



Canadian Radio-television and
Telecommunications Commission

Conseil de la radiodiffusion et des
télécommunications canadiennes

Canada

CONNECTING RURAL AND REMOTE COMMUNITIES

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Telecommunications



Overview

- **Status of the industry**
- **Current files**
 - **Wholesale High-Speed Access (HSA)**
 - **Wireless Review**
- **Broadband Fund**





Status of the industry

- Total Canadian telecommunications revenues reached **\$50.3 billion** in 2017, up from \$48.6 billion in 2016



Revenues for
**mobile wireless
services**

↑ 5.4%

\$25.8 B



Revenues for
**fixed Internet
services**

↑ 7%

\$11.5 B



Status of the industry

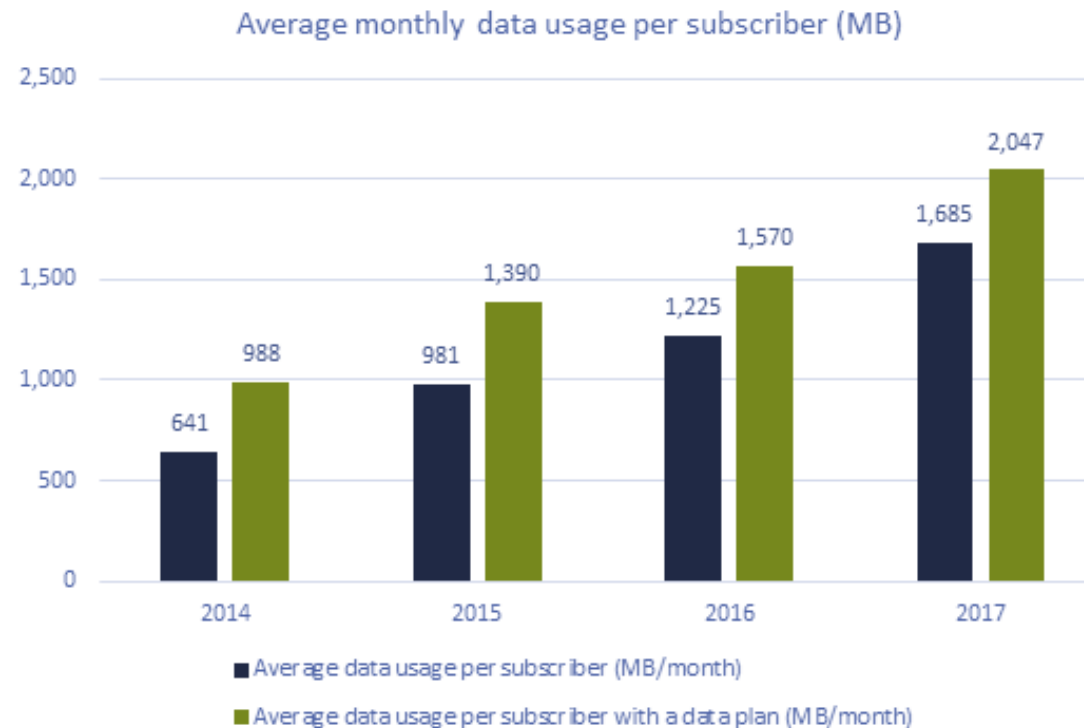
- Access to high-quality telecommunications services is an absolute necessity
- Digital technologies are now integral to Canadians' daily lives
- Canadians rely on them to work, learn, play, connect with each other and access services (e.g. e-health)





Status of the industry

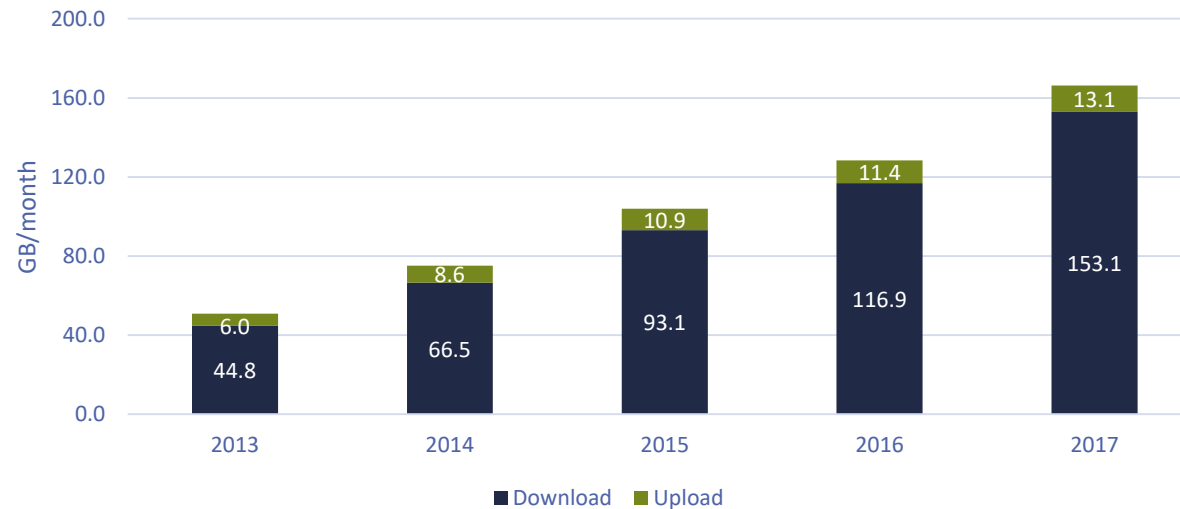
- **83%** of Canadians subscribers have a mobile data plan
- Average monthly cellular data usage for subscribers grew from **1.5 GB** in **2016** to **2 GB** in **2017**





Status of the industry

Weighted average upload and download usage by high-speed residential
Internet service subscribers

