

Canadian Data Caps Summary Report

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Introduction

In this report, we investigate the state of data caps and overage charges in Canada for wireline and wireless Internet services. We present the size and frequency of data caps across major providers based on the retail pricing available on their websites as of June 3, 2016, and determine how much customers can expect to pay for exceeding their usage limits.

In addition, we examine what factors play a part in the adoption of restrictive data cap policies; this includes companies' use of data caps and overage fees as pricing tools, as well as their role in propping up provider-owned services — such as cable TV — by making third-party streaming applications less attractive to customers.

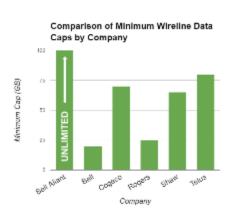
We also attest to the lack of transparency offered by major providers regarding their available packages, data caps, and overage fees, and how this prevents customers from making informed decisions about their service. In light of the CRTC's recently-launched consultation¹ on differential pricing practices related to Internet data plans, this report ultimately seeks to inform readers of the punitive nature of data cap policy and associated overage charges in Canada.

Residential Internet Data Caps

Telecom companies are keeping Canadians on a short leash when it comes to data caps. Some of the smallest data packages in Canada provide subscribers with a mere 20GB of data for the entire month, such as Bell's Fibe 5 package in Quebec. In comparison, the minimum amount of data capped by major providers in the United States is 150GB² — a difference of nearly eight times. Figure 1 below compares the smallest data caps found across Canadian providers, and the fees associated with exceeding monthly usage.

Figure 1: Minimum Data Cap/Overage Comparison - Wireline Internet

Company	Package	Data Cap	Region
Bell Aliant	All Packages	Unlimited	NL/NB/PEI/NS
Bell Canada	Fibe 5	20GB	QC
Cogeco	Express 15	70GB	QC
Rogers	Internet 5	25GB	ON/NL/NB
Shaw	Internet 5	65GB	AB/BC/MB/SK/Western ON
Telus	Internet 1	80GB	AB/BC



¹ Telecom Notice of Consultation CRTC 2016-192. Source: http://www.crtc.gc.ca/eng/archive/2016/2016-192.htm

² Danielle Kehl and Patrick Lucey, "Artificial Scarcity: How Data Caps Harm Consumers and Innovation," Open Technology Institute, June 2015,

https://static.newamerica.org/attachments/3556-artificial-scarcity/DataCaps_Layout_Final.a7ef6b9029da4dd 29324757e5710b903.pdf

Company	Overage Policy
Bell Aliant	No fees, as there are no caps.
Bell	Overage fee is \$3.00/GB to \$4.00/GB, capped at \$100 per month.
Cogeco	For speeds >40 Mbps, overage fee is \$1/GB without a monthly billing limit; For speeds <40 Mbps the overage fee is \$1.50/GB with a \$50 monthly limit. Unlimited data add-on has no overage fees.
Rogers	Overage fee is \$1.50/GB, capped at \$100/month.
Shaw	No overage fees; data caps enforced by suspension of service.
Telus	Overage data sold in "buckets;" First 50GB bucket is \$5, Subsequent 50GB buckets are \$10, up to a monthly maximum of \$45.

For perspective, watching a program on Netflix will use between 1 and 3GB of data per hour of streaming.³ Therefore, in one month it would take only 45 minutes of standard-definition streaming per day for a customer to exceed a 20GB data cap. Say goodbye to binge watching your favourite shows; upon exceeding your limit, just four HD episodes of The Walking Dead (at approximately 3GB/hour) would blow past 10GB of data in overage. Depending on provider, that could add upwards of \$40 to your monthly bill.

Customers should anticipate paying more in overage if their service contains more "toll booths," as there is simply a greater chance that they will exceed their data cap. The number of capped Internet packages in Canada is significantly greater than in the United States. Canadian provider Bell, for example, breaks up their service into more distinct tiers of data than American providers Cox and CenturyLink combined.⁴ Figure 2 shows the data caps in each basic package offered by Canadian Internet service providers.

