GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
STARRED QUESTION NO.444
TO BE ANSWERED ON 02.04.2025

CAPACITY AUGMENTATION PROJECTS IN RAILWAYS

***444. SHRI ARUN BHARTI:**

Will the Minister of RAILWAYS be pleased to state:

(a) the details of capacity augmentation projects undertaken by the Railways during the current fiscal to enhance safety and speed;

(b) the budget allocated for these projects and the percentage of funds utilised so far;

(c) the progress made in implementing cutting-edge projects under the 'Viksit Bharat' vision;

(d) the measures taken/being taken by the Government to integrate advanced technologies for passenger safety, comfort and convenience particularly in Jamui Parliamentary Constituency; and

(e) the future plans of Railways for expanding capacity and improving passenger services in the next fiscal year including timelines for their implementation?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)

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

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION NO. 444 TO BE ANSWERED ON 02.04.2025

(a) to (e): Railway projects are surveyed/ sanctioned/executed Zonal Railway wise and not State-wise/ Parliamentary constituency wise as the Railway projects may span across State boundaries.

As on 01.04.2024, across Indian Railways, 488 Railway infrastructure projects (187 New Line, 40 Gauge Conversion and 261 Doubling) of total length 44,488 Km, costing approx. ₹7.44 lakh crore are in planning/approval/construction stage, out of which, 12,045 Km length has been commissioned and an expenditure of approx. ₹2.92 lakh crore has been incurred upto March, 2024. The summary is as under:-

Category	No of Projects	Total Length NL/GC/DL (in Km)	Length Commissioned till Mar'24 (in Km)	Total Exp upto Mar'24 (₹ In Crore)
New Lines	187	20199	2855	160022
Gauge Conversion	40	4719	2972	18706
Doubling / Multitracking	261	19570	6218	113742
Total	488	44,488	12,045	2,92,470

The details of commissioning / laying of new track across Indian Railways is given below:-

Period	New Track Commissioned	Average Commissioning of new tracks
2009-14	7,599 Km	4.2 Km/day
2014-24	31,180 Km	8.54 Km/day (more than 2 times)

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Zonal Railway wise details of Railway projects including cost, expenditure and outlay are made available in public domain on Indian Railway's website.

During FY 2019-20 to FY 2023-24 and in FY 2024-25, 245 projects (46 New Line, 18 Gauge Conversion and 181 Doubling) of total length 9,605 Km costing approx. ₹1,75,000 Crore have been sanctioned across Indian Railways. This includes 63 projects (19 New lines and 44 Doubling) of total length 2,803 Km costing approx. ₹72,740 Crore sanctioned in FY 2024-25.

Furthermore, during this period 1033 surveys (313 New Line, 13 Gauge Conversion & 707 Doubling) of total length 72,818 Km have been sanctioned.

Railway Infrastructure Projects falling fully/partly in the State of Bihar are covered under East Central Railway (ECR), Eastern Railway (ER), North Eastern Railway (NER) and Northeast Frontier Railway (NFR) Zones of Indian Railways. Zonal Railway wise details of Railway projects including cost, expenditure and outlay are made available in public domain.

BIHAR:-

As on 01.04.2024, 55 projects (31 New Lines, 02 Gauge Conversions and 22 Doubling), of total length of 5,064 Km, costing ₹79,356 crore falling fully/partly in the State of Bihar including Jamui are in planning/approval/construction stage, out of which, 1194 km length

has been commissioned and an expenditure of ₹26,983 crore has been incurred upto March' 2024. The summary is as under:-

Category	No. of projects	Total Length (in Km)	Length Commissioned (in Km)	Exp. upto March 2024 (₹ in crore)
New lines	31	2712	464	13629
Gauge Conversion	2	348	288	1520
Doubling / Multitracking	22	2005	442	11834
Total	55	5,065	1,194	26,983

Budget allocation for Infrastructure projects and safety works, falling fully/ partly in Bihar is as under:

Period	Outlay
2009-14	₹1,132 crore/year
2025-26	₹ 10,066 crore (Nearly 9 times)

The details of commissioning / laying of new track falling fully/partly in the State of Bihar during 2009-14 and 2014-24 is as under:-

Period	New Track Commissioned	Average Commissioning of new tracks
2009-14	318 Km	63.6 Km/Year
2014-24	1,669 Km	166.9 Km/Year (Nearly 3 times)

Jamui is existing station on Indian Railways network between Kiul and Jhajha on Delhi- Howrah route. To further improve rail connectivity to Jamui region, following projects have been taken up:

SN	Name of Project	Length(km)	Cost (₹ in crore)
1	Jhajha-Batia New Line	20	496
2	Byepass Line at Saraigarh between Baijnathpur-Andoli & Jhajha	5	79

During FY 2021-22, 2022-23, 2023-24 and 2024-25, 77 No. Surveys (13 New line and 64 Doubling/multi tracking) of total length 4,200 km falling fully/partly in the State of Bihar have been sanctioned which include following surveys falling fully/partly in Jamui:-

(i) Sitarampur to Jhajha (4th Line) – 154 km

(ii) Sitarampur to Kiul via Jhajha (3rd line) - 199 km.

