



Canadian Radio-television and  
Telecommunications Commission

Conseil de la radiodiffusion et des  
télécommunications canadiennes

Canada

# Communications Monitoring Report

October, 2015

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# **Communications Monitoring Report**

**CRTC**

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Interested parties are welcome to provide comments for improvements or additions to future editions of the report. You can send your comments to the attention of the Secretary General, CRTC, Ottawa, K1A 0N2.



## Chairman's message

I am pleased to present the 2015 *Communications Monitoring Report*. This report provides a comprehensive view of the Canadian communication services sector, including the technologies they depend on to participate in the digital economy.

This year's edition reveals important trends in how Canadians use their communication services. A picture of the broadband home of the future is beginning to emerge as the majority of households now subscribe to Internet packages with speeds at or above 10 megabits per second, while packages with slower speeds have been declining in popularity. Although Canadians are using a variety of ways to communicate, they are increasingly choosing wireless services over traditional telephone services.

The report also contains new data, including additional information on ethnic radio stations and average monthly mobile data usage.

We have undertaken additional efforts to provide high-level information that is clear and easy to understand in the section titled "Canada's Communication System: An Overview for Citizens, Consumers and Creators." While communication services account for a significant portion of most families' monthly budget, Canadians have a number of options in today's competitive marketplace. We invite them to use the information in the following pages to help them make informed decisions about their services.

The CRTC aims to ensure Canadians are at the centre of their communication system. To do so, it is important that they participate in our public consultations and at our public hearings. The data in this report can inform their comments and ideas and provide evidence to support their views.

We look forward to hearing from all participants in the Canadian communication sector as we work to ensure that Canadians have access to a world-class system.

Jean-Pierre Blais  
Chairman and CEO





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## Executive Summary

The *Communications Monitoring Report* (CMR) provides a comprehensive overview of the communications markets in Canada. Specifically, it provide the industry, stakeholders and the Canadian public with a meaningful tool to help them better understand the communications industry and participate in the CRTC's proceedings.

### Key communications market trends for 2014

- **Overall communications industry revenues reached \$63.2 billion in 2014, up from \$61.9 billion in 2013.** Despite the increase in revenues, the 2.1% growth rate for 2014 is slightly below the five-year average of 2.4%. Revenue increases for mobile, Internet, broadcasting distribution and discretionary television services were offset by decreases in revenue for conventional television, radio and home telephone services.
- **Telecommunications revenues took the lion's share of overall communications revenues.** In 2014, total telecommunications revenues reached \$45.9 billion and grew by 2.5%, while broadcasting revenues reached \$17.3 billion and grew by 1.4% since last year. These proportions are consistent with previous years.
- **The five largest companies accounted for 84% of communications revenues in 2014.** This figure is up 1% from 2013.
- **Average monthly household spending on communications services increased from \$191 in 2013 to \$203 in 2014.** The largest spending increase was on mobile services which rose from \$69 to \$79. Most of Canadians' spending on communications services went to mobile wireless services (39%), followed by home television (27%), Internet (19%), and home telephone services (15%).
- **The price of communications services outpaced overall consumer prices.** Between 2013 to 2014, overall consumer prices increased by 2.0% while prices for some communications services increased as follows: 3.4% for home telephone, 2.3% for cable, direct-to-home satellite and Internet Protocol Television (IPTV), and 8.0% for Internet.

### New technologies are shaping how Canadians are communicating

- **For the first time, more Canadians households subscribed exclusively to mobile wireless services (20.4%) than to wireline (i.e., landline) telephone services (14.4%).** More Canadian households also reported subscribing to mobile phones (84.9%) than landline telephones (78.9%).

- **Canadians continue to move toward broadband mobile services.** Mobile broadband subscribers continued to post strong gains, with over 19 million Canadians subscribing to mobile broadband in 2014, compared to 17.6 million in 2013 and 13.2 million in 2011.
- **The number of wireless subscribers increased in 2014, but at a slower rate than in recent years.** Growth was at 1.5% in 2014, compared to 2.3% in 2013 and 7.9% in 2010.
- **Fewer wireless users subscribed to plans which exceeded 2 years.** In 2014, contracts which exceeded 2 years accounted for 33% of all contract lengths, compared to 56% in 2013.
- **Two-thirds of Canadians own a smartphone.** In 2014, 66% of Canadians 18 years of age and older owned a smartphone compared to 62% in 2013 and 24% in 2010.
- **LTE coverage now reaches over 90% of the population.** LTE availability reached 93% of the population, while HSPA+ is available to 99% of the population.
- **Tablet ownership has continued to increase rapidly over the last year as nearly half of Canadians own a tablet.** In 2014, 49% of Canadian 18 years of age and older reported owning a tablet, compared to 39% in 2013 and 3% in 2010.
- **Ninety-six percent of Canadian households can subscribe to download speeds of 5 Mbps.** This is virtually unchanged from 2013, but significantly higher than 87% in 2011. In comparison, 77% of Canadian households actually subscribe to Internet services at this target download speed.
- **In 2014, 87% of high-speed Internet subscribers had access to download capacities of 40 gigabytes.** This represents significant increases from 76% in 2013 and 72% in 2011.

### **The way Canadians are consuming content is changing**

- **Internet TV viewing continued to increase.** In the spring of 2015, Canadians 18 years of age and older watched 7 hours of Internet TV on a weekly basis, compared to 5.1 hours in 2013 and 1.5 hours in 2008.
- **Traditional TV viewing is continuing to drop.** Canadians (2 +) watched 27.4 hours of traditional television per week during the 2013-2014 broadcast year, compared to 27.9 hours in 2012-2013 and 28.5 hours in 2010-2011.

- **Younger Canadians are watching significantly less traditional television than older Canadians.** On average, Canadians 18 to 34 years of age watched less than half the number of hours of traditional television (20.6) as did Canadians 65 year of age and older (41.8).
- **For the first time since its introduction into the Canadian marketplace, IPTV posted revenues beyond the billion-dollar mark.** In 2014, IPTV garnered nearly \$1.3 billion in revenues, up from \$925 million in 2013.

### **Alternative audio activity on the rise**

- **Canadians' use of streaming services is growing.** In 2014, 52% of Canadians streamed music videos on YouTube, 22% streamed AM/FM radio online, 18% streamed personalized online music, and 21% listened to podcasts.
- **Nineteen percent of Canadians 18 years of age and older subscribed to satellite radio services.** This represents a 2% increase over 2013 and an 8% increase over 2009.
- **Meanwhile, both revenues and profitability of private commercial radio stations dropped in 2014.** Commercial radio stations reported a slight decrease in revenues, from \$1.62 billion in 2013 to \$1.61billion in 2014. Both AM and FM radio stations reported weaker profitability margins in 2014.



## 1.0 Introduction

### Purpose of the *Communications Monitoring Report*

Over the last few decades, communications technology has undergone radical transformations. Canadians now have real-time access to a world of information and entertainment across a multitude of platforms. They rely on their communications system to create meaningful content, contribute to Canada's economy and democracy, and connect with their friends, families and communities. As Canadians adapt to technological change, the Canadian Radio-television and Telecommunications Commission (CRTC) will continue to supervise and regulate in a responsible, measured, and intelligent way in the public interest.

The Commission's *Communications Monitoring Report* is a tool for analyzing the evolving state of Canada's communication system. It is designed to support evidence-based policy development, decision making, and open public discussion of broadcasting and telecommunications regulatory policies and issues. The Commission invites parties to use the data in this report to enrich their participation in the regulatory process.

### Scope and structure of this year's report

The 2015 *Communications Monitoring Report* captures a wide range of information on financial performance, industry characteristics, Canadian programming expenditures, service prices and availability across Canada, and many other communications-related subjects.

Building on last year's efforts to provide a concise overview, Section 2.0 highlights key trends and information directly relevant to Canadians as citizens, consumers, and creators. This section provides a general summary of those key trends and of market performance and competition, pricing, and access across all services. Subsequent sections offer more granular sector-level information.

Section 3.0 surveys Canada's communications industry as a whole, focusing on such characteristics as market participants and the number of firms operating across the Canadian communications industry. Within the broadcasting sector, this encompasses radio stations, television services (over-the-air stations, discretionary (i.e., specialty and pay) services, video-on-demand services and pay and pay-per-view services), and broadcasting distribution undertakings; in the telecommunications sector, this covers local voice and access, long distance, Internet, wireless, data, and private line.

The remaining sections focus on specific markets, providing in-depth information for those seeking granular data. For example, Sections 4.0 through 4.3 are dedicated to radio, television and broadcasting distribution markets, featuring a range of data on audience measurement, programming contributions and expenditures, and service availability. Sections 5.0 through 5.6 focus on Canada's telecommunications sector and addresses retail and wholesale Internet, wireline telephone (i.e., landlines), wireless, and data and private line services.

## Changes to the 2015 report

The 2015 *Communications Monitoring Report* includes new and expanded data reflecting regulatory and market developments. These include new technologies and the introduction of new or evolving services, as well as changes in market structure and in domestic regulations and agreements.

The CRTC has adapted the report to take into account emerging technologies and shed more light on existing services. Additions and changes for the 2015 *Communications Monitoring Report* include the following:

- Summary pages featuring key indicators have been added to each section of the report.
- As part of the Open Data project, the CRTC has launched datasets on television ownership and television viewing via the Government's [Open Data portal](#).
- Data on wholesale high-speed access (mainly for broadband Internet) revenues, lines and speeds are now presented.
- Section 5.5 now includes data on Wi-Fi hotspot availability and pricing.
- The report now measures the rate at which Canadians are subscribing to various wireless plans.
- New information has been added on the number of titles in the inventories of video-on-demand services.
- An International perspective section has not been included in the 2015 as the CRTC has resolved to focus on the analysis of data it collects directly. For those seeking additional data relevant to international comparisons, please visit the [Innovation and Technology Data Portal](#) or [Broadband Portal](#) on the website of The Organisation for Economic Co-operation and Development (OECD).

These changes will provide Canadians with improved financial, pricing, and other key indicators and trends to further enhance their understanding of the communications industry.



## **1.1 The CRTC**

The Canadian Radio-television and Telecommunications Commission (CRTC) is an administrative tribunal that regulates and supervises Canadian broadcasting and telecommunications in the public interest, as well as enhances the privacy and safety of Canadians.

The CRTC's main responsibilities include the following:

### **Regulatory Policy, Legislative Implementation and Regulation**

- Developing regulatory policies for Canada's communication system;
- Approving mergers, acquisitions and changes of ownership of broadcasting undertakings;
- Approving tariffs and agreements for certain telecommunications services;
- Issuing, renewing and amending licenses for broadcasting distribution and programming undertakings;
- Resolving competitive disputes.

### **Outreach and Engagement with Stakeholders and Canadians**

- Consulting and informing Canadians;
- Responding to enquiries and complaints from stakeholders and Canadians;
- Collaborating with domestic and international partners on issues;
- Facilitating industry co-regulation and self-regulation through consultations, committees and working groups.

### **Monitoring, Compliance and Enforcement**

- Monitoring and reporting on the Canadian communication system;
- Promoting and enforcing compliance with legislation, regulation and rules such as the Unsolicited Telecommunications Rules (UTRs), Canada's anti-spam legislation (CASL) and the Voter Contact Registry (VCR).

For more information on the CRTC's mandate, mission, and activities please visit our website at <http://www.crtc.gc.ca/eng/acrtc/acrtc.htm>.



## 2.0 Canada's Communications System: An Overview for Citizens, Consumers, and Creators

Over the past several years, the CRTC has strengthened its efforts to place Canadians at the centre of the communications system, whether as consumers of communication products and services, creators and distributors of content, or citizens who need access to information to fully engage in a democratic society. To this end, this section provides an overview of subjects of particular importance to Canadians by focusing on key trends in the communications industry landscape, competition, household expenditures, and access to communications services.

**For the first time, more Canadians households subscribe exclusively to mobile wireless services (20.4%) than to wireline (i.e., landline) telephone services (14.4%).**

While the majority of Canadians still own and use landlines, the data attests to a slow and steady shift away from this technology in favour of wireless services. Indeed, more Canadian households have mobile phones (84.9%) than landlines (78.9%) – a big change from only ten years ago, when just over half of Canadian households subscribed to mobile phones (53.9%) and almost all owned landlines (96.3%).

Yet as Canadians embrace mobile wireless, a more precise picture emerges when examining this trend across income quintiles. For instance, wireless-only households are most prominent among the two lowest income quintiles (see Table 2.0.7). This suggests that the rise of mobile-only households does not solely reflect changing preferences but may also be driven by affordability.

**While overall viewing hours have not changed significantly, younger Canadians are watching significantly less traditional television than older cohorts.**

Since the introduction of more accurate audience measurement tools in 2009 (such as portable people meters, or PPM), the average number of weekly television viewing hours nationally for Canadians 18 years of age and older has remained fairly steady, ranging from 29.8 (2010-2011 broadcast year) to 29.0 (2013-2014 broadcast year). At the same time, the viewing habits of younger and older Canadians reveal a stark contrast. Between 2009-10 and 2013-14, the number of hours older Canadians (65+) spent watching traditional television each week increased by 3.5%, whereas for Canadians 18 to 34 years of age, it declined by 12.3%.

Data from 2013-14 indicate that on average, Canadians 18 to 34 years of age watched less than half the number of hours of traditional television (20.6) as did those 65 and over (41.8). Children (2 to 11 years of age) and teens (12 to 17 years of age) appear to be following a similar course. What this data makes clear is that there is a divide between Canadians under 50 and above – older viewers continue to watch a significant number of hours of traditional television, while younger viewers do not appear to be following suit.

Data from the Media Technology Monitor reveals a similar trend when it comes to digital media: 58% of Anglophones 18 to 34 years of age subscribe to Netflix, compared to 14% of those 65 and over. Among Francophones, the disparity is even more pronounced, at 24% and 1%, respectively.

**In 2014, Canadian households paid an average of \$203.04 per month for their communications services, an increase of \$11.92 from 2013 – roughly 6%.**

Canadian households currently spend more on wireless (\$79.08) and BDU services (\$53.95) compared to Internet (\$38.91) and wireline telephone services (\$31.10).

At the same time, there are clear differences across household income quintiles. Households in the two highest quintiles spend more than twice as much on mobile wireless than those in the lowest income quintile – a pattern that roughly holds for cable and DTH satellite television and Internet services. In the case of landlines, spending remains relatively evenly distributed across income quintiles.

#### **What are broadcasting distribution undertakings?**

Broadcasting distribution undertakings (BDUs) provide subscription television service to Canadians. They redistribute programming from conventional over-the-air television and radio stations. They also distribute pay audio and discretionary (i.e., pay, specialty, pay-per-view (PPV) and video-on-demand (VOD)) services. Most BDUs are cable, national DTH satellite, or Internet protocol television (IPTV) service providers.

**Nearly all Canadians have access to broadband download speeds of at least 5 Mbps, while subscription rates lag behind.**

Over the past five years, the percentage of Canadians with access to the 5 Mbps downstream speed has grown from 86% to 96%, with 77% of households actually subscribing to services offering this speed.

In April 2015, the CRTC launched a review of basic telecommunications services that will address a range of related topics, including upload/download speeds necessary in the digital age, the roles of economic and regulatory players in the public and private sectors, possible funding mechanisms to support telecommunications services and a range of related topics.

#### **Connecting Canadians**

In 2014, the Government committed \$305 million over five years (2014-2019) to extend and enhance access to broadband Internet for Canadians in rural and remote communities that do not currently have access to service at 5 Megabits per second (Mbps). Industry Canada launched the resulting program, Connecting Canadians, in July 2014. Through Connecting Canadians, the Government is supporting the private sector to construct new high-speed Internet infrastructure, with an initial goal of expanding access for 280,000 households across the country. The program is a key commitment under Digital Canada 150, the Government's plan to help Canadians take full advantage of the opportunities of the digital age.