Figure 2: Canadian Data Caps - Wireline Internet

Company	Data Cap
Bell Aliant	NB, NS, NL, PEI: Unlimited
Bell	ON: 50GB, 200GB, 20GB, 125GB, 75GB, 250GB, 740GB, Unlimited
Deli	QC: 20GB, 60GB, 110GB, 120GB, 150GB, 250GB, 400GB, Unlimited
Cogeco	ON: 95GB, 175GB, 275GB, 425GB, 525GB, Unlimited
	QC: 70GB, 160GB, 260GB, 400GB

³ "How can I control how much data Netflix uses?" Netflix Help Center, 2015, https://help.netflix.com/en/node/87

⁴ "Bell Bundles," Bell, 2016, http://www.bell.ca/Bell-bundles

Rogers	ON: 25GB, 125GB, 200GB, Unlimited
	NB, NL: 25GB, 125GB, Unlimited
Shaw	AB, BC: 65GB, 150GB, 300GB, 450GB, 800GB
Telus	AB, BC: 80GB, 150GB, 200GB, 300GB, 450GB, 550GB, Unlimited

Wireless

On wireless, we examined Canada's "Big Three" wireless providers — Bell, Rogers, and Telus — across four distinct pricing zones. These zones are divided into Manitoba, Saskatchewan, Quebec, and Alberta/British Columbia/Ontario/Atlantic Canada. The pricing, number of caps, and the amount of data allotted are governed by competition from a fourth carrier in provincial wireless markets. Manitoba, Saskatchewan, and Quebec each see distinct offerings from the rest of Canada due to regional fourth competitors — MTS, SaskTel, and Videotron, respectively. Both MTS and Sasktel offer affordable unlimited data plans to their customers. Of the Big Three incumbent national carriers that offer mobile data services nationwide (Figure 3), not a single one has an unlimited data option: all Big Three packages come with data caps.

Figure 3: Data Caps Comparison - Wireless

Company	Region	Data Cap
Bell	AB, ON, BC, Maritimes	500MB, 1GB, 2.5GB, 5GB, 7GB, 10GB, 15GB
	QC	4GB, 6GB, 10GB, 14GB
	MB	2GB, 6GB, 10GB, 15GB
	SK	1GB, 5GB, 10GB, 15GB
Rogers	AB, ON, BC, Maritimes	1GB, 2.5GB, 5GB, 7GB, 10GB, 15GB, 30GB, 60GB
	QC	4GB, 6GB, 10GB, 14GB
	MB	1GB, 2.5GB, 6GB, 10GB, 15GB
	SK	1GB, 5GB, 10GB, 15GB
Telus	AB, ON, BC, Maritimes	1GB, 2.5GB, 4GB, 7GB, 10GB, 20GB, 40GB
	QC	4GB, 6GB, 10GB, 14GB
	MB	1GB, 5GB
	SK	2GB, 4GB, 8GB, 12GB

Canadians in some areas are being offered completely different services than their counterparts in other provinces. For some plans, monthly rates in the Ontario region can be more than double the price of an identical plan in Manitoba. For example, compare a 15GB plan across multiple regions and carriers in Figure 4.

Figure 4: Data Charges Comparison - Wireless

	AI N	B-ON-B faritime	C- s		SK			МВ			QC	
	Bell	ROGERS	TELUS.	Bell	ROGERS	TELUS.	Bell	ROGERS	TELUS'	Bell	ROGERS	TELUS.
<1GB	\$70											
1 GB	\$75	\$75	\$65	\$40	\$40			\$45	\$55			
2 GB						\$60	\$45					
2.5 GB	\$85	\$85	\$75					\$50				
4 GB			\$85			\$65				\$60	\$60	\$60
5 GB	\$100	\$100		\$50	\$50				\$65			
6 GB							\$55	\$60		\$70	\$70	\$70
7 GB	\$115	\$115	\$105									
8 GB						\$75						
10 GB	\$130	\$130	\$125	\$60	\$60		\$65	\$70		\$80	\$80	\$80
12 GB						\$85						
14 GB										\$90	\$90	\$90
15 GB	\$170	\$150		\$70	\$70		\$75	\$80				
20 GB			\$190									
30 GB		\$220										
40 GB			\$290									
60 GB		\$370										

