Clearwater County
Broadband
Tomorrow's Internet Today

FACT SHEET
SEPTEMBER 2022

Clearwater County's Broadband Internet Project

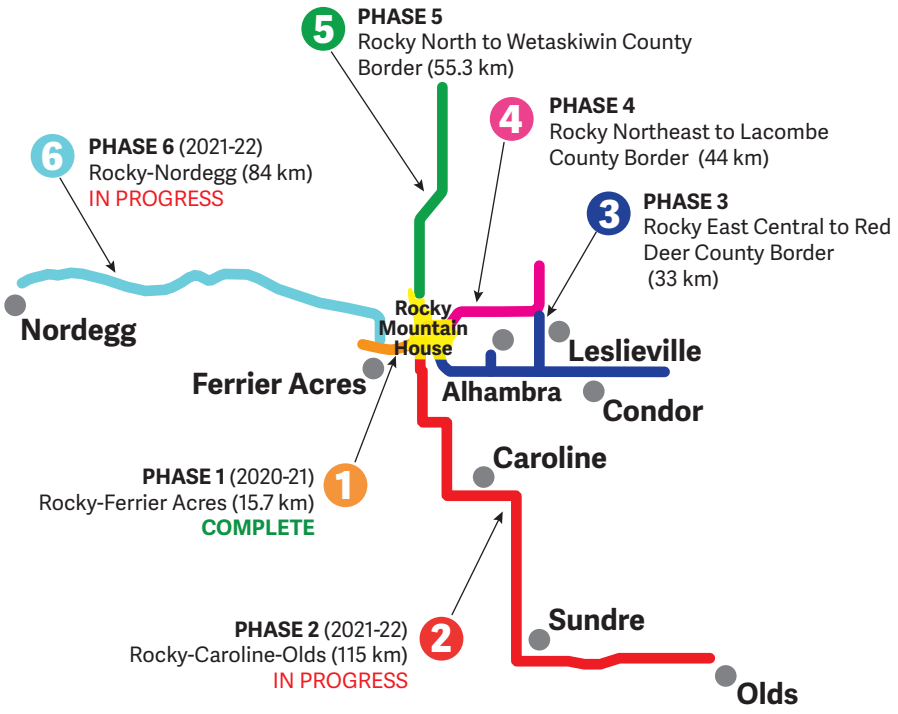
Clearwater County's Broadband Internet Project is a multi-year initiative that aims to deliver high-speed Internet connectivity to a majority of residents and businesses in the County. High-speed Internet access has been consistently identified as an essential component of economic and social well-being by County residents. A vast majority of County residents and businesses are under-served by available Internet services, most of which fall below the Canadian Radio-television and Telecommunications Commission's (CRTC) standards for broadband speeds.

To address the County's digital divide, Clearwater County Council has committed to building a high-speed broadband Internet network and is currently considering a plan for construction and implementation.

The proposed *Core Backbone Broadband Internet Plan 2020-2025* would:

- Cost approximately $22 million and take between three and six years to complete.
- Provide nearby access to high-speed Internet connectivity to 85% of residents and businesses.
- Install approximately 330 kilometres of fibre-optic cable and several wireless towers.

Implementation Phase	Estimated Cost	Distance
1 Rocky-Ferrier Acres (2020-21) COMPLETE	$998,000	15.7 km
2 Rocky-Caroline-Olds (2021-2022) IN PROGRESS	$6,900,000	115 km
3 Rocky East Central to Red Deer County Border	$2,707,000	55.8 km
4 Rocky Northeast to Lacombe County Border	$1,782,000	44 km
5 Rocky North to Wetaskiwin County Border	$2,376,000	55.3 km
6 Rocky-Nordegg (2021-22) IN PROGRESS	$4,308,000	84 km



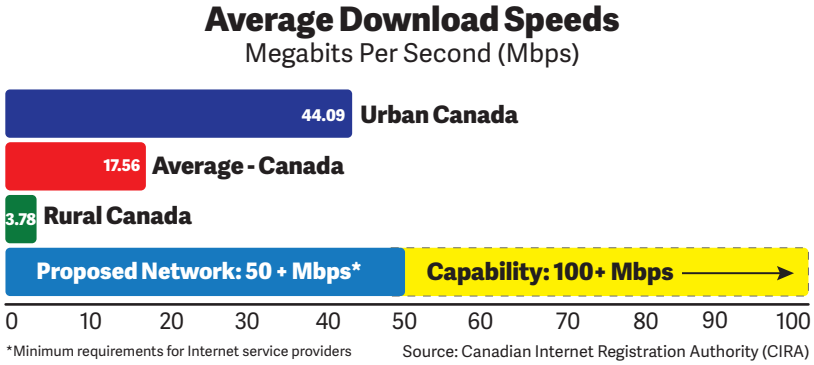
clearwatercounty.ca/broadband

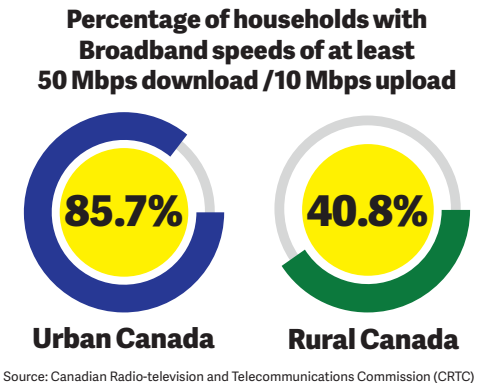
What will this mean for residents and businesses?

