BRAMPTON

Report
Staff Report
The Corporation of the City of Brampton
4/10/2024

Date: 2024-03-27

Subject: **Downtown High-Speed Internet Connectivity (RM 31/2023)**

Contact: Paul Aldunate, Expeditor, Economic Development

Report number: CAO's Office-2024-318

RECOMMENDATIONS:

1. That the report from Paul Aldunate, Expeditor, Economic Development to the Committee of Council Meeting of April 10, 2024, re: **Downtown High-Speed Internet Connectivity (RM 31/2023)**, be received.

OVERVIEW:

- **This report provides an update on the status of high-speed internet connectivity in downtown Brampton and the potential for increasing the use of 5G-related technology.**
- **Staff conducted a survey among businesses in downtown Brampton, including retail, professional and personal services, restaurants, medical offices, and not-for-profits to gather information on any challenges with internet connectivity.**
- **Staff followed up the survey with discussions with Rogers Communications (Rogers) and Bell Canada (Bell) about their individual internet infrastructure upgrade programs for the downtown.**
- **Both Rogers and Bell have indicated they are currently upgrading internet infrastructure in the downtown to provide a better level of service and meet the growing demand of the Innovation District.**
- **There is no financial impact resulting from the adoption of the recommendation in this report.**

BACKGROUND:

Between customers who find websites unreliable and unresponsive to businesses that transfer large amounts of data, weak or slow internet connectivity can cause operational disruptions and result in lost revenue.

In 2019, the City of Brampton heard from downtown businesses that internet connectivity was slow and impacting their ability to operate effectively. Staff was directed to investigate the status of downtown internet connectivity and the availability of emerging 5G technology as a possible answer.

In the summer of 2021, Bell Canada (Bell) approached various City departments (Realty, Economic Development, Public Works & Engineering, Information Technology) about conducting a 5G Pilot (installing 5G microcells on City streetlights/traffic signal poles) in Brampton's downtown core.

Downtown Brampton is also known as the Brampton Innovation District (District). Located midway along the Innovation Corridor between Kitchener-Waterloo and Toronto, the District is an ecosystem that links talent, educators, investors, entrepreneurs, universities, international start-ups and high-growth firms in a variety of industries.

The District has a sharp focus on start-up scaling, investment attraction and talent development, with the goal of supporting entrepreneurs and new business owners through every stage of their journey.

The renaming of the downtown GO station to "Brampton Innovation District GO" in 2023 reflects the crucial role the downtown area plays in nurturing innovation and advancing progress within the community. To continue the growth momentum of the District, the appropriate IT infrastructure needs to be in place to support the attraction of innovative businesses and organizations.

The pilot program was paused given complications with the provision of electricity. Further discussions with businesses and telecommunication providers in the downtown also revealed that the pilot was deemed not to be the optimal approach for addressing internet connectivity issues in the downtown.

With respect to internet connectivity, there are numerous different technologies referenced such as 4G/5G, Cable, Fibre, Wi-Fi, etc. These different technologies have different purposes and fall into two primary categories:

1. Landline connectivity (cable, fibre) provides high-speed bandwidth for many users, typically for home of office connectivity.

2. Mobility connectivity (4G/5G) typically provides internet connectivity for individuals or equipment that is either constantly on the move or situated in an isolated location.

While 5G can deliver high-speed connectivity, it is not intended to provide a solution for numerous staff in an office situation. Similarly, Wi-Fi solutions, even if they are supported by high-speed connectivity such as cable or fibre, typically cannot be scaled over large geographical locations.

In 2023, City staff was further directed to provide an update to Council that included communications undertaken and potential mitigation of 5G-related costs to businesses in the downtown core.

CURRENT SITUATION:

To gain a comprehensive understanding of the issues downtown businesses are facing regarding high-speed internet connection, City staff undertook a confidential survey of businesses and landlords in the fall of 2023. The purpose of the survey was to:

- Understand how many businesses are facing connectivity challenges,
- Understand what those connectivity challenges are,
- Determine whether those connectivity challenges are impeding businesses' ability to grow and expand, and
- Establish a baseline and determine a course of action.