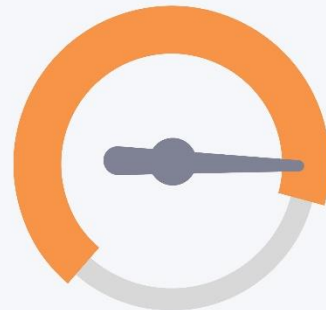


- **86%** of Canadians had an Internet subscription in **2017**
- Canadians are also subscribing to faster speeds – average of **68 Mbps** in **2017**
- Data consumption jumped by **30%** to **166.2 GB**



Status of the industry

- **84%** of Canadian households have access to a fixed Internet access service meeting the universal service objective



Speeds of
50 MBPS download
10 MBPS upload



Unlimited
Data Option



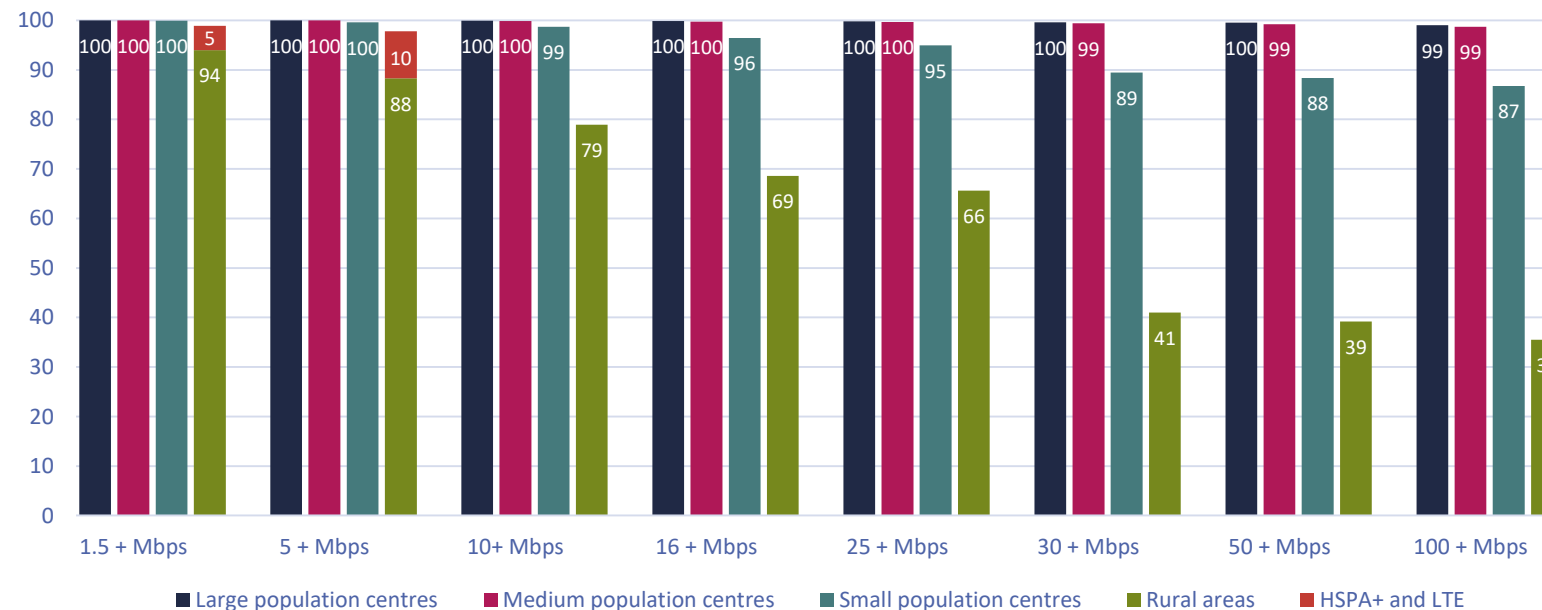
Fibre-to-the-home was available
to **35%** of households in 2017.



Status of the industry

- Access to the universal service varies greatly:
97% of households in urban areas vs **37%** in rural areas
- Approximately **2 million** Canadians households **do not have** access to broadband Internet access services

Broadband availability - Urban vs. broadband (% of households), 2017





Current files: Wholesale HSA

- The CRTC is committed to fostering competition in the broadband market
 - It is vital for reasonable prices and innovative services
- Large companies must grant competitors access to their networks (incl. fibre)
 - Setting final rates for aggregated access across the country and for disaggregated access in Ontario and Quebec
- The CRTC is suspending the implementation of the 100 Mbps cap for aggregated wholesale HSA services
 - Interim relief pending a final decision on the application



