

Why is broadband important now, can't it wait?

A vast majority of Clearwater County residents and businesses are underserved by current Internet services available, with the rural area of Clearwater County not meeting Canadian Radio-Television and Telecommunications' (CRTC) basic standards for broadband connectivity.

Economic diversity, sustainability and innovation are essential to the community's success. To ensure residents and businesses have quality broadband access, Clearwater County Council has indicated that the County will invest in and own a high-speed internet broadband network to reduce the digital divide and provide further opportunities for economic prosperity and social well-being, for now and for generations to come.

With a decreasing population and shifting dynamics of industry, Clearwater County Council has indicated that now is the time for broadband – in order to secure the community's future prosperity.

What does open broadband mean?

Open broadband or Open Access Network (OAN) means a telecommunications network architecture and business model that separates physical access to the network from delivery of services. In an OAN, the owner of the network does not supply services; these services are supplied by separate retail internet service providers (ISPs), allowing for a more competitive environment.

“Broadband” itself means wide bandwidth data transmission which transports multiple signals and traffic types, including internet. The medium can be coaxial cable, optical fiber, radio or twisted pair.

What type of infrastructure will the County broadband project include?

A combination of wired (fibre optic cable) and wireless (towers). Fibre has a 50-year life expectancy. Towers have a similar life expectancy, with the electronics/equipment on the towers having a 5 to 7 year life expectancy. As more users transition to fibre, it should also ease the burden on existing and future wireless services – with a reciprocal effect of enhanced broadband access for either infrastructure type.

What costs more, fibre or towers?

Fibre comes with a higher capital cost initially, however its life expectancy exceeds that of towers. Broadband will be the lowest cost municipal infrastructure the County will have, with the costs of constructing other capital infrastructure such as roads/bridges, water and wastewater systems being significantly more expensive than broadband. Fibre technology has advanced over the years, with “blown” fibre capability making construction more cost effective.

Where will fibre go? What area will be serviced first?

This will depend on the type of infrastructure approved for an area, a decision that will be based on many physical (population density, distance, terrain) and financial (grants, partnerships, reserves) considerations. It is likely broadband will be staged out in a phased plan, beginning with the higher density areas surrounding Rocky Mountain House and along the highway 11 corridor.

What will County internet speeds be? How many MBps? Unlimited data?

Up to 1GB synchronous and unlimited data, with a fibre service. At minimum, the County's broadband will meet the CRTC's standards of 50 Mbps down, 10 Mbps up. Clearwater County Council has indicated the commitment to developing a high-quality system and service.

When the tourists arrive, will the speeds drop like they do now?

This will depend on whether you are serviced by fibre or by tower. With fibre line, no, as speeds and latency are constant and consistent. With towers, yes, the capacity of the service will be determined by usage.

Who pays to put in the fibre to premises?

Although fee structures strategies are part of the business case development which a future step in the process, Clearwater County Council has indicated that it intends to subsidize the cost to some extent, to ensure the majority of residents and businesses have access to this essential service. There is both a social and economic development benefit to quality broadband access. Clearwater County Council has also indicated that the initial fee needs to be low enough that it doesn't hinder uptake or 'take rate'.

What are the tax implications for residents if the County moves ahead with broadband project?

Although funding strategies are part of the business case development which a future step in the process, Clearwater County Council has indicated that it will endeavour to complete the broadband project with minimal adjustments to residential tax rates.

The County has substantial reserves in place planned for over many years, to begin the broadband project (over \$10 million). Along with that, the County will be requesting the provincial and federal governments each fund 1/3 of the project. The intent is to apply for all grant opportunities available. It is also important to note that about 90% of the County's revenues comes from non-residential properties (industry, oil/gas), so the lion's share of any tax revenue utilized for the project will not come from residential taxes.

Once the County system is up and running, there will be new revenues from subscribers which will also assist in cost recovery. Ideally broadband will increase business investment in the County which could increase the business tax base and thereby decrease residential taxes.

What will the total cost of the broadband project be?

Clearwater County Council has indicated it anticipates broadband to cost \$40 - \$50 million for capital infrastructure.

What will the cost to subscribe be monthly?

Although fee structures strategies are part of the business case development which a future step in the process, Clearwater County Council has indicated the costs will be the same, or lower, than what exists in the marketplace currently, but with a far superior service/speeds.

Do we have to use it?

No, similar to the existing private sector market customers will have the decision as to what internet service they subscribe to – if any.

What will be the tie-in costs for a residential property or business that signs up?

