

Bharatmala Pariyojana – ‘Road’ to country’s infrastructure development

Slew of Expressways/Highways underway in Uttar Pradesh

(Ministry of Road Transport & Highways)¹

December 13, 2021

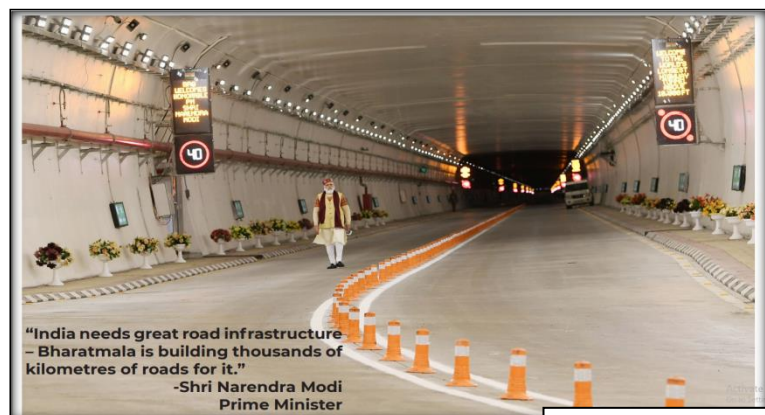
“Many modern and wide roads like the Poorvanchal Expressway, Bundelkhand Expressway, Ganga Expressway, Gorakhpur Link Expressway, Ballia Link Expressway are being built throughout UP. And this is just the beginning of the modern infrastructure of modern UP.”²

- [Prime Minister Narendra Modi](#)

Introduction

Though India has about 62.16 lakh kilometres of road network, which is the second largest in the world in terms of length, it was important to re-define road development and have a macro approach while planning expansion of the [national highways](#) network. Former Prime Minister Shri Atal Bihari Vajpayee had initiated the execution of high-quality road network projects in modern India two decades ago. His efforts for the connectivity of the country and the people are the strong foundation of present-day India. From [Pradhan Mantri Gram Sadak Yojana](#) to the Golden Quadrangle – North-East, East-West and North-South-East-West Corridors, his vision and development efforts for both, rural as well as urban areas, has been the guiding spirit. Prime Minister Narendra Modi consolidated on that vision and created records including highest per day and per week pace of National Highway construction across the country.

A new umbrella programme named [Bharatmala Pariyojana](#) was launched under [Ministry of Road Transport and Highways](#) with the primary focus of optimizing the efficiency of movement of goods and people across the country. The Public Investment Board (PIB) had recommended the proposal during its meeting held on 16.06.2017, following which the Cabinet Committee on Economic Affairs



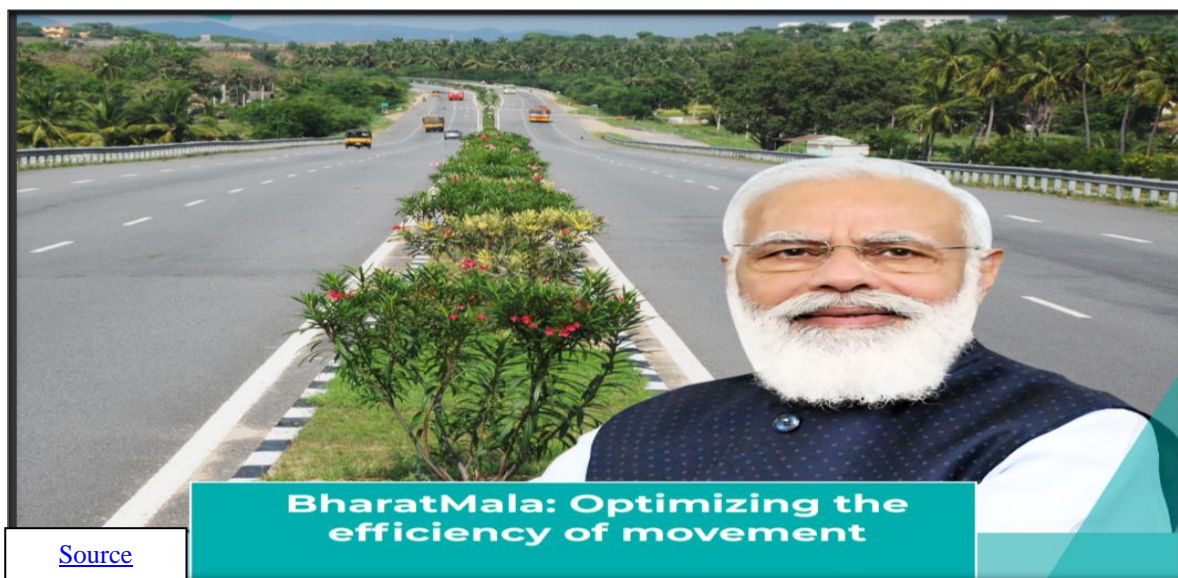
[Photo Source](#)