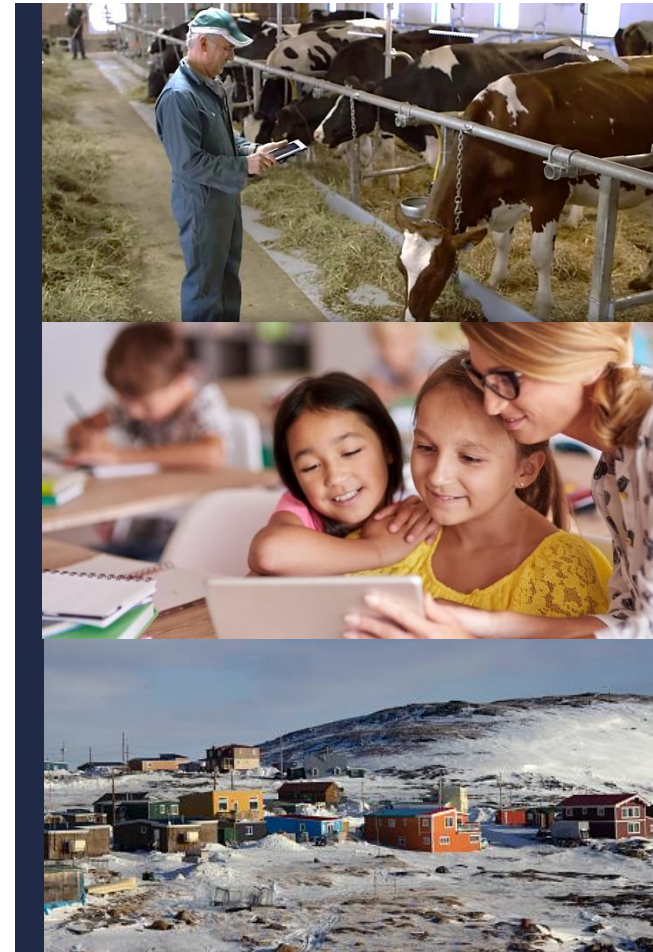
Current files: Wireless review

- The CRTC will monitor the lower-cost data plan
 - Bell Mobility, Rogers and Telus have committed to offering them
- The CRTC is concerned by the state of the mobile wireless market
- Review of the mobile wireless framework
 - Improve choice and affordability for Canadians
 - Preliminary view regarding mandating access for mobile virtual networks operators
 - Measures to facilitate 5G deployment
 - Public hearing starting **January 13, 2020**



Broadband Fund

- To support projects in areas that lack an acceptable level of access
- **Goal: 90%** of coverage by the end of **2021** and **100%** as soon as possible
- **Broadband Fund = \$750M** over the first five years
- Up to 10% of the annual total will be provided to satellite dependent communities
- The Fund is technologically-neutral; everyone can put forward a proposal



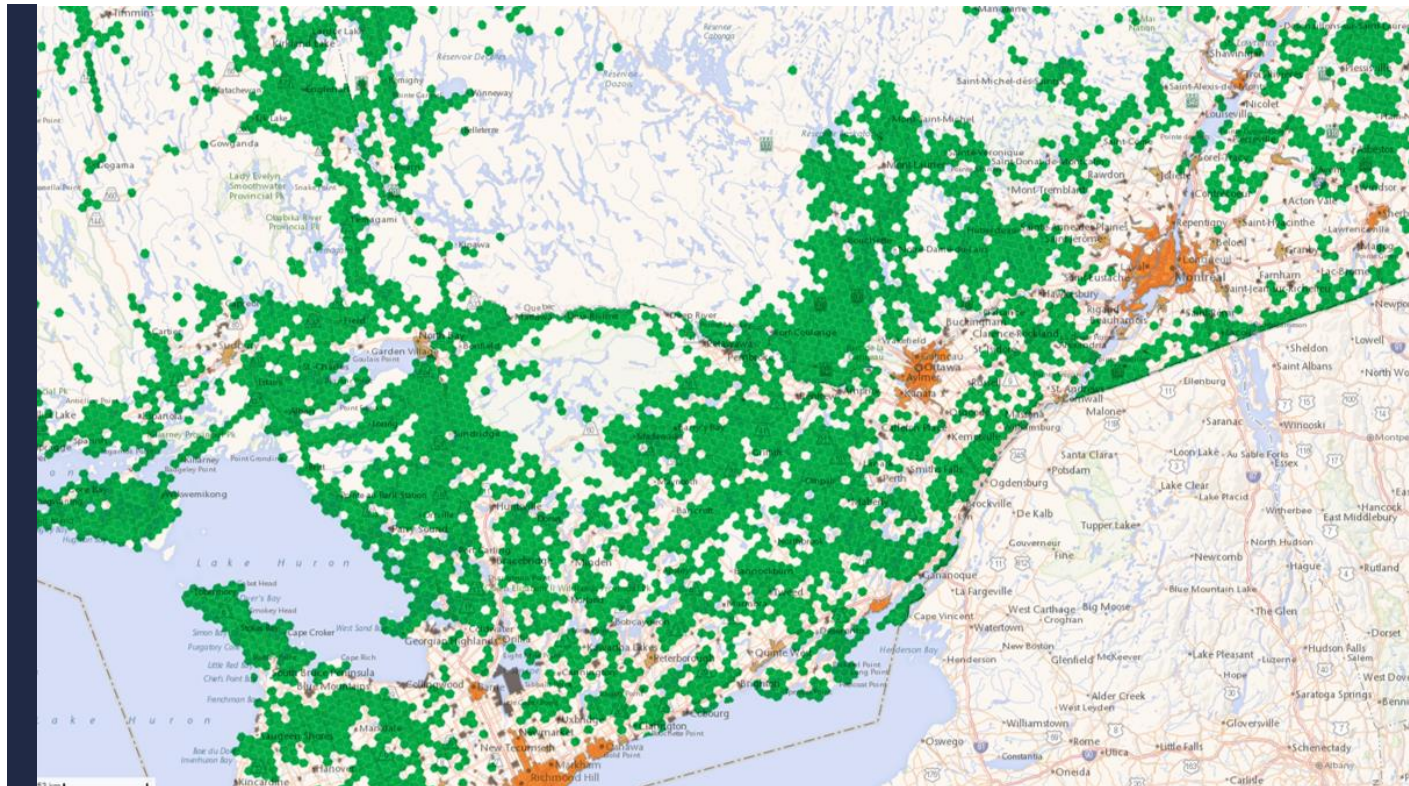


Broadband Fund: Milestones

- The CRTC published a decision on how the **Broadband Fund** will work
- The CRTC released maps showing regions where **50/10 Mbps** and **LTE** is not available

