



**BHARATMALA**  
ROAD TO PROSPERITY

# ANNUAL REPORT

2019  
2020



GOVERNMENT OF INDIA  
MINISTRY OF  
ROAD TRANSPORT & HIGHWAYS  
NEW DELHI

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Ministry of Road Transport and Highways  
Government of India





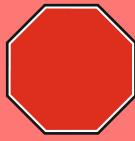
**BHARATMALA**  
ROAD TO PROSPERITY

# ANNUAL REPORT 2019-20



सत्यमेव जयते

GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS  
NEW DELHI



रुकिए  
Stop



Inauguration of the Delhi-Meerut Expressway (Pkg III)

## CONTENTS

Sr. No.	CHAPTER	PAGE
I	Introduction	7
II	Year at a Glance	11
III	Road Development	21
IV	Development of National Highways in the North Eastern Region	31
V	National Highways and Infrastructure Development Corporation Limited (NHIDCL)	35
VI	Road Transport and Road Safety	45
VII	Research and Development	57
VIII	Administration and Finance	63
IX	Implementation of Official Language Policy	73
X	Implementation of Persons with Disabilities Act, 1995	75
XI	Transport Research	77
XII	International Cooperation	81
XIII	Swachh Bharat Mission and Other Campaigns	83

	APPENDIX	
Appendix 1	Subjects allocated to the Ministry of Road Transport & Highways	85
Appendix 2	List of State-wise National Highways in the Country	87
Appendix 3	Allocation for development and maintenance of National Highways during 2019-20	91
Appendix 4	Allocation and Release under CRF	93
Appendix 5	Financial Expenditure of NHIDCL	94
Appendix 6	Information regarding number of Government Servants (Technical and Non-Technical side) including SC/ST employees	95
Appendix 7	Statement Showing the State wise Disbursement of National Permit Fee	96
Appendix 8	Major Head wise Expenditure	98
Appendix 9	Details of Receipts as per the Statement of Central Transactions (SCT) for the last three years Head wise details of Revenue	99
Appendix 10	Receipts for last three years	100
Appendix 11	Highlights of Accounts Total Number of Registered Motor	101
Appendix 12	Vehicles in India – 2003 to 2018	102
Appendix 13	Number of Road Accidents and Persons Involved: 2005 to	103
Appendix 14	2018Road Network by Categories: 1951 to 2018	104
Appendix 15	Combined physical performance of 56 SRTUs - 2015-16 & 2016-17	105
Appendix 16	Status of pending list of C&AG Audit Paras (Commercial)	106
Appendix 17	Financial and Physical Progress for Activities under Swachh Bharat Mission	107

इस चिन्ह का प्रयोग गोलचक्कर पर किया जाता है जहां एक विशेष लेन अनुशासन का पालन किया जाना होता है। यह चिन्ह वाहनों को उनकी दायीं तरफ यातायात के दिए अन्य वाहनों को रास्ता देने का निर्देश देता है।

This sign is used at roundabouts where a specific lane discipline is to be followed. This sign directs the traffic to give way to the fellow traffic on your right side.



प्रवेश निषेध  
No Entry

सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार  
Ministry of Road Transport & Highways, Government of India



यह चिन्ह दर्शाता है कि यहां सभी वाहनों का प्रवेश निषेध है। एक क्षेत्र के कुछ भागों को यातायात के लिए प्रवेश निषेध के रूप चिन्ह किया जाता है। यह प्रतिबंधित क्षेत्र में प्रवेश या यातायात निषेध क्षेत्र हो सकता है। इसलिए, चालक को इसका पालन करना चाहिए और अपना मार्ग परिवर्तित कर लेना चाहिए।



Laying foundation stone for various National Highways (NH) projects including ROBs under Setu Bharatam, at Akividu of West Godavari district, in Andhra Pradesh

यह चिन्ह दर्शाता है कि इस निर्दिष्ट क्षेत्र में बाहरी या भीतरी वाहन नहीं चलाए जाएंगे। इस क्षेत्र में भीड़-भाड़ कम करने के लिए ऐसा किया जाता है। पदयात्रियों के उपयोग वाले क्षेत्रों में भी इस चिन्ह का इस्तेमाल किया जाता है।

This sign signifies that there should be no movement of traffic in the designated area either from outside or within. This is used to decongest the area. It is also used at pedestrian areas.



ट्रकों का आना मना है  
Truck Prohibited

सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार  
Ministry of Road Transport & Highways, Government of India



**Inauguration of the Delhi-Meerut Expressway (Pkg III)**



**Foundation stone laying ceremony of the 6 lane, access controlled corridor of NH 709 B, in Delhi**

जैसा कि चिन्ह से स्पष्ट है, निर्दिष्ट क्षेत्र में ट्रक या भारी मोटर वाहनों (एचएमवी) का प्रवेश वर्जित है। ये वे संकरे रास्ते या भीड़-भाड़ वाले क्षेत्र हो सकते हैं, जहां भारी मोटर वाहनों के प्रवेश से यातायात के सुगम प्रवाह में बाधा पहुंच सकती है।

As sign itself speaks the area designated is a no entry zone for Trucks or HMV. These could be narrow lanes or congested areas where entry of heavy transport vehicle could obstruct smooth flow of traffic.



## CHAPTER I

### Introduction

- 1.1 Ministry of Road Transport and Highways was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent Ministries, i.e., Ministry of Road Transport & Highways and Ministry of Shipping.
- 1.2 Road Transport is a critical infrastructure for the economic development of a country. It impacts the pace, structure and pattern of development. The tasks and responsibilities of the Ministry of Road Transport and Highways encompass, inter alia, construction and maintenance of National Highways (NHs); administration of the National Highways Act, 1956; National Highways Authority of India Act, 1988; National Highways Fee (Determination of Rates and Collection) Rules, 2008; Motor Vehicles Act 1988; and Central Motor Vehicles Rules 1989, as also formulation of broad policies relating to road transport and automotive norms, besides making arrangements for movement of vehicular traffic with neighbouring countries.
- 1.3 The capacity of National Highways in term of handling traffic (passenger and goods) needs to keep pace with economic growth. India has the second largest road network in the world of about 58.98 lakh km. This comprises National Highways, Expressways, State Highways, Major District Roads, Other District Roads and Village Roads as under:

National Highways	1,32,500 km
State Highways	1,56,694 km
Other Roads	56,08,477 km
<b>Total</b>	<b>58,97,671 km</b>

- 1.4 Historically, investments in the transport sector have been made by the Government. However, in order to encourage private sector participation, the Ministry has laid down comprehensive policy guidelines for private sector participation in the development of National Highways.

### Functions

- 1.5 The subjects allocated to the Ministry of Road Transport & Highways are listed at **Appendix-1**

### Organisation

- 1.6 Associated offices

#### 1.6.1 National Highways Authority of India

The National Highways Authority of India (NHAI) was set up through an Act of Parliament, namely the National Highways Authority of India Act, 1988. The NHAI is responsible for the development,

यह चिन्ह दर्शाता है कि इस सड़क पर बैलगाड़ियों और हाथ-ठेलों को चलाना वर्जित है। धीमी गति से चलने वाली ये गाड़ियां और ठेले कई बार यातायात के सुगम प्रवाह में बाधा उत्पन्न करते हैं।

This sign indicates that the road has been prohibited for plying of Bullock & Hand Carts. These slow moving carts many a times hinder the smooth flow of traffic.



बैलगाड़ियों का  
आना मना है  
**Bullock Cart  
Prohibited**

maintenance and management of the National Highways entrusted to it and for matters related or incidental there to. The NHAI became operational in February, 1995.

#### **1.6.2 National Highways & Infrastructure Development Corporation Ltd. (NHIDCL)**

The Cabinet, in its meeting held on 13.03.2014, approved the setting up and operationalization of a new corporate entity, the NHIDCL, under the Ministry of Road Transport and Highways to exclusively carry out the task of construction/ up-grading/widening of National Highways in parts of the country which share international boundaries with neighbouring countries in order to promote regional connectivity on a sustainable basis.

#### **1.6.3 Indian Academy of Highway Engineers (IAHE)**

The Indian Academy of Highway Engineers (IAHE) is a registered Society under the administrative control of the Ministry. It is a collaborative body which was set up in the year 1983 with the objective of fulfilling the long felt need for training of Highway Engineers in the country, both at the entry level and during their service period.

#### **1.6.4 Indian Road Congress (IRC)**

The IRC was formally registered as a Society on 24th September 1937 under the Societies Registration Act of 1860 for periodical holding of road conferences to discuss issues related to road construction, maintenance & development. IRC has over 16,700 registered members comprising engineers & professionals of all Stakeholders of the road sector, from Central and State Governments; Public Sector; Research Institutions; Local bodies; Private sector; Concessionaires; Contractors; Consultants; Equipment manufacturers; Machinery manufacturers; Material producers & suppliers; Industrial Associations; and Multilateral & Institutional organizations like World Bank, ADB, JICA, JRA, IRF etc.



**Kadthal - Armoor, Andhra Pradesh**



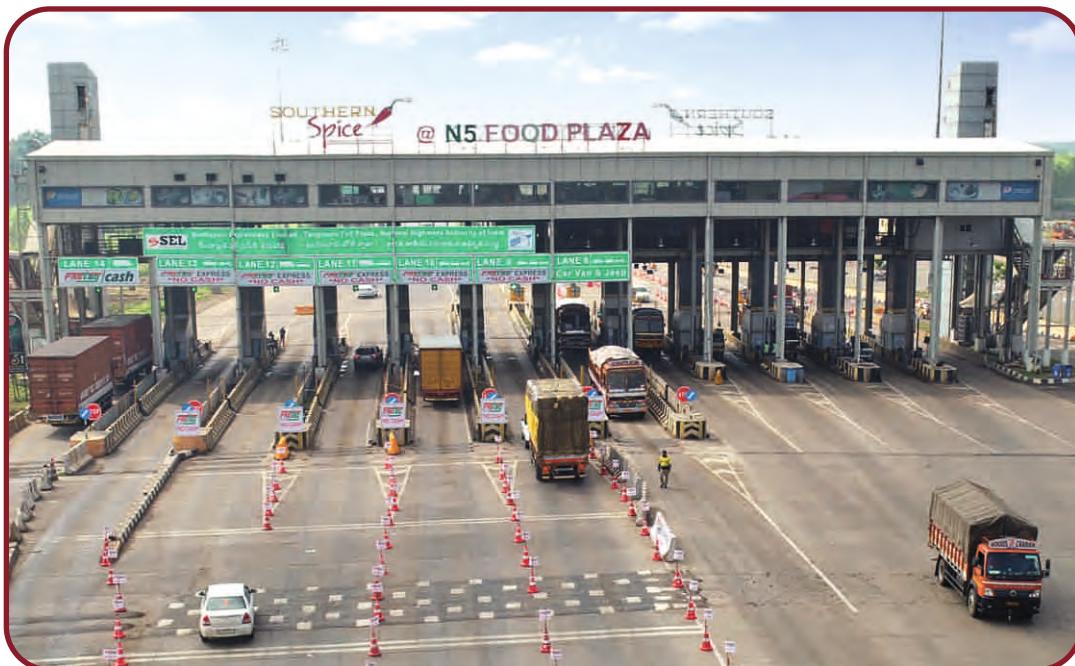
**Eastern Peripheral Expressway**

कुछ स्थानों पर पुल की व्यवस्था किए बिना सड़कें नदी के साथ जोड़ी जाती हैं। चूँकि नदी सड़क को विभाजित करती है इसलिए नौका सेवा के जरिए इन सड़कों को जोड़ा जाता है। यह विन्ह दर्शाता है कि वहां नदी पार करने के लिए नौका सेवा उपलब्ध है।

Some times roads are intersected by the river without the provision of bridge. These roads are connected through ferry service. This sign indicates that there is a ferry service available to cross the river.



