



# Staff Report

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**To:** Chair McKinlay and Caucus Members  
**From:** Lance Thurston, Regional Broadband Study Lead  
**Meeting Date:** October 18, 2013  
**Subject:** **Regional Broadband Study - Next Steps**

## Recommendation

**WHEREAS** the mandate of the Western Ontario Wardens' Caucus (WOWC) is to enhance the prosperity of rural and small urban communities across southwestern Ontario;

**AND WHEREAS** the WOWC understands that for communities to be attractive locations for investment in today's hyper-competitive global economy, they must have the fundamental infrastructure foundation including robust fibre optic broadband Internet access that will fully support emerging technological applications;

**AND WHEREAS** significant gaps in and inequitable access to high speed broadband Internet services are holding back many rural and small towns across the region from realizing their full economic potential;

**AND WHEREAS** the WOWC hired the firm of Campbell Patterson Communications to study the feasibility of creating a regional fibre optic broadband area network with gigabit backbone and capable of delivering last mile connectivity in the 10-100Mb or better range across the entire south west region;

### **NOW THEREFORE BE IT RESOLVED:**

1. **THAT** the WOWC hereby receives the report entitled, *Regional Broadband Feasibility Study*, as prepared by Campbell Patterson Communications in fulfillment of the terms and conditions set out in Request for Proposals RFP-WOWC-02-12; AND
2. **THAT** the WOWC endorses the findings of the Regional Broadband Study, which demonstrate the technical feasibility and regional economic development merits of the WOWC, in partnership with upper levels of government and regional stakeholders, creating a regional area network (RAN) consisting of high capacity,

scalable and ubiquitous fibre optic infrastructure deployed throughout southwestern Ontario regardless of population density; AND

3. **THAT** the feasibility study serve as the basis for :
  - a. Continued efforts through 2013 and 2014 to build awareness and support among key stakeholders across the region for the recommended RAN;
  - b. Advocacy with upper levels of government and other potential partners for financial support and involvement to build the RAN and operationalize the recommended governance and organizational structure; and,
  - c. Proceeding with the recommended next steps in the development process that will enable the project to move forward in a logical sequence including further refinement of the regional area network model, detailing of suitable operating and governance framework options and funding application (business plan) to federal and provincial governments; AND
  
4. **THAT** Campbell Patterson Communications be retained on a month to month basis at a rate of \$5,000 per month effective November 1, 2013 to be cost shared equally among members until a project budget for 2014 is approved, to ensure work on the project continues; AND
  
5. **THAT** the following 2014 broadband project budget plan be recommended to the incoming 2014 WOWC Board of Directors:

<b>Activity</b>	<b>Budget</b>	<b>Comment</b>
<b>Advocacy</b>	\$50,000	Regional stakeholder and upper government outreach, to build awareness and secure interest and commitment across the region.
<b>Consultant</b>	\$110,000	Continued engagement of Campbell Patterson Communications
<b>Business Planning</b>	\$100,000	Hire legal and business expertise required to develop detailed organizational framework for RAN
<b>Project Staffing</b>	\$90,000	Hire project coordinator to assist study team and consultant in managing the project, and cover some of the costs of county staff and WOWC members engaged in the project
<b>TOTAL</b>	\$350,000	\$25,000 per WOWC Member

## Purpose

The purpose of this report is to:

1. Update the Western Ontario Wardens' Caucus on the activities of the regional broadband study team since the last Caucus meeting in August;
2. Present Caucus with the consultant's final report on the feasibility of creating an ultra-high speed fibre optic based regional network across southwestern Ontario; and
3. Recommend next steps in the process of developing the recommended regional area broadband network.

## Origin

At its meeting on August 18, 2013, following a presentation by the regional broadband study team, the WOWC passed the following two resolutions:

1. *THAT the draft Regional Broadband Feasibility Study, WOWC 02-12, prepared by Campbell Patterson Communications, be received as the basis for further stakeholder engagement over the coming weeks and that the final report be brought back for Caucus consideration at its meeting in October 2013.*
2. *THAT the WOWC retain Campbell Patterson for an additional two months at a monthly per diem of \$5,000.00 to assist the study team in engaging stakeholders in a final round of regional engagement and consultation regarding the findings of the feasibility study prior to bringing the final report back to Caucus for consideration at its meeting in October 2013.*

## Background

Across southwestern Ontario today, broadband service tends to be high cost, not widely available outside of large urban centres, not reliable and of low functionality in general. The system relies heavily on legacy copper wire infrastructure. The desired future state is a low cost, readily available, largely fibre-based integrated system that can be scaled (upgraded) to meet increasing provider and user demands for more robust functionality without triggering additional large capital investments or provisioning delays.

