



13 June 2018

Claude Doucet
Secretary General
CRTC
Ottawa, ON K1A 0N2

Dear Secretary General,

Re: Lower-cost data-only plans for mobile wireless: Call for comments, Telecom Notice of Consultation CRTC 2018-98 (Ottawa, 22 March 2018), <https://crtc.gc.ca/eng/archive/2018/2018-98.htm>, and Telecom Notice of Consultation CRTC 2018-98-1 (Ottawa, 10 May 2018), <https://crtc.gc.ca/eng/archive/2018/2018-98-1.htm>

The Forum for Research and Policy in Communications (FRPC) is a non-profit and non-partisan organization established to undertake research and policy analysis about communications, including telecommunications. As required by section 22(2)(g) of the *Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure* (SOR/2010-277), the Forum requests the opportunity - should the CRTC decide to hold a public hearing in the above-noted proceeding – to appear at the hearing, to address the submissions of the applicant and of other parties and to respond to questions from the CRTC.

The Forum supports a strong Canadian communications system that serves the public interest. Our concerns about procedural fairness notwithstanding, we welcome the opportunity to submit comments on TNoC 2018-98, and look forward to reviewing other parties' submissions.

Our comments are attached.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely yours,

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**Unjust enrichment:
The ‘competitive’ wireless market’s failure
to offer reasonably priced data
requires CRTC intervention**

**Comments by the
Forum for Research and Policy in Communications**

13 June 2018

Lower-cost data-only plans for mobile wireless: Call for comments,
Telecom Notice of Consultation CRTC 2018-98 (Ottawa, 22 March 2018),
<https://crtc.gc.ca/eng/archive/2018/2018-98.htm>,
and Telecom Notice of Consultation CRTC 2018-98-1 (Ottawa, 10 May 2018),
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Contents

Executive Summary	2
I. Introduction	1
II. Contextual backdrop giving rise to need for low-cost data-only plans	1
A Current proceeding arose out of specific context that demands rigorous and robust criteria and enforcement concerning lower-cost data-only plans	1
A Mobile wireless telecommunications in Canada is not competitive	4
B Mobile wireless data in Canada is unaffordable	14
III. Evidence establishes that carriers will do minimum required and no more: the CRTC must act	18
A Carriers' proposals are not serious efforts to meet Canadians' needs, the CRTC's directions and the Governor-in-Council's Order	18
B History and precedent explain why the CRTC must protect consumers in determining specifications of data-only plans	21
IV. CRTC must establish data cap floors and price ceilings	23
A People throughout Canada rely increasingly on mobile data	23
B Marginalized or vulnerable populations rely heavily on mobile data	25
C CRTC should require carriers to offer plans of \$7/1gb and \$10/2gb	26
V. CRTC must be proactive in closing loopholes and ensuring full compliance with decision	27
A Lessons from implementing the <i>Wireless Code</i>	27
B Lessons from implementing <i>Let's Talk TV</i> basic packages and pick-and-pay	28
V. Conclusion and recommendations	29

Appendix

Canadians' views on mobile data: results from a national, bilingual survey of Communications in June 2018

Figures

Figure 1	How many 4G gigabytes can be bought for 30 Euros	6
Figure 2	Fully allocated gigabyte prices in 4G smartphone plans in the EU and OECD	7
Figure 3:	OECD Broadband statistics [http://oe.cd/broadband]	7
Figure 4:	Mobile data usage per mobile broadband subscription, 2016	8
Figure 5	Effective revenue per Megabyte versus usage	9
Figure 6	Total mobile service revenue per SIM, with mobile data usage	10
Figure 7:	Chart from Forbes, citing Statista	15
Figure 8	@CRTCeng tweet regarding Internet affordability	17
Figure 9	Final Wholesale Wireless Rates from Telecom Order CRTC 2018-99	19
Figure 10	Real median income by age group, 1976-2016 (2016 dollars)	24
Figure 11	Fully allocated gigabyte price of 4G LTE smartphone plans	27

Tables

Table 1	Pricing for Data Component of TELUS Mobile Wireless Phone Plans	11
Table 2	Pricing for Data Component of Bell Mobile Wireless Phone Plans	12
Table 3	National Carriers' Proposed Data-Only Plans	18
Table 4	Prepaid Data Add-on versus Proposed Data-Only Plans	20
Table 5	Regional Carriers and New Entrant Data Plans	21
Table 6	Number of people whose income has decreased since 2013, by age group	24

Executive Summary

- ES 1** The Forum for Research and Policy in Communications (“the Forum”) commends the Commission on its present efforts to introduce affordable mobile wireless data plans into the Canadian telecommunications market. This has been a longstanding problem that cries out for remedy, particularly now that mandated access for mobile virtual network operators (MVNOs) has been ruled out, as well as new models such as the WiFi-First MVNO. The Commission must take into account this historical context and the fact that the Canadian mobile wireless market continues to lack meaningful competition and demand unreasonably high prices from its subscribers.
- ES 2** The records of multiple related proceedings leading up to this one reflects a significant body of evidence documenting the lack of competition in Canadian mobile wireless services. See, for example, the proceedings leading to:
- *Reconsideration of Telecom Decision 2017-56 regarding final terms and conditions for wholesale mobile wireless roaming service* (Telecom Decision CRTC 2018-97) [*“Reconsideration of TD 2017-56”*];
 - *Ice Wireless Inc. – Application regarding roaming on Rogers Communications Canada Inc.’s network by customers of Ice Wireless Inc. and Sugar Mobile Inc.* (Telecom Decision CRTC 2017-57) [*“Sugar Mobile”*];
 - *The Canadian Network Operators Consortium Inc. – Application to review and vary Telecom Regulatory Policy 2015-177* (Telecom Decision 2016-60) [*“CNOC Part 1 to Review and Vary”*]; and
 - *Regulatory framework for wholesale mobile wireless services* (Telecom Regulatory Policy 2015-177) [*“Wholesale Wireless Framework”*]
- (collectively, “the Mobile Wireless Decisions”).
- ES 3** The Forum notes, in particular, to the submissions of individual interveners, independent academics and consumer advocacy groups on those records. International comparisons put Canada near last place year after year, in terms of mobile wireless penetration, price, and usage. Given research that price drives adoption, high prices are likely suppressing demand for data throughout Canada. A national, bilingual survey conducted in June 2018 on behalf of the Forum found that while more than three-quarters (78.4%) of Canadians use their mobile phones to access the Internet several times a day or more, more than half (53.2%) said they have had to pay additional amounts because they used more data than was included in their monthly plans: well over half (60.9%) said they had limited their data usage one or more times in the previous year, because of worries they might incur data overage fees.
- ES 4** Lack of competition has led to a pressing affordability problem for mobile wireless services across Canada. Since the CRTC began considering whether to moderate the price of mobile wireless service, income (in real terms) has decreased for millions of people. The Public Interest Advocacy Centre (PIAC) has documented the sacrifices made by low-income individuals, including essentials such as medicine, rent and groceries, to pay their communications bills. The Wall report that Bell cites was discredited on the record of the proceeding leading to TD CRTC 2018-97 (*Reconsideration of TD 2017-56*). Importantly, it overlooked the notion that “affordability” does not simply mean low prices, but what one receives at those prices. Affordability also involves an element of choice and control over one’s household budget, and that should also inform the Commission’s determinations in this proceeding. The Forum’s June 2018 survey found that two out of three (68.6%) Canadians did not think they received good value for the money they paid for their mobile phone plans.

- ES 5** The carriers' proposals in this proceeding have left the CRTC with no option but to regulate in the public interest. Parliament foresaw the possibility that Canadians' needs would not be met by the telecommunications system, and provided the CRTC with the powers and tools needed to ensure that wireless data plans meaningfully meet subscribers' needs and are not implemented in a way that undermines the purpose of this proceeding and the federal government's focus on affordability. The plans carriers have proposed pale in comparison to already available in-market offerings among the carriers themselves and competitors. They do not address any gap at all. History and precedent also suggest that carriers will go no further than the CRTC absolutely requires them to, which places a greater onus on the CRTC to not be timid in its determinations resulting from this proceeding.
- ES 6** Not only are people throughout Canada increasingly relying on higher volumes of mobile data every year, but more vulnerable or marginalized communities are overrepresented among those who rely exclusively on mobile wireless services to remain connected, such as low-income households, new immigrants, and those seeking employment. The Forum's June 2018 survey found that many (84.8%) people in the North (Northwest Territories, Yukon and Nunavut) did not think their mobile phone plans provide them with good value for money. Many Deaf, Deaf-blind and people from accessibility groups also rely on higher amounts of data to be able to communicate through their devices at a functionally equivalent level to other wireless users.
- ES 7** Given Canadians' reliance on mobile data and after analysis of the prices paid for different levels of data around the world, as well as in Saskatchewan, Manitoba, and Quebec, the Forum recommends that mobile phone plans include **1 gigabyte of data for \$7 per month, and 2 gigabytes of data for \$10 per month (on LTE).**
- ES 8** Finally, the Forum urges the CRTC to be proactive in closing as many loopholes and potential opportunities for non-compliance as possible, in issuing its decision. This is based on observing developments throughout the implementation of the *Wireless Code* and basic TV packages, as well as the subsequent proceedings required to review and update the initial policies. The Forum respectfully recommends that the CRTC be as specific, clear, and unequivocal as possible in detailing precisely what is expected or required of the carriers and when, as well as what practices are prohibited. This includes seemingly obvious requirements or prohibitions to remain in accordance with the spirit as well as letter of regulation to increase affordability in mobile wireless communications services. Examples of specific provisions the Commission should set out are advertising the new plans to consumers, even if they do not ask, and not adding fees that drive up the basic cost of each plan.
- ES 9** The Forum asks to appear at any public hearing scheduled with respect to this proceeding

I. Introduction

- 1 The Forum for Research and Policy in Communications (FRPC, “the Forum”) is pleased to provide its comments to the Commission in this current proceeding. The high prices of mobile wireless services in Canada have burdened subscribers for many years, and their remedy requires action by the Commission.
- 2 Following this introduction, Part II describes the contextual backdrop against which this proceeding is considering the lower-cost data-only plans, in particular the multi-year and multi-proceeding battle over the same issue of mobile wireless affordability in Canada. This background provides the historical context that inform the CRTC’s determinations around the lower-cost data-only plan, as the only available avenue remaining (given foreclosure of all others) to cut to the heart of the issue: the lack of genuine competition in Canada’s mobile wireless services market.
- 3 Part III explains why the carriers’ proposed plans present inadequate efforts to address the Commission’s and federal government’s concerns, compared to their own in-market and competitors’ existing mobile wireless, tablet, and Internet hub data plans.
- 4 In Part IV, the Forum makes a case that given growing reliance on increasing volumes of data across Canada and globally, and given the overrepresentation of more vulnerable or marginalized communities among mobile wireless-only users, the Commission should recommend that carriers offer plans of **1 gigabyte (GB) for \$7** and **2 GB for \$10**.
- 5 Part V looks to lessons than can be learned from the implementation of the *Wireless Code* and the *Let’s Talk TV* basic TV plans. These proceedings and their subsequent developments strongly suggest that the Commission must issue explicit and specific, even seemingly obvious, directions and prohibitions around the rollout of the lower-cost data-only plans. This is required to prevent potential loopholes and noncompliance that would delay consumers’ ability to benefit from the low-cost data-only plans as intended.
- 6 Finally, results from a national, bilingual and interactive telephone survey conducted on behalf of the Forum in June 2018 are appended to this submission.

II. Contextual backdrop giving rise to need for low-cost data-only plans

A Current proceeding arose out of specific context that demands rigorous and robust criteria and enforcement concerning lower-cost data-only plans

- 7 Telecommunications users and their advocates throughout Canada have been fighting tooth and nail for more affordable mobile wireless services for at least half a decade, dating back at latest to the proceeding that led to Telecom Regulatory Policy CRTC 2015-177, *Regulatory framework for wholesale mobile wireless services*.¹ Nearly every related decision and new development in the

¹ The CRTC issued *Wholesale mobile wireless roaming in Canada – Unjust discrimination/undue preference*, Telecom Notice of Consultation 2013-685 (Ottawa, 12 December 2013), <https://crtc.gc.ca/eng/archive/2013/2013-685.htm>, to consider whether or not, as a question of fact, there was

intervening time has seen the Canadian mobile wireless telecommunications market become more concentrated and more expensive, despite the Commission's constant reassurances and increasingly inexcusable optimism in every successive decision. The result is that (as the Forum's June 2018 survey found) although 78.4% of Canadians use their mobile phones several times a day or more, more than two-thirds (68.6%) thought they did not receive good value for the money they pay for their mobile phone plans.

- 8 Despite pleas from low-income consumers, subscribers, disability advocacy groups, public interest advocacy organizations, academics, and even the federal government, the Commission has nonetheless, in decision after decision, continued to place its trust—and forced the public to do the same, unwillingly—in the market. This has meant trusting mostly in six companies specifically—Bell, TELUS, Rogers, Videotron, Eastlink, and Freedom—all of which are private entities with comparatively few legal obligations to the public, and three of which collectively have approximately 90% of the market share locked down, in both revenues and subscribers.
- 9 First, in TRP CRTC 2015-177, the Commission declined to mandate wholesale access for mobile virtual network operators (MVNOs), to the networks of mobile network operators (MNOs) such as the three national carriers, despite finding the service met the essentiality test on all three elements: required input, substantial impact on downstream retail, and lack of duplicability. Its rationale was concern for the regional new entrants' investments, combined with a belief—since proven wrong—that its other determinations in TRP CRTC 2015-177 would “reduce certain barriers faced by MVNOs” and “should also encourage the emergence of a competitive market for wholesale MVNO access.”² This has not happened.
- 10 Second, in Telecom Decision CRTC 2016-60, *The Canadian Network Operators Consortium Inc. – Application to review and vary Telecom Regulatory Policy 2015-177*, the Commission again declined to facilitate the emergence of MVNOs and thus affordable mobile wireless services in Canada. Its rationale: continued concern for the new entrants' investments, as well as the expectation that “its determinations regarding wholesale roaming services would allow smaller wireless carriers such as the new entrants to become a viable alternative source of supply for MVNO services.”³ They have not.
- 11 Third, in Telecom Decision CRTC 2017-57, *Ice Wireless Inc. – Application regarding roaming on Rogers Communications Canada Inc.'s network by customers of Ice Wireless Inc. and Sugar Mobile Inc.*, the Commission directed Ice Wireless to shut down the Sugar Mobile WiFi-first model, which would have introduced an innovative and affordable new option into the mobile wireless services market, for low-income subscribers, as well as provided much needed competition. As part of this decision, the CRTC said: “The Commission continues to consider that MVNOs can play a role in

a situation of unjust discrimination or undue preference with respect to wholesale roaming arrangements in Canada. Two months later it issued *Review of wholesale mobile wireless services*, Telecom Notice of Consultation 2014-76 (Ottawa, 20 February 2014), <https://crtc.gc.ca/eng/archive/2014/2014-76.htm>, to determine whether Canada's wholesale market is sufficiently competitive to obviate the necessity for regulation, and, if not, what specific regulatory measures are required.

² *Regulatory framework for wholesale mobile wireless services*, Telecom Regulatory Policy CRTC 2015-177 (5 May 2015), at para 124 [*Wholesale Wireless Framework*].

³ *The Canadian Network Operators Consortium Inc. – Application to review and vary Telecom Regulatory Policy 2015-177*, Telecom Decision CRTC 2016-60 (18 February 2016) [*CNOC Part 1 to Review and Vary*].

increasing consumer choice and value in the retail market, and in supporting the development of a competitive market for wholesale MVNO access.”⁴

12 MVNOs have not played a role, largely because they do not exist.

13 Fourth, the Commission reviewed the WiFi-first MVNO model upon the request of the Governor in Council to revisit its decision in TD CRTC 2017-57 above. Despite the Minister of Industry, Science, and Economic Development (ISED) emphasizing the affordability crisis—particularly for low-income households in Canada—as a driving factor prompting the Order in Council,⁵ the Commission again declined to approve this model and again prevented the availability of more affordable, yet functional, mobile wireless offerings to struggling telecommunications users in Canada. The CRTC once again rationalized this disappointment to the public, stating:

[T]he Commission considers that other alternatives to improve the choice of innovative and affordable mobile wireless services, particularly for Canadians with low household incomes, would be desirable to avoid the regulatory uncertainty and risk of negative impact on investment that would be created by broadening the definition of “home network.”⁶

14 The CRTC then expressed an intention “to take immediate measures to improve choice and affordability for mobile wireless services and, in the near term, review the overall effectiveness of its policies on wireless resale competition by moving forward with a broad review of the wholesale wireless framework.”⁷ This current proceeding constitutes its “immediate measures”, as well as a stopgap measure until the CRTC’s upcoming full review of wholesale wireless policies, which may result in more direct solutions that cut through to the heart of the structural issue. In announcing this proceeding in a news release, the CRTC promised to the public that it would “ensure lower-cost data-only wireless plans are available to Canadians across the country, as part of its efforts to foster affordability, innovation and choice in the wireless market.”⁸

15 The Forum urges the CRTC to keep its promise. Data-starved communities and individuals have waited long enough.

16 The absolute least the Commission could do at this point, having closed all other avenues to affordability (while insisting it was not), is to issue determinations that mandate the provision of data-only plans that are both affordable and functional. This means directing the national carriers to offer plans that provide a reasonably meaningful monthly allotment of data, which the Commission specifies, for a low price, which the Commission specifies. These components should

⁴ *Ice Wireless Inc. – Application regarding roaming on Rogers Communications Canada Inc.’s network by customers of Ice Wireless Inc. and Sugar Mobile Inc.*, Telecom Decision CRTC 2017-57 (1 March 2017) [Sugar Mobile].

⁵ Government of Canada, Order in Council, No. 2017-0557 (1 June 2017), online: <http://orders-in-council.canada.ca/attachment.php?attach=34464&lang=en>.

⁶ *Reconsideration of Telecom Decision 2017-56 regarding final terms and conditions for wholesale mobile wireless roaming service*, Telecom Decision CRTC 2018-97 (22 March 2018), at para 85 [Reconsideration of TD 2017-56].

⁷ *Ibid.*, at para 89.

⁸ CRTC, “CRTC continues to foster investment, innovation and affordable choice in the wireless market”, News Release (22 March 2018), online: <https://www.canada.ca/en/radio-television-telecommunications/news/2018/03/crtc-continues-to-foster-investment-innovation-and-affordable-choice-in-the-wireless-market.html> (emphasis added).

be based on current usage trends, consumer needs and expectations, and pre-existing offerings in Canada. The Forum's June 2018 survey found that very few Canadians (1.1%) now have a data-only plan, but that one in five (23.2%) would switch to a data-only plan – if also lower-cost.

A Mobile wireless telecommunications in Canada is not competitive

- 17 As many interveners have repeatedly and exhaustively detailed for the CRTC in each of the proceedings above, the Canadian mobile wireless telecommunications market is highly concentrated and not competitive, despite the claims of national carriers.⁹ The Forum would refer to the records of the proceedings leading to *Reconsideration of TD 2017-57*, TD CRTC 2017-57, TD 2016-60, or TD 2015-177: on this point, they are quite similar, with little changing but the addition of accumulating evidence and mounting examples in the form of comparison reports,¹⁰ price studies,¹¹ recurring and often matching price hikes,¹² acquired challengers, shut-down flanker brands (and former competitors), continued market dominance, and plans remaining unaffordable even as the cost of providing data moves dramatically downward.¹³
- 18 Bell asserts that mobile wireless prices have been declining over time, according to the 2017 Nordicity price comparison report completed for ISED Canada.¹⁴ The first example Bell uses to support this point includes no data, however, meaning someone subscribing to that plan would be paying exorbitant per-use rates to get online through their phone plan.
- 19 While the two other baskets do include minimal amounts of data (1GB and 2GB, respectively), asking “Have prices decreased at all?” is the wrong question. In analyzing the impact of a merger between two carriers in Austria and Germany, taking each country from a 4-player to 3-player mobile wireless market, the Finnish consulting firm Rewheel pointed out that, “[T]he right question to ask is not whether unit prices continued to fall after a 4 to 3 merger but rather has the merger resulted in a significantly lower rate of decrease than the projected rate of decrease absent of the merger.”¹⁵

⁹ Submissions of Bell, TELUS, and Rogers (23 April 2018).

¹⁰ See, e.g., Rewheel, “The state of 4G pricing – 1H2018”, *Digital Fuel Monitor* (1 May 2018), online: http://research.rewheel.fi/downloads/The_state_of_4G_pricing_DFMonitor_9th_release_1H2018_PUBLIC.pdf [Rewheel, “4G Pricing”].

¹¹ See, e.g., Nordicity Group Ltd., 2017 Price Comparison Study of Telecommunications Services in Canada and Select Foreign Jurisdictions (5 October 2017), online: [https://www.ic.gc.ca/eic/site/693.nsf/vwapj/Nordicity2017EN.pdf/\\$file/Nordicity2017EN.pdf](https://www.ic.gc.ca/eic/site/693.nsf/vwapj/Nordicity2017EN.pdf/$file/Nordicity2017EN.pdf) [Nordicity Report].

¹² See, e.g., Gary Ng, “Rogers, Telus and Bell Explain \$5/month Wireless Price Hikes”, *iPhone in Canada* (17 March 2014), online: www.iphoneincanada.ca/carriers/rogers-telus-bell-price-hikes/; Jamie Sturgeon, “Rogers, Bell, Telus wireless customers face ‘substantial’ price hike”, *Global News* (27 January 2016), online: <https://globalnews.ca/news/2480259/rogers-wireless-customers-face-substantial-price-hike-next-month/>; Gary Ng, “Rogers Raises Prices in Manitoba by \$5 on Share Everything Plans”, *iPhone in Canada* (18 May 2016), online: www.iphoneincanada.ca/carriers/rogers/rogers-manitoba-5-increase/.

¹³ Rewheel, “Unlimited mobile data and near zero marginal cost – a paradigm shift in telco business models” (25 September 2017), online: research.rewheel.fi/downloads/Near_zero_marginal_mobile_data_cost_25092017_PUBLIC.pdf [Rewheel, “Unlimited mobile data”].

¹⁴ Bell Submission, at para 14.