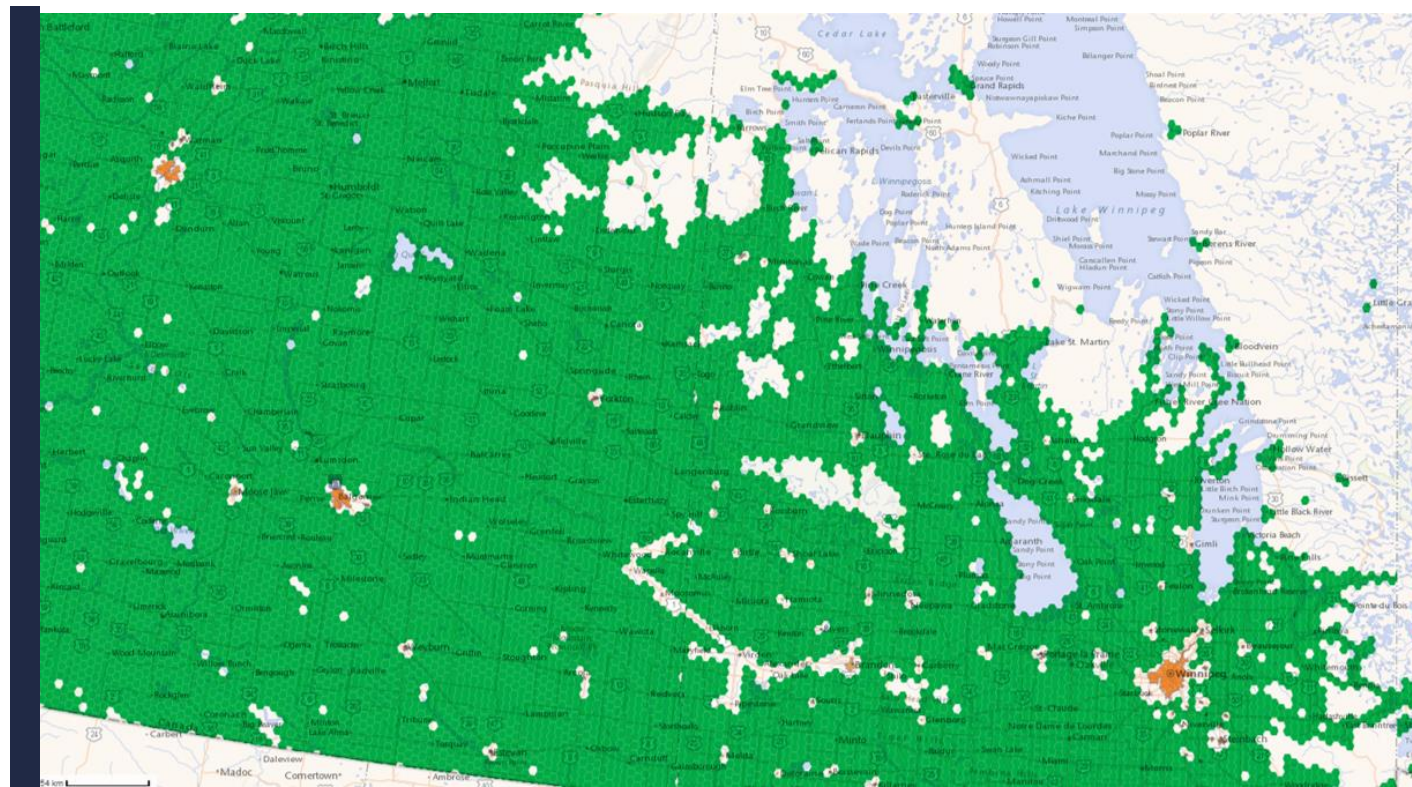
Areas Without 50/10 Fixed Broadband

- Inhabited areas in which no household has access to **50/10 Mbps** fixed broadband