Understanding the importance of high speed broadband Internet connectivity to the prosperity of the region, the WOWC hired the firm of Campbell Patterson to determine the feasibility of creating a robust regional network that extends fibre optic access

throughout the entire southwest region; a fibre optic network that connects service providers who then extend fibre or wireless access to businesses and homes throughout the region. As part of this review, the consultant was asked to:

- a) Identify the scope of connectivity, speed and price gaps through the entire geographic area to help address potential opportunities for the future;
- b) Identify key stakeholders that will benefit from a regional broadband investment and to measure the commitment level to invest and/or subscribe to the system once it is available;
- c) Understand the deterrents to network investments that have inhibited stakeholders from providing or investing in infrastructure in the WOWC region; and
- d) Make recommendations on a desired course of action for the WOWC in addressing identified broadband needs in the region.

## Study Recommendations

The feasibility study concludes there is merit in the Western Ontario Wardens' Caucus working with a consortium of broader public sector organizations and private service providers to create a regional area network (RAN) consisting of high capacity, scalable and ubiquitous fibre optic infrastructure deployed throughout the southwest region regardless of population density. The proposed network is nominally called SWIFT, which stands for "South Western Integrated Fibre Technology" network.

The recommended model is intended to create a level playing field for service providers that will foster competition, which in turn will drive the highest bandwidth at the lowest cost per megabit/sec to providers and users. A link to the final Broadband Feasibility Study is as follows: [WOWC Broadband Feasibility Study Redacted](#)

The proposed SWIFT network consists of the following elements:

### 1. Network Design

The network at full build out would serve the entire region, comprising 310 communities, encompassing 3 million residents including rural areas with population densities as low as 4 persons per square km. Users across the region would be encouraged to participate and connect to the partner providers systems. User fees would sustain the system.

The network would have three infrastructural components interconnected together (as shown in Figure 1 on the next page), which would result in high capacity, scalable and ubiquitous fibre optic infrastructure:

- a) **Transport fibre optic** – a fibre optic transport network inter-connecting all major centres in Western Ontario operating at 100 gigabits per seconds

(Gbps) with redundant, high capacity facilities to Toronto in order to interconnect to other telecommunications carriers and content providers worldwide.

- b) **Aggregation fibre optic** – the fibre optic transport network connected the 40 Gbps Aggregation points in each county.
- c) **Access fibre optic** – each access aggregation point would be connected to 10 Gbps Access nodes to over 300 cities, towns, villages, and hamlets in the region. Last mile fibre access to public institutions, private enterprises and residences.

