



# HAMILTON CHAMBER OF COMMERCE

# DIGITAL INFRASTRUCTURE

# REPORT



*The Hamilton Chamber of Commerce is proud to play an important role in advocating for digital infrastructure policies that enhance the social and economic prosperity of our city and our members.*

*The degree to which businesses have come to rely on digital infrastructure cannot be understated. Digital infrastructure serves as a key artery to provide essential services for businesses, both large and small.*

*In this digital age, the ongoing improvement to Hamilton's digital infrastructure is essential to the economic prosperity of our city. Businesses in Hamilton rely on high speed, dependable, low cost internet connectivity to operate and remain competitive.*

*It is encouraging to see the City of Hamilton acknowledge the importance of digital infrastructure, by seeking improvement through efficiency and innovation.*

*Moving forward, it is critically important that the City continue to down the path of improvement. In particular, we recommend the City of Hamilton remains open to the use of new technologies, creates an online portal for permit submissions, and considers ways to address physical environment saturation.*

- Keanin Loomis, President and CEO of Hamilton Chamber of Commerce

## BACKGROUND

Digital Infrastructure is defined as the physical hardware, interconnection medium, and preparation used to support the transmission of data.

Although telecommunications fall under federal jurisdiction, the actual administration of the physical wired infrastructure is accomplished at the municipal level. The City of Hamilton controls its own right-of-way and issues permits for construction and other utility activities within these right-of-way. It is up to each provider to negotiate terms with a municipality for access to its rights-of-way. To build and maintain subsurface copper, fiber or wireless infrastructure, service providers navigate an application process with the City of Hamilton.

Hamilton City Council convened the Mayor's Intelligent Community Task Force to examine Hamilton's Information Technology (IT) infrastructure. The current City of Hamilton Economic Development Action Plan (2016-2020), aspires to have Hamilton's digital infrastructure deliver Internet speeds of 250 Mbps to rural Hamilton, 1 Gbps to urban Hamilton and 10 Gbps to business parks by 2020.

As part of the Hamilton Chamber of Commerce's Digital Hamilton initiative, the Chamber convened a number of internet service providers servicing the City of Hamilton, to provide perspective on the current state of digital infrastructure deployment and broadband availability in Hamilton. More specifically, our consultations with industry were intended to offer insight into how the City of Hamilton can facilitate, incentivize, and enhance infrastructure and service levels across the City.

The Digital Infrastructure Working Group (hereafter the Working Group) provided a number of recommendations to city staff, to improve the current state of digital infrastructure in Hamilton. With representation from organizations with a national presence, a comparative frame of reference in evaluating Hamilton's performance could be established.

**As of the writing of this report, several improvements to the City's administration of digital infrastructure utilities have been made consistent with the suggestions made by the Chamber's Working Group.**

## TANGIBLE RESULTS AND IMPROVEMENT

The ongoing improvement of Hamilton's digital infrastructure is essential to the economic prosperity of our city. Tangible improvements to the City of Hamilton's approach to telecommunication approvals have already been made. In particular, faster processing timelines and fewer complaints suggest a positive trend in results.



**VS**



**2016-2017**

**2018**

approximately 36 days

average turnaround time for permit approvals

approximately 700

permits issued

average of 57 per year

average complaints on elements relating to poor traffic management, site deficiencies, and poor original restoration

approximately 29 days

800

reduced to 36

The recommendations made to the City staff by the Chamber's Working Group:

### **1. CHAMBER RECOMMENDATION: CONSIDER THE APPROVAL OF NEW TECHNOLOGIES**

The Working Group recommended that the City entertain a flexible approach to the submission and approval of innovative and ultimately cost-effective new technologies.

The techniques for deployment of digital infrastructure will continue to innovate and the City will always need to consider new alternatives. As such, advancements will lead to lower disruption to residents and of public space, along with lower costs to deploy and restore. Newer methods including micro-trenching, keyholing, and under-road-bed builds are providing a lower cost to deploy, lower cost to repair, and reduced impact on citizens.

### **CITY OF HAMILTON IMPROVEMENT: KEYHOLING PERMITTED**

The City of Hamilton has since permitted keyholing as an innovative technology within the City.

## **2. CHAMBER RECOMMENDATION: DEPLOY OMNIBUS APPROVALS**

To encourage and support additional investment in digital infrastructure and broadband availability, the Working Group recommended that the City consider omnibus approvals of more than one permit at a time. In the City of Toronto, parties are able to negotiate omnibus and conditional permit approvals for significant one-time investment projects.

### **CITY OF HAMILTON IMPROVEMENT:**

The City of Hamilton has since permitted omnibus approvals for large projects and is already exploring this option with telecommunications providers.

## **3. CHAMBER RECOMMENDATION: CREATE AN ONLINE PORTAL FOR MONITORING AND UPDATES**

The members of the Working Group recommended that the City consider the development of, or access to, an online self-service portal that would allow service providers to submit permit requests for specific routes and see in near-real-time whether there are other existing requests for the same or similar corridors. This would reduce the permit request workload on the City and encourage service provider collaboration.

### **CITY OF HAMILTON IMPROVEMENT:**

Hamilton has developed two online tools for utilities, found [here](#). Both Corridor Activities and SPIDER are open 24/7 for all utilities to obtain records and confirm site availability. The Corridor Activities site indicates upcoming events, road closures, and non-City work to help interested parties make an informed decision about scheduling. SPIDER is an award-winning online records tool, helping utility companies develop accurate permit drawings.

## **WHERE DO WE GO FROM HERE? FURTHER RECOMMENDATIONS**

In this digital age, businesses rely on high speed, dependable, low cost internet connectivity to operate and remain competitive. The ongoing improvement of Hamilton's digital infrastructure is therefore essential to the economic prosperity of our city.

### **For continued improvement, the Chamber recommends the City of Hamilton consider the following:**

#### **1. REMAIN OPEN TO THE APPROVAL OF NEW TECHNOLOGIES**

The Working Group recommends that the City entertain a flexible approach to the submission and approval of innovative and ultimately cost-effective new technologies.

#### **2. CREATE AN ONLINE PORTAL FOR PERMIT APPLICATION SUBMISSION**

The Working Group recommends that the City consider the development of or access to an online self-service portal that would allow service providers to submit permit requests.

#### **3. CONSIDER WAYS TO ADDRESS PHYSICAL ENVIRONMENT SATURATION**

In some districts and corridors within Hamilton, real estate for internet utilities are sufficiently congested, making it difficult and often impossible to add new conduits. Lack of space will deter the entry of new service providers.

Crowded Right of Way (ROW) environments are found across Canada, making it a national issue. Since the City of Hamilton controls rights-of-way and issues permits for construction, the Chamber recommends the City consider ways to address this growing physical environment saturation concern in our municipality.