



Policy Leveraging in Canada:

A Comparative Analysis of Selected
Initiatives

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Policy Leveraging in Canada

A Comparative Analysis of Selected Initiatives

Background

This report provides a comparative analysis of 14 selected initiatives and programs in the Canada with a “policy leveraging” component. The main purpose of the report is to strengthen the knowledge base available to INFC’s Policy and Priorities Division as it moves forward on the development of a policy leveraging framework for new federal government infrastructure programming.

The report is organized into three parts. The first provides a summary of key findings. The second presents, in chart form, a comparative analysis of selected initiatives and programs in theme areas of particular relevance for INFC (e.g. water and wastewater, connectivity and public transit and local roads). The third part of the report is an appendix with detailed discussion of the 20 initiatives and programs subject to analysis.

Key Findings

Canada has numerous infrastructure programs aimed at improving northern or Aboriginal infrastructure and at improving broadband infrastructure that provide examples of policy leveraging.

There are few leveraging programs in Canada that address transportation infrastructure, especially in comparison to the United States. Particularly noticeable is the lack of leveraging (and spending) on public transit – a policy area with high potential for leveraging due to its beneficial impact on several issues such as urban development, transportation safety and affordability, air pollution, and climate change. The Canadian Urban Transit Association notes this difference on its website, “The average Canadian transit vehicle is now more than 11 years old. In the United States, where state and federal investment plays a larger role, the average age is less than 8 years.”¹

Comparative Analysis of Selected Policy Leveraging Programs and Initiatives

The chart on the next page summarizes the results of an analysis of 14 selected government programs and initiatives in Canada. The chart is organized on the basis of the following themes: water and wastewater; solid waste; trade corridors; connectivity; public transit and local roads; culture, tourism and recreation; climate change; sustainable urban growth; and other.

1 http://www.cutaaactu.ca/pdf/issue_4.pdf ; http://www.cutaaactu.ca/pdf/issue_paper.pdf

Comparative Analysis of Selected Policy Leveraging Programs and Initiatives

Themes	Programs/ Initiatives	Level of govt	Nature of requirements/ incentives/ conditions	Benefits	Lessons learned
Water & Wastewater	Sustainable Water and Sewage Systems Act, 2002	Provincial	Under this Act, all Ontario municipalities must assess and recover the full cost of water and sewer services.	Water subsidies will be phased out, hidden environmental costs recognized, and result should be more efficient use and lower infrastructure costs.	Too early for lessons learned.
Solid Waste	Pay-as-you-throw Programs	Municipal	Residents pay for garbage collection based on the amount thrown away.	In St. Albert, 35-40% reduction in waste to landfills, increased recycling.	Recycle yard works well & is less expensive than blue box program for St. Albert (population of approximately 55,000).
	GVRD Solid Waste Management Plan	Regional	Waste management plan with primary goal to reduce per capita waste disposal to 50 per cent of 1990 levels. Met this goal within three years, by 1998.	Includes high level of cooperation, with commitments made on behalf of the federal, provincial and municipal governments.	Plan includes continuous evolution of goals and creation of industry-run product stewardship programs.
Trade Corridors	Manitoba's Mid-Continent Trade Corridor Strategy	Provincial	The strategy's goal is to assist in developing and maintaining an efficient and safe transportation system through the NAFTA trade corridor from Manitoba to Mexico.	Assists Manitoba's efforts to work cooperatively with other jurisdictions on trade corridor issues.	
	SuperNet	Provincial	60% of the capacity provided by the program is for providing government services. Others can use the remaining 40%. Allows others to "piggyback" off the SuperNet and makes high-speed service affordable in areas that would otherwise be too expensive or difficult to reach.	Internet access provided by SuperNet is also being used for e-health, schools, and intelligent transportation systems in Alberta.	
Connectivity	SchoolNet	Federal	Connects Canadian schools and libraries to the Internet.	Students gain computer literacy including Internet acumen.	Partnerships require continuing direction and resources from Industry Canada and/or SchoolNet to be sustainable over the medium to long term.

