

Artificial Intelligence Applications for Smart Cities Report

Part of the AI & Intelligent Automation Service Area Package

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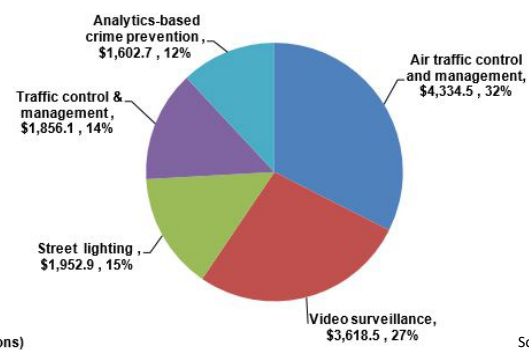
23 Use Cases across Six Smart City Sectors: Governance, Safety & Security, Mobility & Transportation, Energy & Resource Management, Infrastructure Management, and Healthcare

The concept of a smart city has been around for decades, driven by a utopian vision of city systems, services, workers, and residents functioning in synchronicity for a more efficient, safer, and productive environment. Artificial intelligence (AI) will likely be the catalyst for enabling the smart city. Smart cities will use machine learning (ML), deep learning (DL), computer vision (CV), and natural language processing (NLP) technologies (among others) to enable city services, assets, and systems to become more powerful, efficient, and automated. These improvements will result in an enhanced environment in which to live, work, and play.

Most city planners and departments are focused on operational, fiscal, or quality of life issues. Today's cities are expected to evolve so that the business and residential experience is efficient and cost-effective. Failure to address quality of life issues will result in businesses, residents, and tourists seeking out other cities or choosing to reside and work in the suburbs or exurbs. The goal is to create city systems and services that operate more efficiently and provide significant benefits. These benefits can come in many forms, including reduced or more efficient traffic, cleaner air, more efficient government services, and reduced crime. Omdia forecasts that global smart city AI software revenue will reach nearly \$5 billion annually by 2025, up from \$673.8 million in 2019.

This report provides a quantitative assessment of the market opportunity for smart city AI applications. The study includes analyses of 23 AI use cases distributed across six industry sectors: governance, safety & security, mobility & transportation, energy & resource management, infrastructure management, and healthcare. Each use case is described in detail, along with real-world examples of technology being deployed in smart cities around the world. Global market forecasts, segmented by technology, geography, sector, industry, and use case, extend through 2025. Profiles of 37 companies active in the smart city AI space are also included in the report.

Top Five Smart City AI Software Use Cases by Cumulative Revenue: World Markets: 2019-2025



Source: Omdia

Report Coverage

KEY ISSUES ADDRESSED	COVERAGE	APPLICABLE TO
<ul style="list-style-type: none"> • What are the key use cases for AI within the smart city, and which sectors will experience the most revenue growth between 2019 and 2025? • Which use cases are projected to be adopted in the near term, and which ones will not see strong use until later in the forecast period? • What are the key drivers of smart city AI software adoption in each industry and technology category? • Which underlying AI technologies (vision, language, and analytics) are powering the smart city AI use cases? • What barriers exist in the marketplace, and how will they affect the adoption of AI technology? • Which regions of the world will see the most activity with smart city AI projects? • Which companies are actively supplying AI software and services to the public sector? 	<ul style="list-style-type: none"> • Smart City AI Software Use Cases, World Markets: 2019-2025 <ul style="list-style-type: none"> • By Cumulative Revenue <ul style="list-style-type: none"> • Top Five • Top Ten • By Region • By Sector • By Use Case • By Technology • By Industry 	<ul style="list-style-type: none"> • Technologies <ul style="list-style-type: none"> • Machine Learning • Deep Learning • Natural Language Processing • Computer Vision • Machine Reasoning • Strong AI • Sectors <ul style="list-style-type: none"> • Governance • Safety & Security • Mobility & Transportation • Energy & Resource Management • Infrastructure Management • Healthcare • Regions <ul style="list-style-type: none"> • North America • Western Europe • Eastern Europe • Asia Pacific • Latin America • Middle East & Africa
		<ul style="list-style-type: none"> • AI technology companies • Software companies • Police departments • Transportation product vendors • Service providers and systems integrators • Construction companies • Capital finance companies • City government consultants and law firms • Government agencies • Investor community

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