Subject:	Town of Lincoln Access to Broadband, Report AD 07-20
To:	Council
From:	Office of The Chief Administrative Officer

Report Number:	AD 07-20
Wards Affected:	All
Date to Committee:	Wednesday, November 18, 2020
Date to Council:	Monday, November 23, 2020

Recommendation:

THAT Report AD 07-20 regarding the Town of Lincoln Access to Broadband **be received for information.**

Purpose:

The purpose of this report is to provide Council with a summary of the Town of Lincoln's broadband accessibility for its residents, businesses, and visitors. Access to highspeed internet has become an integral component of our every day lives, highlighted by the COVID-19 pandemic and the drastic shift to online economic activity.

Background:

In December of 2016, the Canadian Radio-Television and Telecommunications Commission (CRTC) declared broadband internet a basic service. The CRTC applied a target of nation-wide high-speed broadband internet with download speeds of at least 50 megabits per second (Mbps) and upload speeds of at least 10 Mbps to 90% of homes and businesses by 2021.

Since March 17th, 2020, when COVID-19 caused Canada to enter a state of emergency, there have been a drastic change in economic activity across our community, throughout Ontario and, quite frankly, across the country and the world.

For many of our businesses, having adequate broadband, highspeed internet access has played a major role in delivering products and services to our residents and visitors

during the COVID-19 crisis. The once “nice to have” accessory of highspeed internet has become critical to economic activity and our daily lives.

As Council is aware, the Town has worked tirelessly to assist our businesses in adapting to COVID-19 and has been providing various information and tools to better connect businesses with the growing online economy.

On May 5th, 2020, the Town of Lincoln launched ShopLincoln.ca, a one-stop shop to connect residents and visitors with local businesses. The website was created to help support our local businesses during province-wide shutdowns back in the Spring, but will continue to be used as a permanent resource for our local economy, especially as we have shifted it to becoming more of a tourism destination marketing resource.

On August 18th, 2020, the Town, alongside the Downtown Beamsville BIA, secured $26,000 in funding for the Digital Service Squad (DSS) program through the Digital Main Street initiative from the Ontario Business Improvement Area Association (OBIAA) and the Government of Canada. The funds will allow the Town and BIA to provide one-on-one assistance in helping our business bolster their digital presence

On August 21, 2020, Niagara Wireless Inc (NWIC), supported and assisted by the Town, submitted an application for the Province of Ontario’s Improving Connectivity in Ontario (ICON) program. If successful, the program will provide NWIC with funding to help deliver minimum internet speeds of 50-10 Mbps to areas in need in Lincoln. NWIC has been informed that their submission has moved to stage 2 analysis, which will require a business case be submitted for further approval.

Report:

Access to highspeed internet has become a necessity in the daily lives of our residents, highlighted further due to the ongoing global pandemic. From having socially distanced virtual chats to engaging with our local businesses to continue to support our local economy, highspeed internet has become an integral component of the world we live in. At the start of the pandemic our local businesses that were quick on modifying their business model through online sales and curbside pickup, were best situated to ride the non-essential business closures that was mandated by the Province.

Town of Lincoln staff have worked closely with our business community throughout the pandemic to assist in moving towards an online model, however, we recognize that there is a gap in broadband accessibility throughout the town, as not all areas have access to the same speeds.

It is safe to say that almost all residents and businesses in the Town currently have access to internet in one form or another, however, the speed, quality, reliability, and cost of each connection can vary significantly. Now that internet traffic is higher than ever, inadequate internet speeds can cause connections to get cut, downloads to get

slow, and video feeds to lag, depending on which internet package a certain residence has.

For our business community, a highspeed internet connection means increased productivity, improved product marketing, and the ability to reach a wider, much larger range of customers. Connecting our businesses to highspeed internet will give the Town of Lincoln a competitive advantage in a market that is rapidly switching to online economic activity. In addition, connected communities attract significant and lasting investments which will boost the local economy, thereby improving quality of life for all.

Current Broadband Accessibility in Lincoln

Two significant mapping tools were used to distinguish which areas in Lincoln were viewed as “underserviced” to the province of Ontario. This included street level coverage of different internet speeds (Appendix A) and Canada’s Hexagonal Grid which covers areas of approximately 25 square kilometers in size to determine the percentage of homes and businesses that are being delivered speeds of 50-10 Mbps (Appendix B).

The maps found that most high-speed broadband internet services of at least 50-10 Mbps only exist in the main centres of Beamsville and Vineland. Aside from a few areas in Jordan, Jordan Station and along King Street, the remaining areas cover speeds of at least 25-10 Mbps, half of the federal wide broadband internet target.