Themes	Programs/ Initiatives	Level of govt	Nature of requirements/ incentives/ conditions	Benefits	Lessons learned
	K-Net and the Smart Communities Program	K-Net is local, Smart Communities is Federal	To be chosen, communities had to demonstrate how they could achieve economic, social and cultural improvements through the use of information and communication technologies.	The K-Net demonstration project was successful, and the lessons learned were used to expand K-Net into one large network rather than establishing 19 smaller networks for communities.	Ensure local control of the entire network. Partner with firms and organizations that share a vision of local community ownership.
Public Transit and Local Roads	Urban Transportation Showcase Program	Federal	Projects must use alternative transportation strategies for reducing greenhouse gas emissions in municipalities.	Too early in the program to evaluate benefits.	
Culture, Tourism and Recreation	Heritage Challenge Fund Community Program	Provincial	Funds conservation and restoration of heritage properties.		
Climate Change	Municipal Building Retrofits, City of Sudbury	Local	Retrofits based on potential carbon dioxide emission reductions.	Saved CDN\$1.1 million in energy costs and reduced CO ₂ emissions by 28%.	
Northern	Broadband for Rural and Northern Development Pilot Program	Federal	Eligible communities must have no publicly available broadband infrastructure that is capable of meeting its broadband needs. Priority given to northern, remote, rural or First Nations communities.	Broadband access enables remote provision of health and education services and increases economic opportunities.	
	Capital Assistance to Enhance Drinking Water	Provincial	Funding is restricted to communities in northern Ontario.	Helps communities comply with the new Drinking Water Protection Regulation.	
	Innovative Housing Fund	Federal	Provides funding for First Nations. Projects must involve innovative housing technology, design or financing and management techniques.	Cost-sharing requirement has resulted in new partnerships between First Nations and businesses.	
Sustainable Urban Growth	Green Municipal Funds	Federal	Innovative municipal infrastructure projects and feasibility studies.	Will improve air, water or soil quality, protect the climate or promote the use of renewable resources	



Appendix: Detailed Discussion of The Programs and Initiatives

1. Water and Wastewater

Sustainable Water and Sewage Systems Act, 2002

- In December 2002, the Ontario government passed the Sustainable Water and Sewage Systems Act. Under the Act, all municipalities must assess and recover the full cost of water and sewer services.
- According to the Act, the full cost of providing wastewater services includes the source protection costs, operating costs, financing costs, renewal and replacement costs, and improvement costs associated with collecting, treating or discharging wastewater and other costs as may be specified by regulation.
- The Act is part of the Government's commitment to implement all recommendations of the Walkerton Inquiry.² Now that all municipalities must use full-cost pricing for water, subsidies will be phased out and hidden environmental costs recognized.³

2. Solid Waste

Pay-As-You-Throw (PAYT) Programs

- St. Albert established its award-winning PAYT program in 1996. Using a variable-rate volume subscription program, residents choose to use garbage cans, bags, or carts.⁴ There is no pick-up for recyclables; instead, residents deliver their recyclable materials to a recycle yard.
- Nanaimo also has a user pay system. It allows residents to put out an unlimited amount of residential recyclables but limits the basic service for garbage to one container per week unless residents choose to purchase additional tags that allow additional standard size containers.⁵
- Contact Person for City of St. Albert Program: Tony Lindon, 780-459-1557

2 <http://www.ene.gov.on.ca/envision/water/sdwa/>

3 http://www.fcpc.org/publication_detail.php?PubID=623

4 <http://www.city-st-albert.ab.ca/admin/contentx/default.cfm?PagelD=1761&hdrmenu=1>
<http://www.fcm.ca>

5 http://www.nanaimo.ca/residents/index_inside.asp?id=246&collection=19

Greater Vancouver Regional District (GVRD) Solid Waste Management Plan

- British Columbia's Waste Management Act requires regional district waste management plans. The GVRD Solid Waste Management Plan, adopted in 1995, is a region-wide approach to reducing waste.
- A primary goal of the plan was a 50% reduction of 1990 levels in per capita waste disposal by the year 2000. The region met its goal two years early, in 1998.
- The plan is unique because of the level of cooperation between the federal, provincial and municipal governments.
- With the plan's success, new goals are evolving to reduce even more waste. For example, the plan will soon include recycling of wood, metal and other materials from demolition and construction sites, including home renovation projects.
- Contact: Ken Carrusca 604-436-6822.
- For more information:
<http://www.gvrd.bc.ca/recycling-and-garbage/planning.htm>
<http://www.gvrd.bc.ca/recycling-and-garbage/pdfs/SolidWasteManagementPlan1995.pdf>
http://www.iclei.org/liawards/winners2000/waste_winners.htm#vancouver