Clearwater County's Broadband Internet Project will have significant impacts on the lives of residents and businesses. Due to population sizes, market conditions discourage Internet Service Providers (ISP) from investing in broadband infrastructure in rural areas, including alternative routes to Internet Exchange Providers (IXP) in major cities. A municipally-owned fibre-optic network would create multiple routes to IXPs and provide interconnectivity at lower scalable prices. It would also widen the service areas of existing ISPs, encourage new entrants and foster a competitive marketplace. This often translates into higher speeds, improved services and lower prices for consumers.

Speed

Clearwater County, like other rural areas in Canada, has far slower speeds than urban areas. Internet speeds, which are measured in megabits per second (Mbps), vary dramatically across the country. The CRTC has established an average speed of 50 Mbps for downloading and 10 Mbps for uploading as universal standards for adequate Internet services. While average download speeds reach over 44 Mbps in urban Canada, they average less than 4 Mbps in rural Canada. The proposed fibre-optic network would enable minimum download speeds of 50 Mbps for downloading and 10 Mbps for uploading for both fibre and wireless connections.



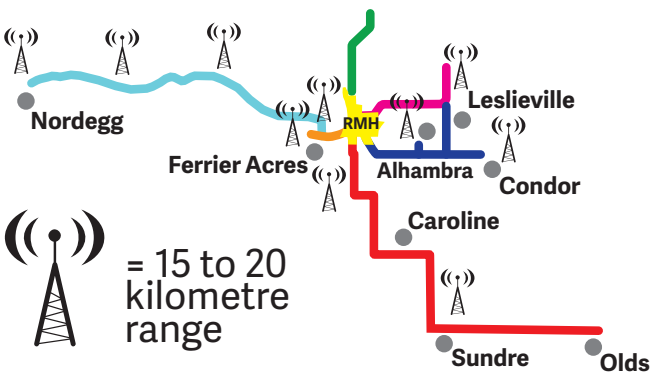


Service

Another major impact will be the expansion of coverage. As part of the plan, wireless technology will be deployed along the proposed routes to extend service within 15 to 20 kilometres of the network.

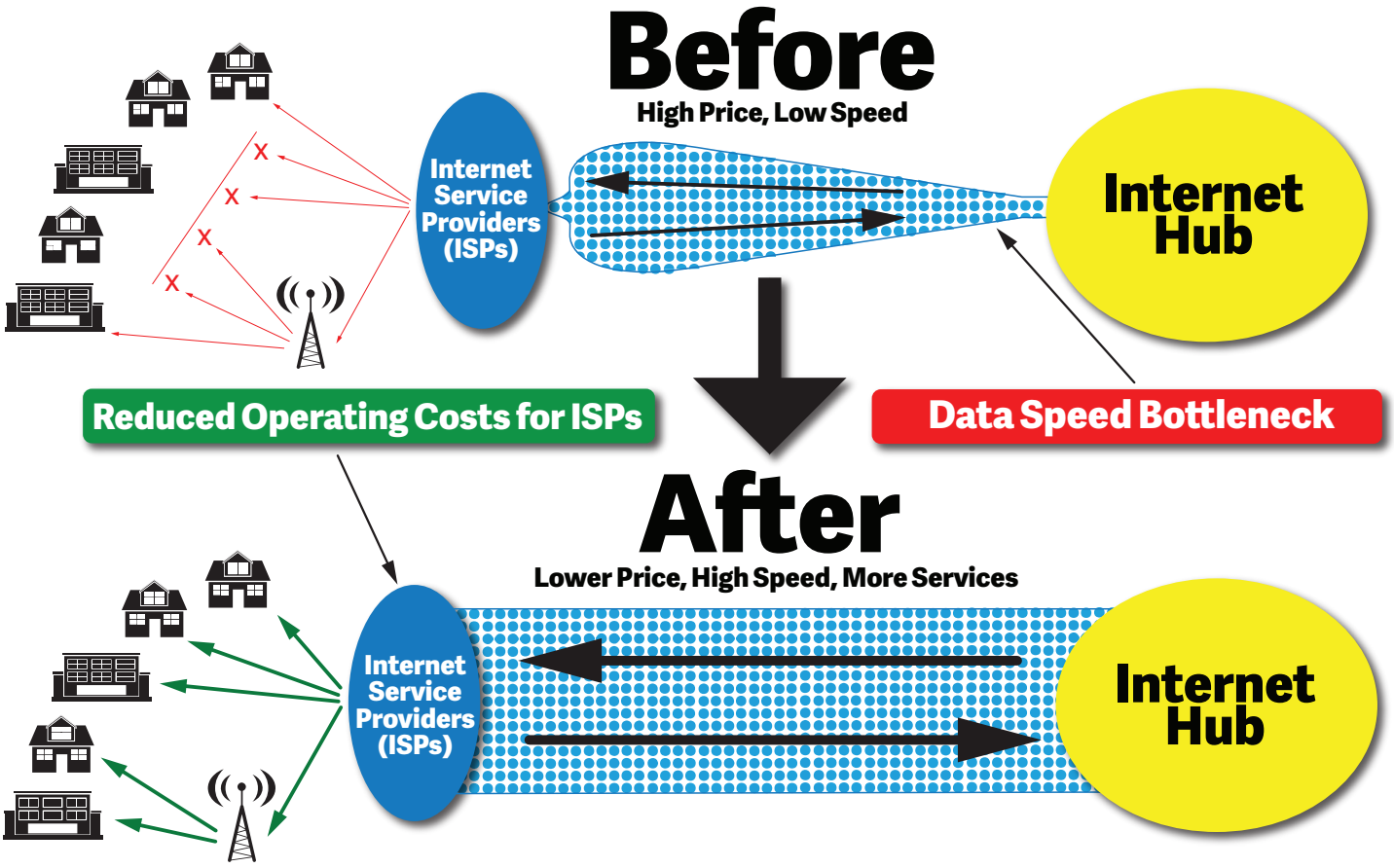
The implementation of the project will also enable a number of potential services, including:

- Voice over the Internet Protocol (VOIP) Phone
- Internet Protocol Television (IPTV)
- Prepaid Internet access for tourists and campers
- Agri-Tech services



Price

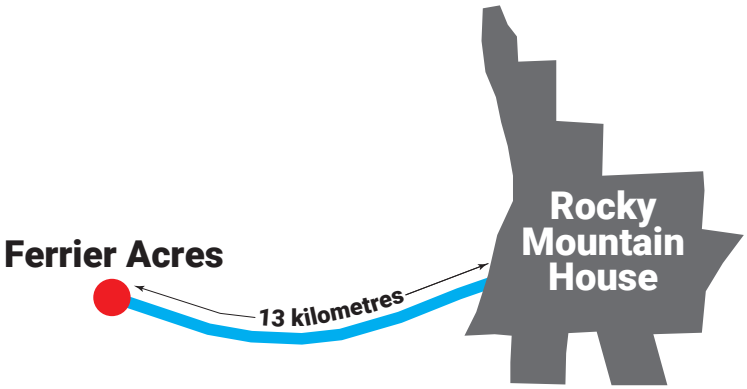
The *Core Backbone Broadband Internet Plan 2020-2025* would partially address the high cost of Internet connectivity in the County by creating an opportunity for an alternative high bandwidth Internet connection route to the Internet Exchange Point (IXP) hubs in Calgary and Edmonton. A municipally-owned fibre-optic network would bypass the high costs of interconnection to the IXP hubs via existing providers.



Project Objectives

Ferrier Acres Pilot Project

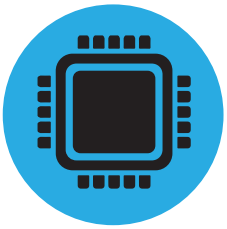
In May 2020, Council approved a pilot project to deliver broadband service from Rocky Mountain House to Ferrier Acres. The total estimated cost of the project is $998,000, with federal funding covering $371,288 and the remainder of $626,712 to be funded from the approved 2020 broadband capital budget. The project is an initial small-scale installation that will provide technical and logistical information to guide large-scale implementation.



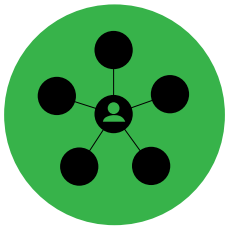
Post Core Backbone Implementation

Upon completion of the *Core Backbone Broadband Internet Plan 2020-2025*, additional initiatives will build upon the broadband infrastructure to expand and improve Internet access and affordability throughout the County.

Prioritize further construction of branch routes into existing or new subdivisions, business areas for various optional services.



Develop a working plan with Internet service providers to test and implement new services in targeted zones and remote areas.



Work with a consortium of counties to broaden the regional fibre network to create competitive lower cost services and reduce operating expenses.

Building independence and control into the region's telecommunication sector and foster economic development and future growth.

Fibre-to-the-Home

Clearwater County Council has expressed interest in possibly expanding the Core Backbone Broadband Internet Plan to include 'Fibre-to-the-Home' (FTTH), subject to the approval of the Universal Broadband Fund (UBF) and additional direction from Council. Although grant applications will reflect conceptual design for the provision of FTTH, this addition has not been approved by Council and is not currently included within the scope of the approved project. If grant applications are approved, Council will consider amending the approved Core Backbone Plan to include the FTTH component.