Those costs will be determined once the County receives a completed County-wide conceptual deployment plan, completes a broadband business case and strategic action plan and associated marketing plans. Stay tuned.

How can the County save on capital costs of fibre infrastructure? Can you use abandoned pipelines? Can you use existing towers?

Policies can be developed by Council to ensure that with any new civil works project, such as a new road development, that additional conduit will go into the trench for when fibre makes it to that area.

Clearwater County Council has indicated that they will also seek to partner with existing local service providers and industry, as appropriate, to ensure efficiencies and to fulfill its duty to fiscal responsibility.

Why is the County not leaving broadband to the incumbent providers?

The economies of scale are not there for private industry to reach out their services in the sparsely populated areas of the County. The difference is the County is not a “for-profit” entity requiring a certain return on investment, rather the County is “for the people” and can take a longer view as to the best interest and needs of the community as a whole.

Will the County subsidize existing internet service providers (ISPs)?

The County’s fibre going past existing ISPs could certainly help with affordability. As well, Clearwater County Council has indicated that they wish to partner with existing local service providers to ensure efficiencies, with the ultimate goal of the majority of residents having access to quality broadband service.

Clearwater County Council has also indicated that they will continue to act as an advocate in terms of backhaul costs and the inequities that exist currently in the province. Reduction of backhaul costs to rural and remote locations would benefit both a municipal broadband provider as well as existing private sector ISPs.

What is the difference between a “lit” or “dark” systems?

Dark Fibre refers to unused or ‘dark’ network infrastructure that is a mixture of cabling, switches and repeaters. Data is transported over fibre networks by passing light through the optical cables. If there is no data being transported, there is no light – this means that the fibre is ‘dark’. Dark Fibre is essentially fibre infrastructure not in use.

Clearwater County Council has also indicated that a County-owned “lit” system is preferred to expedite the access to quality broadband service to the majority of residents and businesses.

Will residential taxpayers pay for the infrastructure and then also have to pay for service?

Clearwater County Council has set aside substantial reserves to begin the broadband project (over \$10 million) and will request federal and provincial funding as well as apply for all grants available. The Province of Alberta is also in the process of developing a provincial broadband strategy, which may impact how soon broadband can spread further out into the County.

Again, 90% of the County's revenues comes from non-residential properties (industry, oil/gas), so the lion's share of any tax revenue utilized for the project will not come from residential taxes.

Yes, users will need to pay a monthly subscription for their internet services, as they would do now and with similar costs. The only difference is that you should receive a far superior service/speeds.

What is the role of the Town of Rocky Mountain House? Have you considered a co-op model? Have First Nations communities been consulted?

Clearwater County Council has indicated they'd like to work with as many partners as possible - be it municipal, provincial, federal, First Nations or ISPs - to make the broadband project as efficient and effective as possible. At this early stage in the planning process, partners have been invited to discuss possible options, but nothing formal is in place at this point in time.

Why do taxpayers have to pay for capital infrastructure for a service that they may not use?

The role of municipal government as prescribed by the *Municipal Government Act* is:

- To provide good government.
- To provide service, facilities or other things that, in the opinion of Council, are necessary or desirable for all or a part of a municipality.
- To develop and maintain safe and viable communities.
- To work collaboratively with neighbouring municipalities to plan, deliver and fund intermunicipal services.

With a decreasing population and shifting dynamics of industry, Clearwater County Council has indicated that now is the time for broadband – in order to secure the community's future prosperity as growth and innovation are essential to the community's success.

How do you know what the take rate will be?

Although there are no guarantees, Clearwater County Council has also indicated that the initial fee to sign-up needs to be low enough that it doesn't hinder uptake or 'take rate'. The County will also develop a business case and marketing plans which will give a better idea of anticipated take rate on a municipal system. Potential partners also have existing residential, industrial and commercial customers.

When will the construction start?

Council anticipates that construction will begin by spring 2019, again with a phased plan, beginning with the higher density areas surrounding Rocky Mountain House and along the highway 11 corridor.

What are the next steps?

Completion of the County-wide broadband infrastructure masterplan is the first step, followed by business case and marketing plans. Thereafter would be the County tendering engineering and construction contracts.

What contingencies will be put in place for the 50-year lifecycle of the fiber?

Similar to any of the County's other capital assets (road, bridges, water and wastewater systems), money will be set aside in reserves, in this case after 5-7 years, for maintenance and required future capital upgrades.

What is the County's population and premise number?

According to Statistics Canada's 2016 census, Clearwater County population is 11,947 people and 4699 private dwellings occupied by usual residents.