3. Trade Corridors

Manitoba's Mid-Continent Trade Corridor Strategy

- The goal of the strategy is to “facilitate Manitoba's trade requirements and investments within the NAFTA countries through the development and maintenance of efficient and safe transportation systems.”
- The Province of Manitoba is working on various projects that deal with issues important to corridor development including regulatory harmonization, border facilitation, and technological innovation. Manitoba has been working cooperatively with other levels of government, other provinces, the Canadian Federal government, U.S. state governments and corridor associations to take advantage of opportunities such as the Canada/U.S. Border Accord and those related to TEA 21.
- Manitoba is also a member of North America's Superhighway Coalition (NASCO) and is working with this group on issues such as alternative fuel infrastructure between Winnipeg and the central United States.
- Contact: Bob Dilay (204) 945-8695
- For more information:
<http://www.gov.mb.ca/est/climatechange/pdfs/final-mccap-sep-16-02.pdf>
<http://www.gov.mb.ca/chc/press/top/1997/12/1997-12-12-01.html>
<http://www.gov.mb.ca/chc/press/top/2002/04/2002-04-06-01.html>

SuperNet

- Alberta SuperNet is a high-speed, high-capacity broadband network linking 4,700 government offices, schools, health-care facilities and libraries in 422 Alberta communities. The project will eventually provide one stop information for truckers through existing Internet based systems. In this way, it improves the trade corridor. Also, telecommunications companies and Internet service providers can “piggyback” onto the Alberta SuperNet network, making it possible for service providers to offer high-speed services to areas that, until now, have been too expensive or difficult to reach. Therefore, SuperNet brings high-speed, broadband Internet connectivity to rural Alberta.
- It also provides the necessary infrastructure for CANAMEX initiatives such as the Smart Tourism and Smart Freight Corridor projects. Travel Alberta has a comprehensive website that provides information on attractions, accommodations, highway and road conditions, and scenic routes and could easily be tied into the CANAMEX Smart Tourism initiative.⁶
- The Internet access provided by SuperNet is also being used for e-health, schools, and intelligent transportation systems in Alberta.
- This is a Public-Private Partnership. The main partners in the project — the Albertan government and the prime contractor, Bell Canada — have already completed and tested approximately 50% of the project.⁷ The remainder of the project should be completed by 2004.
- Contact Person: Randy Skrepnyk, Associate Director (780) 422-2374
US & Mexico, Alberta Ministry of International and Intergovernmental Relations
Email: randy.skrepnyk@gov.ab.ca
- For more information:
<http://www.albertasupernet.ca>

6 http://www.canamex.org/Pages/SMART_CORRIDOR.htm

7 The Albertan government is providing \$200 billion Canadian, and Bell Canada is providing \$100 billion Canadian.

4. Connectivity

SchoolNet

- In 1999, SchoolNet, an Industry Canada program, achieved its mandate to connect Canadian schools and libraries to the Internet. After working in partnership with the provincial and territorial governments, the educational community and the private sector, Canada became the first country in the world to connect its public schools, including First Nations schools, and public libraries to the Internet.⁸
- The program has continued to expand and improve. According to the SchoolNet website, the program shows that tension between provincial and federal parties “can be overcome when both are working towards a common goal, and when all parties are willing to offer resources while foregoing program control at the delivery level.”⁹
- SchoolNet partnerships have relied on continuing direction and resources from Industry Canada. One lesson learned was the importance and necessity of federal involvement in the form of a national connectivity strategy.¹⁰
- For more information:
<http://www.schoolnet.ca>

