

June 14, 2017

To Whom It May Concern:

Enclosed please find my nomination for the 2017 LAPS writing prize. The assignment required students in COMN 4201 to write a 3,000 word Wikipedia article. Please accept my nomination of Andrew Hatelt's article "Digital divide in Canada" (December 17, 2016 version). Wikipedia's PDF function does not demonstrate his successful use of internal links, so I encourage the committee to review the online version:

[https://en.wikipedia.org/w/index.php?title=Digital\\_divide\\_in\\_Canada&oldid=755429459](https://en.wikipedia.org/w/index.php?title=Digital_divide_in_Canada&oldid=755429459).

To see some of this work I have attached two screenshots from his article. It should be noted that, as noted on the assignment instructions, movement of content to the actual encyclopedia was optional. After Andrew took the initiative to move his content from his sandbox to the encyclopedia, creating the article "Digital divide in Canada", we nominated his contribution for Wikipedia's internal 'Did You Know' award. Andrew won the award for his article on February 8, 2017, and a link to his article was featured on the front page of Wikipedia, driving considerable traffic to his contribution. Since the article was created on December 16, 2017, the article has been viewed 4,573 times. The article is now also a part of Wikiproject Canada.

I should add that Andrew's work is not only a strong example of Wikipedia encyclopedic writing, including the chart that he made and uploaded to the Wikimedia Commons under a Creative Commons License, but his work contributes to the closing of a considerable Canadian content gap on Wikipedia. Before Andrew's initiative there wasn't a detailed article on the digital divide in Canada, and now there is.

I have also attached a screenshot of a Google search for "Digital Divide in Canada", where you can now see Andrew's work prominently displayed, expanding his contributions associated with Wikipedia's global knowledge community.

If you have any questions about the article, or Andrew's exemplary work, please let me know.

Thank you for your consideration.

Sincerely,

Jonathan Obar, PhD  
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York University  
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# Digital divide in Canada

From Wikipedia, the free encyclopedia

**This is an old revision of this page, as edited by AndrewH7 (talk | contribs) at 18:48, December 17, 2016 (Added an internal link). The present address (URL) is a permanent link to this revision, which may differ significantly from the current revision ([https://en.wikipedia.org/wiki/Digital\\_divide\\_in\\_Canada](https://en.wikipedia.org/wiki/Digital_divide_in_Canada)).**

(diff) ← Previous revision | Latest revision (diff) | Newer revision → (diff)

The **digital divide in Canada** refers to the discrepancy that exists between Canadians who have access to information and communication technologies (ICT) and the benefits they provide compared to those who don't.<sup>[1]</sup> This divide can be the result of many factors including high costs for technology and online access,<sup>[2]</sup> differences in the availability of online connectivity resources in different locations across the country,<sup>[3]</sup> and lacking digital literacy. The digital divide in Canada also stems from income inequality among Canadians and differences in online connectivity practices exhibited by those of different age, gender, first language, and cultural background.<sup>[4]</sup>



The territories situated within Northern Canada in particular have been technologically divided compared to the rest of the country due to economic and geographical obstacles creating challenges regarding having high speed internet connections set up between distant and sparsely populated towns, along with the low digital literacy rates and lack of access to technology that some northern residents possess.<sup>[5]</sup>

Various government initiatives are currently being implemented to reduce the digital divide in Canada, including plans aimed at providing all Canadians with affordable high speed internet packages,<sup>[6]</sup> increasing the amount of free public Wi-Fi available,<sup>[7]</sup> and the improvement of digital literacy among students in public elementary and high schools.<sup>[8]</sup>

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## Connectivity gap

While 99% of Canadians have access to wireline telephone service, many gaps still exist between the level of ICT access and internet connectivity that different groups within Canada possess.<sup>[10]</sup> As of 2015 there are over 13 million fixed broadband subscriptions in Canada, which translates into approximately thirty six subscriptions per one hundred Canadian citizens.<sup>[9]</sup>

In the past the regulation of telephone and television monopolies in Canada by the Canadian Radio-television and Telecommunications Commission (CRTC) led to the creation of expansive telecommunications networks and made connecting to them by customers affordable.