**Conference on One Nation One Tag FASTAG**



**FASTAG IMPLEMENTATION ON NH**



## CHAPTER II

### Year 2019-20 at a Glance

#### 2. ROAD NETWORK:

- 2.1 Road Sector :** The National Highways have a total length of 1,32,500 km, which in totality serve as the arterial network of the country. The development of National Highways is the responsibility of the Government of India. The Government of India has launched major initiatives to upgrade and strengthen National Highways through various phases of the National Highways Development project (NHDP). The status of various programmes up to 31.12.2019 are as under:

Phases	Total Length in km	Length completed upto 31.03.2019	Length completed during 01.04.2019 to 31.12.2019	Length Completed up to 31.12.2019
<b>Bharatmala Pariyojana (I+II+III+IV)</b> GQ, Port connection & Upgradation with 2/4/6 -laning / Development of North South- East West Corridor	46,278	33,808	3,148	36,956
<b>V</b> 6-laning of GQ and High density corridor	6,500	3,264	329	3593
<b>VI</b> Expressways	1000	176	21	197
<b>VII</b> Ring Roads, Bypasses and flyovers and other structures	700 km of ring roads/ bypass + flyovers etc.	115	9	124
<b>Other Schemes</b>				
<b>SARDP-NE (Phase A+Arunachal Pradesh)</b>	6,418	3,029	112	3,141
<b>LWE (including Vijaywada Ranchi Route)</b>	6,014	5,279	65	5,344
<b>EAP (WB+JICA+ADB)</b>	1,985	1,018	63	1,081

यह चिन्ह दर्शाता है कि निर्धारित सड़क पर हाथ टेले चलाने पर रोक है क्योंकि ये यातायात के तेज प्रवाह में बाधक बनते हैं।  
 This sign indicates that the Hand Cart is prohibited on the demarcated road as it would hinder the flow of fast moving traffic.



- 2.2** The year 2019-20 was a year for consolidating the gains that have accrued from major policy decisions taken in the previous five years, a time for monitoring of ongoing projects, tackling road-blocks and adding to the already impressive pace of work achieved last year. The Ministry took a decision to complete all ongoing projects that had been awarded upto 2015-16, and placed the highest ever target of construction of at least 11,000 kms of National Highways, while aspiring to upscale the construction of about 12,000 kms of National Highways as against 10,855 kms achieved during 2018-19. Overall road projects exceeding 50,000 km in length, costing more than Rs. 5.80 lakh crore, are in progress out of which work in respect of projects of more than 33,500 km length has been completed and in balance length of more than 16,000 km works are in progress. National Highways of 6940 km length have been completed in the first nine months of FY 2019-20, as against 6703 km for the corresponding period during the last financial year. The Ministry has scaled new heights in expanding the Highway infrastructure throughout the country.
- 2.3** **2019-20 witness several highlights.** Several bridges like the Signature bridge at Dwarka, bridge over Ganga in Allahabad, state of the art tunnels like Silkyara in Uttarakhand have come up / are coming up to shorten distances in difficult terrains and make remote areas more easily accessible. World class expressways and Ring Roads are coming up to decongest high density traffic corridors. The Delhi-Meerut Expressway, Delhi-Vadodara Expressway, Vadodara-Mumbai Expressway and Bangalore-Chennai Expressway are some examples.

## 2.4 Major Initiatives by the Ministry

### 2.4.1 Bharatmala Pariyojana

The Cabinet Committee on Economic Affairs approved the implementation of an umbrella programme for the National Highways – “Bharatmala Pariyojana Phase-I” in its meeting held on 24th October 2017, for construction/ up-gradation of National Highways of 34,800 kms length over a period of 5 years (2017-18 to 2021-22) at an estimated outlay of Rs. 5,35,000 Crore. The programme focuses on optimizing efficiency of freight and passenger movement across the country by bridging critical infrastructure gaps through effective interventions like development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International Connectivity roads, Coastal and Port Connectivity roads and Green-field expressways. Multi-modal integration is also built into this program. Special attention has been paid to fulfilling the connectivity needs of backward and tribal areas, areas of economic activity, places of religious and tourist interest, border areas, coastal areas and trade routes with neighbouring countries. Projects with aggregate length of approximately 9674 kms (includes projects with length 347 kms which had been awarded and terminated) have already been awarded under Bharatmala Pariyojana (including residual NHDP Works) till Dec 2019, while projects with length 3555 kms are currently under bidding. Additionally, work on preparation of Detailed Project Reports for about 16,326 kms is under progress.

साइकिल—सवारों की सुरक्षा सुनिश्चित करने के लिए कुछ सड़कों पर, जहां तेज गति से वाहन चलते हैं, साइकिल चलाने पर रोक लगा दी जाती है। इसलिए, साइकिल—सवारों को उन सड़कों का इस्तेमाल नहीं करना चाहिए, जहां यह चिन्ह लगा हो।

In order to ensure the safety of cyclists certain roads which are meant for fast moving vehicles are prohibited for cyclists. So the cyclists should not use the roads where this sign has been installed.



## 2.4.2 Projects completed, planned / under progress:

### (i) Delhi-Meerut Expressway (DME)

The Delhi-Meerut Expressway aims to provide faster and safer connectivity between Delhi and Meerut and beyond this, with Uttar Pradesh and Uttarakhand. The alignment of DME starts from Nizamuddin Bridge from Delhi and follows existing NH 24 upto Dasna. While one leg of DME will continue from Dasna on NH 24 to Hapur, a Greenfield alignment has been planned from Dasna to Meerut. The Expressway is being constructed in 4 packages. The total length of the project is 82 km, of which the first 27.74 kms will be 14-laned, while the rest will be 6-lane expressway. The project is likely to cost Rs 4975.17 crore.

The 8.36 km long Package -1 of the projects was inaugurated by Hon'ble Prime Minister in May, 2018. It is a 14 lane, access-controlled section stretching from Nizamuddin Bridge to Delhi UP Border, and was completed in a record time of 18 months as against the earlier expected construction period of 30 months, at a cost of about Rs. 841.50 crore.

This is the first National Highway in the country with 14 lanes, and has several features that would help reduce pollution. These include a 2.5-metre-wide cycle track on either side of the highway, a vertical garden on the Yamuna Bridge, solar lighting system and watering of plants through drip irrigation only.

Package-III from Dasna to Hapur (22.27 km) has been completed on 13.09.2019 (PCOD). Package-II from UP Border to Dasna (19.28 km) and Package –IV - Green-field Alignment from Dasna to Meerut – (31.78 km) are under construction, the physical progress is 67% & 59% respectively.

### (ii) Anishabad-Aurangabad-Hariharganj Section of NH-98 in Bihar

Rehabilitation and Upgrading to 2 lanes/2 lane with paved shoulders configuration of Anishabad-Aurangabad-Hariharganj Section of NH-98 in Bihar for Lot-I (km 0.00 to km 62.00) with a length of 62.60 km was sanctioned on 10.01.2013. The work was started on 13.08.2014 with a sanctioned cost of Rs.360.50 cr. and was completed on 24.10.2019. There has been reduction in travelling time from 6-7 hours to 2-2.5 hours after construction of the stretch. Steps for enhanced road safety have been taken by providing and installing proper road signs, junction improvements, road marking etc.

### (iii) Delhi – Vadodara Expressway

A greenfield alignment between Delhi – Vadodara with a length of 844 km through Sohna, Dausa, Jaora, Ratlam, Godhra, which reduces the travel distance between Delhi – Vadodara by around 150 km, is being developed. Projects with length 372 km have already been awarded while projects with length 380 km are currently under bidding.



#### **(iv) Vadodara-Mumbai Expressway**

A greenfield alignment between Vadodara – Mumbai with a length of 352 km through Kim, Talasari, Virar has been finalized. Work has already been awarded for a stretch of 124 km for Vadodara-Kim sector and bids invited for 228 km between Kim and Virar.

#### **(v) Nagpur-Hyderabad-Bangalore (NBH) Expressway**

DPR has been awarded and alignment finalization is under progress for the new green-field 940 km Nagpur–Hyderabad–Bangalore Expressway

#### **(vi) Dhubri-Phulbari Bridge over river Brahmaputra**

The Project aims at construction of total 19.282 km length 4 – lane bridge over river Brahmaputra on NH-127B with JICA ODA loan. The construction of this bridge project will save huge travel distance from 205.30 km to only 19.282 km and saving in time from 5 hrs to 20 minutes between Dhubri in Assam and Phulbari in Meghalaya.

### **2.4.3 Funding Models and other policies to facilitate construction of National Highways**

#### **(i) Monetisation of Assets through Toll-Operate-Transfer (TOT) Model:**

This Ministry has conceptualised an innovative way for raising funds through Monetisation of completed Road Assets. This is known as Toll-Operate-Transfer (TOT) Model.

The Ministry is monetizing its road assets constructed with public funds through Toll-Operate-Transfer (ToT) scheme. The scheme envisages bidding of bundled national highways for a concession period of 30 years. The first bundle comprised 09 projects, totalling 681 km of roads in Andhra Pradesh and Gujarat. It was awarded in 2018 to Macquarie for Rs. 9,681 Crore, which was about 1.5 times the NHAI's estimates. The TOT Bundle-1 project is already started w.e.f. 29.08.2018 (appointed date).

The second bundle comprising over 586 kms spread over four states – Rajasthan, Gujarat, West Bengal and Bihar was also placed in the market. However, it was restructured thereafter. The third bundle comprised 09 projects totalling 566.27 km of road in Uttar Pradesh, Bihar, Jharkhand and Tamil Nadu. It was awarded in November 2019 to M/s. Cube Mobility Investment Fund Pvt. Ltd. The Concession Agreement was also signed on 27.12.2019 with 9 SPVs. The bid for fourth bundle of TOT comprises of 06 projects, totaling 341.58 km length of roads in the state of Punjab, Haryana, Rajasthan, MP & UT of J&K is also invited with Bid Due Date of 13.02.2020.

