

## Report ITR-PCD-01-14

**To:** Chair Wright and Members of Planning and Community Development Committee  
**From:** Geoff Hogan, Information Technology (IT) Director  
**Meeting Date:** March 18, 2014  
**Subject:** **Intelligent County Initiative**  
**Status:** Recommendation adopted by Committee as presented per Resolution PCD36-14 March 18, 2014; Adopted by Council April 1, 2014 per Resolution CC48-14;

### Recommendation(s)

**WHEREAS encouraging diversification of local and regional economies through the increased use of broadband and information and communications technologies (ICT) is an essential component of developing a knowledge-based economy;**

**AND WHEREAS leveraging high speed, high capacity communications technologies (broadband) across a wide range of sectors achieves above average rates of economic growth, job creation, social diversification and environmental innovation;**

**AND WHEREAS Grey County is participating in the Southwest Economic Alliance (SWEA) Intelligent Region Project;**

**NOW THEREFORE BE IT RESOLVED THAT Reports ITR-PCD-02-14 be received;**

**AND THAT Grey County participate in the SWEA Job Creation Partnership (JCP) program to access community engagement specialists to staff the project;**

**AND THAT if suitable JCP placements cannot be found that a contract staff be hired to help manage the project;**

**AND FURTHER THAT Grey County single source Intelligent Community Forum to provide its Accelerator program to fast track local community engagement;**

**AND FURTHER THAT the project be funded from the approved 2014 Intelligent Community budget.**

## Background

In order to be viable and prosper in today's global economy, communities and regions must compete for investment on the global stage, and its communities must have the tools to grow their economies from within. 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, job creation and overall community prosperity.

The demand for more robust Internet service is increasing dramatically, as more and more people become aware of and reliant on Internet-based services and information. Continued innovations in e-health, e-government and e-commerce and entertainment are extending the societal reach of and dependence on the Internet and this in turn is fueling an unprecedented revolution in how we all live, work and play.

Worldwide experience shows that the extension of ultra-high speed broadband to as much of the population as possible reaps significant and measurable economic and social benefits. Communities that connect to and embrace the so-called Internet of Everything are rewarded with many of following so called 'Intelligent' outcomes and attributes (as reported by the Intelligent Community Forum):

- Ready access to the best available interactive and diagnostic health, learning and training, and business development services, without leaving the community
- Strong private sector investment as a result of the unparalleled quality of place and advanced low cost open access ultra-broadband communications that support an array of talent working in an environment conducive to collaboration and innovation
- Open access ultra-broadband infrastructure that facilitates new health caregiver support systems that dramatically expand support for patients with cancer, diabetes and other debilitating ailments
- Enhanced caregiver supports to facilitate aging with dignity in the home, yielding lower health care costs per capita and a higher quality of life

- Intelligent buildings, smart grid and other environmental initiatives that reduce the carbon footprint of communities
- New forms of tele-presence collaboration that stimulate collaborative research, innovation, the creation of new young companies and improved competitiveness of others
- Intelligent transportation with reduced environmental impacts, improved service, shorter travel times and fewer accidents
- Educators providing more engaging and interactive learning experiences to meet the diverse needs of learners; Distance learning is made possible
- Advanced forms of entertainment and information services connected to community home entertainment centres presenting new ways to watch hundreds of cultural, sporting, news and other events
- Businesses collaborating with the arts and cultural communities to define new frontiers in digital media thanks to a competitive blend of creativity and technology that produces new products, services, investments, international trade and employment opportunities

### *Success Factors*

The five key success factors for an Intelligent Community or region are<sup>1</sup>:

#### *1. Broadband Connectivity*

Broadband is the new essential utility, as vital to economic growth as clean water and good roads. Communities need a clear vision of their broadband future and to craft policies to encourage deployment and adoption.

#### *2. Knowledge Workforce*

A knowledge workforce is a labour force that creates economic value through the acquisition, processing and use of information.