## 2. Governance

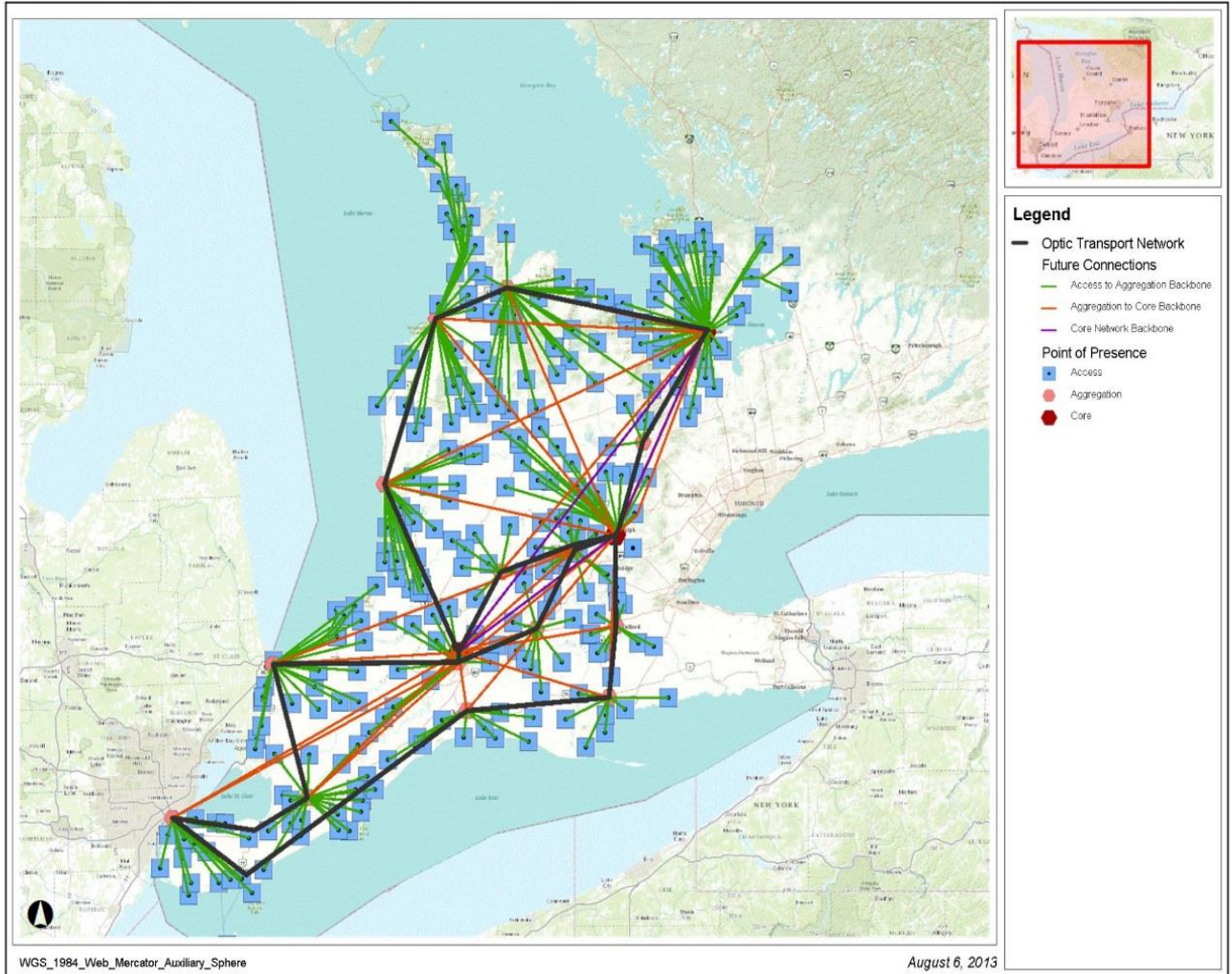
A not-for-profit corporation would be created to operate the SWIFT RAN. It would be governed by a consortium of providers and WOWC members, and possibly other major public and private sector users (e.g. school boards). A management team, reporting to a board of directors of consortium members, would be responsible for the day to day management and planning needs of the system.

## 3. Capital Structure

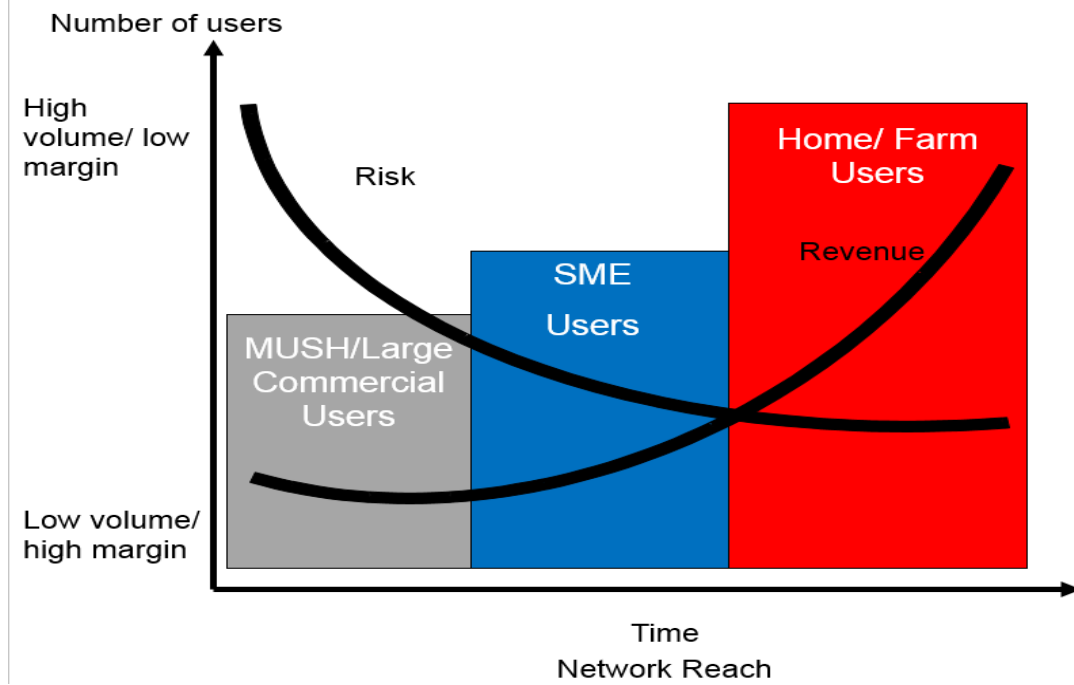
Funding to build SWIFT would be from equity, debt, and grants from county and upper levels of governments.