The Cabinet has given its approval to the amendments proposed in the TOT Model. Henceforth, Public funded National Highway projects which are operational and have toll revenue generation history of one year after the Commercial Operations Date can be



monetized through the TOT Model. Under this, the right of collection of Toll Fees for operational public-funded NH projects is to be assigned for a pre-determined period to the Concessionaires (developers/ investors) against upfront payment of a lump-sum amount. O&M obligations of such projects would rest with the Concessionaires until the completion of the period under TOT Model.

The CCEA has also given approval to NHAI for raising funds from banks through securitization of user fees. This is another instrument for resource mobilisation.

#### **(ii) Infrastructure Investment Fund (InvIT)**

NHAI has been given the mandate to set up an InvIT to monetize its completed stretches of public funded national highways with the objective of mobilizing additional resources through capital markets. NHAI will be able to securitise future cash inflows through an InvIT, as it allows the organisation to monetize illiquid and stable cash generating infrastructure assets. It will attract long-term capital, allowing the investors to have an indirect exposure in the project(s). This proposition is more attractive for foreign investors, which are hesitant to take direct exposure in highway projects.

#### **2.4.4 E-initiatives**

##### **(I) Bhoomi Rashi - Land Acquisition portal**

The process of issuing Land Acquisition notification was beset with delays due to clerical mistakes, time taken in processing notification and huge amount of public funds was also parked with the Competent Authority for Land Acquisition (CALA).

With the adoption of the portal w.e.f. 01.04.2018, the system has become transparent, error-free, and paperless. The system also ensures accountability at each level. The portal has also reduced the time period for publication of notification in the Gazette of India. Any number of reports using different parameters, can be generated through the system. Processing of payment through BhoomiRashi has ensured real time deposition of compensation in the account of the beneficiary. Real time deposition of compensation through the Bhoomi Rashiportal has been successfully done for MoRTH projects in the State of Himachal Pradesh, Maharashtra, Odisha, Bihar, Karnataka, etc.

During the period 01.04.2019 to 31.12.2019, a total of 1380 land acquisition notifications have been issued and 8889 hectares of land has been notified for acquisition under Section 3D of the NHs Act 1956. Also in an effort to create land bank data of NHs, all the field units have been directed to enter all the legacy data of land pertaining to the NH Projects from year 1997 to 2018.

सड़क के कुछ व्यस्त चौराहों (इंटरसेक्शन) पर यह चिन्ह देखा जा सकता है। इन चौराहों पर वापस मुड़ने (यू-टर्न) से बड़ी दुर्घटनाएं हो सकती हैं या यातायात जास लग सकता है। जुर्माने और किसी भी अप्रिय घटना से बचने के लिए ड्राइवर को चाहिए कि वह इस चिन्ह का उल्लंघन न करें।

This sign can be seen at some of the busy intersections on roads. The U-turn at these intersection could result in major crashes or traffic jams. The driver should not violate this sign to avoid fine and any untoward incident.



Land acquired by the National Highways Authority of India during last four years:

S. No	Year	Area u/s 3A (Ha.)	notified	Area notified u/s 3D i.e Total area acquired (Ha.)
1	2016-17		8471	7491
2	2017-18		11459	9494
3	2018- 19		96450	29374
4	2019-20 (Upto Dec. 2019)		12784	7774

Source: BhoomiRashi Portal

### **(ii) Enterprise Resource Planning (ERP) Project-eDISHA**

eDisha, Digitally Integrated System of Highway Assets is the face of 'Design, Development, Implementation and Enablement of Technology Solution at Ministry, NHAI and NHIDCL. This will eliminate data duplication and provide data integrity with a "single source of truth" along with digitization. Ministry is the main stakeholder alongwith NHAI and NHIDCL.

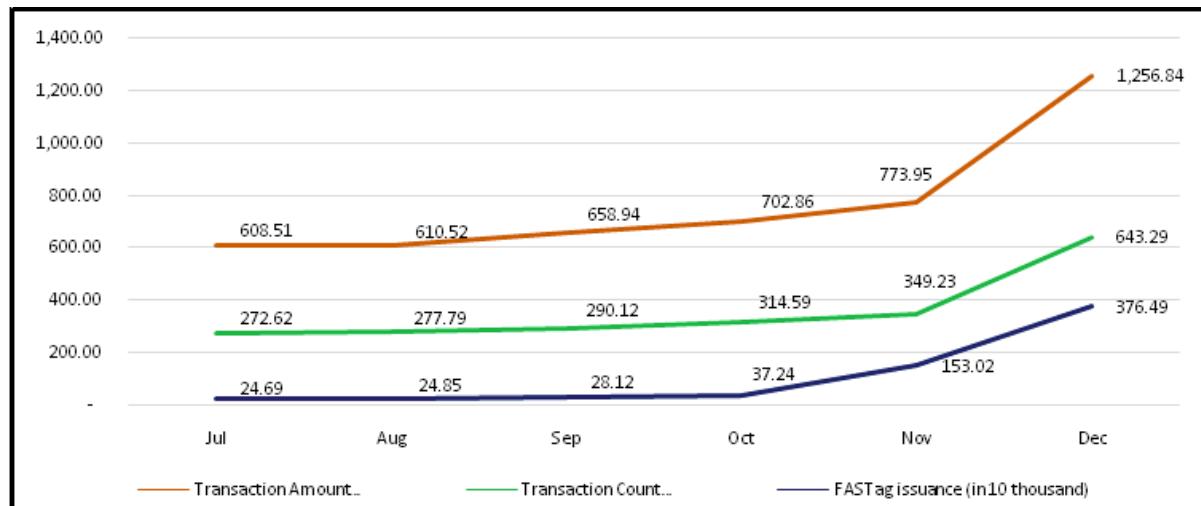
eDISHA will facilitate the flow of real time information across departments and ecosystems, so businesses can make data-driven decisions and manage performance-live.

eDISHAis being implemented in all ROs/BOs of Ministry, NHAI & NHIDCL along with Hqrs.

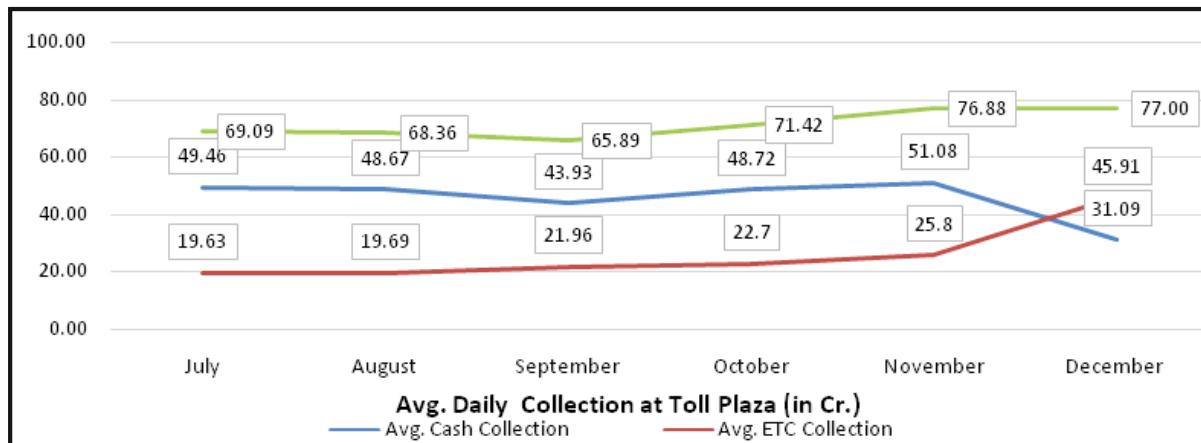
### **E-tolling**

Electronic Toll Collection (ETC) system, has been implemented on pan India basis in order to remove bottlenecks and ensure seamless movement of traffic and collection of user fee as per the notified rates, using passive Radio Frequency Identification (RFID) technology. Indian Highways Management Company Limited (IHMCL), a company under the Company's act 1956 has been incorporated for working as implementing agency for ETC with National Payment Corporation of India (NPCI) functioning as the Central Clearing House (CCH). 24 banks (including Public and Private sector banks) have been engaged as issuer banks in order to issue FASTag to road users. A cashback of 2.5% is being offered for the FY 2019-20 in order to incentivize road users for usage of FASTag. As on 20.01.2020, collectively banks have issued 135.62 lakh FASTags and with an 30.80 lakhs average daily ETC transactions, the average daily collection through ETC has increased to Rs. 50.88 crore with a penetration of 65% in total fee collection. There are 538 operational National Highways (NH) fee plazas out of which 536 plazas are live with ETC infrastructure in all lanes.

### Growth of FASTag



### Average Daily User Fee Collection

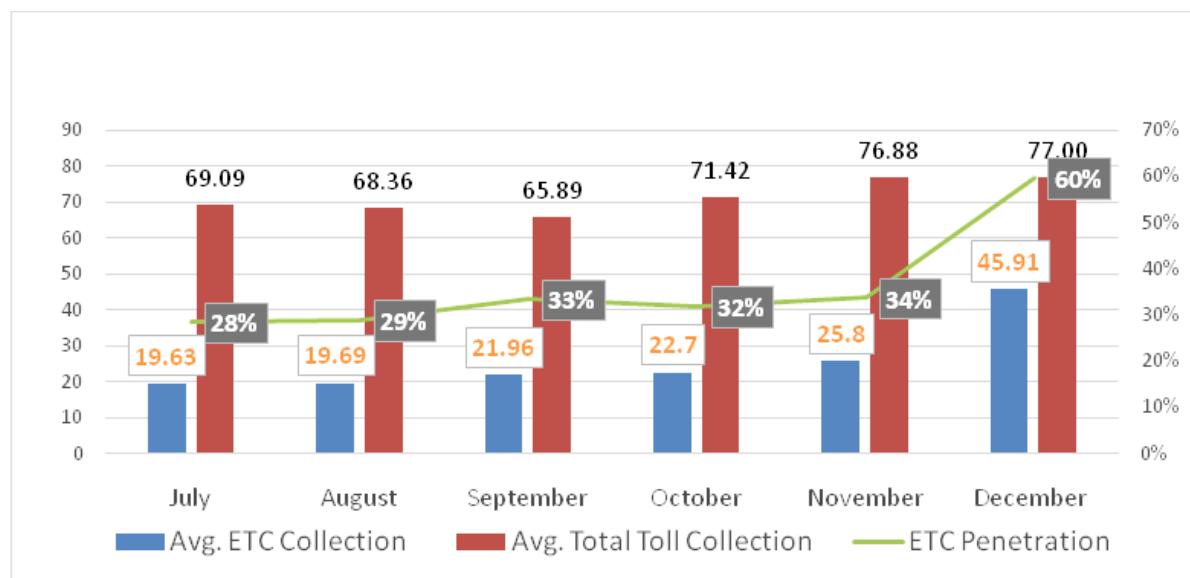


यह चिन्ह निर्देश देता है कि यातायात के सुगम प्रवाह के लिए ड्राइवर बाएं रहकर गाड़ी चलाएं। यह चिन्ह मुख्यतः उन सड़कों पर लगाया जाता है, जहां बीच में विभाजक (डिवाइडर) नहीं होता और उसी सड़क पर दुरुरक्षा यातायात प्रवाह रहता है।

This sign indicates that the driver should drive in left lane for smooth traffic flow. This sign is installed mainly on the roads which do not have divider in between and two way traffic flows on the same road.



