual revision of the user fee is done w.e.f. 1<sup>st</sup> April and the fee is to be rounded off to the nearest Rs 5 as per the new user fee rules. However, some roads built before 2008 are governed by old rules where the fee is rounded off to Re 1 only. The Committee recommends streamlining and bringing uniformity to the revision of Toll Plaza fees.

**21.2.** Further, the Ministry and other organisations should consult local representatives during the DISHA meetings along with local/frequent road users before fee revision.

### **National Electronic Toll Collection (NETC) Program**

22. The Ministry informed that the National Electronic Toll Collection (NETC) programme, the flagship initiative of MoRTH and NHAI, has been implemented on pan India basis in order to remove bottlenecks and ensure seamless movement of traffic by allowing electronic payment of toll fees on National Highways through a RFID-based tag called FASTag, usable across all toll plazas on National Highways and selected State toll plazas. The NETC Payment System consists of these stakeholders depicted in the picture below-





### FASTag Coverage and its benefits:

23. The Ministry apprised the Committee that the FASTag is acceptable at all fee plazas on National Highways. More than 7.65 Crore FASTags have been issued till date. There are 40 issuer Member Banks live under NETC programme who issue FASTag to the customers through various channels. Average Daily collection via FASTag on NH fee plaza is more than Rs 163.09 Cr in FY 23-24 (Till September 23). ETC transaction count – and Number of average daily ETC transaction on NH fee plaza is more than 94.67 Lakhs in FY 23-24 (September 2023). ETC penetration is approximately 98.5 per cent of the total user fee collection on NHAI fee plaza is through FASTag. Government has mandated all lanes of fee plazas on National Highways as FASTag Lane of the fee plaza w.e.f. midnight of 15th/16th February 2021.

24. It was also informed that 46.3 crore hours vehicle travel time per year has been saved which is equivalent to the economic value of Rs. 34,000 crore. This has led to 47 seconds less waiting time average from the previous 714 seconds in the manual collection, and has resulted in fuel savings. Toll revenue has increased to 29 per cent and the number of vehicle trips has increased and pilferage stopped. Also, a significant reduction in carbon emissions has been witnessed. He submitted that the Ministry has issued around 7.65 crore FASTags.

### 25. Committee's observations/recommendations

The Committee is hopeful that the coverage of FASTag will penetrate more in the remote areas. However, the Committee notes that there are multiple cases of faulty FASTags, which hamper the movement of vehicles. The road users also face trouble and have to pay double the toll charges. The Committee, therefore, recommends that the Ministry must take the issue of faulty



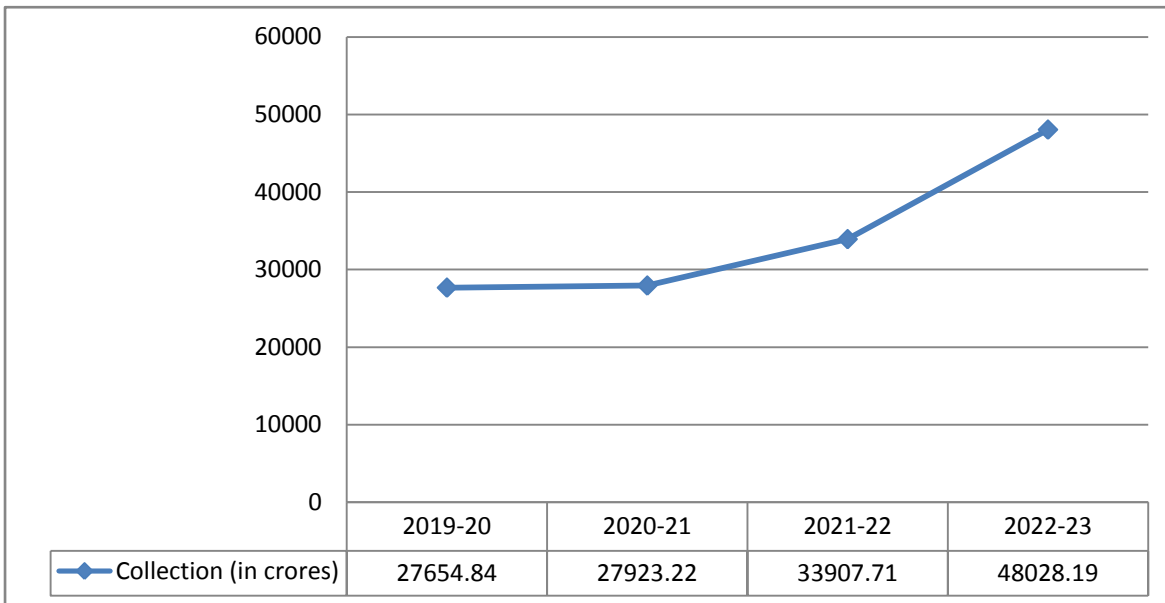
FASTags seriously. Since the onus lies on the concerned agencies, they must be penalised for such negligence instead of the road users.

### Revenue increase after FASTag implementation

26. As per the study carried out by consultant on National Electronic Toll Collection Impact Assessment, it has been found that the one-time revenue increase amounting to more than 6100 Crore Rupees has happened due to implementation of FASTag system on account of following reason;

- (i) Reduced travel time resulting in more trips.
- (ii) Reduced revenue leakage due to digitalisation and other related factor.

27. The above increase is in addition to normal annual increase due to annual rate revision and traffic growth. The detail of the total user fee collected through fee plazas on National Highways during the last four financial years is depicted in the graph below:



28. The Ministry vide Unstarred Question No. 1529 dt. 02/08/2023 informed that currently the following entities are paid the following fees under National Electronic Toll Collection (NETC) program:

Entity	Program Management fee (% of ETC Transaction value) excl. GST
Issuer Bank	1
Acquirer Bank	0.13
National Payments Corporation of India (NPCI)	0.15
Indian Highways Management Company Limited (IHMCL)	0.25

## 29. Committee's observations/recommendations

The Committee appreciates the rise witnessed in revenue collection after the implementation of FASTag. However, the Committee recommends that the revenue collected from toll plazas should also be shared with the respective States.

### III

## Challenges

### Issue of encroachment:

30. The Committee notes that there are cases of encroachment of right way, potholes, blockage of roadside drains, dumping of waste materials which can be observed on the stretches of NHs. The encroachment on the road hinders the Right of Way and becomes the prominent reasons for accidents on NHs.

31. As regards encroachments, the Ministry submitted that the removal of encroachments is done as per the Control of National Highways (Land and Traffic) Act, 2002. Under this Act, MoRTH has notified Highway Administrators for various section of NHs and empowered them to take action against any encroachment of NH RoW as per this Act. Accordingly, the highway administrators issue notices and take necessary action for removal of encroachment on NH RoW in consultation with the District Administration. State Government also plays a crucial role in removal and restricting the encroachment of NH Right of Way (ROW). Periodic drives are undertaken to remove all sorts of encroachments from NH land as per the aforementioned Act. Thus, removal of encroachment on NHs is a continuous process, which is being done throughout the year to ensure seamless movement of traffic on NHs. Further, in order to give more emphasis on output (condition of road asset) rather than input (materials/manpower), new mode for O&M of NHs has been recently adopted by MoRTH viz., Performance based Maintenance Contracts (PBMC), the performance of the PBMC contractors will be assessed based on compliance of the service levels specified in the contract.

32. The Ministry informed that the potholes, blockage of roadside drains, dumping of waste materials are assessed through regular inspection and also through NSV survey. Action is taken by concerned field units and it is also monitored on Check App.

33. It was also informed about the Highway administrator concept wherein one NHAI officer is

appointed as the administrator with powers to issue notices. However, he does not possess the magisterial powers.

#### **34. Committee's observations/recommendations**

**34.1.** The Committee recommends the Ministry to conduct a thorough survey and mapping of National Highways to identify and document all instances of encroachments. Utilize modern technology, such as satellite imagery and GIS mapping, for accurate data collection. Introduce stricter penalties for encroachment violations, and streamline the legal process for swift resolution.

**34.2.** The Committee suggests that a State Government officer with magisterial authority could be appointed as the nodal officer for an area. The Project Director (PD) of NHAI and the Magistrate can manage and exercise their powers to eradicate problems like encroachment and unauthorized median, etc.

**34.3.** The Ministry should launch awareness campaigns to inform the public about the importance of maintaining clear Rights-of-Way on National Highways. Use various media channels, including radio, television, social media, and community events, to educate citizens on the adverse effects of encroachments.

**34.4.** The Ministry should strive to introduce positive reinforcement mechanisms such as tax incentives or recognition, for individuals and businesses complying with the regulations and maintaining clear Rights-of-Way.

**34.5.** The Committee feels that there is a need to engage local communities in the protection and maintenance of National Highways. The Ministry must encourage community participation through volunteer programs, neighbourhood watch initiatives, and partnerships with local civic groups.

#### **Excess Toll collection**

35. The Committee notes that 28 crore excess fee has been collected by three toll plazas in Nathavalsala (Andhra Pradesh), Chalageri (Karnataka) and Hebbalu (Karnataka) as noted by CAG during the delayed period of construction. This was in violation of rules stating that no user fee shall be levied for the delayed period, leading to higher toll collection from commuters.

