

Now Available

# Railways in India 2020

Analysis and Insights; Projections and Opportunities

- ❖ Research Report
- ❖ Data-set (Excel)
- ❖ 52 Weekly Newsletters
- ❖ 11 Monthly Updates

## Report Summary and Key Insights

- The railway sector has been on a high growth trajectory for the past few years. While the pace of infrastructure creation has been at an all-time high, new and innovative ways to improve operational efficiency and passenger experience are also being explored. From the introduction of high-speed trains to modernisation of railway stations, the sector has been abuzz with activity.
- Passenger safety and comfort is being accorded the highest priority with the provision of new technologies, systems and amenities. Digital transformation of railways has been on IR's priority list for a long time. Also, a number of initiatives are being taken to improve the share of revenue from the freight business.
- IR has set massive network expansion and decongestion targets for the next four to five years. It plans to undertake over 17,000 km of new line, doubling and gauge conversion works by 2024. Besides, it plans to electrify at least 28,000 rkm of railway network by 2022.
- Rolling stock continues to be a major thrust area for IR. Advanced trains with better passenger amenities such as Humsafar Express, Antyodaya and coaches such as Deen Dayalu, Anubhuti, Vistadome and Uttam have been introduced.
- The national transporter aims to become a net zero carbon emitter by 2030 as part of the country's strategy to combat climate change. In this regard, it has planned to source about 1,000 MW of solar power and about 200 MW of wind power progressively by 2021-22 across zonal railways and production units.
- IR's operating ratios have shown a mixed trend. The high financial burden on IR could be attributed to its traditional policy of cross-subsidisation of passenger fares with freight rates.
- To meet the growing investment requirements, there is increased focus on mobilising new funding sources. IR has successfully completed initial public offerings of RITES Limited, IRCON Limited, IRCTC and RVNL. Other options being explored include advertisements, commercial exploitation of vacant land and providing space rights over station buildings, institutional financing, and land monetisation along tracks.
- Further, IR plans to use PPPs for faster development and completion of tracks, rolling-stock manufacturing, and delivery of passenger and freight services.
- Going forward, the industry can expect new business opportunities, particularly in light of the recent announcement to invest about Rs 50 trillion in network expansion and decongestion works (between 2018 and 2030) and the government's Make in India mandate. Based on the projects tracked by India Infrastructure Research, the railways sector offers a lucrative pipeline of 925 projects involving a cumulative investment of more than Rs 20 trillion. Mega projects such as newly announced DFC, HSR, RRTS corridors and station redevelopment projects are expected to accelerate construction activity in the sector.
- For the successful and timely execution of projects, policymakers need to address the challenges that can slow down the execution of projects such as procedural delays, contractual issues, financial instability, and geological complexities. While the government's vision is to involve private players in the sector, this will happen only when policy execution ensures a level Playing field.

### The report will provide you the following:

- ❖ A comprehensive assessment of sector trends and developments
- ❖ Update on mega projects such as DFC, HSR, station redevelopment, RRTS, etc.
- ❖ Advancements in rolling stock, tracks and signalling systems
- ❖ Market presence of major contractors and developers in the sector
- ❖ Targets and achievements in terms of network expansion and decongestion
- ❖ Investment requirements for the next five years
- ❖ Projects in the pipeline, upcoming tenders and opportunities

### Key Insights and Takeaways

#### SECTION I: MARKET ANALYSIS, PROJECT PIPELINE AND OUTLOOK

1. **Sector Overview**
  - ❖ Network Size and Growth
  - ❖ Trends in Traffic and Earnings
  - ❖ Modal Share of Railways
  - ❖ Key Sector Trends
  - ❖ Financing and PPP Experience
  - ❖ Targets and Achievements
  - ❖ Investment Requirements
  - ❖ Issues and Challenges
  - ❖ Sector Outlook
2. **IR/MoR Initiatives and Recent Developments**
  - ❖ Highlights of Union Budget 2020-21
  - ❖ New Announcements
  - ❖ Freight Segment Initiatives
  - ❖ Passenger Segment Initiatives
  - ❖ 100-day Action Plan Achievements
  - ❖ New Initiatives under Make in India
  - ❖ Digital Initiatives
  - ❖ Recent IPO Issuances
  - ❖ Key Commissioned Projects
  - ❖ Key Projects Announced
  - ❖ New Trains and Coaches
  - ❖ New Safety Measures
  - ❖ Others
3. **Future Outlook and Projections (till 2024-25)**
  - ❖ Growth Drivers
  - ❖ Passenger Traffic Projections (till 2025)
  - ❖ Freight Traffic Projections (till 2025)
  - ❖ Mega/Big Ticket Projects under Construction
  - ❖ Upcoming Contracts and Tenders
  - ❖ Investment Requirements (Medium-term and Long-term)
  - ❖ Outlook for the Next Five Years (till 2024-25)
4. **Project Pipeline and Market Opportunities**
  - ❖ Project Pipeline Analysis
    - By Stage of Development
    - By Type of Project
    - By Zone
    - By Completion Period
  - ❖ Opportunity by Stakeholder
    - EPC Contractors
    - Developers
    - Technology Providers
    - Equipment and Material Suppliers
  - ❖ Expected Network Addition
  - ❖ Top Upcoming Projects (in terms of investment)

