Microsoft®
Virtual Earth™

Location Services for Public Sector

In public sector agencies today, budget pressures, changing policies and an aging technological infrastructure require decision makers to seek more effective organizational collaboration. Some fundamental goals of this pursuit are better visibility and clarity of organizational data, operational efficiency, seamless organizational communication and ultimately, broad and rapid solutions deployment. In order to achieve these goals, managers of public sector organizations must make complex decisions about investing resources while simultaneously cutting costs.

Today's Challenges in the Public Sector:

Limited Insight

: : Public sector organizations need a way to enrich their understanding of metrics such as demographic statistics, public health information or pollution data

: : Limited visibility into crime trends and disasters inhibits the development of effective risk management processes

: : A constant and overwhelming flow of information makes data analysis challenging

Poor Constituent Connections

: : Aging infrastructure and technology makes collaboration between departments and agencies more difficult to execute efficiently and effectively

: : Agencies need to find multiple channels to provide location and other peripheral information to constituents

: : Public sector employees often have to travel between many different locations and need a way to maximize travel efficiency

Barriers to Innovation

: : Changes in systems and websites can be difficult to scale, costly to implement and can cause substantial downtime

: : Managing the exact location of mobile resources and personnel requires comprehensive visualization

: : Managing real time data updates from multiple information sources can be difficult and costly

Virtual Earth Advantages

The Microsoft® Virtual Earth™ platform is an integrated set of services that combines advanced viewing options, including exclusive bird's eye view[1], aerial, and 3D imagery, with innovative mapping, location and search functionality. It enables public sector organizations to engage business partners and customers by providing innovative solutions and a visual display of data. Additionally, the service oriented architecture enables public sector organizations to easily develop solutions that leverage customizable features and imagery, dynamic maps, driving directions, and powerful data visualization and reporting capabilities without significant financial investments. Public sector organizations use the Virtual Earth platform to realize the following benefits:

Empower: The Virtual Earth platform empowers public sector organizations by providing tools to help them manage data and connect to users more effectively. By leveraging the powerful Virtual Earth data visualization capabilities, public sector organizations can use the platform as a foundation for building location intelligence solutions. Empowered with the most up to date information, public sector organizations can also focus on connecting with users and delivering the best products and services.

Real: The Virtual Earth platform offers reliable imagery and data allowing public sector organizations to build a precise view of their organization. Exclusive bird's eye[1] imagery allows public sector organizations to create richer connections with their users by allowing them to view and familiarize themselves with locations before arriving. Enhanced geocoding provides the most accurate and up-to-date results possible for efficient driving directions and position locators. Pushpin information boxes allow users to learn about a location or quickly visualize information relevant to that location. Combined, these features result in a more enhanced and immersive website experience.

Professional: The Virtual Earth platform utilizes open-standards based technologies, and offers flexible licensing options that fit almost any budget, enabling public sector organizations to develop innovative solutions through a cost effective approach. With 99.9% availability, public sector organizations can be confident that the platform services will be available when needed.

Locate. Innovate. Integrate.

Virtual Earth Platform for Public Sector

With the Microsoft® Virtual Earth™ platform, public sector organizations can visualize and analyze geographic data and share it with other agencies or with the public. The Virtual Earth platform is designed for robust implementations offering efficient, reliable and security-enhanced usage from features to support. Professional Virtual Earth tools help speed development, allowing data to be quickly and broadly disseminated, which can shorten time to deployment and save money helping departments manage data and collaborate more effectively.

Strengthen Constituent Connections

: : Enhance end-user collaboration by providing the ability to share location relevant information and organizational data through maps, detailed imagery and annotation tools

: : Maximize efficiency by offering multipoint routing and incorporate 3rd party data such as traffic and weather, to provide a rich visual resource

: : Make your locations more discoverable and realistic for users with detailed maps, 3D capabilities and driving directions

Improve Insight

: : Create disaster management solutions that allow federal, state, and local agencies to track disease outbreaks, weather events and other disasters

: : Analyze metrics based on location, demographics and other statistics by layering data within the Virtual Earth environment

: : Integrate many data sources to track and manage critical events, trends and organizational resources to better plan and improve disaster response time

Grow Through Innovation

: : Manage data streams and information updates using GeoRSS feeds to view a wide range of data sources, including census data or health information

: : Tighten mobile asset and personnel management by implementing data visualization solutions that integrate with RFID tracking or GPS technology

: : Through an open standards platform, Virtual Earth helps speed time to deployment and helps minimize IT costs by integrating with existing technology investments including traditional GIS vector data

Virtual Earth in Action

Scenario: A county organization wanted better visibility into the incidents and disasters that occur across its region. To accomplish this goal, the organization created a Virtual Earth solution that takes real-time incident information from every city in the region and puts it onto a single map accessible to anyone using the solution.

Solution: The public sector organization created a single user interface where users can drill down into many different types of color and shape-coded information plotted on a map. This information includes vehicle tracking for police and fire vehicles equipped with RFID trackers as well as incident information. When the user hovers over an incident icon, an information box highlights pertinent data such as the nature of the incident and the address. GeoRSS feeds give users access to real-time traffic camera, weather and federal and regional threat level data. An alerts and notifications system linking to the Emergency Notification System, Major Event Advisories and federal data streams, keeps every user up to date with the latest information

disseminated according to the context of the user's map view.

Benefits: The public sector organization increased broad awareness, across all site users, of the problems that occur in the county. By layering information on Virtual Earth maps, dispatchers for police and fire vehicles were able to give more exact response time estimates based on where the emergency response vehicle was in relation to the incident. The alerts and notifications keep every user up to date with the most critical information. Traffic cameras and weather data streams help internal users avoid congested areas and increase travel efficiency. Finally, easy integration with many different technologies and data sources saved public sector dollars.

To learn more about how Orange County created an Emergency Virtual Operations Center using the Virtual Earth platform, please go to: http://virtualearth4gov.spaces.live.com/blog/ cns!369B39F890CE30C1!377.entry

More Information

For more information, please visit www.microsoft.com/virtualearth. For information on Virtual Earth for the Public Sector, please visit http://www.microsoft.com/ virtualearth/industry/government.aspx. In addition you may contact a Virtual Earth Sales Specialist: North, Central, and South America, e-mail: maplic@microsoft. com. In Europe, Africa, Middle East, and the Asia Pacific region, e-mail: mapemea@microsoft.com In Europe, Africa, Middle East, and the Asia Pacific region, e-mail: mapemea@microsoft.com.

1 Available in many metropolitan areas.

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