



Leaders at the Core of Better Communities

2011 Annual Awards Program

Program Excellence Awards Nomination Form

Deadline for Nominations: March 11, 2011

Complete this form (sections 1 and 2) and submit with your descriptive narrative.

SECTION 1: Information About the Nominated Program

Program Excellence Award Category (*select only one*):

- ☐ Community Health and Safety
- ☒ Community Partnership
- ☐ Community Sustainability
- ☐ Strategic Leadership and Governance

Name of program being nominated: Fredericton Community Network

Jurisdiction(s) where program originated: Fredericton, Canada

Jurisdiction population(s): 50,535

Please indicate the month and year in which the program you are nominating was fully implemented. (Note: All Program Excellence Award nominations must have been fully implemented by or before January 31, 2010, to be eligible. The start date should not include the initial planning phase.)

Month: October Year: 2006

Name(s) and title(s) of individual(s) who should receive recognition for this award at the ICMA Annual Conference in Milwaukee, Wisconsin, September 2011. (Each individual listed MUST be an ICMA member to be recognized.):

Name: Paul R. Stapleton

Title: Chief Administrative Officer Jurisdiction: City of Fredericton

Name: Chris MacPherson

Title: Assistant City Administrator Jurisdiction: City of Fredericton

Name: _____

Title: _____

Jurisdiction: _____

SECTION 2: Information About the Nominator/Primary Contact

Name of contact: Don Fitzgerald

Title: Executive
Director, Strategic
Initiatives

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Problem Assessment (Challenge or Need)

In the early 2000's suppliers of broadband connectivity struggled to keep up with insatiable demand and focused their efforts on large very, dense markets where they could earn a maximum return. The concept of the Digital Divide became the common way to describe the connected "haves" and "have-nots". At this time Fredericton was one of the "have-not" communities. Broadband access was only available in very few areas, and even then for prices that were many times the costs of similar services in larger urban centers.

Fredericton is dependant on the ability of its professionals to export to markets outside of our region and we recognized that this disadvantage had the potential to constrain economic growth and it could also precipitate an economic decline. We understood that this new form of connectivity was going to be a differentiator of communities in the future, and without some type of resolution we could see our best assets – our people – begin to relocate.

It was apparent that if our community were to have the tools that it required an alternative solution would be necessary. As a result of community stakeholder discussions in 2001 we incorporated a federal company, e-Novations ComNet Inc. as a wholly owned subsidiary of the City. It set out to become a provider of broadband connectivity to our municipal operations and the community at large.

Program Implementation & Costs

Based on the community consultations e-Novations developed a member based business model. The municipality agreed to become the first member of this new network and loaned the company \$65,000 CDN. Another private member provided a \$50,000 forgivable loan and the largest University in our Province and the largest ISP prepaid 3 years worth of membership fees. With this working capital of \$150,000 CDN e-Novations began to construct a fibre optic network. By the end of the first year membership in the Community Network had grown to 12 organizations, many of whom had multiple locations in the community.

Members were now able to connect their branches at broadband speeds but they still had an unfulfilled need in common: dedicated Internet access. In its second year of operations e-Novations became a commercial Internet Service Provider (ISP).

We decided to operate in the style of a Co-op. e-Novations purchases guaranteed dedicated access to Internet in "bulk" and allots it to members on that basis. What is innovative is that while members pay for guaranteed minimum bandwidth, they are able to access the Internet at even higher speeds, if other members are not using their entire allotment at the same time. The combination of fibre optic connections and higher speed access to the Internet than was otherwise available, gave the Community Network a significant value proposition in the community and e-Novations market share grew accordingly.

As the number of members to the network increased the surplus cash flow was invested in expanding the network. By mid 2002, most of the easy wins with our large institutions had been made; we had a stable fibre ring, positive cash flows, and had influenced the price point for broadband connectivity and Internet access in Fredericton. However, we were still a long way away from our vision of broadband everywhere.

Like the commercial providers we were challenged by the "last mile" costs. We needed a way to broaden the network with complementary communication technology. In partnership with our airport, located some 15 miles from our city and outside existing broadband coverage areas, we explored a number of alternatives. Point to point wireless technology proved to be the answer and it was through this channel that we were ultimately able to provide high-speed Internet access everywhere in Fredericton.

We had delivered on our original vision; e-Novations had repaid its start-up loans and satisfied the other funding requirements of its initial partners. We had essentially "created" a new business in our community and we had demonstrated to our citizens and businesses that we took our role of providers of world-class tools seriously.

In the fall of 2003 we realized we use could our network to respond to the increasing need or desire to be connected all the time. The vision of being always connected, at high speeds, anywhere in the city was one that many communities were exploring at that time. Our network formed a robust backbone we could use to make that vision a

reality and what's more – we could do it in such a way that the connections would be free for all to use.

Over the next two years we deployed close to 300 Wi-Fi access points throughout our downtown and business corridors. We covered our public facilities and retail malls. In short, we inventoried our high traffic areas and delivered free Wi-Fi to these areas. Rather than approach this market in a conventional way by establishing “hot spots”, we overlaid hot spots to create a Wi-Fi zone.

Leveraging municipal infrastructure such as such as libraries, rinks, parking structures, water towers, traffic signals and streetlights to host Wi-Fi access points, and the City's fibre optic ring as a host network, along with long distance wireless technology Fredericton now boasts ubiquitous broadband service, a truly connected business community and an extensive Wi-Fi zone, which allows individuals to connect to the world free of charge.

Bandwidth at broadband speeds is provided to this “Fred-eZone” by e-Novations. As the ISP managing the Community Network, e-Novations makes available unused network capacity to the Wi-Fi zone. In this way the City incurs no incremental costs and consistent with our philosophy of treating this as infrastructure we do not charge users.

Tangible Results\Measurable Outcomes

Our project established a new price point for other providers to meet and caused them to accelerate their deployment plans which resulted in both lower prices and increased choice for our community.

Most significantly residents and businesses based in Fredericton now enjoy the availability of broadband everywhere and at price points rivalling much larger Canadian and American urban centers rather than at 3-4 times the price, which was the norm before the establishment of e-Novations.

Lessons Learned

Our lessons include:

1. The community in general often faces the same challenges as the municipality does.
2. There are "social entrepreneurs" who are prepared to invest in community development.
3. Consultation often leads to the establishment of a broad based project team.
4. When faced with a challenge we are better off to face it ourselves rather than to wait for someone to "deliver" us.