### Daily Average ETC penetration



#### 2.4.5 Major Initiatives taken by Land Acquisition Division

Establishment of Highway Administration under the Control of National Highways (Land and Traffic) Act 2002.

1. The Ministry of Road Transport & Highways under the Control of National Highways (Land and Traffic) Act, 2002 has been prescribing the competent authorities i.e. the Highway Administration, for control and management of the National Highways.
2. In order to have a better and effective monitoring of the functions to be performed at the National Level, a body, an apex committee under the Chairmanship of Secretary(RT&H), to be known as the Highway Administration for the entire network of National Highways in the country, has been established. The body, acting as the Highway Administration, are responsible for and empowered to:
  - 2.1 Lay down policies and implementation framework for the Highway Administration consistent with the provisions of the Act;
  - 2.2 Issue general orders for regulation of different types of traffic on National Highways under Chapter V of the Act;
  - 2.3 Decide on the allocation of functions and responsibilities among different Highway Administrators at different levels;
  - 2.4 Issue executive orders/ Standard Operating Procedures (SOPs) in respect of delivery of various services and enforcement of provisions of the Act and the rules & regulations from time to time;

- 2.5 Undertake periodical review and monitor the functioning of Highway Administration at different levels;
- 2.6 Any other functions and responsibilities assigned under the Act and the rules thereunder.
- 3. The heads of respective organisations pertaining to the National Highways have been appointed under Section 3(2) of the Act to act as Highway Administrators for their respective jurisdiction. Subject to the overall superintendence and control of the Highway Administration body, the Highway Administrators established are responsible for and empowered to:
  - 3.1 Appoint Highway Administrators in respect of the National Highways entrusted to the respective organisations for different jurisdictions, namely, the Headquarter of the organisation, the States/ UTs right up to a stretch of the National Highway;
  - 3.2 Undertake periodic review of the functioning of the Administrators at different levels in respect of delivery of services and ensure enforcement of all the Standard Operating Procedures and executive instructions issued by the Highway Administration at the Apex level;
  - 3.3 Issue executive orders/ Standard Operating Procedures (SOPs) in respect of delivery of various services and enforcement of provisions of the Act and the rules & regulations from time to time;
  - 3.4 Issue specific orders for regulation of different classes of traffic on National Highways under Chapter V of the Act;
  - 3.5 Any other functions and responsibilities assigned under the Act and the rules thereunder.
- 4. The Project Director of the NHAI / GM or DGM of the NHIDCL/ Executive Engineer of the NH Wing of the State PWD, Regional Officer of the Ministry/ NHAI/ ED of NHIDCL, as per their respective territorial jurisdictions are appointed as Highway Administrators in their ex-officio capacity to discharge the functions and exercise the powers as assigned to them.

#### **2.4.6 Way-side Amenities and Highway Nest (Mini)**

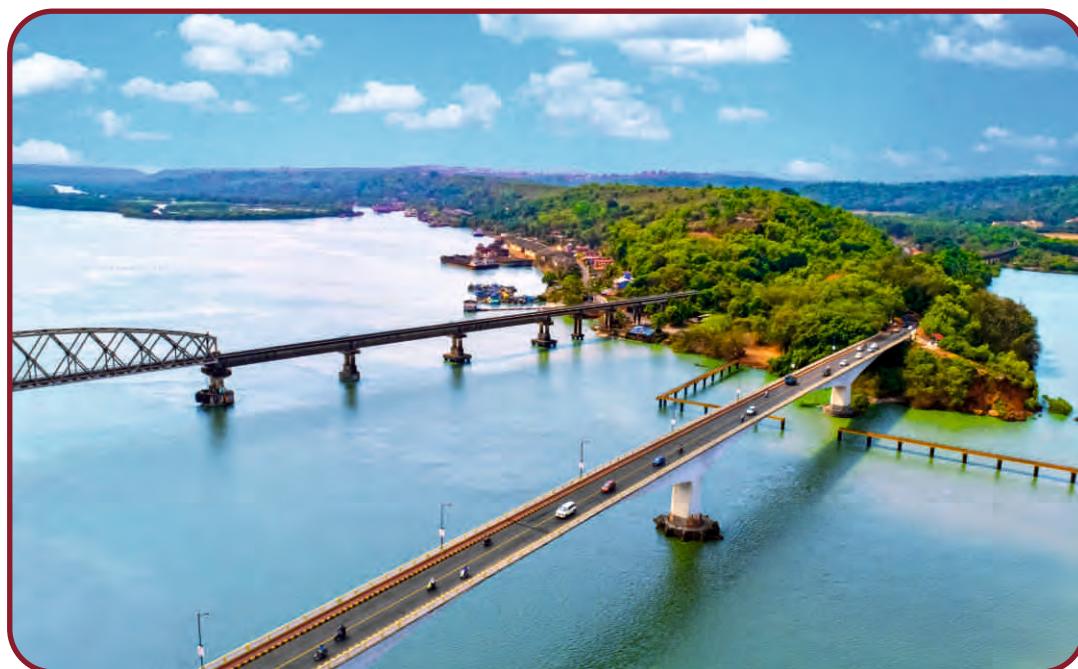
The Ministry recognises the importance of availability and development of way-side amenities as basic facilities value added service for its highway users. While it has made plans for development of such full-fledged facilities along the new Projects, it has also taken up provision of such facilities along the existing NHs wherever found feasible. The procurement process is under way for the development of Way-side Amenities of larger sizes in PPP mode along the National Highways, the NHAI has taken up construction of 450 numbers Highway Nest (mini). These are being developed near Toll Plazas, approximately 200 meters downstream on a 10m x 20m paved platform and comprises of facilities like toilets, water, ATM, a small kiosk with Tea/ Coffee vending machines and packaged food items for Highway users.



#### 2.4.7

#### **Launch of Annual Awards for Excellence In National Highways Sector**

Annual Awards for excellence in National Highways sector have been instituted for recognizing concessionaires and contractors who have been performing exceptionally well. These awards are designed in various categories, viz., construction management, operation and maintenance, best toll plaza, safest highways, innovation in design arid construction technology. Applications are received through the online process, evaluated quantitatively on pre-determined scoring parameters and then validated through desktop and third-party field assessment. Thereafter an independent Jury goes through the short-list and selects the final award winners in all categories for felicitation by the Ministry.

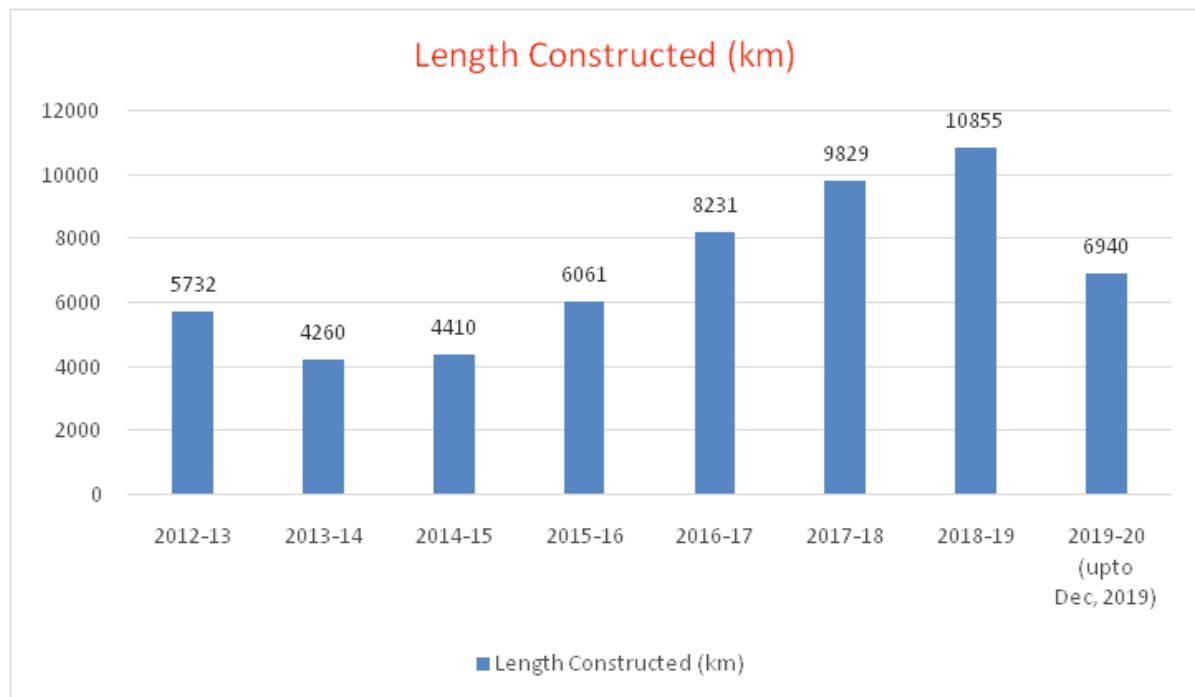


**NH 66 Zuari Bridge, Goa**

## CHAPTER III

### ROAD DEVELOPMENT

- 3.1 The Ministry has been entrusted with the responsibility of development of Road Transport and Highways in general and construction & maintenance of National Highways (NHs) in particular. All roads other than National Highways in the states fall within the jurisdiction of respective State Governments. In order to assist the State Governments in the development of state roads, Central Government also provides financial assistance out of the Central Road Fund (CRF) and Inter State Connectivity and Economic Importance (ISC & EI) scheme. Besides National Highways development Project (NHDP) & National Highway Interconnectivity Improvement programme (NHIIP), Ministry is implementing SARDP-NE & LWE schemes which includes National Highways and State roads. The Ministry is also responsible for evolving standards and specifications for roads and bridges in the country besides acting as a repository of technical information on roads and bridges.

