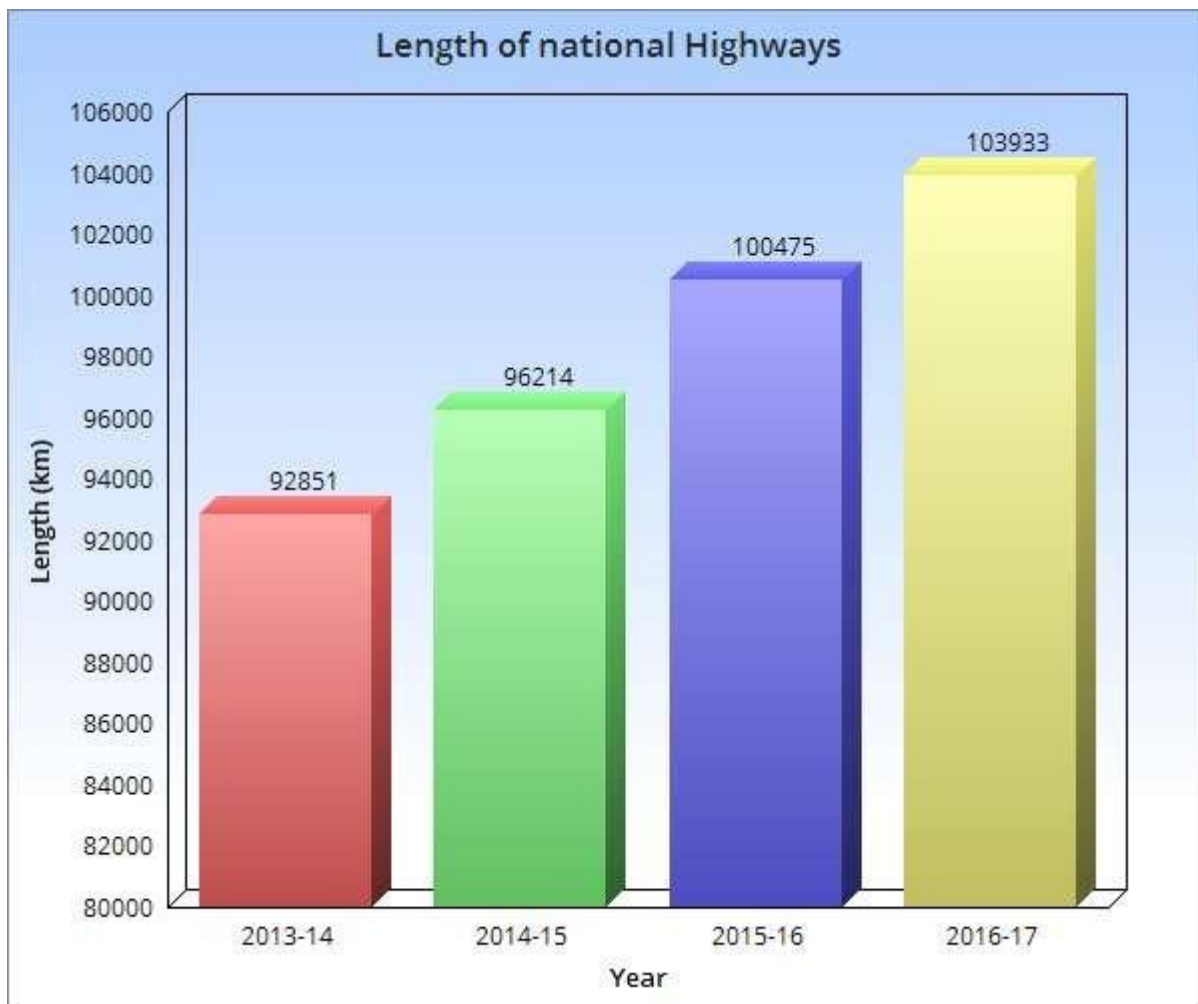


MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

I. FASTER DEVELOPMENT OF NATIONAL HIGHWAYS

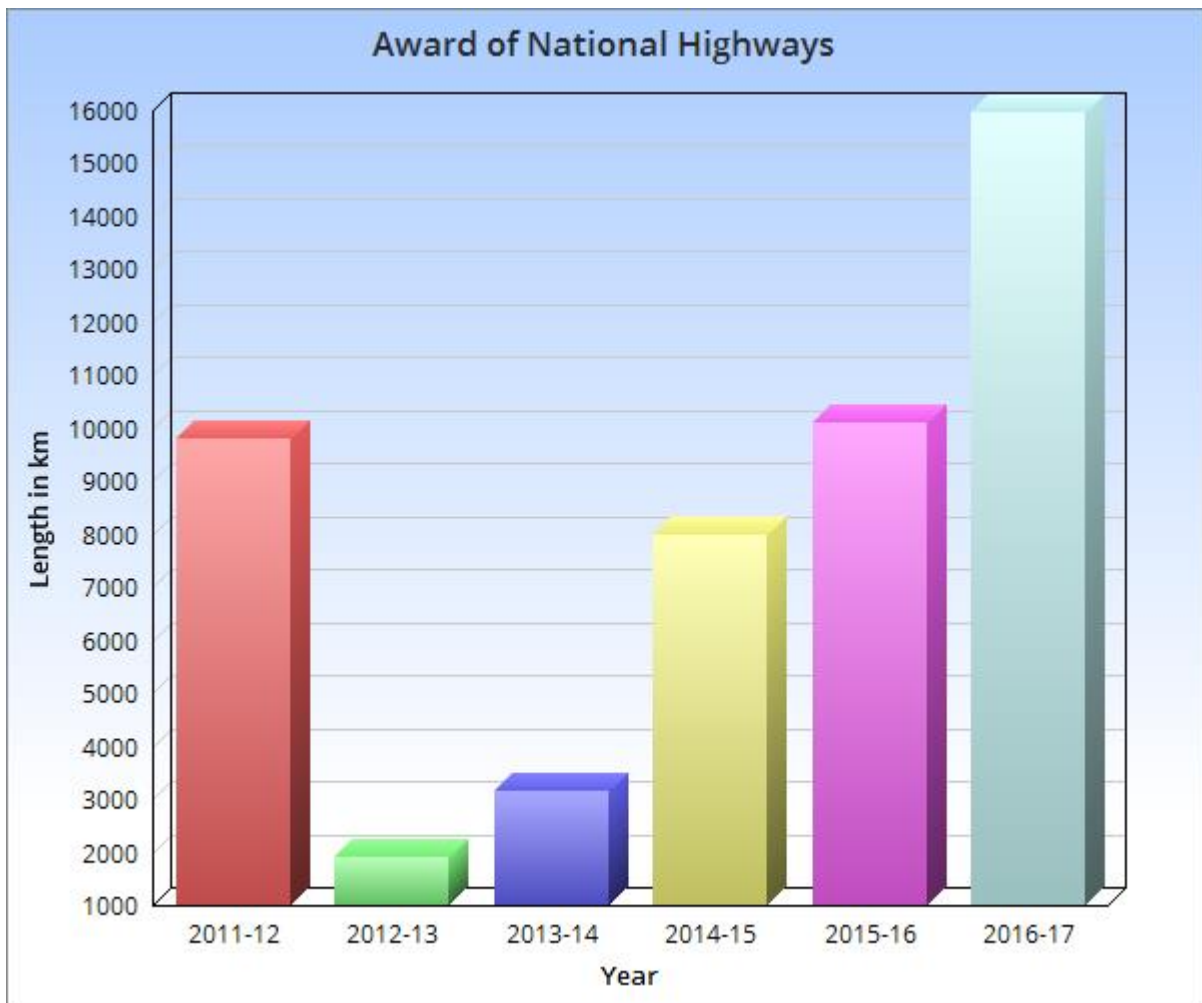
1. Growth of National Highways

Year	Length of NH in KM
2013-14	92851
2014-15	96214
2015-16	100475
2016-17	103933



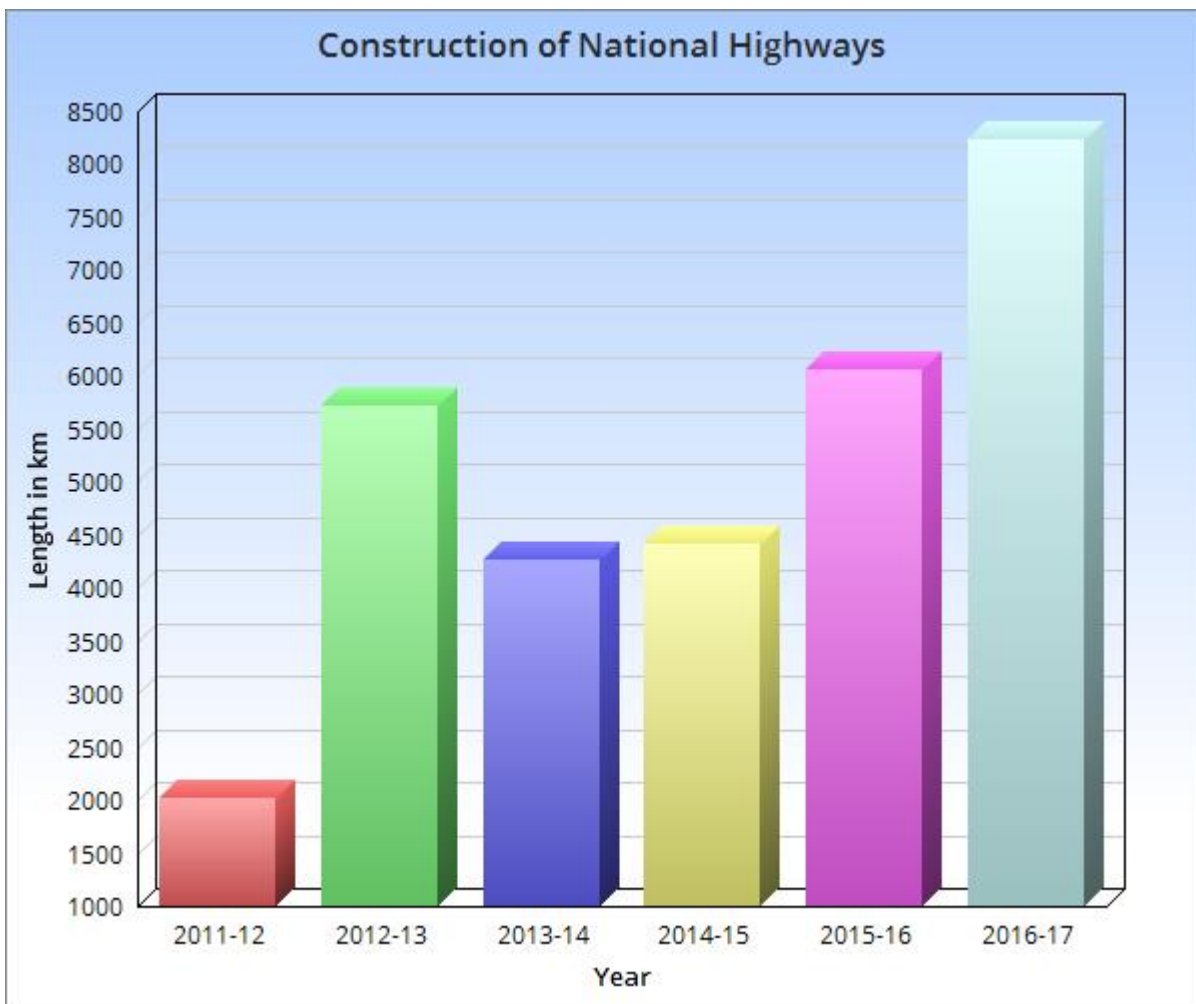
2. Higher Award of National Highways Construction work

Year	Length of Work Awarded in km
2011-12	9794
2012-13	1916
2013-14	3169
Total of 2011-2014	14879
2014-15	7972
2015-16	10,098
2016-17	15,948
Total 2014-2017	34,018



3. Higher Total Construction of National Highways

Year	Length of NH Constructed in km
2011-12	2013
2012-13	5732
2013-14	4260
Total 2011-2014	12005
2014-15	4410
2015-16	6061
2016-17	8231
Total 2014-2017	18702



II. MAJOR PROGRAMMES / PROJECTS IN THE LAST THREE YEARS

(i) Bharatmala Pariyojana: Phase-I

Objective

This is a new umbrella program for the highways sector that aims to optimize the efficiency of road traffic movement across the country by bridging critical infrastructure gaps. Special attention has been paid to fulfilling the connectivity needs of areas of economic activity, places of religious and tourist interest, border areas, backward and tribal areas, coastal areas and trade routes with neighbouring countries under the programme. Multi-modal integration is one of the key focuses of this programme.

