

India Smart Highway Market By Technology (Intelligent Transportation Management System (ITS), Intelligent Traffic Management System (ITMS), Communication System, and Monitoring System), By Display (Variable Message Signs (VMS), Digital Signage, and Others), By Service (Managed Service, Maintenance and Operation Service, Consultancy Service), By End-Use Industry (Urban Smart Highways, Rural Smart Highways), By Region, Competition, Forecast & Opportunities, 2029

<https://marketpublishers.com/r/IE1BD6374B8DEN.html>

Date: October 2023

Pages: 71

Price: US\$ 3,500.00 (Single User License)

ID: IE1BD6374B8DEN

Abstracts

India smart highway market is anticipated to grow at a high CAGR in the forecast period 2025-2029. The Indian Smart Highway business is rapidly expanding and altering the country's transportation scene. With rapid urbanization, a growing population, and an emphasis on infrastructure development, smart roads have emerged as a critical answer to congestion, safety, and efficiency issues. This note investigates the key drivers of the India Smart Highway market, the current condition of the sector, notable developments, and the prospective influence on India's transport environment.

The India smart highway market is rapidly expanding, transforming the country's transport infrastructure. Smart highways have arisen as a vital solution to address congestion, safety, and efficiency concerns as a result of urbanization, population increase, and an emphasis on infrastructure development. The India Smart Highway market is gaining traction quickly, altering the country's transport scene and providing a glimpse into the future of mobility. With increased urbanization, a growing population,

and a focus on infrastructure development, smart roads have emerged as a critical answer to the difficulties of traffic congestion, safety concerns, and transportation efficiency. This detailed report digs into the fundamental drivers driving the India Smart Highway market's growth, examines its current position, identifies notable advances, and emphasizes the profound impact it can have on India's transportation ecosystem.

Increasing Investments in Smart Cities

Over the next 20 years, the Indian government intends to invest USD 1 trillion on smart cities. As smart cities require intelligent transportation systems to manage traffic and improve safety, this investment is likely to increase demand for smart highway technologies. Smart city investments have created several prospects for the expansion of the India smart highway market. The funds designated for smart city development are used to modernize existing roadways, build new motorways, and deploy smart technologies for traffic control and infrastructure monitoring. The integration of intelligent transport systems is a critical part of the smart highway market in the context of smart cities. These systems include technology, such as traffic management systems, adaptive signaling, and real-time data collection and analysis. Smart highways can monitor traffic patterns, optimize traffic flow, and minimize congestion by utilising these systems, resulting in increased mobility and reduced trip time for commuters. The investments in smart cities have facilitated the adoption of emerging technologies in the smart highway sector. This includes the implementation of connected vehicle solutions, where vehicles can communicate with infrastructure and other vehicles, leading to improved safety, efficient traffic management, and reduced emissions. Additionally, the focus on sustainability and environmental consciousness in smart cities has propelled the adoption of electric vehicle charging infrastructure along smart highways.

The investments in the India smart highway market have also led to collaborations between the government and private sector entities. Public-private partnerships (PPPs) have become instrumental in implementing smart highway projects by leveraging the expertise and resources of private companies, ensuring efficient execution and timely delivery.

In conclusion, the increasing investments in smart cities have spurred the growth of the India smart highway market. These investments have allowed for the integration of advanced technologies, intelligent transportation systems, and collaborative efforts between the public and private sectors. As a result, smart highways are playing a crucial role in transforming India's urban transportation infrastructure, enhancing mobility, and improving the overall quality of life for citizens.

Rising Adoption of Connected and Autonomous Vehicles

The growing popularity of connected and autonomous cars (CAVs) is predicted to have a substantial impact on India's smart highway sector. CAVs are vehicles outfitted with advanced sensors, communication systems, and artificial intelligence that allow them to function without or with minimal human interaction. These vehicles have the potential to transform the transportation industry, and smart roads will be critical in facilitating their deployment and assuring their safe and efficient operation. Connected and autonomous vehicles require a robust infrastructure to function optimally. Smart highways equipped with advanced communication systems, sensors, and data networks are essential for facilitating vehicle-to-infrastructure (V2I) and vehicle-to-vehicle (V2V) communication. This connectivity enables CAVs to receive real-time information about road conditions, traffic patterns, and potential hazards, enhancing safety and efficiency. CAVs have the potential to revolutionize traffic management on highways. Through V2I communication, these vehicles can receive real-time information about traffic congestion, optimize their routes, and adjust their speed, accordingly, leading to improved traffic flow and reduced congestion. Smart highways with advanced traffic management systems and infrastructure can support the efficient integration and operation of CAVs, ensuring a smooth and seamless traffic experience. Connected and autonomous vehicles have the potential to contribute to energy efficiency and environmental sustainability goals. Through intelligent routing, adaptive cruise control, and predictive maintenance capabilities, CAVs can optimize fuel consumption and reduce emissions. Smart highways with integrated renewable energy solutions, electric vehicle charging infrastructure, and smart grid connectivity can support the adoption and operation of CAVs, promoting a greener transportation ecosystem. The increasing deployment of linked and self-driving vehicles will have a dramatic impact on India's smart highway sector. Smart highways with modern communication systems, infrastructural support, and intelligent traffic management skills will be critical for CAVs to operate safely and efficiently. India can pave the path for a future of safer, more efficient, and greener transportation by embracing this technology transition.