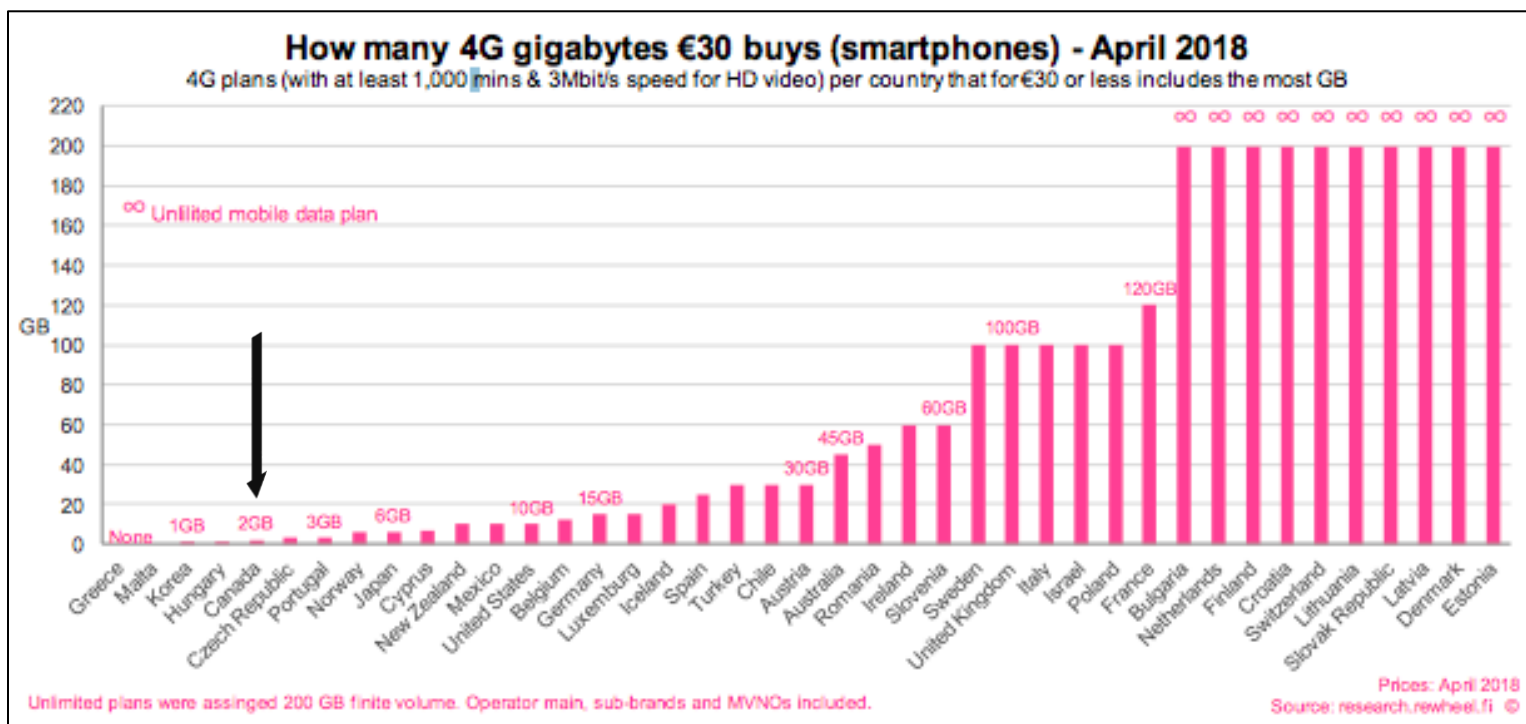
¹⁵ Rewheel, “Gigabyte price development in 4 to 3 consolidated versus 4-MNO European markets – September 2013 to March 2018”, *Digital Fuel Monitor* (12 April 2018), online: research.rewheel.fi/downloads/GB_prices_4_3_consolidated_vs_4MNO_markets_2013_2018_PUBLIC.pdf, at page 5 [Rewheel, “Gigabyte”].

- 20 Applying Rewheel's point to the proceeding at hand, whether prices have decreased at all since 2008 means little—indeed, if prices did not fall at all given the intervening ten years and technological advancements, the situation would be even more dire. Rather:
- the question is whether prices have fallen
- as far as they would have in the absence of a weakly regulated oligopoly.
- 21 The available evidence strongly suggests that that the answer to this question is “no”. For instance, domestic and international reports from reputable, impartial sources find year after year that Canada consistently ranks among the most expensive countries in the world when it comes to mobile wireless prices. High prices result in correspondingly low adoption rates and low usage, likely due to financial constraints suppressing data volumes rather than current available plans coming anywhere near meeting users' needs in Canada. We provide results from these reports, below.
- 22 First, the 2017 Nordicity report Bell cited found that Canada was the most expensive of the six countries examined, for the middle three basket levels, and among the top three most expensive countries for all remaining levels.¹⁶
- 23 Second, in its most recent release of the *Digital Fuel Monitor* report studying mobile wireless markets around the world, Rewheel continued to find Canada among the last places in how much data one could buy for 30 euros, or \$45.54 CAD. Figure 1 below shows that as of April 2018, Canada is 5th out of 40 countries, those in the EU and OECD combined. Not only can a subscriber in Canada only buy 2 GB of data for 30 euros, but for the same price, one could purchase 6 GB in Japan, 15 GB in Germany, 30 GB in Australia, 60 GB in Slovenia, 100 GB in Sweden, Italy, or Poland, and *unlimited mobile data* in Bulgaria, Netherlands, Finland, Croatia, Switzerland, Lithuania, Slovak Republic, Latvia, Denmark, and Estonia.¹⁷ In fact, a full half of the European Union's 28 countries offered 100 GB to unlimited GB for 30 euros at most.
- 24 Notably, Rewheel included sub-brands as well as MVNOs in its study, which puts the lie to claims that other reports demonstrating Canada's shortcomings are thrown off by not including the major carriers' flanker brands (or rather, they may indeed be thrown off but in falsely boosting the Canadian market offerings, as they would not have other countries' truly low-cost brands to compete against in that case, either).
- 25 Moreover, as Professor Michael Geist has noted, carriers and their proponents may not lay at geography's feet Canada's abysmal performance and shockingly high prices for data.¹⁸ This is because Norway, Iceland, and Australia all feature lower population densities than Canada, and yet as shown in Figure 1 below, one can buy 6GB, 20GB, or 45GB, respectively, for the price of a paltry 2GB in Canada. That is a difference of up to 22 *times*, or over 2000% more data.

¹⁶ Nordicity Report, *supra* note 10; Rose Behar and Sameer Chhabra, "Canadians still paying some of the highest wireless rates in the world: ISED", *Globe and Mail* (12 December 2017), online: <https://mobilesyrup.com/2017/12/12/international-telecom-pricing-study-shows-canadians-still-pay-more-than-everyone-else/>.

¹⁷ Rewheel, "4G Pricing", *supra* note 9.

¹⁸ Michael Geist, "Not So Fast: Digging into MEI's Report on the State of Canadian Wireless Services" (11 May 2018), online: <http://www.michaelgeist.ca/2018/05/slowermeireport/>.

Figure 1 How many 4G gigabytes can be bought for 30 Euros¹⁹

- 26 Additionally, according to Rewheel, the median price of data across the European Union countries is 2.4 euros per GB, or \$3.64/GB.²⁰ The median price of data across OECD countries is 2.9 euros per GB, or \$4.40/GB.²¹ Meanwhile in Canada, the median price is 9.6 euros per GB, or \$14.55/GB—triple or quadruple the price. This is all shown in Figure 2 below.

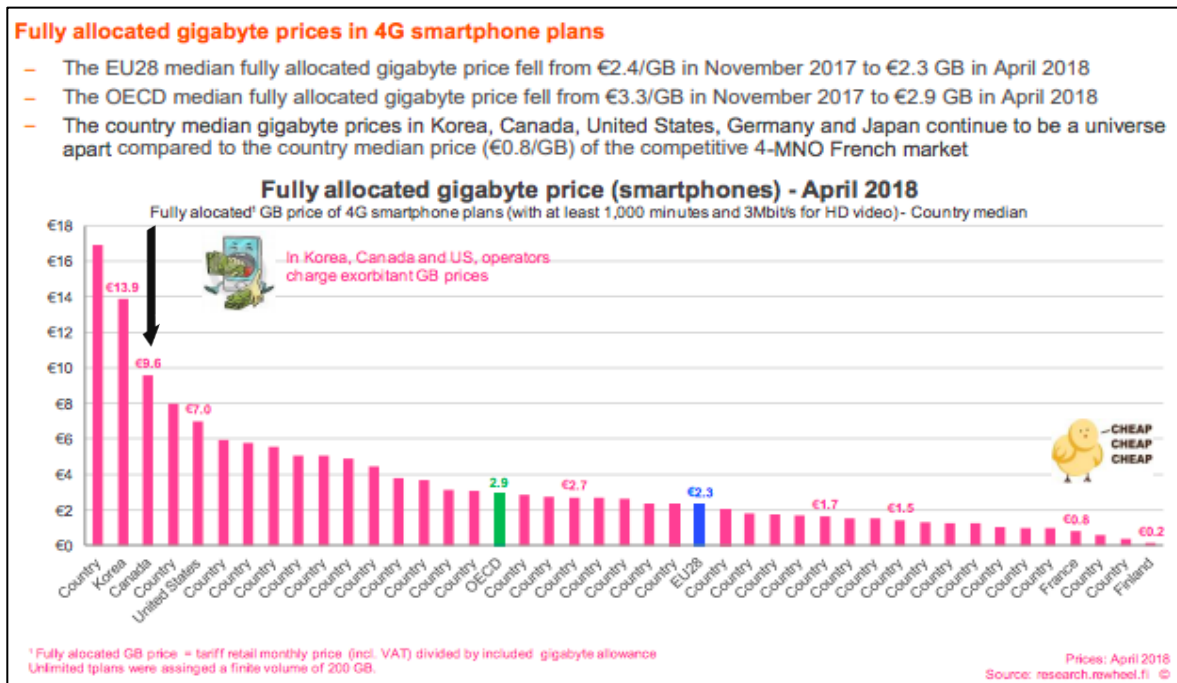
[Remainder of page intentionally blank]

¹⁹ *Ibid.*

²⁰ Rewheel, “4G Pricing”, *supra* note 9 at page 3.

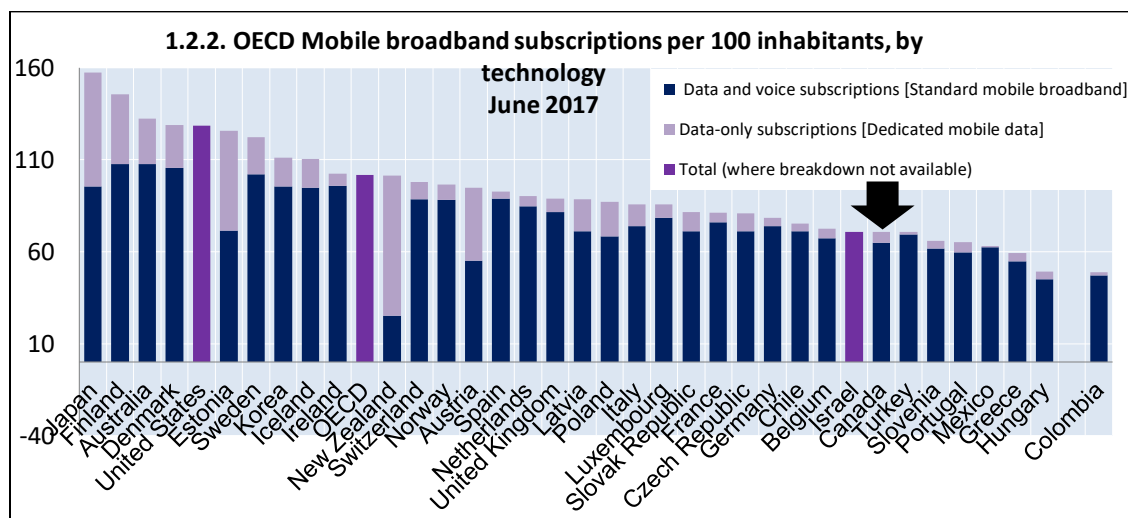
²¹ Rewheel, “4G Pricing”, *supra* note 9 at page 3.

Figure 2 Fully allocated gigabyte prices in 4G smartphone plans in the EU and OECD²²



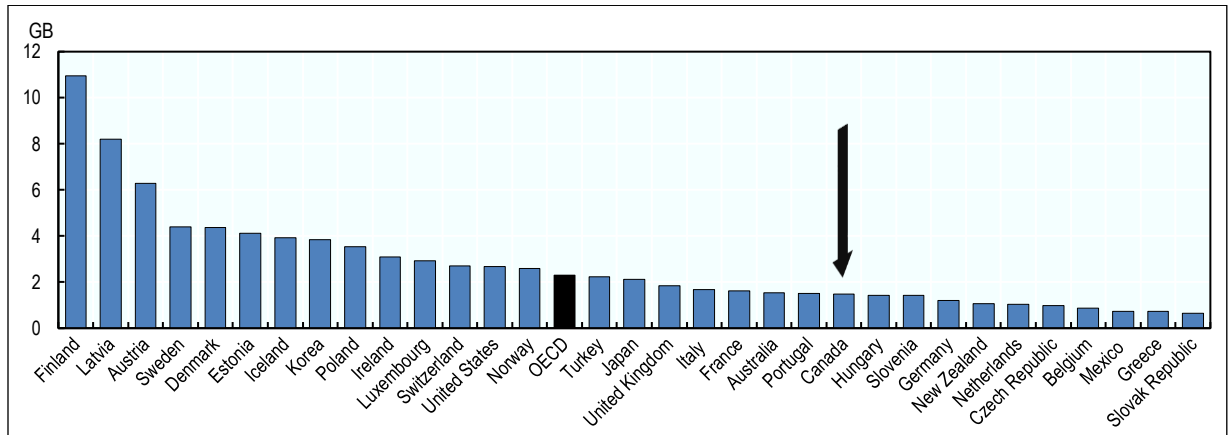
27 Third, as Figure 3 below shows, Canada features one of the lowest mobile plan subscription rates among OECD countries. This corresponds with similarly low data usage, as Figure 4 demonstrates.

Figure 3: OECD Broadband statistics [<http://oe.cd/broadband>]²³



22 *Ibid.*

²³ “Fixed and wireless broadband subscriptions per 100 inhabitants”, *OECD Broadband Portal* (June 2017), online: <http://www.oecd.org/sti/broadband/1.2.OECD-FixedMobileBB-2017-06.xls>.

Figure 4: Mobile data usage per mobile broadband subscription, 2016²⁴

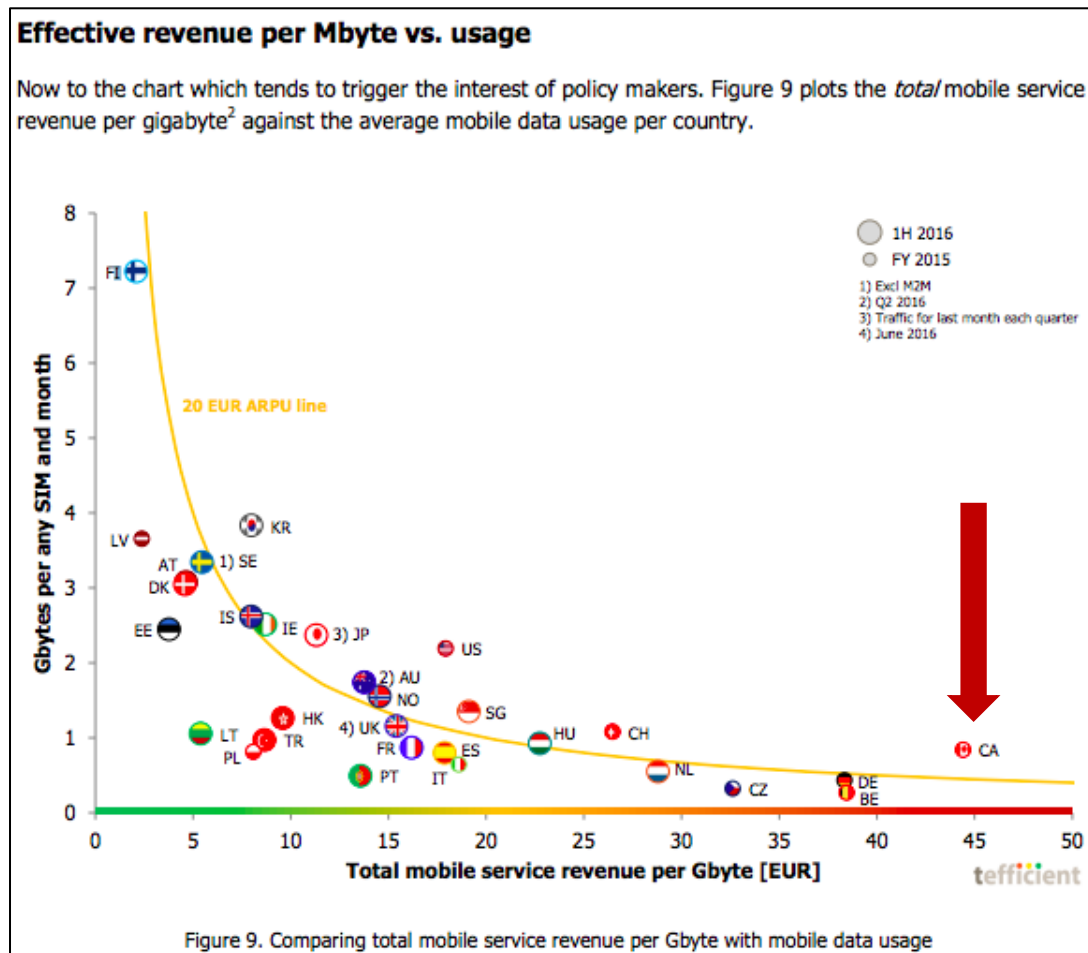
- 28 Fourth and lastly, a 2016 report by Swedish consultancy Tefficient included results reconfirming that Canadian mobile wireless users do not enjoy mobile wireless value for the prices they pay. Specifically, as Figure 4 shows, Canada's telecommunications service providers had the highest effective total revenue per GB in the world in 2015-16, and simultaneously some of the lowest subscriber usage.²⁵ Users in Finland enjoy the diametrically opposite situation, paying on average less than half of what users in Canada do, for approximately 7 times more data²⁶ (Figure 5).

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²⁴ OECD, "Chapter 3. Access and Connectivity: Figure 3.35: Mobile data usage per mobile broadband subscription", *OECD Digital Economy Outlook 2017* (2016).

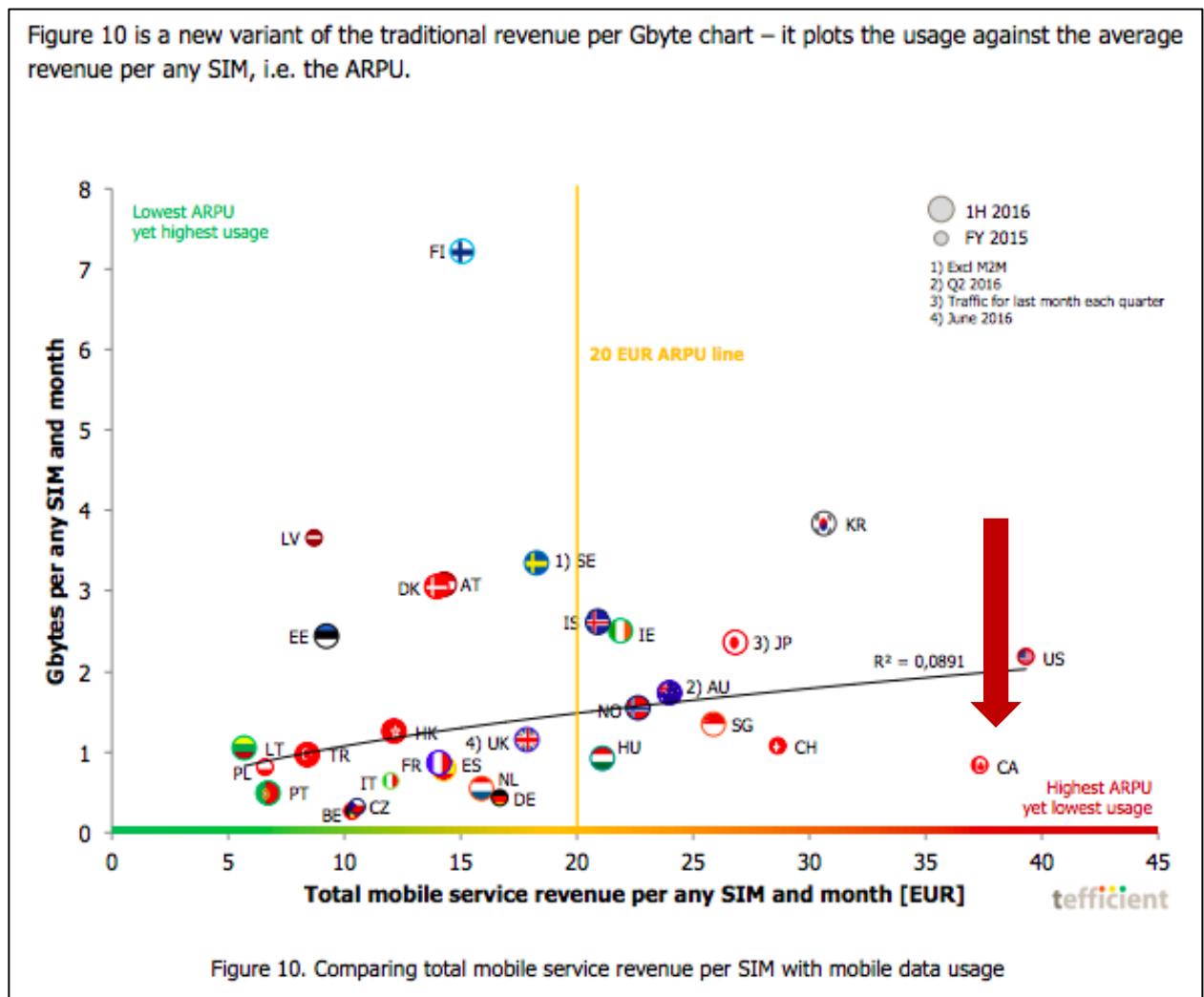
²⁵ Tefficient, "Mobile data 1H 2016: Unlimited pushes data usage to new heights" (5 January 2017), online: media.tefficient.com/2016/12/tefficient-industry-analysis-5-2016-mobile-data-usage-and-pricing-1H-2016-ver-2.pdf, at page 12.

²⁶ *Ibid.*, at page 13.

Figure 5 Effective revenue per Megabyte versus usage²⁷

[Remainder of page intentionally blank]

²⁷ *Ibid.*, at page 12.

Figure 6 Total mobile service revenue per SIM, with mobile data usage²⁸

- 29 Within Canada, again as many have pointed out regularly over the past several years, the range of price differentiation for identical products and services across different provinces also points to the high level of rents that national carriers are extracting from their customers. Consumers who did not arrange to be born in or inhabit provinces with a strong regional competitor, such as Saskatchewan, Quebec or, until the Bell acquisition, Manitoba, pay a particularly high price. Benjamin Klass recently highlighted only one of the most recent iterations of this phenomenon on Twitter: “Rogers offers customers \$70, 20 GB mobile plan in Manitoba. 20GB plan in Ontario? \$170. #CRTC.”²⁹
- 30 Similarly, the following Table 1 reveals telling variations in what TELUS charges for particular amounts of data in British Columbia, Saskatchewan, and Manitoba, at time of writing. To capture companies’ valuation of data specifically, without being able to itemize charges in bundled voice, data, and text plans, the Forum has predominantly examined pricing where the TSP has provided

²⁸ *Ibid.*, at page 13.