36. The Committee also notes that a bogus toll plaza built on private land in Gujarat's Morbi district on the Bamanbore-Kutch National Highway, went unnoticed for more than a year. The Committee feels that it is a case of sheer negligence by the officials of the Ministry.

### **37. Committee's observations/recommendations**

**37.1.** The Committee recommends that the Ministry should conduct regular and independent audits of toll collection operations to ensure transparency and accuracy. Implement an oversight mechanism that reviews toll collection records and financial transactions to identify any discrepancies.

**37.2.** The Ministry should establish stringent penalties for toll plaza operators found guilty of intentional or repeated excess toll collection. Such operators should not be allowed to participate for bidding process in the future.

**37.3.** To ensure against building of fake toll plazas in the country, the Ministry must conduct an all-India survey for identifying such bogus toll plazas and take strict actions against the culprits. The Ministry must also impose stringent penalties on officials of the Ministry for the dereliction of their duties.

### **Congestion at Toll Plazas**

38. The Committee notes that congestion at toll plazas is a common issue that can lead to delays, increased travel time, and frustration for road users. Effectively managing and mitigating congestion at toll plazas is crucial for maintaining smooth traffic flow. During peak hours, even in 2023, long queues can be seen on NHs across the country.

39. The Ministry apprised that the issue of congestion on the User Fee Plazas has been addressed and now it has been reduced to a large extent but time lapse is generally observed because of human behaviour at the User fee Plaza due to reasons such as discussion on the ID card; sorting out the issue of blacklisted FASTag and sometimes malfunctioning of the equipment. The malfunctioning of equipment has been taken care of by setting Toll Management Command Centre and continuously monitoring the status of all equipment at the User fee plazas for its active working, However, steps have been taken to regulate the traffic on a faster pace as far as possible by deploying additional staff to facilitate the convenience of the road users. Efforts are being made by regular monitoring, implementation of ICD 2.5 for real time transaction processing, implementation of Manual Transaction Policy to decongest the toll Plazas. To ensure seamless transit on the National Highways, continuous monitoring of the equipment and deployment of trained staff is being done. However, the technologies of user fee collection through ANPR and GPS based tolling is under exploration to attempt in future.

#### **40. Committee's observations/recommendations**

**40.1.** The Committee notes that in our country, number plates are hallmarked and can be recognized by high-resolution cameras so that the amount can be deducted from bank accounts linked to the vehicle number. Hence, the Committee recommends that where there is congestion at toll plazas, Closed Tolling System can be implemented through the installation of Automated Number Plate Readers (ANPR) cameras.

**40.2.** Meanwhile, till the installation on ANPR, the Committee suggests that a measure should be adopted whereby if one is unable to pay at that point of time, the vehicle should be relieved and moved out of the lane so that there is no blockage of traffic. Later, a text message should be sent on the mobile number linked to the vehicle number for payment of toll tax. If the person deliberately evades the toll tax, an FIR or challan may be issued against the driver based on his/her vehicle number and picture of the vehicle.

**40.3.** The Ministry must evaluate the capacity of existing toll plazas and, where feasible, consider expanding or building redundant toll facilities to distribute traffic more evenly and reduce congestion. The Ministry can also introduce express toll lanes exclusively for registered users or frequent commuters who can pre-register for faster access through dedicated lanes.

**40.4.** The Ministry and toll plaza officials should develop and communicate clear emergency response plans for toll plazas to address breakdowns, accidents, or other unexpected events promptly and minimize disruptions.

#### **Damages due to natural calamities**

41. The Committee notes that natural calamities pose significant challenges to the operation and maintenance of NHs. It has been observed recently that hilly states like Uttarakhand, Himachal Pradesh and Sikkim are prone to natural disasters like earthquakes, floods, cloudbursts, etc, which cause a severe damage to highway infrastructure, including roads, bridges, and toll plaza facilities that leads Disruption of traffic flow, closure of highways.

42. NHAI informed that it is adopting sustainable and environmentally friendly processes while constructing highways in hilly roads by fulfilling all the statutory conditions of MoEFCC & other agencies, such as proposing tunnel/ via ducts wherever feasible instead of hill cutting/filling, slope stabilisation etc. NHAI has taken many new eco-friendly initiatives such as cut & cover tunnel, usage of geopolymer technology, hydroseeding for natural development of plants & shrubs on slope surface. During the recent unprecedented heavy rainfall in the state of Himachal Pradesh, NHAI ensured that the NHs are opened for traffic in minimum possible time. The stretch between Kullu-Manali which was damaged completely by

heavy floods at several locations was opened to all types of traffic in minimum possible time. Similarly the stretch between Shimla and Parwanoo was also damaged and blocked due to landslides at several locations and the traffic on the same has been made operational through at least 2 lanes in minimum possible time. Total 68 nos. of tunnels (Under Construction/Under DPR) have been proposed in the State of Himachal Pradesh by NHAI. These tunnels will not only prevent the seasonal blocking of roads due to landslides but is also an environment friendly method of road construction which involves lesser tree cutting and less damage to environment as compared to the conventional method of road construction in hilly area.

43. With reference to recent floods in Sikkim, it was informed by the Ministry that on the night of October 3, 2023, the South Lhonak Lake in North Sikkim breached, causing a Glacial Lake outburst Flood (GLOF). Teesta III dam producing 1,200 MW electricity, the biggest hydropower project in Sikkim, located approximately 60 kilometres downstream of the lake, in Chungthang town of Mangan district, was decimated by the GLOF, The GLOF also unleashed devastation on downstream areas of the dam. The flood has caused severe damages to NHs in the State of Sikkim, The severely affected NHs are some portion of NH-10 and NH-310A and NH-310AG:

**NH-10:** From km 0 to km 52 of NH-10 lies in the State of West Bengal, while the road suffered damage at 23 locations, section from km 25.80 to km 28.00 was completely washed out, Restoration of this 2.2 km washed out section was taken from PW(R)D, West Bengal and was assigned to NHIDCL. The NHIDCL has restored traffic on this washed out section by 19.10.2023. Temporary restoration of the damaged portion on remaining stretch completed by PW(R)D of West Bengal.

During the Study Visit of the Committee to Gangtok, it was informed by the Ministry that NH-10 from Rangpo (Km 52) to Ranipool (km 80) is open for two-way traffic movement. The stretch of NH-10 from ranipool (80 km) to gangtok (92 km) having length 12 km is open to traffic. NH-710 from Melli via Manpur-Namchi- Damthang to Tarku of length 64 km is also opened to traffic. The 250 m long damaged portion near Singtam Hospital area is also restored.

**NH-310A:** from km 81.50 to km 84.60 having length of 3.1 km between Mangan to Chungthan have been washed out, fresh road alignment of approx. 3 km is under construction by BRO, Toong bridge at km 84.60 has been temporarily restored. 700 m approach road to Theng tunnel at 86.90 and 200 m at other side of tunnel has been damaged. At km 92, 500 m road washed out, out of which 350 m length of road has been restored. It was informed that the Chungthang Bridge at km 95.43 was restored by constructing 190 ft Bailey bridge on 17.11.2023. Fresh road alignment of approx. 2 km is under construction by BRO, Toong bridge at km 84.60 is to be restored by constructing Bailey Steel Bridge for which the work is ongoing.

**NH-310AG:** Around 15.4 km from km 0 to km 0.4, km 2.2 to km 6.5, km 8 to km 13.5, km 17 to km 18.5 km 27 to km 30, km 39 to km 44 in stretch of Chungthang-Lachen-Zeema-Kalep washed out. The temporary restoration by constructing foot track is completed between Chungthang and Munshithang. 5 bridges at km 3.43, km 4.31, km 6.10, km 9.95, km 41 stated to be restored by 30.7.2024.

#### **44. Committee's observations/recommendations**

**44.1.** The Committee appreciates the restoration work carried out by the respective organisations. However, it is delete also suggested that the Ministry should establish a rigorous schedule for regular maintenance and inspections of roads. The Ministry must identify vulnerable sections and prioritize them for preventive measures, repairs, or upgrades.

**44.2.** The Committee suggests incorporating resilient design principles when planning and constructing roads. This includes using durable materials, proper drainage systems, and considering the local climate and geological conditions.

**44.3.** The Committee recommends that the Road Safety Audit must be carried out at every stage of the DPR preparation i.e. feasibility Stage, Preliminary Design Stage and Final Stage to ensure that the safety is not compromised at any stage.

**44.4.** The Ministry must develop and regularly update emergency response plans specifically tailored for road-related disasters. Ensure that these plans are well-communicated and understood by relevant authorities, first responders, and the public.

**44.5.** The Committee notes that recently, 41 workers were trapped under the debris of the collapsed section of Uttarkashi's Silkyara tunnel, which forms a crucial segment of the Brahmakhal-Yamunotri section of the National Highway, a part of the government's Char Dham road scheme. Unfortunately, the very structure meant to enhance connectivity through an extensive 889-kilometer road network, has become a site of tragedy. The Government must implement a stringent maintenance schedule, including inspections for structural integrity, drainage systems, and ventilation to identify and rectify issues promptly. Employ sensors and monitoring technologies to continuously assess structural health, detecting any potential weaknesses or anomalies early.

**44.6.** There is also a need for Training personnel in tunnel management and emergency response procedures so that such incidents do not occur in the future.