#### SECTION II: IR'S OPERATIONAL AND FINANCIAL PERFORMANCE

5. **Financial Performance and New Funding Strategies**
  - ❖ Trends in Capital Expenditure
  - ❖ Trends in Operating Ratio
  - ❖ Revenue Trends
  - ❖ Cost Trends
  - ❖ Revenue Surplus
  - ❖ New Funding/Revenue Sources
  - ❖ Potential for PPPs
  - ❖ Issues and Challenges
6. **Key Efficiency Indicators**
  - ❖ Efficiency Indicators for Freight Operations
    - NTKM Per Wagon Per Day
    - Wagon km Per Wagon Per Day
    - Freight Train Engine km
    - Average Net Load of Freight Trains
    - Wagon Turn around Time
    - Average Load Per Wagon
    - Ineffective Percentage of Rolling Stock
  - ❖ Passenger km Per Route km
  - ❖ Line Capacity and Utilisation
  - ❖ Staff Utilisation Indicators
7. **Freight Traffic and Earnings Analysis and Future Outlook**
  - ❖ Key trends (2014-15 to 2018-19)
    - Freight Traffic Trends
    - Freight Earning Trends
  - ❖ Monthly Traffic and Earning Trends in 2019-20
  - ❖ Initiatives for Improving Freight Traffic
  - ❖ Freight Traffic Projections
  - ❖ Segment Outlook
8. **Commodity-Wise Freight Traffic Trends**
  - ❖ Commodity-wise Trends in Freight Traffic and Earnings (2014-15 to 2018-19)
    - Coal
    - RMSP
    - Cement
    - Foodgrains
    - Steel
    - Iron Ore
    - Fertilisers
    - Mineral Oil
    - Container service
    - Balance goods
  - ❖ Comparative Performance of Commodities in 2019-20

**9. Passenger Traffic and Earnings Analysis and Future Outlook**

- ❖ Key trends (2014-15 to 2018-19)
  - Passenger Traffic Trends
  - Passenger Earning Trends
- ❖ Monthly Traffic and Earning Trends in 2019-20
- ❖ Suburban and Non-Suburban Traffic and Earnings Analysis
- ❖ Class-wise Traffic and Earnings Analysis
- ❖ Initiatives for Improving Passenger Amenities
- ❖ Passenger Traffic Projections
- ❖ Segment Outlook

**10. Zone-wise Performance Analysis: Traffic and Earnings Trends**

- ❖ Traffic Trends
  - Growth in the Past Five Years (2014-15 to 2018-19)
  - Monthly Traffic in 2019-20
- ❖ Earning Trends
  - Growth in the Past Five Years (2014-15 to 2018-19)
  - Monthly Traffic in 2019-20
- ❖ Key Efficiency Indicators
- ❖ Network Expansion Plans (2019-20)
- ❖ Key Ongoing Projects
- ❖ Upcoming Contracts and Tenders
- ❖ Investment Requirements

**SECTION III: FOCUS ON MEGA PROJECTS: TARGETS, ACHIEVEMENTS AND NEW OPPORTUNITIES****11. Dedicated Freight Corridor**

- ❖ Corridor Routes
- ❖ Progress So Far
- ❖ Project Funding
- ❖ Trend in Expenditure
- ❖ Targets and Timelines
- ❖ Upcoming Corridors and Opportunities
- ❖ Opportunity for the Industry
- ❖ Upcoming Contracts and Tenders
- ❖ Future Investment Requirements

**12. High Speed Rail**

- ❖ HSR Corridors
- ❖ Progress So Far
  - Mumbai-Ahmedabad
  - Diamond Quadrilateral
  - Delhi-Amritsar, Chennai-Mysore
  - Smaller Route High Speed Rail Corridors
- ❖ Key Initiatives under Mission Raftaar
- ❖ Identified Semi-HSR Corridors
- ❖ Recent Developments
- ❖ Key Issues and Challenges
- ❖ Implementation Options
- ❖ Investment Requirements
- ❖ Upcoming Opportunities
- ❖ Expected Timelines