²⁹ Ben Klass, “Rogers offers customers \$70, 20GB mobile plan in Manitoba. 20GB plan in Ontario? \$170. #CRTC” (24 May 2018), online: Twitter <<https://twitter.com/BenKlass/status/998048303680864256>>.

it for data in isolation. It must also be noted that this data was compiled using best efforts at time of writing, based on information available on the mobile wireless carriers' respective websites, and such information is notoriously subject to change without notice.³⁰

- 31 Without the promotional bonus data, a TELUS subscriber would pay \$25 per month for 1 GB of data in British Columbia, yet pay only \$5 for that 1 GB in Saskatchewan or Manitoba—a 500% difference. With another promotion, Manitobans could pay \$20 for 8 GB of data, yet British Columbians are normally charged \$25 for 1 GB, or \$30 for 2 GB – 1.5 times the price for one quarter the data.

Table 1 Pricing for Data Component of TELUS Mobile Wireless Phone Plans

Plan	Data	Price	\$/MB	Region	Citation
PlanBuilder	1 + 2 GB	\$25	\$0.008/MB	BC	https://www.telus.com/en/bc/mobility/pla_nbuilder?INTCMP=Tcom_Plans_Individual_plan_BYOD_Plan_Builder&numPeople=1&d ataPlanSOC=SDSH3G25&voicePlanSOC=PYC UNLP70&needsDevices=false
	2 + 2 GB	\$30	\$0.007/MB		
	5 + 2 GB	\$45	\$0.006/MB		
	10 GB	\$60	\$0.006/MB		
	12 GB	\$70	\$0.006/MB		
	15 GB	\$100	\$0.007/MB		
	20 GB	\$120	\$0.006/MB		
	40 GB	\$220	\$0.005/MB		
PlanBuilder	80 GB	\$350	\$0.004/MB	SK	https://www.telus.com/en/sk/mobility/pla_nbuilder?INTCMP=Tcom_Plans_Individual_plan_BYOD_Plan_Builder&numPeople=1&d ataPlanSOC=SDSH3G25&voicePlanSOC=PYC UNLP70&needsDevices=false
	1 GB	\$5	\$0.005/MB		
	5 GB	\$15	\$0.003/MB		
	12 GB	\$25	\$0.002/MB		
PlanBuilder	15 GB	\$35	\$0.002/MB	MB	https://www.telus.com/en/mb/mobility/pla_nbuilder?INTCMP=Tcom_Plans_Individual_plan_BYOD_Plan_Builder&numPeople=1&d ataPlanSOC=SDSH3G25&voicePlanSOC=PYC UNLP70&needsDevices=false
	1 GB	\$5	\$0.005/MB		
	2.5 GB	\$10	\$0.004/MB		
	6 + 2 GB	\$20	\$0.002/MB		
	10 GB	\$30	\$0.003/MB		
PlanBuilder	16 GB	\$35	\$0.002/MB	All	<i>ibid.</i>
	Overage (<1000MB)	\$10/200MB	\$0.05/MB		
PlanBuilder	Overage (>1000MB)	\$0.10/MB	\$0.10/MB	All	

- 32 Compiling price data for the data component of Bell's mobile wireless plan (at time of writing), in Table 2 below, provides further evidence that on a national level, the Canadian telecommunications market lacks competition. Many of the plans, including the base amount of data, promotional data, and price are identical to those that TELUS offers. Subscribers in Manitoba and Saskatchewan would pay \$5 for 1 GB, for which those in Ontario would normally have to pay \$25. For 15 GB, the competitive pressure from SaskTel means Bell's customers in Saskatchewan would \$35; subscribers in post-MTS Manitoba would pay \$40; and those in Ontario would pay

³⁰ See, for example, Videotron changing its data pricing for its premium plans midway through a submission round of the *Unlimited Music* proceeding, as noted by the Public Interest Advocacy Centre in its comments at the time. See also Klass' revelation that Rogers has apparently added new restrictions to pre-existing tablet data plans to mitigate the perceived miserliness of its proposed plan in this proceeding: Ben Klass, "After proposing 'lower cost data-only' plans to the #CRTC, Rogers appears to have actually removed their existing (much cheaper than proposed plans) stand-alone data only plans from the market. 1/x" (19 May 2018), online: Twitter < <https://twitter.com/BenKlass/status/998048303680864256>>.

\$100. Meanwhile, the Swiss pay less than all of that—approximately \$30 CAD (20 euros)—for *unlimited mobile data*.

Table 2 Pricing for Data Component of Bell Mobile Wireless Phone Plans

Plan	Data	Price	\$/MB	Region	Citation
Share Plan	1 + 2 GB	\$25	\$0.008/MB	ON	https://www.bell.ca/Mobility/Cell_phone_plans/Share_plans [set region: ON]
	2 + 2 GB	\$30	\$0.007/MB		
	5 + 2 GB	\$45	\$0.006/MB		
	8 + 2 GB	\$60	\$0.006/MB		
	10 + 2 GB	\$70	\$0.006/MB		
	15 GB	\$100	\$0.007/MB		
Share Plan	1 GB	\$5	\$0.005/MB	SK	https://www.bell.ca/Mobility/Cell_phone_plans/Share_plans [set region: SK]
	5 GB	\$15	\$0.003/MB		
	10 GB	\$25	\$0.002/MB		
	15 GB	\$35	\$0.002/MB		
Share Plan	1 GB	\$5	\$0.005/MB	MB	https://www.bell.ca/Mobility/Cell_phone_plans/Share_plans [set region: MB]
	2.5 GB	\$10	\$0.004/MB		
	6 + 2 GB	\$20	\$0.002/MB		
	10 GB	\$30	\$0.003/MB		
	15 GB	\$40	\$0.003/MB		
Share Plan	Overage		\$0.07/MB	All	<i>Ibid.</i>

33 The variation across provinces, in addition to the convenient timing and comparative generosity of the offered promotional data, suggests a certain arbitrariness when it comes to MNOs' pricing of data, the kind of arbitrariness made possible by staggeringly high mark-ups, even at the lowest available price points. Between the blatant price differentiation, if not outright price discrimination, between customers in different provinces, and Canada's status as a glaring outlier for data prices and data usage internationally, it is difficult to take seriously any notion that the Canadian mobile wireless market is "competitive", or "affordable".

34 The presence of flanker brands such as Rogers's Fido, TELUS's Koodo and Public Mobile, and Bell's Virgin Mobile may improve the situation slightly,³¹ but does not assist consumers in the long run. This is because by definition, flankers can never compete as hard as a true competitor would, due to concerns around cannibalizing their parent companies' revenues. Available literature on flanker brands, or "fighter brands", as a business strategy, widely recognizes this dynamic as an inherent aspect of the approach, with long-term negative impacts on consumers and the overall competitiveness of the market:

Positioning a fighter brand presents a manager with a dual challenge: You must ensure that it appeals to the price-conscious segment you want to attract while guaranteeing that it falls short for current consumers of your premium brand. That means you must match your fighter brand's low price with equally low perceived quality. [...]

Call it "un-brand management." To prevent cannibalization, a company must deliberately lessen the value, appeal, and accessibility of its fighter brand to its premium brand's target segments.

³¹ Emily Jackson, "Second-tier wireless brands leave Canadian customers more satisfied: J.D. Power", Financial Post (27 April 2017), online: business.financialpost.com/technology/flanker-wireless-brands-leave-canadian-customers-more-satisfied-j-d-power.

It may even need to actively disable existing product features and withhold standard marketing support from the fighter brand.³²

- 35 This appears similar to what Rogers' approach—positioning its pre-existing products as less desirable to increase the perceived value and appeal of its inadequate data-only plan. This also appears to be what BDUs such as Bell tried to do with the basic TV packages.³³
- 36 The literature does note that “for those managers who find value destruction a difficult concept to contemplate, is that the other way to ensure that a fighter brand offers a sufficiently differentiated proposition is to innovate around the premium brand and strengthen its brand equity.”³⁴ However, the past several years have arguably seen more innovation in regulatory process and marketing rather than with the quality of TSPs' core services themselves, as demonstrated by proceedings such as *Bell Mobile TV*, *Videotron Unlimited Music*, and the ongoing Part 1 application by “FairPlay Canada”.
- 37 The CRTC must make its determinations regarding the proposed lower-cost data-only plans in light of the fact, as shown above, that in Canada the market has failed to provide the level of affordability that exists in other countries.
- 38 Canadian mobile users need the CRTC to set a high data floor of a prescribed amount of data along with a low price ceiling at a prescribed price, and to ensure adequate specificity and enforcement such that the implemented plans work according to the spirit of the CRTC's decision, or risk that telecommunications service providers will continue to skirt the boundaries of the letter, as seen with other ameliorative regulations such as the *Wireless Code* and the basic TV packages. Evidence for the necessity of a high data floor comes from the Forum's June 2018 survey: more than half (55.1%) of those who paid data-overage fees just a few times in the previous year, and 64.2% of those who paid data-overage fees four or more times in the previous year, used one GB or more in a typical month (Appendix, survey result 11) – even those who have taken the time to acquire plans with a gigabyte of data are exceed their data limits, and pay penalties.
- 39 Action by the CRTC, now, is especially critical because even in the best-case scenario, where the plans are truly affordable and offer reasonable, meaningful amounts of data—one result will be that even more of the market becomes vested exclusively in Canada's top three carriers, giving them even more market share and worsening concentration. While the CRTC contemplates that mandating lower-cost data-only plans from the national carriers may prompt competitive responses in new data-only plans from the new entrants, this does not erase the national carriers' first-mover advantage (albeit an imposed one), and there is no guarantee that the new entrants will offer competing plans in any case. The CRTC must make its determinations on the assumption that these plans will be the only ones available to low-income users and others who find current offerings unaffordable.

³² Mark Ritson, “Should You Launch a Fighter Brand?”, Harvard Business Review (October 2009), online: <https://hbr.org/2009/10/should-you-launch-a-fighter-brand>.

³³ *Licence renewal of broadcasting distribution undertakings – Review of practices relating to the small basic service and flexible packaging options and imposition of various requirements*, Broadcasting Decision CRTC 2016-458 (21 November 2016), online: <https://crtc.gc.ca/eng/archive/2016/2016-458.htm> [Review of basic TV practices].

³⁴ Ritson, *supra* note 31.

B Mobile wireless data in Canada is unaffordable

40 As with the lack of competition in Canada's mobile wireless market, the lack of affordability in mobile wireless data has also been well documented throughout the past several years, by interveners in related wireless policy proceedings before the Commission, through academic and policy research,³⁵ and by various media outlets.³⁶ The Forum would direct the Commission to the records of this proceeding's predecessors (the proceedings leading to the Mobile Wireless Decisions), and will briefly emphasize four main points here.

41 First, wireless services are the largest telecommunications retail sector, responsible for bringing in 52% of total retail telecommunications revenues, according to the 2017 Communications Monitoring Report.³⁷ This is no surprise, given the data above showing that Canada's mobile wireless companies make the most money off of their customers out of all other mobile wireless companies in the world. However, it also underscores the importance of strictly regulating and enforcing the plans that result from this proceeding, in the interests of fostering genuine affordability with reasonably meaningful amounts of data, given the incentives to maintain such outstanding revenue levels, and lack of sufficient competition to incentivize otherwise.

42 Second, the Public Interest Advocacy Centre (PIAC) as well as OpenMedia thoroughly critiqued the faulty Wall report that Bell cites in this proceeding, and which Bell commissioned and submitted in the WiFi-first MVNOs proceeding, for its claims regarding affordability of mobile wireless services in Canada. The Forum refers to and incorporates by reference paragraphs 23-35 of PIAC's Final Submissions in TNC CRTC 2017-259, and paragraphs 7-12 of OpenMedia's Supplementary Intervention in TNC CRTC 2017-259.

43 Third, evidence has demonstrated that the price of mobile wireless plans drives adoption, rather than the other way around:

The high, in many cases unaffordable, Gigabyte prices commanded by operators in protected markets where challengers are not present are effectively suppressing mobile broadband penetration and most importantly mobile data consumption.

In competitive markets, where a challenger operator group is present and where Gigabyte prices are up to 100 times lower than in protected markets (see Finland €0.17/GB versus Greece €17/GB) mobile data consumption per capita is several times higher (up to 20 times) than in protected markets. There is a clear pattern of significantly lower usage in protected markets where competition is not functioning and operators are collectively suppressing demand by keeping Gigabyte prices artificially high.³⁸

44 In other words, those who can afford more data, unsurprisingly, use more data. What this means, however, is that simply stating that users are paying for plans, or that plans at lower price points

³⁵ E.g. Jonathan Bishop and Alysia Lau, "No Consumer Left Behind Part II: Is There a Communications Affordability Problem in Canada?", Public Interest Advocacy Centre (July 2016), online: http://www.piac.ca/wp-content/uploads/2016/09/PIAC_No-Consumer-Left-Behind-Part-II-Website-Version.pdf.

³⁶ Tristin Hopper, "Why Canadian cell phone bills are among the most expensive on the planet", *National Post* (18 December 2017), online: nationalpost.com/news/canada/why-canadian-cell-phone-bills-are-among-the-most-expensive-on-the-planet.

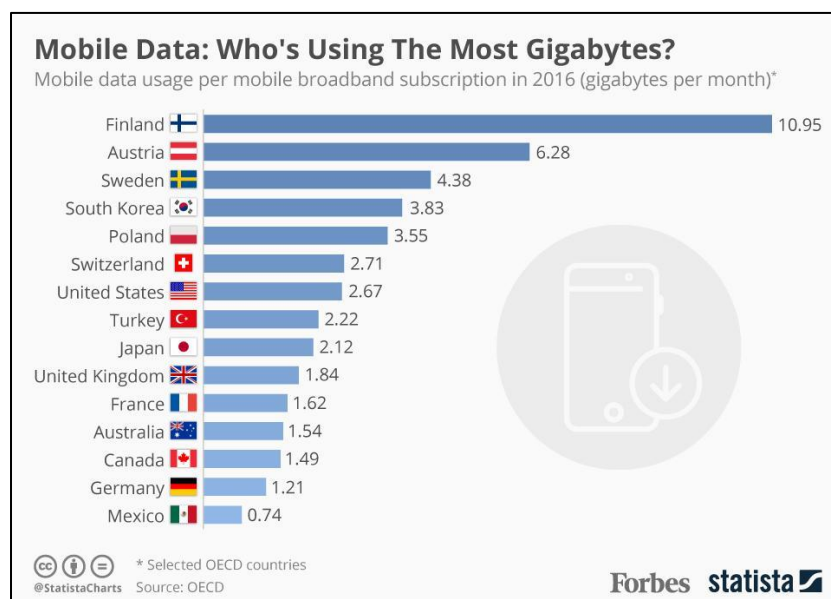
³⁷ CRTC, *Communications Monitoring Report 2017* (24 November 2017), online: <https://crtc.gc.ca/eng/publications/reports/PolicyMonitoring/2017/cmr2017.pdf>, at page 31 [CMR 2017].

³⁸ Rewheel, "Price level drives mobile connectivity adoption and use", March 2014, online: research.rewheel.fi/insights/2014_march_penetration_vs_price/.

exist, without regard to the actual volume of data they provide, is no answer to subscribers' widespread and legitimate concerns regarding affordability. The Forum's June 2018 survey found that 53.5% of those with an annual household income of less than \$20,000 (before taxes) limited their use of their mobile phones one or more times in the previous year due to worries about data-over charges – and so did 70.7% of those whose annual household income (before taxes) was \$150,000 or more (Appendix, Survey figure 3).

- 45 The sheer amount of per capita data usage in other countries, compared to in Canada, strongly suggests that if mobile wireless subscribers could afford to use more than 1.2 GB per month each,³⁹ they would. For comparison's sake, the Finnish Communications Regulatory Authority reported that in "the second half of 2017, average consumption of mobile data in the mobile network was almost 26 gigabytes per Finn." Those who were on data-only plans used nearly 37 GB per person per month (as opposed to those on voice-and-data plans, which used approximately 10 GB per month).⁴⁰ Yet, as the figures above showed, subscribers in Finland pay some of the lowest prices in the world for it. Figure 7 shows Canada near the bottom for mobile data usage among selected OECD countries:

Figure 7: Chart from Forbes, citing Statista⁴¹



- 46 While it is true that jurisdictional, contextual, regulatory, and geographical differences between Canada and other countries may make a direct comparison difficult, in most of the international studies presented above, Canada appears to be enough of an outlier to an extent that cannot be completely accounted for, that such extreme variance cannot be attributed to country differences alone. Moreover, certain factors are shared with other jurisdictions that do not face the same

³⁹ CMR 2017, *supra* note 36.

⁴⁰ Viesintävirasto (Finish Communications Regulatory Authority), "Mobile data usage much higher in mobile broadband subscriptions than voice subscriptions" (7 March 2018), online: <https://www.viestintavirasto.fi/en/ficora/news/2018/mobiledatausagemuchhigherinmobilebroadbandsubscriptionthanvoicesubscriptions.html>.

⁴¹ Niall McCarthy, "Mobile Data Subscriptions: Which Countries Use The Most Gigabytes? [Infographic]", Forbes (11 October 2017), online: <https://www.forbes.com/sites/niallmccarthy/2017/10/11/mobile-data-subscriptions-which-countries-use-the-most-gigabytes-infographic/#6a2c02e37220>.

mobile wireless affordability problems; as noted above, several countries with less population density than Canada still have more consumer-friendly and affordable mobile wireless data.

- 47 Some of the national carriers' comments regarding affordability throughout recent proceedings, or what is and is not "affordable", or their evidence proffered to support the notion that mobile wireless affordability is not an issue in Canada, makes it increasingly difficult to conclude other than that they are not qualified to speak to the concept in this context. This includes what affordability is and means, given the repeated misunderstanding or overlooking of the nuanced definition—emphasizing choice and control—which PIAC introduced in its telecommunications affordability reports.⁴² It also includes what might be considered affordable or unaffordable and why, from the perspective of a low-income subscriber (*i.e.*, distinguishing between a plan that is low-priced but useless, and a plan that is low-priced, and meets the buyer's needs, thereby fulfilling users' purpose in purchasing the plan in the first place).
- 48 To truly address affordability, the Commission must ensure that the plans resulting from this proceeding are both low-priced *and* functional in the amount of monthly data included. Moreover, the selected prices and amounts should take guidance from international standards of data usage, not Canada's severely and artificially suppressed ones. Allowing plans that are only either low-priced *or* functional would only reproduce the deficiency already identified in the market, and fail the objective of this proceeding altogether.
- 49 As the state of the market stands today, many people throughout Canada cannot afford to purchase a mobile wireless plan that would adequately meet their needs. Comparing mobile wireless plans to "a cup of coffee a day"⁴³ is misleading and irrelevant.
- 50 First of all, comparing mobile plans to the cost of a cup of coffee assumes that all those who cannot currently afford mobile wireless services are in fact spending money on purchasing daily cups of coffee, which is likely not to be the case. This is especially so in light of PIAC's findings in late 2015 that people were then already sacrificing needs such as groceries, rent, and medicine to pay their communications bills.
- 51 Yet jocular posts from the CRTC's Twitter account, such as one from early June 2018, which make light of the sacrifices that people would make to have Internet access, continue to reflect the assumption that affordability is based on poor decision-making by lower-income groups. The CRTC Twitter account recently commented on a survey undertaken by the Canadian Internet Registration Authority about things people would give up to gain access to the Internet - "fast

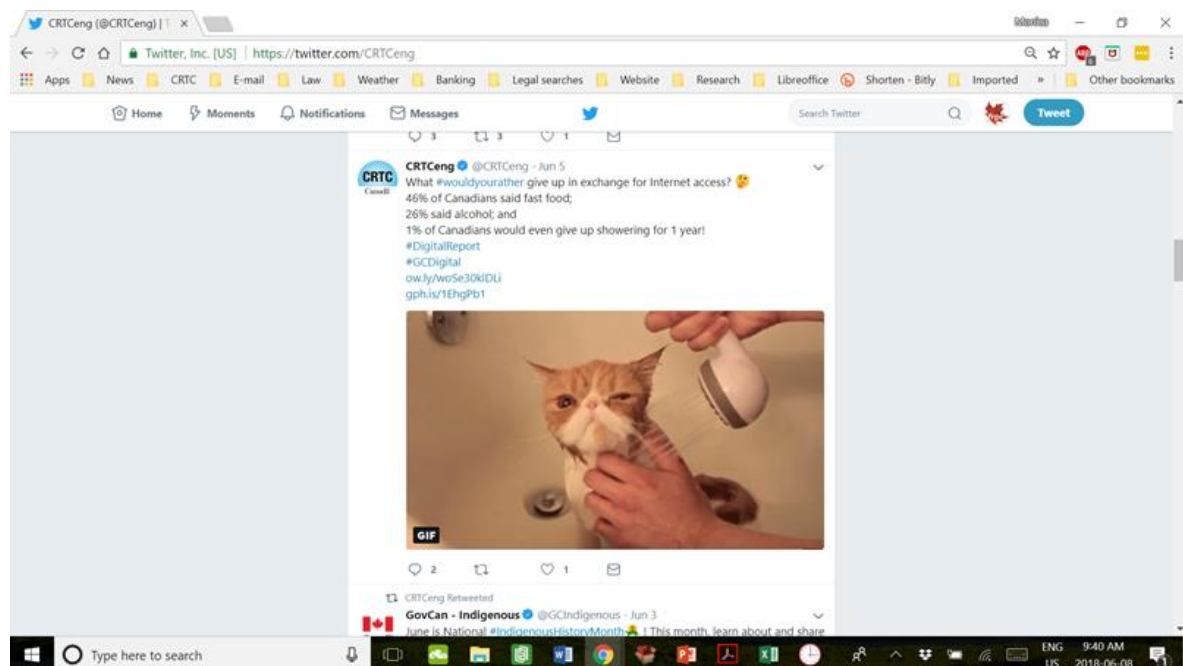
⁴² Bishop and Lau, *supra* note 34 at pages 1-2: "In describing what 'affordability' means, the report determined that one of the defining elements of affordability was control—the ability of an individual or a household to control their expenditures in order to fulfill their needs. Because affordability concerns a household's control over their budget, affordability is also about choice which allows a household to access a service offering which meets their needs." See also Final Submission of PIAC in TNC CRTC 2017-259, at para 21: "A household's willingness to pay more for wireless service does not necessarily indicate that that service is affordable. Rather, it better demonstrates that service's essentiality to the household. PIAC's interviews with low-income consumers and local organizations which engage with low-income clients showed that even in the face of mounting communications costs, low-income users will sacrifice other household expenditures in order to retain their communications services."

⁴³ Submissions of Bell and TELUS.

food”, “alcohol”, and “showering for 1 year! [of cats]”⁴⁴ (see Figure 8). It made light of the fact that for hundreds of thousands of people in Canada, poverty is not a laughing matter: a recent study by the University of British Columbia estimated that in 2016, “730,000 Canadians reduced their spending on food and 238,000 reduced their spending on home heating due to the cost of prescription drugs”.⁴⁵ Is it likely that people who are giving up food and heat to buy medicine can easily afford high-cost mobile phone plans?