K-Net and the Smart Communities Program

- K-Net is a First Nation computer conferencing system developed and managed by Keewaytinook Okimakanak, a First Nations Tribal Council, based in Sioux Lookout.¹¹ The K-Net (Kuh-ke-nah Network) program began in 1994 under the direction and vision of the First Nation Chiefs.
- The Smart Communities Program is an Industry Canada program launched in 1999 as a demonstration project that selected 12 demonstration Smart Communities, including one in an Aboriginal community – Kuh-ke-nah. Selected projects receive up to \$5 million in program funding over three years to support their Smart Community vision. This funding helped K-Net establish a wide area network that includes the tribal council offices. Other programs and funders such as FedNor and the Ontario Northern Heritage Fund also provided funding and helped the Network to reach other communities, now totaling approximately 19.
- K-Net is in the process of setting up five Smart Services: 1) Community Information Technology Centres with computer access and training, videoconferencing and workstations for disabled users in each of the five First Nations; 2) K-Net Portal, a high-speed, interactive gateway to community information and services such as support for small business; 3) Data Warehouses, which will enable each of the five First Nations to store and retrieve information; 4) A telehealth initiative in partnership with the NORTH Network; and 5) Keewaytinook On-line Secondary School, which will allow students to attend Grade Nine in their community rather than leaving for urban centres such as Thunder Bay.¹²

8 <http://www.schoolnet.ca/home/e/whatis.asp>

9 http://www.schoolnet.ca/home/e/documents/SN_evaluationE.pdf

10 http://www.schoolnet.ca/home/e/documents/SN_evaluationE.pdf

11 <http://www.schoolnet.ca/aboriginal/learningcircle/learner7/english/connectingfirstnations-e.html>

12 <http://knet.on.ca>

- Health Canada is paying for connectivity to move Telehealth into additional communities, while FedNor and the Northern Heritage Fund Corporation are providing telehealth equipment.
- According to Dan Pellerin, the K-Net Network Manager, one lesson learned is the importance of allowing the communities to drive the network growth, identify the needs and take ownership of the network as much as possible.¹³ According to Brian Beaton, K-Net Services Coordinator, another lesson learned is the importance of getting communities involved in the planning and implementation of broadband connectivity solutions and applications so that they are better prepared to be the providers of online services and resources “making them owners of their local networks and producers of local socio-economic opportunities.”¹⁴
- Contact: Dan Pellerin, Network Manager, danpellerin@knet.ca 807-737-1135
- For more information:
 - <http://knet.on.ca>
 - http://www.cbasc.org/english/search/display.cfm?code=2995&coll=FE_FEDSBIS_E
 - [http://www.aboriginalcanada.gc.ca/abdt/lookups/graphics.nsf/vDownload/ACC/\\$file/ConnectivityReport20020612b_En.pdf](http://www.aboriginalcanada.gc.ca/abdt/lookups/graphics.nsf/vDownload/ACC/$file/ConnectivityReport20020612b_En.pdf)

5. Public Transit and Local Roads

Urban Transportation Showcase Program (UTSP)

- This Transport Canada program, with a budget of \$40 million over five years, promotes alternative strategies for reducing greenhouse gas emissions from transportation in municipalities. The program is part of the Government of Canada’s Action Plan 2000 on Climate Change.
- It demonstrates, evaluates and promotes effective strategies to reduce GHG emissions from urban transportation. Working in partnership with provinces and municipalities, the program demonstrates transportation strategies in selected cities and evaluates the impacts of these strategies on urban challenges such as smog reduction, congestion, and infrastructure costs. “This new information will lay a foundation for the adoption of effective, integrated GHG emission reduction strategies in urban centres across Canada by 2010.”
- For more information:
 - <http://www.tc.gc.ca/programs/environment/utsp/menu.htm>
 - http://www.tc.gc.ca/mediaroom/releases/nat/2002/02_h089e.htm

6. Culture, Tourism and Recreation

The Heritage Challenge Fund Community Program

- A joint program of the Ontario Ministry of Citizenship, Culture and Recreation and the Ontario Heritage Foundation, the program provides not-for-profit organizations, First Nation Councils, municipalities or local services boards, and conservation authorities with matching funds for capital projects and endowments.