Aim

A total of around 53,000 kms of NHs have been identified to improve National Corridor efficiency, of which **24,800 kms** are to be taken up in Phase-I, which will be implemented over a period of five years i.e. 2017-18 to 2021-22 in a phased manner. This includes 5,000 kms of the National Corridors, 9000 kms of Economic Corridors, 6000 km of Feeder Corridors and Inter-Corridors, 2000 kms of Border Roads, 2,000 kms of Coastal Roads and Port Connectivity Roads and 800 kms of Green-field Expressways.

Cost

Total likely fund provision for Bharatmala Phase-I is Rs. 5,35,000 cr.

Bharatmala will be a major driver for economic growth in the country. It is estimated that more than 35 crore man-days of employment shall be generated under Phase-I of the programme.

ii Setu Bharatam

In order to ensure safe and smooth flow of traffic, the Ministry has envisaged a plan for replacement of Level Crossings on National Highways by ROBs/ RUBs under a scheme known as Setu Bharatam.

Aim

Under this programme, construction of 208 RoBs/ RuBs on Level Crossings (which are not falling under any other programme like NHDP etc.)

Cost

An estimated cost of Rs. 20,800 crore is envisaged.

Status

Out of these 208 ROBs, Detailed Project Reports for 127 ROBs have been received in the Ministry, out of which 78 ROBs with an estimated cost of Rs. 6428.57 crore have been sanctioned till 31.03.2017, of which 35 works have been awarded so far. 09 ROBs with an estimated cost of Rs. 576.58 crore have been sanctioned till date during FY 2017-18.

iii. Planning for Multi Modal Transport Systems

An India Integrated Transport and Logistics Summit was organized in New Delhi from 3rd to 5th

May 2017. It was attended by around 3000 delegates from India and abroad which included central and state government organizations, international organizations like World Bank and ADB, global transport and supply chain experts and representatives of private companies. Thirty-four MoUs amounting to about Rs 2 lakh crores were signed at the end of the Summit. Carrying the initiative further, the Ministry is actively engaged with a few states for establishment of Multi-modal Logistics Parks in this direction.

iv **Indian Bridge Management System (IBMS)**

The Ministry took-up a new initiative, known as Indian Bridge Management System (IBMS), to inventorise all structures e.g. Bridges and culverts constructed on the National highways. The consultants have completed their report and also undertaken the condition assessment of all the existing bridges on National Highways. As such, inventory for more than 1,62,000 bridges and culverts has been completed. A total of 147 Bridges have been identified as distressed structures which call for immediate restoration/ replacements. A time-bound action plan to undertake repairs and restoration or construction of new bridges in place of the decadent structures has been put in place.

v. **Chardham Mahamarg Vikas Pariyojna**

Aim

The project envisages development of easy access to the four prominent Dhams, namely, Gangotri, Yamunotri, Kedranath and Badrinath, situated in the state of Uttrakhand. These four Dhams are prominent pilgrimage centres. The project entails development of 889 km of roads with configuration of two-lane with paved shoulders.

Launch Date Dec 2016

Cost_ An estimated cost of about Rs. 12,000 crore.

Status

So far, 24 works have been sanctioned traversing a length of 395 kilometres. 22 works covering a length of 340 kilometre have been awarded. The projects are being taken up on EPC mode and the program is targeted for completion by March, 2020 .

vi. **Delhi-Meerut Expressway**

The Delhi-Meerut Expressway aims to provide a fast link between the two cities. The alignment of DME starts from Nizamudin 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 8.7 km, 14-lane highway is being completed in a record time of about 15 months as against the originbal scheduled completion period of 30 months. This first stretch from Nizamudin Bridge to UP Border is provisioned with 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.

vii. Vadodara-Mumbai Expressway

The 473 km expressway will link Ahmedabad-Vadodara Expressway to Mumbai-Pune Expressway thus providing Expressway connectivity from Ahmedabad to Pune for a length of about 650 Km. The project will be taken up in three phases. Land acquisition, environment clearance etc are at advanced stage of approval for Phase I and II. Bids have also been invited for the First package of of phase -1.

viii. Bangalore-Chennai Expressway (262 km)

Bangalore-Chennai Expressway is a green-field alignment and will be operated with a closed toll system. There are two existing roads connecting Bangalore-Chennai, one is via Hoskote (Bangalore)-AP then to Chennai & second is via Electronic City (Bangalore) Hosur (Tamil Nadu) and then to Chennai. The alignment of proposed expressway is passing in between these two stretches. The processes of land acquisition, environment and other pre-construction activities are under progress.

ix. Byet Dwarka – Okha Bridge

The Ministry has taken up construction of a signature 4-lane Bridge to connect the mainland at Okha to Byet-Dwarka Island off the Gujarat Coast with this signature Bridge spanning a length of 2.32 kms. The Project has been awarded on 01.01.2018 at a cost of Rs. 689.47 crores. This will be the longest span cable stayed bridge in India with the main span of 500 mtrs, and is scheduled to be completed in 30 months.

x. North East Road Network Connectivity Project- Phase I

Development of 403 kms of National Highways in Meghalaya and Mizoram. Out of 403 km, approximately 52 kms will be in Meghalaya and 351 km in Mizoram. The estimated cost is Rs 6,721 crore The projects will be taken up for implementation during the financial year 2017-18. The civil works are expected to be completed by 2021 and maintenance works are expected to be completed by 2025. The projects will encourage sub-regional socio-economic development by improvement of infrastructure in Meghalaya and Mizoram. It will also enhance the connectivity with inter-state roads and International Borders. The work for development to two lane standards are under scheme "North East Road Network Connectivity Project Phase I" with loan assistance of Japan International Cooperation Agency (JICA).