- 52 Consciously or not, such public comments on behalf of the federal regulatory authority indicate the strong possibility of an institutional predisposition by the CRTC to accept the tired, patronizing, analog-era trope that bad spending decisions by the poor explain their interest in lower-cost mobile phone plans, as the poor must be misallocating what are otherwise entirely adequate resources on fast food and alcohol.

Figure 8 @CRTCeng tweet regarding Internet affordability



- 53 Second, comments comparing the cost of items that appear to be bought by all, play into a common financial advice trope known as the “latté factor”. The latté factor has been criticized for ignoring larger structural issues and fixed costs in favour of placing further burden on low-income individuals:

But it was not, as Bach put it, “the daily extravagances that drain your resources” that were the cause of many of our money woes. ... “Spending \$2 for a latte may, over the long-term, add up. But it is not the direct cause. It has to be in combination with high medical expenses or losing your job or something like that.” ... Warren and Tyagi demonstrated that buying common luxury

⁴⁴ CRTC Twitter account @CRTCeng, of 5 June 2018.

⁴⁵ UBC News, “Canadians giving up food, heat to pay for prescription drugs: UBC study” (13 February 2018), <https://news.ubc.ca/2018/02/13/canadians-giving-up-food-heat-to-pay-for-prescription-drugs-ubc-study/>.

items wasn't the issue for most Americans. The problem was the fixed costs, the things that are difficult to cut back on.⁴⁶

- 54 In the Forum's view, these observations apply to mobile wireless communications, as communications represents a fixed cost that is difficult to reduce, given established price inelasticity data.⁴⁷ In June 2018 more than half (60.9%) of Canadians said they limited their use of their mobile phones due to worries that they might otherwise have to pay data-overage charges.⁴⁸
- 55 Comparing essential communications services to coffee simply serves to detract from the fact that mobile communications services are grossly overpriced in a market that permits extravagant markups for mobile wireless data because genuine competition does not exist.

III. Evidence establishes that carriers will do minimum required and no more: the CRTC must act

- 56 The national carriers' proposals in this proceeding, combined with their respective track records in response to other proceedings that explicitly implemented consumer-friendly regulations, are the evidence establishing that the Commission cannot do less than direct the MNOs to provide a specific low-cost data-only plan, with both a prescribed data floor and a prescribed price ceiling.

A Carriers' proposals are not serious efforts to meet Canadians' needs, the CRTC's directions and the Governor-in-Council's Order

- 57 The proposals that Bell, Rogers, and TELUS put forward in response to the Commission's request do not come anywhere near meeting the objectives of this proceeding: to address an identified gap in the market for affordable mobile wireless services.⁴⁹ The proposed amounts of data, for the proposed prices, are unreasonable in context of current in-market offerings within Canada, let alone compared to what mobile wireless subscribers may expect elsewhere in other OECD countries or across the European Union. Evidence also suggests that there are no real barriers to the carriers making more robust plans available, either economical or technical—it is simply a matter of will and incentives. This is why the Commission must be as clear and specific as possible in its determinations, to ensure that the resulting packages advance both the spirit as well as the letter of its objectives in this proceeding.
- 58 Table 3 below sets out what each national carrier has proposed in terms of monthly data allotment and monthly cost.⁵⁰ The Forum predominantly takes issue with these two components of the plans, given their centrality to meeting consumers' needs.

Table 3 National Carriers' Proposed Data-Only Plans

Prepaid & Postpaid	Bell	TELUS	Rogers
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⁴⁶ Helaine Olen, "Buying Coffee Every Day Isn't Why You're in Debt", *Slate* (26 May 2016), online: http://www.slate.com/articles/business/the_united_states_of_debt/2016/05/the_latte_is_a_lie_and_buying_coffee_has_nothing_to_do_with_debt_an_excerpt.html.

⁴⁷ Canadian Media Concentration Research Project, *Mobile Wireless in Canada: Recognizing the Problems and Approaching Solutions* (March 2014), online: <http://www.cmcrp.org/wp-content/uploads/2014/03/Mobile-Wireless-in-Canada-Final-Report.pdf>, at page 41.

⁴⁸ Appendix, p. 11.

⁴⁹ Telecom Notice of Consultation CRTC 2018-98, at paras 3-8.

⁵⁰ Submissions of Bell, Rogers, and TELUS.

Monthly Data	500 MB	500 MB	400 MB
Monthly Cost	\$30	\$30	\$25 MB
\$/MB (rounded)	\$0.06/MB	\$0.06/MB	\$0.06/MB

59 First, evidence suggests that there is little economic justification for offering such a low amount of data for such a high price, relative to what is included. Comparing the per megabyte (MB) cost of these plans to wholesale wireless tariff rates, the carriers' own in-market plans, and competitors' plans, reveal a breathtaking degree of markup that the Commission should not accept.

60 In Telecom Order CRTC 2018-99, the Commission issued the final tariffs for wholesale mobile wireless roaming services. The table from that decision, below as Figure 8, shows the wholesale rate that each national carrier may charge another mobile wireless carrier for roaming on their network, on a per MB basis.

Figure 9 Final Wholesale Wireless Rates from Telecom Order CRTC 2018-99

National wireless carrier	Voice wholesale roaming rate per minute	SMS wholesale roaming rate per message	Data wholesale roaming rate per MB
Bell Mobility	\$0.013668	\$0.000593	\$0.013281
RCCI	\$0.007062	\$0.000007	\$0.013978
TCI	\$0.015735	\$0.001796	\$0.014071

61 The approved wholesale wireless rates are about \$0.013 to \$0.014 per MB. They represent cost-based rates with a 40% markup already.⁵¹ The proposed "lower-cost" data-only plans for this proceeding would see a more than 400% markup on top of the approved wholesale rates, on a per MB basis. This seems to come uncomfortably near to extracting rents from a group of people who are likely already in vulnerable or marginalized positions, if they are in a position to need these particular plans.

62 Comparing the proposed "lower-cost" plans to the carriers' own pre-existing plans also demonstrates how the proposals contain, comparatively, an extraordinarily low amount of data for an arbitrarily high price. Referring to Tables 1 and 2 above, Bell's and TELUS's retail rates for data fall significantly below 1 cent per MB in British Columbia, Ontario, Saskatchewan, and Manitoba, regardless of the volume of data the subscriber chooses to add to their plan. In comparison, the proposed "lower-cost" data-only plans in this proceeding would charge low-income customers 6 cents per MB. That is over six times more expensive than plans for those who *can* afford pre-existing offerings. To reiterate, the Forum is using isolated data prices, and not prices for bundled voice + data + SMS plans.

63 In fact, the closest resemblance to the "lower-cost" rates in pre-existing plans are the pay-per-use and overage fees, which range from 5 cents to 10 cents per MB. That all but defeats the purpose of this proceeding, which is to ensure affordable mobile wireless plans for low-income subscribers, presumably to put them on a more equitable footing by closing this particular aspect of the digital divide. Providing them with plans that are essentially entirely overage by the rest of the market's standards runs counter to this objective.

⁵¹ *Wholesale mobile wireless roaming service tariffs – Final rates*, Telecom Order CRTC 2018-99 (22 March 2018), at para 189.

- 64 Further, the proposed plans—which are also meant to be prepaid as well as postpaid—from all three carriers are more expensive than each of their respective prepaid data add-ons for the same volume of data, as seen in the following table (Table 4) comparing the two offerings. Bell and TELUS both charge \$5 for the same 500 MB of data, while Rogers charges \$5 more for 100 MB fewer than its prepaid data add-on. As far as prepaid data is concerned, these would appear to be “higher-cost data-only plans”, again misaligned with the Commission’s objectives.

Table 4 Prepaid Data Add-on versus Proposed Data-Only Plans

Carrier	Plan	Data	Price	\$/MB	Citation
Bell	Prepaid Add-on	500 MB	\$25	\$0.05/MB	https://www.bell.ca/Mobility/Cell_phone_plans/Prepaid_plans
	Proposed Data-Only Plan	500 MB	\$30	\$0.06/MB	Submission of Bell
TELUS	Prepaid Add-on	500 MB	\$25	\$0.05/MB	https://www.telus.com/en/sk/mobility/prepaid/add-ons/
	Proposed Data-Only Plan	500 MB	\$30	\$0.06/MB	Submission of TELUS
Rogers	Prepaid Add-on	500 MB	\$20	\$0.04/MB	https://www.rogers.com/web/content/wireless-products/addons
	Proposed Data-Only Plan	400 MB	\$25	\$0.06/MB	Submission of Rogers

- 65 The national carriers also offer data-only plans for tablets or mobile Internet hubs /sticks. Here, too, are offerings that already provide more value to consumers than the proposed data-only plans in this proceeding. For example, Bell’s Tablet Flex plan only costs \$20 for 500 MB, rather than the \$30 suggested here. In fact, \$30 would buy 2 GB of data—four times as much—on Bell’s Tablet Flex plan.⁵² TELUS’s Mobile Internet Flex Plan features the same amounts of data at the same prices.⁵³ Rogers also offers 2 GB on mobile Internet for \$30—over five times as much as its proposed data-only plan for only \$5 more.⁵⁴
- 66 Flanker brands such as Fido (Rogers), Koodo (TELUS), and Virgin (Bell) also already offer plans that are more attractive than the proposed data-only plans—yet still unaffordable, or there would have been no gap identified. For example, Fido’s data-only tablet plan is \$15 for 2 GB (3 GB with current promotion), while a data-only hotspot plan is \$15 for 2 GB.⁵⁵ Koodo offers prepaid data boosters at \$20 for 500 MB or \$30 for 1 GB,⁵⁶ and Virgin’s postpaid pay per use data plan, as well as prepaid data add-ons, are also slightly cheaper or offer more data than the proposed plans.⁵⁷
- 67 In addition to the MNOs’ own pre-existing plans and some of their flanker brands’ plans outstripping the suggested data-only plans in this proceeding, the price of data from some of the regional mobile wireless providers or new entrants also put the proposed plans to shame. For example, the following Table 5 includes plans from SaskTel, Videotron, and Freedom Mobile with various plans that all include more data for less cost than the three proposed plans in this proceeding. Notably, the per MB price of the proposed plans is double the *average* rate from SaskTel. Additionally, Sugar Mobile (not shown), before TD CRTC 2017-57, was selling 400 MB for

⁵² Bell Mobility Website: https://www.bell.ca/Mobility/Cell_phone_plans/Tablet_PC_data_plans.

⁵³ TELUS Website: <https://www.telus.com/en/on/mobility/mobile-internet/?linktype=nav#combo>.

⁵⁴ Rogers Website: <https://www.rogers.com/consumer/wireless/tablet-plans?tab=tab3#tablet-plans-d>.

⁵⁵ Fido Website: <https://www.fido.ca/nac/#/choose-plan>.

⁵⁶ Koodo Website: https://www.koodomobile.com/prepaid-plans?INTCMP=KMNew_NavMenu_Shop_PrepaidPlans.

⁵⁷ Virgin Website: <http://www.virginmobile.ca/en/support/faq.html?q=monthly-standard-rates> and <http://www.virginmobile.ca/en/features/prepaid-features-summary.html>.

\$19—less than Rogers’ proposed price for the same amount, yet while being Rogers’ wholesale wireless roaming customer.⁵⁸

Table 5 Regional Carriers and New Entrant Data Plans

Carrier	Plan	Data	Price	\$/MB	Citation
SaskTel	shareMORE Data Only	1 GB	\$15	\$0.015/MB	https://www.sasktel.com/store/product-detail-compare/Personal/Wireless/Rate-plans/shareMORE-plans/_/N-27ai
	shareMORE Data Only	5 GB	\$20	\$0.004/MB	
	shareMORE Data Only	10 GB	\$30	\$0.003/MB	
	shareMORE Data Only	Overage		\$0.03/MB	Terms & Conditions
	Prepaid Data Add-on	500 MB	\$15	\$0.03/MB	https://www.sasktel.com/store/product-detail-compare/Personal/Wireless/Prepaid/prepaid-add-ons/Data-Add-ons/Data-Add-ons/_/N-2784
	Prepaid Data Add-on	1 GB	\$25	\$0.02/MB	
Videotron	Mobile Internet	1 GB	\$25	\$0.02/MB	http://www.videotron.com/residential/internet/mobile-internet/flex-rate-package
			\$15	\$0.01/MB	
	Mobile Internet	Overage		\$0.02/MB	
	Data Add-on	1 GB	\$7	\$0.007/MB	
Freedom	Big Gig 50	10 GB (+ 3)	\$50	\$0.005/MB (\$0.003/MB)	https://www.freedommobile.ca/plans-and-devices/plans-v2?utm_exp=3rjSITC2Qla4Chlvk6L8Ug.1&utm_referrer=https%3A%2F%2Fwww.freedommobile.ca%2F#category=big-gig
Bell/TELUS	Proposed Data-Only	500 MB	\$30	\$0.06/MB	Submissions
Rogers	Proposed Data-Only	400 MB	\$25	\$0.06/MB	Submission

68 In addition to few economic barriers to making the plans either dramatically cheaper, or offering significantly more data for the proposed prices, there also appear to be few technical barriers to offering the same plans for customers’ smartphones which are already available for tablets. Anecdotes and guides online detail subscribers successfully using designated tablet plans on their smartphones in Canada.⁵⁹ If one of the Commission’s objectives is to give consumers more choice and control—both specifically in the context of affordability within this proceeding, and as a broader goal for Canadian communications policy overall—then it seems fairly low-hanging fruit to assert that once customers have purchased data from a carrier, they be able to decide for themselves which device to use that data on.

B History and precedent explain why the CRTC must protect consumers in determining specifications of data-only plans

69 The history of consumer protection regulation and market evolution in Canadian telecommunications is a history of carriers often providing just enough competition or new initiatives to stave off what may be impending regulation, without going much further due to lack of real incentives. This is important because it suggests the CRTC must specify in its orders precisely what should result from this proceeding, because the absolute least that the CRTC

⁵⁸ Aaron Saltzman, “CRTC shuts down Sugar Mobile in big victory for Rogers, Big 3”, *CBC* (1 March 2017), online: <http://www.cbc.ca/news/business/sugar-mobile-rogers-telus-bell-cellphone-crtc-1.4004569>.

⁵⁹ See, e.g., Charlie Rage, “Switching from a voice to a data only smartphone plan in Canada” (30 January 2017), online: charliedrage.com/data-only-smartphone-plan; Dan Misener, “How I ditched my voice plan and went data-only” (6 January 2014), online: misener.org/ditched-voice-plan-went-data; Howard Forums, “Will a tablet sim work on a cellphone?” (18 October 2014), online: <https://www.howardforums.com/showthread.php/1848736-Will-a-tablet-sim-work-on-a-cellphone>; RedFlagDeals, “[SOLVED!] Is it possible to use a Bell Tablet Plan on Smartphone? [YES!]” (12 July 2015), online: forums.redflagdeals.com/solved-possible-use-bell-tablet-plan-smartphone-yes-1454606.

directs the carriers to do is the absolute most that consumers will have access to, at least until the next time a seemingly serious regulatory threat appears on the horizon.

- 70 For example, the proceeding leading to Telecom Regulatory Policy CRTC 2016-496, *Modern telecommunications services – The path forward for Canada’s digital economy*, which looked at affordability of home broadband Internet, saw Rogers deciding to expand its program for low-income subscribers in social housing in Toronto, just one week before the Commission’s hearing.⁶⁰ Similarly, TELUS announced a new pilot program during the hearing itself.⁶¹
- 71 On the broadcasting side, in September 2016, the Commission held a hearing to review BDUs’ implementation of the basic TV package and its pick-and-pay decision from *Let’s Talk TV*, in response to numerous customer complaints. Bell had received a particularly high and public amount of criticism due to reports that it had instructed its sales staff not to tell consumers about the new basic TV package, and for requiring those who wanted basic TV to also subscribe to Bell home Internet. The day before Bell’s hearing appearance, it removed the Internet subscription condition. As Commissioner Christopher MacDonald pointed out, “If one were to take a bit of a cynical view, it’s somewhat surprising that would come out hours before the oral phase of a hearing.”⁶²
- 72 In the context of affordability in mobile wireless services, it seems worth noting that Bell launched its newest flanker brand, Lucky Mobile, only last December—just as the proceeding to revisit the Commission’s WiFi-MVNO / Sugar Mobile model came to an end and the Commission had to begin deliberating whether or not to grant approval, with a strong ISED-directed eye on affordability. On a recent investor call, Bell CEO George Cope explained that “Lucky Mobile was partly a strategic move to fall in-line with the government’s desire for more low-cost options.”⁶³
- 73 Where the market has become more competitive, or more user-friendly, it has been due to the Commission’s intervention and direction, such as with wholesale wireless roaming rates, the *Wireless Code*, the Commission for Complaints for Telecom-Television Services, the competitor quality of service regime, and wholesale wireline mandated access policies. In each of these, the Commission had to act to ensure that telecommunications service providers treated customers and competitors fairly, and complied with both the spirit and the letter of the law.
- 74 The Forum respectfully submits that the Commission has an opportunity to get achieve its objectives for affordable mobile telephone service in this proceeding, with the benefit of hindsight from issues that required additional process and determinations, after much consumer grief, such as *Wireless Code* and basic TV. To truly ensure that affordable data-only plans are available to telecommunications users across Canada, unambiguously and as expeditiously as *Reconsideration of TD 2017-57* and the Notice of Consultation implied is intended, the CRTC must set out the specific parameters of the low-cost data-only plans that the national carriers must make available in the market, specify what additional features should be included (such as the ability to tether), and specify what conditions are disallowed (such as Bell’s tied selling for basic TV). Much in the same way that the CRTC required telecommunications service providers to provide critical

⁶⁰ "Rogers to offer \$9.99 internet to low-income housing organization tenants", *CBC News* (7 April 2016), online: www.cbc.ca/news/business/rogers-cheap-internet-1.3523584.

⁶¹ Transcript, TNC CRTC 2015-134, *Review of basic telecommunications services*, 18 April 2017, at paras 7836-37.

⁶² Sophia Harris, "Under fire at CRTC hearing, Bell promises big change to \$25 basic TV plan", *CBC News* (8 September 2016), online: www.cbc.ca/news/business/bell-crtc-25-basic-tv-1.3752176.

⁶³ Rose Behar, "Bell CEO 'a little disappointed' CRTC lowered wholesale roaming costs for competitors", *MobileSyrup* (3 May 2018), online: <https://mobilesyrup.com/2018/05/03/bell-crtc-disappointed-lower-wholesale-roaming-costs/>.

information to their actual and potential customers, the CRTC should also require mobile telephone service providers to present data-only plans using clear, easy-to-understand language.⁶⁴

IV. CRTC must establish data cap floors and price ceilings

- 75 The Commission must establish a data floor and a price ceiling for the low-cost data-only plans that result from this proceeding, based on the real and growing needs of mobile wireless users throughout Canada, and vulnerable or marginalized users in particular. The Forum recommends that plans provide **1 GB for \$7 or 2 GB for \$10**.

A People throughout Canada rely increasingly on mobile data

- 76 The Forum notes first, that people throughout Canada and the rest of the world, and the global economy, are increasingly relying on greater and greater volumes of mobile wireless data. According to Statista, mobile phones were responsible for 33% of web traffic in Canada as of January 2018 (with tablets generating an additional 11%, for a total of 44% web traffic being mobile).⁶⁵ Additionally, the CRTC's 2017 *Communications Monitoring Report* found that 27.5% of households in Canada were wireless only.⁶⁶
- 77 The 2017 *Communications Monitoring Report* also stated that mobile wireless subscribers in Canada used on average 1.2 GB per month in 2016, a 25% increase from 2015.⁶⁷ As noted, however, this is a low number compared to countries across the OECD and EU, and combined with Rewheel's finding that price drives adoption, likely reflects the fact that mobile wireless data in Canada is unaffordable to many, rather than that 1.2 GB per month is truly sufficient to participate meaningfully in today's global digital society.
- 78 The Forum notes with respect to affordability that since 2013 – when the CRTC began to consider wholesale roaming arrangements⁶⁸ and, shortly thereafter, whether Canada's wholesale mobile wireless market was sufficiently competitive so as to forestall regulation⁶⁹ – income has declined in real terms for many people in Canada. As Figure 10 shows, median income – the level at which half the population earns less, and the remaining half earns more, than that income – barely grew (0.7%) for those between 25 and 54 years of age, then actually decreased for people between the ages of 55 and 64 years of age, and flatlined for those over 65 years of age. While the median income for those between 16 and 24 years of age did increase by 15.5% between 2013 and 2016, their median income remained \$4,600 lower than it was (in real terms) in 1976.

⁶⁴ The Forum's June 2018 survey found that 23.6% of Canadians wanted more information about data-only plans, even when they already used a great deal of data (3 GB or more), suggesting that data use alone does not always translate into knowledge about data plans (see Appendix, Survey result 19).

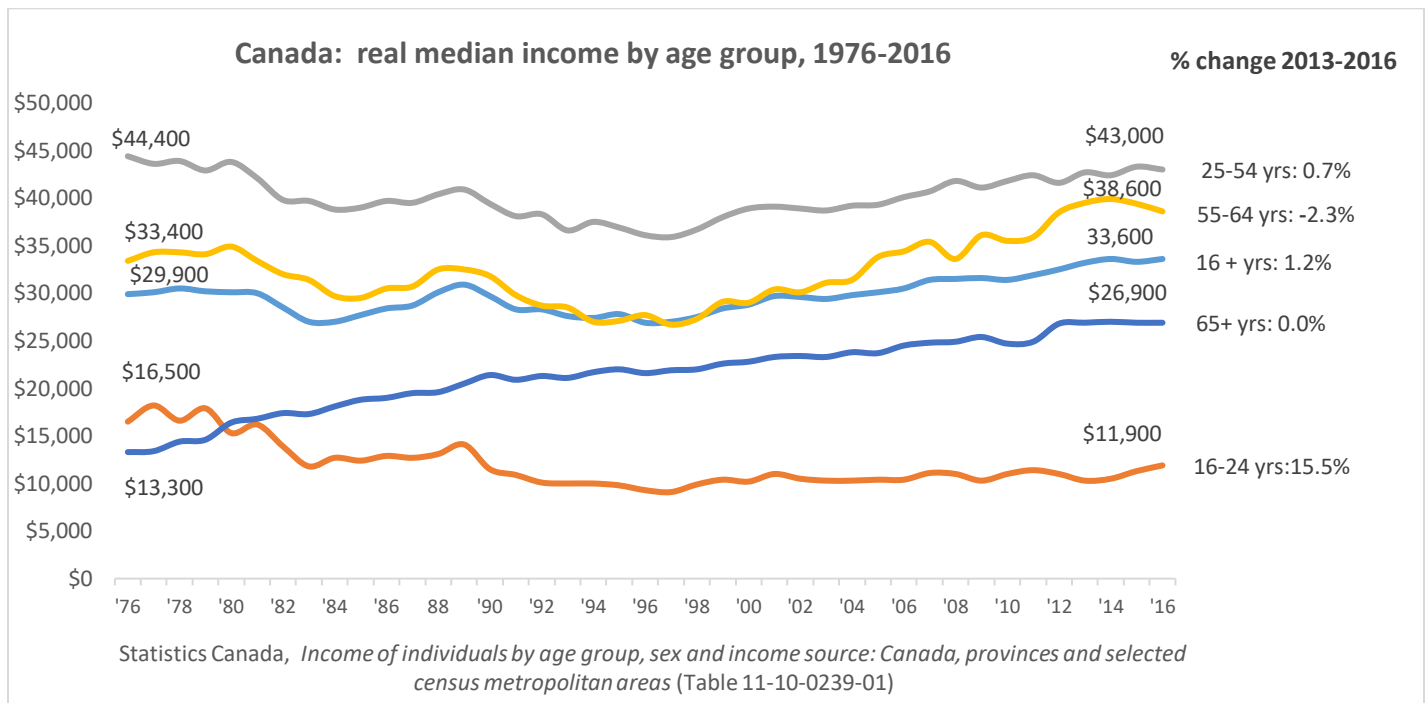
⁶⁵ Statista, "Distribution of online traffic in Canada as of January 2018, by device" (2018), online: <https://www.statista.com/statistics/505773/canada-online-traffic-device-share/>.

