

## **NEWSLETTER** CONSTRUCTION INFRASTRUCTURE UPDATES

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Delhi-Dehradun Expressway: First Phase Of Rs 13,000 Crore Mega Project Completed, Inauguration Expected Soon PTI, March 12, 2025

In a significant milestone, the first phase of the Delhi-Dehradun expressway has been completed, NewsX reported citing sources from the National Highway Authority of India (NHAI).

While the official date for its inauguration has not been announced, reports suggest that the stretch could be opened for traffic within this month.

Once operational, the expressway will cut down travel time between Delhi and Dehradun from five to six hours to just a little over 2 hours.

The phase-1 32-km section from Akshardham to Baghpat, which currently takes over an hour to traverse, will now be covered in just 25 to 30 minutes.

This will bring major relief to commuters, especially those traveling between Delhi and Baghpat, as well as residents of nearby areas like Karawal Nagar and Mustafabad, by easing congestion and improving connectivity.

The Delhi–Dehradun Expressway is a significant infrastructure project aimed at enhancing connectivity between Delhi and Uttarakhand's capital Dehradun.

Spanning approximately 210 kilometers, this six-lane access-controlled expressway is designed to reduce travel time from the current 6.5 hours to around 2.5 hours.

It will pass through the states of Delhi, Uttar Pradesh and Uttarakhand, and will pass through the cities of Baghpat, Baraut, Shamli and Saharanpur.

The project is divided into four phases, with an estimated cost of around Rs 13,000 crore. It also includes a 12 km long elevated wildlife corridor, the longest in India, to ensure safe passage for animals near Rajaji National Park.

This infrastructure project aims to transform connectivity while prioritising safety and environmental conservation.

The expressway incorporates cutting-edge design features, including a 12-km elevated wildlife corridor, six animal underpasses, and two elephant underpasses, ensuring safe passage for animals along the route from Ganeshpur to Dehradun.

Additional provisions include a 340-meter-long, three-lane tunnel at Datkali in Dehradun, constructed at a cost of Rs 1,995 crore.

## Key infrastructure along the expressway includes:

- 16 entry and exit points
- 113 underpasses for vehicular and light traffic



- 76 km of service roads
- 29 km of elevated roads
- 62 bus shelters

The 212-km six-lane Greenfield Access-Controlled Expressway starts at the Delhi-Mumbai Expressway near Akshardham and passes through Shastri Park, Khajuri Khas, Mandola EPE Interchange, Baghpat, Shamli, and Saharanpur, before reaching Dehradun.

Its strategic route is expected to benefit commuters, tourists, and freight operators alike.

Delhi-Mumbai Expressway's Longest Tunnel Nears Completion Business Standard, March 11, 2025

The construction of India's longest tunnel on the Delhi-Mumbai Expressway, passing through the Mukundra Hills Tiger Reserve in Rajasthan, is nearing completion. The ambitious 4.9 km tunnel is the first of its kind in India, featuring eight lanes divided into two parallel tubes, each with four lanes.

According to a senior official from the National Highways Authority of India (NHAI), only 60 metres of excavation remains for Tube-2, which runs from Chechat to Kota. The official stated, "The remaining excavation will be completed within a month. After this, further excavation will be done to ncrease the tunnel's width and height in certain sections."

Tunnel Construction Details Out of the total 4.9 km stretch, 3.3 km is underground, while the remaining 1.6 km has been constructed using the cut-and-cover method. The tunnel's width will be expanded from 9 to 19 metres, and its height will be increased from 8 to 11 metres by March 2025. Once the excavation is completed by June 2025, work will proceed with road construction, security measures, electrical systems, and communication facilities.

Part of a Major Infrastructure Project The Delhi-Mumbai Expressway, spanning 1,350 km, aims to enhance connectivity between Mumbai and New Delhi. In Rajasthan alone, 327 km of the 373 km stretch is already operational. However, the completion of interchanges is still required before some sections can open for traffic.

