

Bridging the Digital Divide

- What factors attribute to the digital divide?
- Are remote and rural areas in Canada falling behind?
- What are the implications of 5G in rural areas?

JOINT COUNCIL'S EXECUTIVE MONTHLY REPORT
(Developed by the Research Committee)
MARCH 2020

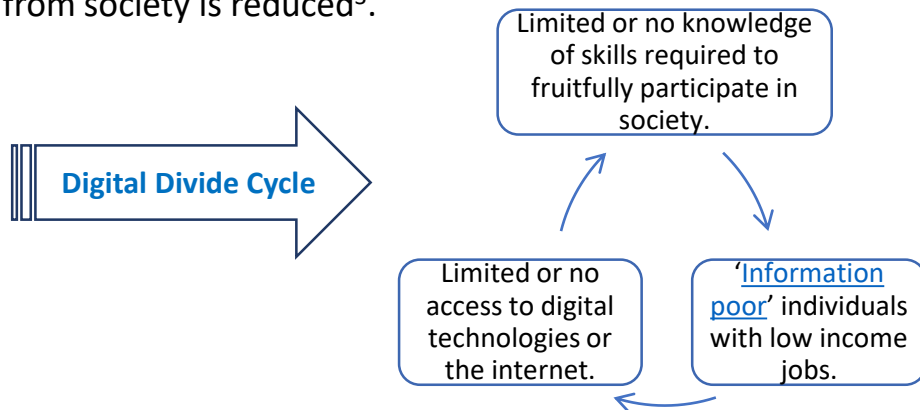
1. Introduction

According to [Stanford University](#), “digital divide” refers to “the growing gap between the underprivileged members of society (i.e. the poor, rural, elderly, etc.) who do not have access to computers or the internet; and the wealthy, middle-class, and young people living in urban and suburban areas who have access” ¹.

Some [key factors](#) that attribute to the digital divide include²:

- 1 Geographical restrictions (rural vs. urban);
- 2 Income levels; and
- 3 Digital literacy.

According to the [Digital Divide Australia](#), if individuals have limited or no access to digital technologies or the internet, their ability to fully contribute to and benefit from society is reduced³.



To address existing and emerging digital divides, it is important to set and reach (and constantly reset and reach) digital equity goals ⁴.

1. [Digital Divide](#)
2. [What is the Digital Divide?](#)
3. [Why is the Digital Divide Important?](#)
4. [Digital Equity Is the “What” and Digital Inclusion Is the “How”](#)

Digital Inclusion vs. Digital Equity

Digital Inclusion (the “How” or Activities)

[Digital Inclusion](#) refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes 5 elements:

- 1) affordable, robust broadband internet service;
- 2) internet-enabled devices that meet the needs of the user;
- 3) access to digital literacy training;
- 4) quality technical support; and
- 5) applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.

Digital Equity (the “What” or Goals)

[Digital Equity](#) is a condition in which all individuals and communities have the information technology capacity needed for full participation in society, democracy and economy. Digital Equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

2. Remote & Rural Regions are Falling Behind in Broadband Internet

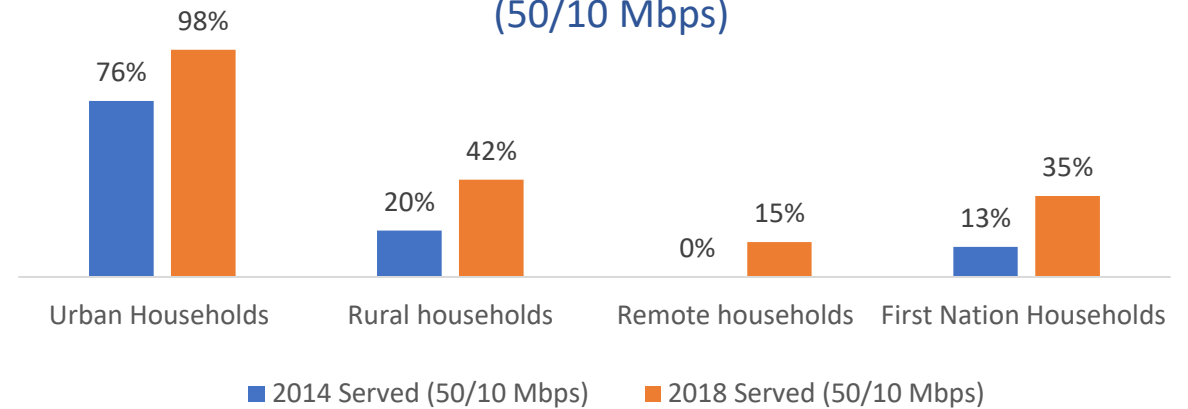
On January 29, 2020, a six-person expert panel set up to advise the federal government tabled [“Canada's communications future: Time to act”](#) – a report that investigated Canada’s communications future. According to the [report](#), Canada’s remote and rural regions are falling further behind urban areas in access to broadband internet and other forms of electronic communication¹. To narrow the gap, the panel provides 97 recommendations. Some of which include:

- All providers of electronic communication services be required to contribute money into the Canadian Radio-television and Telecommunications Commission’s broadband fund.
- The Telecommunications Act be changed to say that all Canadians, no (matter where they live) should have “timely, affordable, barrier-free access” to the telecommunication services they need to fully participate in Canadian society and the global economy.
- Focus on users. Central to all the recommendations is a desire to better position users of communications services – whether that be individual consumers, not-for-profit institutions or private sector organizations.