¹<https://morth.nic.in/>

²<https://pib.gov.in/PressReleaseDetail.aspx?PRID=1698414>

(CCEA) had approved the Phase-I of the Bharatmala Pariyojana.

The Bharatmala Pariyojana envisages development of about 26,000 km length of Economic Corridors, which along with Golden Quadrilateral (GQ) and North-South and East-West (NS-EW) Corridors are expected to carry majority of the freight traffic on roads. Further, about 8,000 km of Inter-corridors and about 7,500 km of feeder routes have been identified for improving effectiveness of Economic Corridors, GQ and NS-EW Corridors. The programme envisages development of ring roads, bypasses and elevated corridors to decongest the traffic passing through cities and enhance logistic efficiency. 28 cities have been identified for ring roads and 125 choke points & 66 congestion points have been identified for their improvements. Further, in order to reduce congestion on proposed Corridors, enhance logistic efficiency and reduce logistics costs of freight movements, 35 locations have been identified for development of Multimodal Logistics Parks.



Need for the Umbrella Scheme

- Inadequacy in optimization of National Highway network & Road network due to resource constraints and absence of a national plan.
- Lack of integrated planning in the connectivity of major corridors and ports with hinterland.
- Presence of Congestion Points, with multiple points of local congestion present even on already developed corridors.
- Lack of accident response infrastructure.

Salient features of the Project

Bharatmala focuses on enhanced effectiveness of already built infrastructure, multi-modal integration, bridging infrastructure gaps for seamless movement and integrating National and Economic Corridors. There are six key features of the programme:

- Economic Corridors:** Integrating the economic corridors facilitates larger connectedness between economically important production and consumption centers.
- Inter-corridor and Feeder routes:** This would ensure first mile and last mile connectivity.

- iii. **National Corridor Efficiency Improvement:** Through this, the greater actionable goal is to undertake lane expansion and decongestion of existing National Corridors.
- iv. **Border and International connectivity roads:** Better border road infrastructure would ensure greater manoeuvrability, while also boosting trade with neighbouring countries.
- v. **Coastal and Port connectivity roads:** Port-led economic development is further boosted through connectivity to coastal areas, encouraging both tourism and industrial development.
- vi. **Green-field Expressways:** Expressways have higher traffic configuration and choke points would benefit from green-field expressways.

Amongst the major projects completed under Bharatmala Pariyojana are the [Eastern Peripheral Expressway](#), [Delhi-Meerut Expressway](#), [Narmada Bridge](#), [Chenani – Nashri Tunnel](#) and the [Dhaura-Sadia Bridge](#).

