GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 6068
TO BE ANSWERED ON 01.04.2026

FUNDS FOR RAILWAY SAFETY

6068. SHRI NAVEEN JINDAL:

Will the Minister of RAILWAYS be pleased to state:

(a) the details of allocation of funds for railway safety and the actual expenditure there against during the last five years, year-wise and in the ongoing fiscal year;

(b) the details of vacant posts as on date particularly in technical and safety-related roles (e.g., loco pilots) and measures taken to fill them up to ensure that staff is not overworked;

(c) the current status of safety infrastructure including track maintenance, signalling systems and modernisation of coaches in quantifiable terms; and

(d) the steps taken to enhance overall passenger safety including progress and timelines for the implementation of the 'Kavach' automatic train protection system across all railway zones in the country?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

(a), (c) & (d): Safety is accorded the highest priority on Indian Railways. As a consequence of various safety measures taken over the years, there has been a steep decline in the number of accidents.

Number of Consequential Train Accidents has reduced as shown in the table below:-

Year	Consequential Accidents
2014-15	135
2025-26 (upto 25.03.2026)	15 (89% lesser)

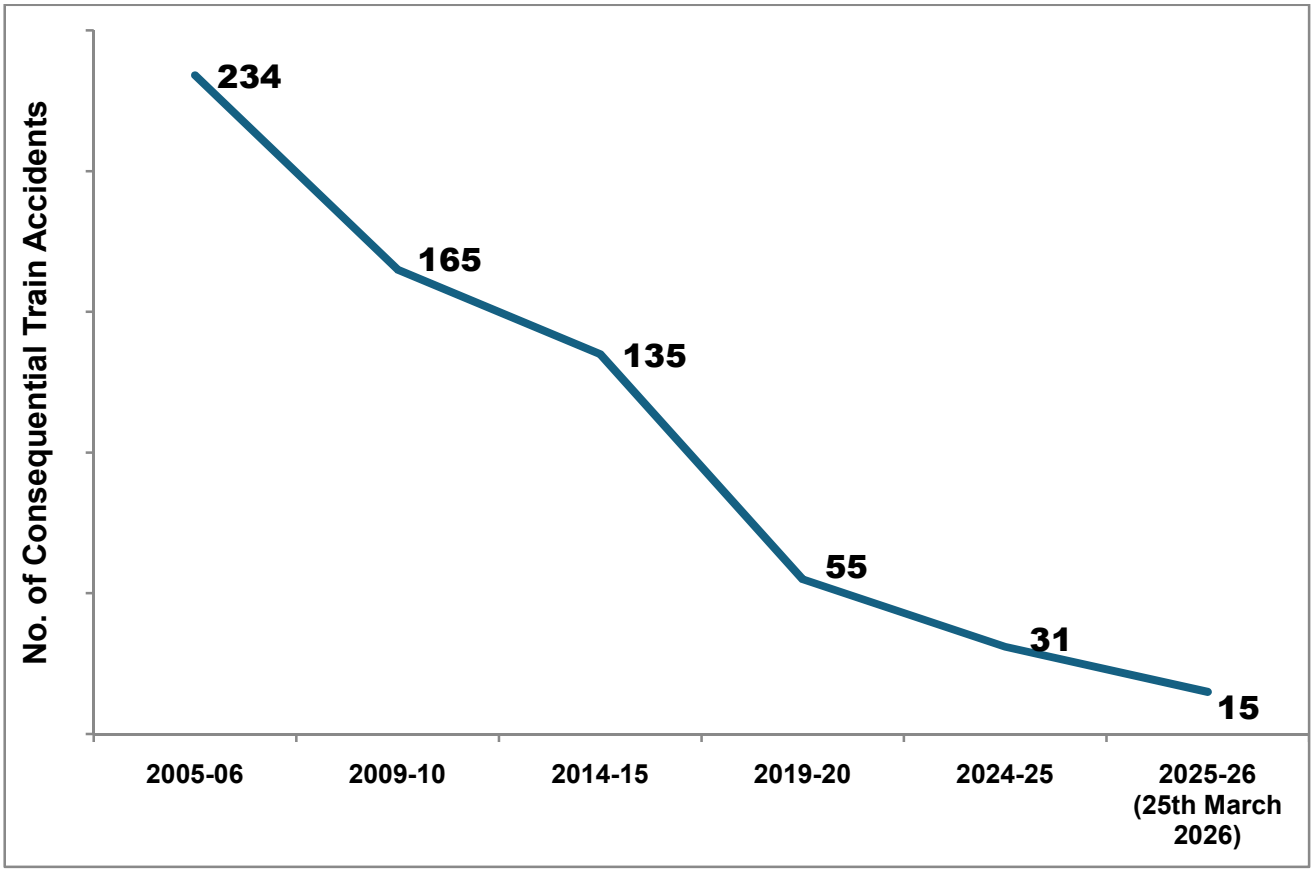
Another important index showing improvement in safety in train operations is Consequential Accident Index, the details of which are as under:-