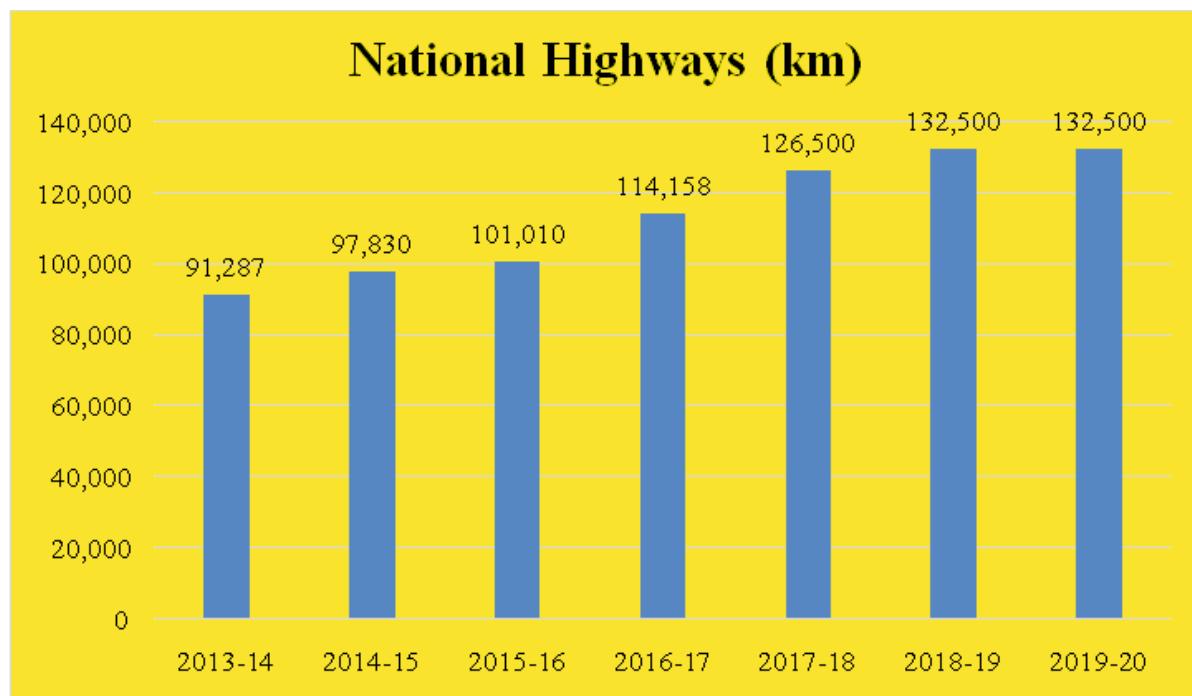


यह चिन्ह ड्राइवर को सिर्फ दाएं मुड़ने का निर्देश देता है। इस संकेत का पालन करने से सुरक्षित और सुगम ड्राइविंग का मार्ग प्रशस्त होता है।

This sign directs the driver to turn right only. Obeying this sign will lead to safety and hassle free drive.



- 3.2** The length of National Highways for which the Ministry of Road Transport & Highways, Government of India is responsible is 1,32,500 km. A list of State-wise National Highways is at **Appendix-2**.



- 3.3** The National Highways system has various deficiencies such as capacity constraints, inadequate pavement crust, poor geometrics and lack of safety features. Improvement of National Highways is undertaken by way of widening and strengthening of existing highways, reconstruction / widening of bridges and construction of bypasses after prioritizing the works within available resources.

#### **3.4 Development and Maintenance of National Highways:**

The Government is implementing Bharatmala and National Highways Development Project (NHDP).

#### **3.5 Bharatmala Phase-I**

Phase-I of Bharatmala Pariyojana includes development of following schemes:

Sr. No.	Scheme	Length (km)	Cost (Rs. crore)
1	Economic Corridors	9,000	120,000
2	Inter -Corridors & feeder roads	6,000	80,000
3	National Corridor Efficiency improvement	5,000	100,000
4	Border & International connectivity roads	2,000	25,000
5	Coastal & port connectivity roads	2,000	20,000
6	Expressways	800	40,000
	<b>Sub Total</b>	<b>24,800</b>	<b>385,000</b>
7	Ongoing Projects, including NHDP*	10,000	150,000
	<b>Total</b>	<b>34,800</b>	<b>535,000</b>

\*-balance works under various phases of National Highways Development Project (NHDP) shall be fully subsumed under the proposed Bharatmala Pariyojana, to remove overlap and undertake comprehensive development. Balance works under NH(O), SARDP-NE, EAP & LWE schemes would continue under relevant schemes.

### 3.6 Sources of funding for Bharatmala Phase-I

The Bharatmala Pariyojana Phase-I is to be funded from Cess collected from Petrol & Diesel (as per Central Road & Infrastructure Fund Act, 2000, erstwhile CRF Act, 2000), amount collected from toll apart from External Assistance, Expected monetisation of NHs through TOT (Toll-Operate-Transfer), Internal & Extra Budgetary Resources (IEBR) and Private Sector Investment.

The Financing Plan indicating the source of Fund upto 2021-22 for Phase-I of Bharatmala Pariyojana and other schemes for development of roads/ NHs are as follows:

यह चिन्ह उस वाहन की चौड़ाई दर्शाता है, जिसे चिन्ह के स्थान के पार जाने के क्षेत्र में प्रवेश के लिए अनुमति दी जाती है। इस क्षेत्र में 2 मीटर से ज्यादा चौड़ाई वाले वाहन के प्रवेश पर रोक होती है। यह कोई पुल या संकरा रास्ता हो सकता है।

This sign indicates the width of the vehicle, which is allowed to enter the zone beyond it. The vehicle with width above 2 meters is restricted to enter this zone. This could be a bridge or a narrow lane.



Sr. No.	Source	Estimated fund (Rs. Crore)
1	CRF earmarked for NH	2,37,024
2	GBS (SARDP, EAP Counter Part etc.) Expected monetisation of NHs through TOT	59,973
3	(Toll-Operate -Transfer)	34,000
4	PBFF (Toll NHAI)	46,048
5	Market Borrowings	2,09,279
6	Private Investment (PPP)	1,06,000
	<b>Total</b>	<b>6,92,324</b>

### 3.7 Financial performance-

3.7.1 Progress made in increase in Capital Expenditure and IEGR during 2019-20 The funds allocated for the Ministry and expenditure incurred during 2019-20 is summarized below:

Amount in Rs. crore

Sr. No.	Scheme	2019 -20	
		Alloc.	Expd.*
1	GBS- Capital	71,560	44,017
2	M&R- Revenue	3,100	511
<b>3</b>	<b>Total (Central Sector Road)</b>	<b>74,660</b>	<b>44,528</b>
4	CRF(State Roads) - Revenue	7,422	3,602
5	EI&ISC for State roads -Capital	500	237
6	Road Transport - Revenue	280	19
7	Secretariat Expd. - Revenue	155	86
<b>8</b>	<b>Total (Budget)</b>	<b>83,016</b>	<b>48,471</b>
9	IEBR	62,000	36,526
<b>10</b>	<b>Grand Total (Budget + IEGR)</b>	<b>1,45,016</b>	<b>84,997</b>
11	Pvt. Sector Investment	25,000	14,365

सड़क पर लगा यह चिन्ह दर्शाता है कि कितनी लंबाई का वाहन उस रास्ते से गुजर सकता है। यह चिन्ह तीव्र मोड़ या घुमावदार मोड़ पर लगाया जाता है। यह उन लंबे और बड़े आकार के वाहनों के लिए होता है जो सुरक्षित ढंग से मुड़ नहीं सकते।



GBS- Gross Budgetary Support, IEBR- Internal and Extra Budgetary Resources,

\* Till 30.11.2019 (except for IEBR raised and Pvt. Sector investment for which the data is upto 31.10.2019)

### **3.8 State PWD and Border Road Organization (BRO)**

- (i) An amount of Rs. 30,284.00 crore has been allocated during current year 2019-20, for the NH entrusted to State PWDs and Rs. 350.00 crore for NHs entrusted to BRO for Development of NHs/roads.
- (ii) An amount of Rs. 1,427.17 crore including Rs. 140 crore for BRO has been allocated during 2019-20 for the maintenance of National Highways entrusted to the State PWDs & BRO.
- (iii) State-wise allocation for the development and maintenance of National Highways entrusted to State PWD during the year 2019-20 (upto December, 2019) is at **Appendix - 3**.

### **3.9 Tribal Sub Plan (TSP) for NH works**

The Ministry has been earmarking dedicated funds under Tribal Sub-Plan (TSP) component since 2011-12, which was limited to the Scheme for development of National Highways (NHs) roads in Left Wing Extremism (LWE) affected areas. However, the dedicated outlay under TSP component of the Ministry has been significantly enhanced to 4.3% of the annual capital budgetary allocation (excluding loan part of external aid component and plough back of revenue received by auctioning of NHs on Toll-Operate-Transfer (TOT) model) effective from the financial year 2019-20 by taking up NH projects confined within Tribal Areas under National Highways (Original) [NH(O)] Scheme.

Following are the details of allocation of funds and expenditure incurred under TSP component of the Ministry during current year:

<b>Financial Year</b>	<b>Total Outlay for eligible Capital Schemes</b>	<b>Outlay under Tribal Sub Plan (TSP) Component</b>	<b>Expenditure incurred (provisional upto 30.11.2019)</b>	
			<b>Under Total eligible Capital Schemes</b>	<b>under TSP Component</b>
2019-20	60,697.00	2,610.00	43,534.44	1,393.93

आम तौर पर किसी पुल से पहले यह चिन्ह लगाया जाता है। यह पुल की वहन क्षमता को दर्शाता है। इस चिन्ह की भार सीमा 4 टन है। यह दर्शाता है कि सिर्फ 4 टन या उससे कम एक्सल भार वाले वाहन इस पुल से गुजर सकते हैं।

This sign is usually installed before a bridge. It indicates the load that a bridge can bear. The limit of this sign is 4 tonnes which indicates that only vehicles with axle load of 4 tonnes or less can pass over the bridge.

### 3.10 National Highways Interconnectivity Improvement Projects (NHIIP):

- 3.10.1 Rehabilitation and Upgrading to 2-lanes/2-lane with paved shoulders configuration from single/intermediate lane and strengthening of stretches of various National Highways totalling 1067 km in the states of Bihar, Karnataka, Odisha, Rajasthan and West Bengal was taken up with loan assistance of World Bank under Phase-I of National Highways Interconnectivity Improvement Projects (NHIIP).
- 3.10.2 All 15 Contracts have been already awarded at award cost of Rs. 4,554 cr. Till December 2019, 868.50 km of length has been completed.

