



Newfoundland and Labrador's Connectivity Strategy

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Overview

Newfoundlanders and Labradorians are increasingly relying on high-speed internet through broadband and mobile cellular connectivity for their daily lives. We access online government services, see our healthcare professionals, run our small businesses, conduct personal business, attend online classes, and video-call with friends and family. The experience of the pandemic has demonstrated the heightened importance of broadband and cellular connectivity as Newfoundlanders and Labradorians adjusted to working from home, online learning, virtual health care, online government services, and e-commerce. Yet, some Newfoundlanders and Labradorians, particularly those in rural and remote communities, do not have adequate access to high-speed internet or have unreliable and low-speed service that is not suitable for the ever-increasing demand. It is paramount that

residents and businesses have access to reliable and affordable connectivity to meet their needs.

While telecommunications, including broadband and mobile connectivity services, falls within the constitutional jurisdiction of the federal government, the Government of Newfoundland and Labrador is committed to working with our partners to improve broadband and mobile connectivity services for unserved and underserved rural and isolated communities as well as communities facing network congestion. In addition, Government will collaborate with the private sector and telecommunications internet service providers to identify common goals and partnership opportunities to better serve Newfoundland and Labrador.

Government will continue to work with our federal partners to maximize and leverage the investments being made in our connectivity

infrastructure through the Universal Broadband Fund (UBF) and other funding programs.

Most recently, on February 21, 2022, Industry, Energy and Technology (IET) and Innovation, Science and Economic Development Canada (ISED) announced a historic commitment that will provide up to \$136 million to connect remaining rural households in Newfoundland and Labrador to high-speed Internet.

High-speed broadband and mobile connectivity services drive social development, global competitiveness, and economic prosperity in our communities. Increasingly, small businesses are using the internet to access a global market, students are enrolling in online programming and courses, friends and family are connecting over vast distances, and people are speaking with their mental health professionals from the comfort of their living room. An investment in connectivity infrastructure is an investment in our communities and people. Government will continue to engage with municipalities, local governments, Indigenous

governments and organizations, community partners, health and educational institutions, and businesses to identify the current challenges with connectivity services and priority areas for investment. Regions throughout the province, particularly those in isolated and remote communities, face unique challenges. Partner involvement is vital to improving connectivity services throughout the province.

High-speed broadband and mobile connectivity services drive social development, global competitiveness, and economic prosperity in our communities.

The Government of Newfoundland and Labrador is committed to improving our connectivity services, closing the connectivity gap between urban and rural communities, and improving the social and economic well-being of communities. That is why Budget 2021 allocated \$25 million to improve connectivity through cellular and broadband service, building upon our previous investments. Government will use these funds to work with the federal government, service providers, and other partners to further leverage investment, ensuring that more Newfoundlanders and Labradorians have access to reliable connectivity services needed to succeed today while ensuring scalability for longer-term growth.



Where We Are

The Canadian Radio and Telecommunications Council (CRTC) declared Internet service a basic telecommunications service for all Canadians and set new speed targets for basic universal access of 50 megabits per second (Mbps) download and 10 Mbps upload for fixed broadband internet access services, often referred to as “50/10” service.

50/10 service is fast enough to support online learning resources, high-definition streaming, telehealth services, cloud-based software, and multiple users accessing the internet within a household. While there are issues in some areas of the province, the Provincial Government is committed to working with federal partners and internet service providers to ensure more Newfoundlanders and Labradorians have access to this level of service.

Newfoundland and Labrador faces unique challenges in ensuring that everyone has access to 50/10 broadband service and high-quality Long Term Evolution (LTE) cellular service, such as the geographic realities of the province and the high cost of new higher speed infrastructure in rural and remote communities.

The latest CRTC Communications Market Reports (2020) demonstrates that 73.9 per cent of households in the province have access to 50/10 broadband service, the other 26.1 per cent of households do not have 50/10 broadband service available. These households are primarily concentrated in rural and remote areas across the province. The report also demonstrates the connectivity gap between urban and rural communities in the province. Only 49.6 per cent of homes in rural areas of the province have

Broadband Internet Service Availability



73.9%

of Newfoundland and Labrador households



49.6%

of rural households

access to 50/10 broadband service. Those living in rural Newfoundland and Labrador face slower and less reliable internet connections than their counterparts in urban centres.