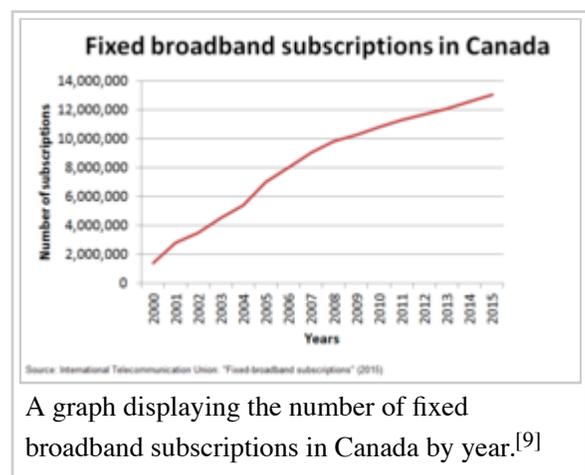
Broadband's current lack of regulation at the retail level has led to a different market environment emerging for high speed internet access where internet service providers (ISP) have great control over what prices they charge and what infrastructure they build.<sup>[2]</sup>

## Income and price

Statistics Canada states that income disparity plays a role in determining whether or not Canadians are connected online. Findings show that 97.7% of households that reside within the highest income quartile have high speed internet access, while only 58% of households that reside within the lowest income quartile possess access to the internet at home.<sup>[11]</sup>

A report conducted by Acorn Canada of low and moderate income Canadian families found that 83.5% of respondents believe the monthly cost of high speed internet service in Canada is very expensive.<sup>[12]</sup> The Canadian Internet Registration Authority reports that in 2015 Canadians paid an average of \$38.91 per month for high speed internet service, or an average of \$203.04 monthly for all communication services combined.<sup>[13]</sup> Acorn Canada is currently calling on the CRTC to mandate ISPs to provide a \$10 per month high speed internet package in an effort to ensure that at least some form of online access is affordable for all Canadians.<sup>[12]</sup>

A lack of competition plays a large role in the prices that ISPs charge Canadians for online access. Unlike



other countries which allow foreign competition to enter their national markets and keep prices competitive, regulation has forbidden the same from happening within Canada, resulting in fewer online connectivity choices for Canadians and the ability for incumbent ISPs to have a large amount of control over the prices they charge.<sup>[14]</sup> To compensate for this, the CRTC has allowed for new entrant carriers to enter the broadband market in an attempt to keep prices competitive and increase consumer options regarding where internet access can be purchased from. New entrant carriers such as TekSavvy have been mandated access to incumbent carrier networks, such as those belonging to Rogers and Bell, giving carriers which do not have the capital or resources available to build their own networks an opportunity to compete in the market.<sup>[15]</sup> Broadband packages offered by new entrant ISPs are generally less expensive than those offered by incumbent ISPs, with many new entrant plans being between 20% to 30% cheaper compared to incumbent plans with similar speeds.<sup>[16]</sup> Many plans offered by new entrant carriers also feature higher data caps, periods during the day when online usage does not contribute to a user's monthly data cap, or in some cases no monthly data cap at all.<sup>[16]</sup>

Despite efforts by the CRTC to increase competition without allowing the presence of international competitors, Canadian broadband prices have been steadily rising, with the average cost of high speed internet packages rising at three times the rate of inflation since 2010.<sup>[2]</sup> As online access continues to become more essential to life in Canada, the price elasticity of broadband service has been decreasing, allowing for disproportionate increases in price without the need for incumbent ISPs to fear a significant loss of customers as a result.<sup>[2]</sup>

Fixed broadband service is not the only area which has seen disproportionate increases in prices, as according to the International Telecommunication Union Canada's mobile sector had the highest average revenue per user in 2010 compared to the mobile markets of all other countries.<sup>[17]</sup> As of 2015 mobile packages in Canada have an average price of approximately \$60 per month with the possibility existing for usage and overage fees if calling, text messaging, or data limits are exceeded.<sup>[2]</sup> Similar to new entrant carriers in the provision of fixed broadband service, mobile virtual network operators (MVNO) also exist which use incumbent infrastructure to provide mobile services in an attempt to make the market more competitive.<sup>[18]</sup>

## Data caps

Many high speed internet packages offered in Canada have data caps, or online data consumption limits that when surpassed will result in additional charges being applied to a user's monthly bill. Data caps in Canada can be as low as 20GB, which is over six times lower than the lowest data cap in the United States of 150GB.<sup>[19]</sup> Data caps contribute to the digital divide by discouraging online usage in users due to the fear of incurring overage charges for any bandwidth consumed once one's data cap has been exceeded. This results in further difficulties for low income families and minority groups regarding being able to afford and make significant use of high speed internet access at home.<sup>[20]</sup>

Plans offered by new entrant ISPs frequently have higher data caps than those offered by incumbent ISPs, with some new entrant plans offering unlimited bandwidth during times of the day when overall network use is lower. Some plans offered by new entrant carriers also feature no data cap at all, which is something not frequently offered in retail plans provided by incumbent ISPs.<sup>[16]</sup>

## Location

While urban areas within Canada have a 100% high speed internet availability rate, rural areas have a lower level of access to high speed internet service with a rate of only 87%.<sup>[3]</sup> Many locations which do not have access to high speed broadband networks reside within the Northwest Territories, Yukon, and Iqaluit where various geographical features create difficulties relating to the development of broadband infrastructure.<sup>[4]</sup> These development difficulties are compounded by the fact that there exists little incentive for ISPs to build broadband infrastructure in the north due to the high cost and low return of developing in areas where towns and people are greatly dispersed.<sup>[5]</sup>



A map highlighting Canada's ten provinces and three territories in white.