### ***a) Industry landscape and competition***

Canada's communications system is composed of two broad categories: broadcasting and telecommunications. In 2014, total communications revenues increased by 2%. However, this overall growth masks important divergences across individual sectors. While detailed financial information can be found in each section of this report, the present section offers a high-level overview of industry revenues and the competitive landscape in broadcasting and telecommunications.

**Table 2.0.1 Communications service industry at a glance**

Revenues (\$ billions)	2013	2014	Growth (%)
Communications	61.9	63.2	2.1
Broadcasting	17.0	17.3	1.4
Radio	1.6	1.6	-0.5
TV	6.5	6.6	1.9
BDU	8.9	9.1	1.4
Telecommunications (retail and wholesale)	44.8	45.9	2.4
Wireline Voice (local and long distance)	10.6	10.1	-4.7
Internet	8.2	8.9	8.8
Data and Private Line	4.8	4.8	0.0
Wireless (local and long distance)	21.2	22.0	3.8

Source: CRTC data collection

### **Telecommunications remains dominant**

In 2014, telecommunications services continued to capture approximately 73% of all communications revenues, with broadcasting services representing the remaining 27%. This speaks in part to the scale of mobile wireless services, which accounted for nearly half of all telecommunications revenues. Indeed, mobile wireless alone generated more revenues than the entire broadcasting sector.

As noted above, more Canadians now subscribe exclusively to mobile wireless than wireline telephone services. This reflects trends in financial data that demonstrate relatively consistent mobile revenue growth.

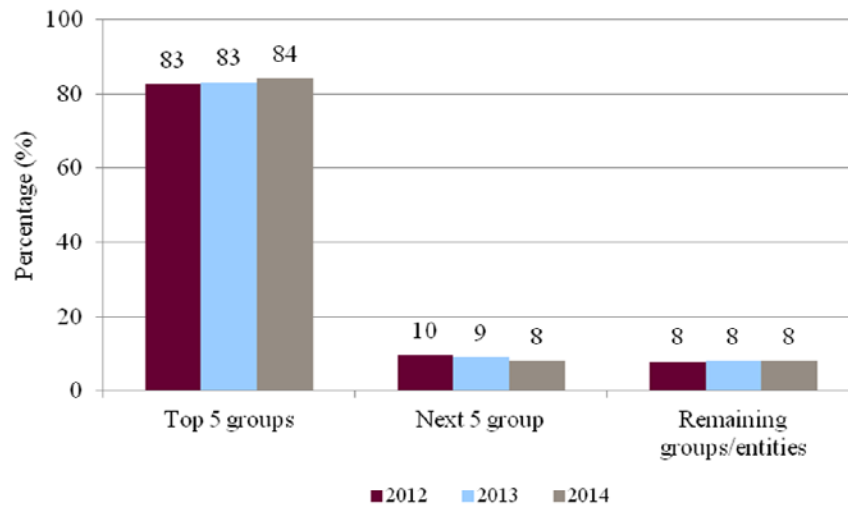
A similar phenomenon – one in which certain sectors drive overall growth while others remain flat or shrink – appears to manifest itself across multiple sub-sectors of the communications system. Services introduced in the early-to-mid-20<sup>th</sup> century, including wireline voice services, conventional television and radio continue to be widely used by many Canadians. At the same time, these services' revenues have not grown at the same pace as those of newer services; in many cases, they have even declined.

### **A concentrated market**

The competitive landscape in the communications system as a whole remains mostly unchanged from last year. Large vertically and horizontally integrated entities hold dominant market positions. As Figure 2.0.1 indicates, the top five broadcasting and telecommunications group/entities (Bell

Canada, Quebecor, Rogers, TELUS, and Shaw) together accounted for approximately 84% of total industry revenues, an increase of 1% from 2013. The next five groups (Bragg, Cogeco, MTS, SaskTel, and Telesat) represented a combined 8% of total revenues.

**Figure 2.0.1** Percent of total combined revenues, by broadcasting and telecommunications ownership groups



Source: CRTC data collection

The ten largest entities tend to offer a wide range of services (e.g. wireless, landline, Internet, and broadcasting distribution services). The remaining companies operate in fewer sectors, focusing, for example, on providing retail high speed Internet services as a reseller or operating a small group of regional radio stations. Other sections of this report – notably 5.3 (Internet) and 5.5 (Wireless) – feature information on the extent to which resellers and new entrants have increased their revenues and subscriber base.

#### What's in a name: conventions for entities mentioned in this report

This section refers to major broadcasting and telecommunications entities by short-form names rather than formal titles (e.g. Rogers rather than Rogers Communications Inc.) The goals behind this are two-fold. First, it provides clear terms that Canadians can easily recall and relate to through their experience as consumers. Second, these shorter names offer a concise and consistent naming convention. A list of companies referenced in the *Communications Monitoring Report*, including their official titles, can be found in Appendix 6.

## Bundling

This market concentration plays a role in the rise of bundling, as the largest entities are well-positioned to offer their customers discounts in exchange for subscribing to a range of services. Over the past five years (2010-2014), the number of subscriptions with bundled services rose from 8.8 to 10.4 million. Bundling data for 2014 remained unchanged from 2013 as the rate of growth has slowed over the past several years, which may mean that providers are reaching a ceiling on the number of customers that are willing to bundle their services.

**Table 2.0.2      Number of subscriptions with bundled services (millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Number of subscriptions with bundles	8.8	9.4	10.0	10.4	10.4	4.3
<i>Growth (%)</i>	<i>17.1</i>	<i>6.4</i>	<i>6.3</i>	<i>4.1</i>	<i>0.0</i>	

Source: CRTC data collection

***b) Communications expenditures and prices***

Examining data on the amounts that Canadian households spend on communications services provides an important perspective on how communication services impact the household budget and points, to a certain extent, to national-level shifts in demand and the competitive landscape.

It is important to recognize the limitations of expenditures data. First, it may overlook the fact that certain services, such as over-the-air television and radio services, remain valuable to Canadians. Second, the average expenditure amount takes into account all households, including those that do not subscribe to one or more services. As a result, expenditures for households that purchase services may appear lower than they actually are.

**Spending on communication services continues to climb**

Over the course of 2014, the average Canadian household spent approximately \$203 per month on communication services, an increase of \$11.92 (6.2%) from last year. Table 2.0.4 suggests that much like industry revenues, certain service sectors received a larger share of expenditures than others.

This increase was driven in large part by changes in spending on wireless and Internet services, which grew 14.1% and 10.0%, respectively. The increase for the Internet services may be driven by a group of Canadians that have upgraded their speeds.

Canadians continued to allocate less of their household expenditures to landline telephony service, which fell from \$32.85 per month to \$31.10, a reduction of 5.3%. Beyond a shift towards wireless services, one contributing factor is that households with a second or third landline telephone appear to be eliminating these subscriptions and signing onto additional wireless subscriptions, as Figure 2.0.4 demonstrates. In 2014, wireline telephone services represented 15.3% of household communications expenditures compared to 38.9% for wireless services.

While there is considerable variance between the average amounts spent by Canadians in each income quintile, households tended to devote more of their communications budget to either mobile wireless or cable and DTH satellite services. In 2014, spending was greatest on mobile services across all income quintiles.

Although spending by lower income households on communication services was less than that for higher income households, communications takes up a significantly larger percentage of their total expenditures – as Table 2.0.3 shows.

**Table 2.0.3 Household communications expenditures at a glance, by quintile, 2013**

Characteristics	First quintile (household income less than \$30,668)	Second quintile (household income from \$30,669 to \$51,804)	Third quintile (household income from \$51,805 to \$79,722)	Fourth quintile (household income from \$79,723 to \$121,291)	Fifth quintile (household income over \$121,292)	Average of all quintiles
Average annual income	\$18,582	\$41,105	\$64,854	\$98,634	\$199,702	\$84,575
Members per household	1.49	2.11	2.49	2.95	3.34	2.48
Communications expenditures as a percentage of annual income	8.3%	4.9%	3.8%	2.8%	1.7%	2.9%

Sources: Statistics Canada's Survey of Household Spending

**What are the characteristics of the average Canadian household?**

Based on Statistics Canada's 2014 Survey of Household Spending (data for 2013), the average household annual income before taxes in Canada was \$84,575. The average household annual income before taxes ranged from \$68,898 to \$79,674 for households east of Ontario and from \$77,640 to \$118,750 for households in Ontario and west of Ontario. Households in Alberta had the highest average household annual income before taxes at \$118,750, followed by households in Ontario at \$87,696.

From the perspective of per household income quintiles (each 20% of households by average annual income), the first quintile had an average annual income of \$18,582. This quintile had an average of 1.49 members per household. The highest income in this quintile was \$30,668. The third quintile had an average annual income of \$64,854. It had an average of 2.49 members per household. The highest income in this quintile was \$79,722. The top 20% of households had annual incomes in excess of \$121,291. The average annual income for this quintile was \$199,702. This quintile had an average of 3.34 members per household.



**Table 2.0.4 Monthly household communications expenditures, by service and by quintile (\$/month/household)**

Service	Year	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile	Average of all quintiles
Wireline telephone	2011	33.91	33.51	37.01	42.56	42.39	37.66
	2012	29.06	33.05	34.28	37.18	40.73	34.86
	<i>Growth (%)</i>	-14.3	-1.4	-7.4	-12.6	-3.9	-7.4
	2013	27.92	30.72	31.38	34.55	39.78	32.85
	<i>Growth (%)</i>	-3.9	-7.0	-8.5	-7.1	-2.3	-5.8
	2014	25.24	29.41	31.61	33.51	35.78	31.10
	<i>Growth (%)</i>	-9.6	-4.2	0.7	-3.0	-10.1	-5.3
Mobile wireless	2011	31.58	43.33	58.25	73.00	98.50	60.92
	2012	32.92	48.58	67.92	80.42	107.08	67.42
	<i>Growth (%)</i>	4.2	12.1	16.6	10.2	8.7	10.7
	2013	34.92	50.33	68.67	83.33	109.50	69.33
	<i>Growth (%)</i>	6.1	3.6	1.1	3.6	2.3	2.8
	2014	43.17	56.17	77.58	91.75	126.50	79.08
	<i>Growth (%)</i>	23.6	11.6	13.0	10.1	15.5	14.1
Internet	2011	18.45	25.47	31.80	34.65	39.28	29.95
	2012	21.42	26.49	33.03	35.64	40.32	30.95
	<i>Growth (%)</i>	16.1	4.0	3.9	2.9	2.6	3.3
	2013	21.48	30.53	39.33	40.95	44.74	35.41
	<i>Growth (%)</i>	0.3	15.3	19.1	14.9	11.0	14.3
	2014	24.74	33.82	40.34	45.75	50.05	38.91
	<i>Growth (%)</i>	15.2	10.8	2.6	11.7	11.9	10.0
Cable and DTH	2011	37.99	45.76	52.09	59.35	67.11	52.42
	2012	35.55	46.93	51.79	55.95	70.00	52.02
	<i>Growth (%)</i>	-6.4	2.6	-0.6	-5.7	4.3	-0.8
	2013	37.45	46.77	51.98#	60.20	71.58	53.56
	<i>Growth (%)</i>	5.3	-0.3	0.4	7.6	2.3	3.0
	2014	35.20	46.88	55.14	61.66	70.79	53.95
	<i>Growth (%)</i>	-6.0	0.2	6.1	2.4	-1.1	0.7
Total	2011	121.75	148.03	179.26	209.60	247.34	180.95
	2012	118.94	155.04	187.02	209.18	258.14	185.25
	<i>Growth (%)</i>	-2.3	4.7	4.3	-0.2	4.4	2.4
	2013	121.76	158.35	191.36#	219.03	265.60	191.12
	<i>Growth (%)</i>	2.4	2.1	21.7	4.7	2.9	3.2
	2014	128.35	166.27	204.67	232.67	283.12	203.04
	<i>Growth (%)</i>	5.4	5.0	7.0	6.2	6.6	6.2

Sources: Statistics Canada's Survey of Household Spending, CRTC data collection, and staff analysis

The results of Statistics Canada's *Survey of Household Spending* (the Survey) are released approximately two years after the data is collected. As a result, the most recently available data is from 2013. Consequently, the data contained in this table was calculated by dividing residential revenues for each sector (wireline excluding equipment sales and retails, mobile wireless, Internet, and cable and DTH satellite) by the average number of households. Next, these revenues per household were proportioned according to the expenditure distribution from the Survey. All expenditures exclude sales tax.

## Communication service price levels

Price indices offer a perspective on the extent to which prices for a basket of goods and services change over time. Figure 2.0.2 compares the long-term evolution in prices of three key telecommunications baskets: telephone (TPI); Internet; and cable, DTH satellite, and Internet Protocol television (IPTV) services.

Figure 2.0.2 shows the changes in price for fixed-baskets of telecommunications services (landline telephone, Internet, and cable, DTH satellite, and IPTV) as well as the overall changes in prices as measured by the Consumer Price Index (CPI). By maintaining a consistent basket of goods and services and comparing prices in the current year to the index reference period (2002), these indices measure “pure” price change. As an example, the cable, satellite, and IPTV index indicates that a service basket priced at \$50.00 in 2002 would cost approximately \$83.30 in 2014.

As measured by the CPI, average annual inflation in Canada was 2.0% in 2014. In comparison, from 2013 to 2014, the prices of key communication services increased by 3.4% (telephone), 2.3% (cable, DTH satellite and IPTV) and 8.0% (Internet).

### What’s in a basket?

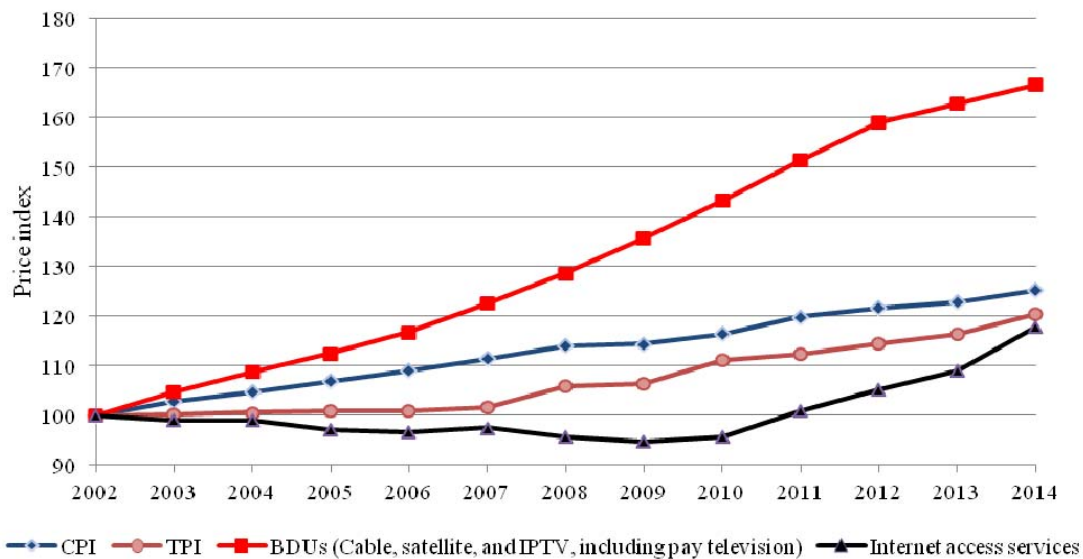
#### Telephone basket

The Telephone Price Index (TPI) reflects the price changes experienced over time by a household for a fixed basket of telephone services. This type of basket reflects a weighted average of consumer expenditures on basic local service, other local telephone services (such as options and features), and long distance, installation, and repair services. The TPI does not include Internet service expenditures.

#### Cable, DTH satellite, and IPTV basket

The Cable, DTH satellite, and IPTV price index reflects the price changes experienced over time by a household for a basket of cable television services. This basket includes both “basic” and “extended” cable services. Basic cable service is the minimum service to which all customers must subscribe. Extended cable service is the most popular package of additional channels. The BDU index does not account for bundling discounts.

