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Gouvernement du Canada



Smart Communities



Canada

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Smart Communities

EMPOWERING CANADIANS



http://smartcommunities.ic.gc.ca

S mart Communities
are communities
with a vision of the future
that involves the use of
information and communication
technologies in new and
innovative ways to empower
their residents, institutions
and region as a whole.

ver the next three years, 12 Canadian communities will demonstrate their expertise in the use of information and communications technology (ICT) to provide economic, social and cultural benefits for their citizens.

It is my great pleasure to introduce these communities, selected as Smart, Communities demonstration projects through a rigorous, Canada-wide competition run by the Smart Communities Program.

The Smart Communities Program is one of the pillars of the Government of Canada's Connecting Canadians initiative, designed-to help Canada become the most connected country in the world. Through innovation and foresight, Canada continues to enhance its role as a leader in the development and use of ICT in today's global, knowledge-based economy.

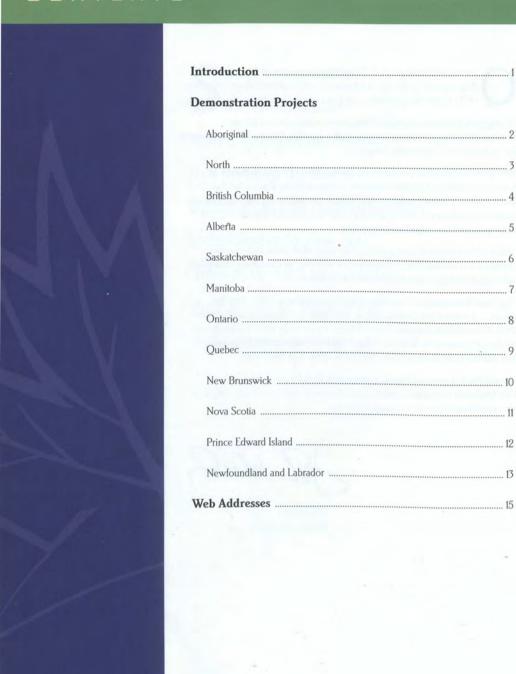
This booklet contains 12 short profiles of the innovative Smart Communities strategies. It is my hope that, in sharing these with you, all Canadian communities will benefit from the Smart Communities' experiences.

The Smart Communities Program is currently developing a range of on-line resources to assist other communities in developing and implementing their own Smart Communities strategies. Some of these resources are already available on the Smart Communities Web site (http://smartcommunities.ic.gc.ca), and others will be developed over the course of the next three years.

I would like to commend these 12 communities for their pioneering spirit. Our forefathers connected Canadians with a railway; our 21st-century visionaries are connecting the country through technology.

John Manley Minister of Industry

L Mai



Mart Communities Demonstration Projects are the central focus of the Smart Communities Program. Selected through a nationwide competition in May 2000, these 12 communities — one in each province, one in the North and one in an Aboriginal community — will become centres of expertise in the integration of information and communications technologies into communities, organizations and families.

The demonstration projects will provide a powerful catalyst to create Smart Communities across Canada. Their true legacy, however, will be in the development and delivery of strategies, skills, tools and lessons learned for the benefit of all communities seeking to become Smart. Three complementary components of the Smart Communities Program are being developed to help share their experiences.

The **Smart Communities Resource Exchange** is a Web site clearing house of Smart Communities' best practices, applications and technologies, as well as a networking arena for sharing experiences, offering expertise and setting up alliances.

The Smart Communities Tool Kit and Skills Development Program will provide on-line and in-person training, as well as educational and business development tools. These tools will help communities plan, manage and monitor their initiative.

The **Smart Communities Recognition Program** will provide communities that are not recipients of funding with the opportunity to have their achievements recognized as they move toward the standards of world-class Smart Communities.

Moving toward a smart nation







The Kuh-ke-nah Network of Smart First Nations

live First Nations in northwestern Ontario are working together to take advantage of the information age in their own way, and they have tailored a common solution to meet their diverse needs. With the Kuh-ke-nah Network of Smart First Nations, high-speed regional portals in each community will be linked to a common interface. By connecting in this way, each community can customize how it uses the technology.

These remote settlements have long been cut off from resources most of us take for granted: libraries, schools and medicine. A community information technology centre will provide direct access in each location. This link will create a virtual "main street" where users can consult local government, shop or check on cultural activities under way in other settlements on the network.