Differences can also be found in the quality of networks that Canadians who live in different areas of the country have access to. Those living in urban areas, particularly residents of newly constructed or renovated condominiums, are more likely to have access to fiber to the premises (FTTP) internet connectivity than those in older neighbourhoods, who commonly still connect to the internet through infrastructure that is at least partially comprised of legacy telephone or cable technologies.<sup>[21]</sup> As of 2015 Canada ranks 24th out of all countries in terms of FTTP penetration at a level of less than 5%. This lags behind other developed countries such as Japan and South Korea which have national FTTP penetration levels of nearly 70%.<sup>[22]</sup>

## Demographics and the second level digital divide

Main article: *Second-Level Digital Divide*

Aside from monetary factors, demographic differences within Canada have also resulted in disparity regarding online connectivity and ICT use. Variables such as education and age can play a role in what is considered to be the second level digital divide, where even though a person may have access to high speed internet and the ICTs required to connect to it, their ability to make effective use of them is at a disadvantage compared to more educated or digitally literate groups.<sup>[23]</sup> The digital divide in Canada is no longer just a question of those who have access to ICTs and those who don't, but rather bridging gaps pertaining to the second level digital divide is becoming increasingly important as resources including health care access, government documents, and businesses transition to an online space, meaning that digital literacy and technological understanding will be a key factor in the future for ensuring access to such things.<sup>[24]</sup>

### Education

The level of education attained by a Canadian citizen plays a role in determining how much one uses the internet. Canadians who have graduated high school are 67% more likely to connect online than those who have not graduated. Canadians who are currently attending school also have an almost five times higher online access rate compared to those without a high school diploma.<sup>[4]</sup>

Education levels not only determine how frequently Canadian citizens connect online, but also represent how engaged they are in various online activities. Canadians who have graduated high school perform

more online activities than those without a high school diploma, and university graduates complete more online activities than those who have only graduated high school. In regards to social networking, current students utilize social media services more frequently than those who are not currently in school, and Canadians with less than a high school diploma use social media more often than university graduates do.<sup>[4]</sup>

## Age

As of 2013 research has shown that 80% of Canadians who are sixteen years of age or older are connected to the internet and actively participate online. This number is up from 2007 when only 73% of Canadians who were sixteen years of age or older were engaging online.<sup>[4]</sup>

Approximately five million people within Canada are 65 years of age or older, and belong to an age group which shows some of the lowest levels of ICT usage and online engagement due to lacking access and digital literacy. Ageism is also a contributing factor to this phenomenon, as many elderly Canadians feel disconnected from online issues and discourse amidst an online population which tends to be composed mostly of younger people. Accessibility issues are another contributing factor to the lack of older Canadians online, as barriers such as websites with smaller text can make it more difficult for some people to navigate the World Wide Web.<sup>[25]</sup>

## Gender

While the gap in Canada between men and women who have online access and own ICTs is shrinking to the point of almost non-existence, gaps still prevail regarding the quantity and type of use that exists between males and females. Canadian men make more use of the internet overall, performing more online activities and being generally more engaged compared to women.<sup>[4]</sup> However, women are found to make greater use of social network media, with a 58% higher usage rate compared to men.<sup>[4]</sup>

## Language and culture

Canada's multilingual nature results in discrepancies between the use that Canadians of different first languages get out of online resources. This was a prominent factor of division during the earlier days of the internet, as there was far less motivation for French Canadians to go online due to a lack of French websites and information available compared to English.<sup>[26]</sup> As of the 2011 Canada Census, 57% of Canadians speak English as their first language, with 21% speaking French, and 20% speaking a language other than English or French as their first language.<sup>[17]</sup>

Immigration is another factor which must be considered when looking at the digital divide in Canada, as in some Canadian cities over half of the residents are foreign born. Immigrants who have resided in Canada for a fair length of time, as well as Canadian born immigrants have a 68% higher chance of using the internet compared to immigrants who have arrived in Canada recently.<sup>[4]</sup>

