

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

RAJYA SABHA
UNSTARRED QUESTION NO - 3145
ANSWERED ON - 20/08/2025

**DAMAGE TO PUBLIC INFRASTRUCTURE DUE TO SUBSTANDARD
CONSTRUCTION**

3145. SHRI MALLIKARJUN KHARGE:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

(a) the details of damage, including financial estimates, sustained by National Highways due to substandard construction of bridges, roads etc., in the last five years, year-wise and State-wise;

(b) the number of lives lost and injuries reported due to such poor construction;

(c) whether enquiries have been conducted into lapses in supervision and oversight that led to such damages;

(d) if so, details thereof, including findings and recommendations and action taken against contractors found responsible for such damages and if not, the reasons therefor;

(e) steps taken or proposed by the Ministry to strengthen supervision, ensure accountability and prevent recurrence of such issues?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (e) As per information provided by the executing agencies of Ministry of Road Transport and Highways, damages sustained by National Highways (NHs) due to substandard works (including structures like Bridges, culverts etc.) during the last five years and current Financial Year have been reported for 53 projects / stretches; State / Union Territory (UT) – wise details of which along with action taken is annexed. Actions against defaulting agencies have been taken up as per the provisions of the Contract/ Concession agreement in above cases of deficiencies/ damages, such as termination of contract agreement, levying of penalties/ liquidated damages, debarment/ blacklisting, declaring as non-performers etc. Remedial work to repair or reconstruct damages is the responsibility of the Contractor/ Concessionaire at their own cost except in those cases where the Contract Agreement has been terminated in which case the securities provided are forfeited.

There is no report of specific details of lives lost and injuries due to poor construction of NHs.

All efforts are made to ensure that the NHs are constructed as per stipulated quality standards specified in the Indian Roads Congress (IRC) specifications and codes. To ensure that highway construction adheres to stipulated quality standards, Consultants (Authority's Engineer/ Independent Engineers- AE/IE) are appointed by the executing agencies for day-to-day supervision of works at site. Officials of executing agencies undertake inspections from time to time and ensure adherence of conformity of quality of the work done by the Concessionaire/ Contractors with stipulated requirements.

Assessments of road conditions through Network Survey Vehicle (NSV) has been mandated for all NHs and Expressway works at the time of completion and every six months thereafter, which is monitored through electronic platform. NSV system for road condition assessment has been revamped using analytics for enforcement of contractual provisions during Operation and Maintenance (O&M) through dedicated central cell.

Deficiencies observed, if any, are brought to the notice of the Concessionaires/ Contractors for taking up necessary corrective/ remedial actions as stipulated in technical schedules of the Contract/ Concession Agreement or within a reasonable period as decided by the executing agency / AE/ IE.

The Government has additionally taken the following initiatives for improvement of quality control systems in implementation of NHs works: -

- i. Adoption of Automated & Intelligent /Machine-aided Construction (AI-MC) in NH projects;
- ii. Operationalization of a centralized system called NHAI One App for Monitoring and rectification of highway defects which enables geo-tagging of defects along with photographs;
- iii. Analysis of High-Resolution Imagery collected from Drone Surveys in Drone Analytics Monitoring System (DAMS) integrated with Artificial Intelligence/ Machine Learning algorithms for periodic evaluation of progress and quality of ongoing NHs works from time to time;
- iv. Deployment of Mobile Quality Control Vans (MQCVs) equipped with Non-Destructive Testing Equipment on pilot basis in four States, namely in Gujarat, Rajasthan, Odisha and Karnataka, for diagnostic assessments of overall health and quality of works from time to time during project implementation phases;
- v. Deployment of Third Party Quality Auditors for independent quality audits of NH works on a case-to-case basis.

ANNEXURE REFERRED TO IN REPLY TO PART (a) TO (e) OF RAJYA SABHA UNSTARRED QUESTION NO. 3145 ANSWERED ON 20.08.2025 ASKED BY SHRI MALLIKARJUN KHARGE REGARDING DAMAGE TO PUBLIC INFRASTRUCTURE DUE TO SUBSTANDARD CONSTRUCTION

State/UT-wise details of damages sustained by National Highways (NHs) due to substandard works (including structures like Bridges, culverts etc.) during the last five years and current Financial Year-