**13. Station Infrastructure Development**

- ❖ Current Infrastructure
- ❖ Key Focus Points of Station Redevelopment Projects
- ❖ PPP Experience in Station Redevelopment
- ❖ Current Models of Station Redevelopment
- ❖ Overall Key Milestones

- ❖ Progress under Key Schemes/Programmes
  - Station Redevelopment by IRSDC
  - Facility Management by IRSDC
  - Station Redevelopment by Zonal Railways
  - Station Redevelopment by RLDA
  - Station Redevelopment along with State Governments
  - Adarsh Station Scheme and Passenger Funding Amenities
- ❖ Other Schemes and Recent Developments
- ❖ Key Issues and Challenges
- ❖ Entailed Investment and Expected Revenue Generation
- ❖ Upcoming Opportunities
- ❖ Expected Timelines

**14. Regional Rapid Transit Systems**

- ❖ Key RRTS Projects
- ❖ Progress So Far and Key Milestones
  - Delhi-Meerut
  - Delhi-Panipat
  - Delhi-SNB Complex
- ❖ New Announcements and Recent Developments
- ❖ Key Issues and Challenges
- ❖ Investment Requirements
- ❖ Upcoming Contracts and Tenders

**15. New Suburban Rail Systems**

- ❖ Key Upcoming Projects and Progress So Far
  - Bengaluru Suburban Rail System
  - Mumbai Urban Transport Project Phases 3 and 3A
- ❖ Key Issues and Challenges
- ❖ New Announcements and Recent Developments
- ❖ Investment Requirements and Project Timelines
- ❖ Upcoming Contracts and Tenders

**SECTION IV: SEGMENT ANALYSIS: ROLLING STOCK****16. IR's Fleet Size and Future Production Plans**

- ❖ Trends in Production of Coaches: Growth in the Past Five Years
- ❖ Net Holding of Diesel and Electric Locomotives
- ❖ Net Addition of Wagons
- ❖ Production Target and Achievements (2014-15 to 2018-19)
- ❖ Future Production Targets
- ❖ Zone-wise Planned Expenditure on Rolling Stock

**17. Production Capacity and Expansion Plans**

- ❖ Existing Production Capacity
- ❖ Production of LHB Coaches
- ❖ New Coaches and Trains
- ❖ New Components and Innovations in Design
- ❖ Initiatives under Make in India
- ❖ Upcoming Production Units

**SECTION V: SEGMENT ANALYSIS: CONSTRUCTION****18. Tracks: Current Network and Expansion Plans**

- ❖ Size and Growth
- ❖ Network Expansion Targets versus Achievements
- ❖ Track Electrification
- ❖ Track Renewal and Repair
- ❖ Recently Completed Projects
- ❖ Recently Awarded Contracts

- ❖ Key Ongoing Projects
- ❖ Upcoming Tenders and Contracts
- ❖ Network Expansion Plans

## 19. Bridges

- ❖ Growth in Number of Rail Bridges
- ❖ ROBs/RUBs Sanctioned
- ❖ ROBs/RUBs under Setu Bharatam
- ❖ Technology and Design Trends
- ❖ Key Bridge Projects
- ❖ Key Ongoing Projects
- ❖ Key Upcoming Projects
- ❖ Segment Outlook

## 20. Rail Tunnels

- ❖ Size and Growth
- ❖ Techniques for Tunnel Construction
- ❖ Key Completed Projects
- ❖ Key Ongoing Projects
- ❖ Key Upcoming Projects
- ❖ Upcoming Contracts and Tenders
- ❖ Key Issues and Challenges

## SECTION VI: NEW FOCUS AREAS: KEY INITIATIVES AND FUTURE PLANS

### 21. Safety

- ❖ Current Safety Scenario
  - Trends in Train Accidents
  - Derailment
  - Consequential Accidents - by Zonal Railways
- ❖ Expenditure Trends
- ❖ Rashtriya Rail Sanraksha Kosh
- ❖ Key Budget Announcements
- ❖ Government Initiatives
- ❖ Issues and Challenges
- ❖ Future Plans and Investments

### 22. Energy Requirements and Renewable Energy Potential

- ❖ Electricity Consumption and Expenditure
- ❖ IR's Targets Under Mission 41K
- ❖ Mission Electrification
- ❖ Initiatives to Reduce Traction and Non-Traction Consumption
- ❖ Transmission Network
- ❖ New Captive Power Plants
- ❖ Current Renewable Capacity (Solar & Wind)
- ❖ Key Ongoing Projects
- ❖ Upcoming Tenders and Contractors
- ❖ Other Key Initiatives and Developments
- ❖ Issues and Challenges
- ❖ Upcoming Opportunities