The operating model is premised on securing large commercial users, municipalities, universities/colleges, school boards and health care organizations as early adopter tenants that will provide, through user fees, the necessary level and consistency of cash flow and critical mass of activity to sustain the system at the outset. Introducing home, small business and farm users with access provider partners will provide the blanket coverage required to achieve our region's economic and social aspirations. This is illustrated in Figure 2 below.

**Figure 1: Future Regional Area Broadband Network Concept**



**Figure 2**



#### 4. Cost

The capital cost of building the proposed network is estimated to be \$234 million, which could be reduced by 20-30% if existing service provider infrastructure in the region can be used as part of the network. Day one operating expenses for the proposed not-for-profit management function are estimated to be in the order of \$9.65 million.

### Stakeholder Engagement

In preparing the draft report that was considered by the WOWC at its meeting on August 18<sup>th</sup>, the study team reached out to over 300 users and 25 providers of internet services in the region both through direct meetings, telephone conversations, email correspondence and two well-attended regional workshops in Guelph and London, organized by the team. Municipalities, health care providers, internet providers, school boards and many others were part of that initial outreach.

Since the August 18<sup>th</sup> Caucus meeting the study team has been busy meeting with additional stakeholders across the region and revisiting many of those who had previously contributed information. The aim of this most recent outreach effort has been to ensure that the study report accurately reflects information provided to the study team, answer any questions and concerns of stakeholders arising from the draft report, receive direct feedback on the study findings, and engage and build awareness among additional parties. Since August 18<sup>th</sup> the team has met or arranged to meet with:

Date	Stakeholder Group
August 28	Federal Minister of Public Works and Government Services (Kitchener)
September 3	Grey County Council (Owen Sound)
September 6	Grey County municipal CAOs (Hanover)
September 11	Huron County Council (Goderich)
September 12	Cheryl Brine and Kevin Laidly, OMAF (Owen Sound)
September 17	Small Independent Local Exchange Carriers (Stratford)
September 12	SWEA Board of Directors (teleconference)
September 20	WOWC CAOs (Woodstock)
September 25	Township of Southgate Council (Hopeville)
September 26	Rogers (Brampton)
Sept 26/Oct 4	Brant Renewables (wholly owned by Brant County)
September 27	Cogeco (Burlington)
October 9	Directors from 5 Ministries involved in GO-Net Project (Toronto)
October 10	Members of WEDnet (Windsor)
October 10	Members of LARGnet (London)
October 11	First Nations (Stratford)
October 11	Rhizome, Packetworks, (Stratford)
October 28	Regional Members of Parliament (Ottawa) tentative
November 15	Ontario West Municipal Conference Plenary Session (London)
November ?	Other Regional Meetings for Municipal Councillors and Staff TBA

In addition to the above, study team members have met directly with or spoken on the telephone to over 100 individuals (residents and/or small business owners) who had contacted the team seeking information, wanting to get involved, encouraging us to

continue with our efforts or simply wishing to share their particular service challenges. A good number of these have been residents of municipalities outside of the area covered by the WOWC.

## **Stakeholder Feedback**

The feedback received from the various parties since releasing the draft report has been, on the whole, encouraging. It has helped to shape the study team's focus on outstanding issues and refine the language and recommendations of the final report. Key messages received and the team's responses follow:

### *Building Awareness and Support*

Awareness of the WOWC broadband study and proposed network model is increasing significantly across the region. There remain, however, a number of key players that are not aware or well informed, such as some municipal councils, our urban municipal colleagues, public institutions, etc.