Growing Need to Improve Traffic Safety and Efficiency

The growing demand to improve traffic safety and efficiency is driving the development of smart motorways in India. As the country's population and urbanization grow, so does the need for better transportation infrastructure and administration. Smart highways use cutting-edge technologies and sophisticated systems to improve road safety, traffic flow, and overall transportation efficiency. Sensors, cameras, communication networks, and

data analytics are used on these highways to monitor traffic conditions, manage congestion, and deliver real-time information to drivers. Rapid urbanization and rising automobile ownership in India have resulted in substantial traffic congestion and road accidents. As a result, smart highway solutions to address these difficulties are urgently needed. The goal is to develop safer and more efficient road networks by using technology such as intelligent transportation systems, real-time traffic monitoring, and smart signaling systems. Smart highways can provide various advantages, including fewer accidents and fatalities, better traffic management, increased fuel efficiency, shorter travel times, and lower carbon emissions. These benefits are especially important in countries like India, where road safety and traffic management are big concerns.

The Indian government has launched a number of projects and programs to develop smart highways. The Ministry of Road Transport and motorways, for example, has started the 'Intelligent Transport Systems' project to install smart technologies on motorways and urban roadways. To improve traffic efficiency and safety, tolling systems, electronic toll collecting, and real-time traffic information systems are being implemented.

Market Segments

The India Smart Highway market is segmented into technology, display, service, end-user industry and region. Based on Technology, the market is segmented into Intelligent transportation management system (ITS) and Intelligent traffic management system (ITMS), Communication system and Monitoring system. Based on Display, the market is divided into Variable Message Signs (VMS), Digital signage and Others, Distributed Control System (DCS) and Human Machine Interface (HMI). Based on Service, the market is segmented into Managed service, Maintenance and operation service and Consultancy service. Based on End-User Industry, the market is segmented into Urban Smart Highways and Rural Smart Highways. The market analysis also studies the regional segmentation to devise regional market segmentation, divided among East India, West India, North India, and South India

Market Players

Major market players of India smart highway market are Larsen & Toubro Limited, Tata Projects Limited, Mts Systems Corporation, Schneider Electric India, Cisco Systems India Private Limited, Siemens Limited, IBM India, ABB India Limited, Honeywell Automation India Limited, Essel Infraprojects Limited, and Reliance Infrastructure

Limited. To achieve good market growth, businesses that are active in the market employ organic tactics, such as product launches, mergers, and partnerships.

Report Scope:

In this report, India Smart Highway Market has been segmented into following categories, in addition to the industry trends which have also been detailed below:

India Smart Highway Market, By Technology

Intelligent transportation management system (ITS)

Intelligent traffic management system (ITMS)

Communication system

Monitoring system

India Smart Highway Market, By Display

Variable Message Signs (VMS)

Digital signage

Others

India Smart Highway Market, By Service

Managed service

Maintenance and operation service

Consultancy service

India Smart Highway Market, By End-User Industry

Urban Smart Highways

Rural Smart Highways

India Smart Highway Market, By Region:

East India

West India

North India

South India

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in India Smart Highway Market

Available Customizations:

India Smart Highway Market with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. SERVICE OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
- 1.3. Markets Covered
- 1.4. Years Considered for Study
- 1.5. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

4. VOICE OF CUSTOMER

5. INDIA SMART HIGHWAY MARKET OUTLOOK

- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.2. Market Share & Forecast
 - 5.2.1. By Technology (Intelligent transportation management system (ITS), Intelligent traffic management system (ITMS), Communication system, Monitoring system)
 - 5.2.2. By Display (Variable Message Signs (VMS), Digital signage, Others)
 - 5.2.3. By Service (Managed service, Maintenance and operation service, Consultancy service)
 - 5.2.4. By End-User Industry (Urban Smart Highways, Rural Smart Highways)
 - 5.2.5. By Region (South India, North India, West India, East India)
- 5.3. By Company (2023)

