Advanced Geospatial Solutions for Local and Regional Government Operations

The public is increasingly demanding that local governments provide services quickly and efficiently. Whether it is delivering clean drinking water, providing safe streets and roads, collecting garbage, ensuring accurate property assessments, or responding to emergency situations, local governments are on the front line. Planning, programming, and delivering these services consistently in the face of budgetary and staff constraints require the best tools available supported by people who understand local government needs.

For more than 35 years, Intergraph has met the challenges of local and regional governments with proven business solutions comprised of products, services, and experienced professionals. Today, Intergraph continues its leadership role with modern business solutions based on its pioneering technology, including GeoMedia and other industry products focused specifically on the workflows of local government. These new business solutions help local governments to efficiently geospatially enable their information technology (IT) infrastructure, providing unprecedented levels of access to geospatial data and functionality throughout the enterprise.

Geospatial technology is widely recognized as an effective tool for integrating disparate local government business systems and processes. As virtually every piece of information in a local government has a spatial reference, geospatial information management can provide the “backbone” necessary to pull your operations together. Integrating geospatial data, functionality, and workflows with open and highly scalable enterprise technology, Intergraph’s geospatial solutions help local and regional governments maximize departmental and enterprisewide efficiencies. This translates into improved services and operating efficiency. Government agencies worldwide depend on Intergraph for advanced geospatial solutions for every aspect of their operations.
MANAGING THE LOCAL INFRASTRUCTURE

Public safety and quality-of-life issues demand that government infrastructure be maintained effectively. Intergraph’s geospatial solutions for governments can assist personnel in all aspects of the infrastructure life cycle, including:

- Presenting data from multiple sources for planning
- Providing base data to engineers for design
- Providing field-based solutions for construction inspections
- Assisting maintenance and operations personnel in locating assets and making repair/replacement decisions
- Analyzing repair, history, age, and usage to assist with capital improvement project planning

WATER AND WASTEWATER

Working with our partners, Intergraph can provide a complete solution for the enterprise asset management of water and wastewater networks. These networks form the backbone of the asset inventory and maintenance operations of the water and wastewater department. Using GeoMedia’s advanced feature modeling system, the solution ensures that an accurate, connected network is created and can support sophisticated capabilities such as network traces. Using GeoMedia products to assist professionals with network construction and maintenance, a complete water and wastewater solution from Intergraph reduces the time required for data maintenance and ensures that information is collected correctly the first time.

STRONG RELATIONSHIPS MEAN STRONG NETWORKS

Intergraph prides itself on strong relationships and integration with key asset management partners such as INFOR. The resulting solutions provide a seamless, two-way integration between Intergraph technology and key asset management solutions. These relationships allow you to integrate a spatial component into your asset and work management processes, which enables users to quickly locate and identify assets and visualize complex situations – aiding in the decision-making process while reducing operational costs.

Barcelona Municipality, Barcelona, Spain

Barcelona City, with more than 1.5 million residents, is one of the most dynamic cities in the Mediterranean. The Barcelona Municipality wanted to integrate and share information with citizens and services contractors (electricity, gas, lights, etc.). The Municipal Computer Institute (IMI) of Barcelona selected GIS solutions from Intergraph in 2007. IMI implemented a spatial data infrastructure (SDI) portal, integrating Web services, and GeoMedia. The evolution to a Web services architecture through the SDI portal brings key benefits, including the ability for the municipality and subcontractors to share territorial and service information.
Meeting the challenges of local and regional governments with proven business solutions
Municipality of Czestochowa, Department of Geodesy and Cartography, Poland

Czestochowa is first mentioned in recorded history in 1220. Today, the city is a large municipality with well-developed infrastructure and strong social and economic potential. The Department of Geodesy and Cartography of the Municipality of Czestochowa manages the city’s cadastral, land registry, and infrastructure maps. The department was using two separate systems for land registry and cadastral maps, creating several challenges. The old system provided very limited integration possibilities. Additionally, it focused on maintaining data, not sharing it.

Czestochowa is using Intergraph government solutions to perform geospatial analysis, maintain geometrical data, and to display cadastral and thematic maps. Multitiered technology makes it possible to add new workstations to the system easily and to extend system functionality as needed. GeoMedia’s open architecture and industry standards provide for easy integration of information and data sharing.

TRANSPORTATION

The transportation infrastructure is the lifeblood of any city, town, or county. The construction, inspection, and maintenance of roads, lighting, and bridges must constantly be managed to ensure the safety of citizens. Whether you manage your roads on a segmented basis or use linear referencing techniques and dynamic segmentation capabilities, Intergraph’s transportation solution based on GeoMedia technology provides all the tools necessary to spatially manage transportation-related information.

LAND INFORMATION MANAGEMENT (LIM)

Governments at all levels are responsible for managing a wide range of Land Information Management processes, including surveying, mapping, title/deed recording, planning, addressing, and more. The geospatially enabled IT infrastructure must be such that the processing can be streamlined and accurate, timely, and current information can be available to all users and constituents regardless of their location and means of access.

Intergraph’s geospatially enabled business solutions for government span the full spectrum of Land Information Management, including:

- Maintenance solutions integrated with key business systems, such as title/deeds recording, cadastral registration, valuation, planning and permitting, and property addressing
- Enterprise access to geospatially enabled information and geospatial functionality at desktop, Web, and field levels
- Integration of geospatial technology with non-spatial business systems to spatially enable and leverage more value out of non-spatial systems

As part of Intergraph’s geospatially enabled Land Information Management solutions, GeoMedia products offer best-in-class tools for parcel management, providing modern workflows that are necessary for efficient and timely input, adjustment, and integration of parcel data at all stages of the parcel life cycle. Intergraph’s advanced data modeling, enterprise transaction management, effective dating, and lineage tools and processes ensure these solutions are flexible, powerful, and scalable. Using GeoMedia Web products, Intergraph’s solutions provide enterprise, spatially enabled viewing and analysis of key, non-spatial data assets.