III. DYNAMIC POLICY INITIATIVES

Dynamic policy initiatives taken by the Ministry in the last three years have led to better award and implementation of projects.

PROBLEM AREA	POLICY TO ADDRESS THE PROBLEM
<p>Shortage of equity and Languishing Projects</p>	<p>Hybrid Annuity Model</p> <p>As per this model, 40% the Project Cost is to be provided by the Government as „Construction Support“ to the private developer during the construction period and the balance 60% as annuity payments over the concession period along with interest at market linked rates on outstanding amount to the concessionaire. There is separate provision for O&M payments by the Government to the concessionaire.</p> <p>Monetization of Public Funded Highways</p> <p>Under the Model, the right of collection of user fee (toll) in respect of the selected highway stretches constructed through public funding shall be assigned for a 30 years, to developers/investors against upfront payment of a lump-sum amount to the Government. . Initially, 75 public funded NH projects with aggregate length of around 4,500 km and annual toll revenue collection of around Rs 2,700 crores have been identified for the Model The bids for the first bundle of 9 NHs have been invited.</p> <p>Masala Bonds</p> <p>Targeting mobilization of funds, NHAI launched an issue of Masala Bonds at the London Stock Exchange in May 2017. The Masala Bond saw an overwhelming response from a wide spectrum of investors. The initial benchmark issue of Rs 1500 crore was upsized to Rs 3000 crore. Asia contributed 60 percent and Europe 40 percent of subscription. 61 percent of the amount is from fund managers or insurance funds, 18 percent from banks and 14 percent from private banks. NHAI's Masala Bonds have been rated the best for the year 2017.</p> <p>Managing Languishing Projects</p>

	<p>The Ministry has focused on completion of on-going projects along with sanction and award of new projects. A total of 73 projects (8,187 km) worth an estimated investment of Rs.1,00,000 crore were identified as Languishing Projects. The reasons for delay were identified and policy interventions undertaken to address the same. This, inter alia, includes (a) One Time Fund Infusion Scheme (OTFIS) whereby financial assistance is provided by NHAI to the contractor/ concessionaire in the form of a working capital loan, (b) Rationalized Compensation whereby a one-time compensation, equivalent to annuities that were missed on account of delay in completion of the project , is provided to the concessionaire in the case of BOT (Annuity) projects; (c) Extension of concession period, (d) Substitution of concessionaire & Termination.</p>
<p>Delays due to Inter ministerial coordination</p>	<p>An Infrastructure Group created under Chairmanship of Minister (RTH & S) to resolve approval/clearance issues related to Environment & Forests, Railways and Defence. Processes have been streamlined like online approval of General Arrangement Drawings (GADs) for ROBs/RUBs. Forest and Environmental Clearances have been de-linked. Stage I Forest Clearance is now considered as deemed approval for cutting of trees etc.</p>
<p>Delays in approvals etc</p>	<p>Decentralisation & Administrative Measures</p> <ul style="list-style-type: none"> (a) Enhanced powers for approval of projects have been delegated to the NHAI Board specifically in the case of EPC projects and all PPP (BOT) projects where no VGF is involved. This will fast track the decision making process. (b) Powers for appraisal and sanction of NH projects implemented through the state PWDs have been enhanced and certain field offices of MoRTH are now headed by the CE-ROs with a view to further streamlining various processes. This is expected to increase efficiency and speedier decision making. (c) Within the Bharatmala Parijoyna 10% of the funds will be earmarked under the Grand Challenge mechanism for the State Governments where sufficient and timely land is made

	available. This will fast track the projects.
Delays in Land Acquisition	<p>Land Acquisition has been expedited by bringing the awards and their disbursal in consonance with the principles of the RFCT LARR Act, 2013.</p> <p>For the purpose of monitoring and expeditious settlement of LA issues for various projects, guidelines have been circulated to constitute LA Cells in the Ministry, its ROs, NHAI, NHIDCL and their PIUs.</p> <p>Besides acquisition under NH Act, 1956, a policy decision has been taken to ensure availability of requisite land for NHs through bulk purchase in accordance with the policy of the concerned State Governments.</p>

IV. GREATER PRIORITY TO ROAD SAFETY

For the first time a multi-pronged approach has been adopted by the Ministry, based on the 4 Es of Engineering, Enforcement, Education and Emergency Care, during the last three years for ensuring road safety. This includes better and safer road engineering, more effective legislation, improved vehicular safety standards, training of drivers, improved trauma care and generating public awareness. Several initiatives have been taken in the last three years to ensure safety on roads. These include :

i. Better Legislation - Motor Vehicle (Amendment) Bill, 2017

The Ministry constituted a Group of Ministers across states to deliberate upon and propose strategies for reducing road fatalities and to suggest actionable measures for implementation. On the basis of recommendations of the GoM, MoRTH introduced the Motor Vehicle (Amendment) Bill 2016 in Parliament (Lok Sabha) on 9th August, 2016. The Bill addresses road safety issues by providing for stiffer penalties, permitting electronic enforcement, improving fitness certification and licensing regime, statutory provisions for protection of good Samaritans and recognition of IT enabled enforcement systems. The Bill also paves way for reforms in public transport which in turn will help in improving road safety. The Bill contains provisions for treatment of accident victims during golden hour which will help in saving precious lives. The Bill also aims to simplify processes for the citizens dealing with transport departments and usher in an era of transport reforms in the country. **The Bill**

has been passed by the Lok Sabha and has been referred to the Select Committee of Rajya Sabha.