Continued and more focused outreach is required to build regional support and commitment to the proposed network. This is an ongoing activity for the study team as the above activity table shows.

### *SILEC Skepticism*

There is a strong degree of skepticism among the small incumbent local exchange carriers (SILECs) about the need for or benefits of any form of government involvement in funding the building of a fibre network in their service territories. Some feel that any form of government intervention will destabilize local markets by increasing competition and thereby forcing small local providers out of business. It seems the wariness in large measure is due to negative experiences the SILECs have had with previous government funded broadband programs and they point to the recent Eastern Ontario Regional Network project where most of the funding went to two large incumbent providers as an ongoing basis for concern.

The steering committee and the WOWC Chair have endeavoured to provide assurances to the SILECs that the SWIFT project will be executed in a way to maximize opportunity for small providers to compete on a level playing field with all other providers.

Larger providers have provided favourable support for the findings in the study and have urged that significant funds be allocated to last mile access fibre optic connectivity.

### *Economic Value*

Results from numerous studies and testimonials worldwide consistently show that communities and regions that invest in and embrace high capacity broadband communications and information technologies achieve above average rates of economic growth, job creation, social diversification and innovation. Not surprisingly



then, many countries, U.S. states, Canadian provinces and cities are investing heavily in high speed broadband infrastructure as the backbone of their economic development strategies. The WOWC's feasibility study illustrates compelling regional examples from Australia, Alberta, Iowa, and Ontario.

Canada as a whole has some of the poorest high-speed Internet service in the developed world with download/upload speeds 100 to 1000 times slower than 20 major competitors. Over a year ago, the International Telecommunications Union (ITU) stated that our nation ranked:

- 32nd among world nations for consumer Internet download speeds
- 22nd out of 30 countries in broadband adoption, network capacity and pricing
- 16th in broadband adoption

Our competitive standing has continued to erode since that statement was made.

Location and natural resources, once the determinants of economic potential and community prosperity and long the competitive advantage for many Southwestern communities, are no longer relevant in the new global economic order. Rather, it is the ability of business and government to adapt and innovate, the skills and creativity of the local labour force, and the availability of high capacity broadband access to the Internet that now power wealth creation, entrepreneurial activity, new jobs and community prosperity.

In this now globalized market place companies and entrepreneurs seek to locate their facilities and base of operations where they can gain the greatest advantage in terms of costs, skilled labour and access to markets. Communities without high capacity broadband cannot even begin to compete and cannot expect to flourish.

The WOWC understands that the demand for faster more robust Internet service is increasing dramatically as more and more people become aware of and reliant on Internet-based services and information, particularly video on demand. Continued innovations in e-health, e-government and e-commerce and entertainment serve to extend the societal reach of and dependence on the Internet.

Innovation, skills and adaptability abound in the people of Southwestern Ontario. Unfortunately, the high speed broadband infrastructure needed to enable their full participation and success in the global economy either does not exist or is not equitably affordable across the region. In many of the rural and small town communities across the region broadband download speeds now approach at best 1.5 megabits/second (where available). Upload speeds and symmetrical bandwidth flow (upload/download), which is a key to entrepreneurial and business applications functionality, are agonizingly slower. These communities are therefore at a decided disadvantage in attracting investment, achieving entrepreneurial innovation, generating wealth, creating jobs.

Without access to competitively robust broadband infrastructure prosperity will elude many communities across the region.

The study team has prepared a more in-depth discussion on the economic impact of broadband. That report is linked to this report at [WOWC Economic Value and Social Impact Report](#)

### *Why be part of a regional solution?*

There is a sense among some parties, despite evidence to the contrary gathered in this and many other studies worldwide, that those communities enjoying what is considered to be a high level of service and “best in show” Internet connectivity today have no need to be a part of this regional effort.

This view fails to take into account that well-served urban areas are inextricably bound to under-served or un-served rural areas. For example, most school boards offices are located in urban areas and are well served with fibre optic connectivity. Many of their school sites however, are situated in rural areas that are not. The same is true for county and municipal governments and multi-site hospital corporations. The proposed SWIFT network will equitably interconnect users across the entire region and provide ultra-high-speed and lower cost Internet transit for everyone to the world beyond southwestern Ontario.