Consequential Accident Index:-

Year	Accident Index
2014-15	0.11
2024-25	0.03 (73% lesser)
2025-26(upto February 2026)	0.01

This index measures number of consequential accidents as a ratio of total running kilometers of all trains.

$$\text{Accident Index} = \frac{\text{No. of consequential accidents}}{\text{No. of trains X million kilometers run}}$$



The various safety measures, including track maintenance, modernization of coaches and signalling system, taken to enhance safety in train operations are as under:-

1. On Indian Railways, the expenditure on Safety related activities has increased over the years as under:-

Year	Expenditure/Budget on Safety related activities (Rs. In Cr.)
2013-14	39,200
2022-23	87,336
2023-24	1,01,662
2024-25	1,14,022
2025-26	1,17,693
2026-27	1,20,389

2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,665 stations up to 28.02.2026 to reduce accidents due to human failure.

3. Interlocking of Level Crossing (LC) Gates has been provided at 10,153 Level Crossing Gates up to 28.02.2026 for enhancing safety at LC Gates.

4. Complete Track Circuiting of stations to enhance safety by verification of track occupancy by electrical means has been provided at 6,669 stations up to 28.02.2026.

5. Detailed instructions on issues related with safety of Signalling, e.g. mandatory correspondence check, alteration work protocol, preparation of completion drawing, etc. have been issued.

6. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.

7. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.

8. Retro-reflective sigma boards are provided on the mast which is located two OHE masts prior to the signals in electrified territories to alert the crew about the signal ahead when visibility is low due to foggy weather.

9. A GPS based Fog Safety Device (FSD) is provided to loco pilots in fog affected areas which enables loco pilots to know the distance of the approaching landmarks like signals, level crossing gates, etc.

10. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Prestressed Concrete Sleeper (PSC) Normal/Wide base sleepers with elastic fastening, fan shaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges is used while carrying out primary track renewals.

11. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.

12. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.

13. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.

14. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.

15. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).

16. Patrolling of railway tracks to look out for weld/rail fractures.

17. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.

18. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.

19. Web based online monitoring system of track assets viz. Track database and decision support system has been adopted to decide rationalized maintenance requirement and optimize inputs.

20. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.

21. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.

22. Replacement of conventional ICF design coaches with LHB design coaches is being done.

23. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.

24. Safety of Railway Bridges is ensured through regular inspection of Bridges. The requirement of repair/rehabilitation of Bridges is taken up based upon the conditions assessed during these inspections.

25. Indian Railways has displayed Statutory "Fire Notices" for widespread passenger information in all coaches. Fire posters are provided in every coach so as to educate and alert passengers regarding various Do's and Don'ts to prevent fire. These include messages regarding not carrying any inflammable material, explosives, prohibition of smoking inside the coaches, penalties etc.

26. Production Units are providing Fire detection and suppression system in newly manufactured Power Cars and Pantry Cars, Fire and Smoke detection system in newly manufactured coaches. Progressive fitment of the same in existing coaches is also underway by Zonal Railways in a phased manner.

27. Regular counselling and training of staff is undertaken.

28. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide Gazette notification dated 30.11.2023, wherein work of integrated maintenance/ repair/replacement of assets is planned up to 52 weeks in advance on rolling basis and executed as per plan.