¹³ <http://smartcommunities.ic.gc.ca>

¹⁴ <http://smartcommunities.ic.gc.ca>

- Capital projects are for conservation and restoration of eligible heritage properties, and related feasibility studies, architectural plans and conservation master plans. Endowments provide income for the ongoing capital costs of conserving eligible heritage properties.
- For more information: <http://www.culture.gov.on.ca/english/culdiv/heritage/building.htm>

7. Climate Change and Municipal Environment Energy Improvements

Municipal Building Retrofits, City of Sudbury

- Sudbury's 1997 Strategic Energy Plan provided benchmarks for existing carbon dioxide emissions from regional facilities; projected emissions reductions as a result of energy retrofit activities; and compared cost-benefit of internal and external funding options.¹⁵
- In the first year of retrofits, the City audited the energy use in 30 municipal facilities and implemented measures that saved CDN\$1.1 million in energy costs, reduced CO₂ emissions by 28% and created 30 jobs locally in the first year.
- The successful implementation of Sudbury's Strategic Energy Plan has led to the development of a community-wide sustainable development plan that targets \$5 million in annual savings through reductions in energy use and the local production of green energy.

8. Northern and Aboriginal

Industry Canada's Broadband for Rural and Northern Development Pilot Program

- The program provides funding through a competitive process to bring publicly available broadband access to communities.
- Priority is given to First Nations, northern, remote and rural communities that do not currently have Digital Subscriber Line (DSL) or cable modem service. "For a community to be considered eligible under the Broadband Pilot Program, it currently must have no publicly available broadband infrastructure that is capable of meeting its broadband needs. Typically, these are communities where Digital Subscriber Line (DSL) or cable modem access is not already available to the public."
- Contact: (613) 948-5365 or 1 800 575-9200
- For more information: <http://www.broadband.gc.ca>

¹⁵ <http://www.fcm.ca>

Capital Assistance to Enhance Drinking Water Protection in Northern Ontario

- The Northern Ontario Heritage Fund Corporation (NOHFC) provides additional funding for some capital projects approved for assistance under the SuperBuild Ontario Small Town and Rural (OSTAR) initiative to help communities located in Northern Ontario comply with the new Drinking Water Protection Regulation.
- “The goal of this program is to provide the municipal infrastructure necessary to ensure the provision of safe, clean drinking water. Water infrastructure is defined as water services required to comply with the new Drinking Water Protection Regulation.”
- Eligible applicants include municipalities and Local Services Boards in Northern Ontario that are eligible for investment through the SuperBuild Ontario Small Town and Rural (OSTAR) initiative.
- For more information: http://www.mndm.gov.on.ca/nohfc/drinking_water_protection_e.asp

Innovative Housing Fund

- Introduced in 1998, this fund provides First Nations an opportunity to explore new or innovative approaches to better housing. Funds are available for a period of three years for projects that use innovative materials, technologies or techniques such as alternative house designs, energy sources, water supply and/or distribution, sewage collection and/or disposal, and innovative housing portfolio management or financing options.¹⁶
- Provides \$2 million in annual funding from *Gathering Strength*. Funding criteria require the initiatives to be cost-shared with the private sector and/or First Nations organizations, which has resulted in new partnerships between First Nations and businesses.¹⁷
- Individual First Nations, Tribal Councils or other First Nations organizations, such as technical organizations or housing authorities are eligible.¹⁸
- The program has helped to encourage housing that is culturally appropriate and location appropriate; however, larger communities and those close to major centers tend to receive more funding from DIAND for housing because funding is often based on the size of community rather than on need. In addition, it is very expensive for trucks to supply materials to small, remote communities that are far from contractors and difficult to reach.¹⁹
- Contact Person: Fred Smith (819) 953-5490

¹⁶ http://www.ainc-inac.gc.ca/ps/hsg/cih/pct_e.html

¹⁷ http://www.ainc-inac.gc.ca/pr/info/info104_e.html

¹⁸ http://www.ainc-inac.gc.ca/ps/hsg/cih/pct_e.html

¹⁹ Phone conversation with Dee Jenkins, DIAND (Sept. 11, 2003).