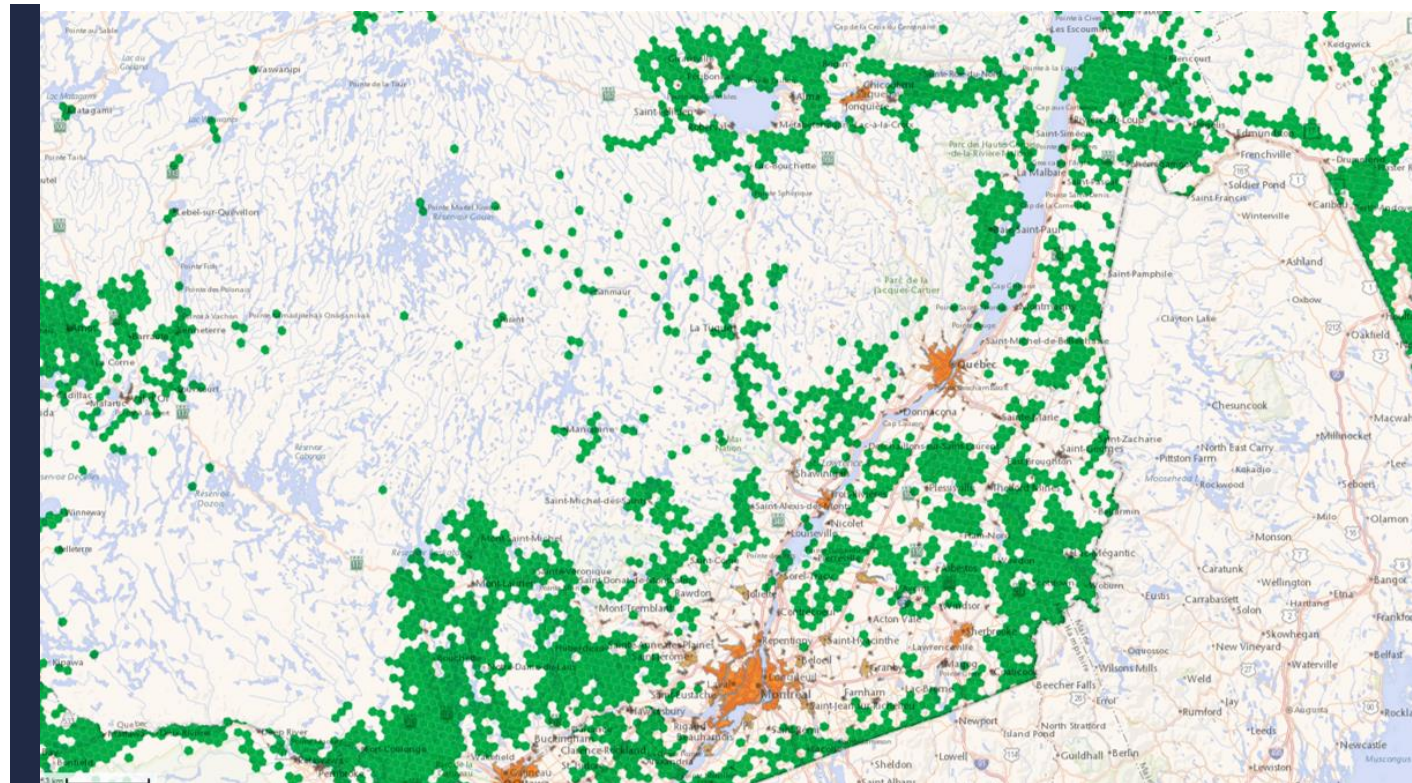
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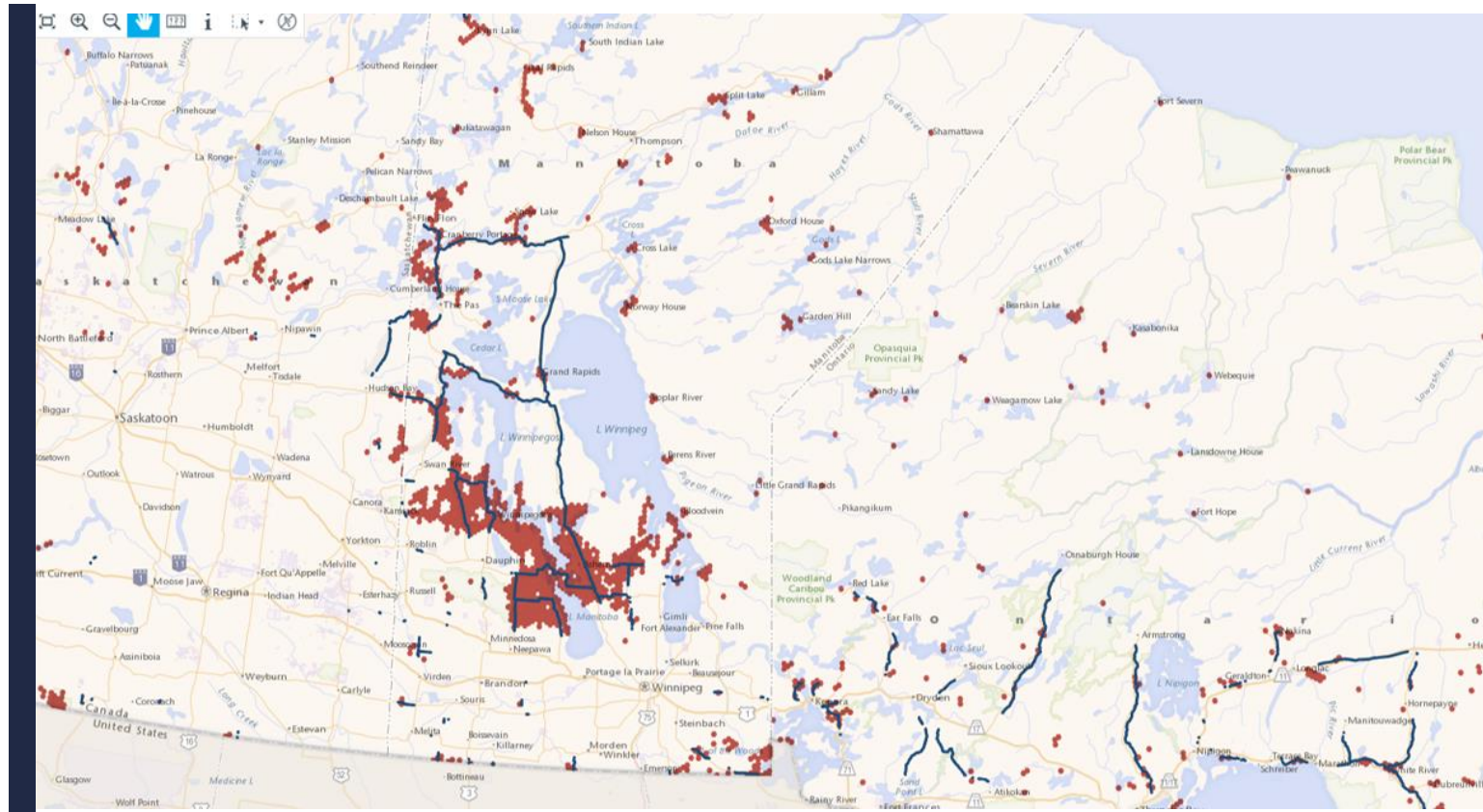