### 23. Signalling and Telecommunication Systems

- ❖ Current Infrastructure and Practices
- ❖ Recent Initiatives and Developments
- ❖ Technology Trends and Advancements
- ❖ Initiatives under Make in India
- ❖ Market Opportunities
- ❖ Expenditure Trends
- ❖ Investment Plans and Requirements

## SECTION VII: PROFILE OF RAILWAY PSUs

### 24. Key Railway PSUs

- ❖ Braithwaite & Company Limited
- ❖ Container Corporation of India Limited
- ❖ Dedicated Freight Corridor Corporation of India Limited
- ❖ High Speed Rail Corporation of India Limited
- ❖ Indian Port Rail Corporation Limited
- ❖ Indian Railway Catering and Tourism Corporation Limited
- ❖ Indian Railway Finance Corporation Limited
- ❖ Ircon International Limited
- ❖ Konkan Railway Corporation Limited
- ❖ Mumbai Railway Vikas Corporation Limited
- ❖ National High Speed Rail Corporation Limited
- ❖ Pipavav Railway Corporation Limited
- ❖ Rail India Technical and Economic Services Limited
- ❖ Rail Land Development Authority
- ❖ RailTel Corporation of India Limited
- ❖ Rail Vikas Nigam Limited

### The dataset covers the following:

- ❖ Mastersheet of Key Upcoming Projects
- ❖ Zone-wise Expenditure in 2019-20
- ❖ Tracks
- ❖ Signalling and Telecommunication
- ❖ Traction Distribution Works
- ❖ Electrification
- ❖ Dedicated Freight Corridors (DFCs)
- ❖ High Speed Rail (HSR) Projects
- ❖ Suburban Rail Projects
- ❖ Rapid Regional Transit Systems
- ❖ Station Redevelopment Projects
- ❖ Rail Tunnel Projects
- ❖ Key PPP Projects

## Monthly Updates

The 11 monthly updates will comprise 16-24 pages on:

- Analysis of Traffic and Earnings
- Performance of Production Units
- Key Efficiency Indicators
- Project Update
- Upcoming Tenders
- New Project Announcements (New Lines, DFC, High-Speed Rail, RRTS, Station Redevelopment, Port-rail Connectivity, etc.)
- Key Data and Statistics

## Weekly Newsletters

The 52 weekly newsletters will comprise 4-6 pages. It will cover news developments in the railways sector relating to:

- Policy Announcements
- Government Initiatives
- Project Completions/Awards/Announcements
- Update on Key Programmes
- Key Financings
- Etc.

I would like to purchase the "Railways in India 2020" report:

Format (PDF)	Price
Site Licence (Single Location)	Rs 110,000
GST @ 18%	Rs 19,800
<b>Total</b>	<input type="checkbox"/> <b>Rs 129,800</b>
Enterprise Licence (Multiple Locations)	Rs 165,000
GST @ 18%	Rs 29,700
<b>Total</b>	<input type="checkbox"/> <b>Rs 194,700</b>

I am enclosing a cheque/demand draft for Rs \_\_\_\_\_, vide cheque/demand draft no. \_\_\_\_\_ drawn on \_\_\_\_\_ dated \_\_\_\_\_ in favour of "India Infrastructure Publishing Pvt. Ltd."

Signature

.....

Name (Block Letters) \_\_\_\_\_

Designation \_\_\_\_\_

Company \_\_\_\_\_

Company GST No. \_\_\_\_\_

Mailing Address \_\_\_\_\_

Telephone \_\_\_\_\_ Mobile \_\_\_\_\_

E-mail \_\_\_\_\_

#### Wire transfer details:

**Beneficiary** : India Infrastructure Publishing Pvt. Ltd.  
**Bank Name** : The Hongkong and Shanghai Banking Corporation Ltd  
**Bank Address** : R-47, Greater Kailash-1, New Delhi - 110048  
**Account No.** : 094179587002  
**Swift Code** : HSBCINBB  
**IFSC Code** : HSBC0110006  
**GSTIN** : 07AAACI5880R1ZV

#### Contact details:

##### Sumita Kanjilal

Information Products  
India Infrastructure Publishing Pvt. Ltd.  
B-17, Qutab Institutional Area, New Delhi 110016, India  
Tel: +91-11-46560421, 41034600, 41034601 Fax: +91-11-26531196  
Mobile: +91-9958299609  
Email: sumita.kanjilal@indiainfrastructure.com