

National Rail Plan [UPSC Notes]

The Government of India released the draft National Rail Plan in December 2020. This document seeks to address certain lacunae in the Indian Railway system and sets out targets to achieve. In this article, you can read all the important points under the National Rail Plan for <u>UPSC</u> & other govt exams.

What is the National Rail Plan?

The National Rail Plan aims to offer a long-term perspective plan for boosting the railway network in India.

- 1. The vision of the National Rail Plan (NRP) is to develop capacity, infrastructure and enhance rail freight share ahead of the demand.
- 2. It also aims to develop capacity by 2030 that will cater to the expanding demand up to 2050.
- 3. One of the key tasks of the NRP was to map the entire Indian Railway Network at GIS (Geographical Information System) Platform along with their respective attributes and line features. This gigantic exercise was carried out as part of the study and the entire network was mapped on the GIS platform.

National Rail Plan Objectives

The objectives of the NRP are mentioned below.

- 1. To generate capacity ahead of demand by 2030, which in turn would cater to growth in demand up to 2050.
- 2. To raise the modal share of Railways from the current 27% to 45% in freight by the year 2030 as part of a national commitment to decrease carbon emission and to continue to sustain it.
- 3. To forecast traffic growth in both passenger and freight year on year up to 2030 and on a decadal basis up to 2050.
- 4. To frame strategies based on both operational capacities and commercial policy programmes to heighten the modal share of the Railways in freight to 45% by 2030.
- 5. To bring down the transit time of freight significantly by enhancing the average speed of freight trains from the current 22 kmph to 50 kmph.
- 6. To diminish the overall cost of rail transportation by almost 30% and pass on the benefits to the customers.
- 7. To map the growth in demand on the Indian Railway route map and simulate the capacity behaviour of the network in future.
- 8. To identify the bottlenecks that would arise in the future based on the above simulation.
- 9. To select projects along with appropriate technology in both track work, signalling and rolling stock to reduce these bottlenecks well in advance.

National Rail Plan Vision 2024

Vision 2024 has been launched to hasten the implementation of some major projects by 2024. The following are some of the key projects under this:

- 100% electrification (by December 2030)
- Multi-tracking congested routes

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- Upgrade of speed in the Delhi-Mumbai and Delhi-Howrah routes to 160 km/h
- Upgrade of speed on all other Golden Quadrilateral-Golden Diagonal (GQ/GD) routes to 130 km/h
- Elimination of all Level Crossings on all Golden Quadrilateral-Golden Diagonal routes

Other Features of the NRP

- Three Dedicated Freight Corridors, namely East Coast, East-West & North-South have been identified along with timelines.
- Future projects (beyond 2024) have been identified in track and signalling with timelines.
- New high speed rail corridors have been identified.
- The plan also assesses the total capital requirement for all the projects.
- It identifies new financing models and streams including those based on public-private partnerships.

National Rail Plan Significance

The Indian Railways is the fourth-largest rail network in the world. In FY 2017-18, the railways carried 8.26 billion passengers and transported 1.16 billion tonnes of freight. To cater to the aspirations of economic growth and development, it is imperative that the railways are modernised and optimised.

According to some experts, importance was accorded to the passenger services of the railways and not enough to the freight services. Therefore, even towards the end of the 19th century and the first decade of the 20th, railways didn't contribute as much to growth as it did in other countries. (Bibek Debroy, Financial Times, Feb 11, 2021).

The NRP seeks to rectify this bias against freight by aiming to increase the share of railways in freight. Another significant aspect of the NRP is that it maps the railway network on a GIS platform and identifies gaps. In the GIS map, besides digitization of railway lines, digitization of railway stations has also been undertaken on the basis of type of railway station. Stations and Junctions identified for the upcoming Dedicated Freight Corridor (DFC) are also digitised based on the location provided in the proposed alignment and digitised.