ii. Engineering Interventions to improve road safety

The Ministry established “**Road Safety Cell (Engineering) (RSCE) in August, 2015** to exclusively work on Road Safety Engineering. Ministry is making concerted efforts in road safety engineering by way of :

Identification and rectification of road accident black spots

The Ministry has so far identified 789 road accident black spots in various States of which 138 are on State roads. 189 spots have already been rectified and sanctions for rectification of 256 spots accorded till date which are in different stages of bidding/ progress. 2 Nos. of road safety improvement works on National Highways at selected critical locations at a cost of Rs 30 crore have also been sanctioned under road safety annual plan during 2017-18 which are also under bidding/ progress. Apart from carrying out road safety audits as part of all EPC/ BOT projects, standalone road safety audit has also been initiated on National Highways. Ministry had also has sanctioned installation of crash barriers on national highways in hilly terrain at accident prone locations in different hill states in a length of 137 km at a cost of Rs 85 Crore.

iii. Model Automated Centres for checking fitness of vehicles:

Ministry has sanctioned 20 Inspection and certification Centres for testing the fitness of the commercial vehicles through an automated system. Six centres are already operational. These centres will provide for objective evaluation of road worthiness of the heavy commercial vehicles. Based on the encouraging experience, it is now proposed to extend this scheme to all the states during next year.

iv. Training of Drivers

Ministry has been working in association with States, Vehicle manufacturers and NGOs for strengthening the driving training. Institutes of Driving Training and Research (IDTRs) have been established in a few states which act as model Driving Training Centres with state of art infrastructure. Ministry has also launched a scheme for creating driving training centres in all the districts of the country in due course and also supports refresher training programmes for heavy commercial vehicles drivers.

v. Passenger Safety and Security

To enhance the passenger safety and specially the safety and security of women and children in transit, all the passenger buses and taxis have been mandated to be fitted with GPS devices to enable real time tracking and intervention in times of crisis.

vi. Steps for safety of vehicles

Two Wheelers: Two Wheelers account for a major share of accidents and consequent fatalities. A frequent reason is skidding of vehicles. To save the precious lives of two-wheeler users, all the two wheelers have been mandated to be fitted with Anti-Lock braking System (ABS) w.e.f. 1st April, 2019. This is expected to significantly improve the on-road safety of two-wheelers. Apart from this, all the two-wheelers have also been mandated to have a day light running system to improve the conspicuity of the two wheelers. Helmet is provided as a compulsory accessory at the time of sale of all new two wheelers. This has helped improve helmet compliance amongst two-wheeler riders.

Motor Cars - All the passenger cars are also mandated to be fitted with ABS to improve their safety and stability. One of the highlights of the year is the mandate for car manufacturers to fit additional safety features on cars to be manufactured from 1st July, 2019. These include compulsory air-bags, speed warning audio alert, seat belt audio alerts and reverse sensors.

Heavy Vehicles: All heavy vehicles have been mandated to have ABS fitted on them. The bus body code has been implemented which would help improve the passenger safety as well as ensure minimum level of comfort. The truck body code has also been notified.

vii. Free Eye Check-up Campaign

The Minister of Road Transport and Highways and the NHAI launched a countrywide Free Eye Check-up Campaign and distribution of spectacles for truck drivers, cleaners and helpers on 2nd October, 2017 at Panjari Toll Plaza, Nagpur Bypass, Nagpur, in Maharashtra. 50 free eye check-ups camps were also set up on identified National Highways till 6th October, 2017. More than 5,000 drivers registered for the eye check-up and more than 3,000 spectacles were distributed to those with impaired vision free of any charge.

New Accident Reporting Format

A strong Road safety action plan requires a credible database. The current format of reporting was, therefore, revised on the basis of the recommendations of an expert committee comprising of experts from IIT Delhi, IIT Kharagpur, WHO, senior officers from the Police and Transport Departments of States and the Ministry of Health & Family Welfare. The new format of accident reporting has been adopted by all the States and will help in focussing at the key risk areas to strengthen road safety in coming years.

Decrease in road accidents and fatalities

India is committed to bring down fatalities from road accidents. This requires a multi-pronged approach for strengthening automobile safety standards, improving road infrastructure, generating awareness programmes, strengthening enforcements and streamlining the trauma care assistance programme. The Ministry's concerted efforts at bringing down the number of road accidents has started showing results. As per the report **Road Accidents in India-2016**, there has been a decrease

in road accidents by 4.1% in 2016. The data for first three quarters indicates that this trend continues. The number of accidents up to September, 2017 saw a reduction of 5.2% over the figures for the corresponding period in 2016. The fatalities have shown a decrease of 4.4% during this period. Except the States of Assam, Bihar, Orissa and Uttar Pradesh, all the States have witnessed a decrease in road accident fatalities ranging between 2-10 % during this period.

V GREEN INITIATIVES

The Ministry has taken the following green initiatives in the last three years

- i. Taxi Policy Guidelines -have been issued in December 2016 to ensure safe, secure and affordable ride to the common public so as to help in reducing congestion as well as pollution in the cities.
- ii. Vehicle Fleet Modernization Programme is being finalized to enable the replacement of old, heavy and medium commercial vehicles as they contribute the maximum of vehicular pollution
- iii. The Ministry has issued a notification mandating implementation of Bharat Standards-VI (BS-VI) emission norms from 1stApril 2020 for all vehicles. This is a significant step to combat vehicular pollution in the country.
- iv. India ready for flex - fuel automobiles - India has put in place all required regulations for the use of Flex-fuel like ethanol mixed with petrol.
- v. Vehicle manufacturers will have to give details about the emission and noise levels of each vehicle they produce from 1st of April 2017
- vi. Ethanol – Fuelled Bus- Notification was issued for mass emission standards for flexi fuel ethanol E85 and ED95. This Notification will enable vehicle manufacturers to manufacture vehicles running on bio-ethanol E85 and ED95. A bio-ethanol fuel bus is already under trial in Nagpur.
- vii. Bio- CNG and Bio- Diesel – Notification has been issued for norms for the use of Bio CNG for testing and exhaust emission for vehicles running on Bio-CNG. With this notification, the vehicle manufacturers can manufacture, sell and get vehicles fuelled by Bio-CNG in the country. Draft Notification was also formulated for Mass Emission Standards for Bio-diesel (B 100) fuelled vehicles.
- viii. Retro fitment of existing polluting vehicle into electric hybrid and electric vehicle permitted - Enabling regulations have been finalized and demonstration of technology completed successfully.
- ix. Ministry has taken a landmark step towards reducing the vehicular pollution. Emission norms for Tractors and Construction Equipment vehicles have been notified for low Sulphur fuel, to be implemented from 01st October, 2020.

