

# **Intelligent Transportation Systems Market Forecasts to 2034 – Global Analysis By System Type (Advanced Traffic Management Systems, Advanced Traveler Information Systems, Advanced Public Transportation Systems, Commercial Vehicle Operation Systems and Emergency Management Systems), Component, Technology, Application, End User and By Geography**

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## **Abstracts**

According to Statistics MRC, the Global Intelligent Transportation Systems Market is accounted for \$32.0 billion in 2026 and is expected to reach \$77.1 billion by 2034 growing at a CAGR of 11.6% during the forecast period. Intelligent transportation systems refer to the integration of advanced information, communication, and control technologies into transportation infrastructure and vehicles to enhance mobility safety, operational efficiency, environmental performance, and user experience across road, rail, maritime, and aviation transportation networks. They encompass advanced traffic management centers, dynamic message signs, variable speed limit systems, traveler information platforms, transit signal priority systems, commercial fleet telematics, emergency vehicle preemption, connected vehicle communication infrastructure, and AI-powered incident detection and traffic flow optimization algorithms serving urban traffic authorities, transit agencies, logistics operators, and highway management authorities.

### **Market Dynamics:**

#### **Driver:**

Urban Traffic Congestion Management

Urban traffic congestion management pressure is the primary investment driver as rapidly growing city populations create traffic volumes that conventional fixed-timing signal infrastructure cannot efficiently manage, compelling transit authorities to invest in adaptive signal control, AI-powered traffic analytics, and integrated mobility management platforms. Economic costs of urban traffic congestion exceeding hundreds of billions of dollars annually in major metropolitan economies create compelling financial justification for intelligent transportation system investment that generates measurable productivity and emissions reduction benefits. Government smart city infrastructure programs are embedding intelligent transportation system deployment as a core pillar of urban digital transformation investment.

**Restraint:****Legacy Infrastructure Integration Complexity**

Legacy transportation infrastructure integration complexity represents a persistent deployment barrier as intelligent transportation system implementations must interface with existing traffic signal controllers, communication networks, and traffic management centers designed over decades using incompatible proprietary standards and communication protocols. Retrofit integration costs for brownfield urban deployments frequently exceed greenfield system cost estimates by substantial margins, extending project timelines and reducing return on investment calculations that underpin funding approval decisions. Transportation authority procurement fragmentation across hundreds of independent municipal and state entities creates market access challenges for vendors seeking scalable commercial implementations beyond pilot project phases.

**Opportunity:****Connected and Autonomous Vehicle Integration**

Connected and autonomous vehicle communication infrastructure integration represents a multi-decade growth opportunity as vehicle-to-infrastructure communication systems require roadside unit deployment, traffic management center software upgrades, and real-time map data services that constitute large incremental intelligent transportation system procurement categories. Government infrastructure investment mandates for vehicle-to-everything communication deployment in new road construction projects are establishing regulatory demand floors. Autonomous vehicle safety assurance requirements for infrastructure-provided perception support at complex intersections are generating specific procurement demand for high-

performance roadside sensor and communication systems beyond conventional traffic management applications.

### **Threat:**

#### Data Privacy and Surveillance Concerns

Data privacy concerns and public surveillance oversight challenges represent growing deployment constraints for intelligent transportation system implementations relying on pervasive camera networks, license plate recognition, and individual mobility tracking capabilities that transport agencies require for system performance but citizens may resist as excessive surveillance infrastructure. Regulatory restrictions on biometric data collection and retention in multiple European and U.S. state jurisdictions are limiting system design options for intelligent transportation implementations requiring vehicle and occupant identification. Cybersecurity incidents targeting traffic management systems are heightening public and political skepticism of large-scale connected transportation infrastructure investments.

### **Covid-19 Impact:**

COVID-19 dramatically reduced traffic volumes across global urban networks, temporarily reducing the urgency and funding justification for new intelligent transportation system investment while concurrently demonstrating how adaptive traffic management systems could be reprogrammed to optimize changed mobility patterns during lockdown and recovery phases. Post-pandemic urban mobility pattern changes including sustained remote work, micromobility growth, and logistics traffic increases have created new traffic management requirements that are driving updated intelligent transportation system procurement programs tailored to post-pandemic mobility demand profiles.