The details of the Safety related works related to better maintenance practices, Technological improvements, better infrastructure and rolling stock etc. undertaken by Railways are tabulated below:-

S.N.	Item	2004-05 to 2013-14	2014-15 to 2024-25	2014-25 Vs. 2004-14
	Technological Improvements			
1.	Use of high-quality rails (60 Kg) (Km)	57,450 Km	1.43 Lakh Km	More than 2 times
2.	Longer Rail Panels (260m) (Km)	9,917 Km	77,522 Km	Nearly 8 times
3.	Electronic Interlocking (Stations)	837 Stations	3,691 Stations	More than 4 times
4.	Fog Pass Safety	As on	As on	288 times

	Devices (Nos.)	31.03.14: 90 Nos.	31.03.25: 25,939 Nos.	
5.	Thick Web Switches (Nos.)	Nil	28,301 Nos.	
	Better Maintenance Practices			
1.	Primary Rail Renewal (Track Km)	32,260 Km	49,941 Km	1.5 times
2.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 Lakh	2 Crore	More than 2 times
3.	Weld failures (Nos.)	In 2013-14: 3699 Nos.	In 2024-25: 370 Nos.	90% reduction
4.	Rail fractures (Nos.)	In 2013-14: 2548 Nos.	In 2024-25: 289 Nos.	More than 88%reduction
	Better Infrastructure and Rolling Stock			
1.	New Track KM added (Track Km)	14,985 Km	34,428 Km	More than 2 times
2.	Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)	4,148 Nos.	13,808 Nos.	More than 3 times
3.	Unmanned Level crossings (Nos.) on BG	As on 31.03.14: 8,948	As on 31.03.24:Nil (All eliminated by 31.01.19)	Removed
4.	Manufacture of LHB Coaches (Nos.)	2,337 Nos.	42,677	More than 18 times

Strengthening, upgradation, modernisation and improvement of Signalling infrastructure is a continuous and ongoing process over Indian Railways. Indian Railway is continuously modernizing current infrastructure of its signalling system as under:

1. **Electrical/Electronic Interlocking Systems with centralized operation points and signals in place of old mechanical signalling have been provided at 6665 stations as on 28.02.2026, out of which Electronic Interlocking have been provided at 3870 stations.**
2. **Interlocking of Level Crossing Gates (LC) has been provided at 10153 Level Crossing Gates upto 28.02.2026 for enhancing safety at LC Gate.**

3. **Complete Track Circuiting of stations to enhance safety by verification of track occupancy by electrical means has been provided at 6,665 stations up to 28.02.2026.**
4. **Axle counters for automatic clearance of Block Section, BPAC (Block Proving Axle Counter) are provided to ensure complete arrival of train without manual intervention before granting line clear to receive next train and to reduce human element. These systems have been provided on 6149 Block Sections up to 28.02.2026.**
5. **Detailed instructions on issues related with safety of Signalling, e.g. mandatory correspondence check, alteration work protocol, preparation of completion drawing, etc. have been issued.**
6. **System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.**
7. **Rolling block system for maintenance of assets has been introduced to increase their reliability.**
8. **Regular inspection and maintenance of all railway signalling assets is carried out as per laid down norms to ensure safe operation of trains. These are regularly monitored through designated officials in divisions across zonal railways.**
9. **Staff are regularly counselled and trained.**

<u>Kavach Implementation</u>

1. **Kavach is an indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order (SIL-4).**
2. **Kavach aids the Loco Pilot in running of trains within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also helps the trains to run safely during inclement weather.**
3. **The first field trials on the passenger trains were started in February 2016. Based on the experience gained and Independent Safety Assessment of the system by Independent Safety Assessor (ISA), three firms were approved in 2018-19, for supply of Kavach Ver 3.2.**
4. **Kavach was adopted as National ATP system in July, 2020.**
5. **Implementation of Kavach System involves following Key Activities:**
   a. **Installation of Station Kavach at each and every station, block section.**

b. Installation of RFID Tags throughout the track length.

c. Installation of telecom Towers throughout the section.

d. Laying of Optical Fibre Cable along the track.

e. Provision of Loco Kavach on each and every Locomotive running on Indian Railways.

6. Based on deployment of Kavach version 3.2 on 1465 RKm on South Central Railway and experience gained, further improvements were made. Finally, Kavach specification version 4.0 was approved by RDSO on 16.07.2024.

7. Kavach version 4.0 covers all the major features required for the diverse railway network. This is a significant milestone in safety for Indian Railways. Within a short period, IR has developed, tested and started deploying Automatic Train Protection System.

8. Major improvement in Version 4.0 includes increased Location Accuracy, Improved Information of Signal Aspects in bigger yards, Station to Station Kavach interface on OFC and Direct Interface to existing Electronic Interlocking System. With these improvements, Kavach Ver.4.0. is planned for large scale deployment over Indian Railways.