#### **Violation of distance rule between adjacent toll plazas**

45. The Committee notes that the Fee Rules 2008 specifies that the spacing between two adjacent toll plazas should be 60 km to ensure the availability of a long line of sight for acceleration and deceleration zone and optimisation of revenue potential. As per the observation of the Committee, this rule is followed more in breach than in observance. Deviations are being legitimized through executive notifications.

46. The Ministry in this context reproduced the extant guidelines for location of fee plaza under Rule 8 of

NH Fee Rules, 2008, which are given below:

" (1) .....

(2) Any other fee plaza on the same section of national highway and in the same direction shall not be established within a distance of sixty kilometres;

Provided that where the executing authority deems necessary, it may for reasons to be recorded in writing, establish or allow the concessionaire to establish another fee plaza within a distance of sixty kilometres;

Provided further that a fee plaza may be established within a distance of sixty kilometres from another fee plaza if such fee plaza is for collection of fee for a permanent bridge, bypass or tunnel. "

47. The Ministry further submitted that the distance criteria for establishment of a fee plaza have come to existence after NH Fee Rules 2008 and there was no such rule in earlier NH Fee Rules, 1997. Fee plaza not complying with 60 km distance criteria have been established with the approval of MoRTH with recording justifiable reasons such as non-availability of land, forest area, for curbing of revenue leakage, municipality limits etc. Each fee plaza is assigned with some influence length of highway for which User fee is fixed as per NH Fee Rules 2008. Therefore, 60 km or more distance between two User fee plazas may not be economical to the user public specifically small distance users.

#### **48. Committee's observations/recommendations**

**48.1.** The Committee would like to know about the details of all the toll plazas, which are located within a distance of 60 kms.

**48.2.** The Committee would also like to know about the reasons accorded for each of the toll plaza which is an exception to the Distance clause of NH Fee Rules, 2008.

### **Delay in the procurement of construction for Core Infrastructure Projects**

49. The Committee notes that there are currently 599 national highways in India. The National Highways Authority of India (NHAI) is anticipated to construct around 4,000 to 4,500 kilometres (equivalent to 2,796.2 miles) of new roads annually over the next three years. In this context, local administration becomes very critical for smooth tolling. The Committee analysed that the major factors causing delays in procurement during the construction phase of infrastructure projects are- Non-availability of land for construction, delay in approval of Utility Shifting from the concerned utility owners impacting efficient & unhindered construction of highway. Non-inclusion of local needs/ demands of service roads/structure in DPR, other demands like additional underpasses/flyovers by local public during construction also act as an impediment.



Further, delay/non-availability of mining permissions for sand/earth/stone aggregates awaiting state support.

#### **50. Committee's observations/recommendations**

**50.1.** The Committee recommends that the timely availability of unencumbered land must be ensured before the construction of any project.

**50.2.** The Committee also recommends that timely approvals/permissions for earth/stone quarries should be assured by the State Governments.

**50.3.** It is observed that some of the genuine problems of local people are neglected, for example, mini-trucks (locally known as Chhota Hathi) carry many people for commutation purposes but are charged as commercial vehicles. The Committee, therefore, recommends that the demands of local public should also be taken into due consideration before finalisation of Detailed Project Report.

#### **Challenges in the bidding stage of Toll Plazas**

51. The Committee notes that the Ministry of Road Transport & Highways is currently handling 202 National Highway projects covering a total length of 6,270 kilometres with an estimated cost of Rs.79,789 crore. Out of these projects, 42 NH projects, spanning 474 kilometres and valued at Rs.10,992 crore, are in the bidding stage.

52. The Ministry informed that the bids are evaluated using a two-stage evaluation procedure, first stage is the Technical Evaluation wherein the bidder proves that it has the required technical experience to undertake the O&M of the Highway stretches and the required net worth/Asset under Management to infuse funds in the projects. Second stage is the Financial Evaluation wherein financial bids of the bidders who are found to be technically responsive are opened. Value of the underlying asset is assessed by the Authority. The financial quotes that are more than the expectation (IECV) of the Authority are accepted and the H1 is declared. If no quote matches the IECV, then that particular bundle is annulled. The IECV for the stretches is finalized by a Standing IECV Committee headed by the AS&FA, MoRTH.

53. The Committee also pointed out that there is an uncertainty in Bid Due Dates, which has serious ramifications on the development of projects and to the Highway developers. The tenders invited by NHAI as mentioned in **Annexure-III**, are pending for a period ranging from 9 to 14 months. The approximate value of these tenders is about 50,000 crores. Correspondingly, the total bid security for these amounts to approximately Rs. 500 Crore. Assuming an average participation of the bidders for these tenders, a cumulative amount of Rs. 7500 crore is currently blocked for this purpose. The impact of allocating funds

towards Performance security and financial closures easily translates into about Rs. 25,000 crores of blocked capital. The Committee found that the Concessionaires have been incurring significant recurring expenditures due to these postponements of bid date, the tenders themselves continue to be postponed, with announcement made just one working day prior to the Bid Submission date.

#### **54. Committee's observations/recommendations**

**54.1.** The Committee recommends that the NHAI must establish fixed and definite timelines for bids and their respective awards. NHAI must provide a comprehensive tender calendar that indicates the upcoming bids and their target bidding and award projects.

**54.2.** NHAI should consider the validity requirement of the bid security based on the first due date. Specifically, as the RFP provisions validity of the bid up to 120 days from the first Bid Due Date, and the validity of the bid security upto 180 days from the first Bid Due Date. In the event if the validity of the bid security remains valid upto 150 days i.e. Bid Due Date is extended by 30 day, from the Extended Bid Due Date, this should be taken into consideration and NHAI should not ask the bidder to increase the validity of the bid security. Instead, the lowest bidder may extend the validity period of the bid security as per the authority's requirement at a later stage. This adjustment will benefit all bidders as it will eliminate the need for frequent extensions of the bid security validity.

**54.3.** The Scope of Work should be finalised after Detailed Project Report as per site requirement and after consultation with local public. The prior approval of Utility Shifting from concerned department through the DPR consultant should also be done.

**54.4.** The acquisition and possession of minimum 95% of the continuous stretch of land required for construction works should be completed at the time of bidding.

#### **Violence at Toll Plazas**

55. The Committee notes that the toll plazas usually encounter road users who start altercation with staff due to various reasons, including FASTag issues or unwillingness to pay toll. Often, such altercations lead to heated debates between road users and toll plaza staff, which in some cases turn into physical violence from both sides. The Committee discovered that in 2011, a 22-year-old worker at the Kherki Daula toll plaza on National Highway 48 near Manesar in Haryana was shot dead, allegedly by a car driver who refused to pay the toll of Rs 27.

56. The Committee appreciates that, NHAI has issued Standard Operating Procedures (SoP) to curb

altercation incidents and strengthen security at National Highway Toll Plazas in order to safeguard interests of both the commuters and toll operators. The detailed Standard Operating Procedure include guidelines for NHAI field offices to ensure strict implementation and adherence by toll collecting agencies to manage staff and road users. In addition to this, ‘Toll par Calm’ a special drive has been initiated by NHAI at Toll Plazas. Under this initiative, NHAI has collaborated with professional Psychologists for anger management and customer delight training to Toll Plaza staff. The first training session was conducted at Murthal Toll plaza in Haryana, and more training will be conducted on other toll plazas across the country.

#### **57. Committee’s observations/recommendations**

**57.1.** The Committee appreciates the ‘Toll par calm’ initiative taken by the authorities. However, it recommends that it must be implemented at all the toll plazas in the country as early as possible. Further, panic alarm systems should be installed at toll booths that can be activated in case of emergencies. These systems should alert nearby law enforcement agencies for a swift response to any violent incidents.

**57.2.** Public awareness campaigns should be launched to educate road users about the consequences of violence at toll plazas. Promote a culture of respect and cooperation, emphasizing that toll plaza personnel are there to assist and ensure a smooth traffic flow.

**57.3.** Proper training should be provided to toll plaza staff in conflict resolution and de-escalation techniques. Equipping them with the skills to handle challenging situations diplomatically can help prevent violence.

**57.4.** The authorities must collaborate with local communities to establish community policing initiatives around toll plazas. Engage the community in reporting suspicious activities and maintaining a safe environment.

**57.5.** The Committee suggests that the VIP culture associated with the evasion/non-payment of toll tax should be done away with. It has been observed that most of the mishaps take place due to non-payment of toll taxes.

### **Black spots and Accidents**

58. The Committee notes that the total number of road accidents and fatalities in the country during the Year 2022 were reported as 4,61,312 and 1,68,491 respectively. The Committee took a note of the first-aid and medical facilities available to the road users and victims.

59. The Committee appreciates that citizens are now empowered to report road quality data, accidents,

and potholes which provides users with real-time data through the electronic Detailed Accident Report (e-DAR) Project.