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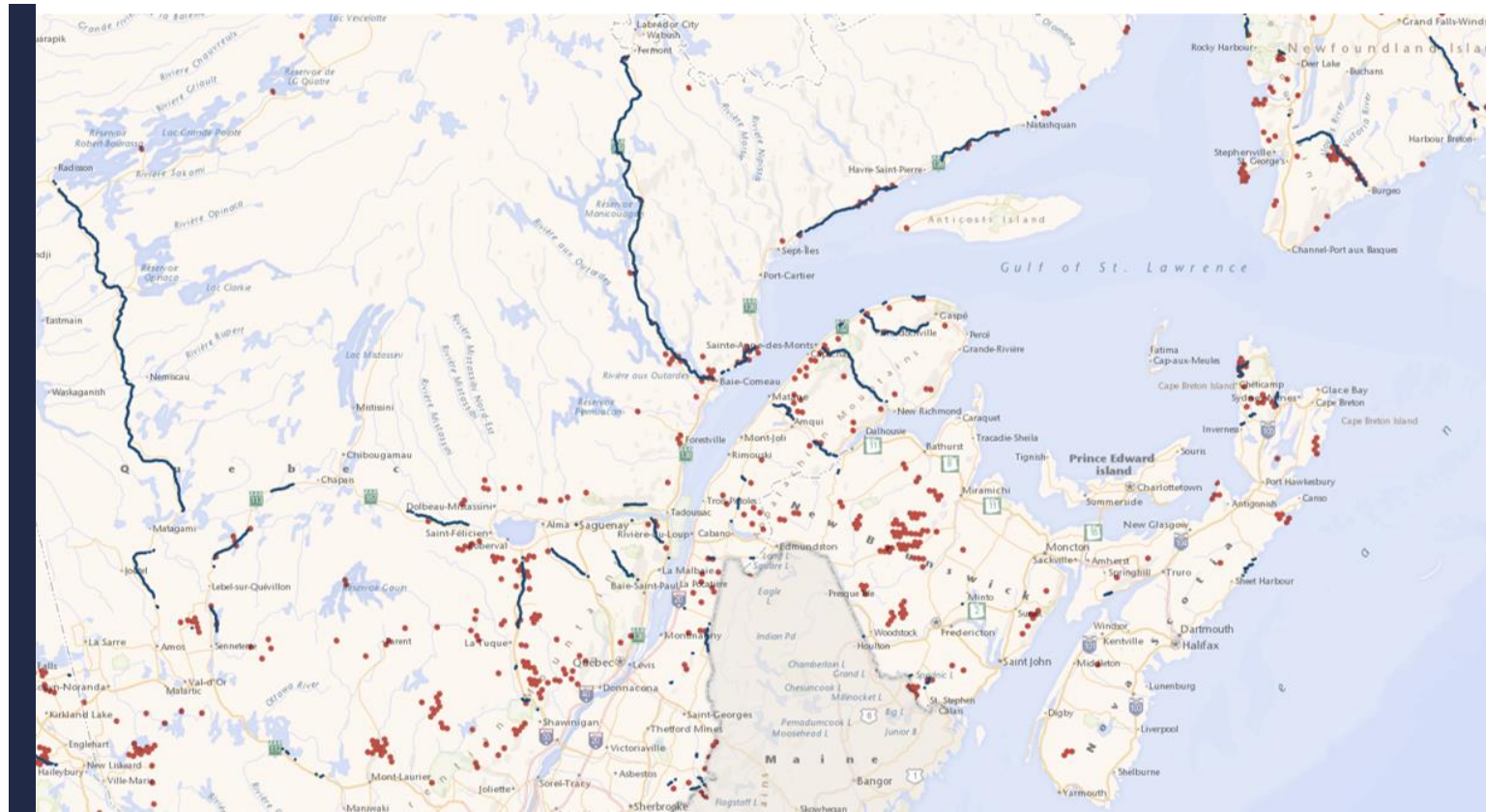
Areas Without Mobile Wireless (LTE)