9. After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on 1638 Route Kilometres, covering the high density Delhi- Mumbai and Delhi-Howrah routes as below:

SN	Section	Progress (Route Km)
(1)	Delhi-Mumbai route:	
i	Junction cabin – Palwal – Mathura –Nagda section	667
ii	Vadodara – Ahmedabad section	96
iii	Vadodara – Virar section	336
(2)	Delhi – Howrah route:	
i	Gaya Sarmatanr section	93
ii	Chota Ambana - Bardhaman – Howrah section	260
iii	Subedarganj-Kanpur	186

10. Track side Kavach implementation work has been taken up on 24,427 RKM covering all GQ, GD, HDN and identified sections of Indian Railways.

11. Progress of key items of Kavach on High density routes including Delhi– Mumbai & Delhi– Howrah corridors as on 25.03.26 are as under:

SN	Item	Progress
i	Laying of Optical Fibre Cable	8923 Km
ii	Installation of Telecom Towers	1184 nos
iii	Station Data Centre	767 station
iv	Installation of Track side equipment	7165 RKm
v	Provision of Kavach in Loco	4277 nos

12. In addition, work for installation of Kavach in 8979 Locomotives and 1200 EMU/MEMU has been taken up.

13. Specialized training programmes on Kavach are being conducted at centralized training institutes of Indian Railways to impart training to all concerned officials. By now more than 61,758 technicians, operators and engineers have been trained on Kavach technology. This includes about 52,317 Loco Pilots & Assistant Loco Pilots. Courses have been designed in collaboration with IRISET.

(b): Recruitment:

Loco Pilots are important members of Indian Railway family who play pivotal role for moving passenger and goods traffic in safe and efficient manner. Indian Railways is committed to ensure proper working conditions for loco pilots. Indian Railways recruit Assistant Loco Pilots on a regular basis considering the vacancy position. Keeping in view train operation and retirement of staff, new positions are opened up for recruitment.

The details of filling up vacancies of Assistant Loco Pilots are as follow:

Year	Details regarding recruitment for the post of Assistant Loco Pilots
2024	18,799 vacancies were notified. Selection process already completed and 15,873 candidates empanelled till date.
2025	9,970 vacancies were notified; First stage Computer Based Tests (CBTs) have been completed.
2026	11,127 vacancies as per Annual Calendar 2026 have been notified in March 2026.

Recruitment done in Indian Railways during 2004-05 to 2013-14 vis-à-vis during 2014-15 to 2025-26 is given as under: -

Period	Recruitments
2004-2005 to 2013-2014	4.11 lakh
2014-2015 to 2024-2025	5.08 lakh
2025-26 - till date	43,230

Occurrence and filling up of vacancies are continuous processes on Indian Railways considering its size, spatial distribution and criticality of operation. Adequate and suitable manpower is provided to cater to the regular operations, changes in technology, mechanisations and innovative practices. The vacancies are filled up primarily by placement of indents by Railways with Recruitment agencies as per operational and technological requirements.

The RRB examinations are quite technical in nature entailing large scale mobilization of men and resources and training of manpower. Railway overcame all these challenges and successfully conducted the recruitment in a transparent manner following all laid down guidelines. No instance of paper leakage or similar malpractice has occurred during the entire process.

Further, as system improvement, the Ministry of Railways has introduced a system of publishing the Annual Calendar from 2024 for recruitment to various categories of Group 'C' posts. The introduction of the Annual Calendar is benefitting the aspirants in the following manner:

- **More opportunities for candidates;**
- **Opportunities to those becoming eligible every year;**
- **Certainty of exams;**
- **Faster Recruitment process, Training and Appointments**

Presently, recruitment against 1,54,213 vacancies of non-gazetted personnel has been taken up on Indian Railways as per Annual Calendar 2024, 2025 and 2026.

During January to December 2024, ten Centralized Employment Notifications (CENs) for 92,116 vacancies were notified for filling up of posts of Assistant Loco Pilots (ALPs), Technicians, Sub-Inspectors, Constables in Railway Protection Force (RPF), Junior Engineers (JEs)/ Depot Material Superintendent (DMS)/ Chemical & Metallurgical Assistant (CMA), Paramedical Categories, Non-Technical Popular Categories (Graduate), Non-Technical Popular Categories (Under-Graduate), Ministerial & Isolated Categories and Level-1 categories such as Assistants, Track Maintainers and Pointsman.