Exceeding allotted data for the month can have very expensive consequences for users. Mobile data overage fees are charged by the megabyte, and can add up quickly if the user plans on streaming video or music. For example, in some cases a work day's worth of Spotify streaming on "extreme" quality could use almost 1GB of data.⁵ An additional gigabyte of data in wireless overage fees could end up costing the customer an extra \$50 on their monthly bill, at which point a customer's data usage must be capped according to the CRTC's Wireless Code, and the customer's permission sought for further data charges to be incurred.⁶ Wireless overage fees are compared across national carriers in Figure 5.

Figure 5: Overage Charges - Wireless

Company	Overage Policy
Bell	Overage fee is \$0.06/MB.
Rogers	\$5/100MB; Data "usage exceeding plan allotment charged in increments rounded up to next MB or GB as applicable."
Telus	\$5/100MB up to 1500MB (data will be rounded up to the nearest 100MB), then \$0.05/MB after the first 1500MB.

Conclusion

Canadians have been led to believe that data caps are a necessary part of Internet services. However, comparisons with other countries around the world prove that this is not the case. Upon closer analysis, it becomes clear that data caps are nothing more than pricing tools disguised as network resource management. The arguments for data caps as a traffic management practice simply don't stand up to scrutiny.

For example, when bundled with TV services, Bell's monthly Internet data caps vanish.¹⁰ In effect, ISPs use the threat of overage fees and data caps to herd customers away from third-party streaming, and toward traditional television packages. This suppresses innovation;

⁵ "Spotify Data Usage," Vodafone Help and Support, 2015, http://vodafone.intelliresponse.com/index.jsp?requestType=NormalRequest&source=100&id=1537&question=Spotify+data+usage

⁶ Section E. Bill Management, "The Wireless Code, Simplified," CRTC, November 14 2014, http://www.crtc.gc.ca/eng/info_sht/t14.htm

⁷ Dwayne Winseck, "Rethinking Universal Service for the 21st Century and an All-IP World," Canadian Media Concentration Research Project, August 14 2015.

⁸ Kehl and Lucey, op. cit.

⁹ "Intervention Submitted to the CRTC, Re: Telecom Notice of Consultation 2015-134, Review of Basic Telecommunications Services, File number: 8663-C12-201503186, Comments of OpenMedia, February 1 2016,

https://openmedia.org/sites/default/files/openmedia-crtc2015-134-interventiontwo-final_0.pdf

¹⁰ "Bell Bundles," Bell, 2016, http://www.bell.ca/Bell-bundles

new services are less likely to be adopted by consumers when they feel both bound to existing services and intimidated by "excessive use" charges.

This tactic is especially troubling when we take into consideration that the basic concept behind capping individual subscribers has been disproven. The common assumption is that "bandwidth hogs" must have their usage capped to avoid network congestion. In reality, that strain on resources is instead caused by increased traffic loads during peak periods.¹¹ Furthermore, costs incurred by ISPs for individual user bandwidth usage are extremely small, and are in no way accurately represented by current overage fees.¹²

Customers are being told their regular online activities are excessive based on fallacious reasoning. Unclear motives for capping usage has led to many misconceptions regarding data, causing subscribers to remain uncertain about how their time online translates into gigabytes. Companies perpetuate this lack of understanding. We found provider websites difficult to navigate and lacking in clear references to overage, let alone comprehensive educational resources on understanding data. Some providers attempt to explain the issue, but the results are often misleading.¹³

Because of this confusion, subscribers are hesitant to partake in activities that they believe will push them over their data limit. They may feel barred from engaging with the online community, and could be less inclined to download software updates that keep users secure. Data caps are telecom's way of discouraging people from using the Internet. They have no place in a world where affordable access to broadband is a necessity.

¹¹ Winseck. op. cit.