- x. Ministry has also taken initiatives to promote alternate fuels in vehicles. The Electric vehicles are being given a big push by the Ministry. India's first multi modal Electric Vehicle passenger transport project was launched in Nagpur with integrated solution of buses, taxis and E-Rickshaws.
- xi. The E-Rickshaw, which has proved to be an effective substitute for manual Rickshaws, has emerged as a cost effective, environment friendly solution for improving last mile connectivity. These have been exempted from the requirement of obtaining permits. This has created a game changing scenario for promoting E-rickshaws. During the year to promote last mile connectivity for metro passengers, 1000 number of E-Rickshaws were launched at Gurugram, Haryana.
- xii. **Green Highways Division in NHAI** -NHAI has set up a Green Highways Division and has planted over 2.5 lakh trees planted last year in order to make National Highways green, clean and pollution free.
- xiii. **Linking of Construction of Highways with digging of Water Bodies in drought affected areas** The requirement of earth work for the development of National Highway network for embankments is met by the contractors/ concessionaires through buying the earth from landowners or procuring the same through mining of minor minerals as per the provisions laid down by the concerned State Governments. Keeping in view that many parts of the country face drought conditions and restoration of ponds, check dams, water tanks offers an age-old system of water conservation/ ground water recharging, instructions have been issued by the Ministry to the agencies responsible for construction of National Highways to advise their contractors/ construction agencies through their field officers to approach the concerned District Collectors/ Sub-collectors/ Water Conservation Departments to obtain a list of any such villages/ rural areas where de-siltation/ revival of existing ponds/ water bodies or digging of areas for creation of new water bodies are required and procure the requisite soil for road embankments by digging/ de-silting the existing village ponds/ water bodies, subject to such soil being found suitable for the embankment purposes. This arrangement would help in restoration of such dried-up water bodies without any charge and the contractors will be able to source the requisite soil without any payment.
- xiv. **Bridge cum Barrage**

The Ministry has sought proposals from state PWDs for making bridge-cum-barrage on NHs so as to serve the dual purpose of crossing the water body and storing water on the upstream/ down stream side to serve as water reservoirs/ ground water recharging bodies. This will help better and optimum utilization of water for various purposes.

- xv. **Measures undertaken to Check Air Pollution in Delhi NCR Region**

Directions have been issued to Project Directors, Contractors and field level officials working on highway projects around Delhi to take measures to check pollution arising from the construction work. The steps to be taken include sprinkling water at all construction sites and camps, covering of dumpers transporting the construction material/ waste including fly ash in the region, covering of exposed soil at the sites, paving/ greening the earthen shoulders and use of mechanised brooming of these road stretches. PDs have been directed to inspect the construction sites regularly to ensure that all pollution control measures are strictly complied with. Additionally, tight targets have been set for the completion of Eastern and Western Peripheral Expressways around Delhi. Once the two peripheral expressways are ready, vehicles destined for neighbouring states will be able to bypass Delhi and this will reduce vehicular pollution in Delhi to a large extent.

VI. E- INITIATIVES

(i) Implementation of Hybrid ETC system

Electronic toll collection (ETC) system, the flagship initiative of MoRT&H, 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 registered under the Companies Act, has been incorporated for working as implementing agency for ETC with National Payment Corporation of India (NPCI) functioning as the Central Clearing House (CCH). 11 banks (including Public and Private sector banks) have been engaged as issuer Banks in order to issue FASTag to road users. A cashback of 7.5% is being offered for the FY 2017-18 in order to incentivize road users for usage of FASTag. In addition to FASTag, several other electronic means have also been employed to enable road users for payment of user fees such as use of PoS machines for collection of fees through Credit/ Debit cards, use of Pre-paid payment instruments etc.

As on 1-12-2017, a total of 7.7 lakh FASTag units are being used by road users. User fees collected through FASTag has also seen significant growth in terms of user fees collected and the penetration has increased from 179.1 Cr with 11.2% penetration in January 2017 to 285.3Cr with 18.5% penetration in the month of November 2017.

- (a) In order to further augment the services provided to FASTag users, all the lanes at the fee plazas are being converted to Hybrid lanes with one dedicated lane on either side, exclusively for FASTag users. This is to be completed by 31.03.2018.
- (b) All new vehicles of class M and N being sold after 1-Dec-2017 will be affixed with FASTag by the vehicle manufacturer or the authorized dealer, in order to enhance the penetration and usage of FASTg among road users.

ii. **Project Monitoring Information System(PMIS)**

A very effective Project Monitoring Information System (PMIS) has been introduced for tracking the status of all projects, preparation of reports and online upload of important project documents like DPRs and contract documents, etc.

iii. **INAM-Pro+ launched**

INAM-Pro+, an upgraded version of INAM-Pro, was launched on 01 June 2017. More than 700 construction companies have used INAM-Pro during the last two years. With 37 Cement companies registered on it, the portal facilitated comparison of price, availability of materials etc. and made it convenient for prospective buyers to procure cement at reasonable rates in a transparent manner. INAM-Pro*, with enhanced features will reduce the time and efforts in preparation of proposals and bid submissions, and help increase efficiency and transparency in procurement of construction materials as a user can now place orders, obtain price quotes and track them in swift manner on this portal.