In November 2020, ISED announced a call for proposals for the Universal Broadband Fund, which will provide \$2.75 billion by 2026 in support of projects throughout Canada. With this and other broadband funding initiatives, the federal government has a target of reaching 98 per cent of homes in Canada with access to 50/10 Mbps by 2026. These investments by our federal partners are critical to increasing access to 50/10 broadband service in the province.



The CRTC publishes the Communications Market Report annually, which includes broadband and cellular coverage data.

It can be found here [crtc.gc.ca/eng/publications](https://www.crtc.gc.ca/eng/publications)

There is also a need to improve access to reliable cellular coverage across the province. The CRTC Communications Marketing Report (2020) shows that 99.9 per cent of Newfoundlanders and Labradorians living in urban centers have access to LTE cellular service, whereas access in rural Newfoundland and Labrador is 89.9 per cent.

Total LTE Coverage in Newfoundland and Labrador



99.9%
of the population
In Urban Centres



89.9%
of the population
In Rural Areas



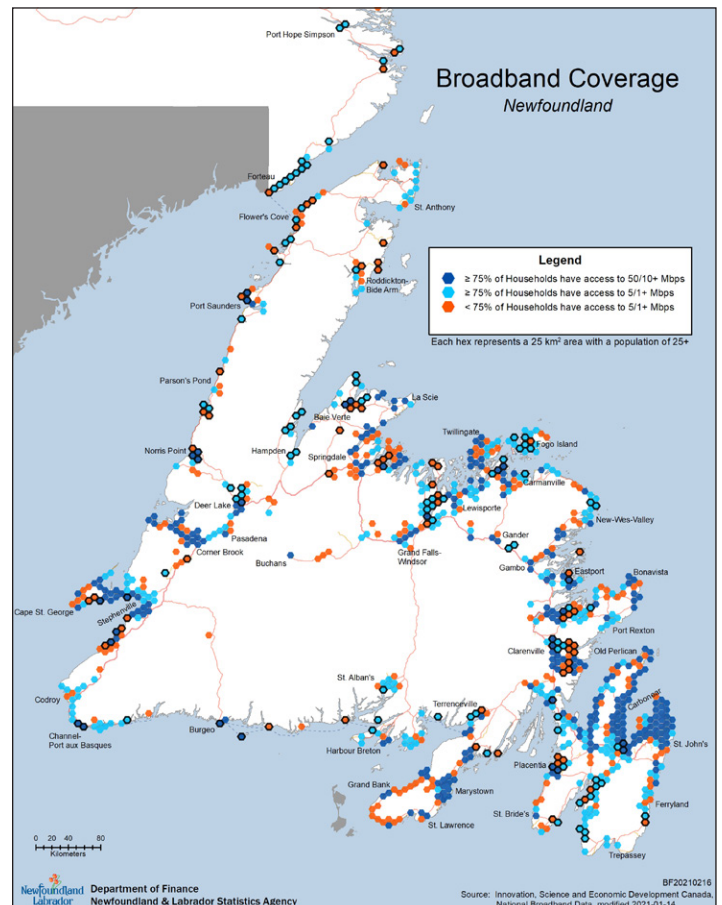
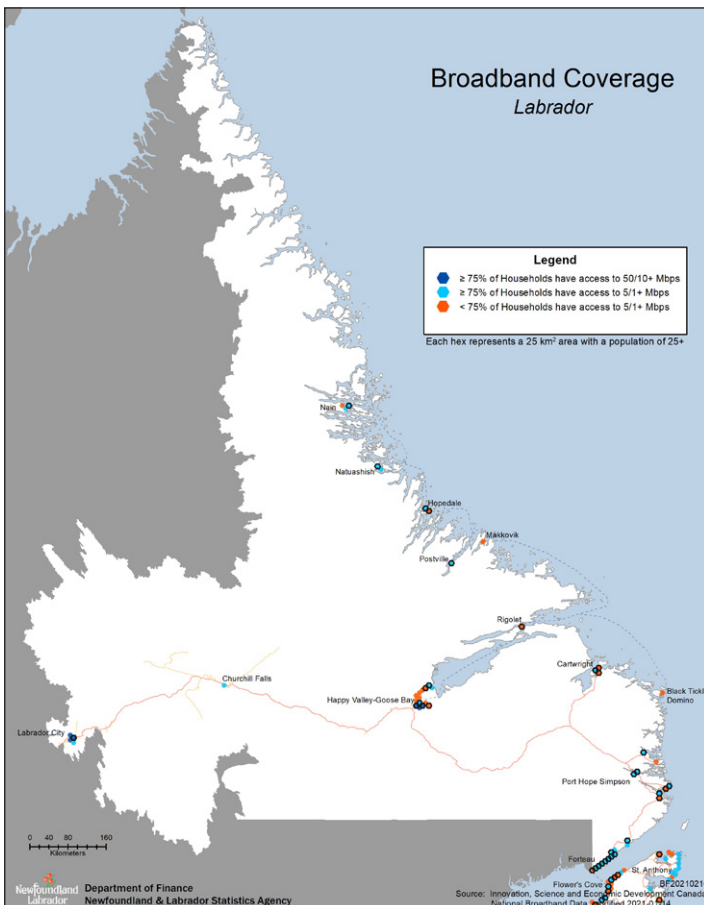
66.5%
On Major Roads
and Highways