⁶⁶ CMR 2017, *supra* note 36.

⁶⁷ *Ibid.*, at page 32.

⁶⁸ *Wholesale mobile wireless roaming in Canada – Unjust discrimination/undue preference*, Telecom Notice of Consultation 2013-685 (Ottawa, 12 December 2013), <https://crtc.gc.ca/eng/archive/2013/2013-685.htm>.

⁶⁹ *Review of wholesale mobile wireless services*, Telecom Notice of Consultation 2014-76 (Ottawa, 20 February 2014), <https://crtc.gc.ca/eng/archive/2014/2014-76.htm>.

Figure 10 Real median income by age group, 1976-2016 (2016 dollars)

79 What these data mean, in more concrete terms, is that since 2013 real income has decreased for more than five million people over the age of 55 (5.372 million; see Table 6).

Table 6 Number of people whose income has decreased since 2013, by age group

Age group	Median income in 2016	% change since 2013	Number of people in category	People below median income (000s)
16 years and over	\$33,600	1.2%	29,341	14,670.5
16 to 24 years	\$11,900	15.5%	3,960	1,980
25 to 54 years	43,000	0.7%	14,637	7,318.5
55 to 64 years	38,600	-2.3%	4,927	2,463.5
65 years and over	26,900	0.0%	5,817	2,908.5
Subtotal, 55 years +				5,372.0

Source: Statistics Canada, *Income of individuals by age group, sex and income source, Canada, provinces and selected census metropolitan areas* (Table 11-10-0239-01)

80 Increasing, and arbitrarily high, prices for mobile data have direct consequences for millions of Canadians, and cause real harm. As part of its telecommunications affordability report, PIAC conducted a survey in late 2015 that found 25% of low-income respondents “felt mobile phone service was extremely important”, with an additional 19% considering it “important”.⁷⁰ According to that survey, 21% of respondents reported struggling to pay their mobile wireless bills over the past year.⁷¹

81 More specifically, PIAC’s survey also found that 49% of respondents had done one or more of the following in order to pay their communications bills: taken a bank or other loan; sold or pawned their possessions; relied on social welfare or charity; borrowed money from family or friends; or cancelled one or more of their telecommunications plans altogether. For some, remaining

⁷⁰ Bishop and Lau, *supra* note 34 at page 40.

⁷¹ *Ibid.*

connected was so important that they gave up food, medicine, clothing, rent, or other essentials, in favour of paying their communications bills.⁷² Mobile telecommunications are an essential public service.

B Marginalized or vulnerable populations rely heavily on mobile data

- 82 Second, certain vulnerable or marginalized communities rely disproportionately on mobile wireless services, such as low-income households and newcomers who have immigrated to Canada. For instance, the CMR 2017 noted that the lowest two income quintiles have the highest proportion of households with only wireless service (35% of the first quintile; 30.4% in the second).⁷³ During the proceeding leading to *Modern Telecommunications Services*, the CRTC heard many Deaf, Deaf-blind and people from accessibility groups describe their reliance on higher levels of data: data enable people in these communities to use their devices to communicate at a level functionally equivalent to other users.⁷⁴
- 83 A 2014 study by Yahoo Canada found that new immigrants in Canada (*i.e.*, those who had arrived within the previous five years) also rely heavily on mobile wireless services, spending 54% more time on mobile than average.⁷⁵ The study also noted that 81% of respondents thought their mobile wireless plan was more expensive in Canada than in their respective home countries.⁷⁶
- 84 While there are scarce data in Canada, multiple studies in the United States have established that, in addition to living in lower-income households, those who rely exclusively on mobile wireless services to stay connected disproportionately have less formal education, or disproportionately belong to African American, Hispanic, or Latinx communities.⁷⁷ According to recent Pew research, 22% of the Hispanic population and 15% of African Americans in the United States only have mobile wireless Internet (as opposed to home broadband).⁷⁸
- 85 Perhaps the highest reliance occurs at the cross-section between these communities and those seeking work: a number of studies have highlighted the significant role played by mobile wireless devices when it comes to finding work; this is all the more true among those in the communities

⁷² *Ibid.*, at page 115.

⁷³ CMR 2017, *supra* note 36 at page 42.

⁷⁴ Telecom Regulatory Policy CRTC 2016-496, *Modern telecommunications services – The path forward for Canada's digital economy* (22 December 2016), at paras 85, 103, and 208-209.

⁷⁵ "New Study Explores the Digital Habits of New Canadians", Yahoo Canada (12 November 2014), online: yahooadvertisingca.tumblr.com/post/102448845105/new-study-explores-the-digital-habits-of-new; see also Douglas Soltys, "New Canadian immigrants spend 54% more time per day on mobile devices than the national average", MobileSyrup (18 November 2014), online: <https://mobilesyrup.com/2014/11/18/new-canadian-immigrants-spend-54-more-time-per-day-on-mobile-devices-than-the-national-average/>.

⁷⁶ *Ibid.*

⁷⁷ Aaron Smith and Kenneth Olmstead, "Declining Majority of Online Adults Say the Internet Has Been Good for Society", *Pew Research Center* (30 April 2018), online: http://assets.pewresearch.org/wp-content/uploads/sites/14/2018/04/27165144/PI_2018.04.30_Internet-Good-Bad_FINAL.pdf at page 4; Aaron Smith, "Searching for Work in the Digital Era", *Pew Research Center* (November 2015), online: http://assets.pewresearch.org/wp-content/uploads/sites/14/2015/11/PI_2015-11-19-Internet-and-Job-Seeking_FINAL.pdf; John B Horrigan, "Broadband and Job: African Americans Rely Heavily on Mobile Access and Social Networking in Job Search", *Joint Center for Political and Economic Studies* (October 2013), online: <http://jointcenter.org/sites/default/files/Broadband%20and%20Jobs.pdf>, at pages 1 and 17.

⁷⁸ Andrew Perrin, "Smartphones help blacks, Hispanics bridge some – but not all – digital gaps with whites", *Pew Fact Tank* (31 August 2017), online: www.pewresearch.org/fact-tank/2017/08/31/smartphones-help-blacks-hispanics-bridge-some-but-not-all-digital-gaps-with-whites/.

mentioned above.⁷⁹ Mobile wireless devices enable people to search for positions, complete and/or submit applications, research, e-mail contacts and potential employers, and even to create resumes and cover letters.⁸⁰ Many job application processes, including government services, have also moved predominantly, if not exclusively online, and may only be accessed through an Internet connection, with sufficient data.

- 86 Furthermore, Pew found that the same groups who relied more heavily or exclusively on mobile wireless services to stay connected were those also most likely to cancel their services due to affordability issues.⁸¹ This aligns with the data available in Canada showing that low-income households are most likely to be mobile wireless only (according to the CMR 2017), as well as with PIAC's affordability report demonstrating the struggles of low-income subscribers to maintain their communications services, and the lengths they will go to in paying their bills.

C CRTC should require carriers to offer plans of \$7/1gb and \$10/2gb

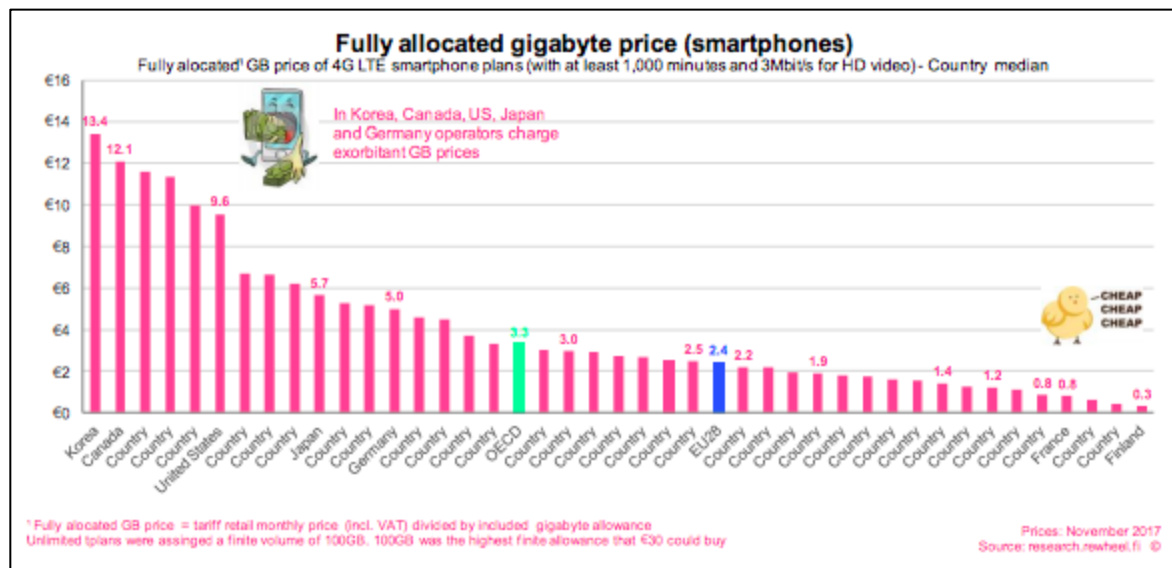
- 87 In light of the documented and growing dependence on affordable mobile wireless data in Canada, particularly among more vulnerable or marginalized communities such as new immigrants and those who are unemployed but seeking work, there is a clear need for the lower-cost data-only plans that the Commission intends to result from this proceeding. However, carriers' notions of what constitutes "sufficient" for the average person, let alone the average struggling person, to participate meaningfully in today's digital society have repeatedly proven to be out of touch and misaligned with real people's experiences.

- 88 In the Forum's view, the Commission should encourage the national carriers to offer low-cost data-only plans of **1 GB for \$7 per month** and **2 GB for \$10 per month (on LTE)**. This is approximately the median price per GB among OECD countries, as shown in Figure 11 from Rewheel, represented below. This is also comparable to the price of Bell's and TELUS's mobile data buckets in Saskatchewan and Manitoba, and matches that of Videotron's data add-ons in Quebec. Market forces are less distorted in these provinces than in regions without a historically strong regional competitor, and should therefore serve as the benchmark. In fact, in Manitoba, \$10 would obtain 2.5 GB.

⁷⁹ See generally Horrigan, *supra* note 70.

⁸⁰ *Ibid.*; see also Smith, *supra* note 70.

⁸¹ *Ibid.*

Figure 11 Fully allocated gigabyte price of 4G LTE smartphone plans

- 89 The purpose of this proceeding is to remedy a gap that the Commission identified as currently part of the market – that is, the failure to serve users who cannot afford pre-existing mobile wireless plans. This means that, by definition, the plans that result from this proceeding must be superior to those already in the market, by offering more data at a more affordable price for those for whom promotional and flanker brand plans are still out of reach. In order to ensure that this occurs, the Commission should mandate that the national carriers offer low-cost data-only plans with the specifications that the Forum recommends above.

V. CRTC must be proactive in closing loopholes and ensuring full compliance with decision

- 90 This proceeding is distinct from many other notices of consultation in the sense that it is expressly ameliorative, driven by the Order in Council's focus on making mobile wireless communications more affordable to Canadians, and by the Commission's own desire to close an identified gap in the market by introducing new low-cost, data-only plans. However, effective implementation of the Commission's ultimate determinations will rest on the specificity and robustness of the decision and enforcement or, ideally, the *ex ante* prevention of potential non-compliance through various loopholes.

- 91 The Commission must place the public interest first by not imposing a burden upon consumers to be individually vigilant and topically knowledgeable in advocating for themselves in every transaction with a carrier and in being able to know whether or not a carrier is acting in keeping with the letter and spirit of the Commission's decisions in every situation. The Forum respectfully recommends that the CRTC consider the events and decisions surrounding the *Wireless Code* as well as the roll out of the *Let's Talk TV* basic TV packages, and incorporate those lessons into the decision of this proceeding: it should explicitly state its specific requirements, and specifically prohibit practices that may undermine the effectiveness of the CRTC's decision.

A Lessons from implementing the *Wireless Code*

- 92 The proceeding that led to Telecom Regulatory Policy CRTC 2017-200 (*Review of the Wireless Code*) exposed a number of issues that mobile wireless subscribers faced, and that might have been prevented had there been a higher degree of specificity in the original Code. These included:

identifying which individuals on an account have the ability to consent to overage charges, and whether or not the account-holder, as the account-payer, should be informed and have control over overage;⁸² revising the Code “to require WSPs to communicate with customers in not only plain language, but also in a way that is clear, timely, and accurate”;⁸³ requiring WSPs “to ensure that the CIS contains a description of any limits imposed on services purchased on an unlimited basis”;⁸⁴ and confirming that core components of a mobile wireless plan, such as data, constitute key terms of the contract.⁸⁵

93 Many of these issues may have seemed obvious or to have gone without saying, given the context of consumer protection, at the time the Commission issued the original *Wireless Code*. Unfortunately, this turned out not to be the case, and the CRTC was forced to revise the *Code* to explicitly specify, for example, that WSPs’ communications with customers, in the context of ensuring informed agreement to contracts, had to be “clear, timely, and accurate.” This inadvertent “oversight” led to years of difficulties for customers, as demonstrated by CCTS statistics showing complaints regarding misleading or undisclosed contract terms consistently topping the list.⁸⁶ It is also likely that the years required to correct such problems unfairly raised profits of some wireless service providers.

94 To avoid similar difficulties in the rollout of the lower-cost data-only plans that the Forum supports, and to prevent the necessity for all involved to spend further resources on subsequent reviews or complaints, the CRTC should be as specific and as thorough as possible in detailing what is required of carriers in providing the new plans, and when, regardless of how obvious or sensible the CRTC’s requirements may otherwise seem.

B Lessons from implementing *Let’s Talk TV* basic packages and pick-and-pay

95 Developments and the eventual hearing surrounding BDUs’ implementation of the Commission’s *Let’s Talk TV* decision regarding basic TV packages and pick-and-pay should also inform the drafting of Commission’s determinations in this proceeding. Despite the expressed intent behind making basic TV packages available, BDUs engaged in various practices that undermined the new packages’ purpose and the Commission’s decision. This included tying TV packages to expensive home Internet subscriptions, disallowing bundling with other services, ordering customer service staff not to reveal the existence of the new plans, and tacking on significant additional fees such that in some cases, the basic TV packages became more expensive than customers’ pre-existing cable subscriptions.⁸⁷

96 The CRTC was forced to issue a new decision specifying what, again, one might have thought to be taken for granted, such as “not penalizing customers who switch to a lower-priced package [and] keeping offerings simple and transparent”, as well as the directive that “BDUs should not downplay the small basic service or avoid providing information on the small basic service. Rather,

⁸² Telecom Regulatory Policy CRTC 2017-200, *Review of the Wireless Code* (15 June 2017), at para 103 [*Wireless Code*].

⁸³ *Ibid.*, at para 131.

⁸⁴ *Ibid.*, at para 141.

⁸⁵ *Ibid.*, at para 168.

⁸⁶ Commission for Complaints for Telecom-Television Services (CCTS) Mid-Year Report 2017-2018, online: <https://www.ccts-cprst.ca/wp-content/uploads/2018/04/CCTS-Mid-Year-Report-2017-2018.pdf>, at page 3.

⁸⁷ Sophia Harris, “Bell tells staff to downplay new \$25 basic TV package ordered by CRTC”, CBC News (26 February 2016), online: www.cbc.ca/news/business/bell-skinny-tv-package-crtc-1.3465674; *Review of basic TV practices*, *supra* note 32.

BDUs should clearly communicate all relevant information regarding the small basic service and pick-and-pay and small package options.”⁸⁸

- 97 The Forum recommends that the CRTC ensure that the decision resulting from this proceeding details as explicitly and as specifically as possible what practices are expected, and when they must be fully implemented, as well as the practices that are prohibited, in the implementation of low-cost data-only plans. This might include, for example, stating expressly that carriers are to prominently advertise the existence of these plans on their websites and in customer service phone calls, as well as expressly prohibiting the concealment of these plans from customers. This could also include specifying that carriers may not tie the new plans to other purchases, and may not tack on additional fees that would not normally apply to other mobile wireless plans.

V. Conclusion and recommendations

- 98 The Forum commends the CRTC for engaging in its present efforts to introduce new, affordable options into the mobile wireless market for telecommunications users in Canada. This has been a longstanding issue in Canadian telecommunications policy and remains a pressing problem for low-income users or would-be users across the country, which demands a remedy in the absence of mandated MVNO wholesale access to networks.
- 99 The CRTC must encourage carriers to make available data-only plans of **1 GB for \$7** and **2 GB for \$10**. This recommendation is based on evidence taken from the national carriers’ and new entrants’ currently existing mobile wireless plans, international comparison data, studies of mobile wireless affordability in Canada and data regarding those who rely the most on mobile wireless services in particular.
- 100 Moreover, the Commission must learn from the lessons of other ameliorative initiatives such as the *Wireless Code* and *Let’s Talk TV* basic packages, to prevent their initial shortcomings from being repeated in the rollout of the lower-cost data only plans. The CRTC’s decision must state, as explicitly as possible, its requirements of the carriers for providing these plans. It must also state, as explicitly as possible, what practices are prohibited due to their potential to undermine the CRTC’s efforts in making these plans available.
- 101 The Forum looks forward to the Commission’s promised review of wholesale wireless services policies within the next year. Low-cost data-only plans will serve as a stopgap solution given the structural deficiencies of the market. The Commission must keep this broader context in mind and ensure that, as the final and likely only recourse for many who will not otherwise be able to afford mobile communications, for at least the next several years, these plans are as robust and meaningful as possible in enabling their users to participate meaningfully in today’s digital society.

⁸⁸ *Ibid.*, at para 35.

Appendix

**Canadians' views on mobile data:
results from a national, bilingual survey of Canadians
in June 2018**



Canadians' views on mobile data

Results from a survey commissioned by the
Forum for Research and Policy in Communications (FRPC)

11 June 2018

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Contents

Highlights	1
I. Purpose of the research	1
II. Analysis of survey results	1
A. Use of mobile phones to access the Internet (Q1)	3
B. Data in mobile phone plans	5
1. Data included in mobile phone plans? (Q3)	5
2. Amount of data included in mobile phone plans? (Q4)	5
3. Use of data in a typical month (Q8)	6
4. Good value for the money that users pay? (Q5)	7
C. The cost of data	9
1. Incidence of overage fees for data (Q6)	9
2. Do users limit use due to fears of data overage fees? (Q7)	11
D. Views on a lower-cost data-only plan (Q9)	14
1. General demographics	14
2. High-use users	15
3. Users who don't think they get value for money	16
4. Users who've experienced overage fees	16
III. Research method	17
A. Survey	17
B. Survey questionnaires	20

Tables

Survey result 1	Frequency of access to Internet using mobile phone (Q1)	3
Survey result 2	Choice of plan and use of Internet (Q2)	4
Survey result 3	Does mobile phone plan include data? (Q3)	5
Survey result 4	Amount of data included in monthly mobile phone plan? (Q4)	5
Survey result 5	Amount of data used in a typical month (Q8)	6
Survey result 6	Do mobile phone plans give good value for money paid? (Q5)	7
Survey result 7	Value for money paid, and use of data (Q5)	8
Survey result 8	Frequency at which data overage charges are paid in Canada (Q6)	9
Survey result 9	Frequency at which data overage charges are paid, by age group (Q6)	9
Survey result 10	Frequency at which data overage charges are paid, by level of education (Q6)	10
Survey result 11	Frequency at which data overage charges are paid, by level of data used (Q6)	10
Survey result 12	Whether had to pay for data overage in previous year, compared with self-limits on use of mobile phone due to worries about data-overage fees	11
Survey result 13	Limiting use because of worry that overage fees might be incurred, by region (Q7)	11
Survey result 14	Limiting use because of worry that overage fees might be incurred, by region (Q7)	12
Survey result 15	Users' views on lower-cost data-only plan, across Canada and by age (Q9)	14
Survey result 16	Users' views on lower-cost data-only plan, by income (Q9)	14
Survey result 17	Interest in a lower-cost data-only plan, by region	15
Survey result 18	Interest in a lower-cost data-only plan, by use of data in a typical month	15
Survey result 19	Use of data in a typical month by interest in a lower-cost data-only plan	16
Survey result 20	Interest in lower-cost data-only plans by opinion on value for money of mobile phone plan	16
Survey result 21	Payment of data overage fees in past year, compared with interest in switching to lower-cost, data-only plan	17

Figures

Survey figure 1	Relationship between typical monthly data use and users' self-limitations on use of data	12
Survey figure 2	Relationship between users' age and self-limitations on use of data	13
Survey figure 3	Relationship between users' income and self-limitations on use of data	13

Highlights

A national, bilingual interactive voice response survey of 1,294 adults (18 years or over) who have their own mobile phones, was conducted by Access Research on behalf of the Forum for Research and Policy in Communications (FRPC) across Canada's provinces and territories on the 8th, 9th and 10th of June 2018. The results have a margin of error of plus or minus +/-2.83%, 19 times out of 20.

The purpose of the survey was to learn about Canadians' experience with respect to mobile phone data and data overage charges and their views on data-only mobile phone plans. These issues have arisen in the context of [*Call for comments - Lower-cost data-only plans for mobile wireless services, Telecommunications Notice of Consultation CRTC 2018-98 \(Ottawa, 22 March 2018\)*](#).