It may be seen that Uttar Pradesh, being home to the largest portion of population in the country, has been one of the core beneficiaries of Bharatmala Pariyojana. From national highways to expressways, the state is setting new standards in road connectivity. Uttar Pradesh has a road network of 299,604 km, out of which 174,451 km is under State Public Works Department (PWD). The roads under PWD comprise 7,550 km of National Highways (NHs), 7,530 km of State Highways (SHs), 5,761 km of Major District Roads (MDRs), 3,254 km of Other District Roads (ODRs) and 138,702 km of Village Roads (VRs).³



Between 2007 and 2017, strategically important project of Yamuna Expressway was constructed & the Lucknow-Agra Expressway⁴ was initiated. Since 2017, The Agra expressway has been made fully operational along inauguration of Purvanchal Expressway and initiation of Bundelkhand Expressway, Ganga Expressway, Gorakhpur Link Expressway and Ballia Link Expressway.⁵

³<http://uppwd.gov.in/pdf/UPCRNDP-SECPO.pdf>

⁴<https://upeida.up.gov.in/en/page/agra-lucknow-expressway>

⁵[One year for polls, Yogi Adityanath govt's focus is on completing expressways | Cities News, The Indian Express](#)

Expressways would lead a holistic development of the state bringing about socio-economic prosperity:

- A good network of roads is the first and foremost requirement for development. It not only makes it easier to transport goods and services but also saves on time as well as costs.
- With the construction of these Expressways, accelerated convenient mode of transportation shall be available in the State and will connect it with the National Capital and other adjoining states.
- Expressways would lead to socio-economic development of the areas covered. Agriculture, commerce, tourism and other industrial development will also get a fillip.
- Industrial Training Institutes, educational institutes, medical institutes, new townships and other various commercial set ups shall be developed, especially near adjacent areas of these Expressways which will result into more opportunities for employment in the state. The overall social/economic development in the state will get a boost.

Major Expressways in the State:⁶

Delhi-Meerut Expressway⁷ project was initiated on December 31, 2015⁸ and was opened for traffic⁹ on April 01, 2021. The 96 km-long, 14-lane Expressway is built at a cost of Rs. 7500 crores. Earlier, commuters from Meerut used to travel through NH-58 to reach Delhi and it took over three hours to cover a distance of 70 km.



[Source](#)

After the inauguration of the Project, Union Minister for Road Transport & Highways, Shri Nitin Gadkari in a tweet said, "*Delhi Meerut Expressway has now been completed & opened to traffic. We have full-filled our promise of reducing travel time between Delhi - Meerut from 2.5 hours to 45 minutes.*"¹⁰

Key Features of Delhi-Meerut Expressway:

- It reduces the travel time between Meerut and Delhi to 45 minutes from over two and half hours taken previously.

⁶<http://upeida.up.gov.in/en/page/history>

⁷<https://morth.nic.in/development-6-lane-delhi-meerut-expressway>

⁸<https://pib.gov.in/newsite/PrintRelease.aspx?relid=179570>

⁹<https://morth.nic.in/development-6-lane-delhi-meerut-expressway>

¹⁰https://twitter.com/nitin_gadkari/status/1377475279321325571

- The expressway also reduces the travel time of commuters from Muzaffarnagar, Saharanpur, Haridwar and Dehradun to Delhi.
- It reduces the traffic congestion at Muradnagar, Ghaziabad and Mohan Nagar.

Agra-Lucknow Expressway¹¹ is a 302.222 Km-long, six-lane (Expandable to 08 lanes) Access Controlled (Greenfield) Expressway with eight-lane wide structures for future expansion of the expressway to 08 lanes. The expressway starts at Agra inner ring road,



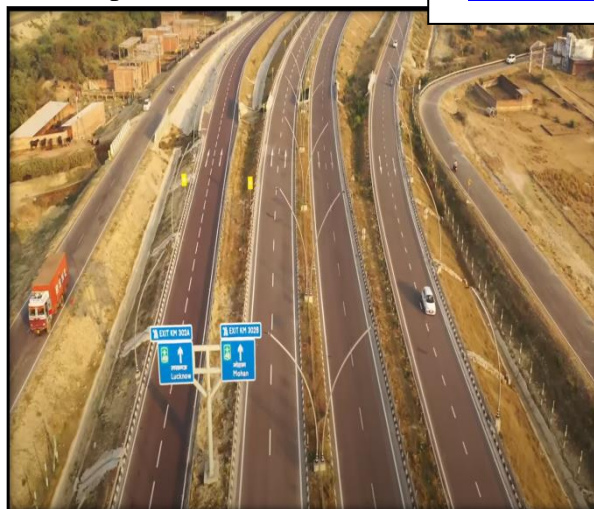
[Photo source](#)