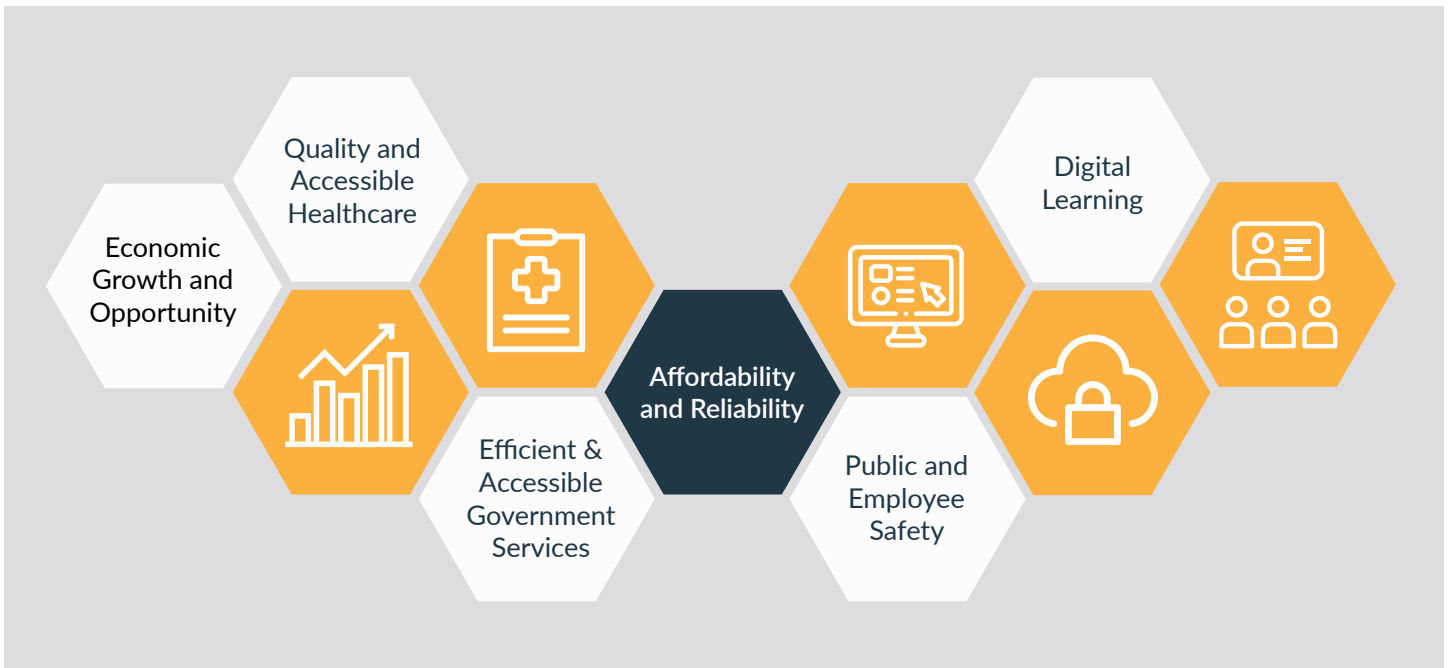
Similar to other jurisdictions, a significant challenge is gaps in cellular service on highways and roads where coverage is only 66.5 per cent.