#### *3. Digital Inclusion*

As broadband deploys widely through a community, there is serious risk that it will worsen the exclusion of people who already play a peripheral role in the

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<sup>1</sup> Intelligent Community Forum

economy and society, whether due to poverty, lack of skills, prejudice or geography. Communities need to promote digital inclusion by creating policies and funding programs that provide marginalized members of the community with access to digital technology and broadband, by providing skills training and by promoting a compelling vision of the benefits of engaging in the broadband economy.

#### 4. *Innovation*

Broadband is to innovation what fertilizer is to crops. Competitive communities work to build the local innovation capacity of new companies and entrepreneurs, recognizing that private sector investment is what generates wealth and produces job growth in modern economies. Failure to innovate means failure to compete.

#### 5. *Marketing and Advocacy*

Like businesses facing greater global competition, communities must work harder than ever to communicate their advantages and explain how they are maintaining or improving their position as wonderful places to live, work and invest in growth businesses. Effective marketing shares this story with the world, while advocacy builds a new vision of the community from within.

Report [CAOR-PCD-14-12 Creating an Intelligent Region](#) outlines the advantages of Grey County becoming an Intelligent Community. Intelligent Communities as described by the New York City based Intelligent Community Forum (ICF) “are those which have – whether through crisis or foresight – come to understand the enormous challenges of the Broadband Economy, and have taken conscious steps to create an economy capable of prospering in it.”

Figure 1 is a conceptual model of an Intelligent Community. Grey County has an excellent foundation (Place – as noted in the model) and is working on the infrastructure layer of the model by leading the Western Ontario Warden’s Caucus’ SWIFT regional broadband project. To become an Intelligent Community not only do you need a solid foundation of Place and Infrastructure, as noted in this model, but the use of Information and Communications Technology (ICT) needs to be harnessed to be able to compete globally and create local prosperity.

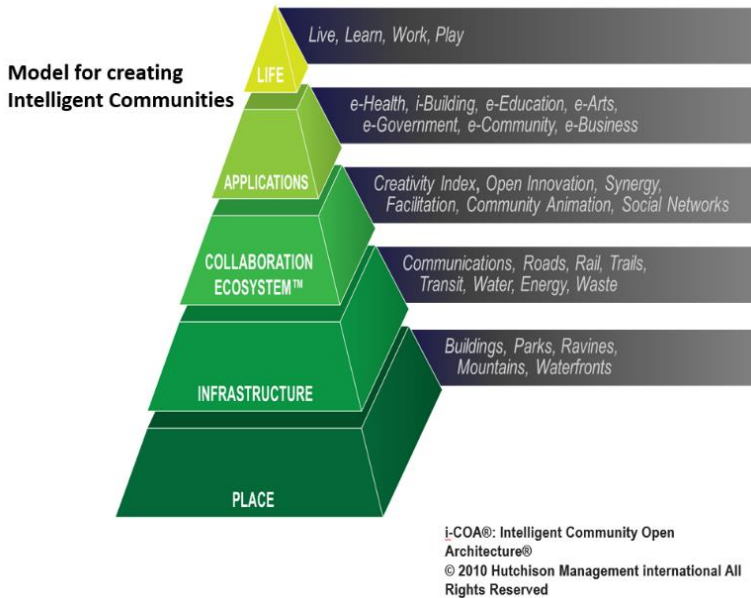


Figure 1 - Model for creating Intelligent Communities

In the past two years Grey County has participated in two initiatives that have given insight into the County's strengths and weaknesses. Participants in the i-CAT survey in 2012 (see [CAOR-PCD-14-12](#)) ranked Grey County highly for the environment, quality of life, finances and smart utilities. Areas that were identified as needing more attention included: rural transportation solutions, communication and coordination among community partners, ultra high speed broadband connectivity, e-commerce, e-health, entrepreneurship, innovation and marketing. In 2013 a pilot project with Cisco Canada provided additional valued insights. The results of the Cisco study are detailed in the section below.

### *Grey Pilot of SWEA/Cisco's Smart and Connected Communities (S+CC)*

## **Background / Report findings**

The Southwest Economic Alliance (SWEA) announced its Intelligent Region initiative in early 2013. Cisco was hired by SWEA to do a high level assessment / benchmarking of the SWEA communities for their level of preparedness for the strategic application of broadband and ICT technologies to their local economies. Grey County volunteered to be a pilot area for the project.