#### 3.10.3 Project Components:

##### **Component A: Road Improvement and Maintenance**

- Widening and upgradation of 1067 km length of NH sections to 2 lanes/2 lane with paved shoulders configuration.
- Performance based maintenance of the assets for a period of 5 years post construction.

##### **Component B: Institutional Development Components**

- Roll-out of Enterprise Resource Planning.
- Updating of various standard reference material including 'costs-database' (for NH works) and 'Data Book' for rate analysis. Standard Data Book has been officially launched by Hon'ble Minister (RT&H) on 14.11.2019.

##### **Component C: Road Safety Components**

- Strengthening road safety capacity at the central level
- 3.10.4 Revised Project Costing has been approved by CCEA- for Rs. 6461 crores for the above 3 components

#### 3.10.5 Financial Progress:

- Allocation 2019-20: Rs. 291 crore under Counterpart Fund and Rs. 305 crore under Externally Aided Project Fund.
- Cumulative Expenditure up to December, 2019 Rs. 4,446 crore (since inception), for FY 2019-20 Rs. 237.50 crore.
- Gross Expenditure eligible for disbursement in 2019-20 (upto December, 2019) Rs. 3,672 Crore (since inception), for FY 2019-20 (upto December, 2019) Rs. 241 Crore.
- Gross Disbursable Portion from World Bank in 2019-20 (upto December, 2019) Rs. 1826 Crore (since inception), for FY 2019-20 Rs. 124 crore.
- Reimbursement by World Bank Rs. 1791 crore (since inception) up to September, 2019.

यह चिन्ह वाहन की गति सीमा निर्धारित करता है, जो सड़क पर लगे यातायात चिन्ह में दर्शायी जाती है। दंडात्मक कार्यवाही और सड़क पर दुर्घटनाओं से बचने के लिए निर्धारित गति सीमा का हमेशा पालन करना चाहिए।



### 3.10.6 Physical Progress:

Phases	Total Length (in km)	Length completed in km (till 31.12.2019)	Length completed during FY 2019-20 (upto Dec, 2019)
As per Monitoring Report	1,067	868.50	29

### 3.11 Central Road Fund

- (i) An allocation of Rs. 54,553.65 crore has been made to the Ministry under the CRF for 2019-20 with the following break-up:-

Amount in Rs. crore	
National Highways	46,617.07
Grant to State Governments and UTs for State roads	7,421.58
Grant to States & UTs for Roads of Inter-State Connectivity and Economic Importance	500.00
Road Transport	15.00
<b>Total</b>	<b>54,553.65</b>

- (ii) The summary of the allocation and release under CRF in respect of states/UTs roads since the year 2000-01 to 2019-20 is as **Appendix - 4**.

### 3.12 Inter State Connectivity and Economic Importance (ISC&EI) schemes

The schemes of Economic Importance and Inter State Connectivity had been in existence prior to the enactment of CRF Act 2000 where only modest programmes of work were sanctioned with Central loan assistance. The scheme was being regulated in accordance with the provisions in the Central Road Fund (State Roads) Rules, 2014 dated 24.07.2014, further amended vide notifications dated 23.06.2016 and 18.12.2017.

However, with the amendment of the CRF Act, 2000 to Central Road and Infrastructure Fund (CRIF) Act, 2000 by the Finance Act, 2018, and its subsequent amendment through the Finance Act, 2019, the CRF (State Roads) Rules, 2014 was repealed.

यह संकेत दर्शाता है कि यह सड़क तीन रंग वाली बत्ती सिग्नल से प्रवालित है क्योंकि चालक कुछ सड़कों पर इस प्रकार की व्यवस्था का अनुमान नहीं लगा पाते।

This sign on road indicates that this road is regulated by three-colour light signals, as driver may not expect such section of some roads.



### 3.13 Indian Academy of Highway Engineers (IAHE)

3.13.1 The Academy has been playing pivotal role in imparting training to highway engineers. The broad activities of IAHE consist of the following:

- Training of freshly recruited Highway Engineers.
- Conducting Refresher Courses for Senior and Middle level Engineers.
- Short duration technical and management development courses for Senior Level Engineers and Administrators involved in road development.
- Training in specialized areas and new trends in highway sector.
- Development of training materials, training modules for domestic and foreign participants.
- To conduct short term courses/management development programme on PPP and EPC etc., develop expertise in different areas like road safety and conduct collaborative research in planning/designing/ construction and management of roads and highways in the country.
- Training of engineers of African/other foreign countries sponsored by Ministry of External Affairs.
- Other miscellaneous work assigned to IAHE from time to time by Government.

### 3.13.2 Training Programme Conducted During The Year:

The Academy has organized 67 training programmes/workshop during 2019-20 up to November, 2019 in which, 2119 Engineers and Professionals have participated. The programme included two international training programmes sponsored by International Labour Organization (ILO) for engineers of Nepal. The training programme also included certificate course for Road Safety Engineers and Auditors in which 46 engineers were certified. Besides one workshop on the subject Highway Development-Challenges & way forward was also conducted.



## Inauguration the Delhi-Meerut Expressway (Pkg III)

यह चिन्ह आगाह करता है कि आगे के रास्ते पर गहराई है। यह चिन्ह ड्राइवर को सड़क का गहरा हिस्सा पार करने के लिए वाहन की गति धीमी रखने में सहायक होता है।

This sign cautions that there is a dip on road ahead. This sign helps driver to reduce the speed to cross the plunge on road.



उभार या ऊबड़-खाबड़  
सड़क  
Hump or Rough  
Road

सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार  
Ministry of Road Transport & Highways, Government of India



NH- 8 (Assam - Tripura)



NH- 8 (Assam - Tripura)

कुछ स्थानों में सड़क पर एक उभार होता है, जो यातायात को धीमा करने के लिए जान-बूझकर बनाया जाता है। यह चिन्ह ड्राइवर को आगाह करता है कि वह इस उभार को पार करने के लिए वाहन की गति कम करे।

Sometimes there is a hump on road intentionally created for slowing the traffic. This sign cautions the driver that he should reduce the speed to cross the hump comfortably.

## CHAPTER IV

### DEVELOPMENT OF NATIONAL HIGHWAYS IN NORTH-EASTERN REGION

- 4.1 The Ministry has been paying special attention to the development of NHs in the North-Eastern-Region region and 10 per cent of the total budget allocation is earmarked for NE region. The total length of National Highways in North-East is 13,658 km and these are being developed and maintained by four Agencies-the state PWDs, BRO, NHAI and NHIDCL. Of the total length of 13,658 km, about 12063 km is with the NHIDCL and respective state PWDs, 864 km is with NHAI and 731 km is with BRO.
- 4.2 The details of National Highways and their development & maintenance works taken up under various schemes in the North-East region are given below:

Sr. No.	Programme	Length (in km)
a	Length under NHDPL Phase-III	110
b	Length of National Highways, State Roads under SARDP-NE  (i) Phase A (ii) Phase B (approved for DPR preparation only)	4,099 3,723
c	Arunachal Pradesh Package of Roads and Highways	2,319

- 4.3 A length of 110 km of National Highway No. 44 in the State of Meghalaya (Jowai-Meghalaya/Assam border {Ratachhera} stretch) falls under NHDPL Phase-III.
- 4.4 Under the ISC & EI scheme, 27 projects amounting to Rs. 1052.64 crore are under progress.
- 4.5 Under the CRF, 286 works amounting to Rs. 3677.87 crore are in progress for the improvement of state roads.
- 4.6 48 works costing Rs. 3942.47 crore under NH (O) are in progress.
- 4.7 State-Wise details of works in the Northeast are given in subsequent paras.

#### 4.8 Arunachal Pradesh

- 4.8.1 The Government has approved Arunachal Pradesh Package of Roads & Highways covering construction/improvement of 2,319 km roads at an estimated cost of Rs. 15643 crore. Out of 2,319 km, 2,180 km falls in the state of Arunachal Pradesh.
- 4.8.2 As on 31st December 2019, 6 improvement works costing Rs. 327.79 crore is in progress under NH(O)

यह चिन्ह दर्शाता है कि आगे के रास्ते पर क्रॉसिंग है। यह चिन्ह सलाह देता है कि वाहन की गति धीमी करें और दोनों तरफ देखते हुए सावधानी से चौराहा पार करें।

This sign indicates that there is a crossing of roads ahead. This sign indicates that the vehicle should be slowed and intersection should be crossed cautiously by looking on both sides.



- 4.8.3 Under the CRF, 58 works for the Improvement of state roads amounting to Rs. 943.00 Crore are in progress for the improvement of State Roads.
- 4.8.4 Under the ISC & EI schemes, 5 works costing Rs. 120 crore are in progress.

#### **4.9 Assam**

- 4.9.1 As on 31st December 2019, 18 improvement works costing Rs. 1347.06 crore, are in progress under NH (O).
- 4.9.2 A length of 667 km connecting Silchar to Srirampur via Lumding-Daboka-Nagaon-Guwahati in Assam has been entrusted to NHAI & NHIDCL as part of East West corridor under NHDP Phase-II East-West Corridor portion in Assam. Work in 636 km has been awarded by NHAI and about 610 km, including 18 km of Guwahati bypass, have been completed so far. For balance 31 km length, to be awarded by NHIDCL.
- 4.9.3 Under the CRF, 44 works amounting to Rs. 1003.24 crore are in progress for the improvement of state Roads.
- 4.9.4 Two works amounting to about Rs. 136.65 crore are in progress under ISC scheme.
- 4.9.5 Government has approved implementation of four laning of NH-37 from Numaligarh to Dibrugarh (201 km) along with construction of 4-lane bridge over river Brahmaputra connecting Numaligarh and Gohpur under Phase 'A' SARDP-NE. The work has been awarded in six packages from Numaligarh –Dibrugarh and is under implementation by NHIDCL. As regard to Numaligarh-Gohpurbridge, consultant has been engaged for preparation of DPR.
- 4.9.6 Government has approved implementation of Arunachal Pradesh Package of Roads & Highways covering 2319 km of roads at an estimated cost of Rs. 15643 crore. Out of 2,319 km, 139 km falls in the State of Assam.

#### **4.10 Manipur**

- 4.10.1 As on 31st December 2019, 8 improvements works costing Rs. 595.81 crore, are in progress under NH(O)
- 4.10.2 Under CRF, 17 works amounting to Rs. 141.56 crore are in progress.
- 4.10.3 Under ISC & EI, 3 works amounting to Rs. 153.31 crore are in progress.

#### **4.11 Meghalaya**

- 4.11.1 As on 31st December 2019, 4 works amounting to Rs. 76.17 crore are in progress under NH (O).
- 4.11.2 92 works amounting to Rs. 539.73 crore are in progress under CRF. In addition, one works at an estimated cost of Rs. 67.68 crore is in progress under the centrally sponsored scheme of inter-state connectivity (ISC).