Like Aboriginal peoples around the world, these five First Nations strive to maintain their cultures and languages. They recognize the opportunities new media present for expressing their cultures and languages. They also see how new skills and knowledge can help sustain their way of life.

Young people are key to any community's future. The Kuh-ke-nah Network will give Aboriginal youth new incentives to stay and contribute to their communities. They can choose to drive the technology in any direction they choose.

The five First Nations see this demonstration project as a way to unite, share resources and, ultimately, foster the growth and development of their people.

Sponsoring Organization: Keewaytinook Okimakanak

Communities: Deer Lake First Nation, Fort Severn First Nation, Keewaywin First Nation, North Spirit Lake First Nation, Poplar Hill First Nation, Ont.

Web site: http://smart.knet.on.ca

Kuh-ke-nah: An Oji-Cree word meaning "everyone-together"

Yellowknife Smart City Project

Partners in change, a northern odyssey

nce known only for gold and government, Yellowknife is aggressively moving into the information age. The city has significant advantages that position it for success as a Smart Community: its citizens tend to be more educated and earn higher incomes than do those in other Canadian cities; the city itself is isolated, yet densely populated; and a higher percentage of Yellowknife residents volunteer for community organizations than in any other city in the country. It is easy to see why the plan they've developed is based on intimate links, intelligent users and benevolent goals.

The Yellowknife Smart City Project is a shining example of cooperative spirit. There are 22 sponsor organizations from the private and public sectors, the YWCA is involved, as are several schools, and some 27 groups have pledged support or resources.

From this broad base, organizers have developed five integrated components:

- · A WellNET simplifies access to a wide range of social services.
- A BusinessNet links customers with local products and services, and better positions Yellowknife in the world market.
- · A CityNET connects citizens directly with government.
- A LearnNET allows students to learn on-line and showcases the best of Yellowknife design, engineering and other disciplines.
- · Centre One provides a forum for exchanging ideas.

This demonstration project is designed to attract people who have traditionally been left out of the decision-making process. The ultimate goal is open access for all, whatever their need, level of education or income. This inclusive model may prove to be the one most copied as the model for a wired world.

Sponsoring Organization: Yellowknife SMART Communities Society

Communities: Yellowknife, Dettah, N'dilo, N.W.T.

Web site: http://city.yellowknife.nt.ca/residentinfo/communityinfo/ smart/finalapp/part00.htm





SMART CHOICES Project

Offering an unprecedented depth of information and programs



hese two communities have rapidly grown into a major urban centre, and the SMART CHOICES Project addresses the challenges presented by this population shift. It will link job seekers with employers, students with teachers, and citizens with governments. Information technology provides the perfect means to link hundreds of disparate groups simultaneously and continuously.

SMART CHOICES involves five key projects. The first of these, the Community Portal, will allow individuals to connect with groups in the public, private and not-for-profit sectors through computers set up in dozens of public places, such as city halls and community centres, or from their home computers. The array of information and services available is staggering: one will be able to pay a tax bill, book a yoga class or even get help with a marketing plan.

The Community Portal also provides the link to the four other key projects:

- Learning Linkage will bring together schools, libraries and municipal programs to improve educational opportunities.
- Safety Net will connect users with police, fire, health and social services to enhance personal safety and well-being.
- E-Z Community Services will hook citizens up with local, provincial and federal governments, as well as community centres and several private sector groups to facilitate a wide variety of transactions.
- Business Choices will have a résumé archive for employers and a job bank for employees. It will also offer market analysis, promote the region to investors and provide small businesses with information and technology essential to their growth.

This demonstration project will bring together a broad range of groups offering an unprecedented depth of information and programs to people from all walks of life.

Sponsoring Organization: SMART CHOICES Society of British Columbia

Communities: Coquitlam, Port Moody

Web site: http://www.smartcommunity.bc.ca

Calgary INFOPORT™ Community Empowerment Project

The Calgary INFOPORT™ Community Empowerment Project is directed at the most vulnerable in society, such as homeless people, battered women, and those with mental and physical disabilities. These people usually live on the fringe of society, and rarely feel the benefits of advancements in technology. This demonstration project will make it possible for them to access social services not only from a government office, but also from computers available throughout the community. More importantly, it will connect service agencies to improve cooperation and efficiency.