**Figure 2.0.2 Price indices for telephone services, broadcasting distribution services (cable, DTH satellite, IPTV and pay television) and Internet services, compared to the CPI**



Source: Statistics Canada

For more information on price indices, see Statistic's Canada [Canadian Consumer Price Index Reference Paper](#).

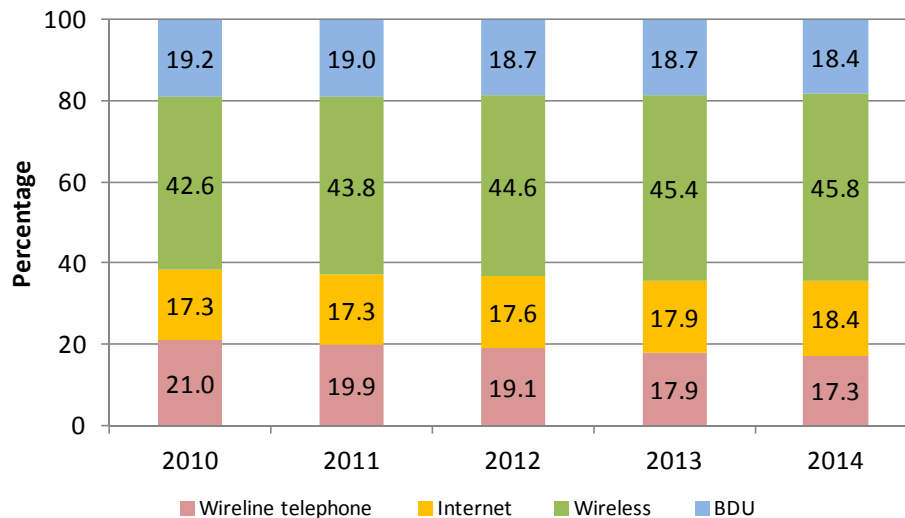
Prices for BDU service offerings have increased over the past decade (4.4% per year, on average). Internet price levels began to rise in 2011. Overall cable television and DTH satellite subscriptions declined slightly over the past five years while Internet and IPTV subscriptions have risen steadily.

### ***c) Access and service availability***

One of the CRTC's key goals is to ensure that Canadians have access to a world-class communication system. Achieving this objective requires quality information about the diverse challenges facing communities across the country. To better understand how the communications system is evolving to help Canadians connect with one another and the world, the rest of this section focuses on the availability of communications services in Canada, with a particular regard to Official Language Minority Communities and access to communication services in minority official languages.

### **Canadians are communicating through many different platforms**

As Figure 2.0.3 shows, mobile wireless represents nearly half of all household connections and Internet connections continue to expand. Landline (i.e. wireline telephone) and BDU (e.g. cable, DTH satellite, IPTV, etc.) connections, despite their relative declines, still comprise over one third of all connections via subscription. As a whole, the average household features 4.5 connections. While mobile wireless connections are the most widespread, Canadians clearly use a variety of ways to communicate.

**Figure 2.0.3 Residential connections, by percentage of households**

Source: CRTC data collection

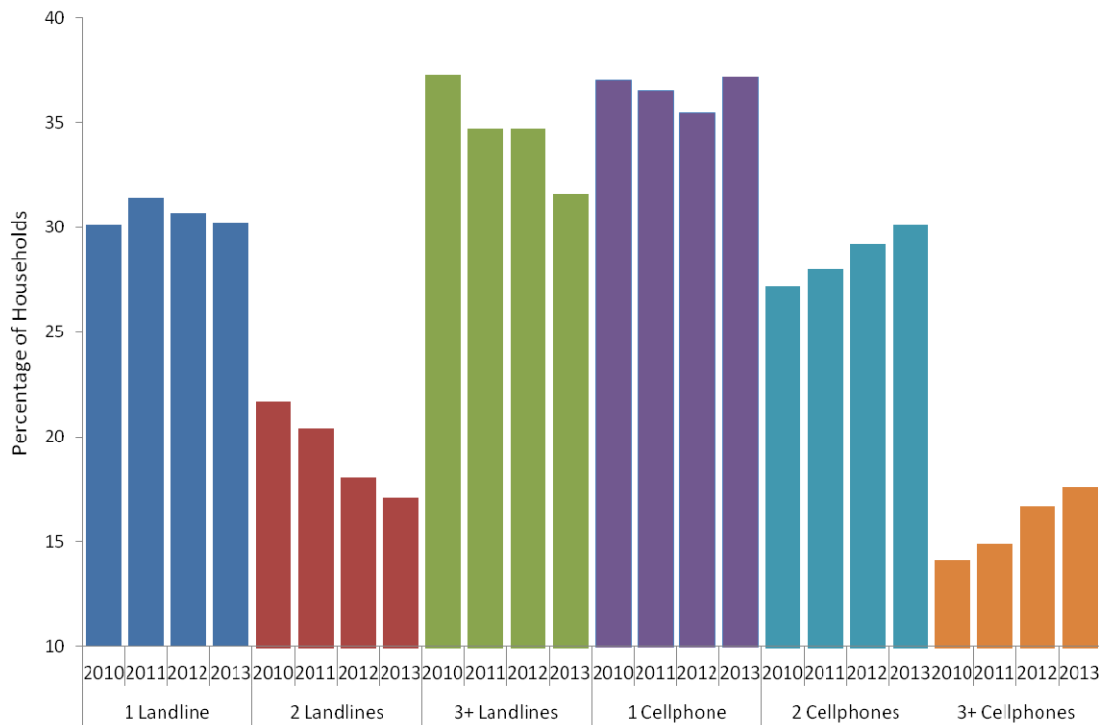
Mobile wireless connections include residential and business connections, and mobile wireless subscriptions with data plans.

### Multi cell phone households behind the rise of wireless

Another way of approaching the issue of availability is to consider the extent to which Canadian households subscribe to key communications services. As Table 2.0.5 shows, nearly all Canadians (99.3%) subscribed to either mobile wireless or landline telephone services. Yet rather than stacking telephone services (i.e. subscribing to both landline and wireless mobile), some Canadians are choosing only one – and for the most part this appears to be mobile wireless. As noted above, the percentage of cell phone only households (20.4%) currently exceeds the percentage of wireline only households (14.4%) – a significant reversal from a decade earlier when these figures stood at 2.5% and 44.9%, respectively.

By organizing this information by province (Table 2.0.6) and income quintile (Table 2.0.7), it is more apparent which groups of Canadians are driving this year-over-year shift. For instance, the four western provinces (Alberta, Saskatchewan, Manitoba, and British Columbia) and Ontario have played a key role in the rise of cell phone only households. In contrast, both Quebec and Eastern provinces (although Nova Scotia to a lesser extent) continue to feature a larger percentage of landline only households. It is worth noting, however, that the percentage of mobile wireless-only households increased in every province between 2012 and 2013.

Figure 2.0.4 suggests that households with multiple landlines are reducing their wireline connections. A significant and growing number of Canadian households feature more than two cell phones.

**Figure 2.0.4 Telephone Ownership Rates, by number of phones and type of service**

Source: Statistics Canada's Survey of Household Spending

This table provides the percentage of Canadian households by the number of phones and type of service between 2010 and 2013, the most recent data available through the Survey of Household Spending. Note that landlines include wireline phones for business use.

While this transition to widespread mobile wireless use – partly at the expense of wireline telephone services – reflects a long-term process, the historical data in Table 2.0.5 shows how rapidly Canadian households have embraced this newer technology; only ten years ago, wireline only households (40%) far outpaced their mobile wireless counterparts (2.7%).

### The link between income and telephone subscriptions

The data on telephone ownership rates by income quintile (Table 2.0.7) further illustrates this transition to mobile phones. Most noticeably, more lower income Canadian households (first and second quintiles) are cell phone only households as opposed to landline-only households – a shift that already had occurred for households in higher income quintiles. The steady decline in wireline subscriptions from 74.6% to 65.2% suggests that many first quintile households are choosing to forgo these services in favour of mobile technology. Financial resources appear to play a factor in whether households subscribe to wireless and wireline services, or simply one of the two. While only 16.1% of households in the highest income quintile subscribe to only wireline or only wireless services, this rises to 63.0% of households in the lowest quintile. Indeed, the data suggest that the higher a household's income quintile, the more likely it is that the household subscribes to both types of telephone service.

**Table 2.0.5 Canadian wireline and mobile wireless subscribers per 100 households**

Year	Wireline	Mobile wireless	Wireline and/or mobile wireless	Wireline only	Mobile wireless only	Only wireline or wireless
2002	97.0	51.6	98.7	47.1	1.7	48.8
2003	96.3	53.9	98.8	44.9	2.5	47.4
2004	96.2	58.9	98.9	40.0	2.7	42.7
2005	94.0	62.9	98.8	36.0	4.8	40.8
2006	93.6	66.8	98.6	31.8	5.0	36.8
2007	92.5	71.9	98.8	26.9	6.3	33.2
2008	91.1	74.3	99.1	24.8	8.0	32.8
2009	89.3	77.2	99.3	22.1	10.0	32.1
2010	89.1	78.2	99.3	21.1	10.2	31.3
2011	86.5	79.4	99.3	19.9	12.8	32.7
2012	83.5	81.4	99.2	17.8	15.7	33.5
2013	78.9	84.9	99.3	14.4	20.4	34.8

Source: Statistics Canada's Survey of Household Spending

**Table 2.0.6 Provincial wireline and mobile wireless telephone subscribers per 100 households, by province, 2013**

Province	Wireline	Mobile wireless	Wireline and/or mobile wireless	Wireline only	Mobile wireless only	Only wireline or wireless
British Columbia	76.0	87.1	99.1	12.0	23.1	35.1
Alberta	78.3	90.1	99.5	9.4	21.2	30.6
Saskatchewan	78.4	86.1	99.3	13.2	20.9	34.1
Manitoba	80.9	82.9	99.4	16.5	18.5	35.0
Ontario	77.3	87.4	99.3	11.9	22.0	33.9
Quebec	81.5	78.4	99.2	20.8	17.7	38.5
New Brunswick	86.0	80.5	99.0	18.5	13.0	31.5
Nova Scotia	82.0	82.9	99.2	16.3	17.2	33.5
Prince Edward Island	85.8	78.5	99.3	20.8	13.5	34.3
Newfoundland and Labrador	87.1	85.9	99.1	13.2	12.0	25.2
Canada	78.9	84.9	99.3	14.4	20.4	34.8

Source: Statistics Canada's Survey of Household Spending

**Table 2.0.7 Canadian wireline and mobile wireless subscribers per 100 households, by income quintile**

Income quintile	Year	Wireline	Mobile wireless	Wireline and/or mobile wireless	Wireline only	Mobile wireless only
First	2010	82.2	54.9	97.3	42.4	15.1
	2011	76.0	57.3	97.3	40.0	21.3
	<i>Growth (%)</i>	-7.5	4.4	0.0	-5.7	41.1
	2012	74.6	61.7	97.4	35.7	22.8
	<i>Growth (%)</i>	-1.8	7.7	0.1	-10.8	7.0
	2013	65.2	66.8	97.5	30.7	32.3
	<i>Growth (%)</i>	-12.6	8.3	0.1	-14.0	41.7
Second	2010	85.7	71.1	99.7	28.6	14.0
	2011	86.0	72.3	99.8	27.5	13.8
	<i>Growth (%)</i>	0.4	1.7	0.1	-3.8	-1.4
	2012	80.3	75.1	99.5	24.4	19.2
	<i>Growth (%)</i>	-6.6	3.9	-0.3	-11.3	39.1
	2013	75.0	79.7	99.7	20.0	24.7
	<i>Growth (%)</i>	-6.6	6.1	0.2	-18.0	28.6
Third	2010	89.3	82.0	99.8	17.8	10.5
	2011	85.1	85.3	99.7	14.4	14.6
	<i>Growth (%)</i>	-4.7	4.0	-0.1	-19.1	39.0
	2012	82.8	85.9	99.7	13.8	16.9
	<i>Growth (%)</i>	-2.7	0.7	0.0	-4.2	15.8
	2013	82.2	88.5	99.7	11.2	17.5
	<i>Growth (%)</i>	-0.7	3.0	0.0	-18.8	3.6
Fourth	2010	93.1	89.7	99.9	10.2	6.8
	2011	91.3	89.8	99.9	10.1	8.6
	<i>Growth (%)</i>	-1.9	0.1	0.0	-1.0	26.5
	2012	87.4	91.0	99.8	8.8	12.4
	<i>Growth (%)</i>	-4.3	1.3	-0.1	-12.9	44.2
	2013	84.7	92.9	99.6	6.7	14.9
	<i>Growth (%)</i>	-3.1	2.1	-0.2	-23.9	20.2
Fifth	2010	95.3	93.5	100.0	6.5	4.7
	2011	94.1	92.0	100.0	8.0	5.9
	<i>Growth (%)</i>	-1.3	-1.6	0.0	23.1	25.5
	2012	92.4	93.4	99.7	6.3	7.3
	<i>Growth (%)</i>	-1.8	1.5	-0.3	-21.3	23.7
	2013	87.5	96.4	100.0	3.6	12.5
	<i>Growth (%)</i>	-5.3	3.2	0.3	-42.9	71.2

Source: Statistics Canada's Survey of Household Spending

The results of Statistics Canada's *Survey of Household Spending* are released approximately two years after the data is collected. As a result, the most recently available data is from 2013.

### The link between income and Internet subscriptions

Mobile wireless devices (such as smartphones and tablets) and technologies (HSPA and LTE) allow many Canadians to access the Internet from nearly any location, however, home computers still play an important role. As Table 2.0.8 shows, most Canadian households have home computers. More Canadian households in the lowest quintile have cell phones (66.8%) (Table 2.0.7) than they do home computers (64.4%) or Internet access at home (59.7%).

While this may be due to a number of factors, one important factor relates to the fact that these households are choosing to devote their resources to a technology that can provide multiple communications services (voice, Internet), rather than to subscriptions for each service individually. It is worth noting that Internet use from the home increased across all quintiles with the sole exception of the highest, which registered a decline of only 0.1%.

**Table 2.0.8 Home computers and Internet use from home per 100 households, by income quintile**

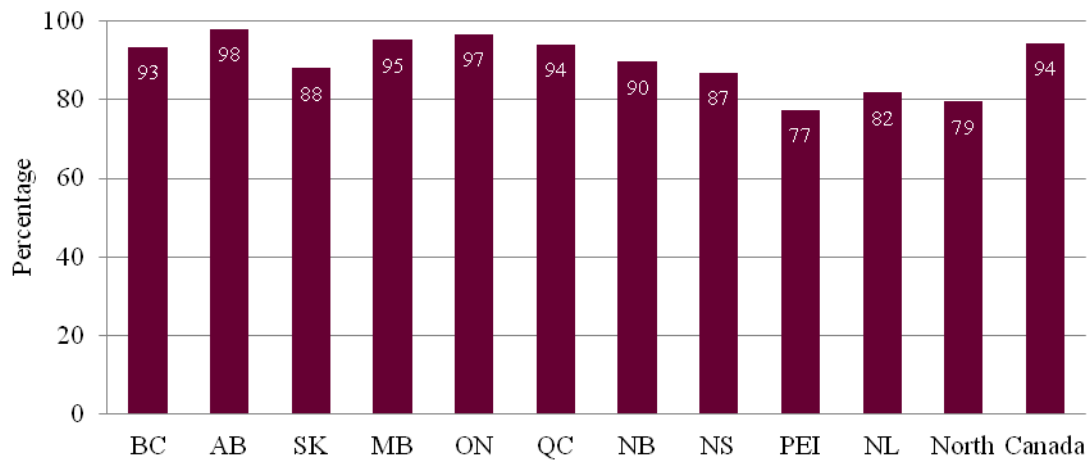
	Year	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile	Average for all quintiles
Home Computer	2012	62.1	76.3	90.5	93.9	97.4	84.0
	2013	64.4	80.6	89.8	95.4	97.9	85.6
	<i>Growth (%)</i>	3.7	5.6	-0.8	1.6	0.5	1.9
Internet Use From Home	2012	55.9	72.4	87.6	93.1	98.5	81.5
	2013	59.7	77.6	89.0	94.9	98.4	83.9
	<i>Growth (%)</i>	6.8	7.2	1.6	1.9	-0.1	2.9

Source: Statistics Canada

This rise in Internet use across income quintiles is also reflected in overall residential Internet availability and subscription rates. The percentage of households with access to broadband with a download speed of at least 5 Mbps remains at 94% (96% with satellite) (Figure 2.0.5). Similarly, although the CRTC's target is linked to the *availability* of 5 Mbps (download) and 1 Mbps (upload) and not subscription, data indicates that Canadians are clearly embracing faster connections as they become more widely available: the majority of households now subscribe to Internet packages with speeds at or above 10 megabits per second, while packages with slower speeds have been declining in popularity.