60. The Ministry informed that the E-DAR Project has been rolled out in all 36 States and UTs for data entry related to road accidents by Police, Transport, Health and Highways Authorities. However, to empower citizens to report road quality data, accidents, and potholes etc on National Highways while also offering an efficient complaint redressal system, NHAI has launched 'Rajmargyatra,' a citizen centric unified mobile application. Ministry vide circular No. RW/NH' 29013/01/2020-S&R dated 09th November 2020 has issued Guidelines/SOP for monitoring of and compliance of all safety and suggested procedures to be followed for preparation of proposal for rectification of black spots. Further, Ministry vide letter No.RW/NH-29011/01/2021-S&R (P&B) RSCE dated 9th September 2021 has also issued guidelines for taking advance action for removal of accident spots on NHs as per Police reports without waiting for converting them into black spots after accidents/fatalities. Ministry vide letter No.RT-25035/104/2022 dated 13<sup>th</sup> January 2023 has issued guidelines for Road Safety Action Plan for road engineering interventions on National Highways vide which it is mentioned that stretch having high number of black spots shall be identified and developed as Model safe road and Model construction zone. So far 196 stretches of national highways have been identified for development as Model Safe Roads under the Ministry. 166 project stretches of NH have been identified for development as Model Safe Construction Zone under the Ministry.

61. The Ministry vide Unstarred Question 3771 dt 05.04.2023 informed the Rajya Sabha that the NHAI has envisaged a cashless treatment facility on all four arms of Golden Quadrilateral stretch i.e. Delhi-Mumbai, Mumbai-Chennai, Chennai-Kolkata and Kolkata-Delhi to provide Hospitalization Insurance cover to the immediate road Accident Victims (including Drivers, Passengers, Pedestrians/Cyclist). The proposed scheme is to take care of the immediate needs of the hospitalization of the victims for the first 48 hours from the time of hospitalization or providing necessary treatment up to a cost of Rs. 30,000/, whichever occurs earlier. For this scheme NHAI has invited bids and technical bids of the tender are under evaluation. As a part of incident management, there is a provision of ambulances and Tow-Away vehicles/cranes, in the respective contract/concession agreements, which are stationed near the fee plazas to cater to any emergency on the National Highways under the jurisdiction of NHAI. Further, the ambulances projects were sanctioned for the entire Country and State-wise separate funds were not allocated. In this regard, NHAI has sanctioned funds of Rs. 395.89 Crore in the last five years for deployment of ambulances through centralised agencies.

<b>62. Committee's observations/recommendations</b>
<b>62.1.</b> The Committee would like to know the current status of the hospitalization insurance scheme. The Committee may also be apprised about the number of ambulances and other medical

facilities available on each NH across the country.

**62.2.** With reference to identification and rectification of black spots on NH, the Committee would like to know the about the time taken to rectify a black spot after its identification. The Ministry must work upon to reduce the time taken to rectify a black spot.

**62.3.** The Ministry should conduct road safety audits for regular monitoring and evaluation of implemented measures. This involves ongoing data collection, site inspections, and collaboration with law enforcement to assess the effectiveness of intervention. Implement engineering solutions to address identified issues. This may include road realignment, installation of traffic calming measures, upgrading signage and markings, improving lighting, and addressing visibility concerns. The Ministry should also provide a report to the Committee indicating time interval between two continuous road safety audits on each NH.

## IV

### Way Forward

#### Monetisation of National Highways

63. The Committee notes that under the declared monetization plan, the Ministry of Road Transport and Highways will offer projects under Toll-Operate-Transfer contracts and Infrastructure Investment Trusts (InvITs) to be offered by the NHAI. InvITs are assets where investors put in money and income generated from such assets is paid as dividends. The overall monetization target was Rs 45,000 crore, of which Rs 30,000 crore would be raised by TOT or Toll-Operate-Transfer model and the remaining Rs 15,000 crore via InvITs.

64. The Ministry informed that CCEA in its meeting held on 20.11.2019 has amended inter alia the stipulation of "at least two years operations after Commercial Operation date (COD)" to "at least one year operations" i.e. collecting toll for at least one year after COD. The Concession Fee realized from monetization of NHs during 2021-22 and 2022-23 is as under:

Year/Mode	TOT (In Crores)	INVIT (In Crores)	Securitization (DME)
2021-22	1,011	7,350	14,006
2022-23	10,662	2,850	10,139

65. The Ministry has taken the following major steps to incentivise the investors for bidding the TOT bundles:

a) Periodic meetings are being held with Bidders/investors to understand and address their TOT bidding related concerns;

b) Initially when the TOT Programme had started, the packages/bundles offered were in large sizes. Now, the size and value of bundles have been reduced so that more bidders can participate in the Bidding process;

c) In order to get the fair value of the Asset, i.e. operational National Highways Project having potential tolling record and affording the bidders to assess the value by its own assessment, Initial Estimated Concession Value (IECV) is now determined after receipt of technical bids but before opening of financial bid;

d) List of Assets likely to be monetized during the FY 2022-23 & 2023-24 along with the macroeconomic assumptions adopted by NHAI for determining IECV by NHAI were published in public domain for information and guidance for due diligence by the prospective bidders;

e) One-to-one meeting convened with fund houses, banks, LIC, EPFO and SBI MF to address the financing issues associated with Asset Monetization Programme;

f) Recently a meeting was convened on 29.09.2023 with the Highways Operators Association of India (HOAI) and other bidders as to address their TOT related concerns,

g) NHAI is targeting to offer two bundles of TOT protects every quarter. This would include bundles of: -

- Medium-large size (Rs. 4000 to Rs. 7000 Cr each) consisting of 5-6 roads
- Smaller bundles (Rs. 1500 Cr) consisting of 2-3 roads
- Overall, NHAI targets to generate approx. Rs. 10,000- 15,000 Cr through TOT this year and Rs.15000 Cr for next fiscal. (FY25)

## **66. Committee's observations/recommendations**

**66.1.** The Committee notes that the NHAI's debt has gone up 14 times since 2014-15 to stand at Rs 3,47,685 crore, as of March 22, 2022. <sup>1</sup> The Committee, therefore, recommends that the Ministry should expand the scope of monetisation of road assets to reduce the debt.

**66.2.** The Committee observes that in the last three years, NHAI has been able to monetise assets

<sup>1</sup> <https://www.businesstoday.in/latest/story/nhais-debt-rose-14-times-since-2014-to-rs-347-lakh-cr-govt-327955-2022-03-30>

through (Toll Operate Transfer (TOT) and InvIT routes – 22 stretches monetised through TOT (aggregate length of 1,612 km) and 8 stretches monetised through InvIT (aggregate length of 632 km). However, bidding intensity for the assets remain relatively weak owing to high operational risks that private contractors need to take on, pertaining to traffic movement, toll collection efficiency, O&M, etc.

**66.3.** The Committee analyses that only 15 per cent of the National Monetisation Pipeline targets have been achieved in the last two years. It is, therefore, recommended that the pace of monetisation should be increased to cope up with rising debts. Faster pace of monetisation would help NHAI control leverage on its balance sheet, and thereby enable awarding of more projects through HAM / EPC route in future.

**66.4.** The Committee observes that under the current model, entirety of the traffic and toll collection risks are passed on to the private concessionaire which has resulted in dwindling interest for some of the riskier assets. Hybrid structures, where part of the traffic risk is borne by the authorities and assured minimum annualised payments are made to concessionaires, could alleviate some of the challenges with the existing TOT model.

**66.5.** The Committee feels that there is a need for clarity in the objectives of road monetization, whether it is revenue generation, infrastructure development, or maintenance funding. There is also a need for concerted efforts between investors and organisation to overcome the gap.

### Satellite/ANPR based toll collection

67. The Committee notes that the GPS based toll collection system reduces travel time significantly. An automatic number plate recognition system through cameras additionally enables automated toll collection without stopping vehicles. This would achieve a free flow of traffic on toll booths and a system to charge vehicle owners for the exact distance of cars driven on the tolled highways.

68. The Ministry informed that the GPS based toll collection technology and Automatic Number Plate Recognition (ANPR) is being explored to attempt in future. At present, there is no plan to make FASTag redundant and to remove the user fee plaza on National Highways. ANPR cameras and RFID Reader have been installed at few plazas to explore for the possibility of user fee collection, but this system is facing the challenges of deduction at high speed and enforcement, so check toll plazas are being used with ANPR system. Realizing the need to upgrade to barrier-less free flow tolling system, the Government has appointed a consultant through tendering process to provide advisory services on implementation of new technology like Global Navigation Satellite System (GNSS) based tolling. Above attempt is being made and further it is also being explored to integrate GNSS based tolling along with ANPR in order to reduce congestion and increase the efficiency.



## **69. Committee's observations/recommendations**

**69.1.** The Committee recommends that the Ministry should seek assistance from foreign countries like Germany, Belgium, Bulgaria, etc who have adopted GPS based tolling system. Once installed, the GPS-based system can also be used for other applications such as in parking. However, the Committee is also apprehensive that such step might reduce the employment opportunities, which are presently available to people.

**69.2.** The Committee is apprehensive of the fact that certain organisations can acquire the GPS coordinates of moving vehicles using the GPS-based Toll Collection System and continuously track them, posing privacy concerns. It is, therefore, recommended that cyber security issues should be taken into consideration before implementation of GPS-based Toll Collection System.

## **Expansion of Incident Management Services**

70. The Committee notes that the Ministry of Road Transport and Highways had drafted a request for proposal for the supply, operation and maintenance of Incident Management Services (IMS) for the entire highway network in this country to minimise the impact of accidents. This was previously only limited to the 65,000 km of NHS managed by NHAI, excluding the 7,000 km managed by NHIDCL (National Highways Infrastructure Development Corporation Ltd.) and the 66,000 km managed by the Roads wing of the Ministry of Road, Transport and Highways.