passes through Firozabad, Mainpuri, Etawah, Auraiya, Kannauj, Kanpur Nagar, Hardoi, Unnao districts and ends on SH-40 in Lucknow. It has facilitated a high-speed corridor, connecting state capital Lucknow to Agra in western Uttar Pradesh and further to the National Capital, New Delhi through Yamuna Expressway. The travel time between Agra and Lucknow has reduced considerably to three hours and further to New Delhi via Yamuna Expressway to five and half hours. The reduction in travel time has resulted in

substantial savings in the consumption of fuel and a reduction in carbon footprint. Interchanges for exit/entry into the expressway have been provided at crossing with major roads.

Key Features of Agra-Lucknow Expressway:

- Interchanges for major roads; underpasses for vehicles, pedestrians & animals.
- Service road, staggered on both sides of Expressway all along the expressway, except at major bridges, RoBs.
- Wayside amenities with provision for toilet locks, petrol pumps, service stations, restaurants & shopping arcades, etc. at four locations - two each on either side of Expressway.
- Provision of the airstrip for landing and taking off of fighter planes in case of an emergency. Advanced Traffic Management System comprising Electronic Call Boxes (ECB), Digital Message Screens, Video Monitoring & Incident Detection System, GPS-based Ambulance Service, etc. Response time of the security team and an ambulance is four to eleven minutes.
- Use of Green Energy (Solar) for all illumination purposes.
- Development of green belt on both sides and the median of Expressway and rainwater harvesting arrangements.

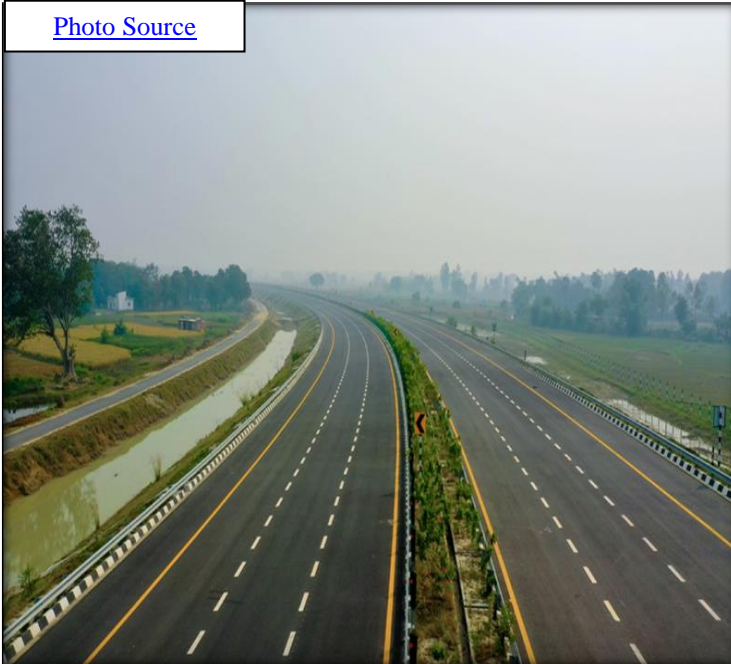


[Photo Source](#)

¹¹<https://upeida.up.gov.in/en/page/agra-lucknow-expressway>

- Development of *Mandi's* at two places (Kannauj & Mainpuri) with access from the Expressway.
- Fastag facility.