VIKSIT BHARAT

In the quest to Viksit Bharat 2047, Indian Railways is continuing its transformative journey paving the way for a new era of modernization and progress. With a strong focus on meeting world class travel experience, boosting freight efficiency and adopting advanced technologies, the Railways has solidified its role as a catalyst for national growth. Modern stations, state-of-the-art trains, and innovative safety systems are reshaping the landscape of rail travel. Committed to sustainability, the Railways is steadily moving towards greener operations while driving economic development through extensive infrastructure upgrades and capacity building. Various efforts taken to make 'Viksit Bharat' by 2047 in the railway sector are as under:

(i) The Amrit Bharat Station Scheme has been launched for development of Railway stations on Indian Railways. The scheme 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, 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. Presently, 1337 railway stations have been taken for redevelopment under the scheme.

(ii) To boost efficiency on railway terminals, "Gati Shakti Cargo Terminal (GCT)" policy has been launched in 2022. So far, 97 GCTs have already been commissioned.

(iii) In order to get the benefits of enhancement in transport capacity, faster transit time and higher average speed, increased movement of double stack container trains, better rail connectivity to industries and saving of CO2 emission, Indian Railways has taken up construction of two dedicated freight corridors (DFC) viz Eastern Dedicated Freight Corridor (EDFC) & Western Dedicated Freight Corridor (WDFC). A total of 2,741 km out of 2,843 km of the corridors has been commissioned so far.

(iv) Mumbai - Ahmedabad High Speed Rail (MAHSR) Project has been undertaken which passes through the States of Gujarat, Maharashtra and the Union Territory of Dadra & Nagar Haveli. The project length is 508 Km with 12 stations planned at Mumbai, Thane, Virar, Boisar, Vapi, Billimora, Surat, Bharuch, Vadodara, Anand, Ahmedabad and Sabarmati.

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(v) Indian Railways has achieved about 98% electrification of its Broad Gauge network. Besides environmental sustainability and reducing carbon footprints, railway electrification would also contribute to overall transportation efficiency, reduction in cost, saving in oil imports and foreign exchange.

(vi) Installation of modern Signaling systems & development and commissioning of its own Automatic Train Protection System, the "Kavach", for enhancing safety of running trains have also been taken up.

Modernization of railway infrastructure and improving safety is a continuous and ongoing process. Safety is accorded the highest priority on Indian Railways. The various safety measures 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:

Expenditure on Safety related activities (₹ in Cr.)					
	2013-14 (Act.)	2022-23 (Act.)	2023-24 (Act.)	RE 2024-25	BE 2025-26
Maintenance of Permanent Way & Works	9172	18,115	20,322	21,800	23,316
Maintenance of Motive Power and Rolling Stock	14796	27,086	30,864	31,540	30,666

Maintenance of Machines	5406	9,828	10,772	12,112	12,880
Road Safety LCs and ROBs/ RUBs	1986	5,347	6,662	8,184	7,706
Track Renewals	4985	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	1823	7,119	9,523	9,581	10,134
Total	39463	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 6,623 stations up to 28.02.2025 to eliminate accident due to human failure.

3. Interlocking of Level Crossing (LC) Gates has been provided at 11,089 Level Crossing Gates up to 28.02.2025 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 6,631 stations up to 28.02.2025.

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 Route Km). Track side works on these routes have been completed on about 2066 Rkm. Regular trials are being done on these sections.

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 re-emphasized.

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.

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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.

16. 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.

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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.

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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:-

SN	Item	2004-05 to 2013-14	2014-15 to 2024-25 (till Jan 25)	2014-25 Vs. 2004-14
	Technological improvements			
1	Use of high-quality rails (60 Kg) (Km)	57,450 km	1.4 lakh km	More than 2 times
2	Longer Rail Panels (260m) (Km)	9,917 km	76,000 km	More than 7 times
3	Electronic Interlocking (Stations)	837 stations	3,243 stations	4 times
4	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90 nos.	As on 31.01.25: 25,293	281 times
5	Thick Web Switches (Nos.)	Nil	27,079 nos.	
	Better maintenance practices			
1	Primary Rail Renewal (Track Km)	32,260 km	49,000 km	1.5 times
2	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 lakh	1.9 crore	More than 2 times
3	Weld failures (Nos.)	In 2013-14: 3699 nos.	In 2024-25: 301 nos.	92 % reduction
4	Rail fractures (Nos.)	In 2013-14: 2548 nos.	In 2024-25: 243 nos.	91% reduction
	Better infrastructure and Rolling stock			
1	New Track KM added (Track km)	14,985 nos.	34,000 km	More than 2 times
2	Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)	4,148 nos.	12,771 nos.	More than 3 times
3	Unmanned Level crossings (nos.) on BG	As on 31.03.14: 8948	As on 31.03.24: Nil (All eliminated by 31.01.19)	Removed
4	Manufacture of LHB Coaches (Nos.)	2,337 nos.	41,551	More than 17 times

Jamui and Simultala railway stations, located in Jamui parliamentary constituency in the state of Bihar, have been identified for development under Amrit Bharat Station Scheme. For development works at these stations, tenders have been awarded and works have been taken up. At Jamui station, works of construction of boundary wall and dismantling of old quarters have been completed and works of construction of new station building, improvement of circulating area, etc. have been taken up.