Plans are currently underway to connect First Nations communities across Canada with high speed internet access. The Government of Canada recently announced \$2.2 million in funding to support the Pathways to Technology project in British Columbia which is focused on connecting First Nations residents in the province with internet connectivity.<sup>[27]</sup> In Manitoba \$4.3 million in Federal funding has been given to the Manitoba First Nations Technology Council with the purpose of providing high speed internet to all 63

First Nations communities within the province, a project which will utilize 3,600 kilometers of fiber optic cable.<sup>[28]</sup>

## Effects of the digital divide in Canada

Lacking access to ICTs, satisfactory broadband service, or digital literacy results in a less informed society and puts those who lack access at a disadvantage compared to others,<sup>[2]</sup> as Canadians are more frequently looking to online sources for news, with social media platforms such as Facebook becoming an increasingly prominent way for people in Canada to consume information.<sup>[17]</sup> Participation online is also important as it expands the social, cultural, and economic possibilities of those who are active on the internet, as services and resources are increasingly transitioning to online spaces, leaving those without online connectivity with a lack of access to them.<sup>[4]</sup> Lacking online access and the knowledge or technology to make use of it also effects Canada's economy as a whole, preventing Canadians from the ability to purchase products or services from other Canadians who operate online businesses.<sup>[2]</sup>

Inadequate knowledge regarding technology is also a growing issue for Canadians as the world becomes more technology and online focused, making the need for digital literacy an increasingly important factor in education and labour, as computers open new opportunities for learning and training. <sup>[8]</sup>

## Solutions

### Broadband as an essential service

Unlike telephone and television provision which are considered essential services within Canada, and are required under Canada's basic service objective to be available to all Canadians regardless of ability to pay for them, broadband internet access does not fall under the same guidelines.<sup>[10]</sup> It has been proposed in recent years that broadband should be deemed an essential service along with telephone and television, and hearings are currently being held to discuss the feasibility of this idea.<sup>[29]</sup> At the present time incumbent ISPs disagree with this proposition, claiming that the currently available internet connectivity services offered in all but some rural areas are sufficient to the point of not needing to be regulated by the CRTC.<sup>[2]</sup>

### Connecting Canadians

A program run by the Government of Canada known as Connecting Canadians is currently undergoing the task of improving Canada's online broadband network access to the point of providing all Canadians with a minimum quality of 5 megabits per second download speed and 1 megabit per second upload speed, target speeds seen by the CRTC as being fast enough to allow sufficient use of the Internet for carrying out essential tasks. This is to be achieved by providing subsidies to ISPs to upgrade and expand networks into rural areas, and aims to supply almost 300,000 households with high speed internet connections by 2019.<sup>[6]</sup>

### Public access

Locations such as public libraries where a person can connect to the internet for free without the need of owning ICTs or paying for internet access are one way of reducing the gap between those who can participate online and those who can't.<sup>[30]</sup>

The city of Toronto is currently partnering with Google in an effort to provide portable Wi-Fi hotspots for Canadians who would not otherwise be able to afford online connectivity. These hotspots can be taken to a user's home for a period of six months and offer 10 gigabytes of usable data per month. They can currently be obtained from six Toronto Public Library locations across the city.<sup>[7]</sup>

## Basic service package

In 2016 the CRTC mandated television service providers to offer a basic TV package to customers for a maximum price of \$25, which can then be expanded upon by purchasing additional channels. The purpose of such a package is to make television service affordable for Canadians who otherwise might not be able to afford a package that includes various extra or undesired channels.<sup>[31]</sup> The same has been proposed to be done for broadband service by having the CRTC determine a sufficient service quality of fixed price that ISPs will be mandated to offer to customers. As low cost internet connectivity options in Canada have been disappearing in favour of mid to high level packages priced at an average of around \$50, it is believed that such regulation would contribute to the narrowing of the digital divide within Canada for those who lack sufficient access due to monetary reasons.<sup>[2]</sup>

## Improvement of digital literacy

The improvement of digital literacy among Canadians has the potential to shrink the divide which exists between citizens who make frequent use of ICTs and online resources, and those who don't. It is being recommended that Canada adapt a digital literacy strategy similar to those which already exist in countries such as the United States and Australia, ensuring that children are learning how to utilize technology efficiently and safely as early as kindergarten, and improving such digital skills throughout compulsory education until grade 12.<sup>[8]</sup> Due to education systems within Canada being controlled at the provincial level it is difficult for the Federal government to implement digital literacy guidelines for schools within the country to use, despite the fact that an improvement in digital literacy would benefit all of Canada, making the facilitation of such a strategy a Federal issue.<sup>[8]</sup>