[Photo Source](#)



Purvanchal Expressway¹² is a 341-kilometre long Expressway which is strategically significant and a prime example of world-class infrastructure. It starts from village Chaudsarai located on the Lucknow-Sultanpur road (NH-731) and ends at village Hydaria located on National Highway No. 31, 18 kilometres east of UP-Bihar border. The Expressway is six-lane wide which can be expanded to eight-lane in future. Constructed at an estimated cost of about Rs 22500 crore, the Purvanchal Expressway will give a boost to the economic development of eastern part of Uttar Pradesh especially the

districts of Lucknow, Barabanki, Amethi, Ayodhya, Sultanpur, Ambedkar Nagar, Azamgarh, Mau and Ghazipur. It has been developed by the Uttar Pradesh Expressways Industrial Development Authority (UPEIDA). Prime Minister Narendra Modi had laid the foundation stone of the project on 14th July, 2018¹³ and it was inaugurated on 16th November 2021¹⁴ by Prime Minister himself at Kurebhar Airstrip in Sultanpur district of UP. A 3.2 km-long airstrip has also been constructed on the Expressway in Sultanpur district to enable landing and take-off of Indian Air Force fighter planes in case of an emergency.



[Source](#)

¹²<https://upeida.up.gov.in/en/page/the-purvanchal-expressway>

¹³<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1538649>

¹⁴<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1772308>



Key Features of Purvanchal Expressway:

- Width of Expressway: Six-Lane wide, expandable to Eight-Lane. (15 m on each side, total 30 m with a median of 5.50 m.)
- Width of Right Of Way (ROW): One Hundred and Twenty (120) m wide land corridor
- Service Road: 3.75 m black top in a staggered manner on either side of Expressway to facilitate easy movement for the inhabitants of adjacent villages, total length-402 km
- Airstrip: 3.20 km-long & 34 metres-wide Cement Concrete Emergency Airstrip for IAF
- Fuel Stations: Eight (one in each Wayside Amenities)
- CNG Stations: Four
- Tree Plantations: 4.50 lakh trees being planted in the ROW of Expressway.
- Rain Water Harvesting: RWH pits constructed as required by geological conditions in the ROW at every 500 metres.
- Lighting: Lighting arrangement made on interchanges, flyovers, major & minor bridges and underpasses with solar backup.
- Design Speed of Highway: Expressway has been designed for speed 120 km/hr and Speed Limit has been fixed at 100 km/hr.
- The work of setting up of eight toilet blocks on Purvanchal Expressway is in progress.
- UPEIDA has been authorized by the government to make industrial hubs on both sides of this Expressway. In the situation of an accident on Purvanchal Expressway, a total of 16 ambulances will be available in each of the packages.



[Photo Source](#)

Bundelkhand Expressway¹⁵ is 296.07 KM-long four-lane project which starts from Chitrakoot and passes through Banda, Mahoba, Hamirpur, Jalaun, Auraiya districts and ends at Agra-Lucknow Expressway in district Etawah. PM Narendra Modi had laid the foundation stone of the Bundelkhand Expressway at Chitrakoot on February 29, 2020.¹⁶ It is four-lane (expandable to six-lane) Access Controlled Expressway project with design speed of 120 km/h. The construction progress of Bundelkhand Expressway on 30.11.2021 is 80 per cent and is expected to be operational at the end of year 2022. The project has been initiated with the objective of providing Omni-directional development in the Bundelkhand area, especially in less developed districts like Chitrakoot, Banda, Hamirpur, and Jalaun. This Expressway will link the Bundelkhand area from the national capital Delhi through the Agra-Lucknow expressway and Yamuna expressway as well as will play a vital role in the development of the Bundelkhand area. After the completion of this project, the ambitious Defense Industrial Corridor project will get an automatic boost.