MOBILE RESOURCE MANAGEMENT (MRM) – MANAGING THE FIELD WORKFORCE

Intergraph MRM solutions empower enterprises and service providers to manage field crews and mobile assets in response to real-time pressures and unplanned events. Our highly sophisticated solutions go well beyond simply tracking mobile units by providing an integrated environment for enterprises to view the location and status of mobile resources and match field crews to tasks based on current availability and proximity.

Knowing the location of your field workforce and using this geospatial knowledge to assist in the assignment of jobs and management of work results in increased efficiencies and reduced operational costs.

Our MRM solutions empower local or regional governments to more effectively manage scheduled activities and more efficiently respond to emergency or unscheduled activities. Whether performing an update to an asset inventory or carrying out a tax assessment, our GeoMedia products can provide your mobile workers with current and accurate information in an easy-to-use form. Intergraph’s full MRM solution provides extensive, real-time enterprise support to manage your mobile staff with advanced, decision-making tools.
City of Hamilton, Ontario, Canada

The City of Hamilton is a large community of mixed urban and rural areas in southern Ontario. The city required an integrated cross-departmental technology solution to assist in managing their complex infrastructure network. Hamilton uses Intergraph technology for operational assistance in work order management and customer services, fleet management for transit vehicles for the disabled, and capital project planning for sewer, water, and roads. Intergraph’s GeoMedia provides a comprehensive set of tools to allow the city to easily input, manipulate, and analyze geospatial data to aid in all facets of infrastructure management.

Sociedade para o desenvolvimento comarcal de Galicia (SITGA), Spain/Galicia

More than 10 years ago, SITGA did a GIS supplier survey and selected Intergraph based on its ability to meet SITGA’s needs. Since that time, the partnership has been a success for both SITGA and Intergraph. SITGA is now recognized as the official cartography organization of Galicia and has made one of the most impressive SDI implementations in Spain. Now SITGA means quality professionalism, and the source for ANY Galicia map.

Using Intergraph solutions, SITGA brings valuable geospatial information to citizens and businesses.
Kommunales Rechenzentrum Niederrhein (KRZN), Moers, Germany

KRZN, the data processing center for the local government authority of Niederrhein, serves more than 40 municipalities and 1.25 million people. When the demand for data processing increased as the area grew, KRZN selected Intergraph’s solution for local and regional governments to convert their existing data management systems into one centralized data warehouse. Users can now view and analyze geospatial and other subject data, and then publish both datasets on the Web or company intranet – bringing valuable information to those who need it.

Partners provide complete solutions

Intergraph has teamed with non-spatial industry leaders to provide comprehensive, spatially enabled business solutions for local government. These solutions complement and leverage our clients’ non-spatial investments, including permitting, recording, asset management, CAMA, taxation, and other systems, by geospatially enabling these investments. This includes integrated, transaction-based maintenance of land information and integrated viewing and analysis of land information. This approach allows our clients maximum flexibility both in working with their existing business systems and in acquiring new business systems.

The Intergraph Synergy Program supports third-party research, development, and implementation of geospatial solutions based on Intergraph technology. The program is a unique framework based on building and maintaining a qualified worldwide network of research laboratories, value-added resellers, consulting firms, training providers, system integrators, data providers, in-house project teams, enterprise software/solutions providers, and independent software vendors.

For more information on the program, visit http://synergy.intergraph.com/.

Why Government Leaders Choose Intergraph

Government agencies around the world choose Intergraph solutions for their geospatial workflows. Key benefits include:

- We provide the ability to build and integrate GIS, interoperability, and enterprise GIS capabilities to offer complete local and regional government business workflows.
- We can lower deployment costs with Intergraph solutions using pre-configured data models and user interfaces.
- GeoMedia continues to provide best-of-class geospatial capabilities for our government solutions. GeoMedia’s open architecture, including industry standards (OGC, FGDC, ISO/CEN, SOA), provide an excellent platform for solutions solving government business problems and ensure legal compliance.
- Our GeoMedia products use Oracle Spatial data structures and long-term transaction technology or Microsoft SQL Server technology to provide IT standards for data management.
- GeoMedia extends your enterprise data and geospatial capabilities with today’s leading map browsers – Google Earth and Microsoft Virtual Earth.
- With the demand for imagery data increasing, our Geospatial Content Management application using Terrasheare provides a scalable enterprise solution for managing and exploiting imagery data across all government solutions.
- Our direct participation with industry and government policy initiatives (INSPIRE drafting teams, European Union referenced projects, OGC technical committees) brings the knowledge and experience of industry standards directly to customer solutions.
- The ability to share geospatial data and services via spatial data infrastructures (SDI) using Intergraph solutions enables governments to better cooperate across departments, with other governments, and with businesses.
- We provide the ability to distribute government information out to the public via spatial data infrastructures SDI to improve e-government services.
About Intergraph

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organizations, businesses and governments in more than 60 countries rely on the company’s spatial technology and services to make better and faster operational decisions. Intergraph’s customers organize vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.

For more information, visit us online at www.intergraph.com.