The recorded internet speeds can either be delivered through wired or wireless connections. Wired connection speeds, which refer to cables connecting to our homes such as copper wire, twisted pair or fibre optics, are outlined in Appendix C. Wired connections are not distributed evenly throughout the Town of Lincoln and only reach the target speeds of 50-10 Mbps in Beamsville and Vineland, as well as parts of Jordan, Jordan Station, and along King Street. Wireless connection speeds, which refer to outdoor cellular technologies such as LTE, and indoor wireless technologies such as WIFI are outlined in Appendix D. The target speeds of 50-10 Mbps are not existent in larger portions of the town, including in parts of the communities of Beamsville and Vineland.

Telecommunication Service Providers:

It is the Telecommunication Service Providers responsibility to provide the required broadband infrastructure to areas in order to supply highspeed internet connectivity. However, in many instances, the Telecommunication Service Providers, while willing to increase internet speeds in the community, are hamstrung by cost of installing that infrastructure, especially in rural areas where density does not help cover the cost of the infrastructure, as Return on Investment is key. Provincial grant and programming will be a factor in bringing down that cost.

Government of Canada – Recent Action

Universal Broadband Fund

As part of the Government of Canada's *High-Speed Access for all: Canada's Connectivity Strategy,* the Federal Government says that it is now on track to connect 98 per cent of Canadians to high-speed internet by 2026. After some pandemic-related delays, the Federal government launched the $1.75 billion universal broadband fund on November 9, 2020.

The Universal Broadband Fund has been designed to fund broadband infrastructure projects that will bring CRTC standards to rural and remote communities. In addition to funding a diversity of highspeed internet project to connect Canadians, the fund offers:

- up to $750 million available for large impact projects
- up to $50 million available to support mobile projects that primarily benefit Indigenous peoples.
- up to $150 million available as part of our Rapid Response Stream.

The Universal Broadband Fund is now accepting applications from across the country. Town's Economic Development Department plans on further investigating this opportunity by reviewing the application process and will be speaking with local partners about a joint application, as the private sector will be a key component for bringing highspeed internet access to all parts of our community.

Other Programs and Funding

Since 2015, the Government of Canada has also provided 8 additional broadband programs and initiatives supporting high-speed internet access for all Canadians, especially in rural and remote communities. These include:

- Low Earth Orbit (LEO) Satellite Capacity Agreement
- Connect to Innovate
- Connecting Canadians
- CRTC Broadband Fund
- Canada Infrastructure Bank
- Broadband projects for rural and northern communities
- Accelerated Investment Incentive
- First Nation Infrastructure Fund

Province of Ontario – Recent Action

The Ontario Government has announced several programs and grants to assist with increasing broadband and cellular services throughout the province. The initiatives began pre-COVID when the Ontario Government shared on July 23, 2019 the *Up to*

Speed: Ontario's Broadband and Cellular Action Plan with the simple goal of wanting people in Ontario to have internet and mobile connections at home, at work, and along major highways.

Since the release of Ontario's action plan, COVID-19 has hit the province and has brought extreme awareness to the importance of highspeed internet in our unserved and underservice communities. Additional action plans, such as *Ontario's Action Plan: Responding to COVID-19* and *Ontario Onwards: Ontario's COVID-19 Action Plan for a People Focused Government* have further outlined projects and responses to the COVID-19 pandemic that directly relate to improving access to broadband and cellular services.

Four key elements of improving broadband and cellular access are as follows:

- Delivering regional and shovel-ready projects
- Launching a new program to expand access to unserved and underserved communities
- Maximizing existing programs and government assets
- Reducing red tape and removing barriers to infrastructure expansion

Improving Connectivity in Ontario Program (ICON)

One of the Province's major funding programs was the release of the *Improving Connectivity for Ontario* program (ICON) on June 3, 2020. The investment of $150 million for the ICON program is part of the $315 million *Up to Speed: Ontario's Broadband and Cellular Action Plan*. The application intake will help drive economic investment and job creation across the province while allowing people to work and learn from home more efficiently.

Recently, on November 4, 2020, as part of the 2020 Provincial Budget, and in support of *Ontario's Broadband and Cellular Action Plan*, the Province announced that they are making a historic investment of nearly $1 billion over the next six years to improve broadband across Ontario. Part of the investment doubles the ICON program released in July 2020, bringing the new total to $300 million. The program now has the potential to leverage more than $900 million in total partner funding to contribute to improving connecting across the province during COVID-19 and beyond.

CENGN Rural Ontario Residential Broadband Program

Canada's Centre of Excellence in Next Generation Networks (CENGN) has carried out 3 separate programs since March 2020 to fund innovative projects across Rural Ontario that demonstrate technology solutions that offer flexible, lower cost, higher performance residential broadband access for Rural Ontario communities. Through a call for expressions of Interest submission process, the CENGN selects 1 host community and 1 technology applicant to carry out their technology projects.