Read the Full report [here](#).

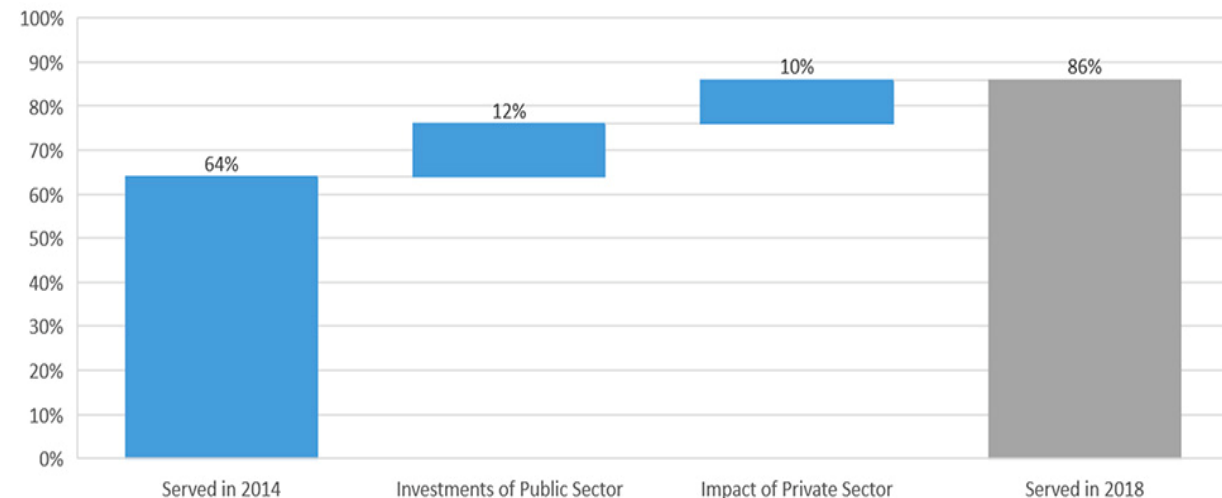
1. [“Canada's communications future: Time to act”](#)

Broadband Penetration in Canada from 2014–2018
(50/10 Mbps)



(Source: [Canada's communications future: Time to act](#))

Impact of investments on rural households served by 5/1Mbps
(2014 & 2018)



(Source: [Canada's communications future: Time to act](#))

3. Could 5G Help Address the Digital Divide in Rural & Remote Areas?



Rural Consequences

Education: Limited opportunities for students in the classroom to access more information online, complete homework, develop digital literacy skills, etc. ¹

Economic: Rural businesses experience difficulty connecting to the global market, and are unable to compete with urban and global counterparts.

Employment: High unemployment rates of rural job seekers due to difficulty accessing employment opportunities posted online, lack of digital literacy skills, education, etc. ²

Read more [here](#).

Benefits of 5G

According to [Smart Cities Drive](#), 5G access can help rural communities by stimulating economic growth and creating high tech jobs¹. In addition to boosting jobs and the economy, 5G could improve the competitiveness of local businesses by connecting them to the global market³. Rural schools could also benefit by enabling students to engage in greater and more efficient learning. Local government services could be boosted by better connectivity, while the healthcare industry could also add more remote telemedicine services to help rural patients¹.

Barriers

The most significant barrier to securing 5G in rural areas is the cost and return on investment. Telecom companies express concerns regarding high costs to install infrastructure and not enough customers to cover those costs. Companies believe they would need to charge unreasonably high rates in order to achieve a return on investment, which would likely mean fewer subscribers¹.

Read more [here](#).

1. [Could 5G close the digital divide between urban and rural communities?](#)
2. [Enabling opportunities: 5G, the internet of things, and communities of color](#)
3. [The Economic Benefits of Getting Rural Internet](#)

Government Efforts to Close the Digital Gap

[Southern
Nova Scotia](#)

[France](#)

[Hampshire,
UK](#)

[Brant County,
Ontario](#)

4. Could 5G Make the Digital Divide Worse?

In a [recent article](#) published by Gov Tech, [Angela Siefer](#) (Executive Director of [National Digital Inclusion Alliance](#)), stated that segments of the population will continue to be left out of technological advantages despite the progress of 5G connection¹.