The feasibility study demonstrates the value of being involved in a regional area network. Most parties see the opportunities the proposed SWIFT network will create for business expansion, improved service to customers and lower prices.

### *Municipalities must have skin in the game*

Provincial and Federal Ministers have been receptive to the study team’s regional area network proposal. Each has indicated however, that for there to be any possibility of financial support from the upper levels of government, WOWC members and other municipal governments must demonstrate a meaningful financial commitment to the project.

The study outlines government grant programs to which applications can be made by the WOWC. It notes that a municipal contribution in the order of \$16 million of the total \$234 million project capital cost would be a reasonable expectation based on current Federal grant guidelines.

In a separate report to the WOWC (see link later in this report), staff has developed a five year operating budget plan that anticipates receipt of government funding and participation from other stakeholders in the development and roll out of this project. In the absence of firm direction, certain assumptions have been made to generate a high level projection to the year 2018.

## *Relationship with Other Regional Efforts*

Part of the feasibility work was to determine what other broadband related initiatives are being pursued across the region in order to avoid duplication, gaps in research and consistency of outcomes. Two initiatives have been identified and steps have been taken by the study team to coordinate efforts.

### Go-Net Upgrade

The Ministry of Government Services (MGS) is planning to consolidate and upgrade its GO-Net network that connects all government and many broader public sector organizations. A member of the WOWC broadband study team is a member of a technical advisory group to the MGS project steering committee. If the MGS procurement process can be aligned with the WOWC's SWIFT network proposal, we have a once in a generation opportunity to rationalize costs while providing equitably affordable and scalable Internet access to everyone in the region. If the MGS procurement fails to take this opportunity into account, the WOWC's SWIFT network proposal and other regional area networks like WedNet in Windsor area and LargNet in London will be harmed.

The study team is encouraged by the recently announced regional economic development lens through which all provincial government programs and services must be viewed. The feasibility study has taken this all into account and contemplates various alternative models and use of funds should the GO-Net procurement prove to be detrimental to the recommended WOWC model.

### SWEA

The South West Economic Alliance (SWEA), a regional economic development advocacy and research alliance of municipalities, universities/colleges and private sector organizations, is pursuing what it calls the *Intelligent* or *Connected* Region initiative. It is a rigorous community development framework that articulates how to leverage broadband technologies to full competitive advantage. The idea is to have municipalities in the southwest region recognized and rated collectively by the worldwide Intelligent Community Forum as an "Intelligent Region".

The WOWC broadband study and the SWEA initiative are complementary and mutually supportive efforts contributing to expanding the region's prosperity base. Each in its own way adds value to the regional prosperity agenda; taken together their shared value to the regional effort is compounded. Care has been taken to integrate and coordinate the WOWC feasibility study and the SWEA *Intelligent* Region initiative. Indeed the development and use of applications that may result from the SWEA community assessment depends heavily on the availability of broadband addressed in the WOWC project.

## Road Map for Next Steps

The feasibility study report outlines the recommended next steps in planning for and developing the proposed SWIFT network. There is much work to be done over the coming two years to flesh out the technical design of the system, develop the necessary legal, governance and operating frameworks, and build awareness and support among regional stakeholders. This work is also necessary in order to be in a position to apply for grant programs offered by upper levels of government.

The next steps and anticipated time lines are outlined in the table below.

<b>Step</b>	<b>Start</b>	<b>End</b>
Feasibility Study	November 2012	October 2013
Consultation with stakeholders	August 2013	October 2014
Organizational structure	November 2013	March 2014
Funding application	January 2014	March 2014
Contribution agreements	April 2014	June 2014
Funding received	June 2014	August 2014
Request for Proposals	September 2014	December 2014
Providers Service Agreements signed	January 2015	March 2015
End state report	March 2015	April 2015
Business plan	January 2015	March 2015
Marketing plan	March 2015	April 2015
Deployment	April 2015	March 2018

## Financial Considerations

The estimated cost to fully construct the proposed network from scratch is in the order of \$234 million, including the cost of a direct fibre optic transport connection to the Internet hub in Toronto, which serves as the regional portal to the World Wide Web. This amount can be reduced by utilizing existing infrastructure owned by service providers and local exchange carriers by agreement. It is suggested that a 20-30% reduction in overall project capital costs could reasonably be achieved in this way.