ICT use is also becoming a key way to facilitate job training and educate people regarding skills required to operate in a world with a constantly evolving digital landscape. As all but 1% of business establishments in Canada are considered either small or medium-sized enterprises, increased digital literacy would ensure that such businesses have the tools and knowledge required to make good use of the internet, as well as have the ability to better serve customers and remain competitive in the global market.<sup>[8]</sup>

## See also

- Digital divide
- Digital divide in the United States

## External links

- Canadian Radio-television and Telecommunications Commission (<http://www.crtc.gc.ca/eng/home-accueil.htm>)

## References

1. Sciadas, George (2001). "The Digital Divide in Canada" (<http://publications.gc.ca/Collection/Statcan/56F0009X/56F0009XIE2002001.pdf>) (PDF). Statistics Canada. Retrieved 24 November 2016.
2. Rajabiun, Reza; Ellis, David; Middleton, Catherine (March 2016). Literature Review: Affordability of Communications Services (<http://www.ryerson.ca/~cmiddlet/ourresearch/lit-review-for-crtc-2016-affordability-rajabiun-ellis-middleton.pdf>) (PDF) (Report). Retrieved 14 November 2016.
3. CRTC (2015). "Communications Monitoring Report 2015: Canada's Communications System: An Overview for Citizens, Consumers, and Creators" (<http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2015/cmr2.htm>). *Government of Canada CRTC*. Retrieved 17 October 2016.
4. Haight, Michael; Quan-Haase, Anabel; Corbett, Bradley A (2014). Revisiting the digital divide in Canada: the impact of demographic factors on access to the internet, level of online activity, and social networking site usage ([https://www.researchgate.net/publication/263307792\\_Revisiting\\_the\\_digital\\_divide\\_in\\_Canada\\_The\\_impact\\_of\\_demographic\\_factors\\_on\\_access\\_to\\_the\\_internet\\_level\\_of\\_online\\_activity\\_and\\_social\\_networking\\_site\\_usage](https://www.researchgate.net/publication/263307792_Revisiting_the_digital_divide_in_Canada_The_impact_of_demographic_factors_on_access_to_the_internet_level_of_online_activity_and_social_networking_site_usage)) (Report). Information, Communication & Society. Retrieved 19 November 2016.
5. Canada's Public Policy Forum (June 2014). Northern connections: Broadband and Canada's digital divide: final report ([https://www.ppforum.ca/sites/default/files/BroadBand\\_Final\\_PPF\\_en.pdf](https://www.ppforum.ca/sites/default/files/BroadBand_Final_PPF_en.pdf)) (PDF) (Report). Ottawa, Ontario. Retrieved 17 October 2016.
6. Government of Canada (2016). "About Connecting Canadians" (<https://www.ic.gc.ca/eic/site/028.nsf/eng/50010.html#eligible>). *Digital Canada 150*. Retrieved October 17, 2016.
7. CBC News (14 June 2016). "Toronto public libraries, Google to offer free take-home WiFi" (<http://www.cbc.ca/news/canada/toronto/toronto-library-wifi-1.3634855>). Retrieved 20 November 2016.
8. Government of Canada (2010). "Digital Literacy in Canada: From Inclusion to Transformation" (<https://www.ic.gc.ca/eic/site/028.nsf/eng/00537.html>). *Digital Canada 150*. Retrieved 18 November 2016.
9. International Telecommunication Union (2015). "Fixed-broadband subscriptions" (<http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>). Retrieved 19 November 2016.
10. CRTC (9 April 2015). "Telecom Notice of Consultation CRTC 2015-134: Review of basic telecommunications services" (<http://www.crtc.gc.ca/eng/archive/2015/2015-134.htm>). *Government of Canada CRTC*. Retrieved 17 October 2016.
11. Government of Canada (26 November 2013). "Canadian Internet use survey, household access to the Internet at home, by household income quartile, Canada and provinces" (<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=3580167>). *Statistics Canada*. Retrieved 19 October 2016.
12. Acorn Canada (January 2015). Internet for All: Internet Use and Accessibility for Low-Income Canadians (<http://www.acorncanada.org/resource/internet-all>) (Report). Retrieved 17 October 2016.
13. Canadian Internet Registration Authority (2014). "The Canadian Internet" (<https://cira.ca/factbook/2014/the-canadian-internet.html>). Retrieved 17 October 2016.
14. Middleton, Catherine (2011). "Canada's Telecommunications Policy Environment" ([http://www.ryerson.ca/~cmiddlet/ourresearch/Middleton\\_TJA\\_2011.pdf](http://www.ryerson.ca/~cmiddlet/ourresearch/Middleton_TJA_2011.pdf)) (PDF). *Telecommunications Journal of Australia*. Retrieved 21 November 2016.
15. CRTC (22 July 2015). "Telecom Regulatory Policy CRTC 2015-326: Review of wholesale wireline services and associated policies" (<http://www.crtc.gc.ca/eng/archive/2015/2015-326.htm>). Government of Canada. Retrieved 23 November 2016.
16. Wall Communications Inc . (30 March 2015). Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions ([http://www.wallcom.ca/pdfs/price-comp-report\\_2015edition\\_final\\_CRTC.pdf](http://www.wallcom.ca/pdfs/price-comp-report_2015edition_final_CRTC.pdf)) (PDF) (Report). Retrieved 20 November 2016.
17. Obar, Jonathan A.; Taylor, Gregory; Antoine, Derek; Bivens, Rena; Caidi, Nadia; Johnson, Arndis; Middleton, Catherine; Skinner, David (30 November 2013). Mapping Digital Media: Canada (<https://www.opensocietyfoundations.org/sites/default/files/mapping-digital-media-canada-20140318.pdf>) (PDF) (Report). Open Society Foundations. Retrieved 19 November 2016.
18. CRTC (5 May 2015). "Telecom Regulatory Policy CRTC 2015-177: Regulatory framework for wholesale mobile wireless services" (<http://www.crtc.gc.ca/eng/archive/2015/2015-177.htm>). Government of Canada. Retrieved 23 November 2016.
19. Open Media Foundation (June 9, 2016). Canadian Data Caps Summary Report (<https://openmedia.org/sites/default/files/end-data-caps-canada-report.pdf>) (PDF) (Report).
20. Kehl Danielle, Philip; Lucey, Patrick (2015). Artificial Scarcity ([https://static.newamerica.org/attachments/3556-artificial-scarcity/DataCaps\\_Layout\\_Final.a7ef6b9029da4dd29324757e5710b903.pdf](https://static.newamerica.org/attachments/3556-artificial-scarcity/DataCaps_Layout_Final.a7ef6b9029da4dd29324757e5710b903.pdf)) (PDF). *New America* (Report). Open Technology Institute. Retrieved 17 October 2016.
21. Nowak, Peter (2 June 2015). "Beanfield serving Toronto condos a fibre broadband diet" (<http://alphabeatic.com>