Some communities are also underserved or challenged with congestion issues, resulting in slow or unreliable cellular reception that can make completing online tasks or even making phone calls difficult. Government will continue to work with federal and private partners to leverage investments in cellular service infrastructure to improve services for residents and businesses of the province.

What We've Heard

Connectivity is important for every Newfoundlander and Labradorian, with increasing reliance on broadband and cellular services to complete daily tasks. It has been an important public issue for many years, and Government regularly receives correspondence from the public and industry partners about





issues such as gaps in coverage. Government also actively monitors activity and reports from the CRTC regarding service availability, policy direction, and public feedback. This strategy was designed through years of input from the public, stakeholders, and industry partners.

Two key areas were dominant from the input received, affordability and reliability. Newfoundlanders and Labradorians are using connectivity services and the internet in nearly every aspect of their lives. Some are driving their local economies, expanding their local company online, or opening up new e-commerce driven businesses; creating substantial economic growth and opportunities in their communities.

High-speed broadband allows for efficient and accessible government services that are important for the people of the province, such as MyGovNL, where residents can register their car or renew their license. High-speed broadband also allows for quality and accessible healthcare; residents can see their specialized physician virtually, and

access mental health services online avoiding costly travel from rural and isolated communities, such as remote communities in Labrador. More residents are pursuing education through digital learning and online workforce development and accessing their course materials through online learning systems, which requires reliable connectivity to access video-conferencing and cloud-based software. As governments, non-profits, and private businesses increasingly turn to new modes of program and service delivery, our connectivity infrastructure must keep pace. Repeatedly, we have heard across the province that it is essential for residents to have affordable, fast, and reliable access.

In addition to having reliable and affordable access, the other key priority from the input received on cellular mobility service was its importance for public and employee safety. Long stretches of major highways and roads in the province still have significant gaps in coverage. Over the years and throughout recent input, people have expressed their concerns for public

safety on long stretches of road with limited or no cellular service.

Input from stakeholders and partners also highlighted the opportunities that connectivity services can bring communities. Access to 50/10 service broadband and mobile connectivity services can allow rural and remote residents to seamlessly access services. Additionally, connectivity services can open businesses in the province to an entirely new national and even global clientele. Investment in connectivity services is an investment in the economic and social well-being of our communities, ensuring that communities remain vibrant and can succeed in today's world.

A common theme from service providers is that upgrading and installing broadband infrastructure, (i.e. fibre), is very expensive, and in many rural and remote areas, there is a limited or no business case for the service provider to upgrade existing or install new infrastructure.

Service providers also indicated that the approval processes for permits and installation of connectivity infrastructure can be lengthy, which can result in potential delays to investments in connectivity. They also highlighted the need for increased access to existing infrastructure, where possible, to facilitate the deployment of new and upgrading connectivity infrastructure across the province.





Our Strategy to Further Close the Connectivity Gap

Historically, the Provincial Government has leveraged significant investment from internet service providers, community partners, and the federal government to develop connectivity infrastructure in the province.

Recognizing the significance of improved broadband and cellular service, funding committed in Budget 2021 will help improve service in the province with an aim to leverage additional significant investment from other partners. Specifically, this commitment allows Industry, Energy and Technology to facilitate partnership opportunities with the federal government, internet service providers, and local communities, cooperating and leveraging collective investments,

to improve mobile and broadband connectivity services throughout the province, particularly in rural and remote communities.

The investment priorities for the growth of the province's connectivity infrastructure are to provide access of at least 50/10 broadband service, which is scalable for long term growth, and improved cellular service access. It is also essential to ensure that the service will be affordable so that the access is attainable for residents of the province. Equally important is the reliability of the service: businesses and households expect a consistent level of service to meet their needs.

