Geographic Information System Market to Reach USD 31.8 Billion by 2031, Reports Mordor Intelligence

The geographic information system market is growing at a 13.94% CAGR, driven by smart-city rollouts, cloud GIS, mobile data collection, and AI analytics.

HYDERABAD, TELANGANA, INDIA, September 29, 2026 /EINPresswire.com/ -- According to Mordor Intelligence, the geographic information system market size is projected to grow from USD 16.58 billion in 2026 to USD 31.8 billion by 2031, registering a CAGR of 13.94% during the forecast period. The market is expanding as organizations increasingly use location-based data for infrastructure planning, asset management, transportation, public safety, agriculture, utilities, and industrial operations. Rapid smart-city development, national open-data initiatives, cloud-native deployments, mobile-first field data collection, and advances in AI-powered imagery analysis are supporting broader GIS adoption across public and private sectors.

The market is also benefiting from the integration of GIS with IoT, 5G, edge computing, digital twins, artificial intelligence, and enterprise software platforms. Cloud deployment is gaining traction as organizations seek scalable infrastructure and lower implementation complexity, while mobile GIS applications are expanding the use of geospatial technologies beyond traditional mapping and surveying teams. North America remains the largest regional market, while Asia-Pacific is projected to record the fastest growth during the forecast period.

Geographic Information System Market Key Growth Factors

Cloud-Native GIS Expanding Enterprise Adoption

Cloud-native GIS deployments are gaining momentum as enterprises seek scalable infrastructure, simplified upgrades, and lower infrastructure costs. Containerized architectures, managed services, cloud data warehouses, and serverless geospatial analytics allow organizations to scale GIS workloads based on demand. Cloud deployment also enables GIS teams to integrate spatial data with enterprise applications and data platforms. The increasing availability of sovereign cloud infrastructure and compliance-focused cloud environments is helping address data residency and security requirements, supporting wider adoption across government, utilities, transportation, and other regulated industries.

Mobile-First Field Data Collection Broadening GIS Applications

The integration of GNSS, cameras, lidar sensors, and mobile applications is expanding the use of GIS in field operations. Smartphones and rugged mobile devices allow field teams to collect, validate, and synchronize location-based information without relying exclusively on dedicated surveying equipment. Offline capabilities enable data collection in remote areas, while 5G connectivity supports the transfer of high-resolution imagery and other field data. Augmented-reality capabilities are also helping workers visualize underground utilities, infrastructure assets, and spatial information directly at project sites.

AI-Powered Geospatial Analytics Supporting Faster Decision-Making

Artificial intelligence is increasingly being integrated into GIS workflows to automate imagery classification, feature extraction, spatial analysis, and change detection. AI-powered systems can identify objects such as roads, buildings, vehicles, and crop conditions from satellite and aerial imagery, reducing the time required for manual analysis. The growing availability of high-resolution imagery and geospatial foundation models is creating additional applications across agriculture, insurance, defense, infrastructure, and environmental monitoring. Vendors are increasingly combining AI models with cloud platforms and APIs to deliver automated geospatial intelligence to enterprise users.

Ashish Gautam, Senior Research Manager, Mordor Intelligence, says, "The geographic information system market is expanding as organizations increasingly use location intelligence, cloud-native platforms, artificial intelligence, and real-time spatial analytics to support infrastructure, operational, and strategic decisions. Mordor Intelligence applies structured research methodologies and rigorous validation to help organizations assess the evolving GIS ecosystem, including cloud deployment, smart-city initiatives, mobile field data collection, AI-powered geospatial analytics, digital twins, and regional adoption trends across the global geographic information system market."

Geographic Information System Market Recent Industry Developments

July 2026: Esri launched ArcGIS for ServiceNow, a bidirectional integration connecting ArcGIS and ServiceNow to bring location intelligence into enterprise workflows. The integration enables users to visualize and analyze incidents, assets, facilities, work orders, and other business data through ArcGIS and ServiceNow, supporting wider use of GIS across enterprise operations.

June 2026: Hexagon acquired ITRES Research Limited, a provider of airborne hyperspectral and thermal imaging systems. The acquisition expands Hexagon's geospatial capabilities by combining hyperspectral and thermal sensing with LiDAR, optical imagery, digital twins, and geospatial processing technologies for advanced mapping and analysis.