First Stage/Single stage Computer Based Tests (CBTs) for 92,116 posts have been completed. Details are as under: -

Exam	Candidates	Cities	Languages
1st Stage CBT for the post of ALP (18,799 vacancies)	18,40,347	156	15
CBT for the post of Technician (14,298 vacancies)	26,99,892	139	15
1st Stage CBT for the post of JE/DMS/CMA (7,951 vacancies)	11,01,266	146	15
CBT for the post of RPF-SI (452 vacancies)	15,35,635	143	15
CBT for the post of RPF-Constable (4,208 vacancies)	45,30,288	147	15
CBT for Paramedical Categories (1,376 vacancies)	7,08,321	143	15
1st Stage CBT for Non-Technical Popular Categories (Graduate) (8,113 vacancies)	58,41,774	141	15
1st Stage CBT for Non-Technical Popular Categories (Under Graduate) (3,445 vacancies)	63,27,473	157	15
CBT for Ministerial & Isolated categories (1,036 vacancies)	4,46,013	139	15
CBT for level-1 posts (32438 vacancies)	1,08,28,261	152	15
Total Candidates	3,58,59,270		

2nd stage CBTs for the posts of ALP, JE/DMS/CMA and Non-Technical Popular Categories (Graduate & Under-Graduate) have also been completed. Details are as under: -

Exam	Candidates	Cities	Languages
2nd Stage CBT for the post of ALP (18,799 vacancies)	2,66,363	112	15
2nd Stage CBT for the post of JE/DMS/CMA (7,951 vacancies)	1,17,339	118	15
2nd Stage CBT for Non-Technical Popular Categories (Graduate) (8,113 vacancies)	1,21,931	129	15
2nd Stage CBT for Non-Technical Popular Categories (Under-Graduate) (3,445 vacancies)	51,978	79	15
Total Candidates	5,57,611		

Computer Based Aptitude Test (CBAT) for the post of ALP and Non-Technical Popular Categories (Graduate) and Computer based Skill Test for the post of Non-Technical Popular Categories (Graduate and Under Graduate) and Ministerial & Isolated Categories have also been completed. Details are as under: -

Exam	Candidates	Cities	Languages
CBAT for the post of ALP	1,32,044	84	2
Translation Test for Ministerial and Isolated Categories	1,233	8	2
CBAT for the post of Non-Technical Popular Categories (Graduate)	13,616	38	2
Computer Based Typing Skill Test (CBTST) for the post of Non-Technical Popular Categories (Graduate-level)	30,341	58	2
Computer Based Typing Skill Test (CBTST) for the post of Non-Technical Popular Categories (Under-Graduate-level)	13,145	44	2
Total Candidates	1,90,379		

Panels for more than 43,000 candidates for various posts including the posts of Technicians, Junior Engineers, Paramedical Categories, Sub-Inspectors & Constable (RPF) and Assistant Loco Pilots have been finalised. Majority of them are in safety categories.

In addition, as per Annual Calendar for the year 2025, nine Centralized Employment Notifications (CENs) for 50,970 vacancies have also been issued. Details are as under:

CEN No.	Post Name	No. of Vacancies notified	Month of Notification
01/2025	Assistant Loco Pilots	9,970	March 2025
02/2025	Technician	6,238	June 2025
03/2025	Paramedical categories	434	July 2025
04/2025	Section Controller	368	August 2025
05/2025	Junior Engineer (JE)/ Depot Material Superintendent/ Chemical & Metallurgical Assistant	2,585	October 2025
06/2025	Non-Technical Popular Categories (Graduate)	5,810	October 2025
07/2025	Non-Technical Popular Categories (Under-Graduate)	3,058	October 2025
08/2025	Isolated Categories	312	December 2025
09/2025	Level-1 posts	22,195	December 2025
Total		50,970	

First stage/Single stage Computer Based Tests (CBTs) for 19,595 posts have been completed. Details are as under: -

Exam	Candidates	Cities	Languages
1st Stage CBT for the post of ALP (9970 vacancies)	10,03,719	141	15
CBT for the post of Section Controller (368 vacancies)	4,33,748	131	15
1st Stage CBT for the post of JE/DMS/CMA (2585 vacancies)	5,74,351	133	15
CBT for the post of Technician (6238 vacancies)	8,41,525	117	15
CBT for the post of Paramedical Categories (434 vacancies)	3,19,396	106	15
Total Candidates	31,72,739		

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