iv. **Bhoomi Rashi, a web Utility for land acquisition**

In its attempt to move towards total e-governance and avoid delays, this Ministry has developed a Web Utility for land acquisition related processes including gazette notification. The web utility would be linked with the e-gazette platform of the Ministry of Urban Development, for e-publication of land acquisition related Gazette Notifications. The affected/ interested parties would also be given an access to the system so as to track the status of their acquired land and the CALA(s) in different states are being taken on board to deposit the compensation amount in the respective accounts of affected/ interested person

v. **Transport MMP: A successful and ambitious e-Governance Project**

Transport Mission Mode Project, driven by Ministry of Road Transport & Highways, has successfully automated RTO operations, set up a consolidated nation-wise transport database and has launched a host of citizen and trade-centric applications – contributing greatly towards the e-Governance initiative of the country under Digital India Program. The salient aspects of this project are as under:

- ❖ Two Flagship Applications under Transport MMP – Vahan and Sarathi Vahan deals with Vehicle Registration, Taxation, Permit, Fitness and associated services while Sarathi is related to Driving License, Learner License, Driving Schools and related activities
- ❖ Implemented in 1000+ RTOs across 33 States/UTs – with state-specific rules, tax structures
- ❖ Key users – RTOs, Govt, Police, Banks, Insurance, Citizens, Vehicle Manufacturers, Dealers

- ❖ Country-wide data consolidated in National Register – updated through periodic replication
- ❖ More than 19 crore Vehicle, 10 crore Driving License Records in the National Register
- ❖ Portal/ API based Data access provided to Govt. Agencies, Security forces, Banks & Insurance
- ❖ Vehicle and License search option to Citizen through Portal/ SMS/ Mobile app
- ❖ Host of online G-B and G-C applications implemented at national and state levels
- ❖ More than 50 Lakh National Permits issued to Goods Vehicles through Online National Permit Portal
- ❖ Homologation (Approval) Portal for Model Certification and Inventory Management for Manufacturers
- ❖ More than Rs. 10000 crores taxes collected by States online.

vi. New Initiatives

- ❖ Centralized, web-enabled Vahan and Sarathi version 4 (fully integrated online services) launched to replace current distributions
- ❖ Multi-tenant deployment under NIC Cloud; High security, availability and data integrity
- ❖ To enhance quality of citizen facilities, reduce/eliminate RTO visits, increase transparency
- ❖ More than 600 RTOs across 15 states already migrated to the new system; rest to follow soon.
- ❖ Integration with multiple Payment Gateways, IRDA, NCRB, CSC, SMS, Open API
- ❖ Integration with Aadhaar for biometric authentication and eKYC; Integration with Digilocker
- ❖ Features dashboards, smart card, document upload, online scheduling, configurable workflow
- ❖ Online Dealer Point Application with integration with Vehicle Manufacturers' inventory
- ❖ Online Fancy Number application with e-auction and e-bidding facility
- ❖ Complete range of online services related to Licensing, Tax Payment, transaction requests
- ❖ System-based, Multi-lingual knowledge test for Learner License with advanced security options
- ❖ Mobile app **e-Challan and m-Parivahan** – developed for comprehensive enforcement solution
- ❖ Convenient, cost-effective, and practical solution with latest features and state-specific options

- ❖ E-Challan being launched in multiple states by both Transport Enforcement and Traffic Police
- ❖ **mParivahan** App - for information and comprehensive services to citizen
- ❖ Major feature will be virtual documents like Driving Licence, Registration Certificate, Permits etc – as authorized soft copy
- ❖ Virtual DL/RC can replace physical document/card with encrypted QR Code for authentication
- ❖ Vision to bring transformational improvements in Transport Sector to facilitate citizens

VII INTERNATIONAL PARTNERSHIPS

i. MoU between India and Nepal

A MoU between India and Nepal for laying down implementation arrangement on cost sharing, schedules and safeguard issues for construction of a new Bridge over River Mechi at Indo-Nepal Border at an estimated cost of Rs.158.65 crores has been signed in August 2017. This will be funded by Government of India through an ADB loan. The new bridge is part of up-gradation of the Kakarvitta (Nepal) to Panitanki Bypass (India) on NH 327B, covering a length of 1500 mtrs. including a 6-lane approach road of 825 mtrs. Mechi Bridge is the end-point of Asian Highway 02 in India leading to Nepal and provides critical connectivity to Nepal.

ii. MoU between India and United Arab Emirates (UAE)

To foster Bilateral Cooperation in the Road Transport & Highways sector, a MoU was signed in January, 2017 during the visit of Crown Prince of Abu Dhabi to India during the Republic Day Celebrations, 2017. The MoU envisages cooperation, exchange and collaboration between India and UAE for promoting increased investment in infrastructure development and logistics efficiency. A Joint Working Group (JWG) has been formed under the MoU from both the sides.

iii. Motor Vehicles Agreement (MVA) between India and Afghanistan

A Motor Vehicles Agreement (MVA) for regulation of passenger, personal and cargo vehicular traffic between India and Afghanistan was signed in September, 2017 for enhanced regional connectivity through road transport and for promoting cross-border road transportation for increased trade with Afghanistan via the land route.

iv. IMT Friendship Motor Rally-II, 2017

India-Myanmar-Thailand (IMT) Friendship Motor Rally-II, 2017, supported by MoRTH from Guwahati to Bangkok, was organized jointly by Kalinga Motor Sports Club (KMSC),

Bhubaneswar and Mahindra Adventure, Mumbai. The Rally started from Guwahati, India on 24.11.2017 and proceeded through Myanmar to reach at Bangkok, Thailand on 03.12.2017 covering a distance of about 5000 kms to return to Guwahati on 22.12.2017. The essence of the event was to propagate IMT Motor Vehicle Agreement and the Governments initiative along the planned route.

v. Co-operation Framework Agreement between IAHE, India and IFEER, Morocco

A Cooperation Framework Agreement between Indian Academy of Highway Engineers (IAHE), India and Institute of Training in Engines and Road Maintenance (IFEER), Morocco IAHE, Noida has been signed on 14.12.2017 during the visit of Moroccan Delegation led by Mr. Abdelkader Amara, Hon'ble Minister of Equipment, Transport, Logistics and Water of the Kingdom of Morocco to Delhi. The Agreement envisages bilateral cooperation in the field of training in Engines and Road Maintenance of Moroccan Engineers.