At Simultala station, works of construction of new station building on second entry side, waiting hall, toilets, extension of platform, improvement of platform surfacing, circulating area, parking area and provision of additional platform shelters have been completed and works for provision of improved signages and lighting have been taken up.

So far, 1337 stations have been identified for development under Amrit Bharat Station Scheme, out of which 98 railway stations including Jamui and Simultala stations are located in the state of Bihar. The names of stations identified for development under this scheme in the state of Bihar are as following:

State	No. of Amrit Stations	Names of Amrit Stations
Bihar	98	Anugraha Narayan Road, Ara, Arariya Court, Bakhtiyarpur, Banka, Banmankhi, BapudhamMotihari, Barahiya, Barauni, Barh,

State	No. of Amrit Stations	Names of Amrit Stations
		Barsoi Jn, Begusarai, Bettiah, Bhabua Road, Bhagalpur, Bhagwanpur, Bihar Sharif, Bihiya, Bikramganj, Buxar, Chakia, Chausa, Chhapra, Dalsingh Sarai, Darbhanga, Dauram Madhepura, Dehri On Sone, Dholi, Dighwara, Dumraon, Durgauti, Ekma, Fatuha, Gaya, Ghorasahan, Guraru, Hajipur Jn, Jamalpur, Jamui, Janakpur Road, Jaynagar, Jehanabad, Jhanjharpur, Kahalgaon, Karhagola Road, Katihar, Khagaria Jn, Kishanganj, Kudra, Labha, Laheria Sarai, Luckeesarai, Lakhminia, Madhubani, Maheshkhunt, Mairwa, Mansi Jn, Mashrakh, Mokama, Motipur, Munger, Muzaffarpur, Nabinagar Road, Narkatiaganj, Naugachia, Nawadah, Paharpur, Patliputra, Patna, Piro, Pirpainti, Rafiganj, Raghunathpur, Rajendra Nagar, Rajgir, Ram Dayalu Nagar, Raxaul, Sabaur, Sagauli, Saharsa, Sahibpur Kamal, Sakri, Salauna, Salmari, Samastipur, Sasaram, Shahpur Patoree, Shivanarayanpur, Simri Bakhtiyarpur, Simultala, Sitamarhi, Siwan, Sonpur Jn, Sultanganj, Supaul, Taregna, Thakurganj, Thawe

Amrit Bharat Station Scheme 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.

Provision/upgradation of amenities and development of stations on Indian Railways is a continuous and ongoing process and works in this regard are undertaken as per requirement, subject to inter-se priority and availability of funds. The priority for development/upgradation of stations is accorded to higher category of station over lower category of station while sanctioning and executing the works.

Development / upgradation of stations including under Amrit Bharat Station Scheme is generally funded under Plan Head-53 'Customer Amenities'. The details of allocation under Plan Head-53 are maintained Zonal Railway-wise and not work-wise or station-wise or State-wise. The state of Bihar is covered under four zones viz. Eastern Railway, East Central Railway, North Eastern Railway and Northeast Frontier Railway. For these zones, an allocation of ₹2,111 Crores (Revised Estimate) has been made for the financial year 2024-25 under Plan Head-53.

CCTV system has been provided at Jamui and at Jhajha Railway station for passenger safety. Passenger Amenities i.e. Wi-fi, Public Announcement system has been provided at all the five stations i.e. Jamui, Jhajha, Girdhaur, Chaura and Dadpur of Jamui Parliamentary constituency. Train Indication Boards & Coach Indication Boards are available at Jamui and Jhajha railway stations for comfort & convenience of passengers. Hand held Metal Detector (HHMD) have been provided at Jhajha Railway station.

Indian Railways (IR), operates various types of regular time-tabled trains e.g. suburban, short distance passenger trains, long distance/Mail/Express/Superfast trains with different composition catering to different segments of passengers. Further, in its consistent effort to augment its carrying capacity, IR introduces new services, extends and increases the frequencies and also attaches coaches in existing services. IR also operates Special trains to cater to the extra rush of passengers during festive season, vacations, or for destinations of tourist value to facilitate tourism and pilgrimage. These are ongoing processes on IR subject to traffic justification, operational feasibility, resource availability, etc.

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