

## 2007 / 2008 GeoNOVA Secretariat Annual Report

Prepared for: Assistant Deputy Minister  
and Deputy Minister of

Service Nova Scotia and  
Municipal Relations



## **BACKGROUND**

This report reflects GeoNOVA's ongoing efforts to communicate corporate geomatics activities. Four previous annual reports have been prepared and distributed to the Deputy and Assistant Deputy Ministers of Service Nova Scotia and Municipal Relations (SNSMR) as per the GeoNOVA Steering Committee's Terms of Reference.

As highlighted in the previous reports "GeoNOVA is the Province's approach to a corporate geographic information management system". This system is built on a set of principles that are as important today as when the GeoNOVA Program was approved. The notion that "data should be created once and shared many times" is still a dominant guiding principle used by GeoNOVA.

## **Introduction**

This report has been broken down into sections, including an outline of 2007/2008 accomplishments and highlighting the work plan for 2008/2009.

Here are some highlights of the accomplishments from 2007/2008:

1. Assisted in securing \$150,000 in funding for Nova Scotia Department of Environment and Labour for building an Environmental Assessment Screening application.
2. Released the Nova Scotia Geographic Catalogue, version 1.1. This version of the software included numerous administrative enhancements to the software.
3. Participated in a successful Canadian Geospatial Data Infrastructure (CGDI) project that focussed on using Web feature Service technology to provide provincial updates to a national product.
4. Partnered with the Department of Finance's Community Counts program to release over 45 layers of demographic data by community for Nova Scotia.
5. Partnered in the Nova Scotia Wind Atlas project with the Department of Energy, University of Moncton, and the Applied Geomatics Research Group

6. GeoNOVA partnered with Target Nova Scotia (affiliated with Nova Scotia economic Development) to design and implement a prototype mapping application for mobile devices.
7. Partnered with the Municipal Services Division in Service Nova Scotia and Municipal Relations to build a province-wide version of the Community Land User Reporting System (CLURS). A successful pilot project was completed in 2006/2007.
8. Released an update of the online version of the Atlas of Nova Scotia , an interactive mapping application that provides a wide variety of interesting maps of and about Nova Scotia.

## **Detailed Summary of 2007/2008 GeoNOVA Activities**

There are three key program areas upon which to report.

1. Program and Policy
2. Geographic Catalogue
3. Geographic Data Access

### **Program and Policy**

Established in 1992 to foster cooperation in Atlantic Canada with regards to integrated coastal and ocean management, coastal mapping and geomatics, the Atlantic Coastal Zone Information Steering Committee (ACZISC) plays an important role in coordinating inter-jurisdictional efforts relating to the coast. The GeoNOVA Secretariat fully supports ACZISC and is represented on the committee, which meets quarterly. The Secretariat contributes geomatics expertise to the group and during 2007/2008 was instrumental in ACZISC's COINAtlantic initiative; an online mapping application that provides search and display capabilities for coastal geography in Atlantic Canada..

The Municipal Geomatics Forum is a standing GeoNOVA Steering Committee workgroup that focuses on geomatics-related issues that impact Nova Scotia's municipalities. During 2007/2008 there were two sessions for this workgroup, including a workshop in Port Hawkesbury to present and discuss a road names reconciliation effort that was being considered by Service Nova Scotia and Municipal Relations', Nova Scotia Geomatics Centre.

Part of the GeoNOVA Secretariat's mandate is to promote and create awareness of geomatics in Nova Scotia. During 2007/2008, conferences that the Secretariat attended and exhibited at included: ESRI Regional Users Conference and Mining Matters (hosted by the Mineral Resources Branch of the Nova Scotia Department of Natural Resources). Both of these conferences were very well attended and the GeoNOVA booths well received. The Secretariat also presented at the Atlantic Association of Planning Technicians annual conference.

