

# Innovative Sault Ste. Marie Organization Creates GIS Solution for Entire Community

By Sarah Watson

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A new kind of organization in Sault Ste. Marie is taking GIS integration to a level much beyond that of a single enterprise, or even a single type of enterprise. It is showing how an entire community of services can benefit from a common GIS solution.

The Sault Ste. Marie Innovation Centre Community Geomatics Centre (CGC) has received lots of accolades this year for leadership and innovation in GIS. The CGC's unique GIS model received two awards from URISA-Ontario Chapter at its annual Be Spatial event May 3 in Toronto: the Best Municipal GIS award and the Leadership in GIS award. The CGC has also received the ESRI Award of Excellence for GIS in Health Care this year.

The CGC is delivering a community-based GIS solution to more than a dozen organizations at affordable costs. Enormous amounts of data are being shared by all organizations to solve enterprise and inter-enterprise issues. This solution requires a strong commitment by all partner organizations in data sharing and cost sharing.

Sault Ste. Marie is a city of 75,000 located at the hub of the Great Lakes on the Canada-US border, rich with



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history and culture, and famous for the four-season outdoor activities of the Algoma Region.

The Sault Ste. Marie Innovation Centre (SSMIC) is a not-for-profit organization whose mandate is to diversify the local economy with an emphasis on information technology. The SSMIC has several business lines including an IT-related business incubator, supporting IT-related companies and pursuing market development projects.

In 1998 when it was learned that both the City and Public Utilities Commission (PUC) of Sault Ste. Marie were about to hire consulting firms from southern Ontario to implement a multi-year GIS solution, the SSMIC stepped forward with an interesting

alternative. Why not hire those consulting firms to provide knowledge transfer only – to seed local GIS expertise in Sault Ste. Marie and implement one GIS for both the City and PUC?

In 1999, EDS Canada, ESRI Canada, Terra Viva Inc. and J.D. Barnes were contracted for two years to initiate the GIS implementation and provide training and knowledge transfer to locally hired staff. The mayor of Sault Ste. Marie and the president of the PUC decided that the GIS solution was to be shared by all departments of both organizations.

The GIS implementation was a five-year, \$5-million project that involved creating a central data warehouse for both the City and PUC. Data

capture included a complete inventory of all water, wastewater, electric, transportation, telecom, land base and administrative features.

The GIS solution is touted as the most comprehensive municipal/utilities GIS solution in Canada. The City and PUC share the costs, and with multi-enterprise licensing agreements the costs are less for both.

The GIS implementation progressed to becoming the Community Geomatics



*The Sault Ste. Marie Innovation Centre won two awards at Be Spatial 2006 at the Toronto Congress Centre: the Leadership Award for the centre's multi-enterprise GIS solution, and the Gold Municipal GIS award, for its Community Geomatics Centre. Paul Beach, GIS program manager, holds the two awards beside Catherine Baldelli of the Town of Milton, past president of URISA-OC.*

Centre. The mission statement of the CGC is to promote partnerships among community organizations and establish the technological means to efficiently share geospatial data, tools, technology and knowledge to create a safer, healthier and more prosperous community.

The CGC expanded to serve the Economic Development Corporation, the fire and police departments and the local conservation authority. Additional partners are coming on board for a reasonable monthly fee and no up-front cost. The City and PUC pay the majority of the costs and permit other organizations to benefit from the GIS solution. The vast majority of the data and GIS tools are being shared between the organizations.

During the past two years the CGC has expanded the GIS solution in innovative ways to address health and social issues in Sault Ste. Marie. Using the extremely comprehensive municipal dataset as background layers, health and social agencies were approached to join the CGC partnership in an attempt to improve the overall health of the community.

New partners include the Algoma Health Unit, Child Care Algoma, the Children's Aid Society, Sault-area hospitals, Communities Quality Improvement, Sault Ste. Marie District Social Services Administration Board and Algoma Manitoulin Early Years. Problems addressed through GIS projects include: early childhood development, handicap accessibility,

elderly abuse, public safety and environmental health plus many others.

This innovative approach of combining health and social-related data with municipal and utilities data has brought about improvements in services from all sides.

Instead of delivering services with a broad-brush approach, these services can be optimally delivered to areas where they are most needed. Priorities for delivering municipal services are based on demographic and health data, enabling the establishment of outreach programs in neighbourhoods where the incidents of certain health or social problems are occurring, improved methods to distribute inspector case loads, and the reduction of municipal and utilities liabilities such as slip-and-falls and tripping.

Early results indicate improvements in public safety, improvements in health delivery, reductions in municipal liabilities and more effective use of budgetary resources.

The benefits of the CGC's GIS solution resonate throughout the community and the community as a whole is benefiting from the enhancement of the IT expertise. GIS expertise is well entrenched in the area and is being passed on to the private sector.

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