**Figure 2.0.5 Residential broadband availability (5 Mbps or higher downstream speed), by province**



Sources: Industry Canada and CRTC data collection

Direct-to-home satellite services are excluded. Since satellite is a service with a national footprint, it is excluded from this figure ; however, it would add approximately 1.5% to the availability of 5 Mbps broadband services.

**Table 2.0.9 Residential Internet subscriptions by downstream speed per 100 households**

Platform	2010	2011	2012	2013	2014
<b>High Speed (256 kbps and higher)</b>	73	76	78	79	81
<b>Broadband</b>					
1.5 Mbps and higher	69	72	75	77	80
5 Mbps and higher	51	54	62	71#	77
10 Mbps and higher	18	19	29	45	55
16 Mbps and higher	1	7	21	25	34
50 Mbps and higher	0	0	3	4	8
<b>All speeds (including dial-up)</b>	76	78	79#	80#	82

Source: CRTC Data Collection

## 2.1 Local Spotlight: Access for official languages minority communities

As a designated institution under section 41 of the *Official Languages Act*, the CRTC is committed to enhance the vitality of the English- and French-language minority communities in Canada, to support their development and address their needs within the context of its mandate, and to foster the full recognition and use of both languages in Canadian society. To this end, the CRTC focuses on ensuring that official language minority communities (OLMCs) have access to an appropriate and equitable number of quality services and that these communities are adequately represented in the programming of these services.

These objectives find reflection in the policy objectives which the Commission is tasked to pursue. In this regard, the *Broadcasting Act* specifies that the Canadian broadcasting system should reflect Canada's linguistic duality through programming and employment opportunities; that a range of broadcasting services in English and French shall be extended to all Canadians as resources become available and that the programming provided by the Canadian Broadcasting Corporation be in English and in French and reflect the different needs and circumstances of English and French linguistic minorities.

**Table 2.1.1 Official language minority population as a percentage of the total population, by province and territory, 2012**

Province/territory	Official-language minority population (% of total population)
British Columbia	1.4
Alberta	2.0
Saskatchewan	1.7
Manitoba	3.6
Ontario	4.0
Quebec	8.0
New Brunswick	31.6
Nova Scotia	3.5
Prince Edward Island	3.8
Newfoundland and Labrador	0.5
The North	2.8
Canada	4.8

Source: 2011 Census, Statistics Canada

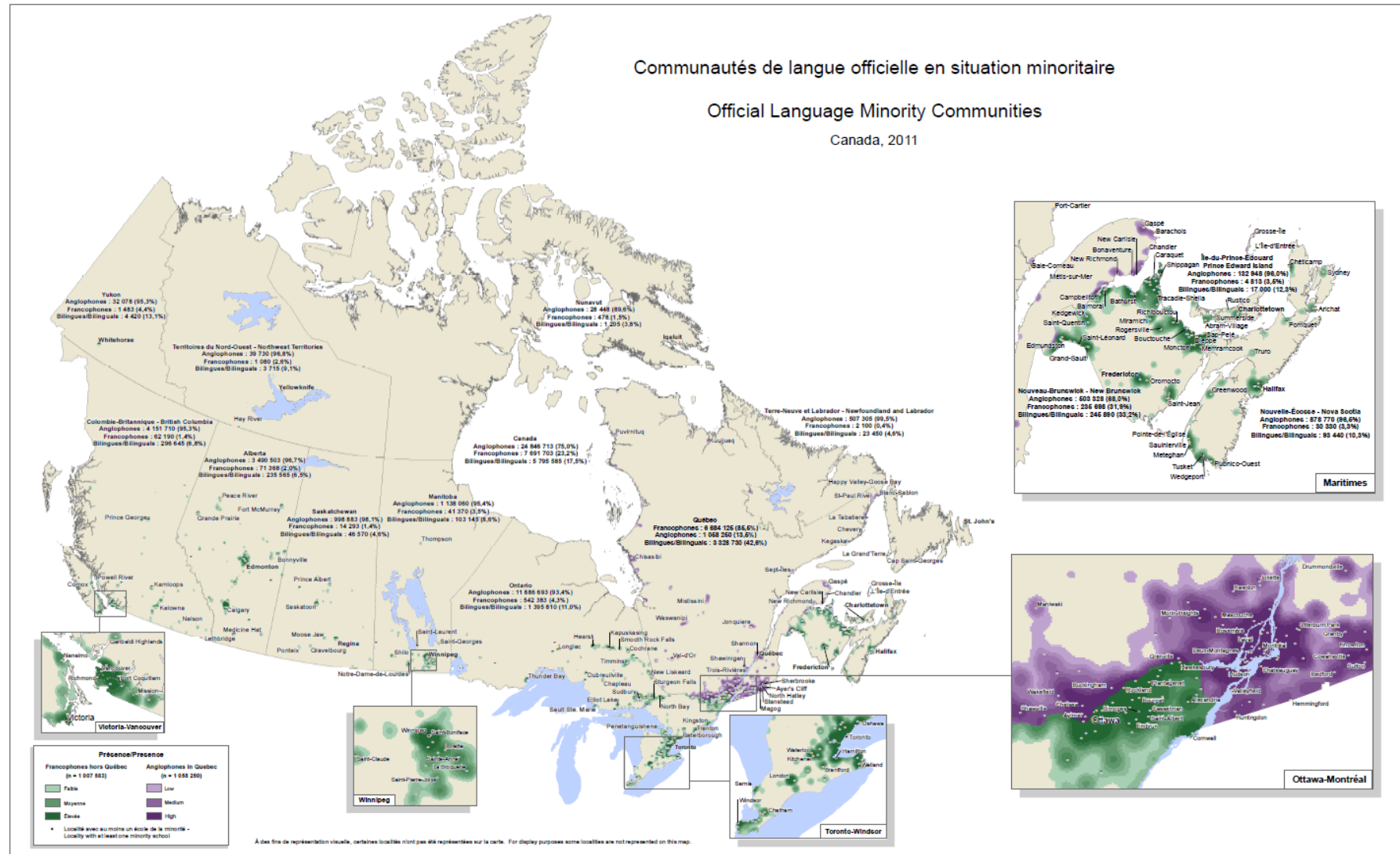
A number of different criteria can be used to identify the language of individuals. These include the first language learned at home, the language spoken at home, and the language of education.

For the purpose of this report, the official-language minority population is defined in terms of the first language learned at home in childhood (i.e., mother tongue) and still understood at the time of the 2011 Census.

The data excludes institutional residents.

This table displays the percentage of the population for whom the mother tongue is an official language in minority status in each province and territory in which they reside, and in Canada as a whole. In all provinces and territories except Quebec, the official language having minority status is French. New Brunswick has the highest percentage of official-language minority population, at 32.0%, followed by Quebec at 8.0%.

## Map 2.1.1 Locations of official language minority communities in Canada



Source: Canadian Heritage, Official Languages Branch.

The ability of an OLMC to access content in its mother tongue varies across provinces. Over 72% of OLMC households have access to over-the-air radio service in their first language, compared to 62% who have such access to television services, both are provided mainly by the Canadian Broadcasting Corporation. Households in these communities have access to the following additional communication services: cable distribution, and broadband Internet access, including mobile wireless broadband access services. Through these services, OLMC households can access content and connect with others in their first official language.

One key challenge reported by OLMCs relates to their ability to access local content in their official language. Although this report does not measure local programming, an indicator of the extent to which OLMC households are served in their official language is their access to local radio and television services, which is outlined in the table that follows.

**Table 2.1.2 Percentage of official language minority community households having access to communication services in their official language, by type of service, for provinces/territories and all of Canada, 2013**

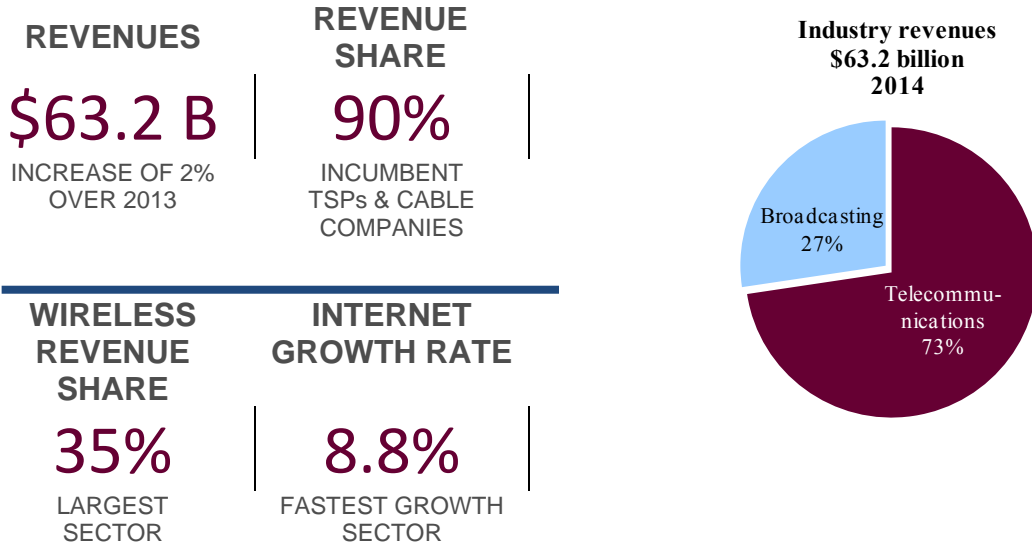
Province/territory	OLMC population as a percentage of total population	Radio	Over-the-air Television	Cable distribution (excluding DTH satellite)	Broadband Internet	Mobile wireless broadband
British Columbia	1.4	71	49	94	96	98
Alberta	2.0	77	33	90	99	99
Saskatchewan	1.7	55	17	74	99	99
Manitoba	3.6	78	62	75	99	99
Ontario	4.0	71	34	88	97	99
Quebec	8.0	83	87	93	96	99
New Brunswick	31.6	94	46	93	99	99
Nova Scotia	3.5	75	1	76	99	99
Prince Edward Island	3.8	64	0	60	86	99
Newfoundland and Labrador	0.5	56	0	82	85	95
The North	2.8	51	0	75	97	84
Canada	4.8	72	62	91	97	99

Source: 2011 Census, Statistics Canada; CRTC data collection; and CRTC staff analysis

This table displays the percentages of the OLMC households in each province and in the territories that have access to radio services, television services, cable distribution services (excluding DTH satellite service as these services are generally available to all households), broadband Internet services, and mobile wireless broadband services, from which they can be served in their first official language.

### 3.0 The Communications industry

#### Display 3.0.0 Key indicators for the communications industry



The Communications industry encompasses both the broadcasting and telecommunications market sectors. In 2014, telecommunications revenues represented 73% of the communications revenues compared to 27% for broadcasting. The communications industry served over 14 million households and over a million businesses in Canada using both landline and wireless facilities.

This section examines key characteristics of the overall communications industry, including revenue growths and financial performances. More detailed market information, including financial performances, ownership landscape data, and the extent to which industry participants offer communications services outside their traditional core markets and operating territory can be found in sections 4 and 5.

As technologies evolved, traditional broadcasting and telecommunications companies started to enter each other's traditional markets utilizing different delivery platforms and offering enhanced services. Today, 70% of total cable-based carriers' revenues are from telecommunications services and 9% of incumbent telecommunications service providers (TSP) revenues originate from traditional BDU services. The revenues from telecommunications and BDU services by these two groups, cable-based carriers and incumbent TSPs, together account for 82% of the \$63.2 billion communications revenues garnered in 2014. The remaining 18% of revenues were earned by other facility-based service providers, resellers and broadcasting entities.

Over the course of the last 15 years, the wireless market sector emerged as the largest single communications sector, capturing 35% of the \$63.2 billion communications revenues in 2014. The BDU market sector is the next largest with 14% of the communications revenues. Broadcasting distribution and Internet services remain particularly reliant on residential subscriptions, which account for 88% of their revenues.

Revenues from top five ownership groups accounted for approximately 84% of total communications revenues in 2014. Of these groups of companies, two are traditional telephone companies (Bell and TELUS) and three are the traditional broadcasting distribution companies (Rogers, Shaw, and Quebecor).

Over the past five years, revenues from the cable-based carriers and the incumbent TSPs, as a percentage of total communications revenues, have remained more or less stable at approximately 32% and 50%, respectively. During this period, cable-based carriers' telecommunications revenues increased by 3.8% annually from \$12.2 to \$14.2 billion. Traditional telephone companies, however, increased their BDU revenues 11.9% annually, from \$1.9 billion in 2010 to \$3.0 billion in 2014.

### a) Revenues

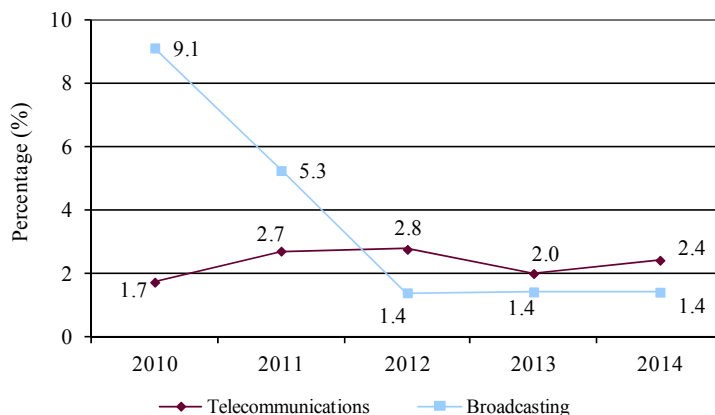
**Table 3.0.1 Communications revenues (\$ billions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Telecommunications	41.6	42.8	43.9	44.8	45.9	2.5
Annual growth (%)	1.7	2.7	2.8	2.0	2.4	
Broadcasting	15.7	16.6	16.8	17.0	17.3	2.4
Annual growth (%)	9.1	5.3	1.4	1.4	1.4	
<b>Total revenues</b>	<b>57.4</b>	<b>59.3</b>	<b>60.7</b>	<b>61.9</b>	<b>63.2</b>	<b>2.4</b>
Annual growth (%)	3.7	3.4	2.4	1.9	2.1	

Source: CRTC data collection

Revenues are one of the principal means to measure the performance of the communications industry. This table shows revenues, growth rates as well as the compound annual growth rate (CAGR) from 2010 to 2014 for telecommunications service providers (TSPs) and broadcasters (including broadcasting distribution undertakings (BDUs)).

**Figure 3.0.1 Communications annual revenue growth rates**



Source: CRTC data collection

Annual revenue growth rates are an indicator of overall broad trends in the communications industry. This graph shows annual revenue growth rates for the telecommunications and broadcasting industries from 2010 to 2014.