71. The Ministry informed that IMS (i.e. Ambulances, Cranes, Patrolling Vehicles) on NHAI stretches are being provided by the contractor/concessionaire during DLP/O&M period on 24x7 basis. Further, on stretches wherein the DLP/O&M period has expired, NHAI has deployed over 300 Ambulances through Centralized Ambulance Contractors and 100 Additional Ambulances can be also be deployed in future based on requirement from the field units through the balance COS provisions of the Ambulance Contracts. The 1033 Helpline Call Centre of NHAI dispatches the on-road units of IMS (i.e. Ambulances, Cranes, and Patrolling Vehicles) and maintains coordination between on road units and road users. Further, the 1033 Helpline Number is being integrated with 108/172 of various state Governments for better utilization of resources and co-ordination with State Agencies. The Specifications of Ambulances and Patrolling Vehicles have been recently modified (2019) in IRC SP: 84/87 Codes for 4/6 Laning and no further upgradation is being planned.



## 72. Committee's observations/recommendations

The Committee recommends that the Incident Management Services should be extended to all the States and UTs in the country. It is, further, suggested that specifications for ambulances, police vehicles, and rescue cranes be standardised to maintain uniformity and eliminate ambiguity. Additionally, as a rescue team, patrol vehicles and ambulances can work together and combine their activities for swift response.

## User-friendly Grievance Redressal Mechanism

73. The Ministry informed that for this purpose, Rajmargyatra, a citizen centric mobile app has been developed for highway users through which they can register their complaints pertaining to following parameters and also upload geo-tagged photos and videos:-

- FASTAG Facility/Lane
- Highway/ Toll Plaza Operation Complaint
- Toilet/Public Convenience
- Poor workmanship on construction
- Potholes and other maintenance issues
- Safety hazards
- 

74. Highlighting the process involved in addressing the complaint, the Ministry informed that each complaint on Rajmargyatra app is provided with a unique ticket number. The citizens will be able to view the progress of their complaint on the mobile app and can also give their feedback in the form of rating. At the back-end there is a web portal to redress the received complaints. The concerned officers (Toll Plaza Manager, PIU, RO, etc.) will have to redress the complaints. The registered complaints are sent to the concerned highway authority from the nearest toll plaza as per their jurisdiction. After taking necessary action, the status of the complaints are updated such as "In-progress " or "closed" or "escalated to next level" and the updated information is received by the complainant on the app itself. Citizens will be able to get information about various other services such as "Know Your Highway", nearest toll plaza, petrol pump, hospital, hotels, etc. through this app.

## **75. Committee's observations/recommendations**

**75.1.** The Committee appreciates the features of Rajmargyatra app. However, the Committee feels that there is a need for promotion of this app on a mass scale. The road users are hardly aware of this app. The Ministry must promote the app through Youtube ads, FM radio channels, hoardings at the NH and through other social media platforms.

**75.2.** The Committee observes that Indian Railways authorities actively use social media platforms to engage with the public, address concerns, and provide real-time updates. It is, therefore, recommended to establish and maintain an active presence on popular social media platforms to address grievances, share important information, and foster a sense of community engagement on the lines of Indian Railways.

## **Need for Legislative amendment**

76. The Committee notes that the well-framed legislation in the context of roads and highways in India is crucial for several reasons. Effective laws contribute to the development and maintenance of a robust and sustainable transportation infrastructure. Legislation helps establish and enforce safety standards, planning, funding, and executing infrastructure projects, environmental sustainability, funding, and integrating technology among others.

77. The Committee was informed that presently, the toll collecting agency approaches State Government administration through NHAI officials for enforcement actions required for operation of highways and maintenance of toll plazas.

## **78. Committee's observations/recommendations**

**78.1.** The Committee recommends that Competent Authority, having enforcement powers, from State Government may be associated with NHAI for taking enforcement actions for smooth operations and maintenance of Highways. They should be empowered to penalise the persons involved in encroachments, toll evasion, unsafe driving (high speed, wrong side driving) and vandalizing toll plazas.

**78.2.** The Committee notes that the evasion of toll fee is not punishable as per law. In this regard,

the Committee recommends making a legislation to link the bank accounts of vehicle owners to charge the toll fee along-with defined penalty in case of toll fee evasion, faulty FASTags or having FASTags with insufficient FASTag balance etc but allowing them to pass through the toll plaza without stopping

## Safety of women on National Highways

### **79. Miscellaneous recommendation**

**79.1.**The Committee notes that the number of women travelling alone on national highways is increasing in the country. The Committee therefore recommends that resting rooms may be constructed for women at toll plazas on National Highways, keeping their safety and convenience at the forefront.

## **RECOMMENDATIONS/OBSERVATIONS - AT A GLANCE**

### **Status of NHs in the country**

The Committee notes that the completion of hundreds of NHs is running behind the schedule. The Committee, therefore, recommends that the Ministry should expedite the construction process and focus on timely completion of all the NHs.

(Para 6.1)

The Committee would also like to know the manner in which the Ministry is planning to dispose of the Single and Intermediate-lane NHs.

(Para 6.2)

The Committee notes that the construction and expansion of National Highways till November end, the first nine months of current financial is around 10 per cent more than the corresponding period of 2011-23. However, the award of new projects for construction fell by almost 52 per cent during this year. The Committee recommends that the Ministry should match up with targets set up and strive hard to achieve the declared targets

(Para 8)

### **Operation, Maintenance & Repair (M&R) of National Highways (NHs) Network**

The Committee notes that the Committee on Revisiting and Revitalising the PPP Model of Infrastructure Development (2015) recommended setting up an independent regulator for the roads sector to encourage private participation and regulate their activity. It had also noted that service delivery, such as constructing roads meant for citizens is the responsibility of the government, and should not be evaded through PPPs. The Committee would like to know the action taken by the Ministry in this regard.

(Para 10)

### **Systematic improvement in Policy / Approach for M&R of NH Network:-**

The Committee notes that the amount of funds allocated for maintaining NHs is miniscule, given the vast length of highways across the country. Several committees, including NITI Aayog, have recommended that maintaining existing roads should be prioritised over constructing new NHs. In 2023-24, the Ministry has been allocated Rs 2,600 crore for maintaining highways (1% of the Ministry's budget). The Committee recommends that the expenditure on O&M should be increased in view of the huge toll tax collected by the authorities from the road users.

(Para 15)

## **National Highways Fee (Determination of Rates and Collection) Rules, 2008 – Background and Salient Features**

The Committee notes that currently, the Annual revision of the user fee is done w.e.f. 1<sup>st</sup> April and the fee is to be rounded off to the nearest Rs 5 as per the new user fee rules. However, some roads built before 2008 are governed by old rules where the fee is rounded off to Re 1 only. The Committee recommends streamlining and bringing uniformity to the revision of Toll Plaza fees.

(Para 21.1)

Further, the Ministry and other organisations should consult local representatives during the DISHA meetings along with local/frequent road users before fee revision.

(Para 21.2)

### **FASTag Coverage and its benefits:**

The Committee is hopeful that the coverage of FASTag will penetrate more in the remote areas. However, the Committee notes that there are multiple cases of faulty FASTags, which hamper the movement of vehicles. The road users also face trouble and have to pay double the toll charges. The Committee, therefore, recommends that the Ministry must take the issue of faulty FASTags seriously. Since the onus lies on the concerned agencies, they must be penalised for such negligence instead of the road users.

(Para 25)

### **Revenue increase after FASTag implementation**

The Committee appreciates the rise witnessed in revenue collection after the implementation of FASTag. However, the Committee recommends that the revenue collected from toll plazas should also be shared with the respective States.

(Para 29)

### **Issue of encroachment:**

The Committee recommends the Ministry to conduct a thorough survey and mapping of National Highways to identify and document all instances of encroachments. Utilize modern technology, such as satellite imagery and GIS mapping, for accurate data collection. Introduce stricter penalties for encroachment violations, and streamline the legal process for swift resolution.

(Para 34.1)

The Committee suggests that a State Government officer with magisterial authority could be appointed as the nodal officer for an area. The Project Director (PD) of NHA and the

**Magistrate can manage and exercise their powers to eradicate problems like encroachment and unauthorized median, etc.**

**(Para 34.2)**

**The Ministry should launch awareness campaigns to inform the public about the importance of maintaining clear Rights-of-Way on National Highways. Use various media channels, including radio, television, social media, and community events, to educate citizens on the adverse effects of encroachments.**

**(Para 34.3)**

**The Ministry should strive to introduce positive reinforcement mechanisms such as tax incentives or recognition, for individuals and businesses complying with the regulations and maintaining clear Rights-of-Way.**

**(Para 34.4)**

**The Committee feels that there is a need to engage local communities in the protection and maintenance of National Highways. The Ministry must encourage community participation through volunteer programs, neighbourhood watch initiatives, and partnerships with local civic groups.**

**(Para 34.5)**

### **Excess Toll collection**

**The Committee recommends that the Ministry should conduct regular and independent audits of toll collection operations to ensure transparency and accuracy. Implement an oversight mechanism that reviews toll collection records and financial transactions to identify any discrepancies.**

**(Para 37.1)**

**The Ministry should establish stringent penalties for toll plaza operators found guilty of intentional or repeated excess toll collection. Such operators should not be allowed to participate for bidding process in the future.**

**(Para 37.2)**

**To ensure against building of fake toll plazas in the country, the Ministry must conduct an all-India survey for identifying such bogus toll plazas and take strict actions against the culprits. The Ministry must also impose stringent penalties on officials of the Ministry for the dereliction of their duties.**

**(Para 37.3)**

### **Congestion at Toll Plazas**

The Committee notes that in our country, number plates are hallmarked and can be recognized by high-resolution cameras so that the amount can be deducted from bank accounts linked to the vehicle number. Hence, the Committee recommends that where there is congestion at toll plazas, Closed Tolling System can be implemented through the installation of Automated Number Plate Readers (ANPR) cameras.