- Inhabited areas or major roads without mobile wireless LTE service



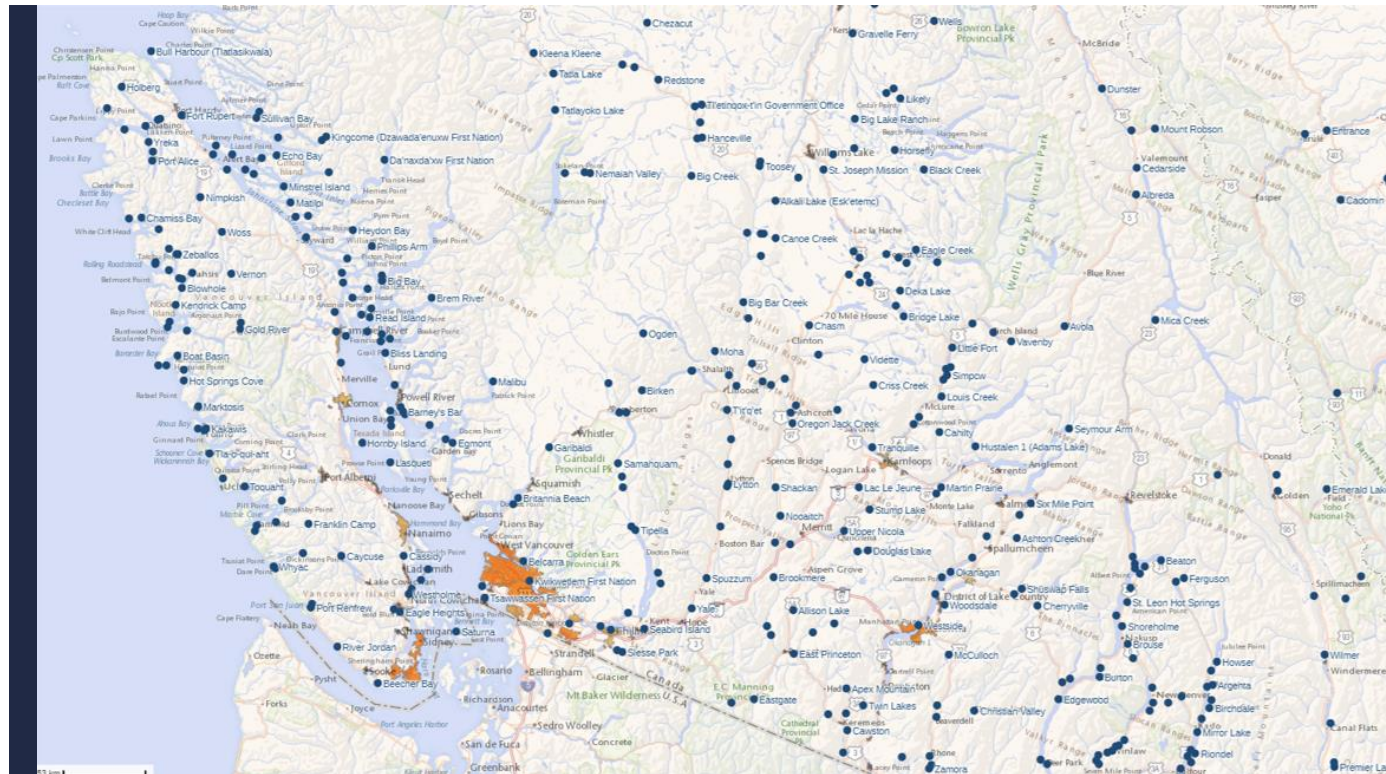
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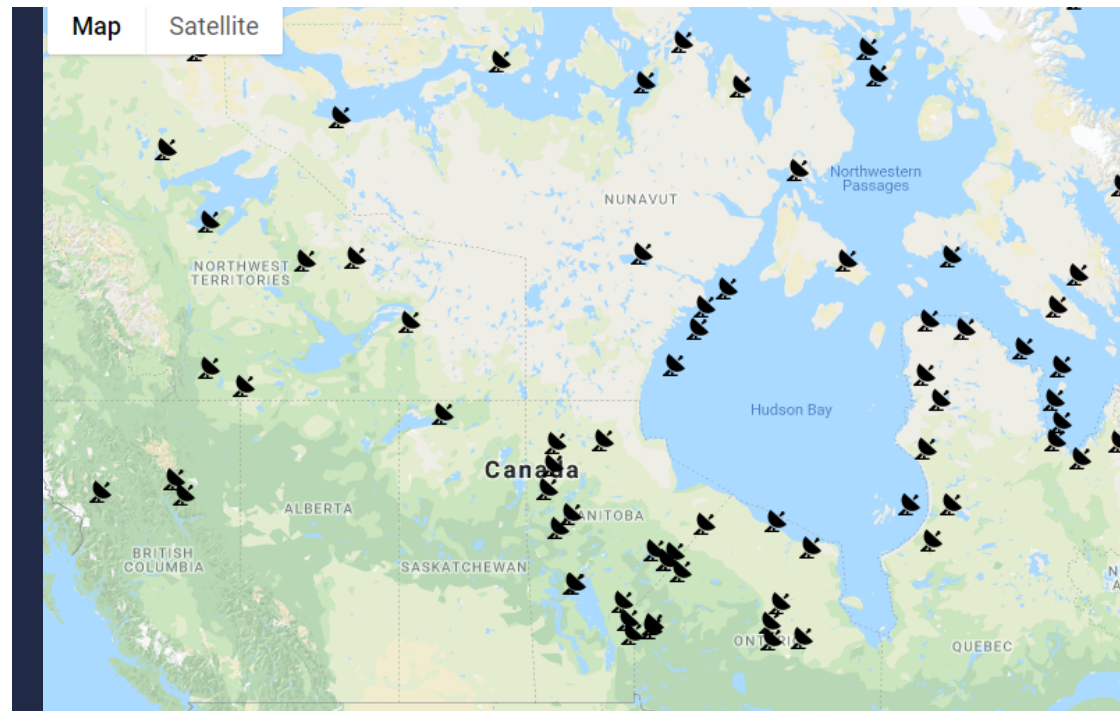
Communities Without High-capacity Transport

- Small population centres with less than **30,000 residents**, located at least 2km away from a transport PoP with a minimum capacity of **1 Gbps**.



Satellite-dependent Communities

- No connection to terrestrially-based telecommunications facilities for connection to the public switched telephone network and/or the Internet
- Communities rely on satellite transport to receive one or more telecommunications services.