There are a number of ways the project will reduce the number of people who fall through the cracks of the social services system: individuals can take advantage of direct and instant access to information and services 24 hours a day, and providers can retrieve detailed, current data at the click of a button. This will result in faster, more accurate referrals, and will improve the ability of agencies to analyse results. Together, these measures will save the government money, which could then be channelled to the people who need it most. All Calgarians stand to benefit from a higher quality of life.

This demonstration project will benefit from the groundwork already completed by Calgary Technologies Inc. (CTI) (formerly Calgary Research and Development Authority). CTI pioneered INFOPORT™, a strategy that has helped thousands of Calgarians improve their use of information technology. Many social service agencies have been using computers for years, but the systems have been isolated, making it cumbersome to exchange even basic information. INFOPORT™ brings the various systems together.

So far, 18 service agencies have signed on to the project, and they will soon be exchanging information on a secure platform created by INFOPORT™. On its own, this advantage would be a boon to the whole community; combined with the project's other features, it is easy to see why stakeholders are excited by the possibilities.



Reducing the number of people who fall through the cracks

Sponsoring Organization: Calgary Technologies Inc.

Community: Calgary

Web site: http://www.crda.calgary.ab.ca/info/index.html



The Headwaters Project

he lengthy list of communities involved in The Headwaters Project clearly demonstrates two things: that this project enjoys broad support, and that it is directed at remote communities in the north of the province. Computers are not new to the region, but the possibility of linking them into a huge network is a significant step forward, and has stimulated an unprecedented response.

This demonstration project will create Community Access Centres at 40 local schools. Residents can study on-line to earn high-school credits, or do their banking. Business skills will also be emphasized: The Headwaters Project will teach people the advantages of e-commerce and guide them through the process of establishing their own business. There will be a wide range of services available, but the most significant may well prove to be in education.

The project will help people improve their computer skills in order to make on-line learning effective. Computer literacy is only the beginning, Health care providers will learn new techniques; tradespeople will upgrade their skills. These simple steps will have an important impact on a region where qualified help is often hundreds of kilometres away.

The Headwaters Project will open up the world for residents. It will also open up the region to the world. Web sites will showcase the history, culture and economy of Northern Saskatchewan, and it is predicted that on-line information on tourism and trade will attract increasing numbers of visitors to the region.

Opening up the world for residents



Sponsoring Organization: Keewatin Career Development Corporation

Communities: Northern Village of Air Ronge, Northern Settlement of Bear Creek, Northern Village of Beauval, Birch Narrows First Nation, Buffalo River Dene Nation, Northern Settlement of Camsell Portage, Northern Village of Cole Bay, Northern Village of Cumberland House, Fond du Lac Denesuline First Nations, Northern Village of Green Lake, Northern Village of Île-à-la-Crosse, Northern Village of Jans Bay, Northern Village of La Loche, Town of La Ronge, Lac la Ronge Band, Metis Northern Region III, Metis Nation of Saskatchewan-Northern Region 1, Northern Hamlet of Missinipe, New North, Northers Saskatchewan Municipalities Association, Northern Hamlet of Patuanak, Saskatchewan Association of Northern Communities, Northern Hamlet of St. George's Hill, Northern Settlement of Stanley Mission, Northern Hamlet of Stony-Rapids, Northern Hamlet of Timber Bay, Northern Hamlet of Weyakwin, Northern Settlement of Wollaston Lake

Web site: http://www.kcdc.sk.ca/hwp/index.asp

Manitoba Smart Network

he Manitoba Smart Network will link rural and urban areas of the province. It will improve the delivery of health care services, open up educational opportunities, and help diversify the economy. Many individual components of the Manitoba Smart Network already exist in isolation; linking them together will create a powerful new tool.

Providing communities with a powerful tool

The greatest gains may well be made in the field of medicine. This demonstration project will integrate hospital laboratories, speeding up the delivery of test results. A state-of-the-art patient registry will improve hospital management, while medical imaging and video conferencing will allow remote areas to consult specialists in the city. These are just a few of the ways that this project will improve the delivery of health care.

The project will also bring together partners from the field of education: Brandon University, Assiniboine Community College, Brandon School Division, Rolling River School Division, Beautiful Plains School Division and Souris Valley School Division. This cooperation will create a wide range of opportunities for residents to upgrade their skills and knowledge.

The Manitoba Smart Network will acquire broadband capacity to ensure fast two-way communication. Broadband is expanding, and the network will expand along with it. Existing networks and applications will be incorporated into the project. This kind of cross-pollination and sharing of resources will allow small communities to achieve many of the same benefits now enjoyed by larger centres. As the network's capacity grows, more communities will be invited to participate, which will then increase the benefits to all involved.