Key Features of Bundelkhand Expressway:

- Width of ROW (Right Of Way) of the project is 110 Metres; a service road of 3.75 M width will be constructed at one side of the expressway in a staggered form so that residents of nearby villages of the project area may get a smooth transportation facility.
- Proposed structures on the Expressway: Total four Railway Over Bridges (ROBs), 14 large bridges, Six Toll Plazas, Seven Ramp Plaza, 266 small bridges, and 18 Flyovers will also be constructed on the Expressway
- Provision of Service Road
- Total Access Controlled Expressway
- Provision for underpasses for vehicles, pedestrians & animals

Gorakhpur Link Expressway¹⁷ Greenfield Expressway project is 91.352 KM-long which starts from Gorakhpur and passes through Ambedkar Nagar, Sant Kabir Nagar districts and ends at Purvanchal Expressway in Azamgarh district of UP. Gorakhpur Link Expressway is four-lane (expandable to six-lane) Access Controlled expressway project with design speed

¹⁵ <https://upeida.up.gov.in/en/page/bundelkhand-expressway>

¹⁶ <https://twitter.com/pmoindia/status/1233294927787769856?lang=ms>

¹⁷ <https://upeida.up.gov.in/en/page/gorakhpur-link-expressway>

of 120 km/h. This Expressway is under construction and expected to be operational in the year 2023. Its approved project cost is Rs. 5876.67 crores (including cost of land). Project has been divided into two packages for implementation. Work is under progress since February 2020. 96.19 per cent land, out of the total required land for the project has been acquired till October 2021. Environmental approval and NOC from the Department of Forest are in process. The Gorakhpur Link Expressway will provide faster connectivity and better commuter experience as well as help in getting the population of affected areas closer. It would also bolster efforts to convey and carry the cultural and commercial values from Gorakhpur to Azamgarh and vice-versa.

Key Features of Gorakhpur Link Expressway:

- Width of ROW (Right Of Way): 110 Metres
- Carriageway: Four lanes (expandable upto six lanes)
- Provision of Service Road expected on major bridges
- Total Access Controlled Expressway
- Provision for underpasses for vehicles, pedestrians and animals

Ganga Expressway¹⁸ is a project of 594 KM approximately. This fully access-controlled Ganga Expressway is proposed to start from N.H. 334, in Meerut district and will end at Prayagraj bye-pass of (N.H.-2) in district Prayagraj. It will be of six lanes (expandable up to eight lanes). Width of ROW (Right of Way) of the Expressway is proposed as 120 metres, service road of 3.75 M width will be constructed at one side of the expressway in the staggered form so that residents of nearby villages of the project area may get smooth transportation facility.

Ballia Link Expressway¹⁹ project is a eight-lane Access Controlled Expressway which will start from Eastern Peripheral Expressway near village Sirsi in Greater Noida and pass through Gautam Budh Nagar to State Highway No.34 near Phephana in Ballia district of UP. Estimated length of the Expressway is approximately 952 kms and the estimated cost is approximately Rs. 30,000 crore. The project has been developed on Design-Build-Finance-Operate (DBFO) basis on PPP Model.

Implementation of Pradhan Mantri Gram Sadak Yojana in Uttar Pradesh:²⁰

Besides initiating national and state highway projects, there has been emphasis on building rural roads under the Pradhan Mantri Gram Sadak Yojana (PMGSY). As of December 09, 2021, a total number of 20,540 road works have been cleared in Uttar Pradesh and 18,565 road works have been completed under PMGSY. The PMGSY was launched as a one-time special intervention, with the objective to provide rural connectivity, by way of a single all-weather road, to the eligible unconnected habitations of designated population size (500+ in plain areas and 250+ in North-Eastern States, Himalayan States, Deserts and Tribal Areas as per 2001 census) in the core network for uplifting the socio-economic condition of the rural population. Hence, the primary objective of the Scheme was to provide all-weather road connectivity to eligible un-connected habitations. No physical targets in terms of kilometres or financial targets or allocations were fixed for states. The fund allocation to states has been made in subsequent years commensurate with the value of projects sanctioned to states.²¹

