



**Maximum Mapping!
Minimum Investment?
A Canadian Perspective**

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Introduction



- Maximum mapping, minimum investment.
- Perspective is all; and sometimes too much.
- The view from a non-specialist in the discipline.

Outline



1. The Canadian Context
2. The evolving federal role
3. Challenge and Change
 - A tipping point in time.
4. What will success look like.

The Canadian Context



- Governance
 - Federal-Provincial-Territorial Jurisdictions; Municipalities.
- Politics and Economy
 - Governmental Priorities
 - Economy.
- Demography
 - Population
 - 90% of population on 10% of surface
- Geography
 - Geographic distribution of resources
 - Climate change
- Strength in Unity.
- Policy drivers are shared, and sometimes not. Sometimes in different ways.
- Private sector focus is targeted
- Versatile products and services
- What is the role of government.
- Focus on the North
- Environmental demands

The Federal Role: Change and Transition



- Federal role, hence the role of the National Mapping Agency, has changed over time.
- Previous role : federal primacy and leadership by doing it all (or most of it anyway).
- Partnership-based
 - Collect once, closest to source
 - Shared funding
- Targeted activities
 - Linked to policy priorities (North, Security)
 - Stakeholder priorities (updating, uploading)
 - Challenge of asymmetry between departmental, federal, provincial and stakeholder objectives still remains.
- In Canada, need to extend the model;
 - must weave the web but one to include the pvt sector and recognize that we can create efficiencies and economic opportunities for growth.
 - right to privacy a critical issue.

National Mapping in Canada



- Federal Role:
 - operationally base data/layers, targeted mapping for national priorities.
 - strategy, partnership development and collaborative strategy execution

- Provincial Governments:
 - operational areas of activity include: land registry, resources, environment, health, infrastructure mapping for emergencies

- Municipal Governments
 - Property lines and boundaries.
 - Transportation corridors

- 13 different « rhythms » and funding schemes for geomatics and toponymy

National Mapping: Extending the Paradigm



- The Private Sector provides multi-faceted involvement (and capabilities)
 - Data producers
 - Information users
 - Application providers
 - Enablers - capacity builders (eg., transportation industry)

Change and Transformation



- The new model
 - A tipping point
 - cost intensity
 - demographic change
 - policy rationale
 - security
 - climate change
 - integrated economic and policy analysis
 - Yes, it is about data; but much more – about knowledge and the value we want to play.

So What?



Availability of data is taken for granted by citizens

- Maps exist
- Data is plenty and free from the government

Government investment in SDI is less than private sector expectations

- Coverages are still missing

Shelf life of data will be shorter

- Increasing rate of availability of data
- Increasing capacity to manage geospatial information leads to more demand and more capacity to supply

Our responses



Leverage our investments

- Leverage joint approaches and expenditures.
- Closest to source, collect once.
- Combine with private sector applications
- Start using volunteered information

Use volunteered information

- Key to success
 - Where people live, work and travel
 - Where private sector has business interests

Shift in our approach

- Authoritative geospatial information is that which is validated and used by the governments for public policy, it does not need to be acquired by the government.

Opportunistic Mapping



- Web 2.0 will allow the gradual transfer of responsibility for collection of geospatial data from the public sector to the private sector in some geographic areas
- The National SDI must adapt and increase its capacity to validate and integrate this multi-source data and information.
- Increasing reliance on Web 2.0 will allow governments to focus on areas where private interests have not yet developed.
- Government role – more focussed, targetted and tied to priorities.