The Manitoba Smart Network will use information and communications technologies to connect people from across the province and improve their quality of life in a variety of ways.

Sponsoring Organization: Manitoba Smart Network Inc.
Communities: Brandon, Neepawa, Souris, Carberry, Minnedosa
Web site: http://www.westmancom.com/msn.htm





SmartCapital

SmartCapital: Solving real-world challenges



hen it comes to information technology, the nation's capital is well connected. SmartCapital will build on the region's success to explore new directions and possibilities, such as the following:

- delivering professional development sessions via Webcasts that can be accessed on desktop computers;
- · providing interactive services on-line in both English and French; and
- creating on-line work spaces for community groups, student associations or special interest groups.

SmartCapital will solve real-world challenges. The Ottawa region is undergoing fundamental change as it moves toward a one-city model. Now, one-stop shopping for on-line government information and transactional services can be offered to all the citizens of the region. Similarly, several library systems will come under one administration as part of the new city and, more importantly, under one database. SmartCapital will demonstrate how all records can be searched simultaneously.

As well, this demonstration project will give start-up and small businesses access to critical economic and competitive data to maintain a business edge.

It will also help market the region's high-technology sector through SmartLab, a series of Web sites connected directly to research laboratories via fibre optic networks. These sites will showcase the latest developments to potential customers.

Finally, residents will have improved access to all kinds of services from the private and public sectors. A SmartCapital portal will have everything from information on educational courses, to health care information, tourist attractions and business opportunities.

Sponsoring Organization: Oltawa Centre for Research and Innovation

Community: Regional Municipality of Ottawa-Carleton

Web site: http://www.smartcapital.ca

Carrefour virtuel de la Mauricie

he Carrefour virtuel de la Mauricie is aimed at five areas: tourism, education, community services, welfare and business. The goal in each case is the same: to make everyone more familiar and more comfortable with information technology.

The tourism sector is already important in the Mauricie region, and it's expected to double over the next 12 months, yet most operators in the industry are small independents with little money to invest in computers and networks. This demonstration project will develop community portals to help these businesses use the Internet to attract new customers. Operators will get assistance in setting up Web sites and in using them to take reservations on-line.

The rise of e-commerce has had a huge impact on the region's economy. Local stores face competition from on-line retailers who can often deliver the same goods at a lower price. The Carrefour virtuel will help merchants and manufacturers position themselves to take advantage of e-commerce. Moreover, a merchant accreditation process will be developed and tested as part of the project. The plan calls for simplified access to basic information on government and community services. Residents can find a program, register for it, and even pay on-line. The project will also establish new ways to access social services such as welfare.

The Carrefour virtuel plans to tap into one of the region's best-known resources: its artists. In the past year, multimedia has emerged as a strong force in e-commerce because programmers and artists are working together to improve on-line presentations. The Carrefour virtuel will provide expertise and training to make the region a leader in this area.

By engaging people from all walks of life, the Carrefour virtuel will lead the way for new technologies to have a positive impact on the whole region.

Sponsoring Organization: Le Groupe Forces Communities: Shawinigan, Shawinigan-Sud, Grand-Mère

Web site: http://www.groupeforces.qc.ca/main.htm

Merchants and manufacturers taking advantage of e-commerce

La Péninsule acadienne: le village global francophone au cœur de la coopération internationale

Introducing a new tier of economic activity to the region



Rural Francophone communities will quickly begin to achieve many of the benefits of new technologies in this hands-on demonstration project. By taking advantage of an existing network of 24 community access sites, the Péninsule acadienne will provide services in several areas: health care, education and economic development. Residents will be offered basic computer training and, once on-line, they will be able to get more detailed instruction.

The Péninsule acadienne will establish a link with other Francophone communities across the country and around the world. By delivering services and training in French, it will extend the benefits of new technologies to the greatest number of people.

The 24 access sites will be linked with a portal dedicated to the region. This intranet will enable groups to exchange services and information in a secure environment. Citizens will use the portal to access services from all levels of government. Literacy and mentorship programs will be available at five of the 24 community access sites.

The intranet technology in this project is wide open — it will allow residents to design their own applications. Rural Francophone communities, for instance, could create chat rooms specific to one issue. Cultural groups could use the medium to workshop new concepts or for cross-promotion.

