

BRIEFING

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Item # 5.2.2

**Chief Financial Officer's Briefing to
Gas, Power and Telecommunications
2021 May 13**

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Fibre Infrastructure Strategy Annual Update

PURPOSE OF BRIEFING

In 2015 September, Council approved the Fibre Infrastructure Strategy (GP2015-0485) with an annual update. This report serves as the fifth annual update on the implementation of The City of Calgary's Fibre Infrastructure Strategy. The telecommunications environment is constantly evolving, and the annual report serves to keep Council apprised of the progress, challenges and future strategic direction regarding The City's fibre infrastructure.

In 2020, the COVID-19 pandemic caused one of the most disruptive events in our lifetimes. Connectivity became a lifeline to many citizens and businesses. City fibre supplies and enables key pillars for recovery and our comeback.

SUPPORTING INFORMATION

As noted in Calgary Economic Development's article "Calgary: A leading city in 5G and connectivity" on 2021 March 15, The City of Calgary's fibre optic "...is where Calgary stands out from the crowd. Calgary has the most extensive network in Canada..." with over 575 kilometers of fibre optic. The City's fibre network was able to mitigate a catastrophic loss in network resources during the 2013 flood and continues to provide ongoing resiliency for The City's network through redundant fibre services to City facilities. Through the use of fibre, The City's award-winning Long Range Low Power Wide-Area Network (LoRaWAN) has the capacity to connect tens of thousands of Internet of Things (IoT) sensors throughout Calgary.

For the last 20 years, Information Technology has been leveraging capital works projects to take advantage of economies of scale to deploy fibre optic to support City services. Excess capacity in City fibre optic has been licensed to civic partners, universities, school boards, businesses and carriers. All revenue is transferred to the Information Technology Reserve and is used for future fibre builds for City services and to support operating costs.

5G/Small Cell is the next advancement in mobile and wireless technology that will enable automation, connected and autonomous vehicles, smart homes and field sensors. Deployment of 5G will depend on City fibre and access to municipal assets like streetlight poles and facilities. Administration is expecting the federal government to enact new legislation that will reduce municipal government's control of their assets to enable broadband deployment. Administration has taken steps to engage in the process and provide a municipal perspective.

ATTACHMENT(S)

Attachment 1 – Fibre Infrastructure Strategy Annual Update