The completion of this tunnel is expected to be a significant milestone in India's infrastructure development, providing faster and safer transportation between two of the country's largest cities. ^ Top

AI-Powered Road Surveys to Enhance City's Infrastructure Management CW Team, March 11, 2025



In a bid to improve the quality of road infrastructure, RoadMetrics is set to deploy advanced technology for conducting comprehensive road condition surveys. A dedicated person from RoadMetrics will be assigned to carry out the surveys using smartphones and GoPro cameras, gathering video data of roads and footpaths. This data will then be processed and analysed by AI algorithms to generate detailed reports on road conditions.

The collected data will be mapped on a web-based GIS platform, providing a bird's-eye view of road conditions with images, maps, charts, and graphs to assist officials in visualising the findings. Additionally, the data will be uploaded into the mobile RoadMetrics data collection app for seamless access.

The reports generated will offer insights into various road defects, including minor, moderate, and severe potholes, alligator cracks, and vertical and horizontal cracks, classified from level 0 to 4, indicating early to late-stage deterioration. This analysis will also include calculations for road maintenance budgets and recommendations for necessary repairs.

Furthermore, the initiative will incorporate pavement assessment and asset mapping through a colour-coded segmentation view. This feature will highlight stretches requiring immediate attention and provide a detailed list of over 50 types of street signages, traffic signals, and other assets such as lighting, following the Ministry of Road Transport and Highways (MoRTH) guidelines.

The implementation of this technology is expected to significantly enhance the decision-making process for road maintenance by providing timely, data-driven insights. As RoadMetrics officials stated, "This initiative is expected to ensure timely and data-driven decisions for the upkeep of the city's road infrastructure."

With AI-backed tools and detailed reporting, the project aims to streamline road maintenance efforts and improve urban infrastructure management.

India's First 8-Lane Tunnel on Delhi-Mumbai Expressway Nears Completion English Jagran, March 11, 2025

India's first eight-lane tunnel on the Delhi-Mumbai Expressway, passing through the Mukundra Hills Tiger Reserve (MHTR) in Rajasthan, is nearing completion. The tunnel features two parallel tubes, each designed with four lanes. Spanning a total of 4.9 km, it includes a 3.3 km underground section, while the remaining 1.6 km is being built using the cut-and-cover technique.

The construction of Tube-1, which connects Kota to Chechat, has been successfully completed. Engineers and workers marked this milestone following the full excavation of the section. Meanwhile, Tube-2, running from Chechat to Kota, is also nearing completion, with only 60 meters of excavation remaining. This final phase is expected to be finished within a month.

Following the completion of excavation, additional modifications will be carried out to expand the tunnel's width and height in specific sections. The entire excavation process is projected to be completed by June 2024. After this, road construction and other necessary infrastructure work within the tunnel will commence, ensuring it is fully operational for traffic in the near future.



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## Jewar Airport-Yamuna Expressway Link Road Completed PTI, March 11, 2025

The government has announced the completion of the road connecting the Jewar Airport terminal to the Yamuna Expressway access points, a critical infrastructure project aimed at enhancing connectivity for travelers. The construction of this route has been successfully completed, providing smooth access for those traveling via the Yamuna Expressway and the Delhi-Mumbai Expressway.

Authorities highlighted that the new road link will significantly improve passenger convenience and drastically reduce travel time for commuters. Speaking about the project, the government stated, "There are several major projects set to be implemented in the future. One such project is the Jewar Airport. To strengthen connectivity between Jewar Airport and the Yamuna Expressway, a route has been constructed."

The first phase of the Noida Airport, spread across 1,334 hectares, includes essential infrastructure such as AIP publication, parallel taxiway, entry-exit taxiway, nine aircraft stands, and an isolated parking area. To maintain high safety standards, multiple safety features have been installed, including watchtowers, training rooms, exit roads, and crash gates equipped with necessary safety equipment.