The survey found that

- Canadians use their mobile phones to access the Internet, “nearly all the time” (47%) or several times a day (31.4%); and that just 7.2% of Canadians do not use their mobile phone to access the Internet (Survey result 2)
- More than two-thirds (70.1%) of those living in cities with more than 100,000 residents say their mobile phone plans offer them more than a gigabyte of data; this figure decreases to 57.4% in communities with fewer than 500 people (Survey result 4)
- Just over half of men (53.7%) and somewhat fewer women (41.5%) use a gigabyte of data or more in a typical month (Survey result 5)
- More than two-thirds (68.6%) of Canadians thought they did not receive good value for the money they paid for their mobile phone plans, with more men (71.9%) than women (64.3%) holding this view (Survey result 6)
 - Just under three-quarters (73.0% to 74.9%) of those between 25 and 54 years of age thought their mobile phone plans did not provide good value for money
 - More than three-quarters (77.4%) of people whose before-tax household income was higher than Canada's median income thought their plans did not provide good value for money
 - 84.8% of people in the North did not think their mobile phone plans provided good value for money, compared to 52.0% of those in Saskatchewan and Manitoba (who shared the same view)
 - Dissatisfaction with the value of their monthly phone plans increased with the amount of data people used in a typical month, rising from 59.1% when they used fewer than 100 megabytes of data, to 78.3% when they used 3 or more gigabytes of data (Survey result 7)
- More than half (53.2%) of Canadians say they have had to pay additional amounts to use their mobile phone service because they used more data than included in their monthly plans (Survey result 8)

- 64% of those who paid data-overage fees in the previous year used 1 gigabyte or more in a typical month (Survey result 11)
- 57.3% of those who have had to pay a data-overage fee in the previous year said they limited use of their mobile phone due to worries they might incur overage fees (Survey result 12)
- Efforts to limit use due to worries about the cost of data overage charges were highest in the North (65.2%), and in British Columbia and Alberta (64.6%) (Survey result 13)
- More than half of Canadians limited their data use at least once in the previous year, regardless of the level of data they use in a typical month (Survey result 14); the more data that people used, however, the more likely they were to limit their data usage (Survey figure 1)
- In terms of data-only plans, very few Canadians (1.1%) said they have such a plan (Survey result 15), while 23.2% said they would switch to a lower-cost data-only plan that permitted them to make calls and send messages (by downloading an application or service from the Internet) (Survey result 18)
 - 29.3% of people living in Saskatchewan or Manitoba, and 26.9% of people in Atlantic Canada said they would switch to a lower-cost data-only plan (Survey result 17))
 - 28% of people who use between 50 and 100 MB of data in a typical month, and 28% of those who use between 2 and 3 GB of data in a typical month, said they would switch to a lower-cost data-only plan (Survey result 18)
 - Propensity to switch to a lower-cost data-only plan was highest for those using more than 3 GB of data in a typical month (Survey result 19)
 - People's desire for more information about lower-cost data-only plans increases with the number of times they have had to pay data-overage charges in the previous year (Survey result 21)

I. Purpose of the research

The Forum for Research and Policy in Communications (FRPC) is a non-profit and non-partisan organization established to undertake research and policy analysis about communications, including broadcasting telecommunications. The Forum supports a strong Canadian communications system that serves the public interest.

This report summarizes results from a national, bilingual survey undertaken on behalf of the Forum in June 2018 about adult Canadians' experiences with data available from their mobile phones, the frequency with which they have experienced data-overage charges, and their interest in data-only mobile phone plans. The survey was undertaken as part of the Forum's research with respect to [Call for comments - Lower-cost data-only plans for mobile wireless services, Telecommunications Notice of Consultation CRTC 2018-98 \(Ottawa, 22 March 2018\)](#), and was submitted to the CRTC on 13 June 2018 as part of the Forum's comments in that proceeding.

The survey results described in this report focus on three issues raised by TNoC 2018-98: mobile phone users' satisfaction with mobile phone plans, the frequency with which mobile phone users experience data-overage charges, and users' interest in data-only mobile phone plans.

Part II, which follows, briefly describes the survey results in the following order:

- a. Users' mobile phone plans' inclusion of data
- b. Level of mobile phone plan data
- c. Users' views on their current mobile phone plan's value for money
- d. Users' experience with paying additional amounts due to data use
- e. Users' experience with limiting their mobile phone use due to fears of additional data fees
- f. Amount of data used in a typical month, and
- g. Users' interest in data-only plans.

We analyze the results in Part III, while the survey method and questionnaires are set out in Part IV.

II. Analysis of survey results

Access Research conducted an interactive-voice-response survey of 1,294 people over 18 years of age in Canada, on the second Friday and weekend of June 2018, using an English-language and French-language questionnaire designed by the Forum. Access Research weighted the

survey responses by age, gender, and region, using data from Statistics Canada.⁸⁹ The survey's results have a margin of error of plus or minus $\pm 2.83\%$, 19 times out of 20.

The survey asked respondents

- About the frequency of their access to the Internet using their mobile phones (Q1)
- Whether they have a pre-paid or post-paid mobile phone plan (Q2)
- Whether their mobile phone plan includes data (Q3)
- If their mobile phone plan includes data, how much data is included (Q4)
- Whether their current mobile phone plan gives them good value for the money they pay (Q5)
- Whether respondents have had to pay additional amounts because of using more data than included in their phone plans (Q6)
- Whether respondents have limited their mobile phone use because they were worried they might be charged additional fees for data (Q7)
- The amount of mobile phone data respondents use in a typical month (Q8), and
- Interest in data-only plans (Q9).

The Forum analyzed these concepts in terms of demographics: language, gender, age, region (in which respondents live), education and income. Responses suggesting uncertainty ("Not sure") were generally included in the analysis.

Tests of statistical significance measure were used to measure the probability that a specific association between variables was or was not likely to have occurred by chance.⁹⁰ Results were considered statistically significant when their probability of occurring by chance – using the Pearson's chi-square test⁹¹ – was equal to or lower than five times out of a hundred (*i.e.*, the 5%, or .05 level that is generally used in the social sciences). Statistically significant results can be generalized to the population being described,⁹² whom we describe in the remainder of this report as 'Canadians'.⁹³

Associations between concepts that were not statistically significant may have occurred by chance, and for that reason are not reported. Results that are not statistically significant also convey meaning, however: results showing no statistically significant differences by gender establish that men, women and others (who chose not to identify as male or female) held the same general views.

⁸⁹ The Forum notes, however, that only one (1) response was received from the territories.

⁹⁰ In other words, a statistically significant result from these tests does not imply that the results are important (a significant finding), but that the results were unlikely to have occurred by chance.

⁹¹ Two-sided asymptotic significance levels.

⁹² Results that are not statistically significant may have occurred by chance.

⁹³ As the survey did not ask respondents about their citizenship or nationality, non-Canadians resident in Canada with Canadian telephone numbers may also be included in the results.

A. Use of mobile phones to access the Internet (Q1)

Survey result 1 shows that in June 2018 close to half (47.0%) of Canadians said they used their mobile phones to access the Internet 'nearly all the time', with almost a third more (31.4%) saying they used their mobile phones for this reason 'several times a day' (**Error! Reference source not found.**). There were no statistically significant differences between genders ($p=.226$), and the regions ($p=.428$).

More than half of people up to the age of 44 used their mobile phones to access the Internet nearly all the time, while people older than 65 tended to use their mobile phones less frequently to access the Internet. A higher percentage of people living in smaller communities of fewer than a thousand people said they used their mobile phones to access the Internet infrequently (once or twice a month) or not at all. In 2016 the median income for households in Canada was \$70,332;⁹⁴ nearly three-quarters (73.1%) of those who did not use their mobile phones to access the Internet reported incomes below this level.

Survey result 1 Frequency of access to Internet using mobile phone (Q1)

1. First of all, how often do you access the Internet using your mobile phone?	Nearly all the time	Do this several times a day	Do this a few times a week	Once or twice a month	Do not use phone to access Internet	Total
TOTAL (N=1294)	47.0%	31.4%	11.3%	3.1%	7.2%	100.0%
	78.4%		11.3%	10.5%		100%
Location (Pearson Chi-Square 0.000)						
In a city with 100,000 or more residents	46.7%	32.8%	12.3%	1.7%	6.5%	100.0%
In a city with between 30,00 and 99,999 residents	50.2%	29.5%	8.8%	2.3%	9.2%	100.0%
In a town or city with a population of between 1,000 and 29,999 residents	45.3%	35.3%	12.3%	2.5%	4.5%	100.0%
In a community with 500 to 999 residents	50.0%	21.8%	10.3%	7.7%	10.3%	100.05
In a community with fewer than 500 residents	43.9%	18.35	8.5%	13.4%	15.9%	100.0%
Age ($p=.000$)						
18 – 24 years of age	56.0%	39.0%	1.%	0.0%	3.5%	100.0%
25 – 34	69.2%	24.3%	5.6%	0.0%	0.9%	100.0%
35 – 44	58.8%	31.3%	5.2%	0.9%	3.8%	100.0%
45 – 54	44.5%	35.2%	12.8%	3.5%	4.0%	100.0%
55 – 64	38.8%	33.9%	18.8%	4.5%	4.0%	100.0%
65 – 74	22.5%	37.1%	15.2%	6.0%	19.2%	100.0%
75 years of age or older	24.8%	16.8%	23.9%	9.7%	24.8%	100.0%

⁹⁴ Statistics Canada, "Census indicator profile, based on the 2016 Census long-form questionnaire, Canada, provinces and territories, and health regions (2017 boundaries)" Table 17-10-0123-01 (formerly CANSIM 109-0501), <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710012301>.

1. First of all, how often do you access the Internet using your mobile phone?	Nearly all the time	Do this several times a day	Do this a few times a week	Once or twice a month	Do not use phone to access Internet	Total
Prefer not to answer	50.0%	16.7%	8.3%	0.0%	3.2%	100.0%
Income (p=.000)						
Under \$20,000	43.0%	30.4%	8.2%	7.0%	11.4%	100.0%
\$20,000 to just under \$40,000	42.7%	25.6%	14.2%	3.8%	13.7%	100.0%
\$40,000 to just under \$60,000	44.1%	27.7%	14.4%	3.1%	10.8%	100.0%
\$60,000 to just under \$80,000	48.1%	35.6%	10.0%	1.9%	4.4%	100.0%
\$80,000 or just under \$100,000	51.0%	33.3%	11.8%	0.7%	3.3%	100.0%
\$100,000 to just under \$150,000	54.1%	34.4%	6.6%	3.8%	1.1%	100.0%
\$150,00 and above	55.6%	32.35	10.1%	0.0%	2.0%	100.0%
Prefer not to answer	40.7%	34.8%	14.8%	3.0%	6.7%	100.0%
Median income (Chi-Square, p=.000)						
Below median income (< \$59K)	40.1%	38.7%	48.3%	62.5%	73.1%	43.7%
Near median income (\$70.3K)	12.7%	14.0%	10.9%	7.5%	7.5%	12.4%
Above median income (> \$80K)	38.2%	35.7%	27.2%	20.0%	9.7%	33.5%
Prefer not to answer	9.0%	11.6%	13.6%	10.0%	9.7%	10.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Education (Chi-Square, p=.024)						
Secondary school or less	48.0%	28.2%	8.1%	3.9%	11.7%	100.0%
College or BA	46.8%	32.2%	12.3%	2.9%	5.8%	100.0%
Graduate studies	45.1%	34.0%	14.4%	2.0%	4.6%	100.0%
No answer	54.2%	33.3%	4.2%	0.0%	8.3%	100.0%

Survey result 2 shows that more than two-thirds (68.7%) of Canadians said they had a post-paid plan for their mobile phones, with a quarter (25.9%) saying they had pre-paid plans, and another 5.5% saying they did not know.

Survey result 2 Choice of plan and use of Internet (Q2)

1. First of all, how often do you access the Internet using your mobile phone?	Nearly all the time	Do this several times a day	Do this a few times a week	Once or twice a month	Do not use phone to access internet	Total
TOTAL (N=1294)	46.9%	31.4%	11.4%	3.2%	7.2%	100.0%
	78.3%		11.4%	10.5%		100%
Mobile phone plan (p= .000)						
Pre-paid (N=335)	40.9%	33.4%	13.1%	5.1%	7.5%	100.0%
Post-paid (N=888)	50.6%	30.9%	9.9%	2.1%	6.5%	100.0%
Don't know (N=71)	29.6%	28.2%	21.1%	5.6%	15.5%	100.0%

B. Data in mobile phone plans

1. Data included in mobile phone plans? (Q3)

Survey result 3 shows that most (86.5%) Canadians say that data is included in their mobile phone plans, with 11.4% saying data was not included, and another 2.1% saying they did not know.

No statistically significant differences exist in whether people do or do not have data in their mobile phone plans, in terms of gender ($p=.331$) and region ($p=.428$).

Income is associated with access to data on mobile phones: a higher percentage of people (54.4%) with incomes below the 2016 median income in Canada reported that data was not included in their mobile phone plans.

Survey result 3 Does mobile phone plan include data? (Q3)

		Data included in plan	Data not included in plan	Don't Know	Total
Canada		86.5%	11.4%	2.1%	100.0%
Median	Under median (\$70.3K)	41.5%	54.4%	75.0%	43.7%
	Median (\$60-79K)	12.8%	10.2%	7.1%	12.4%
	Above median (\$80K +)	36.5%	17.0%	3.6%	33.5%
	Prefer not to answer	9.3%	18.4%	14.3%	10.4%
Total		100.0%	100.0%	100.0%	100.0%

2. Amount of data included in mobile phone plans? (Q4)

Survey result 4 shows that more than two-thirds (67.8%) of Canadians said their monthly mobile phone plan included a gigabyte (GB) or more of data, with proportionately more men (52%) reporting this level of data, than women (44.1%).

Survey result 4 Amount of data included in monthly mobile phone plan? (Q4)

		Fewer than 500 MB	500-999 MB	1 GB or more	Don't know	Total
Canada		22.4%	3.0%	67.8%	6.9%	100%
Gender ($p=.000$)						
	Male	41.4%	45.5%	52.0%	24.7%	47.6%
	Female	55.8%	54.5%	44.1%	70.1%	48.8%
	Other	0.8%		1.3%		1.1%
	Prefer not to say	2.0%		2.5%	5.2%	2.5%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%
City size ($p=.024$)						
	Large city: 100,000 +	18.4%	2.4%	70.1%	9.1%	100.0%
	Medium city: 30-99K	26.6%	1.6%	67.6%	4.3%	100.0%
	Small city: 1K-29K	24.0%	4.5%	65.5%	5.9%	100.0%
	Town: 500-999	16.7%	5.0%	73.3%	5.0%	100.0%
	Community: < 500	33.8%	1.5%	57.4%	7.4%	100.0%

Income (p=.003)

Less than \$20K	30.3%	3.0%	60.6%	6.1%	100.0%
\$20-39K	26.7%	1.8%	62.4%	9.1%	100.0%
\$40-59K	18.5%	7.1%	64.3%	10.1%	100.0%
\$60-79K	21.7%	1.4%	74.1%	2.8%	100.0%
\$80-99K	26.8%	3.5%	64.1%	5.6%	100.0%
\$100-149K	22.9%	1.7%	70.9%	4.6%	100.0%
\$150K or more	15.4%	3.3%	73.6%	7.7%	100.0%
Prefer not to answer	11.5%	1.9%	76.9%	9.6%	100.0%

3. Use of data in a typical month (Q8)

Survey result 5 shows that more than half of all men (53.7%) said they use a gigabyte or more of data in a typical month, while somewhat fewer women (41.5%) reported this level of data usage. Just over half (52.4%) of people in large cities use a gigabyte or more of data in a typical month, with somewhat fewer reporting this level of data usage in smaller cities. Data usage is associated with income; fewer than half of those below Canada's median income (45.9%) reported using a gigabyte or more of data in a typical month, compared with 56% of those above the median income.

Survey result 5 Amount of data used in a typical month (Q8)

		Less than 500 MB	500-999 MB	1 GB or more	Don't know	Total
Gender P=.000	Male	39.1%	45.7%	53.7%	37.5%	46.8%
	Female	58.3%	52.1%	41.5%	58.8%	49.4%
	Other	0.5%		2.1%		1.2%
	Prefer not to say	2.1%	2.1%	2.6%	3.8%	2.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
City =p=.033	Large city: 100,000 +	27.8%	6.5%	52.4%	13.2%	100.0%
	Medium city: 30-99K	25.9%	12.0%	48.1%	13.9%	100.0%
	Small city: 1K-29K	30.5%	7.6%	51.6%	10.3%	100.0%
	Town: 500-999	37.2%	6.4%	43.6%	12.8%	100.0%
	Community: < 500	39.5%		48.1%	12.3%	100.0%
Total		29.6%	7.3%	50.7%	12.4%	100.0%
Income P=.000	Less than \$20K	32.7%	6.3%	51.6%	9.4%	100.0%
	\$20-39K	34.9%	9.0%	39.6%	16.5%	100.0%
	\$40-59K	37.4%	5.1%	48.2%	9.2%	100.0%
	\$60-79K	24.4%	9.4%	55.6%	10.6%	100.0%
	\$80-99K	30.3%	9.2%	50.7%	9.9%	100.0%
	\$100-149K	27.3%	6.0%	57.4%	9.3%	100.0%
	\$150K or more	17.3%	8.2%	62.2%	12.2%	100.0%
	Prefer not to answer	24.6%	6.0%	47.0%	22.4%	100.0%
Total		29.7%	7.3%	50.7%	12.3%	100.0%
Under median (\$70.3K)		35.1%	6.9%	45.9%	12.1%	100.0%

Median	Median (\$60-79K)	24.4%	9.4%	55.6%	10.6%	100.0%
Income	Above median (\$80K +)	26.1%	7.6%	56.0%	10.3%	100.0%
P=.000	Prefer not to answer	24.6%	6.0%	47.0%	22.4%	100.0%
Total		29.7%	7.3%	50.6%	12.4%	100.0%
Edu-	Secondary school or less	34.4%	6.6%	43.4%	15.6%	100.0%
cation	College or BA	29.7%	7.0%	52.1%	11.1%	100.0%
P=.021	MA or Doctorate	19.7%	9.9%	59.2%	11.2%	100.0%
	No answer	24.0%	8.0%	56.0%	12.0%	100.0%
Total		29.6%	7.3%	50.8%	12.3%	100.0%

4. Good value for the money that users pay? (Q5)

The survey asked people if they thought they received good value for the money they paid for their mobile phone plans: two out of three Canadians (68.6%) say they did not. Survey result 6 shows that proportionately more men (71.9%) – who tend to use more data than women (see Survey result 5) – said they did not receive good value for money. Proportionately more (between 73% and 74.9%) younger people between 25 and 54 years of age said they did not receive good value for money.

Survey result 6 Do mobile phone plans give good value for money paid? (Q5)

		Yes, good value for money	No, not good value for money	Total
Canada		31.4%	68.6%	
Gender P=.002	Male	28.1%	71.9%	100.0%
	Female	35.7%	64.3%	100.0%
	Other	18.8%	81.3%	100.0%
	Prefer not to say	12.1%	87.9%	100.0%
Total		31.3%	68.7%	100.0%
Age P=.000	18-24	42.9%	57.1%	100.0%
	25-34	25.2%	74.8%	100.0%
	35-44	25.1%	74.9%	100.0%
	45-54	27.0%	73.0%	100.0%
	55-64	30.9%	69.1%	100.0%
	65-74	34.9%	65.1%	100.0%
	75+	47.0%	53.0%	100.0%
	Prefer not to answer	8.3%	91.7%	100.0%
Total		31.3%	68.7%	100.0%
Median P=.000	Under median (\$70.3K)	36.0%	64.0%	100.0%
	Median (\$60-79K)	36.9%	63.1%	100.0%
	Above median (\$80K +)	22.6%	77.4%	100.0%
	Prefer not to answer	33.3%	66.7%	100.0%
Total		31.3%	68.7%	100.0%

City P=.002	Large city: 100,000 +	36.3%	63.7%	100.0%
	Medium city: 30-99K	34.6%	65.4%	100.0%
	Small city: 1K-29K	24.2%	75.8%	100.0%
	Town: 500-999	26.9%	73.1%	100.0%
	Community: < 500	30.9%	69.1%	100.0%
Total		31.4%	68.6%	100.0%
Region P=.000	BC & AL	29.6%	70.4%	100.0%
	Sask & Man	48.0%	52.0%	100.0%
	Ont	37.9%	62.1%	100.0%
	Que	42.1%	57.9%	100.0%
	Atlantic	27.7%	72.3%	100.0%
	North	15.2%	84.8%	100.0%
Total		31.4%	68.6%	100.0%

Dissatisfaction with the value of monthly phone plans increased with the amount of data people used in a typical month, rising from 59.1% when they used fewer than 100 megabytes of data, to 78.3% when they used 3 or more gigabytes of data (Survey result 7).

Survey result 7 Value for money paid, and use of data (Q5)

		Yes, good value for money	No, not good value for money	
Use of data in typical month P=.000	50-100 MB	40.9%	59.1%	100.0%
	100-250 MB	29.5%	70.5%	100.0%
	250-500 MB	29.6%	70.4%	100.0%
	500-999 MB	33.7%	66.3%	100.0%
	1-2 GB	30.6%	69.4%	100.0%
	2-3 GB	25.8%	74.2%	100.0%
	3+ GB	21.7%	78.3%	100.0%
	DON'T KNOW	46.9%	53.1%	100.0%
Broadly grouped data use in typical month P=.000	Less than 500 MB	32.8%	28.2%	29.7%
	500-999 MB	7.9%	7.1%	7.3%
	1 GB or more	40.7%	55.1%	50.6%
	DON'T KNOW	18.5%	9.6%	12.4%
Total		31.4%	68.6%	100.0%

C. The cost of data

1. Incidence of overage fees for data (Q6)

The survey asked people if they have paid additional amounts for their mobile phone service, because they used more data than included in their mobile phone plans. Just over half (53.2%) said they had paid such fees at least a few times or more in the past year (Survey result 8).

Survey result 8 Frequency at which data overage charges are paid in Canada (Q6)

6. In the past year, have you had to pay additional amounts for your mobile phone service because you have used more data than is included in your phone plan?	Have never had to pay for additional data	Have had to pay for additional data a few times in the past year	Have had to pay for additional data four or five times in the past year	Have had to pay for additional data nearly every month in the past year	Have always had to pay for additional data in the past year	Don't know
TOTAL (N=1294)	45.5%	43.8%	5.8%	2.6%	1.0%	1.3%
	45.5%	53.2%				1.3%

Payment of overage fees for data was highest among those 25 to 34 years of age, with 60.2% reporting that they had paid such fees at least a few times in the previous year (Survey result 9).

Survey result 9 Frequency at which data overage charges are paid, by age group (Q6)

Age	Never had to pay for additional data	Paid for data a few times in past year	Paid for data 4-5 times in past year'	Paid for data nearly every month in past year	Always had to pay in past year	Didn't know	Total
P=.000							
18-24	47.1%	37.1%	7.9%	5.0%		2.9%	100.0%
	47.1%		50.0%			2.9%	100.0%
25-34	39.3%	47.2%	7.9%	3.7%	1.4%	0.5%	100.0%
	39.3%		60.2%			0.5%	100.0%
35-44	40.6%	46.2%	7.1%	2.8%	0.9%	2.4%	100.0%
	40.6%		57.0%			2.4%	100.0%
45-54	48.2%	42.9%	6.2%	1.8%		0.9%	100.0%
	48.2%		50.9%			0.9%	100.0%
55-64	49.8%	41.7%	4.9%	2.7%		0.9%	100.0%
	49.8%		49.3%			0.9%	100.0%
65-74	50.3%	45.0%	3.3%		0.7%	0.7%	100.0%
			49.0%			0.7%	100.0%
75+	46.1%	41.7%	2.6%	1.7%	6.1%	1.7%	100.0%
			52.1%			1.7%	100.0%
Prefer not to answer	33.3%	66.7%					100.0%
	33.3%		66.7%				100.0%
Total	45.6%	43.7%	5.9%	2.6%	1.0%	1.3%	100.0%
	45.6%		53.2%			1.3%	100.0%

Payment of overage fees for data was also higher among those with higher levels of education: 49.3% of those with up to secondary school had paid overage fees at least a few times or more

in the previous year, compared with 53.9% of those with a college degree, and 58.6% of those with graduate degrees (Survey result 10).