A Cisco team from Lima Peru spent three days with Grey County's Economic Development Officer in the spring of 2013 touring our region conducting in-person

interviews. The interviews were followed up by a broader online survey. The [attached report](#) outlines the complete findings of the Cisco team.

The key socioeconomic findings (from the report) were:

1. Support for small and medium businesses (agriculture, tourism, retail and industry)
  - Youth retention and attraction is an issue due to disadvantages with respect to wages and lifestyle value proposition for young people compared to larger cities (like Toronto)
  - Vulnerability of many SME's (small medium enterprises) due to global competition and lack of specialized tools / services
  - Large industries are closing, new jobs need to be found
  - Number of people who could work from home is increasing, but connectivity is an issue

2. Education
  - Labour market supply and demand gap due to lack of skills and lack of coordination between educators and employers
  - Geographic dispersion is a barrier for a broader / more specialized educational offer, since there are only a few students in each town / community
  - Lower wages compared to those found in urban areas, better lifestyle offered in Grey County
3. E-Government
  - Opportunity to improve collaboration and partnerships between different levels – municipal, provincial, federal
  - High building permits startup costs that hinder small business start-ups in communities
  - Limited control of utilities, energy consumption and road safety
4. Healthcare
  - Public and private systems use different databases, causing an information gap in patient information
  - Geographic dispersion is a barrier for healthcare deployment
5. Accessibility
  - Access to Internet depends solely on location, with great differences within Grey County
  - Fiber optic lines have been deployed throughout much of Grey County but remain mostly as private point to point links or dark fiber and do not break out to provide fiber to the premises
  - Hospitals, schools and government facilities are connected between each other and with other organizations
  - Small businesses and residences struggle to access good quality and affordable broadband connectivity
  - Residents without a computer or connection at home have very limited options for access
6. Broadband
  - Wide variety of technologies, Dial up, DSL, Cable, Wireless, Satellite, Fiber; provided by private ISP's (Internet Service Providers)
  - Fiber optic lines have been deployed throughout most of the Grey County but remain as dark fiber (i.e. no service runs through them)

## **Cisco Report Analysis / Outcomes**

The key socioeconomic findings listed above are not 'new' to the County and are similar to the findings of the i-CAT survey from 2012. The Cisco work is the beginning of a

larger regional assessment that will allow Grey County to compare and contrast itself to its peers and neighbours and participate in the SWEA Intelligent Region project.

It came out loud and clear during the interviews that many of the key sectors of the Grey County economy depend on information technology and connectivity and that there is a lot of work still to be done to improve connectivity.

The key benefits that were realized from the Cisco engagement were:

- We learned a lot about our communities and ourselves – capacity, capabilities, issues, and successes
- We broadened and strengthened community connections – a great start for a longer term community engagement
- The process to date brought the reality to the theory – it is starting to really make sense; the process leads to much deeper understanding of what an intelligent region truly is
- Confirms the need for some form of government investment/engagement in bridging the broadband connectivity/capacity gap and providing leadership for community capacity building

### *The Way Forward*

There are a number of communities in Ontario that have participated in the ICF's Intelligent Community awards program. Windsor-Essex, Stratford, Kingston, Waterloo are examples of communities that have made it to the "Top Seven" in the world, with Waterloo being named the Intelligent Community of the Year in 2007.

Applying to this awards program is a possibility in Grey County's future but there is a lot of work to do before the County should consider taking that step. Broadband connectivity and community capacity are two key areas that need improvement prior to competing for top Intelligent Community of the Year. The WOWC's SWIFT regional network project is still in its early stages. If the SWIFT network is approved and funded, the region will take a great step forward in solving its connectivity issues. Grey County will need to make some investment in local infrastructure when the SWIFT network is funded and being rolled out. Until then however, it would be prudent to wait until we can align our local efforts with the regional project before promoting and funding other local broadband improvement projects.