State	S. No.	NH no.	Year of incident	Details of Major damages / defects	Action Taken
Arunachal Pradesh	1	NH-713A & NH-13	2024	RE wall Collapsed	Rectification of defective work initiated by the Contractor. Penalty of 5% of contract value imposed on Contractor.
Andhra Pradesh	2	NH-16	2024	Defects in the construction of RE wall.	Concessionaire commenced the rectification work based on recommendation /suggestion of RE wall Expert. Rs.10,99,235/- was recovered as damages from Concessionaire.
Bihar	3	NH-31	2023	Issues reported by CRRRI in quality of Concrete of superstructure in bridge at Km 264.946	Repair works taken up by Contractor as recommended in CRRRI report
Chhattisgarh	4	NH-130	2024	Cracks in Cement Concrete Panels	Action taken up for Panel Rectifications at the risk & cost of EPC Contractor.
	5	NH-130	2022	Crack in Cement Concrete Panels & RE Wall bulged at Km. 91, 96, 101, 102 & 106.	The EPC Contractor has commenced the rectification work at site.
Himachal Pradesh	6	NH-22 (New NH-05)	2022	Collapse of road stretch between km. 3.130 to 3.170 on the two-lane portion of the project highway (approach road to Tunnel) of Parwanoo-Solan section of NH 05.	Restoration work has been completed by EPC Contractor
Haryana	7	Delhi-Vadodara Expressway-NE-4	2024	Rutting	Authority has imposed damages amounting to Rs.48,61,243/- on the contractor for delayed maintenance; majority of the

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					ruttet portion has been rectified by Contractor.
	8	Delhi-Vadodara Expressway-NE-4	2024	Rutting	Authority has imposed damages amounting to Rs. 42,95,049/- on the contractor for delayed maintenance majority of the ruttet portion has been rectified by Contractor.
Gujarat	9	NH-754K	2025	Ruts, cracks and surface deformation/ Distress was observed recently after rains in June month 2025, severe rutting at some locations.	Penalty of ₹2.8 crore has been imposed on the Contractor along with a recommendation for debarment up to one year or until successful rectification, whichever is later.
Jharkhand	10	NH 75	2022	Cracked PQC panels	Performance Bank Guarantee of Rs 11.79 Crores encashed for non-rectification of defects
Karnataka	11	NH-63	2020	Cracks are developed in PQC for 8.30 km.	Original Contract Terminated. New EPC Contractor is implementing the Balance works.
	12	NH-63	2022	Cracks on PQC Pavement and widening of longitudinal joints on pavement	Contractor has initiated actions for rectification of damages.
Kerala	13	NH-66	2022 and 2025	Soil nailing collapsed incident occurred at Ch. 58+035 to Ch. 58+100 (RHS) on 16.06.2025 with no casualties.	NHA has suspended the Concessionaire and its promoter from future bidding for 01-month period or till Concessionaire initiates rectification of slope protection works. Debarment notice also issued to Concessionaire. Senior Bridge Engineer of AE removed from site.
	14	NH-66	2025	Unprotected soil slip in the cut section with debris deposition on carriageways.	Rectification work carried out and traffic restored with precautionary barricading in median portion.
	15	NH 66	2020	01 Bridge (4 girders collapsed)	Penalty of Rs. 1.00 Cr imposed on Contractor and Contractor debarred from participating in Tender for a

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					<p>period of 1 year. Penalty of Rs. 20.00 lakhs imposed on Authority's Engineer.</p> <p>2. Team Leader, Bridge Engineer of AE was terminated debarred for 2 years.</p> <p>3. Project Manager of Contractor terminated from project.</p>
	16	NH-66	2025	RE wall collapsed	Debarment of Contractor and Independent Engineering firm from participating in ongoing/future bidding for 01 month period or completion of investigation by the expert Committee whichever is later.
	17	NH-66	2025	Collapse of 4 Nos. Girders during Construction	NHAI, imposed penalty of Rs. 15.35 Lakhs. Bridge Engineer & Team Leader of AE were Terminated.
	18	NH-66	2025	Failure/Collapse of scaffolding of Minor Bridge (under construction) at Km.Ch. 497+370(RHS)	Penalty of Rs. 9.55 Cr imposed on Concessionaire
Maharashtra	19	NH-06 (New NH-53)	2022	Damages observed in Slab of Major Bridge at Ch.547.344	Structure was Audited by VNIT Nagpur. As per the recommendation of VNIT, Nagpur, Contractor has taken up reconstruction of slab.
	20	NH-66	2024	Panel cracking, poor riding quality, bumps, poor diversions etc.	Contractor has taken up rectification works.
	21	NH-753L	2020	Cracked panels	Contractor has initiated actions for rectification of damages. DLP period is extended by Six months.
	22	NH-752G	2021	Cracked panels	Contractor has initiated actions for rectification of damages.
	23	NH 548 C	2024	Cracked panels	The Performance BG of Contractor is forfeited. Process initiated for rectification of damages.
	24	NH-161A	2024	Cracked panels	Contractor has initiated actions for rectification of damages.

