## GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

# RAJYA SABHA UNSTARRED QUESTION NO. 2359 ANSWERED ON 08.08.2025

#### MEASURES TO PREVENT DEATHS IN MUMBAI SUBURBAN RAILWAY NETWORK

## 2359 SMT. RANJEET RANJAN:

Will the Minister of RAILWAYS be pleased to state:

- (a) the number of deaths of passengers reported on the Mumbai Suburban Railway system each year from 2022 to 2024, details thereof, line-wise and station-wise;
- (b) the main causes of these deaths, including deaths due to overcrowding, falling from trains, track crossing, and the number of deaths under each category; and
- (c) the specific measures taken to prevent these recurring deaths on the Mumbai Suburban Railway, and reasons as to why fatalities continue to remain high despite previous interventions?

#### **ANSWER**

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

## (SHRI ASHWINI VAISHNAW)

(a) to (c): 'Police' and 'Public Order' are State subjects under the Seventh Schedule to the Constitution of India and therefore, State Governments are responsible for prevention, detection, registration, and investigation of crime and maintenance of law and order on Railways through their law enforcement agencies viz. Government Railway Police (GRP)/District Police. The cases of unnatural death are registered by GRP/District Police and investigated. Railway Protection Force (RPF) supplements the efforts of GRP/ District Police to provide better protection and security to railway property, passenger area and passengers and for matters connected therewith.

There is decrease in the number of incidents reported of unnatural deaths in Mumbai Suburban Railway network during the year 2024 as compared to 2023.

As per information received from GRP, 1764, 1880 & 1692 incidents of unnatural deaths in block sections and 662, 656 & 781 incidents of unnatural deaths at stations have been registered in the year 2022, 2023 & 2024 respectively. These figure include the deaths due to falling from trains, trespassing (crossing track unauthorisedly), and various other reasons such as Pole hitting etc.

The introduction of AC local trains equipped with automatic doors in Mumbai has been a welcome initiative to enhance commuters' safety and reduce incidents related to overcrowding. The automatic doors prevent passengers from hanging on footboards or boarding moving trains which is a major cause of fatal accidents. These doors remain closed while the train is in motion and open only at stations when the train is stationary, thereby significantly reducing the risk of falls.

To improve the infrastructure in Mumbai suburban railway services, following projects have been sanctioned:

S.No.	Name of Project	Length	Cost
		(km)	(Rs. in crore)
1	CSMT-Kurla 5 <sup>th</sup> & 6 <sup>th</sup> Line (MUTP-II)	17.5	891
2	Mumbai Central-Borivali 6 <sup>th</sup> Line (MUTP-II)	30	919
3	Extension of Harbour Line from Goregaon-Borivali (MUTP-IIIA)	7	826
4	Borivali-Virar 5 <sup>th</sup> & 6 <sup>th</sup> Line (MUTP-IIIA)	26	2184
5	Virar-Dahanu Road 3 <sup>rd</sup> & 4 <sup>th</sup> Line (MUTP-III)	64	3587
6	Panvel-Karjat suburban corridor (MUTP-III)	29.6	2782
7	Airoli-Kalwa (elevated) suburban corridor link (MUTP-III)	3.3	476
8	Kalyan-Asangaon 4th Line between (MUTP-IIIA)	32	1759
9	Kalyan-Badlapur 3rd & 4th Line (MUTP-IIIA)	14	1510
10	Kalyan-Kasara 3 <sup>rd</sup> Line	67	793
11	Naigaon-Juichandra double chord Line	6	176
12	Nilaje-Kopar double chord Line	5	338

Ministry of Railways has launched Amrit Bharat Station Scheme. It envisages development of stations on a continuous basis with a long-term approach. It involves preparation of master plans and their implementation in phases to improve the amenities at the stations like improvement of station access,

circulating areas, waiting halls, toilets, lift/escalators as necessary, platform surfacing and cover over platform, cleanliness, free Wi-Fi, kiosks for local products through schemes like 'One Station One Product', better passenger information systems, executive lounges, nominated spaces for business meetings, landscaping, etc. keeping in view the necessity at each station.

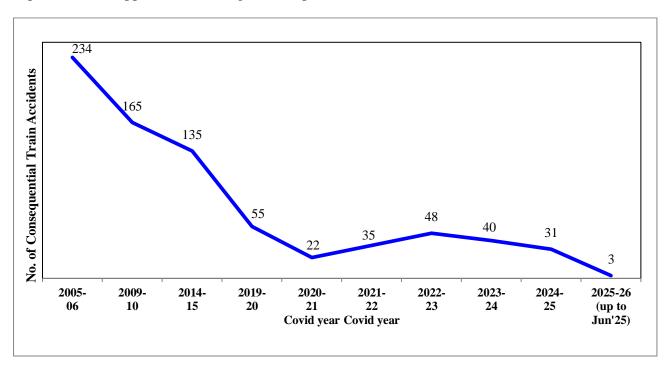
The scheme also envisages improvement of building, integrating the station with both sides of the city, multimodal integration, amenities for Divyangjans, sustainable and environment friendly solutions, provision of ballastless tracks, etc. as per necessity, phasing and feasibility and creation of city centre at the station in the long term.

