GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

LOK SABHA STARRED QUESTION NO. 473 ANSWERED ON 03RD APRIL, 2025

MAINTENANCE OF NATIONAL HIGHWAYS

*473. SHRI RAVINDRA DATTARAM WAIKAR: DR. SHRIKANT EKNATH SHINDE:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) whether the Government plans to focus on the quality and maintenance of National Highways (NHs) in 2025 after a record construction of 56,700 km of NHs during the last ten years and if so, the details thereof;
- (b) the measures that are being taken to ensure that the newly constructed NHs meet high-quality standards and are properly maintained;
- (c) the manner in which the Government would plan to improve the safety and travel experience for NH users in 2025;
- (d) the role that the Government plays in the ongoing operation and maintenance of NHs; and
- (e) the steps being taken to ensure that the recent expansion of NHs from 0.91 lakh km to 1.46 lakh km is effectively managed and maintained for long-term sustainability?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (e) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) to (e) OF LOK SABHA STARRED QUESTION NO. 473 ANSWERED ON 03.04.2025 ASKED BY SHRI RAVINDRA DATTARAM WAIKAR AND DR. SHRIKANT EKNATH SHINDE REGARDING MAINTENANCE OF NATIONAL HIGHWAYS

(a) and (b) The Government has prioritized the maintenance of existing National Highway (NH) network and inter-alia evolved a mechanism to ensure Maintenance and Repair (M&R) of all NHs sections through accountable maintenance agency.

NHs projects are executed on mainly three modes i.e. (i) Build Operate and Transfer (BOT), (ii) Hybrid Annuity Model (HAM) and (iii) Engineering Procurement and Construction (EPC). Concession period for projects including maintenance on Build Operate and Transfer (BOT) is 15 to 20 years and on Hybrid Annuity Model (HAM) is generally 15 years. Concessionaire is responsible for maintenance of the respective NHs stretches within the concession period of the project. Only in case of EPC projects, Defect Liability period (DLP) is 5 years for the bituminous pavement works and 10 years for concrete pavement works.

For Toll-Operate-Transfer (TOT) and InvIT projects, concession period including maintenance is for 20 to 30 years. Concession period for Projects on Operate, Maintain and Transfer (OMT) is generally 9 years.

For all remaining sections of NHs stretches where DLP period has ended or is not under any concession period of BOT/HAM/TOT/InvIT project, Government has taken a policy decision to undertake maintenance works through Performance Based Maintenance Contract (PBMC) or Short Term Maintenance Contract (STMC). While STMC works are generally undertaken for a contract period of 1-2 year, PBMC works are undertaken for a contract period of about 5-7 years. During the current Financial Year 2024-25, Government has approved STMC works in 17,884 km length costing Rs.2,842 Crore and PBMC works in 6,118 km length costing Rs.6,757 Crore.

Further, all efforts are made to ensure that the NHs are constructed as per quality standards specified by Government/ Indian Roads Congress (IRC) specifications and codes. To ensure the construction quality, Consultants (Authority's Engineer / Independent Engineer) are appointed by the executing agencies for day to day supervision of the works at site. Officials of executing agencies as well as Independent Third-Party Auditors undertake inspections from time to time and ensure adherence of conformity of quality of materials used in construction as well as the work done with Concessionaire 1 Contractor Deficiencies. requirements. if any, observed during examination / supervision are brought to the notice of the Concessionaires / Contractors for taking up necessary corrective measures.

In addition, Government has also taken up the random nondestructive quality check on NHs through Mobile Quality Control Van on Pilot basis in four States.

- (c) Road safety engineering measures / works on NHs, including rectification of blackspots, are undertaken mainly as part of scope of development / maintenance works on NHs or as standalone projects in certain cases. Following are some important road safety initiatives taken by the Government:
 - i. For making the NHs black spot free, Government has taken steps for immediate short-term measures like road markings, signages, crash barriers, road studs, delineators, closure of unauthorized median openings, traffic calming measures, etc. at the accident black spots. Long-term measures like improvement of road geometrics, junction improvements, spot widening of carriageway, construction underpasses/overpasses, etc. are taken for permanent rectification of black spots. Out of total 13,795 black spots identified on the NHs upto 2021-22, short-term rectification measures have been completed on 11,515 black spots and permanent rectification measures have been completed on 5,036 black spots.