IITL MoRTH took the idea further by organising the India Integrated Transport and Logistics Summit, organized in May 2017 and by actively promoting multi-modal transport planning with greater synergy in investments in railways, roads, waterways and civil aviation.

vi. The following road projects in India have been identified to be posed for loan assistance by Asian Development Bank (ADB).

1. S. No.	Project	Distance
1	Upgradation of Siliguri-Mirik-Darjeeling road in West Bengal	122 km.
2	Widening of NH-112 (old NH-35) from Kolkata to Bongaon (on India-Bangladesh Border)	60 km
3	Upgradation of road connections to Diamond Harbor in West Bengal NH 12 (old NH 117)	123 km
4	Ukhul-Tolloi-Tadubi road in Manipur, NH 102 A	115 km
5	Split 4 lane road on Kohima-Kedima Kronglmpthal Section of NH 2 (old NH-39)	138 km
	Total	558 Km

India is funding construction of 69 Bridges on the Tamu-Kyigone-Kalewa Road (149.70 kms)Section and construction of 120.74 kms road between Kalewa and Yargi section of

the India-Myanmar-Thailand (IMT) Trilateral Highway, in Myanmar to improve connectivity with South East Asia by road. The Trilateral Highway starts from Moreh (Manipur) in India up to Mae Sot in Thailand through Myanmar. Construction of 130 km length stretch of road connecting Moreh (India) / Tamu (Myanmar) to Kalewa in Myanmar has already been completed by Border Roads Organization of India. For construction of 69 bridges including approach roads in the Tamu-Kyigone-Kalewa road section (149.70 kms) and construction/upgradation of the Kalewa-Yargi road section (120.74 kms) of the IMT Trilateral Highway in Myanmar, appointment of Consultants to finalise tender documents and award of contracts has already been completed.

VIII OTHER INITIATIVES

i. Wayside Amenities

The National Highways Authority of India has started the process of developing wayside amenities at land acquired at 183 locations along side the national highways and has called for private participation for the same. The amenities will provide rest and refreshment for highway commuters during their journey. There would be parking for cars, buses and trucks, restaurant/food court, dhaba, fuel station, minor repair shop, rest rooms for passengers, dormitories for drivers, kiosks for sale of miscellaneous sundry items etc at these sites. The facilities having an area more than 5 acres will be developed under the brand name "HIGHWAY VILLAGE" and facilities on smaller area less than 5 Acres will be developed with brand name "HIGHWAY NEST".

ii. Skill Development

The Ministry has issued guidelines for Skill Development of Drivers and Mechanical Staff in the Road Transport Sector and of Workmen in the Highways Construction Sector with a view of meeting the manpower requirements of the road transport and highways sector and simultaneously creating additional avenues of employment. The workmen training will be conducted by the Directorate General of Training (DGT), Ministry of Skill Development & Entrepreneurship, Govt. of India. Drivers training will be imparted in driver training centres run by private promoters or State Road Transport Undertakings or the apex body of SRTUs, namely, the Association of State Road Transport Undertakings (ASRTU). The Ministry will also provide a stipend to each trainee. Training projects worth Rs 42 crore have been approved so far

Nearly 2800 workers from the states of Karnataka, West Bengal, Rajasthan, Bihar and Odisha have been trained in World Bank funded projects in the trades of masonry, bar-bending and shuttering over a span of four months. A further 1 lakh twelve thousand workmen will be provided training at 310 projects of MoRTH, NHAI and NHIDCL by June 2018, under six trades namely masonry, bar-bending, shuttering, scaffolding, painting and plumbing.

iii. **Red Beacon Lights:**

With a view to strengthen healthy democratic values in the country, MORTH notified to do away with beacons of all kinds atop all categories of vehicles in the country except those connected with emergency, operation & relief services, etc .

IX SUCCESS STORIES

Extra-dosed Bridge across River Narmada at Bharuch

A new four lane, Extra-dosed Bridge across river Narmada at Bharuch, inaugurated by the Prime Minister on 9th of March 2017, has brought major relief for people travelling on the Vadodara-Surat section of NH-8. The 1.4 km 'Extradosed' cable stayed bridge is the longest in India and the second such bridge in the country after Nivedita Setu over Hooghly.

Bridge over River Chambal at Kota

A 6-lane Cable Stayed Bridge across river Chambal at Kota was inaugurated by the Prime Minister Shri Narendra Modi on 29th August 2017. Built at a cost of Rs. 278 Crores, this bridge marks the completion of the East-West corridor.

Chenani- Nashri Tunnel

An ideal example of the government's 'Make in India' and 'Skill India' initiative, the 9 km long, twin-tube, all-weather tunnel between Udhampur and Ramban in Jammu & Kashmir is not only India's longest highway tunnel but also Asia's longest bi-directional highway tunnel. Built at an elevation of 1200 metres on one of the most difficult Himalayan terrains, the tunnel cuts the travel time between Jammu and Srinagar by two hours, bypassing about 41 kms of road length. It will also ensure an all-weather passage on a route that often sees heavy traffic jams and disruptions due to landslides, snow, sharp curves, breakdown of vehicles and accidents. The tunnel has been constructed at a cost of about Rs 3720 crores and is a part of the 286-km-long project for four-laning of the Jammu-Srinagar National Highway.

Dhola Sadiya Bridge

The Hon'ble Prime Minister, Shri Narendra Modi, inaugurated India's longest bridge- the 9.15 km long Dhola-Sadiya Bridge over River Brahmaputra in Assam on 26th May 2017. The bridge has ensured 24x7 connectivity between upper Assam and Eastern part of Arunachal Pradesh, marking a major transformation from the ferry-based, day-only connectivity that collapsed during floods. It has considerably reduced the distance and travel time between the two states. The distance between Rupai on NH- 37 in Assam to Meka/Roing on NH-52 in Arunachal Pradesh has been cut down by 165 KM. The travel time between the two places has come down from

six hours to just one hour – a total five hour reduction.