According to Siefer, there is nothing about 5G that will make it a better option for communities already lacking affordable access to fast Internet. In fact, 5G will add an additional layer of digital inequity¹. This is due to the possibility that in order to access mobile 5G Internet, users will need a newer and more expensive device built for the increased speeds. For underserved communities, the affordability of these devices is an issue.

5. Some Final Words

The issue of digital divide cannot be ignored. As new information and communication technologies are introduced, new forms of social inequities emerge as a result of the unequal distribution, use, and impact of these new innovations. Many believe the introduction of breakthrough technologies (like 5G) is a step forward for technology, while others believe it is not necessarily a step forward in terms of access or affordability.

The digital divide will not close unless there is [clear initiative to close the gap](#). According to an article in [Smart Cities Drive](#), there may be some optimism for governments aiming to balance impact by rolling new technologies nationwide². One encouraging method may be public and private sector partnerships. Governments could incentivize the development of 5G infrastructure (the most significant barrier) by setting up a digital equity fund to help alleviate the cost for private companies.

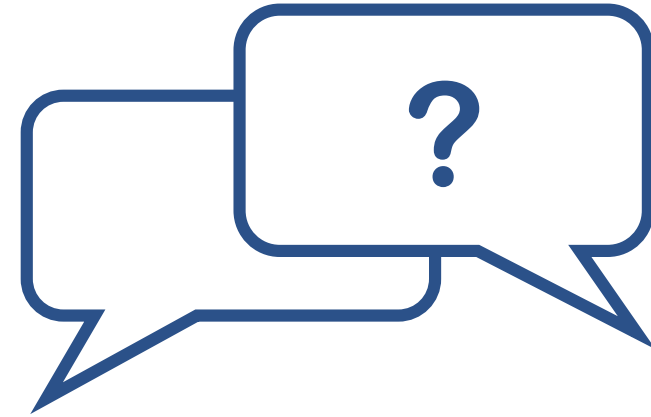
Read more [here](#).

1. [Does 5G Have the Potential to Make the Digital Divide Worse?](#)
2. [Could 5G close the digital divide between urban and rural communities?](#)



For further reading

- [What is Digital Inclusion?](#)
- [Can 5G bridge the digital divide? Congress, experts divided on impact of next-generation wireless](#)
- [Local No-Cost Broadband Program Takes Aim at Digital Divide](#)
- [Grant will help bridge the digital divide](#)
- [5G? What about the 4G digital divide?](#)
- [Lacking digital skills costs £10 billion in lost productivity](#)
- [DocuSign calls for government to improve electronic services for Australia's underprivileged](#)
- [Bad Arguments for Government Broadband in Metro Detroit](#)

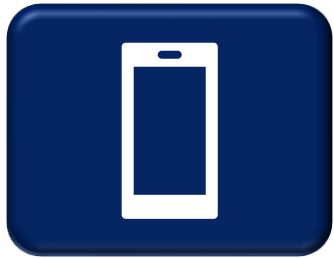


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Outside-In Newsletter: Trends This Month February 2020

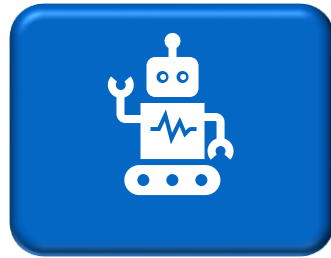


Online Service Delivery

There were several reports of online service delivery initiatives this month.

Canada: Alberta launched its new [Child Care Subsidy Application](#) — which Albertans can now fill out on their phone, tablet or laptop, in October as a test.

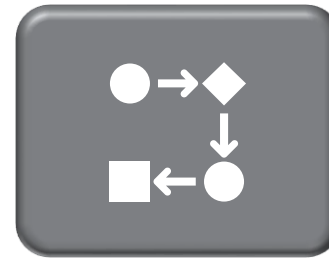
Australia: NSW government's [one-stop shop website](#).



Artificial Intelligence (AI)

A [report](#) from the [Committee on Standards in Public Life](#) has concluded that the public sector must uphold high standards of conduct when adopting AI. Read more [here](#).

We know ethics should inform AI. But which ethics? Read more [here](#)



“Nudging”

Using nudges has improved everything from customer retention and employee safety to organizational commitment and innovation. However, there is a fine line between a nudge and a nag, it's important to acknowledge and understand the subtle differences between the two.

Read more [here](#).

Other noteworthy articles this month:

[Upgrade on track for aging IT system handling old-age benefits, minister says](#)

[Provincial hotline helps residents navigate government, health and social services](#)

[Government Needs to Tie Advances in Data Science to Human-Centered Design](#)

[AI in public service must be accountable](#)

[Privacy expert calls Toronto police's use of Clearview AI 'appalling'](#)

[NSW govt shells out \\$39m from agile digital fund in six months](#)

[Four Canadian privacy watchdogs start investigation of facial recognition service](#)

Research Repository

Access the Citizen First Research Repository [here](#).