Source: ISED National Broadband Internet Services Availability Map



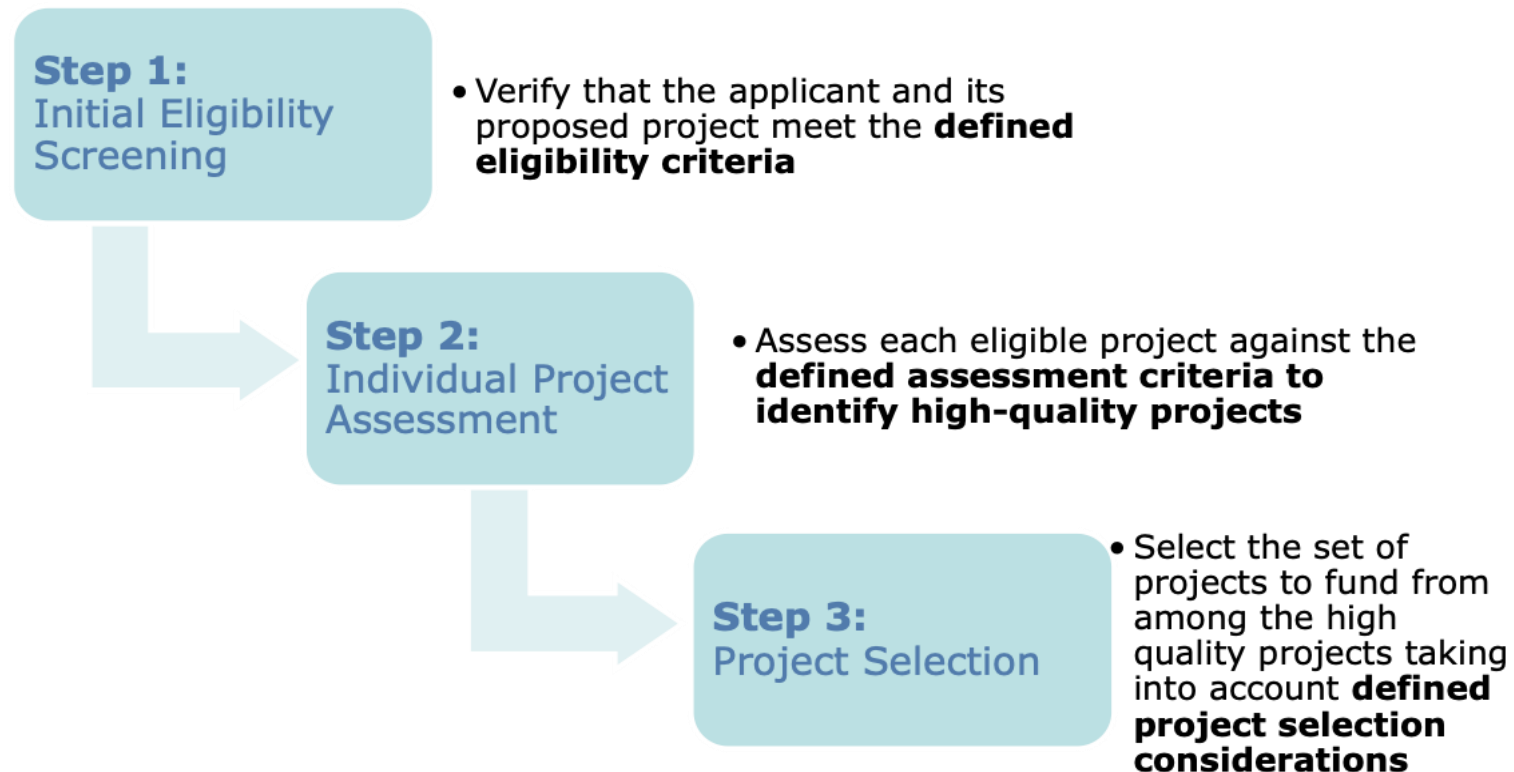
Broadband Fund: Application Guide

- Application guide published for comments; it contains:
 - Details that applicants will need to include
 - Criteria to evaluate applications and select projects
 - Documentation and information to be provided
- Guide to be updated further to the comments received



Broadband Fund: Project Selection Approach

- The Commission will publish a **Call for Applications** in **2019**
- Projects are to be selected for funding based on a comparative selection approach





Broadband Fund: Eligibility

- Applicant must demonstrate that:
 - it is eligible to operate as a Canadian carrier
 - it has at least three years' experience deploying and operating broadband infrastructure in Canada
 - the project is not financially-viable without Broadband Fund support
- Applicant must invest more than a nominal amount
- Applicant can propose projects to build or upgrade access, transport or mobile broadband infrastructure



Broadband Fund: Eligibility

ACCESS

- Access projects to serve:
 - an area within a **25 km** hexagon
 - where no home or business has access to **50/10 Mbps**

TRANSPORT

- Transport projects to a community:
 - with a population of less than **30K**
 - 2 km away from a point of presence with at least **1 Gbps** capacity
- Projects must offer a minimum capacity of **1 Gbps** for new builds or **10 Gbps** for upgrades

MOBILE WIRELESS

- Mobile wireless projects to offer **LTE** coverage
 - in either inhabited areas or part of major transportation roads
 - where there is currently no access to **LTE** technology

Broadband Fund: Assessment

Each project will first be assessed based on:

- ✓ technical merit
- ✓ level of community consultation and involvement
- ✓ financial viability
- ✓ level of funding from other sources (including level of government funding)

Applications will then be assessed based on the following assessment criteria:

Access Projects

- gap between existing service and USO
- level of service proposed
- coverage (service and density)
- subsidy cost per household
- retail offers and pricing proposed

Mobile Wireless Projects

- improvement of service proposed
- geographic coverage
- household coverage

Transport Projects

- level of improvement of network and capacity
- number of Points of Presence (PoPs) proposed
- number of communities/households served
- anchor institutions served
- open access offer proposed

Satellite Component Projects

- gap between existing service and USO
- level of service proposed
- subsidy cost per household
- retail offers and pricing proposed



Broadband Fund: Selection considerations

- The Commission **will** give special consideration to:
 - projects that make the most effective use of available funding
- The Commission **may** give special consideration to:
 - Projects in multiple regions of Canada
 - Fixed access or transport infrastructure projects over mobile infrastructure projects
 - Transport infrastructure projects over fixed access infrastructure projects
 - Projects targeted to Indigenous or official language minority communities



Conclusion

- Bridging the digital divide is paramount
- The **CRTC** is committed to doing its part but it only holds a few of the levers
- **CanWISP** members are in an ideal position to advance your Association's goal of ensuring all **Canadians** have access to our **interconnected world**

The background of the slide is a complex network of blue lines and dots of varying sizes, creating a web-like pattern. A large, semi-transparent white rectangle is centered on the slide, containing the word "QUESTIONS?". To the left of this rectangle, a thick, dark blue vertical line extends from the top to the bottom of the rectangle.

QUESTIONS?