Survey result 10 Frequency at which data overage charges are paid, by level of education (Q6)

Educational level P=.010	Never had to pay for additional data	Paid for data a few times in past year	Paid for data 4-5 times in past year'	Paid for data nearly every month in past year	Always had to pay in past year	DON'T KNOW	Total
Secondary school or less	48.4%	37.9%	5.4%	3.3%	2.7%	2.4%	100.0%
College or BA	45.3%	45.3%	5.6%	2.7%	0.3%	0.8%	100.0%
MA or Doctorate	40.0%	47.7%	8.4%	1.9%	0.6%	1.3%	100.0%
No answer	41.7%	50.0%	4.2%		4.2%		100.0%
Total	45.4%	43.8%	5.9%	2.7%	1.0%	1.2%	100.0%
Median income (p=.020)							
Under median (Less than \$59K)	48.0%	40.2%	5.3%	2.3%	1.8%	2.3%	100.0%
Median (\$60-79K)	46.6%	44.7%	3.7%	3.7%	0.6%	0.6%	100.0%
Above median (\$80K +)	41.4%	48.3%	7.1%	3.0%	0.2%		100.0%
Prefer not to answer	46.7%	43.0%	6.7%	1.5%	0.7%	1.5%	100.0%
Total	45.5%	43.8%	5.9%	2.6%	1.0%	1.2%	100.0%
Region P=.012							
BC & AL	42.9%	44.9%	6.3%	2.3%	2.5%	1.0%	100.0%
Sask & Man	48.6%	47.3%	2.7%	1.4%			100.0%
Ont	44.5%	42.7%	6.4%	4.1%	0.9%	1.4%	100.0%
Que	55.4%	35.4%	5.1%	1.5%		2.6%	100.0%
Atlantic	50.0%	41.0%	5.7%	1.9%		1.4%	100.0%
North	35.9%	52.5%	6.6%	4.0%	0.5%	0.5%	100.0%
Total	45.5%	43.8%	5.9%	2.6%	1.0%	1.2%	100.0%

The highest incidence (64.2%) of people paying overage fees 4 or more times per year, occurred among those with the highest data usage (using a gigabyte or more in a typical month) (Survey result 11). Perhaps unsurprisingly, the level of dissatisfaction (value for money) was highest (89.3%) among those paying data overage fees 4 or more times in the previous year.

Survey result 11 Frequency at which data overage charges are paid, by level of data used (Q6)

Data used in typical month (p=.000)	Overage fees paid in previous year				Total
	Never	A few times	4 or more times	DON'T KNOW	
Less than 500 MB	33.0%	29.2%	18.7%	11.8%	29.7%
500-999 MB	8.8%	6.2%	4.1%	17.6%	7.3%
1 GB or more	44.2%	55.1%	64.2%	23.5%	50.6%
DON'T KNOW	13.9%	9.5%	13.0%	47.1%	12.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Value (p=.000)					
Yes, good value for money	40.4%	26.5%	10.7%	31.3%	31.4%
No, not good value for money	59.6%	73.5%	89.3%	68.8%	68.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

2. Do users limit use due to fears of data overage fees? (Q7)

The survey asked people if they limited their data use because they worried they might be charged data overage fees. More than half (60.9%) said they did limit their use for this reason, and this result did not change when considered by gender ($p=.393$), broad educational categories (secondary, college, graduate; $p=.112$); income that was above or below median income ($p=.109$) or size of city ($p=.293$).

Survey result 12 shows that limits on mobile phone use are related to users' previous experience with data-overage charges. More than two-thirds (69.4%) of those who never limited their cellphone use in the previous year, also did not have to pay data-overage charges in the same period. That said, a third (32.9%) of those who limited their use once or twice in the previous year, and a fifth of those who limited their use a few times or more every week (21.8%) said they had never had to pay data overage fees at all in the previous year – suggesting that fear of data overage fees alone, rather than direct experience with such fees, is modifying mobile phone users' behaviour in Canada.

Survey result 12 Whether had to pay for data overage in previous year, compared with self-limits on use of mobile phone due to worries about data-overage fees

Limited mobile phone use in past year because of worries that might be charged additional fees for data used (Q7)				
Q6 Had to pay for data overage in previous year P=.000	Never limited use	Limited use once or twice	Limited use a few times every week or more	Total
Never had to pay	69.4%	32.9%	21.8%	45.6%
Had to pay a few times	26.7%	57.3%	47.3%	43.9%
Had to pay 4 or more times	2.2%	9.0%	29.8%	9.4%
Don't know	1.8%	0.8%	1.1%	1.2%
Total	100.0%	100.0%	100.0%	100.0%

As Survey result 13 shows, efforts to limit use due to worries about the cost of data overage charges was highest in the North (65.2%) and British Columbia and Alberta (64.6%).

Survey result 13 Limiting use because of worry that overage fees might be incurred, by region (Q7)

		Never limited	Once or twice	A few times every week or more	Total	More than once
Canada		39.1%	46.3%	14.6%	100.0%	60.90%
Region (p=.010)	BC & AL	35.4%	45.1%	19.5%	64.60%	64.60%
	Sask & Man	44.0%	41.3%	14.7%	56.00%	56.00%
	Ont	39.9%	44.5%	15.6%	60.10%	60.10%
	Que	46.2%	46.2%	7.7%	53.90%	53.90%
	Atlantic	40.6%	49.5%	9.9%	59.40%	59.40%
	North	34.8%	49.5%	15.7%	65.20%	65.20%
Total		39.1%	46.3%	14.6%	100.0%	60.90%

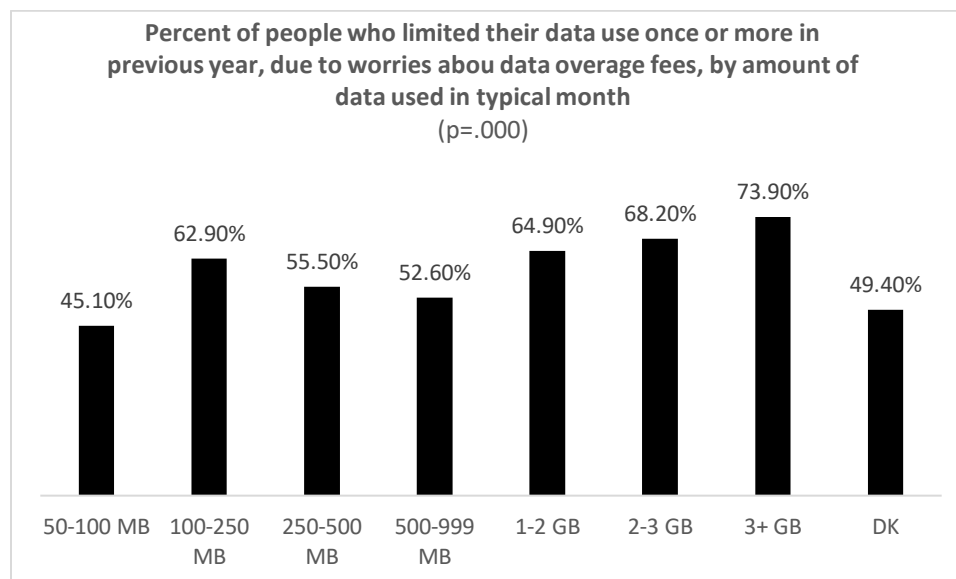
Overall, people's propensity to limit their data use due to concerns about overage charges grew, the more data they used in a typical month, from 52.4% limiting use once or more in the previous year when they used less than 500 megabytes in a typical month, to 69.9% limiting use when they used a gigabyte or more of data (Survey result 14).

Survey result 14 Limiting use because of worry that overage fees might be incurred, by region (Q7)

Data use in typical month (grouped) (p=.000)	Have limited use in previous year			Total	Once or more
	Never limited	Once or twice	A few times every week or more		
Less than 500 MB	47.7%	43.5%	8.9%	100.0%	52.4%
500-999 MB	47.4%	38.9%	13.7%	100.0%	52.6%
1 GB or more	30.1%	52.8%	17.1%	100.0%	69.9%
DON'T KNOW	50.6%	30.6%	18.8%	100.0%	49.4%
Total	39.1%	46.3%	14.6%	100.0%	60.9%

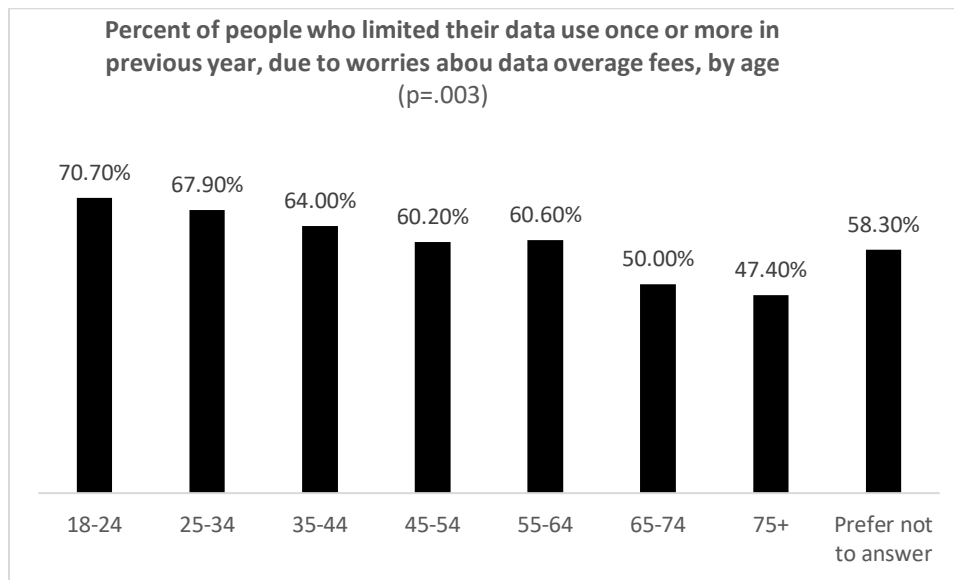
The greater the amount of data used in a typical month, the greater the propensity to limit data usage (Survey figure 1).

Survey figure 1 Relationship between typical monthly data use and users' self-limitations on use of data



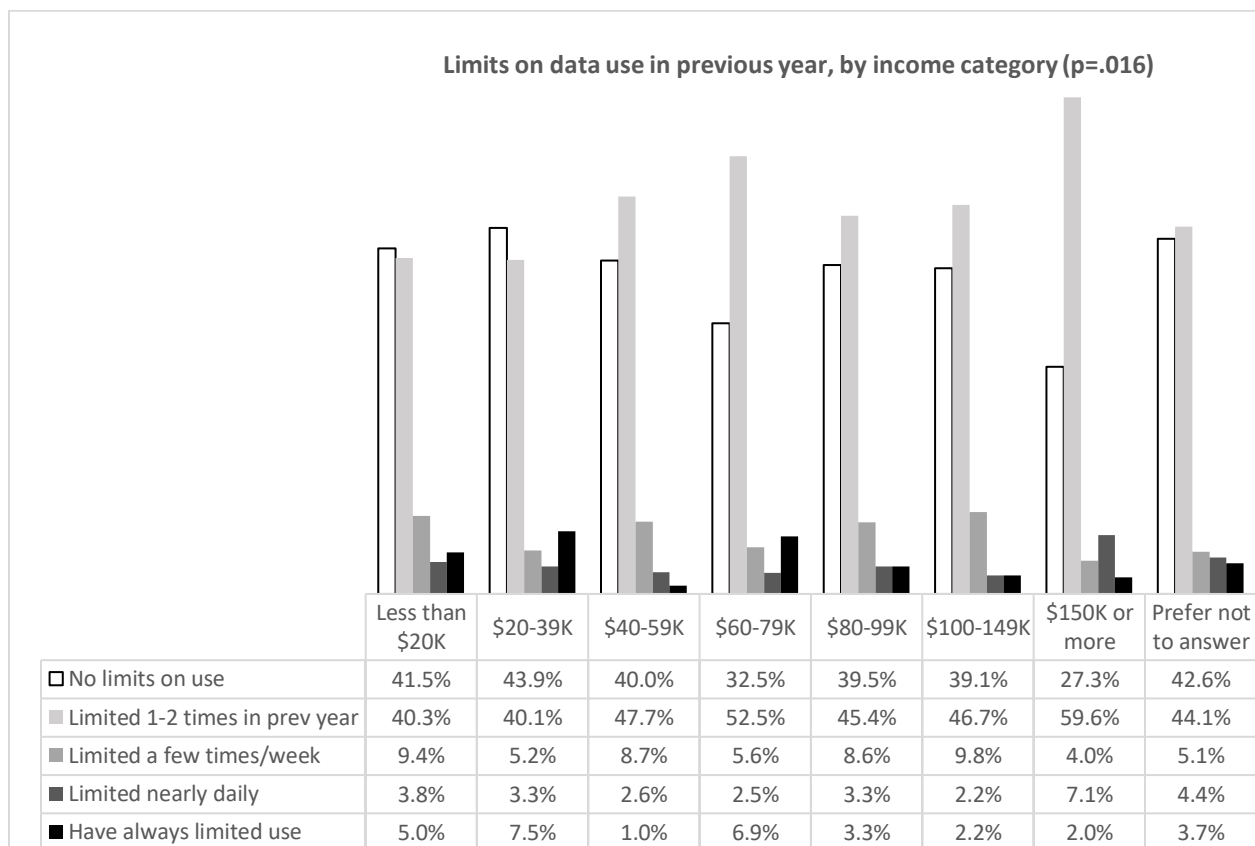
The younger the mobile phone users, the more likely they were to limit their data use (Survey figure 2).

Survey figure 2 Relationship between users' age and self-limitations on use of data



Mobile phone users limited their use of data, regardless of income (see Survey figure 3).

Survey figure 3 Relationship between users' income and self-limitations on use of data



D. Views on a lower-cost data-only plan (Q9)

The last substantive question of the survey (question 9) asked Canadians whether they would switch to a data-only plan if it cost less than their current plan: "Many mobile plans include voice and data, but some only include data. Users with data-only plans can still use the Internet and they can make calls and send messages if the download and use Internet applications or services. Would you switch to a data-only plan if it cost less than your current plan?"

1. General demographics

Very few (1.1%) of Canadians said they already have a data-only plan (Survey result 15).

A little more than one in five Canadians (23.2%) said they would switch to a data-only plan if it were less expensive than their current plan (Survey result 15). No statistically significant differences occurred with respect to gender ($p=.756$) and city ($p=.905$). Interest in switching to a less-expensive data-only plan was highest among those under 34 years of age and lowest among those over 65.

Survey result 15 Users' views on lower-cost data-only plan, across Canada and by age (Q9)

		Would switch	Would not switch	Already have data-only plan	Need more information	DON'T KNOW	Total
Canada		23.2%	60.2%	1.1%	6.8%	8.7%	100.0%
Age	18-24	24.1%	55.3%	2.1%	6.4%	12.1%	100.0%
P=.003	25-34	26.6%	62.6%	0.5%	6.5%	3.7%	100.0%
	35-44	22.2%	62.3%	1.4%	4.7%	9.4%	100.0%
	45-54	20.8%	62.8%	0.9%	6.6%	8.8%	100.0%
	55-64	28.1%	54.0%	1.3%	6.3%	10.3%	100.0%
	65-74	19.2%	66.2%	1.3%	3.3%	9.9%	100.0%
	75+	18.3%	56.5%		17.4%	7.8%	100.0%
	Prefer not to answer	8.3%	66.7%	8.3%	8.3%	8.3%	100.0%

When considered in terms of income, more than a quarter (27.8%) of those with a pre-tax household income of less than \$20,000 or of over \$100,000 per year said they would switch to a data-only plan (Survey result 16)

Survey result 16 Users' views on lower-cost data-only plan, by income (Q9)

Income		Would switch	Would not switch	Already have data-only plan	Need more information	DON'T KNOW	Total
P=.001							
	Less than \$20K	27.8%	48.7%	2.5%	7.6%	13.3%	100.0%
	\$20-39K	22.7%	55.0%	0.9%	10.0%	11.4%	100.0%
	\$40-59K	24.7%	57.7%	1.5%	9.8%	6.2%	100.0%
	\$60-79K	20.6%	67.5%	1.3%	4.4%	6.3%	100.0%
	\$80-99K	23.7%	59.9%	0.7%	7.9%	7.9%	100.0%

\$100-149K	26.8%	63.9%		3.8%	5.5%	100.0%
\$150K or more	25.3%	66.7%		4.0%	4.0%	100.0%
Prefer not to answer	11.2%	67.9%	2.2%	4.5%	14.2%	100.0%
Total	23.1%	60.3%	1.2%	6.8%	8.7%	100.0%

Survey result 17 found the highest level of interest (29.3%) in switching to a lower-cost data-only plan came from Saskatchewan and Manitoba, while the highest desire for more information came from people in Quebec (9.7%) and the North (10.1%).

Survey result 17 Interest in a lower-cost data-only plan, by region

Region =p.044	Would switch	Would not switch	Already have data-only plan	Need more information	Don't know	Total
BC & AL	23.1%	60.9%	2.0%	7.1%	6.9%	100.0%
Sask & Man	29.3%	57.3%	2.7%	2.7%	8.0%	100.0%
Ont	20.2%	65.1%	0.5%	5.0%	9.2%	100.0%
Que	23.1%	53.8%	2.1%	9.7%	11.3%	100.0%
Atlantic	26.9%	60.8%		4.2%	8.0%	100.0%
North	19.7%	60.1%		10.1%	10.1%	100.0%
Total	23.1%	60.2%	1.2%	6.9%	8.7%	100.0%

2. High-use users

The Forum was interested to know whether mobile phone users who used higher levels of data, would be more interested in switching to a data-only plan, than those using lower levels of data. The highest levels of interest in data-only plans came from those who use comparatively low amounts of data (50 to 100 MB) in a typical month (28%), and from those using between 2 and 3 gigabytes of data (28.0%): see Survey result 18.

Survey result 18 Interest in a lower-cost data-only plan, by use of data in a typical month

Use of data in typical month P=.000	Would switch	Would not switch	Already have data-only plan	Need more information	DON'T KNOW	Total
50-100 MB (N=182)	28.0%	59.9%	1.1%	2.2%	8.8%	100.0%
100-250 MB (N=106)	25.5%	61.3%	1.9%	8.5%	2.8%	100.0%
250-500 MB (N=97)	20.6%	55.7%	2.1%	12.4%	9.3%	100.0%
500-999 MB (N=94)	20.2%	70.2%		4.3%	5.3%	100.0%
1-2 GB (N=205)	16.6%	66.8%	1.0%	6.8%	8.8%	100.0%
2-3 GB (N=132)	28.0%	58.3%	0.8%	6.1%	6.8%	100.0%
3+ GB (N=317)	24.3%	61.5%	1.3%	6.6%	6.3%	100.0%
DON'T KNOW (N=161)	21.7%	47.2%	0.6%	10.6%	19.9%	100.0%
Total	23.2%	60.2%	1.1%	6.9%	8.7%	100.0%

When considering the (roughly) one in four people who said they would switch to a lower-cost data-only plan, interest was lowest among those now using between 500 megabytes and 1 gigabyte of data in a typical month (6.3%), and highest (25.7%) among those using more than 1 gigabyte per month: see Survey result 19.

Survey result 19 Use of data in a typical month by interest in a lower-cost data-only plan

Use of data in typical month (p=.000)	Would switch	Would not switch	Already have data-only plan	Need more information	DON'T KNOW	Canada
50-100 MB	17.0%	14.0%	14.3%	4.5%	14.3%	14.1%
100-250 MB	9.0%	8.3%	14.3%	10.1%	2.7%	8.2%
250-500 MB	6.7%	6.9%	14.3%	13.5%	8.0%	7.5%
500-999 MB	6.3%	8.5%		4.5%	4.5%	7.3%
1-2 GB	11.3%	17.6%	14.3%	15.7%	16.1%	15.8%
2-3 GB	12.3%	9.9%	7.1%	9.0%	8.0%	10.2%
3+ GB	25.7%	25.0%	28.6%	23.6%	17.9%	24.5%
DON'T KNOW	11.7%	9.8%	7.1%	19.1%	28.6%	12.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N	300	779	14	89	112	1294

3. Users who don't think they get value for money

Survey result 20 Interest in switching to a lower-cost data-only plan was higher among those who did not think they were getting value for money (25.2%), than among those who thought they were getting good value for money (18.7%).

Survey result 20 Interest in lower-cost data-only plans by opinion on value for money of mobile phone plan

Good value for money (Q5) P=.003	Would switch	Would not switch	Already have data-only plan	Need more information	DON'T KNOW	Total
Yes, good value for money	18.7%	66.3%	1.7%	4.4%	8.8%	100.0%
No, not good value for money	25.2%	57.3%	0.9%	8.0%	8.7%	100.0%
Total	23.1%	60.1%	1.2%	6.9%	8.7%	100.0%

4. Uses who've experienced overage fees

Survey result 21 shows that when people's past experience with data-overage fees is compared to their interest in switching to a lower-cost data-only plan, interest in switching ranges between 18.2% and 25. It also shows that, as people's level of experience with data overage fees increases, their need for more information about data-only plans grows – to the point that more than half (57.1%) of those who have "always" had to pay data-overage fees say they need more information about data-only plans.

Survey result 21 Payment of data overage fees in past year, compared with interest in switching to lower-cost, data-only plan

Data overage fees in past year P=.000	Would switch	Would not switch	Already have data-only plan	Need more information	DON'T KNOW	Total
Never had to pay for additional data	23.4%	63.0%	0.8%	4.6%	8.1%	100.0%
Paid for data a few times in past year	23.3%	61.6%	1.4%	6.2%	7.6%	100.0%
Paid for data 4-5 times in past year'	25.0%	50.0%	1.3%	10.5%	13.2%	100.0%
Paid for data nearly every month in past year	18.2%	51.5%		18.2%	12.1%	100.0%
Always had to pay in past year	21.4%	7.1%		57.1%	14.3%	100.0%
DON'T KNOW	6.3%	18.8%		31.3%	43.8%	100.0%
Total	23.1%	60.2%	1.1%	6.9%	8.8%	100.0%

III. Research method

A. Survey

A national, bilingual survey of 1,294 adults (18 years or over) across the provinces and territories (yielding results with a margin of error of plus or minus 2.83%, 19 times out of 20) who have their own mobile phones, was conducted in English and in French by Access Research using interactive voice response technology by Access Research, on behalf of the Forum for Research and Policy in Communications (FRPC), on the 8th, 9th and 10th of June 2018. The survey's results have a margin of error of plus or minus +/-2.83%, 19 times out of 20.