The proposed not-for-profit corporate entity created to manage the network would require in the order of \$9.65 million in operating dollars day one. This includes all staffing and related costs to run such an organization.

### *Government Grants*

Creating the proposed SWIFT network is premised on the WOWC receiving financial support from upper levels of government and other regional stakeholders. Grant opportunities are outlined in the feasibility study report.

The Federal Government's Build Canada Fund is the most likely granting mechanism. The program has been revised to include broadband as eligible infrastructure. The application process is rigorous and requires significant detailed business planning documentation. An excerpt from the Build Canada Fund criteria is provided in Appendix 2 to this report. The guidelines demonstrate the need for due diligence if there is any expectation of a grant application being favourably received.

Based on a Build Canada contribution funding formula of one third/one third/one third for the \$234 million project, a successful application may yield the following granting contribution:

Federal	\$78 million;
Provincial	\$78 million;
Municipal	\$78 million; of which \$62 million would be from regional partners and \$16 million from WOWC members

Please note the above figures do not include the estimated \$9.65 million operating costs for the recommended broadband consortium.

### *Project Budget*

A budget for the next steps in the planning and development stage of this process is provided in Appendix 1 to this report. The cost for the identified next steps is estimated at \$350,000. Shared equally among members this would mean a one-time contribution of \$25,000 per WOWC member in 2014.

In a separate report to the WOWC, a link to which follows [WOWC Report 2014 Budget](#) staff is proposing a five year operating budget plan for the organization, which includes consideration of the anticipated broadband project costs for 2014-2018. This includes the costs of the Next Steps in the development process in 2014, along with future projections around the receipt of capital funding and contributions to the build out of the network.

### **Appendix 1**

#### **Next Steps Project Budget for 2014**

Item	Cost (\$)	Comment
<b>Advocacy</b>	50,000	Regional stakeholder and upper government outreach, to build awareness and secure interest and commitment across the region.
<b>Consultant</b> Campbell Patterson Communications	110,000	Continued engagement of Campbell Patterson Communications
<b>Business Planning</b>	100,000	Hire legal and business expertise to develop detailed organizational framework for RAN
<b>Project Staffing</b> Project Coordinator  Reimburse some dedicated county staff time	90,000	Hire project staff to assist study team and consultant in managing the project, and cover some of the costs of county staff and WOWC members engaged in the project
<b>TOTAL</b>	\$ 350,000	\$25,000 per WOWC Member

## **Appendix 2**

### **Building Canada Fund Major Infrastructure Component:**

#### **Project Overview Requirements for Connectivity and Broadband Projects**

The Building Canada Fund (BCF) is designed to increase investment in public infrastructure and contribute to broad federal objectives: economic growth, a cleaner environment and strong and prosperous communities. In order to ensure these program objectives are achieved, all projects must be supported by a project overview that includes an assessment of the proposed project. This document provides the minimum information requirements for Connectivity and Broadband project proposals under the Major Infrastructure Component (MIC) of the BCF.

#### **Eligible Recipients**

To be eligible under the MIC, the funding recipient must be one of the following:

- a. A province or a local or regional government established by or under provincial statute;
- b. A public sector body that is established by or under provincial statute or by regulation or is wholly owned by a province or municipality; or,
- c. A private sector body, including not-for-profit organizations, either alone or in partnership with a province or a government referred to above, which includes First Nations.

#### **Connectivity and Broadband Subcategories**

To be eligible under the Connectivity and Broadband category, projects must fall under one or more of the following eligible project subcategories:

- High-speed backbone
- Point of presence
- Local distribution within communities
- Satellite capacity

#### **Connectivity Project Assessment Criteria:**

Proponents of MIC Connectivity and Broadband projects will be required to provide the following information to federal officials as part of their project overview.

##### **1. Project Overview**

1.1 A detailed overview of the project design and work to be carried out, including maps and diagrams showing the location, characteristics and phases (if project is part of larger master plan or project).

1.2 The estimated start date and completion date of the project components.

## 2. Financial and Legal Requirements

2.1 Identification of the project components and their total estimated eligible and ineligible costs (see Annex A for the list of eligible and ineligible costs).

2.2 Identification of the proposed funding sources and the expenditure profile reflecting total eligible costs.

2.3 Indication as to the level of confidence, degree of accuracy and level of contingency of the proposed cost estimates.