#### 4.12 Mizoram

- 4.12.1 31st December 2019, 5 improvement works of the value of Rs. 293.98 crore are in progress under NH(O).
- 4.12.2 Under the CRF, 7 improvement works amounting to Rs. 236.56 crore are in progress. In addition one work costing Rs. 57.91 crore is in progress under ISC Scheme.

#### 4.13 Nagaland

- 4.13.1 31st December 2019, 4 improvement works at a cost of Rs. 927.56 crore are in progress under NH (O).
- 4.13.2 Under CRF, 22 improvement works amounting to Rs. 430.27 crore are in progress.
- 4.13.3 Under ISC & EI, 14 works of the value of Rs. 485.91 crore is in progress.

#### 4.14 Sikkim

- 4.14.1 22 works of the amounting to Rs. 144.16 crore are in progress for the improvement of state roads under the CRF. In addition, one works costing Rs. 31.18 crore are in progress under ISC & EI scheme.

#### 4.15 Tripura

- 4.15.1 31st December 2019, 3 improvement works at a cost of Rs. 374.10 crore are in progress under NH(O).
- 4.15.2 23 works amounting to Rs. 190.24 crore are in progress under the CRF for the improvement of state roads.

यह संकेत मार्ग देने वाले संकेतों के समूह से है। यह संकेत विशिष्ट दर्शाता है कि वहाँ दायीं ओर साइड सड़क है। साइड सड़क का प्रयोक्ता यातायात को मार्ग देगा। यह संकेत रास्ता दीजिए संकेत के साथ साइड सड़क पर लगाया जाता है।

This sign belongs to the family of Give Way signs. This particular sign indicates that there is side road on right. This sign is used in conjunction with a give way sign on the side road.



**Fifth Inception Day Celebrations of NHIDCL**



**Fifth Inception Day Celebrations of NHIDCL**



## CHAPTER V

### **The National Highways & Infrastructure Development Corporation Limited (NHIDCL)**

#### **5.1 Introduction**

The National Highways & Infrastructure Development Corporation Limited (NHIDCL) is a Public Sector Undertaking under the Ministry of Road Transport and Highways, Govt. of India. It was incorporated on 18 July 2014 with the objective to develop National Highways and other infrastructure at a fast pace in the North East and Strategic areas of the country sharing International Borders. Presently the efforts are focussed on economically consolidating these areas with overall economic benefits flowing to each and every strata of the local population & integrating them in a more robust manner with the National Economy.

This company has been entrusted by the Govt. of India with the task of developing and improving road connectivity in length of about 13,000 km including the international trade corridor in the North Eastern region of India.

The Company since its inception has adopted IT initiatives like e-Office, e-Tendering, e-Monitoring, e-Access for efficiency & transparency.

In a short span of time of five years, NHIDCL has been able to expedite the construction of Highways and development of other Infrastructure in the North-Eastern and Strategic Border areas of the country.

- 5.2 In Assam, 17 stretches with a length of 434 km at an estimated project cost of Rs. 9022 crore have been entrusted to NHIDCL, in addition, 1695 km are under DPR including Bharatmala Pariyojana.
- 5.3 In Arunachal Pradesh, the company is looking after 25 stretches with a length of around 712 km with an estimated project cost of Rs. 9,526 crore.
- 5.4 In Jammu & Kashmir and Ladakh, there are total 05 stretches for a length of 63 km and an estimated project cost of Rs. 10,405 crore, in addition, 270 km are under DPR. These projects include 274 km long NH-244, Jammu-Akhnoor, Z-Morph Tunnel (6.5 km) and Zojila Tunnel (14.30 km).
- 5.5 In Manipur, there are total 05 stretches for a total length of 106 km and at an estimated project cost of Rs. 2,279 crore, in addition, 1545 km are under DPR including Bharatmala Pariyojana. Imphal-Jiribam road, the lifeline of Manipur was entrusted to NHIDCL. The road was in dilapidated state, it has been restored and two Major bridges namely Barak and Makru have also been commenced. In addition, restorations of three roads namely Churachandpur, Ukhrul -Toloi- Tadubi, Ukhrul-Jessami National Highway are under progress.
- 5.6 In Meghalaya, Currently, there are a total of 02 stretches, for a length of 85 km with a total estimated project cost of Rs. 860 crore, in addition, 1018 km are under DPR including Bharatmala Pariyojana. Including JICA funded Tura-Dalu project which is awarded on March 2018 at a cost of Rs. 553.41 crore covering a length of 51.5 km.



- 5.7 In Mizoram, there are a total of 07 stretches, for a length of 312 km with a total estimated project cost of Rs. 5,562 crore, in addition, 423 km are under DPR including Bharatmala Pariyojana. Aizwal to Tuipang section of NH - 54 covering a design length of 351 km (8 Packages) to be built at a sanction cost of Rs. 4163 crore (total project cost is Rs. 6168 crore) with funding support from JICA of which 07 projects are awarded.
- 5.8 In Nagaland, there are a total of 17 stretches, the length of all projects is 343 km for an estimated project cost of Rs. 5,937 crore, in addition, 271 km are under DPR including Bharatmala Pariyojana. The company also plans to award 4 more projects this year including construction of Kohima Jessami. The total length of these packages is 103 km at a sanction cost of Rs. 1719 crore.
- 5.9 In Sikkim, NHIDCL has a total of 06 stretches for a length of 78 km for an estimated project cost of Rs. 1,567 crore, in addition, 446 km are under DPR.
- 5.10 In Tripura, NHIDCL has a total of 02 stretches of 50 km at an estimated project cost of Rs. 878 crore, in addition, 421km are under DPR including Bharatmala Pariyojana. This also includes major bridge over river Feni at Sabroom which will connect Tripura to Bangladesh at a sanctioned cost of Rs. 128.69 crore. The company also plans to award Manu-Simlung of 80.26 km in this FY 2019-20.
- 5.11 In Uttarakhand, Ministry has assigned 09 Stretches to NHIDCL for a total length of 104 km which is estimated at a cost of Rs. 2,735 crore, in addition, 313 km are under DPR. NHIDCL has also been entrusted with maintenance and Construction of Rudraprayag – Joshimath, project has been awarded in 3 packages covering the total length of 95 km. Construction of Silkyara tunnel to provide all weather connectivity to one of the four Dham that is Yamunotri covering 4.86 km at the awarded cost of Rs. 853.79 crore.
- 5.12 In the state of West Bengal, 02 stretches with a length of 15 km at an estimated project cost of Rs. 562 crore, in addition, 53 km are under DPR, one project of Mechi Bridge(1.4 km) for connectivity to Nepal is being at a sanction cost of Rs. 114.74 crore.
- 5.13 In Andaman & Nicobar, a total of 09 stretches are entrusted to NHIDCL for a length of 262 km costing around Rs. 1,798 crore. NH-4 (old NH 223) was in a dilapidated state and now is entrusted to NHIDCL with Restoration work. The Road is being improvised to 2 lane with Paved shoulder along with 2 major bridges over Middle Strait Creek, Humphrey Strait Creek.
- 5.14 Bharatmala Projects entrusted to NHIDCL-The Cabinet Committee on Economic Affairs has considered proposal for investment approval of Phase-1 'Bharatmala Pariyojana' in its meeting held on 24th October 2017 and will be implemented over a period of 5 years. The approved components are Border Roads, International Connectivity Roads, Economic Corridor (NER) & Feeder Route- Inland Waterways. The Company has been entrusted with a length of 5196 km details are here as follows:



Summary				
Sr. No	Classification	Civil work to be carried out by NHIDCL	Status of balance scope	
			DPR Completed (in km)	DPR under preparation
1	Border Roads	1436	—	1366
2	International Connectivity Roads	945	673	272
3	Economic Corridor (NER)	2508.7	78	2102.7
4	Feeder Route- Inland Waterways	302.3	-	302.3
<b>Grand Total</b>		<b>5196</b>	<b>751</b>	<b>4043</b>

**5.15 Establishing International Connectivity by the NHIDCL-** It is playing a vital role in creating cross border connectivity to Nepal, Bangladesh and Myanmar with following projects:

- Construction of bridge over river Feni in Sabroom to provide connectivity of Tripura to Bangladesh.
- Construction of Imphal- Moreh road and Moreh bypass road will facilitate trade with Myanmar. Land Port at Moreh is under construction by Land Port & Custom Department.
- 351 km long 2 laning of NH54 from Aizawl to Tuipang in Mizoram which will provide vital link to the Kaladan Multimodal Transport project, that will connect Sittwe port in Myanammar with the NE Region.
- Construction of 6-lane Mechi Bridge on Asian Highway (AH-02) shall improve cross trade through West Bengal with Nepal.

#### **5.16 JICA Funded Projects**

- (i) The Cabinet Committee on Economic Affairs has given its approval for development of 403 km of National Highways in Meghalaya and Mizoram. Out of 403 km approximately 52 km will be in Meghalaya and 351 km in Mizoram. The project is under implementation.
- (ii) The estimated cost is Rs 6,721 crore including cost of land acquisition, resettlement and other preconstruction activities. The civil works are expected to be completed by 2021.
- (iii) The projects will encourage sub regional socio economic development by improvement of infrastructure in Meghalaya and Mizoram. The work for development to two lane standards is under scheme "North East Road Network Connectivity Project Phase I" with loan assistance of Japan International Cooperation Agency (JICA).

- (iv) Aizawl-Tuipang section of (NH-54) in Mizoram for a loan amount of Rs. 2222.18 Crore have been signed under “North-Eastern connectivity Improvement Project Scheme Phase-I” on 29.03.2018. Project passes through 5 districts and provides International connectivity between India & Myanmar through Kaladan Multi Model transit Transport Corridor from Lawngtlai. Projects approved by the Cabinet Committee on Economic Affairs on 22.03.2017 and loan agreement signed with JICA on 31.03.2017 for first tranche of Rs 3690 Cr. Projects are targeted to be completed in 3.5 Years. More than 90% land has been acquired; remaining is likely to be done by January, 2020. Disbursement of Compensation to the beneficiaries is at advance stage of completion by CALA. Civil work is being executed under 8 civil contract packages (total length of 351.163km), out of 8 civil packages, 7 Civil Packages have been awarded and Contract agreement has been signed, remaining one civil work will be awarded by 1st week of February, 2020. Appointed date for package-2,3,4,5 & 6 has been declared. Supervision Consultant has been appointed for all the 8 packages. Other pre-construction activities viz. Forest clearance, Environment clearance, felling of tree and utility shifting has been completed. Additional reserved forest and deemed forest proposal has been uploaded online for clearance.
- (v) 4 Nos. of bypasses are proposed to be constructed to bypass the heavily populated area on Aizawl-Tuipang section (under Phase-1) for which loan agreement has been signed on 29.03.2018 for Rs 2222.183 Cr. Project is divided in 3 civil contract packages (total length of 23.669km). Construction period is scheduled as 30 months is under scheme "North East Road Network Connectivity Project Phase II" with loan assistance of Japan International Cooperation Agency (JICA).
- (vi) Shillong to Dawki section including construction of Dawki bridge in Meghalaya for a loan amount of Rs. 6168 crore have been signed under “North-Eastern connectivity Improvement Project Scheme Phase-II”.
- (vii) Construction of 20 km long bridge between Dhubri and Phulbari on NH-127B in Assam, Meghalaya at an amount of Rs. 4044 crore is under scheme "North East Road Network Connectivity Project Phase III" with loan assistance of Japan International Cooperation Agency (JICA). Bids are to be invited in 2019-20.