**Table 3.0.2 Communications revenues, by type of service provider (\$ billions)**

	2010	201	2012	2013	2014	CAGR (%) 2010- 2014
Incumbent TSPs						
Telecommunications	27.2	27.7	28.0	28.3	28.9	1.5
Annual growth (%)	-0.1	1.8	1.0	1.1	2.1	
Broadcasting distribution revenues	1.9	2.1	2.4	2.7	3.0	11.9
Annual growth (%)	14.2	12.6	10.3	15.1	9.7	
<b>Subtotal</b>	<b>29.1</b>	<b>30.8</b>	<b>30.3</b>	<b>31.0</b>	<b>31.8</b>	2.3
Annual growth (%)	0.7	5.8	1.7	2.2	2.8	
Other facilities-based service providers	0.7	0.9	1.2	1.2	1.2	14.9
Annual growth (%)	-1.3	21.0	34.0	5.6	1.7	
Resellers	1.5	1.5	1.5	1.5	1.6	1.3
Annual growth (%)	-3.5	-0.8	2.3	0.9	2.8	
Cable-based carriers						
Telecommunications	12.2	12.7	13.3	13.8	14.2	3.8
Annual growth (%)	7.1	4.0	4.2	4.0	3.0	
Broadcasting distribution revenues	6.2 #	6.5 #	6.3 #	6.3 #	6.1	-0.6
Annual growth (%)	7.8	3.2	-1.8	-1.7	-2.2	
<b>Subtotal</b>	<b>18.5</b>	<b>19.2</b>	<b>19.6</b>	<b>20.0</b>	<b>20.3</b>	2.4
Annual growth (%)	n/a	3.7	2.2	2.1	1.4	
Broadcasting – Radio & TV	7.6 #	8.0 #	8.1 #	8.1 #	8.2	2.0
Annual growth (%)	n/a	5.1	1.6	-0.1	1.4	
<b>Total</b>	<b>57.4</b>	<b>59.3</b>	<b>60.7</b>	<b>61.9</b>	<b>63.2</b>	2.4
Annual growth (%)	3.7	3.4	2.4	1.9	2.1	

Source: CRTC data collection

Canadians receive broadcasting and telecommunications services from a range of types of service providers, through a range of technologies. This table lists each type of telecommunications and broadcasting service provider and shows changes in total annual revenues for each of year between 2010 and 2014.



**b) Industry characteristics****Table 3.0.3 Industry convergence – Cable vs. telecommunications**

Year	Percentage of cable-based carriers revenues from telecommunications services	Percentage of incumbent TSPs revenues from television services
2014	70.0	9.3
2013	68.7	8.8
2012	67.7	7.8
2011	66.3	7.2
2010	66.2	6.5
2009	66.4	5.8
2008	66.1	5.3
2007	64.7	4.7

Source: CRTC data collection

This table shows the extent to which cable-based carriers collect revenues from telecommunications services and incumbent TSPs (traditional telephone companies) collect revenues from television services. It illustrates one measure of the state of convergence in the industry between 2007 and 2014. Telecommunications services include local telephone, long distance, Internet, data and private line, and wireless services.

**Table 3.0.4 Percentage of broadcasting and telecommunications revenues generated by companies operating in multiple sectors**

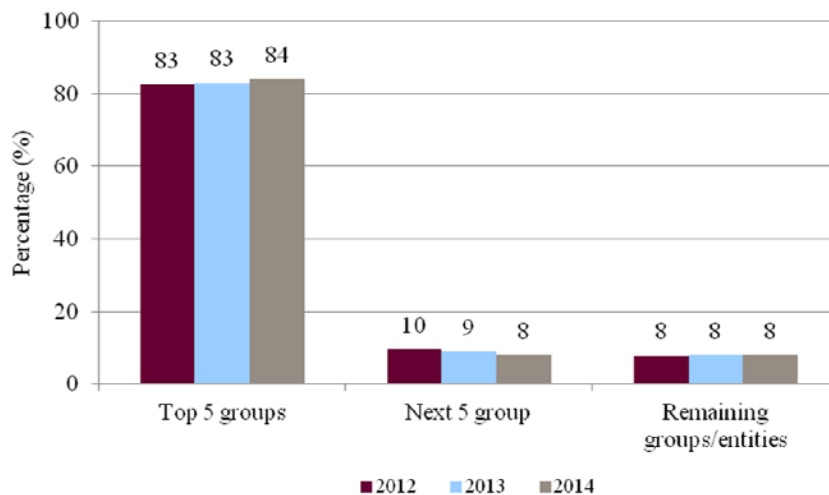
Number of sectors in which companies offer service	Number of reporting groups or entities operating in these sectors				Percentage of broadcasting and telecommunications revenues generated in these sectors			
	2011	2012	2013	2014	2011	2012	2013	2014
11	3	3	3	3	62	61	61	# 61
10	0	0	0	0	0	0	0	0
9	1	1	1	1	5	5	5	5
8	4	5	6	5	23	24	25	26
7	1	1	0	0	1	1	0	0
6	6	3	2	2	0	0	0	0
5	11	14	15	# 12	0	0	1	# 0
4	22	24	31	# 28	3	3	2	2
3	35	39	40	# 43	1	2	2	# 2
2	44	36	41	# 40	2	2	1	1
1	217	233	217	# 211	2	3	3	# 3

Source: CRTC data collection

The data show that three communications service providers offered services in all 11 market sectors (radio, television, BDU, specialty, video-on-demand, pay and pay-per-view in the broadcasting industry, and local and access, long distance, Internet, wireless, data, and private line in the telecommunications industry) generated more than 61% of communications revenues. In contrast, more than 211 providers that offered only one service generated 3% of communications revenues.

c) *Financial performance*

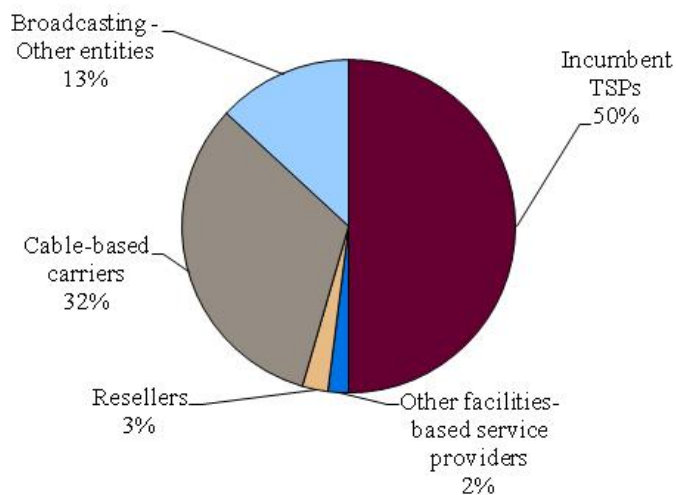
**Figure 3.0.2** Percent of total revenues, by broadcasting and telecommunications ownership groups



Source: CRTC data collection

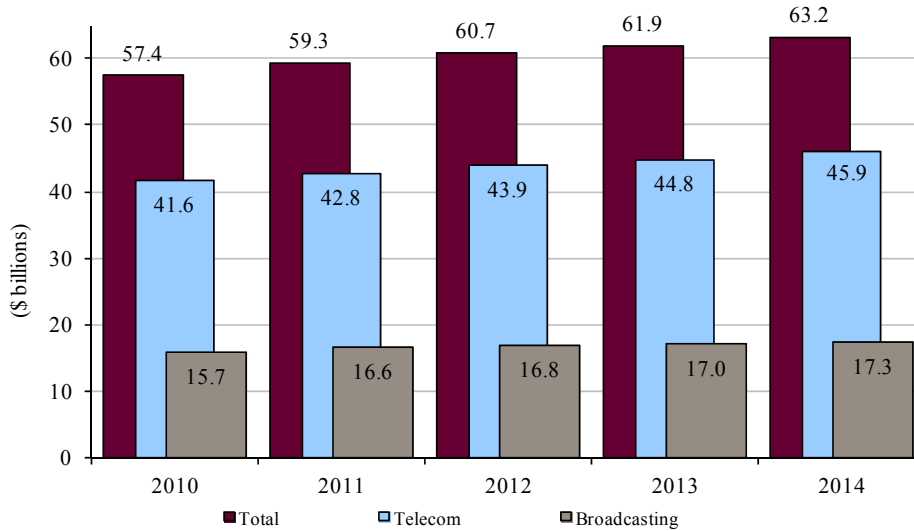
Canada's communications services market is dominated by a small number of large ownership groups. The top five groups, Bell, Quebecor, Rogers, TELUS, and Shaw, account for approximately 84% of total industry revenues. The next five largest groups/entities, Bragg, Cogeco Cable Inc., MTS Allstream, Saskatchewan Telecommunications, and Telesat Canada, gather approximately 8%, and all remaining groups/entities gather 8%. Revenues include those of their affiliates.

**Figure 3.0.3** Communications revenues, by type of provider, 2014



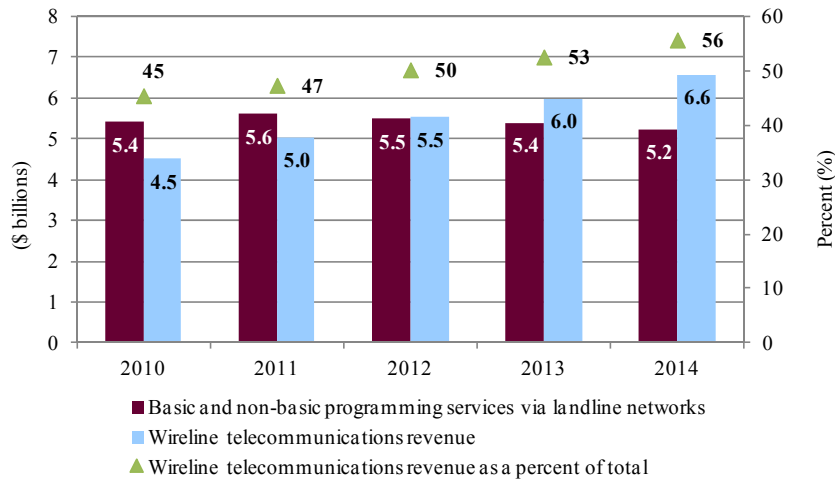
Source: CRTC data collection

**Figure 3.0.4 Broadcasting and telecommunications revenues (excluding non-programming and exempt services)**



Source: CRTC data collection

**Figure 3.0.5 Cable-based service provider revenues, by service type**

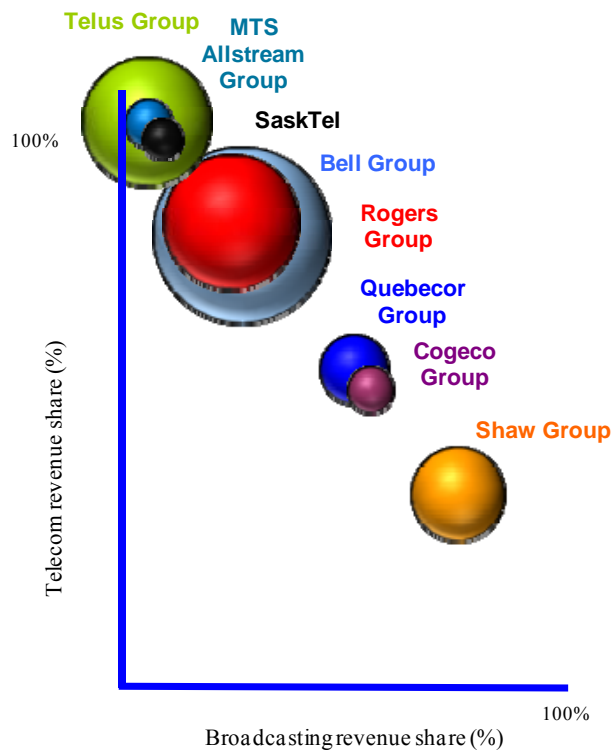


This bar graph compares cable-based service provider revenues from two principal sources: basic and non-basic programming services (i.e. revenues from the distribution of television services), and wireline telecommunication services (i.e. local, long distance, data, private line, and Internet) between 2010 and 2014.

This graph excludes revenues from BDU satellite services and mobile wireless services.

Source: CRTC data collection

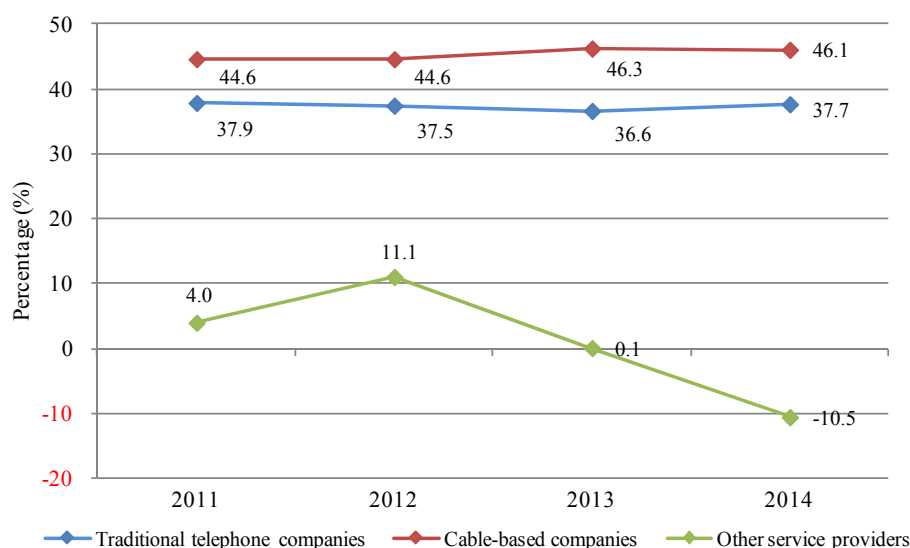
**Figure 3.0.6 Canadian communications revenue composition for a select number of large companies, 2014**



Source: CRTC data collection

Many of Canada's largest communications service companies offer telecommunications services as well as broadcasting services. This graph plots the total revenues of Canada's eight largest communications companies by size (the larger the circle, the greater the company's revenue) and by industry (proximity to an axis indicates a larger share of revenue derived from that industry service).

**Figure 3.0.7 EBITDA margins achieved by cable-based BDUs, traditional telephone companies, and other service providers**



Source: CRTC data collection

This graph shows earnings before interest, taxes, depreciation, and amortization (EBITDA) margins for cable-based BDUs, traditional telephone companies, and other service providers (including resellers) for BDU and telecommunications services for the period 2011 to 2014. Only companies with Canadian communications revenues greater than 80% of their total revenues were included in the calculation of EBITDA.

EBITDA margin is a measure of profitability. Higher EBITDA margins are generally associated with greater profitability.

#### d) Consumer voices

**Table 3.0.5 Number of communications-related contacts received by the CRTC, by type of issue**

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Broadcasting-related enquiries <sup>1</sup>	5,747	6,261	5,829	6,358	4,802	4,938
Broadcasting-related complaints <sup>1</sup>	12,740	10,813	12,419	11,507	11,055	10,115
Telecommunications-related contacts <sup>2</sup>	N/A	N/A	N/A	N/A	25,153	27,077

1. For the 12-month period from 1 April to 31 March.

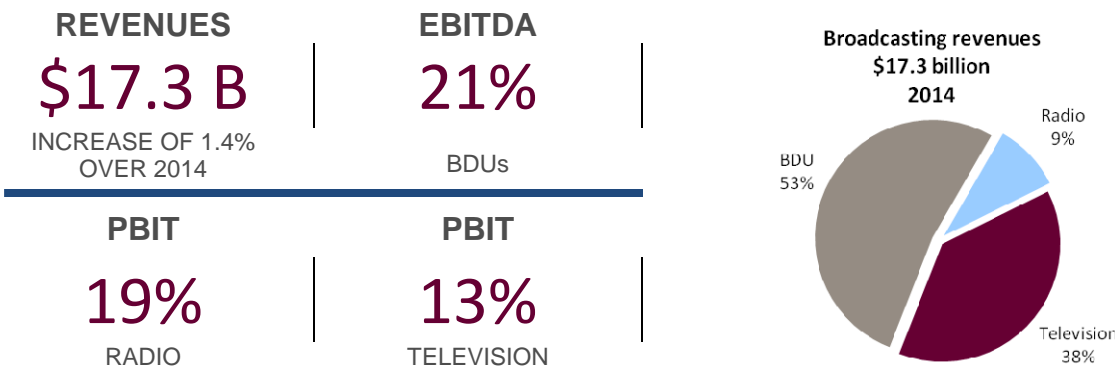
2. For the 12-month period from 1 January to 31 December.

