THE DIGITAL DIVIDE AND THE LACK OF BROADBAND ACCESS DURING COVID-19

Across Canada, the large number of people working and studying from home require reliable and fast internet access. The COVID-19 pandemic demonstrates the urgency of diminishing the 'digital divide' in Canada.

In 2019, the Government of Canada's Connectivity Strategy pledged \$1.7 billion in funding to connect all Canadians by providing broadband access across the country (Government of Canada 2019a). This funding initiative serves as a response to challenges faced by rural and Indigenous communities: high subscription costs and lack of access to the broadband network. In 2018, average prices for advertised service offerings of 50 Mbps download/10 Mbps upload broadband internet in provincial urban areas ranged from \$65.40 to \$98.50. The average prices for rural households ranged from \$69.50 to \$90.00 (CRTC 2019, 82). In contrast, urban and rural residents located in the three territories were required to pay between \$100 and \$111 for the slower 25/3 Mbps broadband access (CRTC 2019, 81). In fact, the standard speed of 50/10 Mbps is not available at all in the territories.

Although governments have frequently emphasized the digital divide, the lack of reliable internet access continues to impose major challenges in First Nations reserves and rural communities. The current goal of the Government of Canada is to achieve "Universal High-Speed Internet for Every Canadian" by 2030 (Government of Canada 2019b). Yet, despite the CRTC setting a "Universal Service Objective" for access to internet with 50 Mbps download / 10 Mbps upload speeds including unlimited data transfer in 2016, the number of urban households connected to high-speed internet remains disproportionate to the number of households with high-speed internet access in both rural and First Nations' communities. Across Canada, 40.8% of rural households had access to the new service objective in 2018 whereas First Nations households accounted for 31.3% (Figure 1).

The reason for a patchy and insufficient broadband network is often justified by low rural population density which results in "limited economic incentives for commercial carriers to provide rural or remote areas with high-speed internet services" (Haight et al. 2014, 505). This raises concerns about social inequality. COVID-19 has once more revealed the impact of such inequality as small- and medium-sized businesses and students residing in

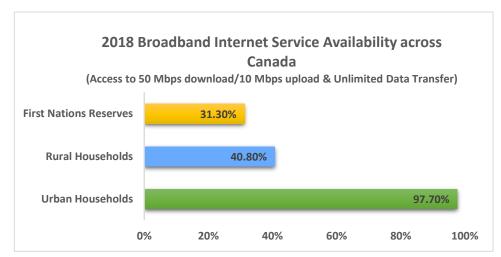


Figure 1. 2018 Broadband Internet Service Availability across Canada. Source: CRTC 2019.

rural and Indigenous communities face major challenges in satisfying the requirements of their customers or educational institutions. The federal government's proposed timeline, achieving universal high-speed internet access by 2030, seems insufficient in our current environment that relies on reliable and fast broadband access.

The timeline to achieve universal high-speed internet access by 2030 as envisioned by the federal government is insufficient given the urgency imposed by COVID-19.

Furthermore, the digital divide disproportionately affects Indigenous Peoples. This becomes obvious when comparing access to high-speed internet services between the provinces and territories, with the exception of Saskatchewan which also falls into the generally slower broadband access category (Figure 2). The situation is, however, most severe in Nunavut which has a coverage of maximum 25 Mbps download capacity. Nearly 85% of Nunavut's 2016 population was Inuit (Government of Nunavut 2016). Thus, the universal service objective as formulated by the Canadian government is not available to the residents of Nunavut.

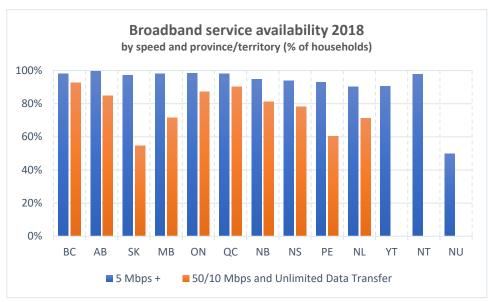


Figure 2. Broadband service availability 2018. Source: CRTC 2019.

The largest wholesale internet providers in Canada are Bell, Rogers, TELUS, Shaw, Videotron and Cogeco. In 2019, the CRTC lowered the rates on broadband internet that smaller retailers can purchase from these wholesalers. As a consequence, the larger carriers indicated that the revenue reductions will inhibit the roll-out of rural service upgrades. Given the comparatively low number of rural households with access to the new universal service objective of 50 Mbps download/10 Mbps upload speeds, this action has not improved the digital divide. Yet, due to the COVID-19 pandemic and the increased urgency for access to high-speed internet, Bell announced in April 2020 that it is accelerating the roll-out of its new "Wireless Home Internet (WHI) service" in rural Canada.

The federal government has made important commitments to achieve high-speed broadband internet access in Canada. While current conditions imposed by the COVID-19 pandemic emphasize digital inequality across Canada, especially within Indigenous and rural communities (Figure 2), there is renewed public interest spurred by the media to address the sometimes invisible digital divide. Despite the shortcomings of the last two decades (causing a lack of telecommunication and broadband infrastructure in rural and northern communities) the political and economic efforts to address this issue may increase in the coming months. The Canada Infrastructure Bank (CIB) is an ideal corporation to develop a roadmap for improving high-speed internet access in rural and Indigenous communities, as it carries the mandate to seek institutional and private investment for revenue-generating infrastructure determined by public interest (Canada 2017, 3).

The CIB pledged \$35 billion across four priority areas including broadband infrastructure development in underserved communities. From this total amount, the CIB seeks to invest \$1 billion in improved broadband access while leveraging \$2 billion from the private sector (Government of Canada 2019b, 2). Currently, nine infrastructure projects are underway, yet only one increases broadband connectivity: the Kivallig Hydro-Fibre link focusing on transmission line and fibre-optic cabling between Nunavut and Manitoba. The federal government established a \$750 million Broadband Fund intended to support underserved rural and remote areas by complimenting provincial, territorial and municipal initiatives.

In addition, participating internet service providers are contributing to the "Connecting Families" initiative to support low-income households by randomly selecting and offering \$10 internet service to eligible families who also receive maximum Canada Child Benefit. This program is unique because it aims to address the demand rather than the supply side of the digital divide. The current pandemic has increased our dependency on high-speed internet, thus infrastructure investment to expand the broadband network across Canada should be a key component in governments' post-COVID-19 recovery plans.

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