5.4. Product Market Map

6. SOUTH INDIA SMART HIGHWAY MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Technology

6.2.2. By Display

6.2.3. By Service

6.2.4. By End-User Industry

7. NORTH INDIA SMART HIGHWAY MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Technology

7.2.2. By Display

7.2.3. By Service

7.2.4. By End-User Industry

8. WEST INDIA SMART HIGHWAY MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Technology

8.2.2. By Display

8.2.3. By Service

8.2.4. By End-User Industry

9. EAST INDIA SMART HIGHWAY MARKET OUTLOOK

9.1. Market Size & Forecast

9.1.1. By Value

9.2. Market Share & Forecast

9.2.1. By Technology

9.2.2. By Display

9.2.3. By Service

9.2.4. By End-User Industry

10. MARKET DYNAMICS

10.1. Drivers

10.2. Challenges

11. MARKET TRENDS & DEVELOPMENTS

12. POLICY & REGULATORY LANDSCAPE

13. INDIA ECONOMIC PROFILE

14. COMPANY PROFILES

14.1. Larsen & Toubro Limited

14.1.1. Business Overview

14.1.2. Key Revenue (If Available)

14.1.3. Recent Developments

14.1.4. Key Personnel

14.1.5. Key Product/Service Offered

14.2. Tata Projects Limited

14.2.1. Business Overview

14.2.2. Key Revenue (If Available)

14.2.3. Recent Developments

14.2.4. Key Personnel

14.2.5. Key Product/Service Offered

14.3. Honeywell Automation India Limited

14.3.1. Business Overview

14.3.2. Key Revenue (If Available)

14.3.3. Recent Developments

14.3.4. Key Personnel

14.3.5. Key Product/Service Offered

14.4. IBM India

14.4.1. Business Overview

- 14.4.2. Key Revenue (If Available)
- 14.4.3. Recent Developments
- 14.4.4. Key Personnel
- 14.4.5. Key Product/Service Offered
- 14.5. ABB India Limited
 - 14.5.1. Business Overview
 - 14.5.2. Key Revenue (If Available)
 - 14.5.3. Recent Developments
 - 14.5.4. Key Personnel
 - 14.5.5. Key Product/Service Offered
- 14.6. Schneider Electric India
 - 14.6.1. Business Overview
 - 14.6.2. Key Revenue (If Available)
 - 14.6.3. Recent Developments
 - 14.6.4. Key Personnel
 - 14.6.5. Key Product/Service Offered
- 14.7. Cisco Systems India Private Limited
 - 14.7.1. Business Overview
 - 14.7.2. Key Revenue (If Available)
 - 14.7.3. Recent Developments
 - 14.7.4. Key Personnel
 - 14.7.5. Key Product/Service Offered
- 14.8. Essel Infraprojects Limited
 - 14.8.1. Business Overview
 - 14.8.2. Key Revenue (If Available)
 - 14.8.3. Recent Developments
 - 14.8.4. Key Personnel
 - 14.8.5. Key Product/Service Offered
- 14.9. Siemens Limited
 - 14.9.1. Business Overview
 - 14.9.2. Key Revenue (If Available)
 - 14.9.3. Recent Developments
 - 14.9.4. Key Personnel
 - 14.9.5. Key Product/Service Offered
- 14.10. Reliance Infrastructure Limited
 - 14.10.1. Business Overview
 - 14.10.2. Key Revenue (If Available)
 - 14.10.3. Recent Developments
 - 14.10.4. Key Personnel

14.10.5. Key Product/Service Offered

15. STRATEGIC RECOMMENDATIONS

16. ABOUT US & DISCLAIMER

(Note: The companies list can be customized based on the client requirements.)

I would like to order

Product name: India Smart Highway Market By Technology (Intelligent Transportation Management System (ITS), Intelligent Traffic Management System (ITMS), Communication System, and Monitoring System), By Display (Variable Message Signs (VMS), Digital Signage, and Others), By Service (Managed Service, Maintenance and Operation Service, Consultancy Service), By End-Use Industry (Urban Smart Highways, Rural Smart Highways), By Region, Competition, Forecast & Opportunities, 2029

Product link: <https://marketpublishers.com/r/IE1BD6374B8DEN.html>

Price: US\$ 3,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/IE1BD6374B8DEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms

& Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970