Source: CRTC correspondence tracking system (the Rapids tracking system counts multiple communications from the same client on the same complaint as separate units; therefore, the actual number of complaints received should be slightly lower).



## 4.0 Broadcasting sector overview

### Display 4.0.0 Key indicators for the broadcasting sector



The Canadian broadcasting sector consists of radio and television stations, discretionary services (such as pay, pay per view (PPV), video-on-demand (VOD), and specialty services) and broadcast distribution undertakings (BDU) including cable, satellite and IPTV.

In 2014, Canadian broadcasting sector revenues remained stable at \$17.3 billion. This amount accounts for 27% of all Canadian communications revenues. The proportion of broadcasting revenues in the communications sector as a whole has remained relatively unchanged for the last three years.

The radio and conventional television market sectors have seen revenue drops and have experienced weaker profitability growth this year. Radio broadcasters reported \$1.6 billion in revenues and PBIT margins of 19%, while television broadcasters reported \$6.6 billion in revenues and PBIT margins that are lower than those of radio.

Conventional broadcasters' revenues are directly tied to economic conditions, as they depend primarily on advertising revenues. Advertisers tend to reduce their budgets amid economic uncertainty. However, this is not the case for discretionary services as they rely predominantly on subscriber revenues. In 2014, approximately 91% of private conventional broadcasters' revenues came from advertising compared to 30% for discretionary services.

In 2014, five large vertically-integrated companies (BCE, Cogeco, Quebecor, Rogers and Shaw) generated \$13.7 billion in broadcasting revenues, and accounted for over 87% total broadcasting revenues. The remaining entities reported combined revenues of \$3.6 billion, or 13% of total broadcasting revenues.

This year, companies operating in all five markets of the broadcasting sector (i.e. radio, television, BDU, specialty and VOD, pay and PPV) generated approximately 70% of total Canadian broadcasting revenues. In comparison, companies operating in only one market sector generated 7% of total Canadian broadcasting revenues.

**a) Revenues**

**Table 4.0.1 Broadcasting revenues (\$ millions)**

		2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Radio	AM	307	311	306	295	291	-1.4
	Annual growth (%)	0.4	1.2	-1.6	-3.7	-1.3	
	FM	1,245	1,302	1,314	1,328	1,323	1.5
	Annual growth (%)	3.6	4.6	0.9	1.1	-0.4	
	Total	1,552	1,613	1,620	1,623	1,614	1.0
Television	Annual growth (%)	2.9	3.9	0.4	0.2	-0.5	
	Conventional television						
	CBC	450	500	508	464	602	7.6
	Annual growth (%)	14.8	11.1	1.6	-8.7	29.7	
	Private	2,142	2,144	2,038	1,944	1,804	-4.2
	Annual growth (%)	8.7	0.1	-5.0	-4.6	-7.2	
	Total conventional	2,592	2,644	2,546	2,408	2,406	-1.8
	Annual growth (%)	9.7	2.0	-3.7	-5.4	-0.1	
	Discretionary services	3,475	3,748	3,968	4,091	4,216	5.0
BDU	Annual growth (%)	11.3	7.9	5.9	3.1	3.1	
	Total	6,067	6,392	6,513	6,499	6,622	2.2
	Annual growth (%)	10.6	5.4	1.9	-0.2	1.9	
	Cable and IPTV	5,610	5,927	6,068	6,322 #	6,509	3.8
	Annual growth (%)	9.5	5.7	2.4	4.2	3.0	
	DTH/MDS undertakings	2,385	2,532	2,492	2,472	2,414	0.3
	Annual growth (%)	8.6	6.2	-1.6	-0.8	-2.4	
	Non-reporting BDUs	135 #	112 #	113 #	132 #	132	-0.5
	Annual growth (%)	9.7	-16.9	1.2	16.6	0.0	
BDU	Total	8,130	8,571 #	8,674 #	8,926 #	9,054	2.7
	Annual growth (%)	9.3	5.4	1.2	2.9	1.4	
<b>Broadcasting Total</b>		<b>15,749</b>	<b>16,576</b>	<b>16,808</b>	<b>17,048</b>	<b>17,290</b>	<b>2.4</b>
Annual growth (%)		9.1	5.3	1.4	1.4	1.4	

Source: CRTC data collection

In this table, broadcasting revenues are presented for each type of service and their component parts, for the years 2010 to 2014. It also shows a compound annual growth rate (CAGR) for each component. Although some components, such as AM radio and private conventional television, lost revenues over this period, others, such as discretionary services, cable and Internet Protocol television (IPTV) showed gains.

Canadian Broadcasting Corporation (CBC) revenues include advertising and other commercial revenues, but exclude Parliamentary appropriations.



**b) Industry characteristics**

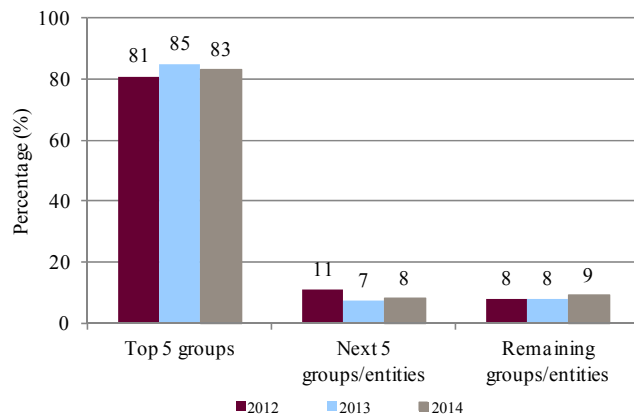
**Table 4.0.2 Percentage of broadcasting revenues generated by companies operating in multiple sectors**

Number of sectors in which companies offer service	Number of reporting group or entities operating in these sectors				Percentage of broadcasting revenues generated in these sectors			
	2011	2012	2013	2014	2011	2012	2013	2014
5	3	3	3	3	68	66	71	70
4	2	2	1	1	15	15	9	9
3	3	2	2	3	5	5	5	5
2	15	16	19	17	7	8	9	9
1	170	171	164	166	6	7	6	7

Source: CRTC data collection

The broadcasting industry comprises five sectors: radio, television, BDU, specialty/VOD, and pay/PPV television. While most companies operate in only one sector, several operate in all five. This table shows the number of companies that operate in different numbers of sectors, and the percentage of total revenues generated by those companies according to the number of sectors in which they operate. Taken together, the data illustrate that the small number of companies operating in multiple sectors earned about two-thirds of total industry revenues. Affiliated companies are included with their parent company.

**Figure 4.0.1 Percent of total broadcasting revenues, by ownership groups**

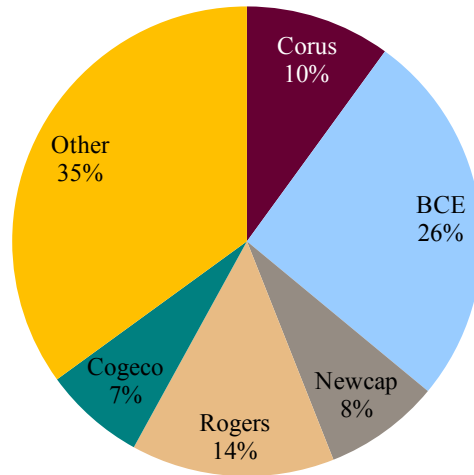


This figure shows the combined percentage of broadcasting revenues of Canada's five largest groups—BCE, Shaw (including Corus), Rogers, Quebecor, Cogeco,—as well as the next five largest—TELUS, CBC, Saskatchewan Telecommunications, Group Bragg, Newcap Group, and the remaining 180 groups/entities in the industry.

Groups' revenues include those of their affiliates.

Source: CRTC data collection

**Figure 4.0.2      Percentage of total commercial radio revenues by broadcaster, 2014**

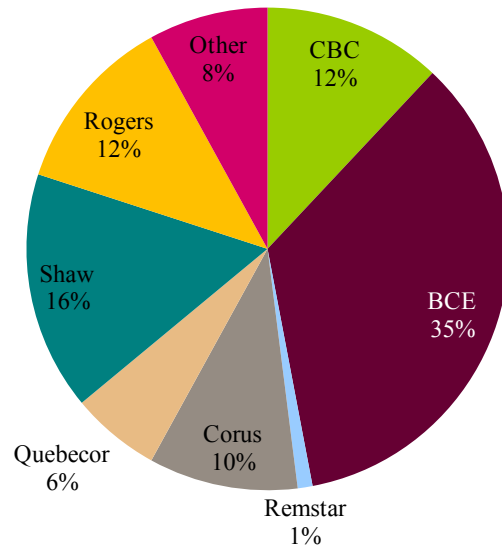


Source: CRTC data collection

Canada's five largest commercial radio broadcasters accounted for more than 65% of total industry revenues in 2014.

The "percentage of total revenue" calculation is based on total revenues reported for each service where the broadcaster had greater than 50% direct and indirect voting interest as of 31 August 2014.

**Figure 4.0.3 Percentage of commercial television revenues by broadcaster, 2014**



Source: CRTC data collection

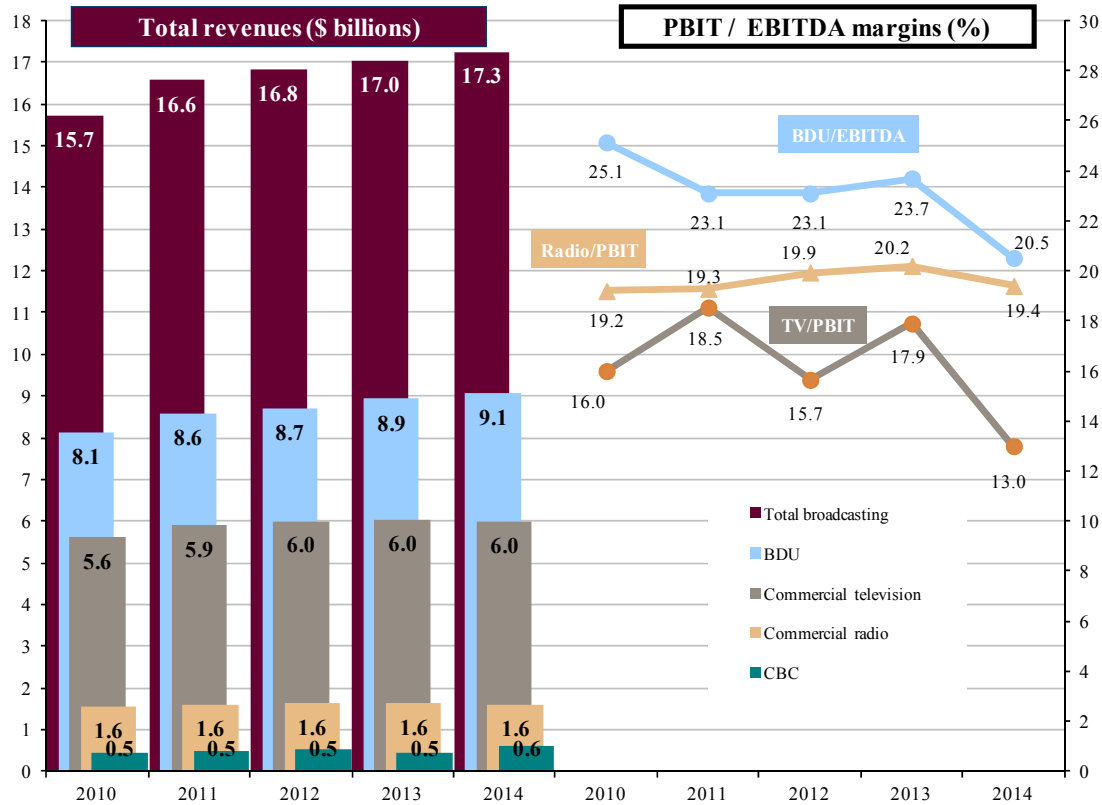
The five largest commercial television broadcasters accounted for 91% of total industry revenues in 2014. In the determination of the top 5 companies, Shaw and Corus were counted as one entity.

The calculation of the percentage of total revenue is based on the total revenues reported for each service where the broadcaster had greater than 50% direct and indirect voting interest as of 31 August 2014.

CBC revenues include advertising, subscriber, and other commercial revenues, and exclude Parliamentary appropriations.

c) *Financial performance*

**Figure 4.0.4 Total broadcasting revenues by type of service and PBIT/EBITDA margins**

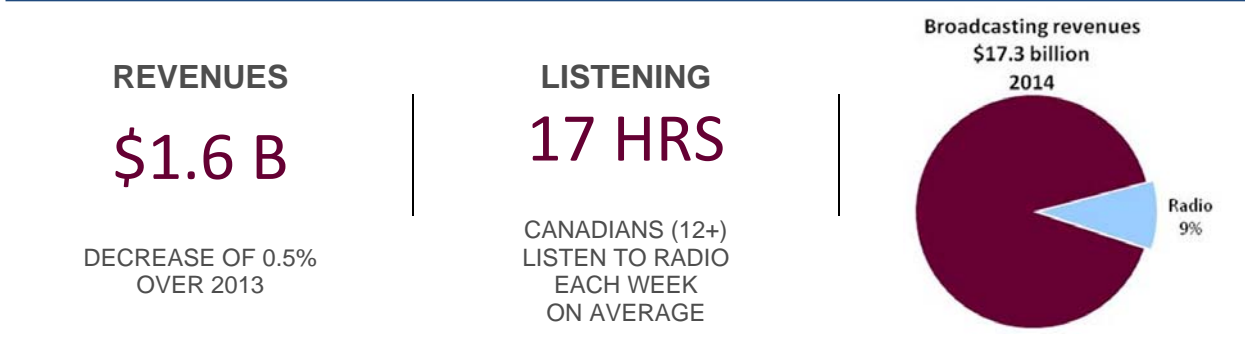


Source: CRTC data collection

The bar graph shows total broadcasting industry revenues and total revenues generated in each of the industry's subcategories (BDU, commercial television, commercial radio, and the CBC). The line graph shows PBIT margins for radio and television services and EBITDA margins for BDUs, as measures of profitability.

## 4.1 Radio sector

**Display 4.1.0 Key indicators for the radio sector**



With over 1,100 radio and audio services broadcasting on our airwaves, Canadians have access to a wide variety of musical choices and local, regional and national news platforms. Over 60% of all radio stations in Canada are located in Ontario, Quebec or British Columbia.

The Canadian Broadcasting Corporation (CBC), Canada's public broadcaster, operates over 80 radio stations across Canada in English and in French. Revenues for CBC's radio unit have steadily declined from \$358 million in 2010 to \$288 million in 2014.

There are almost 720 private commercial radio stations in Canada. They operate in hundreds of different markets across the country and account for over three-quarters of the total number of radio stations in Canada. And the number continues to grow. Over the last five years, commercial radio stations reported a revenue increase of 4% to \$1,614 million and profitability margins of 19%. Over the last five years, revenues reported by AM radio stations have dropped to \$291 million in 2014. This can be attributed, in part, to the declining number of AM radio stations in operation. On the other hand, FM stations have reported slight revenue increases over the same period.

Country and contemporary music formats together garnered the largest national listener share. The popularity of these genres on Canadian radio has been steadily increasing over the last few years.

Religious, community, campus and Aboriginal radio stations play an important role in the communities they serve and in the broadcasting sector as a whole. In 2014, these radio stations numbered 175 and reported \$53 million in revenues.