So far, 1337 stations including 132 stations in the state of Maharashtra have been identified for development under this scheme.

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. Consequential Train Accidents have reduced from 135 in 2014-15 to 31 in 2024-25 as shown in the graph below.

It may be noted that the Consequential Train Accidents during the period 2004-14 was 1711 (average 171 per annum), which has declined to 31 in 2024-25 and further to 3 in 2025-26 (upto June).

Another important index showing improved safety in train operations is Accidents Per Million Train Kilometer (APMTKM) which has reduced from 0.11 in 2014-15 to 0.03 in 2024-25, indicating an improvement of approx. 73% during the said period.



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

Expenditure on Safety related activities (Rs. in Cr.)					
	2013-14	2022-23	2023-24	RE	BE
	(Act.)	(Act.)	(Act.)	2024-25	2025-26
Maintenance of Permanent Way & Works	9,172	18,115	20,322	21,800	23,316
Maintenance of Motive Power and Rolling Stock	14,796	27,086	30,864	31,540	30,666
Maintenance of Machines	5,406	9,828	10,772	12,112	12,880
Road Safety LCs and ROBs/ RUBs	1,986	5,347	6,662	8,184	7,706
Track Renewals	4,985	16,326	17,850	22,669	22,800
Bridge Works	390	1,050	1,907	2,130	2,169
Signal & Telecom Works	905	2,456	3,751	6,006	6,800
Workshops Incl. PUs and Misc. expenditure on Safety	1,823	7,119	9,523	9,581	10,134
Total	39,463	87,327	1,01,651	1,14,022	1,16,470

- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,635 stations up to 30.06.2025 to reduce accident due to human failure.
- 3. Interlocking of Level Crossing (LC) Gates has been provided at 11,096 level Crossing Gates up to 30.06.2025 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 6,640 stations up to 30.06.2025.
- 5. Kavach is a highly technology intensive system, which requires safety certification of highest order. Kavach was adopted as a National ATP system in July 2020. Kavach is provided progressively in phased manner. Kavach has already been deployed on 1548 RKm on South Central Railway and North Central Railway. Presently, the work is in progress on Delhi-Mumbai and Delhi-Howrah corridors (approximately 3000 RKm). Kavach has been successfully commissioned over Kota–Mathura section (Delhi Mumbai route) covering 324 Route Kilometers on 30.07.2025.
- 6. 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.

- 7. System of disconnection and reconnection for S&T equipment as per protocol has been reemphasized.
- 8. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.
- 13. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.
- 14. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.
- 15. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.
- Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
- 17. Patrolling of railway tracks to look out for weld/rail fractures.
- 18. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
- 19. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.
- 20. 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.
- 21. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.

- 22. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.
- 23. Replacement of conventional ICF design coaches with LHB design coaches is being done.
- 24. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
- 25. 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.
- 26. 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.
- 27. 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.
- 28. Regular counselling and training of staff is undertaken.
- 29. 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 (till March 25)	2014-25 Vs. 2004-14
	Technological improvements			
1.	Use of high-quality rails	57,450 Km	1.43 Lakh Km	More than 2 times
	(60 Kg) (Km)			
2.	Longer Rail Panels (260m)	9,917 Km	77,522 Km	Nearly 8 times
	(Km)			
3.	Electronic Interlocking	837 Stations	3,691 Stations	More than 4 times
	(Stations)			
4.	Fog Pass Safety Devices	As on 31.03.14:	As on 31.03.25:	288 times
	(Nos.)	90 Nos.	25,939	

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	14,985 Nos.	34,428 Km	More than 2 times
	(Track km)			
2.	Flyovers (RoBs)/	4,148 Nos.	13,808 Nos.	More than 3 times
	Underpasses (RUBs) (Nos.)			
3.	Unmanned Level crossings	As on	As on 31.03.24:	Removed
	(nos.) on BG	31.03.14:	Nil	
		8948	(All eliminated by	
			31.01.19)	
4.	Manufacture of LHB	2,337 Nos.	42,677	More than 18 times
	Coaches (Nos.)			

The following steps are also being taken for Commuters safety in Mumbai Suburban Railway network:-

- 1. Various awareness and sensitization campaigns are conducted by railways using social media, digital & print media.
- Frequent announcement is made at railway stations using Loud Hailers as well as through Public Announcement systems cautioning passengers against crossing tracks, boarding moving trains and travelling on footboards.
- 3. Short videos for passenger awareness are also displayed in Rail Display Network at railway station.
- 4. Flex boards in both Hindi& Marathi languages have been installed at vulnerable locations of trespassing to caution the passengers/public against crossing railway tracks.
- 5. RPF staff is deployed at vulnerable locations to prevent trespassing and trespassers are prosecuted.
- 6. Legal action is taken against persons travelling on train rooftops, footboards and other restricted places of the train formation.