- /beanfield-fibre-condos-toronto/). Alphabetic. Retrieved 21 November 2016.
22. Cybera (24 January 2014). The Future of Broadband Internet Access in Canada (<https://www.cybera.ca/assets/network/CyberaCRTC-Final-Response-Jan242014.pdf>) (PDF) (Report). Retrieved 20 November 2016.
  23. Hargittai, Eszter (April 2002). "Second-Level Digital Divide: Differences in People's Online Skills" (<http://firstmonday.org/article/view/942/864>). *First Monday*. **7** (4). Retrieved 16 December 2016.
  24. Media Smarts. "Digital Literacy Fundamentals" (<http://mediasmarts.ca/digital-media-literacy-fundamentals/digital-literacy-fundamentals>). Retrieved 19 November 2016.
  25. Lagacé, Martine; Charmarkeh, Houssein; Laplante, Joelle; Tanguay, Annick (November 2015). How Ageism Contributes to the Second-Level Digital Divide: The Case of Canadian Seniors ([https://www.researchgate.net/publication/283719507\\_How\\_Ageism\\_Contributes\\_to\\_the\\_Second-Level\\_Digital\\_Divide\\_The\\_Case\\_of\\_Canadian\\_Seniors](https://www.researchgate.net/publication/283719507_How_Ageism_Contributes_to_the_Second-Level_Digital_Divide_The_Case_of_Canadian_Seniors)) (Report). *Journal of Technologies and Human Usability*. Retrieved 17 November 2016.
  26. Howard, Philip; Laura, Busch; Sheets, Penelope (2010). Comparing Digital Divides: Internet Access and Social Inequality in Canada and the United States (<http://www.ryerson.ca/~cmiddlet/cc8987/readings/2192-5865-1-PB.pdf>) (PDF) (Report). University of Washington. Retrieved 17 October 2016.
  27. Government of Canada (26 April 2016). "Government of Canada Supports Broadband Internet Connection in Eight First Nations Communities in British Columbia" (<http://news.gc.ca/web/article-en.do?nid=1056869>). News Release. Retrieved 18 November 2016.
  28. Taylor, Jillian (28 July 2016). "Indigenous company to bring high-speed internet to all of Manitoba's First Nations communities" (<http://www.cbc.ca/news/canada/manitoba/manitoba-first-nations-technology-council-high-speed-internet-1.3699650>). CBC News. Retrieved 18 November 2016.
  29. Masse, Martin; Beaudry, Paul (4 May 2016). "Nearly every Canadian will soon have high-speed Internet, so why is the CRTC meddling?" (<http://business.financialpost.com/fp-comment/nearly-every-canadian-will-soon-have-high-speed-internet-so-why-is-the-crtc-meddling>). Financial Post. Retrieved 23 November 2016.
  30. Information Policy and Access Center. "Digital Literacy & Public Libraries" (<http://www.plinternetsurvey.org/analysis/public-libraries-and-digital-literacy>). *Public Libraries & the Internet*. Retrieved 23 November 2016.
  31. CRTC (21 November 2016). "You Have Choices. Demand Better." (<http://www.crtc.gc.ca/eng/television/program/alacarte.htm>). Government of Canada. Retrieved 24 November 2016.