¹⁸<https://upeida.up.gov.in/en/page/ganga-expressway>

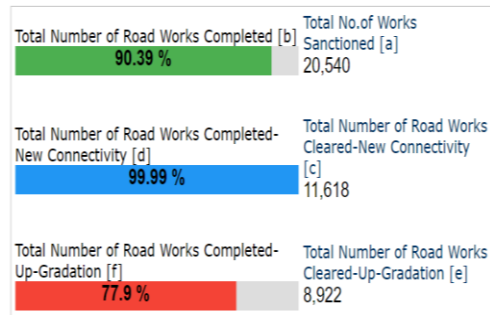
¹⁹<http://upeida.up.gov.in/post/en/proposed-plans-project-3>

²⁰https://ruraldiksha.nic.in/RuralDashboard/PMGSY_NEW.aspx

²¹<https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1656170>

Physical Progress

Key Parameter Indicators	Value
a Total Number of Road Works Cleared	20,540
b Total Number of Road Works Completed	18,567
c Total Number of Road Works Cleared-New Connectivity	11,618
d Total Number of Road Works Completed-New Connectivity	11,617
e Total Number of Road Works Cleared-Up-Gradation	8,922
f Total Number of Road Works Completed-Up-Gradation	6,950
g Total Length Completed under (Upgradation + New)(Kms)	57,553

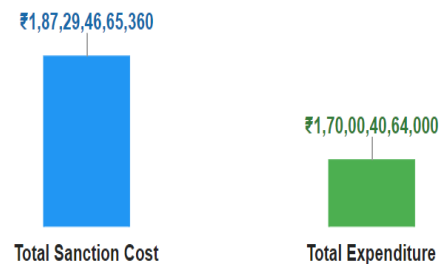


Source

The Cabinet Committee on Economic Affairs chaired by the Prime Minister Shri Narendra Modi on November 17, 2021²² gave its approval to the proposals of the Ministry of Rural Development for continuation of Pradhan Mantri Gram Sadak Yojana-I and II up to September, 2022 for completion of balance road and bridge works. The CCEA also approved continuation of Road Connectivity Project for Left Wing Extremism Affected Areas (RCPLWEA) up to March, 2023²³.

Financial Progress

Key Parameter Indicators	Value
a Total Sanction Cost (Road + LSB)	₹ 1,87,29,46,65,360
b Total Expenditure	₹ 1,70,00,40,64,000



Source

Key features of PMGSY:

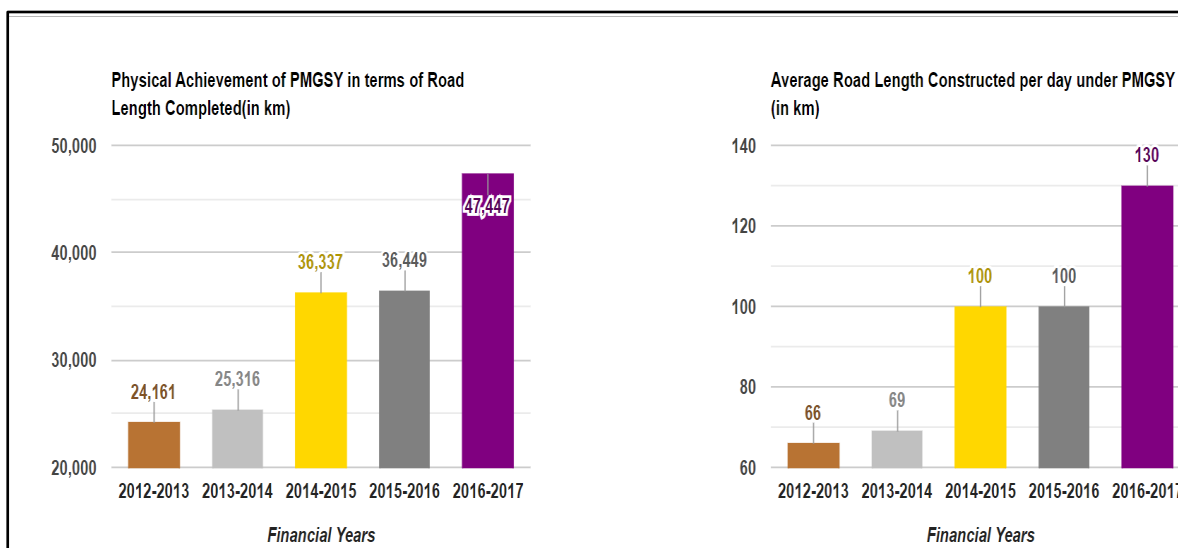
- Decentralized and evidence-based planning; standards and specifications as per Indian Road Congress (IRC) and Rural Roads Manual,
- Dedicated implementation mechanism at central, state and district level, scrutiny of Detailed Project Reports (DPRs) at multiple levels.
- Strong IT backbone for monitoring and implementation of the programme, three-tier quality management system, unbroken flow of funds, inbuilt mechanism for consultation with public representatives at planning, selection of roads and monitoring stages, etc.²⁴

