

January 15, 2007

## A Digital Perspective

Consider a doctor trying to determine whether a community is facing an epidemic by analyzing disease growth patterns. Or how about an urban planner who must recommend whether it is acceptable to build on a site near an important wetland. Both of these scenarios have one thing in common: someone must analyse a situation and make a decision.

What is geomatics? It is the science and technology of collecting, analyzing, interpreting and presenting digital data related to the earth's surface.

Decision-makers are increasingly turning to the national partnership led by NRCan that provides tools to help them make smarter decisions, including life-saving ones, more efficiently and quickly.



**"Sustainable Development: One of 4 priority areas for GeoConnections"**

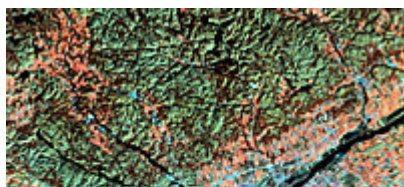
GeoConnections is mandated to increase the accessibility and the use of geospatial information, otherwise known as location-based data, and the technologies that manipulate it, like global positioning systems (GPS) and web-based mapping applications. This program leads to business opportunities and other benefits for federal, provincial and territorial governments, the private sector, non-governmental organizations and academia. Under its current mandate, GeoConnections is working to meet the needs of decision-makers in four priority areas: public safety and security, public health, environment and sustainable development, and matters of importance to Aboriginal peoples.

The first annual report of this domestically and internationally renowned initiative was released in October 2006, and features highlights from among GeoConnections' growing portfolio of projects and success stories, as well as an overview of the program.

The Canadian Geospatial Data Infrastructure (CGDI) enables Canadians to share, access, use, and combine geographic information (e.g., maps, satellite images) through the Internet.

"The annual report showcases how the GeoConnections program has benefited Canadians and how the location-based data accessible through the CGDI is used in day-to-day operations," says Lucie Séguin, Acting Director for GeoConnections. "The representative nature of the program is one of the reasons for its success and that of the CGDI. For example, through its many advisory committees, the program has its roots in the various stakeholder groups and their needs are taken into account in expanding and evolving the CGDI."

During the initial phase of GeoConnections (1999-2005), partners in this national collaboration developed the CGDI, an online resource that brings together current and accurate geographical data directly from its source. Through the use of this common portal, different sets of data can be correlated to determine relationships and patterns. For example, CGDI data can not only pinpoint a bridge on a map, but also estimate how well it will be able to handle traffic volumes several years from now.



"GeoConnections is taking down the walls that exist between organizations by promoting the use of this common portal that interconnects all suppliers and users of geospatial data," says Lucie. "This partnership approach to information management and use is highly efficient and significantly reduces duplication of effort."

The renewed GeoConnections program is now in its second, five-year phase (2005-2011), and is focusing primarily on growing and evolving the CGDI so that it becomes a tool used in the day-to-day operations and decision making of end-users in the four key areas outlined above – by people like ambulance dispatchers and environmental regulatory officials. It will also continue to work with Canada's geomatics sector to ensure that GCDI technologies remain leading edge. To that end, GeoConnections is co-funding projects and creating new business opportunities that will further enhance the CGDI and ultimately influence decision-making on issues related to the program's four priority areas.

According to Lucie, the success of the first phase was demonstrated when the program took its budget of \$60 million and leveraged it into \$170 million of activity contributing to the CGDI and to benefits for Canadians.

"GeoConnections is one of NRCan's success stories," says Lucie. "It is a concrete example of natural resources information being shared and put to good use."

Visit the GeoConnections/CGDI [Web site](#) for details on funding opportunities, conference notices, success stories, and more on this decision-support initiative.