Retrieved from "[https://en.wikipedia.org/w/index.php?title=Digital\\_divide\\_in\\_Canada&oldid=755429459](https://en.wikipedia.org/w/index.php?title=Digital_divide_in_Canada&oldid=755429459)"

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## Connectivity gap

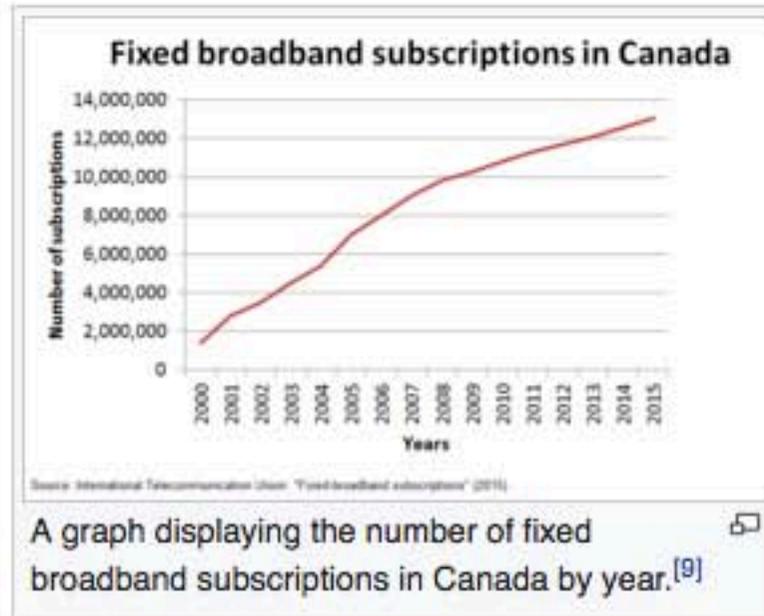
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## Income and price

[Statistics Canada](#) states that income disparity plays a role in determining whether or not Canadians are connected online. Findings show that 97.7% of households that reside within the highest income [quartile](#) have high speed internet access, while only 58% of households that reside within the lowest income quartile possess access to the internet at home.<sup>[11]</sup>

A report conducted by Acorn Canada of low and moderate income Canadian families found that 83.5% of respondents believe the monthly cost of high speed internet service in Canada is very expensive.<sup>[12]</sup> The [Canadian Internet Registration Authority](#) reports that in 2015 Canadians paid an average of \$38.91 per month for high speed internet service, or an average of \$203.04 monthly for all communication services combined.<sup>[13]</sup> Acorn Canada is currently calling on the CRTC to mandate ISPs to provide a \$10 per month high speed internet package in an effort to ensure that at least some form of online access is affordable for all Canadians.<sup>[12]</sup>



## Location

While [urban](#) areas within Canada have a 100% high speed internet availability rate, [rural](#) areas have a lower level of access to high speed internet service with a rate of only 87%.<sup>[3]</sup> Many locations which do not have access to high speed broadband networks reside within the [Northwest Territories](#), [Yukon](#), and [Iqaluit](#) where various [geographical features](#) create difficulties relating to the development of broadband infrastructure.<sup>[4]</sup> These development difficulties are compounded by the fact that there exists little incentive for ISPs to build broadband infrastructure in the north due to the high cost and low return of developing in areas where towns and people are greatly dispersed.<sup>[5]</sup>

Differences can also be found in the quality of networks that Canadians who live in different areas of the country have access to. Those living in urban areas, particularly residents of newly constructed or renovated condominiums, are more likely to have access to [fiber to the premises](#) (FTTP) internet connectivity than those in older neighbourhoods, who commonly still connect to the internet through infrastructure that is at least partially comprised of legacy [telephone](#) or [cable](#) technologies.<sup>[21]</sup> As of 2015 Canada ranks 24th out of all countries in terms of FTTP penetration at a level of less than 5%. This lags behind other developed countries such as [Japan](#) and [South Korea](#) which have national FTTP penetration levels of nearly 70%.<sup>[22]</sup>



A map highlighting Canada's ten [provinces](#) and three [territories](#) in white.