(Para 40.1)

Meanwhile, till the installation on ANPR, the Committee suggests that a measure should be adopted whereby if one is unable to pay at that point of time, the vehicle should be relieved and moved out of the lane so that there is no blockage of traffic. Later, a text message should be sent on the mobile number linked to the vehicle number for payment of toll tax. If the person deliberately evades the toll tax, an FIR or challan may be issued against the driver based on his/her vehicle number and picture of the vehicle.

(Para 40.2)

The Ministry must evaluate the capacity of existing toll plazas and, where feasible, consider expanding or building redundant toll facilities to distribute traffic more evenly and reduce congestion. The Ministry can also introduce express toll lanes exclusively for registered users or frequent commuters who can pre-register for faster access through dedicated lanes.

(Para 40.3)

The Ministry and toll plaza officials should develop and communicate clear emergency response plans for toll plazas to address breakdowns, accidents, or other unexpected events promptly and minimize disruptions.

(Para 40.4)

### **Damages due to natural calamities**

The Committee appreciates the restoration work carried out by the respective organisations. However, it is also suggested that the Ministry should establish a rigorous schedule for regular maintenance and inspections of roads. The Ministry must identify vulnerable sections and prioritize them for preventive measures, repairs, or upgrades.

(Para 44.1)

The Committee suggests incorporating resilient design principles when planning and constructing roads. This includes using durable materials, proper drainage systems, and considering the local climate and geological conditions.

(Para 44.2)

The Committee recommends that the Road Safety Audit must be carried out at every stage of the DPR preparation i.e. feasibility Stage, Preliminary Design Stage and Final Stage to ensure that the safety is not compromised at any stage.

(Para 44.3)

The Ministry must develop and regularly update emergency response plans specifically tailored for road-related disasters. Ensure that these plans are well-communicated and understood by relevant authorities, first responders, and the public.

(Para 44.4)

The Committee notes that recently, 41 workers were trapped under the debris of the collapsed section of Uttarkashi's Silkyara tunnel, which forms a crucial segment of the Brahmakhal-Yamunotri section of the National Highway, a part of the government's Char Dham road scheme. Unfortunately, the very structure meant to enhance connectivity through an extensive 889-kilometer road network, has become a site of tragedy. The Government must implement a stringent maintenance schedule, including inspections for structural integrity, drainage systems, and ventilation to identify and rectify issues promptly. Employ sensors and monitoring technologies to continuously assess structural health, detecting any potential weaknesses or anomalies early.

(Para 44.5)

There is also a need for Training personnel in tunnel management and emergency response procedures so that such incidents do not occur in the future.

(Para 44.6)

The Committee would like to know about the details of all the toll plazas, which are located within a distance of 60 kms.

### Violation of distance rule between adjacent toll plazas

(Para 48.1)

The Committee would also like to know about the reasons accorded for each of the toll plaza which is an exception to the Distance clause of NH Fee Rules, 2008.

(Para 48.2)

The Committee recommends that the timely availability of unencumbered land must be ensured before the construction of any project.

### Delay in the procurement of construction for Core Infrastructure Projects

The Committee recommends that the timely availability of unencumbered land must be ensured before the construction of any project.

(Para 50.1)

The Committee also recommends that timely approvals/permissions for earth/stone quarries should be assured by the State Governments.

(Para 50.2)



It is observed that some of the genuine problems of local people are neglected, for example, mini-trucks (locally known as Chhota Hathi) carry many people for commutation purposes but are charged as commercial vehicles. The Committee, therefore, recommends that the demands of local public should also be taken into due consideration before finalisation of Detailed Project Report.

(Para 50.3)

### **Challenges in the bidding stage of Toll Plazas**

The Committee recommends that the NHAI must establish fixed and definite timelines for bids and their respective awards. NHAI must provide a comprehensive tender calendar that indicates the upcoming bids and their target bidding and award projects.

(Para 54.1)

NHAI should consider the validity requirement of the bid security based on the first due date. Specifically, as the RFP provisions validity of the bid up to 120 days from the first Bid Due Date, and the validity of the bid security upto 180 days from the first Bid Due Date. In the event if the validity of the bid security remains valid upto 150 days i.e. Bid Due Date is extended by 30 day, from the Extended Bid Due Date, this should be taken into consideration and NHAI should not ask the bidder to increase the validity of the bid security. Instead, the lowest bidder may extend the validity period of the bid security as per the authority's requirement at a later stage. This adjustment will benefit all bidders as it will eliminate the need for frequent extensions of the bid security validity.

(Para 54.2)

The Scope of Work should be finalised after Detailed Project Report as per site requirement and after consultation with local public. The prior approval of Utility Shifting from concerned department through the DPR consultant should also be done.

(Para 54.3)

The acquisition and possession of minimum 95% of the continuous stretch of land required for construction works should be completed at the time of bidding.

(Para 54.4)

### **Violence at Toll Plazas**

The Committee appreciates the 'Toll par calm' initiative taken by the authorities. However, it recommends that it must be implemented at all the toll plazas in the country as early as possible. Further, panic alarm systems should be installed at toll booths that can be activated in case of emergencies. These systems should alert nearby law enforcement agencies for a swift response to any violent incidents.

(Para 57.1)

Public awareness campaigns should be launched to educate road users about the

consequences of violence at toll plazas. Promote a culture of respect and cooperation, emphasizing that toll plaza personnel are there to assist and ensure a smooth traffic flow.

(Para 57.2)

Proper training should be provided to toll plaza staff in conflict resolution and de-escalation techniques. Equipping them with the skills to handle challenging situations diplomatically can help prevent violence.

(Para 57.3)

The authorities must collaborate with local communities to establish community policing initiatives around toll plazas. Engage the community in reporting suspicious activities and maintaining a safe environment.

(Para 57.4)

The Committee suggests that the VIP culture associated with the evasion/non-payment of toll tax should be done away with. It has been observed that most of the mishaps take place due to non-payment of toll taxes.

(Para 57.5)

### **Black spots and Accidents**

The Committee would like to know the current status of the hospitalization insurance scheme. The Committee may also be apprised about the number of ambulances and other medical facilities available on each NH across the country.

(Para 62.1)

With reference to identification and rectification of black spots on NH, the Committee would like to know the about the time taken to rectify a black spot after its identification. The Ministry must work upon to reduce the time taken to rectify a black spot.

(Para 62.2)

The Ministry should conduct road safety audits for regular monitoring and evaluation of implemented measures. This involves ongoing data collection, site inspections, and collaboration with law enforcement to assess the effectiveness of intervention. Implement engineering solutions to address identified issues. This may include road realignment, installation of traffic calming measures, upgrading signage and markings, improving lighting, and addressing visibility concerns. The Ministry should also provide a report to the Committee indicating time interval between two continuous road safety audits on each NH.

(Para 62.3)

### **Monetisation of National Highways**

The Committee notes that the NHAI's debt has gone up 14 times since 2014-15 to stand at Rs 3,47,685 crore, as of March 22, 2022. The Committee, therefore, recommends that the

**Ministry should expand the scope of monetisation of road assets to reduce the debt.**

**(Para 66.1)**

**The Committee observes that in the last three years, NHAI has been able to monetise assets through (Toll Operate Transfer (TOT) and InvIT routes – 22 stretches monetised through TOT (aggregate length of 1,612 km) and 8 stretches monetised through InvIT (aggregate length of 632 km). However, bidding intensity for the assets remain relatively weak owing to high operational risks that private contractors need to take on, pertaining to traffic movement, toll collection efficiency, O&M, etc.**

**(Para 66.2)**

**The Committee analyses that only 15 per cent of the National Monetisation Pipeline targets have been achieved in the last two years. It is, therefore, recommended that the pace of monetisation should be increased to cope up with rising debts. Faster pace of monetisation would help NHAI control leverage on its balance sheet, and thereby enable awarding of more projects through HAM / EPC route in future.**

**(Para 66.3)**

**The Committee observes that under the current model, entirety of the traffic and toll collection risks are passed on to the private concessionaire which has resulted in dwindling interest for some of the riskier assets. Hybrid structures, where part of the traffic risk is borne by the authorities and assured minimum annualised payments are made to concessionaires, could alleviate some of the challenges with the existing TOT model.**

**(Para 66.4)**

**The Committee feels that there is a need for clarity in the objectives of road monetization, whether it is revenue generation, infrastructure development, or maintenance funding. There is also a need for concerted efforts between investors and organisation to overcome the gap.**

**(Para 66.5)**

### **Satellite/ANPR based toll collection**

**The Committee recommends that the Ministry should seek assistance from foreign countries like Germany, Belgium, Bulgaria, etc who have adopted GPS based tolling system. Once installed, the GPS-based system can also be used for other applications such as in parking. However, the Committee is also apprehensive that such step might reduce the employment opportunities, which are presently available to people.**

**(Para 69.1)**

**The Committee is apprehensive of the fact that certain organizations can acquire the GPS coordinates of moving vehicles using the GPS-based Toll Collection System and continuously track them, posing privacy concerns. It is, therefore, recommended that cyber security issues should be taken into consideration before implementation of GPS-based Toll Collection System.**

### **Expansion of Incident Management Services**

The Committee recommends that the Incident Management Services should be extended to all the States and UTs in the country. It is, further, suggested that specifications for ambulances, police vehicles, and rescue cranes be standardised to maintain uniformity and eliminate ambiguity. Additionally, as a rescue team, patrol vehicles and ambulances can work together and combine their activities for swift response.