This demonstration project will familiarize the business sector with the advantages of e-commerce, and offer training in areas such as Web site design and Internet business strategies. Tourism, already an important industry in the province, is ideally suited to benefit from this kind of approach.

The Péninsule acadienne will foster new applications in information and communications technologies, introducing a new tier of economic activity to the region. As residents become more comfortable with the technology, they will develop the expertise that can only improve the long-term prospects of the province.

Sponsoring Organization: Concertation Rurale Centre-Péninsule

Communities: Péninsule acadienne: Baie de Miramichí, Tracadie Sheila, Centre-Péninsule, Lamèque-Shíppagan-Miscou, Caraquet

E-mail: cipa@crcp.nb.ca

Western Valley Smart Community

The Western Valley is well known as a region able to make the most of any opportunity. In fact, the United Nations heralds it as one of the best in the world for integrating ecology, economy, innovation and culture. The Western Valley Smart Community is a clear indication of that ability.

This demonstration project will establish a rural network with access points throughout the region, through the installation of one hundred computer kiosks in public buildings, postal outlets and businesses.

Residents can use the kiosks for everything from retrieving e-mail messages to electronic banking. They will also be able to make on-line purchases securely using the kiosks. E-mail addresses will be issued to the 43 000 residents of the Western Valley region. The use of Smart Cards is also being explored to enable all citizens to use the kiosks. With these tools, and with on-line support, they can create a home-based business, communicate with health care providers, or book tickets to next month's concert.

While individuals connect to the Internet, businesses within the region will also be helped into the e-commerce age. The project will also create a series of internal networks allowing larger organizations to exchange data more efficiently. One of these intranets will collect all kinds of mapping and land-use data to create the world's most sophisticated Geographic Information System.

At the heart of the project is the development of a high-speed infrastructure that converges fibre optic, cable, telephone and wireless systems. This will enable many of the kiosks to provide high-speed audio and video transmission.

In the education realm, a virtual teacher/facilitator resource centre will use on-line interactive technology to provide real time assistance to students accessing upgrading programs. E-learning tools will be delivered to the public through Community Access Program sites and kiosks.

Other elements of the project include wiring a multi-million-dollar technology building that will house a cluster of information technology-related businesses and a business incubator. English- and French-language radio stations will be delivered via the Internet. Original census documents from the first French settlers in North America will be digitized.

By putting technology directly into the hands of the people of the region loday, the Western Valley Smart Community will provide them with the tools they need to succeed in the economy of tomorrow.



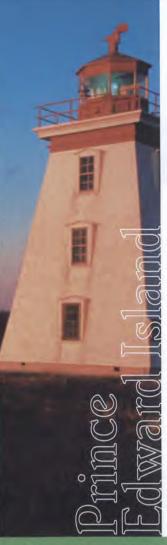
Integrating ecology, economy, innovation and culture

Sponsoring Organization: Western Valley Development Authority

Communities: Municipality of Annapolis County, Town of Annapolis Royal, Town of Bridgetown, la Municipalité de Clare, Municipality of the District of Digby, Town of Digby, Town of Middleton, Bear River First Nation

Web site: http://www.wvda.com/smartcommunity/summary.html





Virtual Charlottetown

Years ago, the town square was the heart of every community, the place where people conducted business and exchanged information. Virtual Charlottetown re-creates the town square with information technology. The Town Square² Internet portal — accessible to all — will become the electronic centre of the community by offering four Smart Services:

- The Learning Centre links teachers with students from anywhere in the region or anywhere in the world.
- The Marketplace connects buyers with sellers. Encryption technology allows for secure transactions, and an extranet provides a secure channel for private groups.
- The Community Exploration offers multimedia tours and detailed background information on everything from heritage to business parks. Detailed maps will be useful for businesses researching an investment in the region, or for tourists planning a visit.
- The Community Builders' Forum provides a platform for sharing a wide range of views and information.

This demonstration project is designed to make the process of going on-line as simple as possible in order to attract the greatest variety of people: seniors, students, caregivers, businesspeople and others. Three municipalities and a number of community organizations will provide support and services to ensure the project's success.

Sponsoring Organization: Charlottetown Area Development Corporation
Communities: Charlottetown, Town of Cornwall, Town of Stratford
E-mail: city@city.charlottetown.pe.ca

Town Square²: Where people conduct business and exchange information

SmartLabrador

Bringing the information age to the people of Labrador is an enormous challenge. There are fewer than 30 000 people scattered across a land mass larger than all the Maritime provinces combined. Phone service is uneven, and it will be years before Internet dial-up service is available in all 32 project communities.