## Demographics and the second level digital divide

Main article: [Second-Level Digital Divide](#)

Aside from monetary factors, demographic differences within Canada have also resulted in disparity regarding online connectivity and ICT use. Variables such as education and age can play a role in what is considered to be the second level digital divide, where even though a person may have access to high speed internet and the ICTs required to connect to it, their ability to make effective use of them is at a disadvantage compared to more educated or [digitally literate](#) groups.<sup>[23]</sup> The digital divide in Canada is no longer just a question of those who have access to ICTs and those who don't, but rather bridging gaps pertaining to the second level digital divide is becoming increasingly important as resources including health care access, government documents, and businesses transition to an online space, meaning that digital literacy and technological understanding will be a key factor in the future for ensuring access to such things.<sup>[24]</sup>

## See also

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- [Digital divide](#)
- [Digital divide in the United States](#)

## External links

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- [Canadian Radio-television and Telecommunications Commission](#)↗

## References

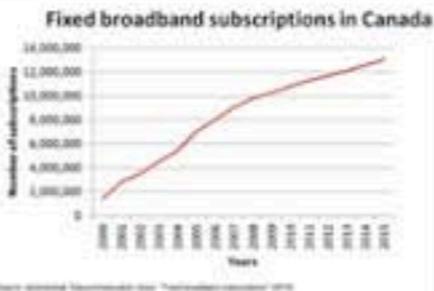
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- ↑ Sciadas, George (2001). "The Digital Divide in Canada"  (PDF). Statistics Canada. Retrieved 24 November 2016.
- ↑  <sup>*abcde*</sup> Rajabiun, Reza; Ellis, David; Middleton, Catherine (March 2016). *Literature Review: Affordability of Communications Services*  (PDF) (Report). Retrieved 14 November 2016.
- ↑  <sup>*ab*</sup> CRTC (2015). "Communications Monitoring Report 2015: Canada's Communications System: An Overview for Citizens, Consumers, and Creators" ↗. *Government of Canada CRTC*. Retrieved 17 October 2016.
- ↑  <sup>*abcdefghi*</sup> Haight, Michael; Quan-Haase, Anabel; Corbett, Bradley A (2014). *Revisiting the digital divide in Canada: the impact of demographic factors on access to the internet, level of online activity, and social networking site usage* ↗ (Report). Information, Communication & Society. Retrieved 19 November 2016.
- ↑  <sup>*ab*</sup> Canada's Public Policy Forum (June 2014). *Northern connections: Broadband and Canada's digital divide: final report*  (PDF) (Report). Ottawa, Ontario. Retrieved 17 October 2016.
- ↑  <sup>*ab*</sup> Government of Canada (2016). "About Connecting Canadians" ↗. *Digital Canada 150*. Retrieved October 17, 2016.
- ↑  <sup>*ab*</sup> CBC News (14 June 2016). "Toronto public libraries, Google to offer free take-home WiFi" ↗. Retrieved 20 November 2016.
- ↑  <sup>*abcde*</sup> Government of Canada (2010). "Digital Literacy in Canada: From Inclusion to Transformation" ↗. *Digital Canada 150*. Retrieved 18 November 2016.
- ↑  <sup>*ab*</sup> International Telecommunication Union (2015). "Fixed-broadband subscriptions" ↗. Retrieved 19 November 2016.
- ↑  <sup>*ab*</sup> CRTC (9 April 2015). "Telecom Notice of Consultation CRTC 2015-134: Review of basic telecommunications services" ↗. *Government of Canada CRTC*. Retrieved 17 October 2016.
- ↑ Government of Canada (26 November 2013). "[Canadian Internet use survey, household access to the Internet at home, by household income quartile, Canada and provinces](#)" ↗. *Statistics Canada*. Retrieved 19 October 2016.
- ↑  <sup>*ab*</sup> Acorn Canada (January 2015). *Internet for All: Internet Use and Accessibility for Low-Income Canadians* ↗ (Report). Retrieved 17 October 2016.



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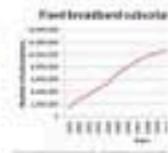


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