As per the dashboard of Ministry of Rural Development, progress of Pradhan Mantri Gram Sadak Yojana (PMGSY) as on 08.12.2021 in Uttar Pradesh is mentioned below:

²² <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1772578>

²³ <https://pib.gov.in/PressReleasePage.aspx?PRID=1772579>

²⁴ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1737394>



[Source](#)

Some other state Highway projects:²⁵

Projects in-progress

S. No.	Name of Road	Length (IN KMs)	Project Cost	Remarks
1	Pukhrayan-Ghatampur-Bindki Road (S.H.-46)	82.530	Rs 1136.45	E-tender opened on 20.04.2018 for selection of Concessioner
2	NH-334B	40.47 km 4-lane	Rs 1509 crore	NH-334B starts at UP/Haryana border (Baghpat) and ends at Rohna. It will provide seamless connectivity from UP to Rajasthan border via Haryana ensuring users can bypass Delhi traffic.

²⁵ <http://www.upsha.in/en/page/projects>

Completed Project

S. No.	Name of road	Length (IN KMs)	Project Cost	Commercial operation Date	Concession Period	Name of Concessioner
1	Muzaffarnagar-Saharanpur Road (SH-59)	52.95	752.88	17.03.2018/16.06.2018	23 Years	M/s Devband Highways Pvt. Ltd. Lucknow.

Video References:

1. <https://www.youtube.com/watch?v=wT63WinTDxg>
2. <https://www.youtube.com/watch?v=3dCPcccNA6k>
3. <https://www.youtube.com/watch?v=Kijj9kQAIvg>
4. <https://www.youtube.com/watch?v=VJDH0pQQw4g>
5. <https://www.youtube.com/watch?v=MRU3uIj0hdA>

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2. <https://nhai.gov.in/#/>
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9. https://ruraldiksha.nic.in/RuralDashboard/PMGSY_NEW.aspx
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Further Reading:

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2. <https://www.financialexpress.com/infrastructure/uttar-pradeshs-infra-on-expressway-drive/2382822/>
3. <https://theprint.in/india/governance/in-yogis-up-expressways-are-scripting-silent-transformation-in-state-known-for-poor-road-infra/638384/>
4. <https://indianexpress.com/article/cities/lucknow/one-year-for-polls-yogi-adityanath-govts-focus-is-on-completing-expressways-7235029/>
5. <https://www.timesnownews.com/business-economy/industry/article/all-you-need-to-know-about-ganga-expressway-lucknow-kanpur-expressway-and-other-2-key-road-projects-of-uttar-pradesh/812871>

Tweets:

1. https://twitter.com/nitin_gadkari/status/1377475279321325571
2. <https://twitter.com/narendramodi/status/1460259110843080705>
3. <https://twitter.com/pmoindia/status/1233294927787769856?lang=ms>
4. <https://twitter.com/narendramodi/status/682514751398789120>
5. <https://twitter.com/pmoindia/status/1233294927787769856?lang=ms>

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