The emergency management systems segment is expected to be the largest during the forecast period

The emergency management systems segment is expected to account for the largest market share during the forecast period, due to strong government procurement prioritization for transportation safety infrastructure that directly supports emergency response performance and public safety outcomes, combined with federal funding mandates for emergency vehicle preemption and incident management system deployment. AI-powered incident detection and automated emergency responder

notification systems are demonstrating measurable improvements in emergency response times that generate compelling procurement justification for municipal public safety agencies. Extreme weather event frequency increases are additionally driving emergency transportation management system investment for flood routing, evacuation guidance, and disaster response coordination.

The hardware segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the hardware segment is predicted to witness the highest growth rate, driven by large-scale deployment of roadside units for vehicle-to-infrastructure communication, next-generation traffic sensor installations including radar, LiDAR, and thermal camera systems, and edge computing infrastructure required to support low-latency intelligent transportation system operations at intersection and corridor level. Government infrastructure investment programs in the U.S., EU, and Asia Pacific are specifying ITS hardware deployment as standard components of road construction and rehabilitation projects. Rising unit volumes and standardization are progressively reducing ITS hardware unit costs while expanding deployment economics across a wider range of transportation authority budget levels.

### **Region with largest share:**

During the forecast period, the North America region is expected to hold the largest market share, due to substantial U.S. federal transportation infrastructure investment through the Infrastructure Investment and Jobs Act incorporating intelligent transportation system deployment mandates, large metropolitan traffic management system replacement cycles generating significant procurement, and leading ITS technology company presence. U.S. Department of Transportation Connected Vehicle pilot programs and state DOT ITS deployment programs collectively represent the world's largest national intelligent transportation procurement market, sustaining North American revenue leadership across hardware, software, and services categories.

### **Region with highest CAGR:**

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, due to rapidly expanding smart city investment programs in China, India, South Korea, Japan, and Southeast Asia incorporating intelligent transportation system deployment as core urban infrastructure, large greenfield transportation network construction projects enabling modern ITS implementation from inception, and

government mobility digitalization mandates. China's intelligent transportation system investment through its smart city and Xiongan new district programs represents the single largest national ITS procurement program globally, generating sustained high-volume demand for traffic management and public transportation technologies.

### **Key players in the market**

Some of the key players in Intelligent Transportation Systems Market include Siemens AG, Thales Group, Kapsch TrafficCom, Cisco Systems, IBM Corporation, Huawei Technologies, NEC Corporation, TomTom, Hitachi Ltd., Indra Sistemas, Q-Free ASA, Iteris Inc., Cubic Corporation, Swarco AG, FLIR Systems, Denso Corporation, TransCore, and Garmin Ltd..

### **Key Developments:**

In March 2026, Siemens AG deployed its SCOOT adaptive traffic signal control system across 800 intersections in a major European capital city reducing average traffic delay by 22% versus legacy fixed-time operation.

In March 2026, Kapsch TrafficCom secured a nationwide electronic toll collection and traffic management system contract in a major Asia Pacific market covering 12,000 kilometers of national highway network.

In January 2026, Iteris Inc. launched its ClearGuide connected vehicle data analytics platform upgrade integrating V2I communication data with traditional loop detector and camera sensor inputs for real-time corridor management.

In January 2026, Cubic Corporation completed deployment of its integrated urban mobility platform connecting bus rapid transit, bike share, and parking management systems in a major North American metropolitan region.

### **System Types Covered:**

Advanced Traffic Management Systems

Advanced Traveler Information Systems

Advanced Public Transportation Systems

Commercial Vehicle Operation Systems

Emergency Management Systems

Components Covered:

Hardware

Software

Services

Sensors

Communication Systems

Technologies Covered:

AI & Analytics

IoT

V2X Communication

Cloud Computing

5G Connectivity

Applications Covered:

Traffic Management

Road Safety & Surveillance

Freight Management

Parking Management

Toll Collection

End Users Covered:

Government

Commercial Fleet Operators

Public Transport Authorities

Logistics Companies

Other End Users

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

### **Free Customization Offerings:**

All the customers of this report will be entitled to receive one of the following free customization options:

#### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

#### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

#### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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