### 5.17 ADB Funded Projects

- (i) SASEC aims to put in place the critical multi-modal transport networks that will enhance intraregional trade and investment in the subregion and, in turn, boost economic growth. SASEC works to strengthen road, rail, and air links, as well as developing port infrastructure to match the needs of the region's growing economies, and to support the SAARC transport corridor network
- (ii) In 2005, the SASEC countries agreed on priority sectors for investment and coordinated action: transport, trade facilitation, and energy. In 2016, the SASEC countries approved the SASEC Operational Plan 2016-2025, a 10-year strategic roadmap, which introduced economic corridor development (ECD) as a fourth sectoral area of focus.

- (iii) The Imphal Moreh road section from km 330.00 to km 425.411 is part of NH 39 which links the state of Manipur with other parts of India. The NH 39 (renamed as NH102) Imphal-Moreh road is also linking India and Myanmar. The road stretch is a critical section of the UNESCAP Asian Highway No. 01 (AH01)/Trans Asian Highway which is the longest route of the Asian Highway network running 20,557 km from Tokyo, Japan via Korea, China, Southeast Asia, India, Pakistan, Afghanistan and Iran to the border between Turkey and Bulgaria west of Istanbul where it joins end-on with European route E80, paving the way for India and other South Asian countries to Myanmar, and further afield to other member countries of the Association of South East Asian Nations (ASEAN). The road is also very important for the Act East Policy of Indian Government.
- (iv) Based on the importance of the road, widening/improvement of it are highly needed. At present, widening/improvement of the road from km 330.00 to km 350.00 under package-I being taken up and the portion from km 350.00 to km 395.68 under package – II is in progress with the financial assistance of Asian Development Bank (ADB) under SASEC Road Connectivity Investment Program (“SRCIP”) Tranche 2 and the portion from km 395.68 to km 425.411(Friendship Bridge) also being taken up with the financial assistance of Asian Development Bank (ADB) under SASEC Road Connectivity Investment Program (“SRCIP”) Tranche 3.

## 5.18 Status of entrusted projects with NHIDCL

### 5.18.1 Status of Projects under Implementation/Construction:

Sr. No.	State /UTs	Total Ongoing Projects	
		No of Projects	Length in km
1	Andman & Nicobar	9	262.36
2	Assam	17	434
3	Arunachal Pradesh	25	712
4	Manipur	4	106
5	Meghalaya	2	85
6	Sikkim	6	78
7	Nagaland	17	343
8	Tripura	2	50
9	West Bengal	2	15
10	Mizoram	7	312
11	J & K and Ladakh	5	63
12	Uttarakhand	9	104
	<b>Total</b>	<b>105</b>	<b>2564.36</b>

जब सड़क की चौड़ाई कम हो जाती है और वह किसी संकरे रास्ते से मिल जाती है तो तेज गति से चलने वाले वाहन के सामने से आ रहे वाहन से टकराने की संभावना रहती है। यह चिन्ह ड्राइवर को सतर्क रहने का संकेत देता है क्योंकि आगे का रास्ता संकरा है।

When the width of the road decreases and the road merges into a narrow road, there is a possibility that a speeding vehicle may collide with oncoming traffic. This sign cautions the driver to be careful as the road ahead is narrow.



### 5.18.2 Projects planned for award in FY 2019-20:

Projects likely to be awarded in FY 2019-20			
S.No	State/UTs	Length (in km )	Cost (Rs in Cr)
1	Arunachal Pradesh	56	601
2	Assam	80	4606
3	Jammu & Kashmir and Ladakh	1	90
4	Manipur	185	3116
5	Meghalaya	72	1432
6	Mizoram	303	4213
7	Nagaland	192	2892
8	Sikkim	43	493
9	Tripura	244	2475
10	Uttarakhand	1	24
	Grand Total	1177	19942

### 5.19 IT Initiatives for Transparency

In addition to its core competence of building highways bridges and tunnels, the company has taken digital initiatives to create transparency in procurement, work progress, awarding the projects, floating tenders and to create a competitive selection procedure to hire Consultants, Authority Engineer and Contractors for the procurement of civil work and DPR preparation.

#### 5.19.1 Development of INFRACON portal for appointment of Consultants for Infra projects-

INFRACON is a web based National Platform for Consultants and Consultancy Firms working for the Infrastructure Sector, particularly in the Roads and Highways Sector. These Consultants are engaged by the public bodies in the preparation of detailed project reports and also in supervision of the under construction projects. INFRACON has been designed to allow Consultancy Firms and Key Personnel to upload their credentials online and in the manner and form which enables automatic evaluation of their Technical Proposals. The Portal has the facility to host Firms & Personnel CVs and Credentials online with linkage to Aadhaar & Digi-locker for data validation & purity.

The Portal also facilitates the public agencies to receive Technical Proposals through INFRACON. In order to do so, Firms & Key Personnel are required to register on the portal online. This has been done to significantly reduce the paper work being done during bid submission and also to bring in Transparency & Accountability in the process. The information being captured on the portal and the input forms are so designed that it also aids in automating the Evaluation Process and leads to Quick and Effective decision-making. So far 1637 Firms and 22064 Key Personnel have registered on INFRACON to work for NHIDCL.

#### **5.19.2 Development of INAM PRO+ as a common platform for B to B transactions -**

INAMPRO ([www.inapro.nic.in](http://www.inapro.nic.in)) is a web based platform and marketplace for Infrastructure and Material Providers to conduct business in a fair, transparent and swift manner. With this platform, MoRTH aims to free the infrastructure sector from external impediments like materials shortages, project cost escalations due to inexplicable variations in material prices etc. that have historically plagued the field of infrastructure development. This portal aims to stabilize the infrastructure material price based on equilibrium between the supply and demand in the infrastructure materials industry, by providing a platform for companies to float their products, prices with stocks and other information for Buyers. The portal also enables New Technology/ Product makers to reach market quickly thereby opening a window of opportunity for such suppliers resulting into inclusive growth. So far, a total of 1052 Buyers, 364 Sellers have been registered showcasing 934 products.

### **5.20 NEW INITIATIVES**

#### **1. MoU WITH NORWEIGIAN GEOTECHNICAL INSTITUTE (NGI), NORWAY**

- A MoU has been signed between the NHIDCL and the Norwegian Geotechnical Institute (NGI), Norway on 06.09.2018 to make use of their experience in areas related to underground construction works and slope stability works in terrains with fragile geological structures.
- This technique will be much useful in finalising the alignment of underground structure like Tunnel based on Geotechnical investigation

#### **2. AIRBORNE ELECTROMAGNETIC SURVEY (AEM)**

- The Airborne Electromagnetic Survey technology is provided by very few companies/ organisations worldwide, Norwegian Geotechnical Institute (NGI), being one of them. The AEM data provides a powerful tool for geotechnical investigation and is considered to be the most efficient and latest employed technology for geophysical investigation in some major countries of the world in challenging terrains.
- It was felt that remote sensing technique such as Airborne Electro-Magnetic Survey, in conjunction with limited Horizontal directional drilling/ coring, could be fast and cost effective in the investigation of sub-surface geology and subsequent preparation of optimum quality DPR



for underground works. Further, it was observed that the cost of tunnel can be reduced substantially due to adoption of above technique, as Geological surprises/ risk can be minimised at the DPR stage.

- The services on site is likely has been commenced from 24 November,2019 and has been concluded on 18 December,2019 at Bhuntar Airport base.
- Survey for Jalori pas tunnel has been completed. The others couldn't be done due to bad weather. The same shall be commence again in end of February,2020.
- The work of conducting AEM survey for (i) Zojila Tunnel (ii) Lachalung La Tunnel (iii) Tanglang La Tunnel and (iv) Shinkun La Tunnel in the UT of Ladakh was awarded to M/s. Norwegian Geotechnical Institute in JV with AIA(IN Technical Collaboration with SkyTEM) at a quoted price of Rs. 14.93 Crore with a completion period of 4 months.

### **3. BUS PORT**

- A Network of Self Sustainable Smart Bus Ports will be developed in every State, to transform the Travel Experience for lakh of commuters who travel across the States in buses every day.

This will open new opportunities of employment and revenue generation by involving the private sector. The State Governments have to bring in the land while MoRTH, through NHIDCL would prepare the pre-feasibility study, the DPR and also complete the bidding process for selection of developers. Projects with States like Tamil Nadu, Uttarakhand and Odisha are at various stages.

### **4. EASYPARK**

It is a method of automatically parking and retrieving cars that typically use a system of pallets, lifts and shuttles.

- 5.21** A Statement indicating the fund spent for the period from 01.04.2019 to 31.12.2019 for the project entrusted to NHIDCL is at **Annexure-5**.



**Fifth Inception Day Celebrations of NHIDCL**



**Fifth Inception Day Celebrations of NHIDCL**

यह चिन्ह आगे की सड़क की फिसलन-भरी स्थितियों को दर्शाता है। इन स्थितियों का कारण जल रिसाव या तेल का फैलना आदि हो सकता है। यह चिन्ह दिखने पर चालक सदैव दुर्घटना से बचने के लिए अपने वाहन की गति कम करें।

This sign indicates the slippery condition of the road ahead. This condition could be due to seepage of water or oil spill etc. The driver should invariably slow down the vehicle at sight of this sign to avoid crash.



मध्य पट्टी में अंतर  
Gap in Median

सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार  
Ministry of Road Transport & Highways, Government of India



30th National Road Safety Week

यह चिन्ह दर्शाता है कि सड़क के 'डिवाइडर' (विभाजक) में एक 'गैप' है और वहां यू-टर्न (वापस मुड़ने) की व्यवस्था की गई है। दुर्घटना से बचने के लिए ड्राइवर को चाहिए कि वह वाहन की गति धीमी करे और संबंधित लेन पर उसे ले जाए।

This sign indicates that there is a gap in the divider of a road and there is a provision of U-turn. The driver should slow and take relevant lane to avoid any crash.