Canadians are increasingly using a range of audio content services in addition to over-the-air radio. According to the Media Technology Monitor (MTM), 22% of Canadians (18+) stream music online and 52% of Canadians (18+) stream music videos on YouTube. Satellite radio has also made strides since its introduction into the Canadian marketplace in 2005. This year, MTM estimates that 16% of Canadians (18+) subscribe to satellite radio compared to 9% in 2009.

a) *Revenues***Table 4.1.1 Revenues of private commercial radio stations and number of stations reporting financial results, by language of broadcast and frequency band**

	2010	2011	2012	2013	2014	Growth (%) 2013- 2014	CAGR (%) 2010- 2014
<b>Revenues (\$ millions)</b>							
<b>AM radio stations</b>							
English-language	272.1	274.9	274.9	264.6	262.0	-1.0	-1.0
French-language	11.2	11.7	6.1	4.7	4.3	-12.0	-21.4
Third-language	24.0	24.4	25.2	25.3	24.6	-1.9	0.7
Total AM	307.3	311.1	306.2	294.6	290.9	-1.3	-1.4
<b>FM radio stations</b>							
English-language	987.3	1,035.3	1,042.1	1,053.8	1,042.7	-1.1	1.4
French-language	239.9	246.7	251.8	253.2	259.2	2.4	2.0
Third-language	17.9	19.8	20.2	21.1	21.3	1.3	4.6
Total FM	1,244.7	1,301.6	1,314.1	1,328.0	1,323.3	-0.4	1.5
<b>Total revenues</b>	<b>1,552.4</b>	<b>1,613.8</b>	<b>1,620.3</b>	<b>1,622.7</b>	<b>1,614.2</b>	<b>-0.5</b>	<b>1.0</b>
<b>Number of stations reporting financial results</b>							
<b>AM radio stations</b>							
English-language	120	115	111	109	109		
French-language	9	7	6	8	6		
Third-language	12	12	12	13	12		
Total AM	141	134	129	129	127		
<b>FM radio stations</b>							
English-language	419	435	444	454	466		
French-language	87	89	90	89	90		
Third-language	10	11	12	13	12		
Total FM	516	535	546	556	568		
<b>Total number of reporting stations</b>	<b>657</b>	<b>669</b>	<b>675</b>	<b>685</b>	<b>695</b>		

Source: CRTC data collection

This table shows revenue trends for private English-, French-, and Third-language commercial AM and FM radio stations, for the period 2010 and 2014, and includes the annual growth between 2013 and 2014, and over the entire study period.

Network results are included; however, results for pay and specialty audio programming services, as well as for multi-channel subscription radio services, are excluded.

**Table 4.1.2 Revenues of commercial radio stations, by radio market size**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Revenues (\$ millions)</b>						
Small markets	553	566	565	579	583	1.3
<i>percent of total %</i>	35.6	35.1	34.9	35.7	36.1	
Medium markets	124	126	124	122	117	-1.4
<i>percent of total %</i>	8.0	7.8	7.7	7.5	7.2	
Large markets	353	371	373	373	372	1.3
<i>percent of total %</i>	22.7	23.0	23.0	23.0	23.0	
Major markets	522	550	556	549	541	0.9
<i>percent of total %</i>	33.6	34.1	34.3	33.8	33.5	
<b>Total revenues</b>	<b>1,552</b>	<b>1,614</b>	<b>1,620</b>	<b>1,623</b>	<b>1,614</b>	<b>0.9</b>

Source: CRTC data collection

Radio market size is defined as follows: small radio market: population under 250,000; medium radio market: population from 250,000 to 500,000; large radio market: population over 500,000; and major radio markets: Montréal, Toronto and Vancouver. The major and small radio markets each generate almost the same amount of revenues, and together garner approximately 70% of all revenues reported by commercial radio stations.

**Table 4.1.3 Revenues of ethnic commercial radio stations, by province**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Revenues (\$ millions)</b>						
British-Columbia	13.6	14.2	15.2	15.3	14.7	2.0
Alberta/Manitoba	3.0	3.4	3.2	3.7	5.0	13.6
Ontario	22.2	23.3	23.7	23.7	23.1	1.0
Québec	3.1	3.3	3.5	3.5	3.2	0.8
<b>Total revenues</b>	<b>41.9</b>	<b>44.2</b>	<b>45.4</b>	<b>46.2</b>	<b>46.0</b>	<b>2.4</b>

Source: CRTC data collection

This table shows radio revenues reported by ethnic radio stations by province from 2010 to 2014. There were no ethnic commercial stations to report from Saskatchewan, the Maritimes and the North.

**Table 4.1.4 Revenues of CBC radio stations, by type of revenue**

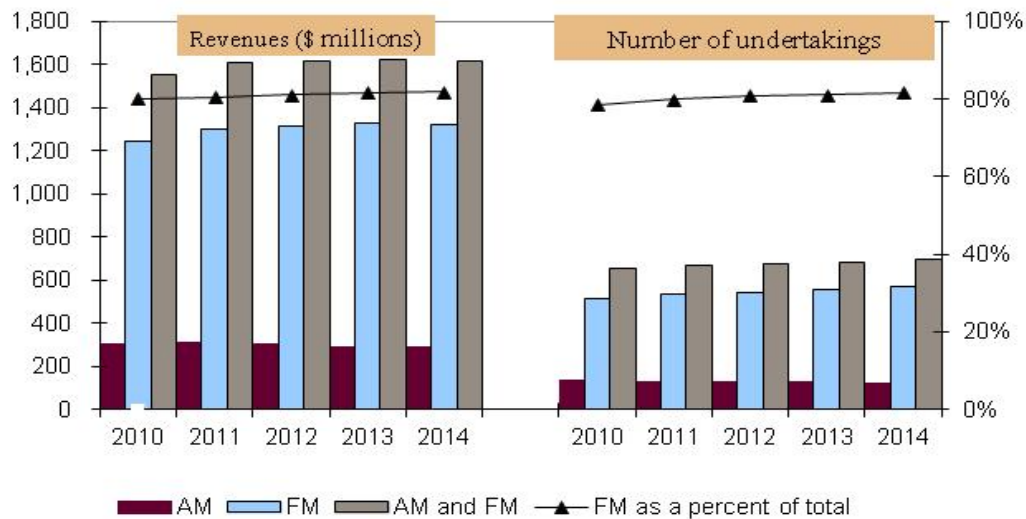
						CAGR (%)
Revenues (\$ thousands)	2010	2011	2012	2013	2014	2011-2014
Advertising revenues	0	0	0	0	1,074	
Annual growth (%)	-	-	-	-	-	
Parliamentary appropriations	346,548	327,267	316,508	295,523	277,310	-5.4
Annual growth (%)	-	-5.6	-3.3	-6.6	-6.2	
Sales/syndication of programs	893	859	952	1,087	1,328	10.4
Annual growth (%)	-	-3.9	10.9	14.2	22.1	
Other	10,856	8,803	8,432	8,145	7,924	-61.1
Annual growth (%)	-	-18.9	-4.2	-3.4	-2.7	
<b>Total revenues</b>	<b>358,298</b>	<b>336,928</b>	<b>325,892</b>	<b>304,756</b>	<b>287,636</b>	<b>-5.3</b>
Annual growth (%)	-	-6.0	-3.3	-6.5	-5.6	
<b>Number of stations</b>	<b>82</b>	<b>78</b>	<b>78</b>	<b>81</b>	<b>82</b>	

Source: CRTC data collection



The data in the following figures present a detailed analysis of the revenues of private commercial English- and French-language AM and FM radio stations. The data on average annual revenues are compared to profit before interest and taxes (PBIT) to indicate the financial health of groups of radio stations. The data for AM and FM stations, as well as the language of broadcast, are segmented to show the variations for each of these criteria. The data in figures 4.1.1 though 4.1.3 include network results, but exclude pay and specialty audio programming services, as well as multi-channel subscription audio services.

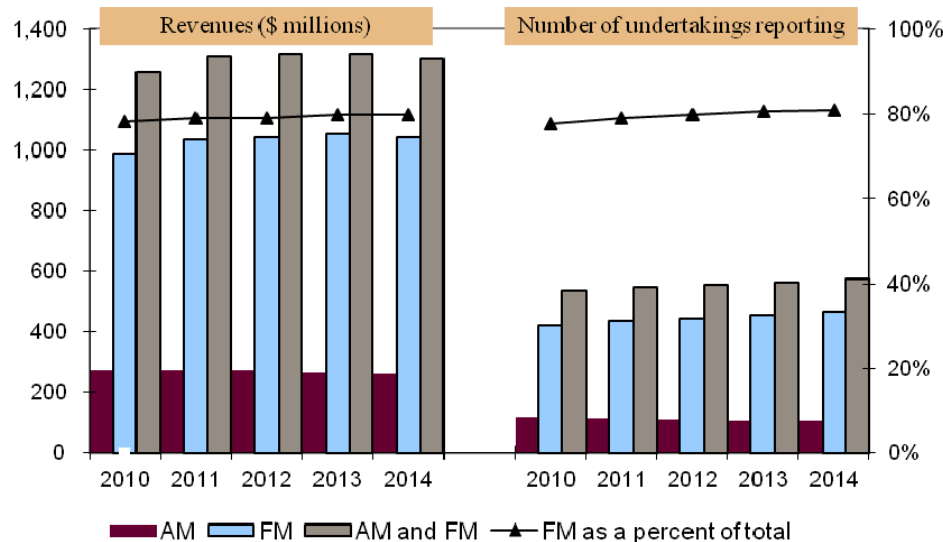
**Figure 4.1.1 Revenues – Private commercial radio stations**



Source: CRTC data collection

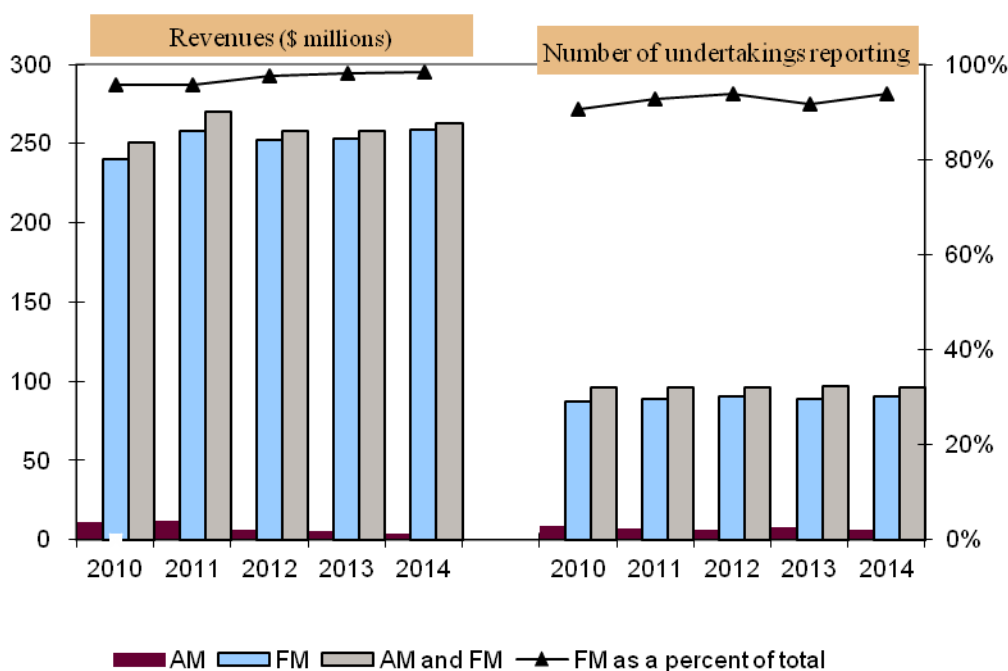
Although AM radio revenues have decreased, revenues derived from FM stations have remained stable.

**Figure 4.1.2 Revenues – English-language private commercial radio stations**



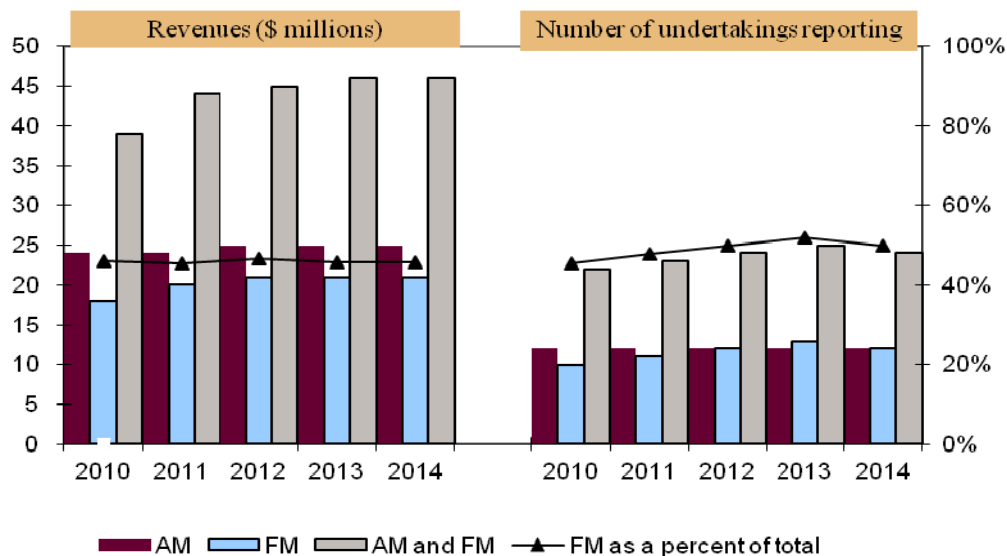
Source: CRTC data collection

**Figure 4.1.3 Revenues – French-language private commercial radio stations**



Source: CRTC data collection

**Figure 4.1.4 Revenues – Ethnic private commercial radio stations**



Source: CRTC data collection

Revenues from private commercial radio stations operating in the context of the Ethnic Broadcasting Policy trended upwards from 2010 and 2013, but slightly declining in 2014. The fluctuations in revenue figures coincide with the number of stations reporting every year.

**Table 4.1.5 Revenues for Type B Native, community, and campus radio stations**

	2010	2011	2012	2013	2014
<b>Native Type B radio stations</b>					
Number of stations reporting	31	32	33	34	24
Revenues (\$ thousands)					
Advertising	5,825	5,593	5,397	4,429	3,996
Other	11,525	12,314	10,772	10,859	7,766
Total revenues	17,349	17,907	16,168	15,289	11,762
Other as a percent of total revenues (%)	66.4	68.8	66.6	71.0	66.0
PBIT margin (%)	9.7	0.4	-4.7	-16.1	6.3
<b>Community radio stations</b>					
Number of stations reporting	97	106	108	112	105
Revenues (\$ thousands)					
Advertising	13,871	15,272	15,518	15,257	14,899
Other	13,443	14,883	15,017	17,156	16,276
Total revenues	27,314	30,155	30,535	32,412	31,174
Other as a percent of total revenues (%)	49.2	49.4	49.2	52.9	52.2
PBIT margin (%)	8.1	10.6	3.9	7.6	6.4
<b>Campus radio stations</b>					
Number of stations reporting	44	48	49	46	46
Revenues (\$ thousands)					
Advertising	1,196	1,082	1,007	874	1,311
Other	6,907	7,401	7,809	8,290	8,391
Total revenues	8,103	8,483	8,816	9,165	9,702
Other as a percent of total revenues (%)	85.2	87.2	88.6	90.5	86.5
PBIT margin (%)	10.6	20.7	10.9	8.6	7.4

Source: CRTC data collection

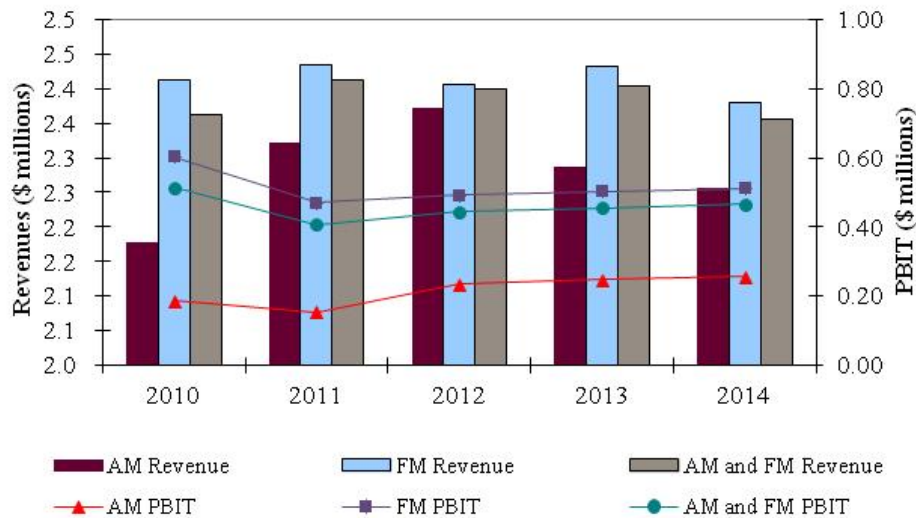
This table shows the number of stations reporting revenues and PBIT margins (PBIT divided by total revenues) for radio stations operating in the context of the Native Broadcasting Policy, as well as community and campus stations from 2010 to 2014.

