ATTACHMENT 4 – MUNICIPAL FIBRE NETWORKS AND COMPARATIVE JURISDICTIONAL ANALYSIS

What is a Municipal Fibre Network?

A municipally owned fibre network refers to a broadband infrastructure network that is owned and operated by a local government (municipality) rather than a private company. Municipalities may choose to invest in building fibre networks for two key reasons: (1) to reduce network operating costs, and (2) to lease access of any unused capacity to third parties.

In Canada, the most common model for municipal fibre networks situates the municipality as a network service provider (i.e. providing internet services) both for its own operations, as well as for other municipal and/or public sector entities. In these cases, any excess capacity that is built into the network is leased to third parties for compensation and referred to as "dark fibre." Dark fibre does not include the equipment or technology required to deliver internet services; the third-party lessees are responsible for adding the technology needed to provide those services.

Comparative Jurisdictional Analysis (Updated from 2022)

Municipality or Region	Ownership - regional or municipal	Extent of fibre network (km)*	Received Federal and/or Provincial Subsidy (Yes / No) ¹	Ownership (no. of years)	Utility
York Region	Regional	710km ²	Yes, Federal and Provincial, 48.7M ³	~20 years ⁴	Public operations with intent to lease to private entities

¹ Universal Broad Fund; Canada-Ontario Broadband Partnership

² https://www.york.ca/sites/default/files/documents/YorkNet_2023AnnualReport_0.pdf

³ \$48 million in funding received, https://www.york.ca/newsroom/news/york-region-welcomes-historic-federal-and-provincial-investment

⁴ YorkNet 2019 Annual Report (York.ca)

Municipality or Region Peel Region	Ownership - regional or municipal	Extent of fibre network (km)* ~800km ⁵	Received Federal and/or Provincial Subsidy (Yes / No) ¹ Yes ⁶	Ownership (no. of years)	Utility Public
_					operations
Durham Region	Regional	~250km ⁷ (expanding to 700 km) ⁸	Yes, Federal ⁹	~30 years	Public operations with intent to lease to private entities
Calgary	Municipal	~400km ¹⁰	Unknown	~30 years ¹¹	Public operations and lease to private entities
Montreal	Municipal	~30km ¹²	Yes, Federal and Provincial ¹³	-	Information unavailable
New York City	Municipal	None (As of 2021, declared intent to build \$157M of publicly owned infrastructure ¹⁴ cancelled in 2022) ¹⁵	Yes, State and Federal ¹⁶	N/A	Goal was city- wide fibre with multiple choices for service

⁵ https://www.peelregion.ca/budget/2024/business-plans/information-and-technology.pdf

⁶ Amount not publicly available.

⁷ https://durhamonenet.ca/faqs/

⁸ <u>https://www.durham.ca/en/news/regional-council-continues-to-push-forward-with-broadband-strategy.aspx</u>

⁹ Total project cost is \$30 million https://www.durham.ca/en/news/durham-region-awarded-broadband-funding-partners-with-vianet-to-deliver-internet-service.aspx

¹⁰ https://www.calgary.ca/major-projects/dark-fibre.html

¹¹ https://crtc.gc.ca/eng/acrtc/prx/2021anderson.htm

¹² Montreal's network is largely privately built and operated

¹³ Total funding for municipality unknown; funding received from <u>Universal Broad Fund</u>; <u>Canada-Quebec</u> Operation High Speed

¹⁴ https://www.nyc.gov/office-of-the-mayor/news/724-21/new-york-city-close-digital-divide-1-6-million-residents-advance-racial-equity

¹⁵ NYC kills 'Internet Master Plan' for universal, public web access - Gothamist

¹⁶ Total funding for municipality unknown; funding received from <u>America Rescue Plan; ConnectALL</u> Initiative

Of the three regionally owned fibre networks currently operating in the GTHA, Peel and York region networks are based on fibre assets that were originally deployed in the early 2000s and where initiatives to sell off the assets were not taken up by their respective Regional Councils. The third, located in Durham region, is a relatively recent undertaking by the regional municipality to bridge rural and urban operations, and was formally brought online in 2023. Although a more recent project, Durham OneNet is predominantly deployed throughout rural "green field" areas, with the largest segment built through a public-private-partnership with Vianet.

Peel, York and Durham regions are all examples of municipally owned fibre networks that provide services for internal operations, in addition to leasing dark fibre portions of their networks to third parties (which can be either public sector-only or expanded to include private entities).