

City of Hamilton tackles merger to become Canada's ninth-largest city

When six municipalities — each with its own unique character and way of doing business — merged to form the new City of Hamilton in 2001, city public works managers faced quite a challenge. Hamilton, Ancaster, Dundas, Flamborough, Glanbrook, and Stoney Creek joined forces to become Canada's ninth-largest city and tackled the challenge of integrating and streamlining their workflows.

These municipalities had been storing their spatial and asset data in a shared geographic information system (GIS) using MicroStation and Intergraph's MGE. The public works department had two parallel databases — one containing geospatial data and another containing infrastructure asset data. The two systems operated independently, resulting in duplication of data and effort, and overall operating inefficiencies. With the increased demands created by the merger, managers realized that they needed streamlined information management, updated technology, and integrated databases and applications to enable the two systems to share information seamlessly.

Responding to this opportunity for change, city managers researched the market and determined that the GeoMedia-Hansen Interface would provide the open, integrated environment they required for spatial and asset data. The city constructed a GIS database and created a geospatial infrastructure management solution that can support its technological demands and expectations.

Intergraph Mapping and Geospatial Solutions and Hansen Information Technologies partnered to develop the GeoMedia-Hansen Interface, which provides a seamless, fully bi-directional solution for managing both the attribute and spatial components of water, wastewater, and storm water systems along with associated work orders and customer service requests. For example, city workers can relate the tabular definition and work history of a water valve in their Hansen system to its spatial definition in GeoMedia. This GIS integration simplifies the identification and selection of assets and aids in the analysis of complex management operations. Based on ActiveX / COM, the GeoMedia-Hansen Interface leverages the latest integration technology for the Microsoft Windows operation system.

This solution has allowed field crews to improve their efficiency. They can now select or locate assets on a map, spatially visualize asset information and work order history to improve



the decision-making process, and select several assets to create multiple work orders or a single work order related to multiple assets. With these new capabilities, costs can be distributed across multiple assets to account more accurately for each department's financial expenditure.

Jim MacAulay, manager of engineering services for the City of Hamilton, said, "Implementing the GeoMedia-Hansen Interface helps streamline many of the daily workflows that the operations staff performs in the management of our infrastructure. Adding the powerful capabilities of a map to visualize problem areas greatly simplifies many of our tasks, including identifying and grouping assets like valves, hydrants, and manholes for the scheduling of work orders in the Hansen application."

Taking it online

The city enhanced the system by developing the MAP.Hamilton Web site using GeoMedia WebMap and GeoMedia WebMap Publisher. The site combines information from multiple departments to enable visitors to locate areas of interest using interactive maps. Residents can access a wide range of information, from parking accommodations for the Bell Canadian Open PGA tournament to details of the city's next big sewer installation. Out-of-towners can research properties to decide whether they want to invest in Hamilton real estate. Police and fire services use the system to manage emergencies and remediate dangerous situations. And the health department goes online to track events such as dead bird sightings to determine West Nile virus treatment areas.

Hard work rewarded

All the hard work done by the City of Hamilton has not gone unnoticed. At the URISA Ontario Chapter Annual General Meeting, the city's MAP.Hamilton Web site was honored with the Silver Medal Award for the Best Municipal GIS Web Site, and the city's entry in the Map Gallery Contest won the Gold Medal Award. The Web site also won first place in *Directions* magazine's Web Mapping Contest. At Intergraph's GeoSpatial World 2003 conference in New Orleans, the city received the first-place award for its Map.Hamilton Web site in the Best Internet Presentation category, and second-place recognition in the Best Plotted Map category. Visit www.map.hamilton.ca to review the city's innovative Web mapping project.

"We are honored to receive recognition for our work," said Al Little, GIS manager, City of Hamilton. "These awards demonstrate the city's commitment to technological innovation and leadership through the delivery of state-of-the-art IT business solutions. The efforts of our staff in every department in the organization, especially the Economic Development Department, contribute significantly to the city's enterprise GIS vision. This helps us realize the benefits of working together to achieve a common goal, thereby making all of our jobs a lot easier."

View a pre-recorded Webcast to learn how the City of Hamilton tackled the challenge of integrating and streamlining their workflows. Access the Webcast at <http://imgs.intergraph.com/freebies/webcasts.asp> and select City of Hamilton.