(Para 72)

### **User-friendly Grievance Redressal Mechanism**

The Committee appreciates the features of Rajmargyatra app. However, the Committee feels that there is a need for promotion of this app on a mass scale. The road users are hardly aware of this app. The Ministry must promote the app through Youtube ads, FM radio channels, hoardings at the NH and through other social media platforms.

(Para 75.1)

The Committee observes that Indian Railways authorities actively use social media platforms to engage with the public, address concerns, and provide real-time updates. It is, therefore, recommended to establish and maintain an active presence on popular social media platforms to address grievances, share important information, and foster a sense of community engagement on the lines of Indian Railways.

(Para 75.2)

### **Need for Legislative amendment**

The Committee recommends that Competent Authority, having enforcement powers, from State Government may be associated with NHAI for taking enforcement actions for smooth operations and maintenance of Highways. They should be empowered to penalise the persons involved in encroachments, toll evasion, unsafe driving (high speed, wrong side driving) and vandalizing toll plazas.

(Para 78.1)

The Committee notes that the evasion of toll fee is not punishable as per law. In this regard, the Committee recommends making a legislation to link the bank accounts of vehicle owners to charge the toll fee along-with defined penalty in case of toll fee evasion, faulty FASTags or having FASTags with insufficient FASTag balance etc but allowing them to pass through the toll plaza without stopping

(Para 78.2)

## **Safety of women on National Highways**

### **Miscellaneous recommendation**

**The Committee notes that the number of women travelling alone on national highways is increasing in the country. The Committee therefore recommends that resting rooms may be constructed for women at toll plazas on National Highways, keeping their safety and convenience at the forefront.**

**(Para 79.1)**

# ANNEXURES

**Comparison of previous fee rules of 1997 and extant fee rule of 2008**

S.No.	PARTICULARS	1997 RULES	2008 RULES AS AMENDED																						
i.	Classification of vehicles	<ul style="list-style-type: none"> <li>• Car /Jeep /Van</li> <li>• LCV</li> <li>• Truck/Bus</li> <li>• HCM/EME</li> <li>• (MAV is charged under truck /bus category)</li> </ul>	<ul style="list-style-type: none"> <li>• Car/Jeep/Van/LMV</li> <li>• LCV, Light Goods Vehicle or Mini Bus</li> <li>• Truck/Bus (<b>two axles</b>) Three Axle</li> <li>• Commercial Vehicles</li> <li>• Heavy Construction Machinery (HCM) or Earth Moving Equipment (EME) or Multi Axle Vehicle (MAV) (<b>four to six axle</b>)</li> <li>• vi. Oversized vehicle (7 or more axles)</li> </ul>																						
ii.	Comparison of rate of fee rules	<p>The user fee for projects involving conversion into four-lanes of existing two-lane of National Highways shall not exceed the capping rates given below at June 1997 prices,</p> <table border="1" data-bbox="488 1350 836 2018"> <thead> <tr> <th data-bbox="488 1350 695 1529">Type of Vehicle</th> <th data-bbox="695 1350 836 1529">Base rate of fee per km (in Rupees)</th> </tr> </thead> <tbody> <tr> <td data-bbox="488 1529 695 1603">Car or Jeep or Van</td> <td data-bbox="695 1529 836 1603">0.40</td> </tr> <tr> <td data-bbox="488 1603 695 1742">Light Commercial Vehicles</td> <td data-bbox="695 1603 836 1742">0.70</td> </tr> <tr> <td data-bbox="488 1742 695 1805">Truck or Bus</td> <td data-bbox="695 1742 836 1805">1.40</td> </tr> <tr> <td data-bbox="488 1805 695 2018">Heavy construction machinery and earthmoving equipment</td> <td data-bbox="695 1805 836 2018">3.00</td> </tr> </tbody> </table>	Type of Vehicle	Base rate of fee per km (in Rupees)	Car or Jeep or Van	0.40	Light Commercial Vehicles	0.70	Truck or Bus	1.40	Heavy construction machinery and earthmoving equipment	3.00	<p>The rate of fee for use of a section of National Highway of four or more lanes shall, for the base year 2007-08, be the product of the length of such section multiplied by the following rates</p> <table border="1" data-bbox="836 1290 1386 2049"> <thead> <tr> <th data-bbox="836 1290 1107 1395">Type of Vehicle</th> <th data-bbox="1107 1290 1386 1395">Base rate of fee per km (in Rupees)</th> </tr> </thead> <tbody> <tr> <td data-bbox="836 1395 1107 1570">Car, Jeep, Van or Light Motor Vehicle</td> <td data-bbox="1107 1395 1386 1570">0.65</td> </tr> <tr> <td data-bbox="836 1570 1107 1749">Light Commercial Vehicle, Light Goods Vehicle or Mini Bus</td> <td data-bbox="1107 1570 1386 1749">1.05</td> </tr> <tr> <td data-bbox="836 1749 1107 1843">Bus or Truck (Two Axles)*</td> <td data-bbox="1107 1749 1386 1843">2.20</td> </tr> <tr> <td data-bbox="836 1843 1107 1977">Three-axle commercial vehicles*</td> <td data-bbox="1107 1843 1386 1977">2.40</td> </tr> <tr> <td data-bbox="836 1977 1107 2049">Heavy Construction</td> <td data-bbox="1107 1977 1386 2049"></td> </tr> </tbody> </table>	Type of Vehicle	Base rate of fee per km (in Rupees)	Car, Jeep, Van or Light Motor Vehicle	0.65	Light Commercial Vehicle, Light Goods Vehicle or Mini Bus	1.05	Bus or Truck (Two Axles)*	2.20	Three-axle commercial vehicles*	2.40	Heavy Construction	
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			Machinery(HCM) or Earth Moving Equipment (EME) or Multi Axle Vehicle (MAV) (four to six axles)*	3.45
			Oversized Vehicles (seven or more axles)	4.20
iii.	Revision of rates	<ul style="list-style-type: none"> <li>Public Funded Projects – <b>after five years</b></li> <li>BOT- as per concession agreement (annually- date as per agreement)</li> </ul>	Every year w.e.f. 1 <sup>st</sup> April.	
iv.	Method of Revision	100% change in WPI	3% fixed + 40% of change in WPI	
v.	Applicability of Rule	Separate rules for public funded and BOT projects	Same rule for both public funded and BOT project	
vi.	Discounts	Provision exists for frequent users. One and half times of single journey rates for any number of journeys within a day. 30 times of single journey rates for any number of journeys within a month. No discount in Rule for BOT Project.	<ul style="list-style-type: none"> <li>Local non-commercial vehicle – Monthly pass for Rs.150/ at 2007–08 WPI</li> <li>Commercial vehicle registered within the District- 50% of the Fee rate (Toll plazas within District)</li> <li>Return journey within 24 hours on payment of 1.5 times of single journey and monthly passes for 50 journeys @ 2/3<sup>rd</sup> of Fee rate.</li> </ul>	
vii.	Restriction of use of highway by slow moving vehicles	No such restriction.	If service road /alternative road is Available slow-moving vehicles are not allowed on the highway.	
viii.	Rates for two lane highway with paved shoulder	No rates provided	60% of rates provided for four lane highway.	
ix.	Distance between two fee plazas and location of fee plazas	No such provision	Distance between two fee plazas is 60 kms. Further, fee plaza is to be located beyond 10 kms from municipal or local town area limits with some relaxation.	



x.	Fee for overloaded vehicles	No provision.	To pay the user fee at the rates 2 times for 0-20% overloading, 4 times for >20% to 40%, 6 times for >40% to 60%, 8 times for >60% to 80% and 10 times for >80% applicable for that category of vehicle and off load the excesses load
xi.	Unauthorized collection	No provision	Excess amount plus Penalty @ 25% of the excess amount.
xii.	Period of levying user fee	Perpetuity	<ul style="list-style-type: none"> <li>• In case of Public Funded Projects - After recovery of capital cost, to be tolled at 40% of the fee rates.</li> <li>• In case of BOT projects — After concession period at 40% of the fee rates.</li> </ul>
xiii.	Tolling of bypasses being part of NH section	To be tolled as part of the section.	1.5 times of the Base rates of road section as provided, if the cost of the bypass is above Rs.10.00 Crore on 2007 - 08 prices.
xiv.	Fee for structure forming part of the section.	To be tolled as part of the section. Separate table for bridges.	<p>By converting length of the structure into an equivalent length of highway/ expressway by multiplying by a factor of ten.</p> <p>Provided that structure of 60 meters of length or less, on a linear highway/expressway will be considered as part of the normal length of highways/expressways for calculation of fee.</p>
xv.	Transitional Plan	No such Plan exists	On transition from NH Fee Rules, 1997 to NH Fee Rules, 2008 the annual increase in the user fee shall in no case be more than 25% of the rate applicable in the immediately preceding year.