The construction of the airport's runway and air traffic control tower has also been completed. The newly developed road ensures direct accessibility to the terminal via the Yamuna Expressway further enhancing convenience for passengers.

Additionally, eight traffic interchanges have been constructed near Dyanatpur to facilitate connectivity between the Yamuna Expressway and the Delhi-Mumbai Expressway. As part of the project, a 100-meter road bridge and a roundabout have been built to connect the interchange facility to the terminal building, although they operate separately.

Authorities have assured that improved roads from various directions will ensure smooth access to the airport terminal, reinforcing the region's position as a major transportation hub. <u>^ Top</u>

Bengaluru Metro Expansion: Yellow Line To Open By May 2025, Driverless Train Operations In The Pipeline <sup>Swarajya,</sup> March 12, 2025

In a significant boost to Bengaluru's urban mobility, the much-awaited Yellow Line of Namma Metro, connecting RV Road to Bommasandra, is set to become operational by May 2025, Karnataka Deputy Chief Minister and Bengaluru Development Minister DK Shivakumar announced during a recent state assembly session.



Responding to a query by Bommanahalli MLA M Satish Reddy, Shivakumar confirmed that the 19.1 kilometre corridor, with 16 stations, would improve access between southern Bengaluru and Electronics City, a major IT and commercial hub, Hindustan Times reported.

The Yellow Line is expected to ease traffic congestion on several overburdened routes, particularly around the Central Silk Board junction, infamous for daily bottlenecks.

In a parallel update, the Minister shared progress on the Pink Line, which will stretch 21.2 kilometres from Kalena Agrahara (Gottigere) to Nagawara. This includes a 7.5 kilometre elevated section and a 13.7 kilometre underground stretch.

According to Shivakumar, the elevated portion—running from Kalena Agrahara to Tavarekere (Swagath Cross)—will be ready for public use by December 2025, while the underground line is targeted for completion by December 2026.

Meanwhile, Bengaluru Metro is preparing for a major technological leap with the introduction of driverless trains on the Yellow Line.

The Commissioner of Metro Railway Safety (CMRS) recently inspected the prototype.

Pending approvals from the Railway Ministry, these trains are poised to mark a new era in the city's metro operations.

Once cleared, the driverless system is expected to bring greater efficiency and convenience to commuters.

The Bangalore Metro Rail Corporation Limited (BMRCL) plans to expand its driverless fleet in the near future, aiming to modernise public transport in India's tech capital.

Patna Metro Milestone: TBM Emerges Near Patna Junction, CM Nitish Kumar Reviews Progress <sup>Swarajya,</sup> March 12, 2025

In a key milestone for Bihar's urban infrastructure, Chief Minister Nitish Kumar on Tuesday (11 March) oversaw the third emergence of the Tunnel Boring Machine (TBM) for the Patna Metro Rail Project, reported Times of India.

The TBM emerged from the underground section of the metro line in front of Buddha Smriti Park near Patna Junction, with the Bihar CM initiating the process by pressing a button.

During the inspection, Urban Development and Housing Department (UDHD) secretary Abhay Kumar Singh briefed the CM using a site map, elaborating on the progress across Corridors 1 and 2.

He stated that the 6.1 km priority corridor — stretching from Malahi Pakri to Patliputra Bus Terminal via Khemnichak, Bhootnath Road, and Zero Mile is being fast-tracked.



"The target is to start the priority corridor — the elevated portion of Corridor 2 (Patna Junction—Patliputra Bus Terminal) by 15 August," Singh informed.

He added that TBM work on the underground metro line began on 21 November 2023 from Gandhi Maidan and had now successfully reached Patna Junction via Akashvani. The total length of Corridor 2 is 14.5 km, with 12 metro stations.

The Chief Minister, who also visited the construction site near Patna Junction, directed officials to expedite the metro construction.

"I have been continuously inspecting the work to ensure there are no obstacles. I have directed the officials to ensure timely completion of the Patna Metro Rail project to facilitate ease of movement for people," he said.

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