A role of the GeoNOVA Secretariat is to present its partners with geomatics related funding opportunities. One of the funding programs that have been around for a while is the federal GeoConnections Program, hosted by Natural Resources Canada. The Secretariat worked with Nova Scotia Environment, Department of Finance (Community Counts), and Emergency Measures Organization to look into potential funding opportunities. Nova Scotia Environment has been successful in securing funding for an environmental assessment project. Opportunities for public safety and health are expected to continue into 2008/2009.

To facilitate the government's new approach to coastal management, a Provincial Oceans Network (PON) has been established, which is composed of representatives from provincial departments and agencies with responsibilities and interests in coastal and ocean management. The GeoNOVA Secretariat provides representation on this committee and provides valuable input regarding geomatics and the coast. PON has a specific interest in Lidar technology and the Secretariat has been providing advice to them.

## **Geographic Catalogue**

The Nova Scotia Geographic Catalogue is the Province of Nova Scotia's listing of geographic products, with over 3000 holdings. Clients and Data Custodians access the listing through the Nova Scotia Geographic Catalogue software on the Internet. During 2007/2008, significant updates were made to the software with a focus on improving the administrative functions of the tool. Enhancements included a complete admin module that incorporated user management, metadata records management, and metadata keywords management.

Consultations with Data Custodians are a part of the Secretariat's ongoing efforts when considering metadata. Meeting with, and providing training for our partners is a key part of making certain that the Geographic Catalogue remains a current and effective tool for promoting Nova Scotia geography. During 2007/2008, the GeoNOVA Secretariat consulted with several groups about incorporating metadata about their geographic products into the Catalogue including: Halifax Regional Municipality, Dalhousie University, NovaNet, and the Applied Research Geomatics Group.

## **Geographic Data Access**

The GeoNOVA Secretariat works with many different partners in Nova Scotia to promote access to geographic data. There are many channels of accessing geographic products, with online tools becoming a favoured option. One method of online geographic data access is the use of mapping services, and specifically Web Map Services, or WMS. WMS is a convenient technology for developers who are seeking to add map content into their applications, and for users who want to display maps either on the Internet or in GIS software that has an Internet connection. During 2007/2008, the Secretariat worked with the Community Counts program at the Department of Finance to publish a WMS that released over forty maps focusing on census demographics by community.

The GeoNOVA Secretariat partnered with GeoConnections, other federal departments, and other provincial jurisdictions on the Canadian Geospatial Data Infrastructure (CGDI) Interoperability Pilot project. The project involved jurisdictions interested in participating in piloting Web Feature Service technologies for updating map information held in the GeoBase website. WFS' differ from WMS' because of their focus on streaming data features instead of graphical map representations of data features. GeoBase is a national website that has framework geomatics data (sometime referred to as "base" data) available for download. The Province of Nova Scotia is committed to GeoBase and makes regular contributions to it. This Pilot effort focussed on using new technologies to automate the flow of updates to a national site. Nova Scotia contributed a provincial road network and geographic names to this pilot. Ultimately, the project demonstrated that updates could be automated to a central, national database using a services oriented approach.

The Atlas of Nova Scotia continues to be very popular online mapping software, primarily because of the wide range of maps included. Software enhancements were carried out during the past year with a goal to encourage further participation from a wide range of geomatics partners.

The GeoNOVA Secretariat partnered with Target Nova Scotia, a site selection tool developed by the Nova Scotia Economic Development and local development agencies to build a prototype GIS client for use in mobile devices. The application concept proved successful and there are plans to deploy the prototype into a production environment.

The GeoNOVA Secretariat worked with Nova Scotia Environment to draft letters to receive funding (\$150,000) from the GeoConnections Program and then assisted NSE in scoping the application after federal funding was secured. As of March 31, 2008 the project has selected the successful vendor to complete the work. The application is expected to be launched by the end of 2008/2009.

COINAtlantic, a project funded by GeoConnections to ACZISC will provide a comprehensive source of data and information tailored to the needs of coastal and ocean resource users and managers. The scope and completeness of the data and information presented and the functionality of its applications will evolve to meet a wide range of users' on-going requirements. COINAtlantic will enable access to the data and information layers of data providers using the CGDI and will direct users to other access methods established by the data providers themselves. The GeoNOVA Secretariat is part of COINAtlantic's project steering committee.