¹² Nate Anderson, "Should broadband data hogs pay more? IPS economics say no", ARS Technica, May 30 2016

http://arstechnica.com/tech-policy/2016/05/should-broadband-data-hogs-pay-more-isp-economics-say-no/

¹³ Excerpt from Dwayne Winseck's 2015 report regarding Bell's attempt to clarify data usage for customers: "It is difficult to see how this kind of information could be helpful to a customer with no technical background, especially since several of these claims are erroneous or misleading. Bell's claim that 125 GB can accommodate 3,125,000 pages, for example, means that each megabyte of the 125 GB cap would have to accommodate 25 Web pages (125 GB is 125,000 MB, and 3,125,000/125,000 = 25). According to the latest data from the HTTP Archive, however, this figure is off by a factor of 50 when contrasted with actual HTTP traffic. The Archive record shows that as of July 15, 2015, the average transfer size of a Web page from the top 1,000 sites was almost 2 MB (1961 KB) – meaning that a cap of 125 GB would accommodate 62,500 Web pages rather than 3,125,000.102 Yet even if Bell was using accurate numbers, it is doubtful that its guidelines would be of much use. No mainstream user counts Web pages as they come and go, which is to say nothing of the awkward fact that people download different mixes of file types on different protocol platforms, so that any target for Web pages would have to accommodate any or all of the other kinds of data Bell mentions, such as movies and pictures."

Appendix A



Wireline Internet Data Caps

Company	Data Cap (GB)	Overage
Bell	20 GB 50 GB 75 GB 125 GB 200 GB 250 GB 750 GB Unlimited	\$3.00/GB to \$4.00/GB up to a monthly max of \$100
Bell Aliant	Unlimited	No overages charges because there are no caps.
COGECO	95 GB** 175 GB** 275 GB* 425 GB* 525 GB* Unlimited***	* overage fee is \$1.00/GB (without monthly billing limit) ** overage fee is \$1.50/GB (\$50 monthly limit) ** no overage fee but must not exceed "reasonable limit". Unlimited data can be added to any plan for a monthly fee.
O ROGERS	25 GB 125 GB 200 GB Unlimited	\$1.50/GB, cap you at \$100/month in overage fees; Overage less than 0.5 GB rounded down. Overage greater than or equal to 0.5GB rounded up to the next GB.
Shaw)	65 GB 150 GB 300 GB 450 GB 800 GB	No overage charges; No unlimited data option, but uses suspension of service to enforce rather than overage fees.
ÆTELUS°	80 GB 150 GB 200 GB 300 GB 450 GB 550 GB Unlimited	Overage data "buckets"; First 50GB bucket: \$5, Subsequent 50GB buckets: \$10, Monthly maximum: \$45, decreased from \$75. All data caps were upped by 50GB in April 2016.

Data shown is for Ontario, except for Shaw and Telus, who don't operate out east. Data for Shaw and Telus' is based on Alberta and B.C.

Appendix B



Wireless Data Caps*

	AB-	AB-ON-BC-Maritimes	imes		SK			MΒ		6	၁ဗ	
	Bell	Onogens	STEETUS.	Bell	OROGERS	ETELUS.	Bell	Оносеня	ELLUS.	Bell	O ROGERS	SETTER.
1GB	\$70											
1 GB	\$75	\$75	\$65	\$40	\$40			\$45	\$55			
GB						\$60	\$45					
GB S	\$85	\$85	\$75					\$50				
GB			\$85			\$65				\$60	\$60	\$60
GB S	\$100	\$100		\$50	\$50				\$65			
GB :							\$55	\$60		\$70	\$70	\$70
'GB	\$115	\$115	\$105									
3 GB						\$75						
GB (\$130	\$130	\$125	\$60	\$60		\$65	\$70		\$80	\$80	\$80
GB G						\$85						
GB t										06\$	06\$	06\$
GB S	\$170	\$150		\$70	\$70		\$75	\$80				
GB (\$190									
GB		\$220										
GB (\$290									
GB (\$370										

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*Each plan compared at minimum starting price, which includes Unlimited Local Calling (Unlimited province-wide calling in Quebec) and Bring Your Own Device/No Tab option.
Telus Share Plans compared at 300 local daytime minutes. "*Manitoba compared at Telus Mobility Share Plan terms as YourChoice is unavailable in that region.