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	25	NH 753F	2024	Cracked panels	Contractor has initiated actions for rectification of damages.
	26	NH-752K	2021	Cracked panels	Contractor has executed the panel replacement / rectification works.
	27	NH 753	2022	Cracked panels	Contractor has initiated actions for rectification of damages.
	28	NH-17	2025	Depression & cracks in PQC	Contractor has initiated actions for rectification of damages.
	29	NH-66 (Old NH17)	2024	PQC cracks and settlement.	Contractor has replaced cracked panels.
	30	NH-66	2024	Full depth Cracks in PQC	Contractor has initiated actions for rectification of damages.
	31	NH-166G	2025	Cracks in PQC	Contractor has initiated actions for rectification of damages.
	32	NH 266	2024	Cracked panels	Rectification of damages taken up at risk and cost of Contractor.
	33	NH 753	2024	Post construction defects are observed in the Rigid Pavement i.e. formation of Longitudinal & Lateral cracks, Opening of Central Joints, Settlement of Panels etc.	IIT Bombay has been appointed for Technical Investigation of defects and suggestion of remedial measures.
Rajasthan	34	Delhi Vadodara Expressway NE-4	2024	Rutting & settlement	Penalty imposed on each contractor amounting to Rs. 50 Lakhs for non-rectification of defects in the stipulated time frame as per provision of contract agreement.
	35	Delhi Vadodara Expressway NE-4	2024		
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	37	Delhi Vadodara Expressway NE-4	2024		
	38	NH-754K	2024	Settlement at some locations observed	(i) Damage of Rs. 50.00 Lakhs imposed upon the Contractor. (ii) Two key personnel of

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					Authority Engineer team were terminated due to poor supervision.
	39	Delhi Vadodara Expressway NE-4	2024	Rutting & settlement of approach	Damages amounting to Rs. 1.06 Cr. imposed for delayed maintenance. Also, IIT Kharagpur has been engaged for detailed study for permanent rectification of defects.
	40	Delhi Vadodara Expressway NE-4	2024	Rutting, settlement of approach & bulging of RE wall	Damages amounting to Rs. 88.32 lakhs imposed for delayed maintenance. Bulging of RE wall has been rectified as per suggestions of CRRRI. Majority of the rutting has been rectified. Further, in addition to above, IIT Kharagpur has been engaged for detailed study for permanent rectification of defects.
	41	NH-754K	2024	Failure of the nose structure while launching of 83 mtr single span truss bridge	Penalty of Rs. 1.00 Cr. imposed and warning for debarment action for any future instances upon the Contractor was issued. Debarment of fabrication team and Designer team issued for the period of 02 years in NHAJ works. Penalty of Rs. 20 Lakhs and warning for debarment action for any future instances upon the Authority Engineer. Debarment of Senior bridge Engineer deployed by the Authority Engineer issued for a period of 2 years in NHAJ works.
	42	NH-148N	2024	Stretch is operational w.e.f. 30.11.2023 and at some locations the settlements observed in approaches of structure	EPC Contractor has rectified damages.

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	43	NH 65	2024	Post-completion, structural defects have been observed in the deck slab of the ROB due to honeycombing caused by poor workmanship.	Contract has been terminated. Debarment of contractor taken up. Bid for rectification works invited.
Telangana	44	NH-161	2022	At some locations Rutting and Bleeding was observed in the Project Highway during O&M Period	Penalty of Rs.134.784 Cr. imposed towards Breach of maintenance obligations.
Uttar Pradesh	45	Lucknow Ring Road	2024	Cracks in PQC Panel in length of 2.886 Km.	Contractor has initiated process for rectification of damages.
	46	NH-76	2020	Cracks in rigid pavement.	Defect Liability Period has been extended till the rectification of defects observed during DLP. Rectification work based on IQA report completed.
	47	NH-76	2020	Cracks in rigid pavement.	Defect Liability Period has been extended till the rectification of defects observed during DLP. Rectification work based on IQA report completed.
Uttar Pradesh & Uttarakhand	48	NH-74	2023	PQC panel cracks	Contractor has initiated process for rectification of damages.
Uttarakhand	49	NH-134 (OLD NH-94)	2023	Collapse at cavity in under construction Silkyara Tunnel.	Rectification measures taken up by the EPC contractors at its own cost. Actions as per the Investigation Committee Report initiated.
West Bengal	50	NH-32	2025	Cracks have developed in the newly constructed PQC.	i) Rectification works initiated by Contractor. Amount of Rs. 20.00 Lakh withheld from Contractor's bill. ii) Key personal of AE has been debarred for a period of one year.
	51	NH-6	2023	Cracks in PQC panels	Repaired at the Risk and Cost of EPC Contractor.

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Andaman & Nicobar Islands	52	NH-4	2024	Distress, sinking of pavement at various locations.	Rectification works completed.
	53	NH- 223 (New NH-4)	2024	Punching in Deck Slab (LHS) of the minor bridge across BD Nallah at Km 88+300 and other quality issues including bad workmanship.	The EPC contractor has carried out the necessary rectifications at their own expense including replacement of slab as recommended by CRRRI-CSIR report.