- ii. Electronic Detailed Accident Report System has been launched through which accident spots on NHs are noticed immediately. Accordingly such spots are visited immediately by field officers and appropriate short term measures are taken.
- iii. In order to reduce the fatality of accident victims, Government has planned pan India launch of the Scheme for Cashless Treatment of Road Accident Victims, as per the legal mandate of Section 162 of Motor Vehicles Act, 1988. The Scheme is aimed at strengthening the emergency care ecosystem to provide timely treatment to road accident victims and prevent loss of precious lives.
- iv. The Scheme for Cashless Treatment of Road Accident Victims is presently implemented on pilot basis across 6 States / Union Territories (UTs), namely, Chandigarh, Assam, Punjab, Uttarakhand, Haryana and Puducherry for acclimatization of field officials.
- v. Further, Government has formulated a multi-pronged strategy to address the issue of road safety based on Education, Engineering (both of roads and vehicles), Enforcement and Emergency Care. Details of various initiatives taken to address road safety issues are at Annexure.

Further, to improve travel experience for NHs users, the Government envisions development of Wayside Amenities (WSAs) at approximate intervals of 40-60 km along NHs. Government in Ministry of Road Transport & Highways has planned to award around 700+ WSAs. Total 393 WSAs have been awarded so far, out of which 94 are operational. Out of the 94 operational WSAs, 59 are equipped with trucker facilities and 50 with Electric Vehicle (EV) Charging stations. Additionally, 100 sites have been allocated to Oil Marketing Companies (OMCs) for the development of trucker facilities.

(d) and (e) Repair of identified defects / issues in the road condition as well as other maintenance / repair works are completed by the

Contractor / Concessionaire within the stipulated timeline as per provisions of the Contract. Compliance is ensured through regular field reports and penalty provisions incorporated in the Contract documents for action against defaulting Contractor / Concessionaire. In addition, field officers have been directed to strictly ensure the maintenance and safety compliance during operation and maintenance period of the contract.

Government encourages the adoption of innovative technologies or methods to enhance the durability and reduce the maintenance requirements of NHs (depending upon factors like rainfall, terrain type, soil category etc.). Such technologies or methods include stabilization of subgrade, geosynthetic reinforced layer(s) in sub-base / base, concrete roads / whitetopping, perpetual pavement, High performance bituminous mixes, modified bitumen / bituminous mixes, Fiber Reinforced Concrete, Cement Grouted Bituminous Mixes, etc. Automated and Intelligent Machine-Aided Construction has been adopted which ensures cloud based maintenance records and quality work.

Road condition assessment is carried out through Network Survey Vehicle (NSV) for the NHs stretches before start of work, before issue of completion certificate and thereafter at regular intervals of six months after completion of the work, thereby enabling quality assessment of NHs at regular intervals for (i) ensuring the maintenance during Concession period / DLP and (ii) prioritizing maintenance requirements to maintain NHs in traffic worthy condition.

Further, app based monitoring through National Highways Authority of India (NHAI) One / Tatpar App facilitates, highway project management by Field officers / Engineers / Contractors / Concessionaires directly from onsite, through digital reporting of daily and monthly defects, submission of geo-tagged and timestamped photos for inspections and digital uploading of test results.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF LOK SABHA STARRED QUESTION NO. 473 ANSWERED ON 03.04.2025 ASKED BY SHRI RAVINDRA DATTARAM WAIKAR AND DR. SHRIKANT EKNATH SHINDE REGARDING MAINTENANCE OF NATIONAL HIGHWAYS

Details of various initiatives taken to address road safety issues: -

(A) Education:

- i. Administers Road Safety Advocacy Scheme to provide financial assistance to various agencies for raising awareness about road safety and for administering road safety programs.
- ii. Observance of National Road Safety Month/Week every year for spreading awareness and strengthening road safety.
- iii. Administers a scheme for setting up of Institutes of Driving Training & Research (IDTRs), Regional Driving Training Centres (RDTCs) and Driving Training Centres (DTCs) at state/district level across the Country.

(B) Engineering:

B.1. Road Engineering:

- i. Road Safety Audit (RSA) of all National Highways (NHs) has been made mandatory through third party auditors/ experts at all stages i.e. design, construction, operation and maintenance etc.
- ii. High priority is accorded to identification and rectification of black spots /accident spots on NHs.
- iii. Road Safety Officer (RSO) has been designated at each Regional Office of road owning agencies under MoRTH to look after RSA and other road safety related works.
- iv. Administers the electronic Detailed Accident Report (e-DAR)
 Project to establish a central repository for reporting,
 management and analysis of road accidents data across the
 Country.
- v. Issued guidelines for the provision of signages on Expressways and National Highways to offer improved visibility and intuitive guidance to the drivers.

vi. Provisions have been made in the Motor Vehicles Act, 1988 for failure to comply with standards for the road design, construction and maintenance, as prescribed by the Central Government from time to time.