The survey was active for 30 days (October 30 to November 30, 2023). The survey was sent out to over 300 commercial contacts within the Major Transit Station Area (MTSA) and the Downtown Brampton Business Improvement Area (DBBIA). City staff visited approximately 126 businesses in downtown Brampton, introducing the survey and asking business owners to complete it. Almost 47 responses were received with many responses resulting from the in-person visits.

Responses came back from different locales and a range of business types with different demand levels and requirements, which included Retail (8), Restaurant (7), Personal Services (5), Professional Services (15), Finance and Insurance (2), Education (1), Medical (4), Fitness (3), Community Services (2).

Out of 47 responses, 17 businesses (36%) stated that the current level of internet service is sufficient for their needs, and they have no issues; 30 businesses (64%) are experiencing problems related to connectivity. Some of the responses received include:

- Choppy connections during calls and the internet are often down.
- Current level of service is poor and unreliable.
- Business operations and online classes are interrupted; internet cuts off or makes online classes laggy.
- With a more reliable and faster internet connection businesses would offer more online classes and free Wi-Fi access to customers and students.
- The delivery applications businesses use would work more smoothly with a better/faster internet connectivity service.

- The point of sale (POS) system would run better, and customers would have a better shopping experience.
- Slow connection is causing delays at the front desk when payments are processed.
- Better connectivity would allow businesses and service providers to conduct meetings with clients in their offices.

Following the survey, staff met with Rogers and Bell on multiple occasions, where it was noted that downtown businesses and landlords were experiencing problems with internet connectivity. These discussions were timely and encouraging given that both organizations are performing upgrades in the downtown at the time of this report.

Bell is currently installing conduits that will further allow for the installation of fibre optic cables. This work is being done in conjunction with construction related to the downtown revitalization work and should be completed within the next 1-2 years. After Bell completes their infrastructure upgrades downtown, their Mobility division will be able to provide better 5G coverage, as it relies on macro and microcells that rely on the fibre optic cables serving as main arteries.

Rogers is also upgrading infrastructure with cable and fibre, which they do periodically based on the level of internet traffic. Rogers' upgrades are not reliant on the downtown revitalization service improvements to be completed.

Previous discussions regarding a pilot program for 5G were centered around enhancing the level of service in public areas of the downtown. Both Rogers and Bell currently have 5G coverage across the city, with the ability to provide enhanced coverage in public spaces, when required. The ability for enhanced 5G technology to support events with faster data transfer and improved graphics and streaming means that event attendees can message friends, download pictures, or live stream special moments with limited to no interruption. These enhancements could be explored as part of the City's efforts to revitalize downtown squares.

A relevant example of how such enhancements could be beneficial is the April 8, 2024, total solar eclipse, which is expected to travel across North America with prime viewing in several locations across Southern Ontario, most notably Niagara Falls. Both Rogers and Bell are gearing up to provide enhanced service for the event, given the amount of people expected to converge on the Niagara Falls area.

CORPORATE IMPLICATIONS:

Financial Implications:

There is no financial impact resulting from the adoption of the recommendation in this report.

STRATEGIC FOCUS AREA:

This report supports the Strategic Focus Area of Growing Urban Centres and Neighbourhoods to stimulate Innovation, Create Jobs, and Grow Investment.

CONCLUSION:

With respect to internet connectivity, there are numerous different technologies referenced such as 4G/5G, Cable, Fibre, and Wi-Fi. The City completed a survey of downtown businesses to better understand their internet connectivity issues. This report highlights some of those issues and provides an update on the status of the infrastructure upgrades currently underway by Bell and Rogers to improve the quality and speed of internet in downtown Brampton.

Authored by:

Paul Aldunate
Expeditor
Economic Development

Reviewed by:

Clare Barnett
Director
Economic Development

Approved by:

Marlon Kallideen
Chief Administrative Officer