The strategy was designed to address the challenges that the province faces in meeting our connectivity goals. With input from residents and stakeholders, our connectivity priorities are clear. Providing access to 50/10+ broadband service, which is scalable for longer-term growth, and improved cellular infrastructure across the province is the objective. The key to improving access is ensuring that connectivity services are affordable; reliable, ensuring dependable access for businesses and households; and growing the province's connectivity infrastructure.

Newfoundland and Labrador's Connectivity Strategy is a three-year plan designed to be flexible based on the unique circumstances throughout regions in the province. Government plans to support connectivity services in the province through partnerships and smart investments to improve the economic prosperity and social well-being in communities and further close the connectivity gap.

Newfoundland and Labrador's Connectivity Strategy has three pillars

INVEST



PARTNER



OPTIMIZE





Invest

The Government of Newfoundland and Labrador is committed to continuing to invest in broadband and cellular infrastructure in partnership with key industry players. Closing the connectivity gap is particularly critical in underserved and unserved rural communities where there is a limited business case for private investment. Ensuring that the province's connectivity infrastructure is capable of serving current and future needs is an ongoing priority.

There are various challenges regarding the amount and timeline for investment. For example,

service providers have limited annual capital investment and decisions are based on a variety of factors, such as the strength of business case (i.e. how many potential customers in an area) for new target areas, as well as the investment required to maintain and upgrade existing infrastructure.

As technology evolves rapidly, the types and cost of connectivity infrastructure are changing. The number of providers in the environment has also evolved in recent years, with more options in some areas, however, many rural and remote areas still have limited options.

Investment is essential to expanding and improving connectivity coverage throughout the province. Budget 2021 committed \$25 million for broadband and cellular improvements. This investment mechanism will allow Industry, Energy and Technology to work with other partners with investment capacity to advance the long-term connectivity needs of every Newfoundlander and Labradorian.

Our government also recognizes the importance of network resiliency. People rely on their connectivity services, and the internet, in many aspects of their lives and need dependable access. A service outage, a wire cut, or a satellite out of commission can disrupt many activities throughout society, such as business development, economic, health, and education services. Government will continue to emphasize the importance of network reliability when investing and working with partners.

ACTIONS

- 1 Continue to invest in broadband and cellular infrastructure. Government will invest \$25 million to expand broadband and cellular access.
- 2 Work with partners to target investments to unserved, and underserved areas.
- 3 Emphasize the importance of network reliability and resiliency in planning and investments.



Partner

There are many stakeholders involved in growing connectivity, including the federal government, businesses, labour, service providers, communities, and Indigenous governments and organizations. The Government of Newfoundland and Labrador's role is to collaborate with these stakeholders to ensure the best outcomes and value is gained from targeted investments for the people of the province. This requires working with partners in other levels of government; including federal, municipal, and Indigenous; labour; service providers; academic and health institutions; the community sector; and the private sector. Working collaboratively, and effectively communicating with partners, is critical to connectivity growth.

The Government of Canada has constitutional jurisdiction for telecommunications and regulates internet service providers through the CRTC.

It also leads investment policy and programs through various funding mechanisms, such as the Universal Broadband Fund administered by ISED. As such, it will be particularly important for government to continue its strong relationship with ISED, the CRTC, and other federal bodies to ensure the best outcomes for Newfoundlanders and Labradorians. Working with federal partners and service providers will ensure the most effective investments and best outcomes for connectivity services in the province.

In 2019, ISED released the **High-Speed Access For All: Canada's Connectivity Strategy**, outlining national commitments to connectivity growth. The province has partnered on various initiatives with the federal government and continues to meet regularly with ISED and other provinces and territories.

The Province will continue to build upon partnerships with the federal government and explore opportunities for other funding sources for connectivity projects, particularly cellular service. The Government of Newfoundland and Labrador will continue to focus on leveraging national investment opportunities, communicating unique challenges and opportunities, and ensuring effective investments are made in communities where they are needed most.

On-going partnerships are vital for sufficiently meeting connectivity needs. Discussions and collaboration with service providers and the private sector can help maximize and leverage investment in our connectivity services and help to identify where our objectives align to best build partnerships.