B.2 Vehicle Engineering:

Various initiatives have been undertaken to make vehicles safer, including the following:-

- i. Mandatory provision of an airbag for the passenger seated on the front seat of a vehicle, next to the driver.
- ii. Prescribed norms related to safety measures for children below four years of age, riding or being carried on a motor cycle. It also specifies use of a safety harness, crash helmet and restricts speed to 40kmph.
- iii. Mandatory provisions for fitment of following listed safety technologies: -

For M1 category vehicles:

- a. Seat Belt Reminder (SBR) for driver and co-driver.
- b. Manual Override for central locking system
- c. Over speed warning system.

For all M and N category vehicles:

- a. Reverse Parking Alert System
- iv. Mandated Anti-Lock Braking System (ABS) for certain classes of L [Motor vehicle with less than four wheels and includes a Quadricycle], M [Motor vehicles with at least four wheels used for carrying passengers] and N [Motor vehicles with at least four wheels used for carrying goods which may also carry persons in addition to goods, subject to conditions stipulated in BIS standards] categories.
- v. Mandated speed limiting function/speed limiting device in all transport vehicles, except for two wheelers, three wheelers, quadricycles, fire tenders, ambulances and police vehicles.
- vi. Published the rules for recognition, regulation and control of Automated Testing Stations, which define the procedure for fitness testing of vehicles through automated equipment and

- the procedure for grant of fitness certificate by ATSs. The rules have been further amended on 31.10.2022 and 14.03.2024.
- vii. Formulated the Vehicle Scrapping Policy based on incentives/dis-incentives and for creating an ecosystem to phase out old, unfit and polluting vehicles.
- viii. Formulated a Scheme to set up one model Inspection & Certification Centre in each State/UT with Central assistance for testing the fitness of vehicles through an automated system.
 - ix. Published rules regarding the Bharat New Car Assessment Program (BNCAP) to introduce the concept of safety rating of passenger cars and empower consumers to take informed decisions.
 - x. Published rules regarding prescribed level playing field in the area of manufacturing of buses by Original Equipment Manufacturers (OEMs) and Bus Body Builders.
 - xi. Mandated vehicles, manufactured on or after 1st October, 2025, shall be fitted with an air-conditioning system for the cabin of vehicles of N2 (goods vehicle with gross vehicle weight exceeding 3.5 tonnes but not exceeding 12.0 tonnes) and N3 (goods vehicle with gross vehicle weight exceeding 12.0 tonnes) category.
- xii. Published rules for revision of standards for Safety Belt, Restraint Systems and Safety Belt Reminder to provide provisions for applicability of revised standards for safety belt assemblies, safety belt anchorages and the installation of Safety Belts and Restraint Systems, in Motor vehicles of category M, N and L7 w.e.f. 01st April, 2025. Further, the vehicles of category M1, manufactured on and after the 1st April 2025, shall meet the requirement of safety belt reminder for all front facing rear seats as per AIS-145-2018.

(C) Enforcement:

i. The Motor Vehicles (Amendment) Act, 2019 as stands implemented provides for strict penalties for ensuring compliance and enhancing deterrence for violation of traffic

- rules and strict enforcement through use of technology.
- ii. Issued rules for Electronic Monitoring and Enforcement of Road Safety. The rules specify the detailed provisions for placement of electronic enforcement devices on high risk & high density corridors on National Highways, State Highways and critical junctions in cities having population of more than one million in the country and cities under National Clean Air Programme (NCAP).
- iii. On 10th June, 2024, issued an advisory to all the States and Union territories on technological interventions for ensuring compliance with Motor Vehicle Act, 1988.
- (D) Emergency Care:
 - i. Published rules for the protection of Good Samaritan, who in good faith, voluntarily and without expectation of any reward or compensation renders emergency medical or non-medical care or assistance at the scene of an accident to the victim or transports such victim to the hospital.
 - ii. Enhanced compensation of victims of Hit and Run motor accidents (from Rs.12,500 to Rs.50,000 for grievous hurt and from Rs.25,000 to Rs.2,00,000 for death).
- iii. The National Highways Authority of India (NHAI) has made provisions for ambulances with paramedical staff/Emergency Medical Technician/Nurse at toll plazas on the completed corridor of National Highways.
- iv. Implemented a pilot program for providing cashless treatment to victims of road accidents in Chandigarh, Haryana, Punjab, Uttarakhand, Puducherry and Assam.