In late May 2020, the Town's Economic Development Department, supported by NWIC, submitted an application to CENGN to receive funding to increase broadband availability throughout the town. Unfortunately, the application was not successful.

Other Programs and Funding

Additionally, there are currently 6 broadband and cellular projects and investments happening now across Ontario. These include:

- Eastern Ontario Regional Network (EORN)
- Southwestern Integrated Fibre Technology (SWIFT)
- Northern Ontario Heritage Fund Corporation (NOHFC)
- Matawa broadband project
- Next Generation Network Program
- Evolution of Networked Services through the Corridor in Quebec and Ontario for Research and Innovation (ENCQOR) initiative

Together, these 6 projects and investments are committing more that $563 million dollars to initiatives that aim to improve cellular and mobile broadband, highspeed broadband expansion and 5G wireless networks across Ontario.

<u>Key findings of our analysis</u>

Key findings from the preliminary analysis include that:

1. While there is internet access throughout the town, the speeds available are not uniform and do not meet CRTC standards
2. Rural areas in Lincoln are the most underserviced areas in the Town, especially important for our agricultural and agri-tourism businesses
3. Telecommunication Service Providers do not have the incentives to invest in lower density populated areas

<u>Next Steps</u>

Currently, the Town is investigating all opportunities and avenues that can be taken to increase broadband access throughout our community. While we would like one solution that would solve all our broadband needs, cost is a significant factor, which means that a long-term vision and incremental approach will be needed, as well as partnering with the private sector. The opportunities listed below are some of the avenues we are looking at:

1) Supporting and partnering with NWIC on their ICON application.
    a. If successful, this application would help us support some underserviced areas in our community. This program will be the first step to increasing the number of households and businesses connected to broadband and cellular

services, providing broadband connectivity speeds of 50-10 Mbps or greater for end users.

2) Niagara Regional Broadband Network (NRBN)
    a. Economic development staff have been in conversations with NRBN on how we can increase broadband accessibility throughout the community. Developing detailed mapping and community engagement opportunities on gauging level of interest in boosting internet speeds will help determine cost versus ROI analysis
3) Additional Partnerships and Advocating
    a. Partnerships with the Niagara Region and other organizations on bringing broadband to Lincoln will continue to be investigated
    b. Continuing to advocate and seek Public-Private Partnerships will be a key element in the long-term

The Town can play a significant role in coordinating with public and private stakeholders, community members, and other Local Area Municipalities on fast-tracking efforts to achieve the recommended internet service speeds in Lincoln. This includes, but is not limited to, efforts that will:

- Identify eligible Infrastructure that can be used to assist in closing the connectivity gap;
- Encourage telecom providers to identify and deploy technology in the most underserviced areas;
- Identify funding and program opportunities for the Town and local telecommunication providers (grants);
- Provide expedited permitting applications to those companies wishing to undertake infrastructure projects to increase broadband availability;
- Investigate the opportunities for incentives to reduce overall costs associated with large infrastructure projects
- Including the laying of wires and fire-optics as standard practice when conducting road work in the right-of-way

Financial, Legal, Staff Considerations:

Financial: N/A

Legal: N/A

Staffing: N/A

Public Engagement Matters:

Engaging with our business community and residents on the connectivity gaps will be a key element of bringing broadband solutions to Lincoln.

Conclusion:

Although the Town of Lincoln does not manage the delivery of telecommunications infrastructure or internet broadband services, the Town holds a good position to coordinate with public and private stakeholders to help diminish the connectivity gap in Lincoln, especially as highspeed internet for our residents and businesses is a key element of our Economic Development Strategy.

As a result of COVID-19, the connectivity gap has, and will continue to become, an overarching concern within the Town of Lincoln as we continue to see the increase of online economic activity. While the Town was able to respond to the changing environment through Shoplincoln.ca and Digital Main Street, the digital divide is still very much present throughout the Town. The need for highspeed broadband internet service is more important than ever as we look to help our businesses adapt and recover from the external factors by the global pandemic.

Respectfully submitted,

Cameron Rotz
Economic Development Intern
Town of Lincoln
Direct: 905-563-2799 ext. 518

Paul Di Ianni
Director, Economic Development and Communications
Town of Lincoln
Direct: 905-563-2799 ext. 272

Appendices:

Appendix A: Town of Lincoln – Wireless & Wireline Internet Connections

Appendix B: Town of Lincoln - Percentage of Areas that serve 50/10 Mbps Hexagonal Grid

Appendix C: Town of Lincoln – Wireless Internet Connections

Appendix D: Town of Lincoln – Wireline Internet Connections

Appendix E: Town of Lincoln – Real Time Internet Speed Test Connections

Report Approval:

Approved by the Chief Administrative Officer