The survey was undertaken as part of the Forum's work with respect to [Call for comments - Lower-cost data-only plans for mobile wireless services, Telecommunications Notice of Consultation CRTC 2018-98 \(Ottawa, 22 March 2018\)](#), and was submitted to the CRTC on 13 June 2018 as part of the Forum's comments in that proceeding.

The survey results described in this report focus on three issues raised by TNoC 2018-98: mobile phone users' satisfaction with mobile phone plans, the frequency with which mobile phone users experience data-overage charges, and users' interest in data-only mobile phone plans.

Copies of the English-language and French-language surveys are attached. The survey was discontinued if respondents worked for a telecommunications company, or if they did not have

their own mobile phone. Respondents who did not know whether data is⁹⁵ included in their mobile phone plans, were not asked how much data they used.

At the Forum's request, Access Research sampled to ensure a response rate from the Yukon, Nunavut and the Northwest Territories of sufficient size to permit separate analysis of the data for the North; altogether 199 responses from the territories were obtained. Rather than analyze the data using the original values for the residence variable, we collapsed these into four larger categories: West (and the single northern response); Ontario; Quebec and the Atlantic provinces.

Q13 In which province or territory do you live?

		Frequency	Recoding	Percent	Valid Percent	Cumulative Percent
Valid	British Columbia or Alberta	395	395			
	Saskatchewan or Manitoba	75	75			
	Ontario	219	219			
	Quebec	195	195			
	Newfoundland or New Brunswick	78	212			
	Nova Scotia or Prince Edward Island	134				
	Northwest Territories	84	199			
	Nunavut	13				
	Yukon	102				
	Total					

Next, we asked respondents about their completed levels of education. Although nearly all (97.6%) answered the questions, low response levels were received with respect to grade school (25 cases), high school (40 cases) and the doctorate level (24 cases). We therefore collapsed the original education values into three categories: up to and including high school; college or bachelor's degree, and MA or doctorate.

11 What is the highest level of education that you have completed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Grade 8 or less	25	3.0	3.1	3.1
	Some high school	40	4.8	4.9	8.0
	High school diploma or equivalent	131	15.8	16.2	24.2
	College or CEGEP	275	33.2	34.0	58.2
	Bachelor's degree	223	26.9	27.6	85.8
	Master's degree	91	11.0	11.2	97.0

⁹⁵ In this report 'data' are referred to as a noun in the singular case.

	Doctorate	24	2.9	3.0	100.0
	Total	809	97.6	100.0	
Missing	Prefer not to answer	20	2.4		
Total		829	100.0		

We also asked respondents about their household income and 86.5% of respondents provided answers. We decided to analyze the results in terms of income quintiles, and regrouped the responses into five categories: under \$20,000; \$20,000 to \$39,000, \$40,000 to \$59,000, \$60,000 to \$79,000 and \$80,000 or higher.

12 Which of the following categories best describes your total household income, before taxes?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under \$20,000	93	11.2	13.0	13.0
	\$20,000 to just under \$40,000	140	16.9	19.5	32.5
	\$40,000 to just under \$60,000	142	17.1	19.8	52.3
	\$60,000 to just under \$80,000	81	9.8	11.3	63.6
	\$80,000 to just under \$100,000	95	11.5	13.2	76.8
	\$100,000 to just under \$150,000	97	11.7	13.5	90.4
	\$150,000 and above	69	8.3	9.6	100.0
	Total	717	86.5	100.0	
Missing	Prefer not to answer	112	13.5		
Total		829	100.0		

Finally, we asked respondents about their age, using 10-year categories to the age of 75. We decided to regroup these categories to reflect generational experience with technology, and used the following categories: 18-24 years of age (born from 1994 or after, and having lived almost all their lives with the Internet); 25 to 44 years of age (born between 1974 to 1993, and having lived most of their lives with personal computers); 45 to 64 years of age (born between 1954 to 1973, and having lived most of their lives with mainframe or personal computers), and 65 years of age or over (born before 1953, and having experienced introduction of mainframe computers, personal computers and the Internet).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 yrs (born 1994 or after)	49	5.9	6.0	6.0
	25--44 yrs (born 1974 to 1993)	220	26.5	27.2	33.2
	45-64 yrs (born 1954 to 1973)	316	38.1	39.0	72.2
	65 yrs + (born before 1953)	225	27.1	27.8	100.0
	Total	810	97.7	100.0	
Missing	No answer	19	2.3		
Total		829	100.0		

B. Survey questionnaires

FRP3

**Forum for Research and Policy in Communications
Mobile Data Plans Survey**

Forum Research Inc.

6 June 2018

n=1,200
n=1,000 NATIONAL (n=200 per region i.e. Atlantic; QC; ON; Prairies + NT + NW; BC +
YK)
+ n=200 ADDITIONAL OVERSAMPLE FOR TERRITORIES

Part A – Introduction & Screener

Hello. This is Access Research calling on behalf of the Forum for Research and Policy in Communications. We would like to ask you some questions about the cost of mobile telephone and wireless data service. The survey will take about 5 minutes of your time. Just use the touchpad on your phone to select the correct answer when prompted. If you have any questions about this call, you can reach our firm, Access Research, at 1-855-561-3603 or at inquiry@access-research.com.

A. First of all, are you at least 18 years of age or older?

- a. Press 1 if Yes → **CONTINUE**
- b. Press 2 if No → **TERMINATE**

B. Do you work for a telecommunications company?

- a. Press 1 if Yes → **TERMINATE**
- b. Press 2 if No → **CONTINUE**

C. Do you have your own cell phone, smartphone or mobile phone? That is, do you have a mobile phone that is not paid for by your employer?

- a. Press 1 if Yes → **CONTINUE**
- b. Press 2 if No → **TERMINATE**
- c. Press 3 if You Don't Know → **TERMINATE**

IF HAS A MOBILE PHONE, SAY:

D. The CRTC, the federal agency that regulates telecommunications in Canada, is considering the cost of data for people who use mobile phones. Could you answer a few questions about this issue? They should take no more than five minutes of your time.

- a. Press 1 to continue → **CONTINUE**
- b. Press 2 to if you do not wish to continue → **TERMINATE**

Part B – Main Survey

1. First of all, how often do you access the Internet using your mobile phone?

- a. Press 1 if you access the Internet using your mobile phone nearly all the time
- b. Press 2 if you do this several times a day
- c. Press 3 if you do this a few times a week
- d. Press 4 if you do this once or twice a month
- e. Press 5 if you do not use your mobile phone to access the internet

2. Do you have a pre-paid or post-paid plan for your mobile phone?

- a. Press 1 if you have a pre-paid plan, where you pay for your phone before you obtain service
- b. Press 2 if you have a post-paid plan, where you pay for your phone after you have used it
- c. Press 3 if you do not know how you pay for your phone

3. Does your mobile phone plan include data?

- a. Press 1 if data is included in your mobile phone plan → **CONTINUE**
- b. Press 2 if data is not included in your mobile phone plan → **SKIP TO Q5**
- c. Press 3 if you don't know → **SKIP TO Q5**

4. How much data is included in your monthly mobile phone plan?

- a. Press 1 if it includes 50 to 100 megabytes
- b. Press 2 if it includes 100-250 megabytes
- c. Press 3 if it includes 250-500 megabytes
- d. Press 4 if it includes 500-999 megabytes
- e. Press 5 if it includes 1 to 2 gigabytes of data per month
- f. Press 6 if it includes 2 to 3 gigabytes of data per month
- g. Press 7 if it includes 3 or more gigabytes of data per month
- h. Press 8 if you don't know

5. Does your current monthly mobile phone plan give you good value for the money you are paying?

- a. Press 1 for Yes
- b. Press 2 for No

6. In the past year, have you had to pay additional amounts for your mobile phone service because you have used more data than is included in your phone plan?

- a. Press 1 if you have never had to pay for additional data
- b. Press 2 if you have had to pay for additional data a few times in the past year

- c. Press 3 if you have had to pay for additional data four or five times in the past year
 - d. Press 4 if you have had to pay for additional data nearly every month in the past year
 - e. Press 5 if you have always had to pay for additional data in the past year
 - f. Press 6 if you don't know
- 7. Have you limited your cellphone use in the last year because you worried that you might be charged additional fees for the data you use?**
 - a. Press 1 if you have not limited your cellphone data use in the past year due to the cost of data
 - b. Press 2 if you have limited your cellphone data use once or twice in in the past year due to the cost of data
 - c. Press 3 if you have limited your cellphone data use a few times each week in the past year due to the cost of data
 - d. Press 4 if you have limited your cellphone data use nearly daily in the past year due to the cost of data
 - e. Press 5 if you have always limited your cellphone data use in the past year due to the cost of data
- 8. How much data do you use on your cellphone in a typical month?**
 - a. Press 1 if you use from 50 to 100 megabytes in a typical month
 - b. Press 2 if you use from 100-250 MB
 - c. Press 3 if you use from 250-500 MB
 - d. Press 4 if you use from 500-999 MB
 - e. Press 5 if you use 1 to 2 gigabytes of data per month
 - f. Press 6 if you use from 2 to 3 gigabytes of data per month
 - g. Press 7 if you use 3 or more gigabytes of data per month
 - h. Press 8 if you don't know
- 9. Many mobile plans include voice and data, but some only include data. Users with data-only plans can still use the Internet and they can make calls and send messages if they download and use Internet applications or services. Would you switch to a data-only plan if it cost less than your current plan?**
 - a. Press 1 if you would switch to a data-only plan
 - b. Press 2 if you would not switch to a data-only plan
 - c. Press 3 if you already have a data-only plan
 - d. Press 4 if you need more information
 - e. Press 5 if you don't know

Part C – Demographics

10. The next few questions are about yourself. Your answers will be kept confidential and anonymous. Please indicate your gender.

- a. Press 1 for Male
- b. Press 2 for Female
- c. Press 3 for Other
- d. Press 4 if you prefer not to say

11. Where do you live?

- a. Press 1 if you live in a city with 100,000 or more residents
- b. Press 2 if you live in a city with between 30,000 and 99,999 residents?
- c. Press 3 if you live in a town or city with a population of between 1,000 and 29,999 residents
- d. Press 4 if you live in a community with 500 to 999 residents
- e. Press 5 if you live in a community with fewer than 500 residents

12. How old are you?

- a. Press 1 if between 18 and 24 years of age
- b. Press 2 if between 25 and 34
- c. Press 3 if between 35 and 44
- d. Press 4 if between 45 and 54
- e. Press 5 if between 55 and 64
- f. Press 6 if between 65 and 74
- g. Press 7 if 75 years of age or older
- h. Press 8 if you prefer not to answer

13. In which province or territory do you live?

- a. Press 1 if British Columbia or Alberta
- b. Press 2 if Saskatchewan or Manitoba
- c. Press 3 if Ontario
- d. Press 4 if Quebec
- e. Press 5 if Newfoundland or New Brunswick
- f. Press 6 if Nova Scotia or Prince Edward Island
- g. Press 7 if Northwest Territories
- h. Press 8 if Nunavut
- i. Press 9 if Yukon

14. What is the highest level of education that you have completed?

- a. Press 1 if Grade 8 or less
- b. Press 2 if Some high school
- c. Press 3 if High school diploma or equivalent
- d. Press 4 if College or CEGEP
- e. Press 5 if Bachelor's degree

- f. Press 6 if Master's degree
- g. Press 7 if Doctorate
- h. Press 8 if you prefer not to answer

15. Which of the following categories best describes your total household income, before taxes?

- a. Press 1 if under \$20,000
- b. Press 2 if \$20,000 to just under \$40,000
- c. Press 3 if \$40,000 to just under \$60,000
- d. Press 4 if \$60,000 to just under \$80,000
- e. Press 5 if \$80,000 to just under \$100,000
- f. Press 6 if \$100,000 to just under \$150,000
- g. Press 7 if \$150,000 and above
- h. Press 8 if you prefer not to answer

Thank you, that's all the questions I have. If you have any questions about this call, you can reach our firm, Access Research, at 1-855-561-3603 or at inquiry@access-research.com. Have a great day.

FRP3
Forum pour la recherche et la politique en communication
Enquête sur les données mobiles

Forum Research Inc. 6 juin 2018

n = 1 200
n = 1 000 NATIONAL (n = 200 par région, ex. Atlantique, QC, ON, Prairies + NT + NW, BC + YK)
+ n = 200 SUPERVISION SUPPLEMENTAIRE POUR LES TERRITOIRES

Partie A - Introduction et Éligibilité

Bonjour. C'est Access Research qui appelle au nom du Forum pour la recherche et la politique dans les communications. Nous aimerions vous poser quelques questions sur le coût du téléphone mobile et de données d'internet sans fil. L'enquête prendra environ 5 minutes de votre temps. Utilisez simplement le pavé tactile de votre téléphone pour sélectionner la bonne réponse lorsque vous y êtes invité. Si vous avez des questions à propos de cet appel, vous pouvez joindre notre cabinet, Access Research, au 1-855-561-3603 ou à inquiry@access-research.com.

R. Tout d'abord, avez-vous 18 ans ou plus?
a. Appuyez sur 1 si Oui → CONTINUER
b. Appuyez sur 2 si Non → TERMINER

B. Travaillez-vous pour une entreprise de télécommunications?
a. Appuyez sur 1 si Oui → TERMINER
b. Appuyez sur 2 si Non → CONTINUER

C. Avez-vous votre propre téléphone portable, smartphone ou téléphone mobile? Autrement dit, avez-vous un téléphone mobile qui n'est pas payé par votre employeur?
a. Appuyez sur 1 si Oui → CONTINUER
b. Appuyez sur 2 si Non → TERMINER
c. Appuyez sur 3 si vous ne le savez pas → TERMINER

SI A UN TÉLÉPHONE MOBILE, DITES:

D. Le CRTC, l'organisme fédéral qui réglemente les télécommunications au Canada, tient compte du coût des données d'internet pour les utilisateurs de téléphones mobiles. Pourriez-vous répondre à quelques questions sur ce problème? Ils ne devraient pas prendre plus de cinq minutes de votre temps.
a. Appuyez sur 1 pour continuer → CONTINUER
b. Appuyez sur 3 pour si vous ne souhaitez pas continuer → TERMINER

Partie B - Enquête principale

1. Tout d'abord, à quelle fréquence accédez-vous à l'Internet avec votre téléphone portable?

- a. Appuyez sur 1 si vous accédez à Internet à l'aide de votre téléphone mobile presque tout le temps
- b. Appuyez sur 2 si vous faites cela plusieurs fois par jour
- c. Appuyez sur 3 si vous le faites quelques fois par semaine
- d. Appuyez sur 4 si vous le faites une ou deux fois par mois
- e. Appuyez sur 5 si vous n'utilisez pas votre téléphone portable pour accéder à l'Internet

2. Avez-vous un forfait prépayé ou post-payé pour votre téléphone portable?

- a. Appuyez sur 1 si vous avez un forfait prépayé, où vous payez pour votre téléphone avant d'obtenir le service
- b. Appuyez sur 2 si vous avez un forfait post-payé, où vous payez pour votre téléphone après l'avoir utilisé
- c. Appuyez sur 3 si vous ne savez pas comment vous payez pour votre téléphone

3. Votre plan de téléphonie mobile inclut-il des données?

- a. Appuyez sur 1 si les données sont incluses dans votre plan de téléphonie mobile → **CONTINUER**
- b. Appuyez sur 2 si les données ne sont pas incluses dans votre plan de téléphonie mobile → **PASSEZ À Q5**
- c. Appuyez sur 3 si vous ne savez pas → **PASSEZ À Q5**

4. Combien de données sont incluses dans votre forfait mensuel de téléphonie mobile?

- a. Appuyez sur 1 s'il inclut 50 à 100 mégabytes
- b. Appuyez sur 2 s'il inclut 100-250 mégabytes
- c. Appuyez sur 3 s'il inclut 250-500 mégabytes
- d. Appuyez sur 4 s'il inclut 500-999 mégabytes
- e. Appuyez sur 5 s'il inclut 1 à 2 gigabytes de données par mois
- F. Appuyez sur 6 s'il inclut 2 à 3 gigabytes de données par mois
- g. Appuyez sur 7 s'il inclut 3 gigabytes ou plus de données par mois
- h. Appuyez sur 8 si vous ne savez pas

5. Votre forfait téléphonique mensuel actuel vous donne-t-il une bonne valeur pour l'argent que vous payez?

- a. Appuyez sur 1 pour Oui
- b. Appuyez sur 2 pour Non

6. Au cours de la dernière année, avez-vous dû payer des frais supplémentaires pour votre service de téléphonie mobile parce que vous avez utilisé plus de données que ce qui est inclus dans votre forfait téléphonique?

- a. Appuyez sur 1 si vous n'avez jamais eu à payer pour des données supplémentaires
- b. Appuyez sur 2 si vous avez dû payer des données supplémentaires plusieurs fois au cours de la dernière année
- c. Appuyez sur 3 si vous avez dû payer des données supplémentaires quatre ou cinq fois la dernière année
- d. Appuyez sur 4 si vous avez dû payer des données supplémentaires presque tous les mois au cours de la dernière année

- e. Appuyez sur 5 si vous avez toujours dû payer pour des données supplémentaires au cours de la dernière année
- f. Appuyez sur 6 si vous ne savez pas

7. Avez-vous limité l'utilisation de votre téléphone portable au cours de la dernière année parce que vous craigniez que des frais supplémentaires vous soient facturés pour les données que vous utilisez?

- a. Appuyez sur 1 si vous n'avez pas limité l'utilisation de vos données de téléphone portable l'année dernière en raison du coût des données
- b. Appuyez sur 2 si vous avez limité l'utilisation des données de votre téléphone cellulaire une ou deux fois au cours de l'année dernière en raison du coût des données
- c. Appuyez sur 3 si vous avez limité l'utilisation de vos données de téléphone portable plusieurs fois par semaine l'année dernière en raison du coût des données
- d. Appuyez sur 4 si vous avez limité l'utilisation de vos données de téléphone portable presque tous les jours l'année dernière en raison du coût des données
- e. Appuyez sur 5 si vous avez toujours limité l'utilisation de vos données de téléphone portable l'année dernière en raison du coût des données

8. Combien de données utilisez-vous sur votre téléphone portable dans un mois typique?

- a. Appuyez sur 1 si vous utilisez de 50 à 100 mégabytes dans un mois normal
- b. Appuyez sur 2 si vous utilisez 100-250 MB
- c. Appuyez sur 3 si vous utilisez 250-500 MB
- d. Appuyez sur 4 si vous utilisez 500-999 MB
- e. Appuyez sur 5 si vous utilisez 1 à 2 gigabytes de données par mois
- F. Appuyez sur 6 si vous utilisez de 2 à 3 gigabytes de données par mois
- g. Appuyez sur 7 si vous utilisez 3 gigabytes ou plus de données par mois
- h. Appuyez sur 8 si vous ne savez pas

9. De nombreux plans mobiles incluent la voix et les données, mais certains ne comprennent que des données. Les utilisateurs disposant de plans de données uniquement peuvent toujours utiliser Internet et peuvent effectuer des appels et envoyer des messages s'ils téléchargent et utilisent des applications ou des services Internet. Souhaitez-vous passer à un forfait de données uniquement s'il coûte moins cher que votre plan actuel?

- a. Appuyez sur 1 si vous voulez passer à un plan de données uniquement
- b. Appuyez sur 2 si vous ne souhaitez pas passer à un plan de données uniquement
- c. Appuyez sur 3 si vous avez déjà un plan de données uniquement
- d. Appuyez sur 4 si vous avez besoin de plus d'informations
- e. Appuyez sur 5 si vous ne savez pas

Partie C - Données démographiques

10. Les prochaines questions concernent vous-même. Vos réponses resteront confidentielles et anonymes. S'il vous plaît indiquer votre sexe.

- a. Appuyez sur 1 pour Homme
- b. Appuyez sur 2 pour Femme
- c. Appuyez sur 3 pour Autre
- d. Appuyez sur 4 si vous préférez ne pas répondre

11. Où habitez-vous?

- a. Appuyez sur 1 si vous vivez dans une ville de 100 000 habitants ou plus
- b. Appuyez sur 2 si vous vivez dans une ville avec entre 30 000 et 99 999 résidents
- c. Appuyez sur 3 si vous vivez dans une ville de 1 000 à 29 999 habitants
- d. Appuyez sur 4 si vous vivez dans une communauté de 500 à 999 résidents
- e. Appuyez sur 5 si vous vivez dans une communauté de moins de 500 résidents

12. Quel âge avez-vous?

- a. Appuyez sur 1 si entre 18 et 24 ans
- b. Appuyez sur 2 si entre 25 et 34 ans
- c. Appuyez sur 3 si entre 35 et 44 ans
- d. Appuyez sur 4 si entre 45 et 54 ans
- e. Appuyez sur 5 si entre 55 et 64 ans
- f. Appuyez sur 6 si entre 65 et 74 ans
- g. Appuyez sur 7 si 75 ans ou plus
- h. Appuyez sur 8 si vous préférez ne pas répondre

13. Dans quelle province ou territoire habitez-vous?

- a. Appuyez sur 1 pour la Colombie-Britannique ou l'Alberta
- b. Appuyez sur 2 pour Saskatchewan ou Manitoba
- c. Appuyez sur 3 pour l'Ontario
- d. Appuyez sur 4 pour le Québec
- e. Appuyez sur 5 pour Terre-Neuve ou le Nouveau-Brunswick
- f. Appuyez sur 6 pour la Nouvelle-Écosse ou l'Île-du-Prince-Édouard
- g. Appuyez sur 7 pour les Territoires du Nord-Ouest
- h. Appuyez sur 8 pour Nunavut
- i. Appuyez sur 9 pour le Yukon

14. Quel est le niveau d'éducation le plus élevé que vous avez complété?

- a. Appuyez sur 1 pour secondaire 2 ou moins
- b. Appuyez sur 2 pour une peu d'école secondaire
- c. Appuyez sur 3 pour diplôme d'études secondaires ou équivalent
- d. Appuyez sur 4 pour le collège ou le cégep
- e. Appuyez sur 5 pour un baccalauréat
- f. Appuyez sur 6 pour une Maîtrise
- g. Appuyez sur 7 pour un Doctorat
- h. Appuyez sur 8 si vous préférez ne pas répondre

15. Laquelle des catégories suivantes décrit le mieux le revenu total de votre ménage, avant impôts?

- a. Appuyez sur 1 si moins de 20 000 \$

- b. Appuyez sur 2 si 20 000 \$ à un peu moins de 40 000 \$
- c. Appuyez sur 3 si 40 000 \$ à un peu moins de 60 000 \$
- d. Appuyez sur 4 si 60 000 \$ à un peu moins de 80 000 \$
- e. Appuyez sur 5 si 80 000 \$ à un peu moins de 100 000 \$
- f. Appuyez sur 6 si 100 000 \$ à un peu moins de 150 000 \$
- g. Appuyez sur 7 si 150 000 \$ et plus
- h. Appuyez sur 8 si vous préférez ne pas répondre

Merci, c'est toutes les questions que j'ai pour vous. Si vous avez des questions à propos de cet appel, vous pouvez joindre notre cabinet, Access Research, au 1-855-561-3603 ou à inquiry@access-research.com. Passez une bonne journée.