

Cities around the world face increasing challenges and pressure from population growth and technological disruption. Residents want to feel safe and live near opportunities. Businesses want to locate where they have the resources to thrive. With urban populations expected to climb from 3.6 to 6 billion by 2045, how cities approach urbanization, technology, business and public safety will determine their ability to flourish.¹

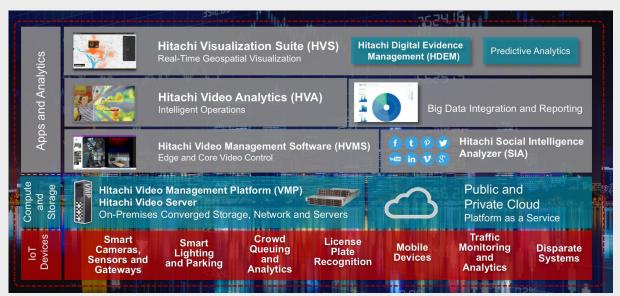
Technology advances deliver unprecedented volumes of data from video cameras, internet of things (IoT) sensors, transportation infrastructure, utilities, social media and more. Organizations now can act to share this data and reduce costs associated with duplicative systems. In fact, an increase in government productivity alone could save an estimated \$3.5 trillion globally.² Unified data integration and innovative IoT-enabled analytics provide the sophisticated insights that cities need to deliver efficient, sustainable and effective services.

¹ United Nations, World Urbanization Prospects. 2014.

 $^{^{\}rm 2}$ McKinsey and Company, The Opportunity in Government Productivity, 2017.

Gain Greater Visibility With Connected Intelligence

Metropolitan centers and the organizations within them use intelligent technology to make their communities smarter, safer and more vibrant. Hitachi Smart Spaces and Video Intelligence integrates data from a variety of IoT and video systems, along with other sources, such as social media. By utilizing big data integration and reporting, these solutions provide real-time and historical information that city officials and organizational leaders can act on to tackle near-term incidents and support smarter planning.



Hitachi Smart Spaces and Video Intelligence combines IoT devices from Hitachi and third parties, distributed or centralized applications, and analytics solutions that deliver instantaneous information and insights to city officials and teams.

Hitachi Vantara Helps Smart Cities Thrive With End-to-End, Intelligent IoT Solution

Hitachi Smart Spaces and Video Intelligence provides an integrated view of urban activity, operations and safety issues and the intelligence to make faster, more informed decisions. Using desktop or mobile devices, cities gain a map-based, single-screen perspective that combines real-time video from cameras, building systems, analytical tools, social media and smart devices from across departments or organizations.

Smart Spaces and Video Intelligence supports smarter operations with transit and traffic data, public safety intelligence and sophisticated analytics. To enhance business locally, the solution analyzes foot traffic, provides insights into customer behavior and triggers automated alerts when long wait times, suspicious activities or other issues are detected.

Smart Features To Improve the Quality of Urban Life

One View for All Data and Intelligence

Hitachi Visualization Suite's geospatial software and smart edge-capture device provide a single-screen, map-based view. They combine video, operational data, GPS transit and fleet vehicle tracking, building and infrastructure data, social media and other sources with native analytics and workflow automation.

Provides a single-screen view to monitor and proactively respond to issues in real time. Delivers greater situational intelligence and data-driven insights to improve safety, city experience and operations.

Activity Visualizer and People Counter

With Hitachi Video Analytics, city officials can understand urban activity and foot traffic with heat maps and visualization, including directional counts and automated privacy protection, wherever the city chooses to deploy cameras.

Identifies high-activity areas to illustrate use of urban areas and infrastructure. Provides local organizations with granular city data to help them and their communities thrive.

Traffic Analysis and License Plate Recognition

Hitachi Video Analytics counts and classifies trucks, cars, buses and bikes on city streets and highways, and at premises with carpools or parking garages. It also recognizes vehicle license plates and matches them with records in local databases.

Identifies traffic volume and transportation trends to recognize policy impacts and enable more informed decisions to improve traffic flow. License plate recognition allows tracking of stolen or suspicious vehicles.