Identifying the gaps in the current level of connectivity services and providing insight into the challenges and opportunities of improving connectivity services will be an ongoing priority. This is important as technology changes, presenting new opportunities as we monitor areas requiring improvements. Government will also work with partners to identify gaps in existing funding programs and work towards solutions to support our communities and businesses. There is no universal solution to improving connectivity services across the province, so engaging our partners will help keep government's approach flexible and solutions-based.

ACTIONS

- 1 Continue to work with federal partners to leverage and ensure effective investments for connectivity in the province.
- 2 Continue to engage and collaborate with Newfoundlanders and Labradorians, service providers, private sector, labour, municipalities, Indigenous governments and organizations, institutions, and other stakeholders to support connectivity initiatives.
- 3 Ensure the design and eligibility criteria for investments are aimed to enable projects that best meet stakeholder needs.
- 4 Continue to use affordability of service to end-users as an assessment criteria in processes.
- 5 Continue to participate in committees and discussions with the federal government regarding connectivity improvements.



Optimize

The variety of funding programs, criteria, administrative hurdles, and the realities of jurisdictional responsibilities surrounding telecommunications can create a complex environment, which can be difficult to navigate. Where possible, the Government of Newfoundland and Labrador will work with partners to improve information flow, maximize existing infrastructure, and explore best-fit solutions and technology.

Government is committed to reviewing its policy frameworks to identify opportunities to reduce administrative burdens that may unnecessarily slow down or delay private investment and

upgrades. Partnering with service providers and the telecommunications sector, we will work to identify any challenges and barriers, which may result in increased investments in the broadband and cellular infrastructure across the province.

Additionally, we will work to increase the awareness of connectivity resources, helping to encourage more communities in the province to partner with service providers to apply for these programs.

Government will explore opportunities to maximize existing infrastructure and explore best-fit technologies for the unique connectivity challenges the province faces. Exploring best-fit

technologies will be critical to improving connectivity services in isolated and remote communities. Maximizing current infrastructure, future investments, and ensuring investment in technologies that are suitable and scalable for the future will ensure that investments are effective

and viable. Where possible, we will communicate information about existing infrastructure to service providers and the private sector. This initiative may help encourage investment and expansion in unserved, underserved, and congested communities across the province.

ACTIONS

- 1 Establish an information webpage profiling connectivity information, links to other resources, and the latest news about provincial initiatives.
- 2 Explore opportunities to improve information and guidance on how to access funding.
- 3 Work with the telecommunications sector, municipalities, and other stakeholders to identify barriers to connectivity improvements.
- 4 Review applicable provincial government policies to help facilitate timely and effective decisions to enable broadband and cellular expansion.
- 5 Work with the federal government to coordinate the implementation of Universal Broadband Fund projects.
- 6 Host a semi-annual engagement with relevant provincial government departments on the status of connectivity.
- 7 Explore and adopt different technologies based on circumstances; especially to serve households that are in areas that are particularly difficult to reach and sparsely populated.

Moving Forward

Our government is committed to improving connectivity access throughout the province, further closing the connectivity gap between urban and rural communities and working with the federal government, service providers, and other key stakeholders to achieve these goals. Connectivity access is an issue that affects all Newfoundlanders and Labradorians and is

becoming increasingly vital for our day-to-day lives; so it is important that we communicate progress. We will provide yearly progress updates, available in an accessible format, over the three-year life of the plan. These updates will also ensure that we remain open, transparent, and accountable to the strategy and communications regarding broadband and cellular improvements.



Commonly Used Terminology

Broadband

The most used form of internet access. Broadband is offered in four forms, DSL (Digital Subscriber Line), fiber-optic, cable, and satellite.

Long-Term Evolution (LTE)

A standard for cellular communications (i.e. cellphones and other devices). LTE is commonly referred to as 4G (fourth generation) technology.

Megabits per second (Mbps)

A common unit of measurement for describing the speed of internet connections.

Network Resiliency

The ability of a network to provide 'back-up' service in the event of an issue with normal network operation.

Wireless

A connection using wireless signals rather than wiring. For example, a signal can be transmitted from a wireless tower to mobile devices or fixed locations such as homes.

Wireline

An internet connection provided directly to a home or business using some form of wire or cable.

Definitions largely adapted from **High-Speed Access For All: Canada's Connectivity Strategy**