The GeoNOVA Secretariat began working with the Nova Scotia Geomatics Centre and their popular DataLocator product during the past year. DataLocator is an application used for browsing data sets available from the Geomatics Centre and then downloading the files to your computer. The Secretariat and the Geomatics Centre have begun to expand the data download capabilities of the application to meet the objectives of both the primary / base data and all Nova Scotia geographic data sets from a corporate perspective.

The GeoNOVA Secretariat participated in the Nova Scotia Wind Atlas Project with the Nova Scotia Department of Energy (lead), along with the K.C. Irving Chair in Sustainable Development at the Université de Moncton and the Applied Geomatics Research Group at the Nova Scotia Community College. During 2007/2008 a website and hard copy maps of the Atlas were published. An interactive map application and a Web Map Service are planned for 2008/2009.

## **GeoNOVA Secretariat Staff, 2007/2008**

Each of the following played an important part in the GeoNOVA Secretariat's accomplishment in 2007/2008:

Pierre Gareau, GeoNOVA Program Coordinator  
Tony Matthews, GeoNOVA Program Coordinator  
Laura Beazley, Acting GeoNOVA Program Coordinator  
Colin MacDonald, Acting GeoNOVA Program Manager

## 2008/2009 GeoNOVA Work Plan – A Look Ahead

This section presents a preview of the 2008/2009 GeoNOVA Secretariat work plan as approved by the GeoNOVA Steering Committee.

ID	Proposed Activity	Program Area	Type
1	Enhancements to Geographic Catalogue Tools	Geographic Catalogue	Discovery
2	Geographic Metadata collection with Nova Scotia stakeholders	Geographic Catalogue	Discovery
3	DataLocator	Geographic Data Access	Access
4	Web Feature Services - Enhancements and Operationalizing	Geographic Data Access	Access
5	Atlas of Nova Scotia	Geographic Data Access	Maps
6	Business Intelligence Mapping	Geographic Data Access	Maps
7	ESRI ArcExplorerWeb, aka Nova Scotia Maps	Geographic Data Access	Maps
8	Interactive Mapping Application for Municipalities	Geographic Data Access	Maps
9	Mobile GIS Project	Geographic Data Access	Maps
10	Web Map Services Development	Geographic Data Access	Maps
11	SAP NetWeaver Portal / GeoNOVA Portal re-design	Geographic Data Access	Point of Access
12	Atlantic Coastal Zone Information Steering Committee	Program and Policy	Committee
13	COIN Atlantic Management Committee	Program and Policy	Committee
14	GeoConnections Technical Advisory Committee	Program and Policy	Committee
15	Geomatics Association of Nova Scotia	Program and Policy	Committee
16	GeoNOVA Exchange Node	Program and Policy	Committee
17	Health Research GIS Committee	Program and Policy	Committee
18	Municipal Geomatics Forum	Program and Policy	Committee
19	NSCAF Advisory Committee	Program and Policy	Committee
20	NSCAF Road Map	Program and Policy	Committee

21	Provincial Lidar Strategy Node	Program and Policy	Committee
22	Provincial Oceans Network	Program and Policy	Committee
23	Conference Attendance	Program and Policy	Outreach
24	Geomatics Capacity Building	Program and Policy	Outreach
25	Geomatics Outreach Program for Schools	Program and Policy	Outreach
26	GeoNOVA / GANS Conference 2008	Program and Policy	Outreach
27	GeoNOVA Annual Report	Program and Policy	Report
28	GeoNOVA Strategic Direction	Program and Policy	Report
29	Civic Addressing Policy and Standard	Program and Policy	Standards and Policy
30	Enterprise License Agreement	Program and Policy	Standards and Policy
31	Development of Customised GIS Training	Program and Policy	Training