SmartLabrador will meet this challenge head-on with a plan based on a series of community portals, linked through satellite and terrestrial systems. Three communities — Nain, Happy Valley-Goose Bay and Forteau — already have uplink capabilities thanks to the pioneering work of an industrial partner, Telesat Canada. These sites have high-speed connections enabling video conferencing and local-dial Internet access.

Technology on top of the world — enabling new services for northern communities

The network will link patients in remote communities to medical personnel, and improve access to a broad range of government and community services. Among the specific Smart Services planned are the following:

- The Labrador News Network will offer news and weather information.
- The Heritage Mall will market local products and services worldwide.
- The Labrador Intranet will provide an open forum for discussion to Labradorians.
- · The Virtual Museum will showcase the history and culture of Labrador.

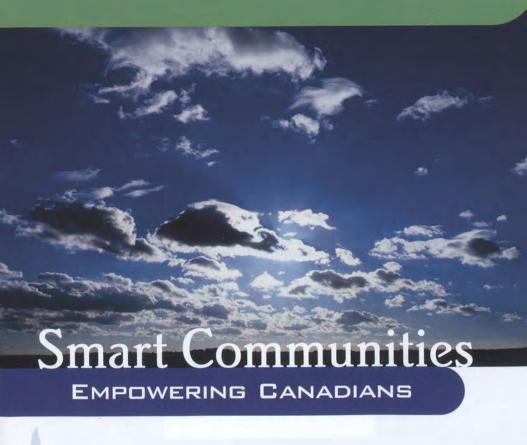
New components will be added to the SmartLabrador model as the network expands to other communities, and it is anticipated that this novel solution will build expertise here that will be exportable to other countries.

Sponsoring Organization: Labrador Information Technology Initiative

Communities: Black Tickle, Capstan Island, Cartwright, Charlottetown, Churchill Falls, Davis Inlet, Forteau, Happy Valley-Goose Bay, Hopedale, Labrador City, L'anse Amour, L'anse au Clair, L'anse au Loup, Lodge Bay, Makkovik, Mary's Harbour, Mud Lake, Nain, Norman's Bay, Northwest River, Paradise River, Pinsent's Arm, Pinware, Port Hope Simpson, Postville, Red Bay, Rigolet, Sheshatshui, St. Lewis, Wabush, West St. Modest, William's Harbour

Web site: http://www.labradorit.nf.ca/smartlabrador



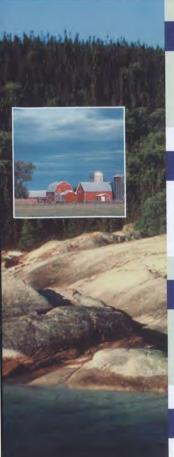


Smart Communities

http://smartcommunities.ic.gc.ca

Peel and stick on your computer.

WEB ADDRESSES



ABORIGINAL

The Kuh-ke-nah Network of Smart First Nations

http://smart.knet.on.ca

NORTH

Yellowknife Smart City Project

http://city.yellowknife.nt.ca/residentinfo/communityinfo/smart/finalapp/partOO.htm

BRITISH COLUMBIA SMART CHOICES
Project

http://www.smartcommunity.bc.ca

ALBERTA

Calgary INFOPORT™ Community Empowerment Project

http://www.crda.calgary.ab.ca/info/index.html

SASKATCHEWAN

The Headwaters Project

http://www.kcdc.sk.ca/hwp/index.asp

MANITOBA

Manitoba Smart Network

http://www.westmancom.com/msn.htm



ONTARIO

SmartCapital

http://www.smartcapital.ca

QUEBEC

Carrefour virtuel de la Mauricie

http://www.groupeforces.qc.ca/main.htm

NEW BRUNSWICK

La Péninsule acadienne: le village global francophone au cœur de la coopération internationale

E-mail: cipa@crcp.nb.ca

NOVA SCOTIA

Western Valley Smart Community

http://www.wvda.com/smartcommunity/summary.html

PRINCE EDWARD

Virtual Charlottetown

E-mail: city@city.charlottetown.pe.ca

NEWFOUNDLAND AND LABRADOR **SmartLabrador**

http://www.labradorit.nf.ca/smartlabrador