Sophisticated Analytics and Data Blending

Blend data from different departments and organizations using sophisticated business intelligence analytics with interactive reporting, dashboards and predictive analytics, and leverage drag-and-drop visual integration capabilities.

Empowers agencies to identify opportunities for growth, as well as reduce waste, fraud and abuse while providing intelligence for real-time decision-making and smarter operations.

As urban centers continue to expand, challenges for civic leaders become more complex. In today's connected world, Hitachi Smart Spaces and Video Intelligence offers officials a way to use data-driven insights to make cities safer and smarter for everyone.

- Provides the tools city agencies need to leverage data from sensors, IoT, video, social media and more, to improve operations and resident safety.
- Delivers real-time insights to help the city enhance public services, understand city space utilization and infrastructure return on investment (ROI), and help local businesses thrive.
- Enables greater situational awareness to respond more effectively to public safety incidents.

Enterprise-Scale Video Management

Hitachi Video Management Software (HVMS) is a secure, elegant video solution that works across platforms to provide an intuitive experience. Hitachi Video Management Platform (VMP) provides converged server, storage, flash modules and VMware virtualization along with platform-as-a-service (PaaS) capabilities. It integrates with the majority of industry video management software offerings to manage video and devices, and to work with hardware with analytics and smart cameras with built-in central processing units (CPUs).

Simplifies city video system deployment and management with an all-in-one, integrated solution. Built from the ground up for video.

Deep Web and Social Media Intelligence

Hitachi Social Intelligence Analyzer (SIA) enables geofenced tweet searches and alerts for keywords that can notify security of a potential threat, in-progress incident, or danger to residents and city staff.*

Replaces inefficient, costly and manual social media searches, and provides security officials with deep web insights, to proactively address threats to public safety. With urban populations expected to climb from 3.6 to 6 billion by 2045, how cities approach urbanization, technology, business and public safety will determine their ability to flourish.

United Nations, World Urbanization Prospects. 2014.



^{*}Some restrictions exist for law enforcement in the United States.

Data Drives Innovation in Smart Cities

At Hitachi, we view cities as interactions of people, communities and technology, and as places we come together to improve our lives. Hitachi Smart Spaces and Video Intelligence supports the efforts of smart cities to achieve three basic goals.

- Improve quality of life: Increase economic opportunity, create vibrant communities, reach sustainability goals and improve public safety.
- Increase resiliency: Enable cities and communities to adapt quickly to economic, organizational and environmental changes, now and in the future.
- Operate efficiently: Optimize transportation times, reduce energy consumption and utilize technology to help people be more effective so your communities can thrive.

We leverage the capabilities of Hitachi's Social Innovation solutions, to provide everything from smart rail and water to IoT solutions for smart cities across the globe.



Next Steps

Hitachi Vantara is helping cities become safer and smarter today. Using the IoT, analytics and other proven technologies, smart cities are driving intelligence that increases efficiency and safety, improving the way people work and live. Ready to learn more about the benefits of Hitachi Smart Spaces and Video Intelligence for your organization?

Hitachi Visualization Suite Datasheet: Correlate disparate data and video systems geospatially, enabling public safety officials to find the assets they need to assess any situation in real time. <u>Download</u>.

Hitachi Video Analytics Overview: Transform security cameras into city sensors that enable smarter operational intelligence and security. <u>Download</u>.

Hitachi Video Management Platform: Empower video analytics, security and monitoring with a converged video solution that stores and manages video with high availability and fault tolerance. <u>Download</u>.

Business Analytics Solution Brief: Leverage big data integration from various systems and deep analytical insights for smarter government and organizations. <u>Download</u>.



To learn more about Hitachi Smart Spaces and Video Intelligence, visit our <u>website</u> or send us an <u>email</u>. We'd be happy to discuss its benefits for your organization.



Hitachi Vantara at a Glance

Your data is the key to new revenue, better customer experiences and lower costs. With technology and expertise, Hitachi Vantara drives data to meaningful outcomes.

Hitachi Vantara