**Exemption from payment of fee has been listed out in Section 11 of the Rules below:-**

No fee shall be levied and collected from a mechanical vehicle:

- (a) transporting and accompanying:
  - (i) the President of India
  - (ii) the Vice president of India
  - (iii) the Prime Minister of India
  - (iv) the Governor of a State
  - (v) the Chief Justice of India
  - (vi) the Speaker of the House of People
  - (vii) the Cabinet Minister of the Union
  - (viii) the Chief Minister of a State
  - (ix) the Judge of the Supreme Court
  - (x) the Minister of State of Union
  - (xi) the Lieutenant governor of a Union territory
  - (xii) the chief of Staff holding the rank of full General or equivalent rank
  - (xiii) the Chairman of the Legislative Council of a State
  - (xiv) the Speaker of the Legislative Assembly of a state
  - (xv) the Chief Justice of a High Court
  - (xvi) the Judge of a High court
  - (xvii) the Member of Parliament
  - (xviii) the Army Commander or Vice-Chief of Army Staff and equivalent in other services
  - (xix) the Chief Secretary to a state Government within concerned State
  - (xx) the Secretary to the Government of India
  - (xxi) the Secretary, Council of States
  - (xxii) the Secretary, House of People
  - (xxiii) the Foreign Dignitary on State visit
  - (xxiv) the Member of Legislative Assembly of a State and the Member of Legislative Council of a State

within their respective State, if he or she produces his or her identity card issued by the concerned Legislature of the State

- (xxv) the awardee of Param Vir Chakra, Ashok Chakra, Maha Vir Chakra, Kirti Chakra, Vir Chakra and Shaurya Chakra, if such awardee produces his or her photo identity card duly authenticated by the appropriate or competent authority for such award
- (b) Used for official purposes by:
  - (i) The Ministry of Defence including those which are eligible for exemption in accordance with the provisions of the India Toll (Army and Air Force) Act. 1901 and rules made thereunder, as extended to Navy also.
  - (ii) the Central and State armed forces in uniform including para military forces and police
  - (iii) an executive Magistrate
  - (iv) the fire-fighting Department or organization
  - (v) The National Highways Authority of India or any other Government organization using such vehicle for inspection, survey, construction or operation of national highways and maintenance thereof.
- (c) used as ambulance and
- (d) used as funeral van.
- (e) specially designed and constructed for use of a person suffering from some physical defect or disability or registered with Ownership type as 'DIVYANGJAN' under the Motor Vehicles Act, 1988 (59 of 1988) and the rules made there under.

S. No.	Project	Tender ID	Bid Type	TPC (Rs. in Cr.)	BG Amt. in Cr.	Due date	State	Invited on	Days
1	Walajapet - Ranipet - TNAP Border	2022_NHA1_127584_1	HAM	975.21	9.75	18.10.2023	Tamil Nadu	1.9.2022	412
2	Neelamangala - Somakkanamutta (Pkg.1)	2022_NHA1_130598_1	HAM	1353.78	13.54	19.10.2023	Karnataka	29.9.2022	385
3	Somakkanamutta - Kunigal (Pkg.2)	2022_NHA1_130712_1	HAM	779.57	7.8	19.10.2023	Karnataka	30.9.2022	384
4	Bedkuva Dur Vil. - Pathakwadi Vil. (Pkg.7)	2022_NHA1_130853_1	HAM	955.52	9.56	23.11.2023	Gujarat	1.10.2022	418
5	Karanjveri Vil. - Karvad Vil. (Pkg.9)	2022_NHA1_130860_1	HAM	1024.29	10.24	6.11.2023	Gujarat	1.10.2022	401
6	Pathakwadi Vil. - Karanjveri Vil. (Pkg.8)	2022_NHA1_130857_1	HAM	732.98	7.33	6.11.2023	Gujarat	1.10.2022	401
7	Bitada / Movi Vil. - Nasarpore Vil. (Pkg.5)	2022_NHA1_130837_1	HAM	588.86	5.89	25.10.2023	Gujarat	1.10.2022	389
8	Jabugam Vil. - Dhamasiya Vil. (Pkg.3)	2022_NHA1_130824_1	HAM	882.77	8.83	25.10.2023	Gujarat	1.10.2022	389
9	Karakkunnu - Vazahayoor	2022_NHA1_131529_1	HAM	1491.95	14.92	11.12.2023	Kerala	10.10.2022	427
10	Ahmedabad Expressway (Pkg.1)	2022_NHA1_132165_1	HAM	979.56	9.8	6.11.2023	Gujarat	14.10.2022	418
11	Ahmedabad Expressway (Pkg.2)	2022_NHA1_132167_1	HAM	1287.29	12.87	6.11.2023	Gujarat	14.10.2022	418
12	Ahmedabad Expressway (Pkg.3)	2022_NHA1_132172_1	HAM	1434.58	14.35	6.11.2023	Gujarat	14.10.2022	418
13	Edathanattukara - Karakkunnu	2022_NHA1_132146_1	HAM	881.65	8.82	11.12.2023	Kerala	14.10.2022	423
14	Ahmedabad Expressway (Pkg.4)	2022_NHA1_132177_1	HAM	1288.71	12.89	6.11.2023	Gujarat	15.10.2022	387
15	Ahmedabad Expressway (Pkg.5)	2022_NHA1_132182_1	HAM	1193.79	11.94	6.11.2023	Gujarat	15.10.2022	387
16	Gobindpur - Kuspangi - Tangi	2022_NHA1_132548_1	HAM	1381.33	13.81	6.11.2023	Odisha	18.10.2022	384
17	Vazahayoor - Ingaullur	2022_NHA1_130962_1	HAM	596.33	5.96	11.12.2023	Kerala	23.10.2022	414
18	AP- KN Border - Raichur - KN/TS Border	2022_NHA1_133029_1	HAM	1188.93	11.89	8.11.2023	Karnataka	1.11.2022	372
19	Bellary Bypass	2022_NHA1_133030_1	HAM	936.84	9.37	8.11.2023	Karnataka	1.11.2022	372
20	Karimba - Edathanattukara	2022_NHA1_134014_1	HAM	1099.12	10.99	11.12.2023	Kerala	1.11.2022	405
21	Ariyanendal - Perugulam	2022_NHA1_136650_1	HAM	1102.48	11.02	22.11.2023	Tamil Nadu	25.11.2022	362
22	Rajapalayam - Senkottai (Pkg.1)	2022_NHA1_136657_1	HAM	1090.36	10.9	22.11.2023	Tamil Nadu	25.11.2022	362
23	Rajapalayam - Senkottai (Pkg.2)	2022_NHA1_136574_1	HAM	1319.61	13.2	22.11.2023	Tamil Nadu	25.11.2022	362
24	Marakkanam - Puduchery	2022_NHA1_136832_1	HAM	1286.91	12.87	22.11.2023	Tamil Nadu	29.11.2022	362
25	Deoghar Bypass	2022_NHA1_137158_1		1047.69	10.48	6.11.2023	Jharkhand	2.12.2022	339
26	Marutharoad - Karimba	2022_NHA1_138752_1	HAM	1265.72	12.66	11.12.2023	Kerala	19.12.2022	357
27	Northern Ayodhya Bypass	2022_NHA1_139329_1	HAM	1386.51	13.87	18.10.2023	Uttar Pradesh	23.12.2022	299
28	Southern Ayodhya Bypass	2022_NHA1_139344_1	HAM	1425.44	14.25	18.10.2023	Uttar Pradesh	23.12.2022	299
29	Surat - Nashik - Solapur (Pkg.4)	2022_NHA1_138380_1	HAM	1307.47	13.07	30.10.2023	Maharashtra	23.12.2022	311
30	Surat - Nashik - Solapur (Pkg.5)	2022_NHA1_138384_1	HAM	1501.59	15.02	30.10.2023	Maharashtra	23.12.2022	311
31	Gobindpur - Rameswar (Pkg.2)	2022_NHA1_138937_1	HAM	1297.41	12.97	19.10.2023	Odisha	29.12.2022	294
32	Gobindpur - Rameswar (Pkg.1)	2022_NHA1_138950_1	HAM	1433.2	14.33	19.10.2023	Odisha	30.12.2022	293
33	Edamon - Kadampattukonam	2022_NHA1_137950_1	HAM	1052.56	10.53	11.12.2023	Kerala	30.12.2022	346
34	Kunagal - Thattekere (STRR Pkg.1)	2023_NHA1_144056_1	HAM	932.8	9.33	19.10.2023	Karnataka	3.2.2023	258
35	Bagganadoddi - S.Mudugadapalli (STRRPkg.2)	2023_NHA1_144054_1	HAM	472.56	4.73	19.10.2023	Karnataka	3.2.2023	258
		TOTAL		38975.37	389.78				