2.4 Assurance of capacity to operate and maintain the service or investment on a sustainable, long term basis, where appropriate for complex projects and when the recipient is a not-for-profit organization or the private sector.

2.5 Demonstration that the project will adhere to all applicable federal legislation and obtain all necessary federal permits and authorizations required for the project.

2.6 Status and plan to complete environmental assessment and First Nations consultations, where required. Infrastructure Canada will assess the impact of the project on Aboriginal Rights and Treaties using the project footprint (location). To this end, the proponent must fill out the questionnaire in Annex B and return it to Infrastructure Canada.

2.7 Confirmation and assurance that the contract award process for eligible costs to be funded under the project is competitive, fair, transparent and consistent with the Agreement on Internal Trade.

## 3. Project Benefits

3.1 The proponent must demonstrate how the project provides benefits to Canadians in support of one or more of the following outcomes:

- Provides broadband access to a greater number of residents, businesses, and/or institutions in Canadian Communities that results in at least one of the following:
  - Increases their ability to participate in economic development through online marketing and e-commerce;
  - Improves their access to employment and learning opportunities;
  - Furthers opportunities for civic engagement and social development including promotion of culture and minority languages; and
  - Allows governments to provide services more effectively and efficiently, including health services.

## 4. Risk Mitigation



4.1 Identification of significant risks and outlining of the measures and/or the proponent's capacity to mitigate these risks (e.g. cost increases, project delays, risk of scope change due to results of environmental assessment).

4.2 For non-governmental recipients, provision of assurance of appropriate governance structure, capacity, track-record managing large projects, and capacity to obtain non-federal funding for the project.

## 5. Minimum Federal Requirements

5.1 Demonstration that newly constructed or materially rehabilitated infrastructure intended for use by the public must ensure appropriate access for persons with disabilities, including meeting the requirements of the Canadian Standards

Association Technical Standard Accessible Design for the Built Environment (CAN/CSA B651-04) for new construction or, subject to the Minister's approval, any acceptable or similar provincial or territorial standards.

5.2 Newly constructed or materially rehabilitated buildings must meet or exceed the energy efficiency requirements of the Model National Energy Code for Buildings, where applicable.

5.3 Beginning April 1, 2011 proponents of projects with a proposed federal contribution of above \$50 million must demonstrate how they will use

Public-Private Partnership (P3) procurement, or if the project is not pursuing P3 opportunities, the proponent must provide an explanation of how P3s were considered and why they were not pursued.

5.4 Connectivity and Broadband projects and/or the proponents must:

- Use technological solutions that are appropriate, reasonable and available.
- Promote competitiveness by conducting a commercially and technologically neutral Request for Proposal.
- Provide for third party open access.
- Be based on a practical needs assessment and is scalable to realistically meet future needs.

## Eligible and Ineligible Costs

Eligible costs will be all direct costs that are, in Canada's opinion, properly and reasonably incurred and paid by an eligible recipient for an eligible investment under a contract for goods or services necessary for the implementation of a project. Eligible costs include only the following:

- The capital costs of acquiring, constructing or renovating a tangible capital asset, as defined and determined according to accounting principles generally accepted in Canada;
  - The costs of joint communication activities (press releases, press conferences, translation, etc.) and road signage recognition set out in the Communication Protocol that will form part of the federal-provincial contribution agreement;
  - All planning (including plans and specifications) and assessment costs specified in the agreement such as the costs of environmental planning, surveying, engineering, architectural supervision, testing and management consulting services. Canada will contribute no more than 15% of its contribution to this cost;
  - The costs of engineering and environmental reviews, including environmental assessments and follow-up programs as defined in the Canadian Environmental Assessment Act and the costs of remedial activities, mitigation measures and follow-up identified in any environmental assessment;
  - Costs of project-related signage, lighting, project markings and utility adjustments;
  - Costs of aboriginal consultation;
  - The costs of developing and implementing innovative techniques for carrying out the Project;
  - Recipient audit and evaluation costs as specified in the agreement; and
  - Other costs that, in the opinion of Canada, are considered to be direct and necessary for the successful implementation of the Project and have been approved in writing prior to being incurred.
- Eligible project costs can begin to accrue effective as of the date indicated by the Minister of Transport, Infrastructure and Communities in writing to the proponent following the Minister's approval-in-principle of the project. However, all eligible costs outlined above can be reimbursed to the recipient only following the signing of the contribution agreement in respect of the project.