Geographic Information System Market Segmentation Insights

By Component

Hardware

Software

Services

By Function

Mapping

Surveying

Telematics and Navigation

Location-based Services

Geospatial Data Management and Analysis

By Deployment Mode

On-premise

Cloud

By End-user Industry

Agriculture

Utilities

Mining

Construction

Transportation and Logistics

Oil and Gas

Government and Defence

Telecommunications

Other End-user Industries

By Geography

North America: United States, Canada, Mexico

South America: Brazil, Argentina, Chile, Rest of South America

Europe: Germany, United Kingdom, France, Italy, Spain, Rest of Europe

Asia-Pacific: China, India, Japan, South Korea, Malaysia, Singapore, Australia, Rest of Asia-Pacific

Middle East and Africa: United Arab Emirates, Saudi Arabia, Turkey, Rest of Middle East, South Africa, Nigeria, Rest of Africa

Geographic Information System Market Regional Insights

North America

North America benefits from mature cloud infrastructure, established GIS ecosystems, strong technology investments, and government initiatives supporting geospatial data interoperability. The United States remains a major contributor as federal agencies and enterprises use GIS for wildfire management, infrastructure planning, broadband mapping, transportation, public safety, and critical-infrastructure resilience. Growing adoption of cloud-based GIS and advanced spatial analytics is also supporting market development across Canada and Mexico.

Asia-Pacific

Asia-Pacific is experiencing strong demand for GIS driven by rapid urbanization, smart-city initiatives, infrastructure development, and increasing investment in digital technologies. China, India, Japan, South Korea, Singapore, and Australia are expanding GIS applications across transportation, utilities, construction, agriculture, logistics, and urban planning. The growth of domestic satellite capabilities, cloud infrastructure, and digital-twin initiatives is further supporting the adoption of advanced geospatial technologies.

Europe, Middle East, Africa, and South America

Europe continues to adopt GIS for infrastructure management, environmental monitoring, urban planning, renewable-energy development, and climate-risk assessment, while data-sharing initiatives and interoperability requirements are supporting demand for standardized geospatial platforms. The Middle East is increasingly using GIS and digital twins for smart-city and infrastructure programs, while South America and Africa are expanding adoption across mining,

agriculture, infrastructure development, and natural-resource management. Greenfield cloud deployments in emerging markets are creating additional opportunities for GIS vendors and service providers.

The Geographic Information System Market Report is also Available in the following Languages

Japanese: https://www.mordorintelligence.com/ja/industry-reports/geographic-information-system-market?utm_source=einpr

French: https://www.mordorintelligence.com/fr/industry-reports/geographic-information-system-market?utm_source=einpr

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Geographic Information System Market Competitive Landscape

The geographic information system market has a moderate level of concentration, with established technology providers competing across GIS software, geospatial data, hardware, cloud services, and industry-specific solutions. Vendors are differentiating through artificial intelligence, cloud-native architectures, spatial analytics, digital twins, mobile applications, and integration with enterprise systems.

Leading companies are also expanding their capabilities through acquisitions, partnerships, and platform integrations. Competition is increasingly extending beyond traditional GIS software toward managed services, APIs, cloud infrastructure, real-time analytics, and sector-specific solutions for utilities, transportation, government, telecommunications, construction, and natural resources.

Geographic Information System Industry Leaders

Environmental Systems Research Institute, Inc. (Esri)

Hexagon AB

Trimble Inc.

Autodesk, Inc.

Bentley Systems, Incorporated

Explore more insights geographic information system on competitive landscape: https://www.mordorintelligence.com/industry-reports/geographic-information-system-market/companies?utm_source=einpr

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DevSecOps Orchestration Market Trends

The DevSecOps orchestration market size was valued at USD 1.18 billion in 2025 and is estimated to reach USD 1.43 billion in 2026 and USD 4.19 billion by 2031, registering a CAGR of 23.99% during 2026–2031. Growing adoption of DevSecOps practices, automated security workflows, and the need to integrate security across software development pipelines are supporting market growth.

Disaster Recovery as a Service Market Share

The Disaster Recovery as a Service market size is expected to increase from USD 3.09 billion in 2025 to USD 3.98 billion in 2026 and reach USD 14.17 billion by 2031, growing at a CAGR of 28.90% over 2026–2031. Rising cybersecurity threats, increasing cloud adoption, and the need for business continuity and rapid data recovery are driving demand for disaster recovery services.

https://www.mordorintelligence.com/industry-reports/disaster-recovery-service-market?utm_source=einpr

3D Mapping and 3D Modelling Market Growth

The 3D mapping and 3D modelling market size is expected to grow from USD 8.57 billion in 2025 to USD 9.74 billion in 2026 and reach USD 18.44 billion by 2031, registering a CAGR of 13.62% during 2026–2031. Growing adoption across urban planning, construction, infrastructure, geospatial applications, and digital twin development is supporting market expansion.

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Mordor Intelligence is a trusted partner for businesses seeking comprehensive and actionable market intelligence. Our global reach, expert team, and tailored solutions empower organizations and individuals to make informed decisions, navigate complex markets, and achieve their strategic goals.

With a team of over 550 domain experts and on-ground specialists spanning 150+ countries, Mordor Intelligence possesses a unique understanding of the global business landscape. This expertise translates into comprehensive syndicated and custom research reports covering a wide spectrum of industries, including aerospace and defense, agriculture, animal nutrition and wellness, automation, automotive, chemicals and materials, consumer goods and services, electronics, energy and power, financial services, food and beverages, healthcare, hospitality and tourism, information and communications technology, investment opportunities, and logistics.

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