The community capacity building component of this initiative however, can start to be addressed while we wait to hear the funding outcomes of the SWIFT network. The county made a good start on community engagement during the Cisco project and the



report has given us a baseline from which to measure ourselves against others in the SWEA catchment area. Building on that success, County staff is recommending that the County take the next step in this journey and engage ICF to deliver its Accelerator program to us.

## The ICF Accelerator Program

The Accelerator program is outlined in the [attached document](#). “Getting started is the always the hardest part. The Accelerator offers a mix of vision, practical guidance, motivation and measurement that spurs key stakeholders to undertake projects that produce results. By organizing for action and gaining short- term successes, community groups develop an appetite for more, and become your most powerful advocates for positive change.”

## Recommendations

1. Broadband infrastructure - wait until the SWIFT project has more details on specific direction so local activities align with regional project
2. Hire the ICF to kick start community engagement on the broader topics outside of broadband infrastructure
3. Hire a resource that can focus on the organization and delivery of the community engagement activities, either through SWEA or directly through the County Intelligent Community budget

## Draft Timeline

- May - June
  - Hire SWEA staff
  - Identify community stakeholders
  - Identify other initiatives like Open Data ([video explaining open data](#)) to complement Intelligent County
  - Begin data collection
- July - August
  - Data collection
  - Organize mentoring meetings for September
- September – November
  - begin ICF mentoring program with a community kickoff

## Financial / Staffing / Legal / Information Technology

### Considerations

The 2014 Economic Development – Intelligent Community budget was approved with a total of \$100,120 in expenditures to be funded from the One Time Funding Reserve. The Cisco pilot was funded by SWEA so the entire budget is still available. The ICF has three community accelerator products the County can take advantage of: the master class, metrics and mentoring. The details of the three products are available in the attachment. County staff recommendation is to hire the ICF for a master class and some mentoring. The cost of the ICF engagement will be between \$50,000 and \$70,000 including travel depending on the outcome of the master class.

The SWEA project has secured funding through the provincial JCP program (Jobs Creation Partnership) for positions to help with community engagement at no cost other than office space and travel expenses for the local municipality ([proposal attached](#)). If people with the right skills can be hired we can use these resources to help with the community engagement. SWEA has offered up to four staff, practically we can use one or two. The contract length is 42 weeks. Staff spend 51% of their time doing SWEA project work and up to 49% of their time doing work directly for Grey County projects. The intelligent region and intelligent county projects are perfectly aligned so most of the work by the SWEA staff will have a direct benefit to the County.

The resources SWEA has available is relatively limited because of the provincial funding program. If the right person cannot be hired, staff recommends the remaining budget be used to hire a resource to help with community engagement. To make this project a success the IT Director and Economic Development staff cannot run the project from a corner of their desk.

### Link to Strategic Goals / Priorities

Goal Number One of the Corporate Strategic Plan is to expand the prosperity base of the county. This means, enhancing and diversifying economic opportunities within the county, by becoming “investment- ready” and ensuring the foundation is in place for sustained success. Our shared vision of sustained community and regional prosperity encompasses:

#### *Economic Opportunity and Growth*

Wealth generation and the creation of work are the basic building blocks for livable, healthy communities where human initiative and stable families can flourish.

Opportunities for entrepreneurial initiative, business expansion and training for jobs that offer upward mobility are critical to this success.

### Community Sustainability

Communities that are vibrant, strong and offer hope to their residents are communities in which neighbourhoods are safe, the environment is clean, housing is affordable, social support services and cultural/recreational opportunities are accessible, and civic spirit is nurtured by participatory decision-making, innovative design and celebration.

### Community Partnerships

Economic opportunity and social/cultural development rely on broad community participation, both at the individual level and at the institutional level. Engaged individuals, governments and the private and not-for-profit sectors working together to provide relevant, accessible and coordinated programs and services that build towards the community's strategic direction.

The Intelligent Community program is wholly consistent with this strategic direction.

## Attachments

[ITR-PCD-01-14 Cisco SWEA S+CC Grey County Report](#)

[ICF Community Accelerator Brochure](#)

[ITR-PCD-01-14 SWEA Intelligent Region JCP proposal](#)

Respectfully submitted by,

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