For all three types of radio stations, “other revenues” include fundraising and other sources. For Native Type B radio stations only, “other revenues” also include government and band council grants and contributions.

**b) Financial performance**

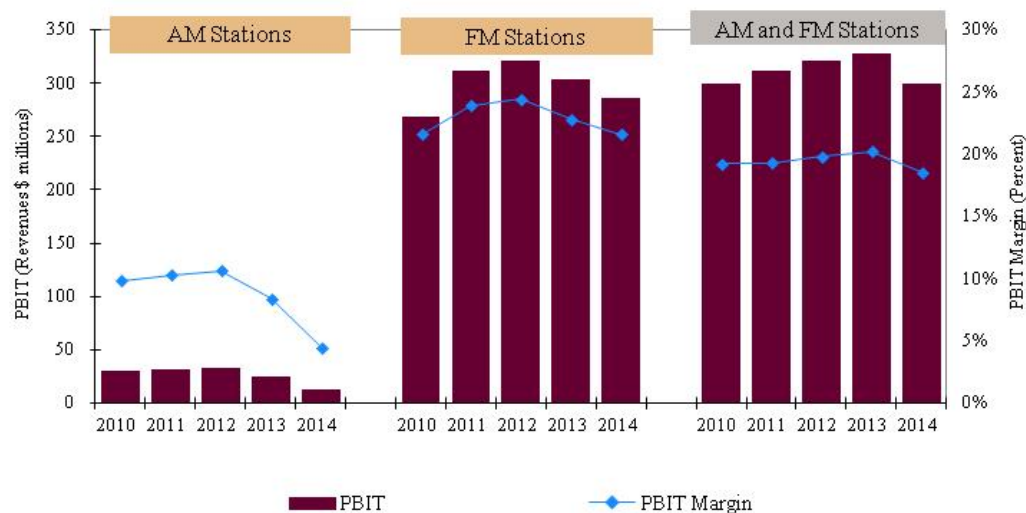
**Note:** The data presented in figures 4.1.5 through 4.1.12 include network results, but exclude results for pay and specialty audio programming services, as well as for multi-channel subscription audio services.

**Figure 4.1.5 Average per-station annual revenues and PBIT – Private commercial radio stations**



Source: CRTC data collection

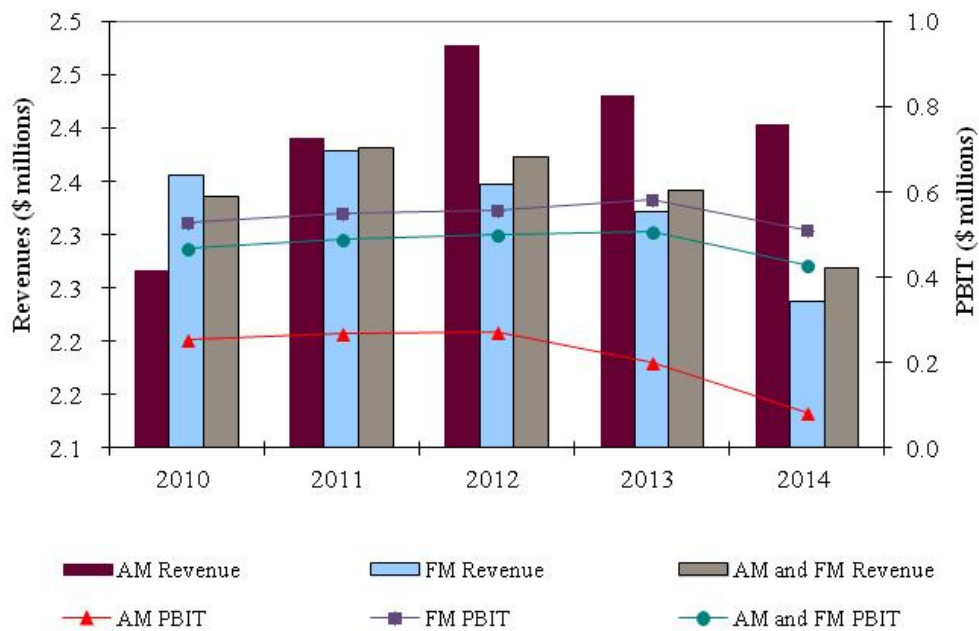
**Figure 4.1.6 PBIT and PBIT margins – Private commercial radio stations**



Source: CRTC data collection

There was an overall increase in the PBIT and PBIT margins for all radio stations from 2010 to 2013, but a slight decrease in 2014. Profitability margins for AM radio stations continue to decline.

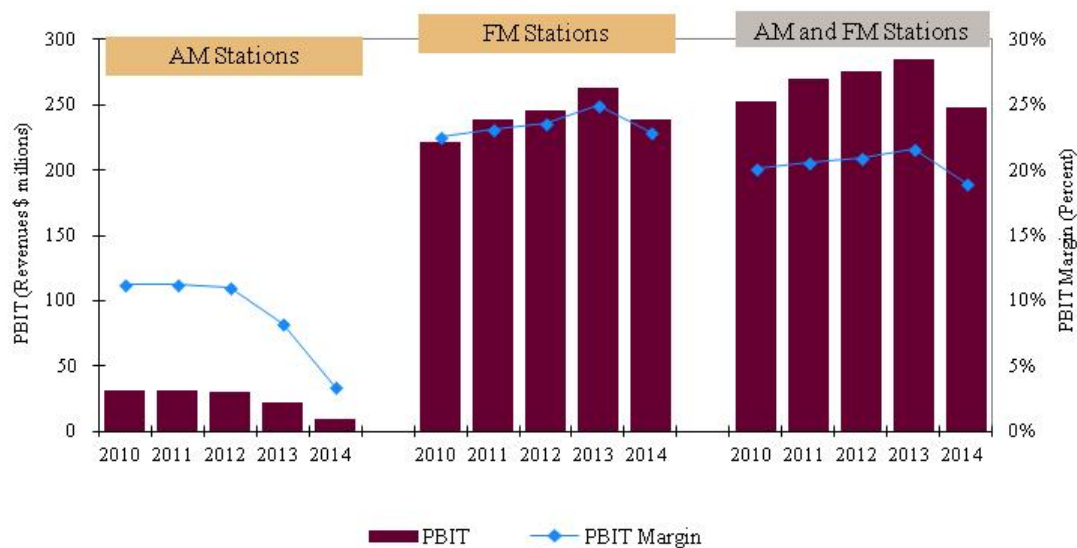
**Figure 4.1.7 Average annual revenues and PBIT per station – English-language private commercial radio stations**



Source: CRTC data collection

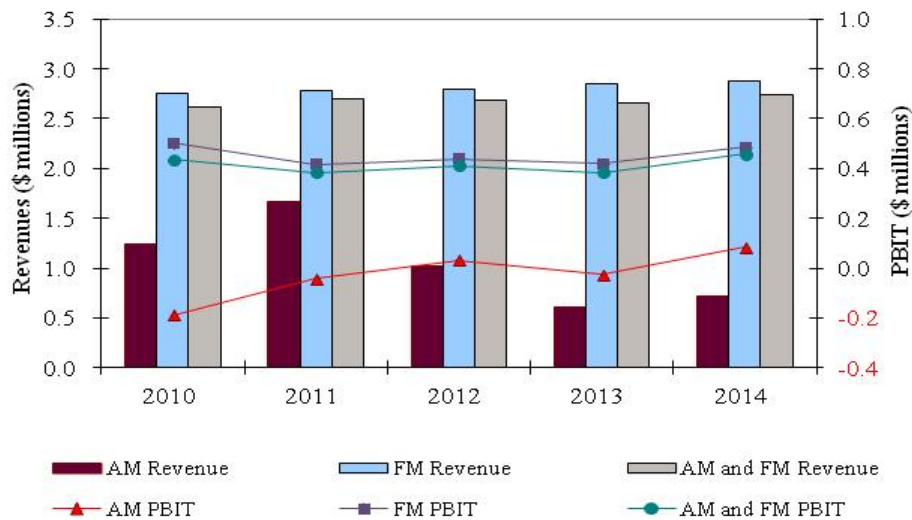
Average annual per-station revenues for both AM and FM English-language private commercial radio stations have decreased in 2014. PBIT margins for AM station continue to decline.

**Figure 4.1.8 PBIT and PBIT margins – English-language private commercial radio stations**



Source: CRTC data collection

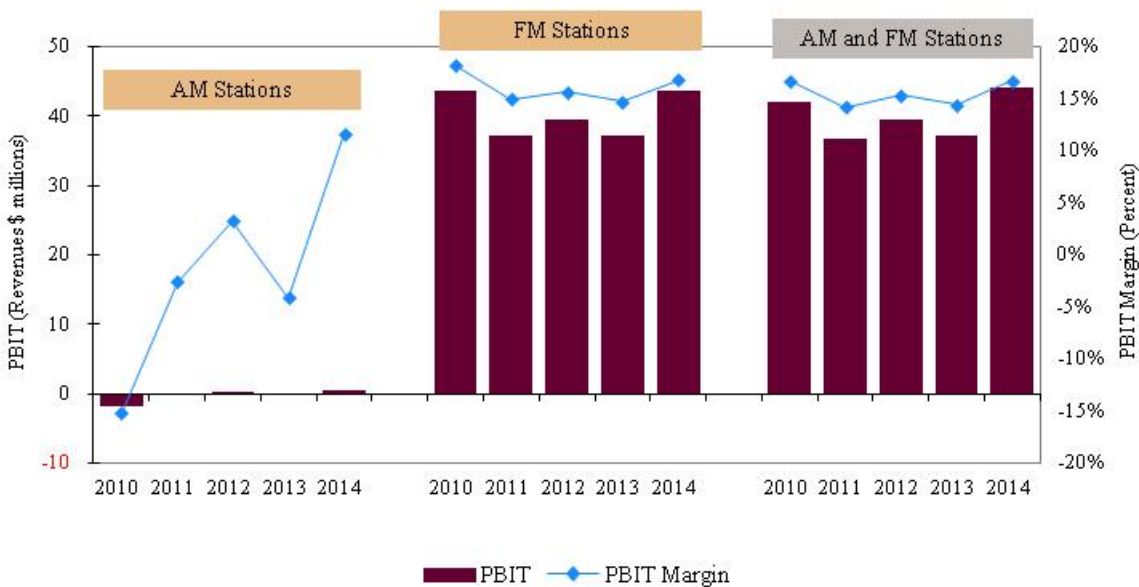
**Figure 4.1.9 Average annual revenues and PBIT per station – French-language private commercial radio stations**



Source: CRTC data collection

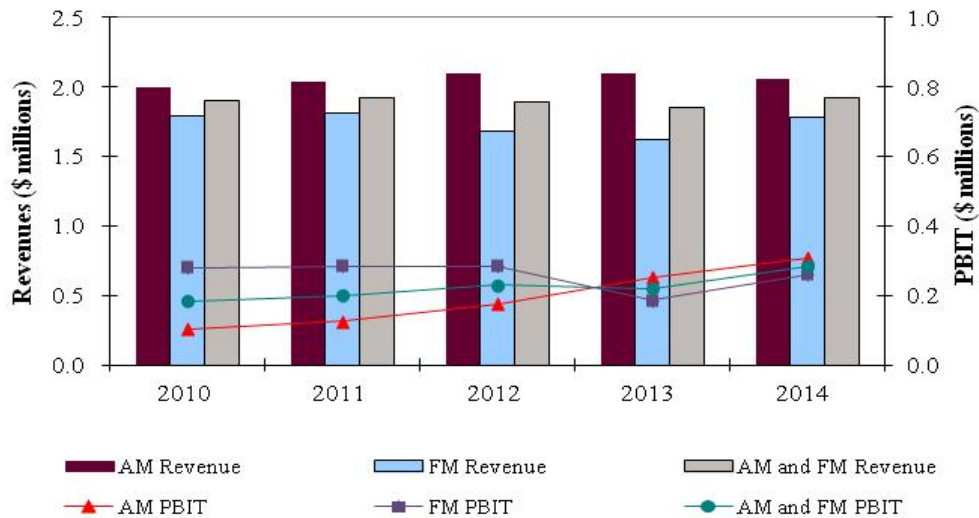
Average annual per-station revenues for French-language private commercial radio stations remained constant from 2010 to 2014. This was largely due to the strength of revenues from FM stations. Revenues from French-language AM radio stations have fluctuated considerably.

**Figure 4.1.10 PBIT and PBIT margins – French-language private commercial radio stations**



Source: CRTC data collection

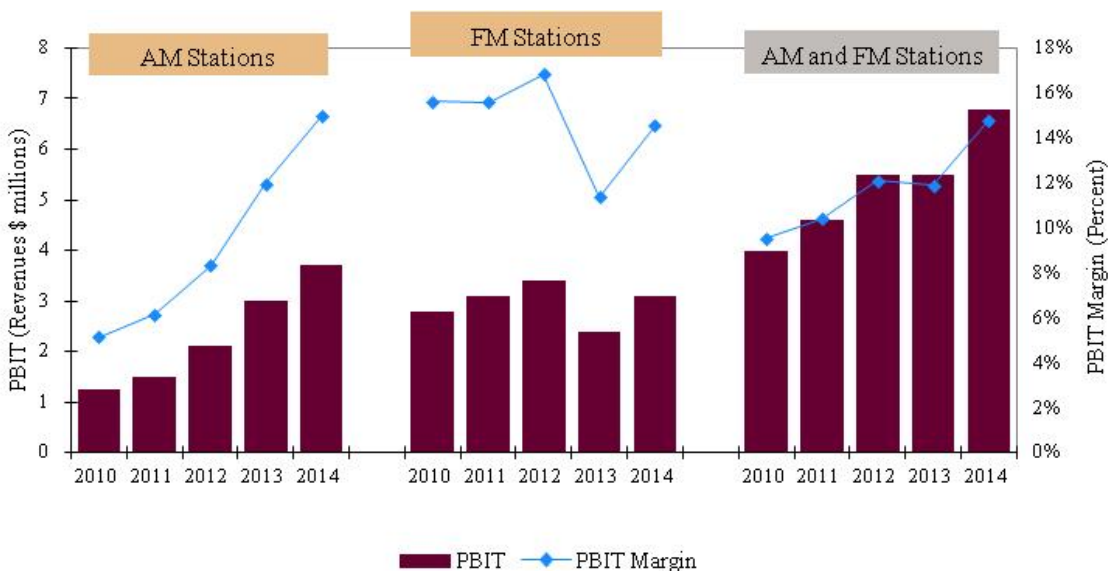
**Figure 4.1.11 Average per-station annual revenues and PBIT – Ethnic private commercial radio stations**



Source: CRTC data collection

Average annual revenues of private ethnic commercial radio stations fluctuated around the \$2-million mark in over the last five years. From 2010 to 2014, AM radio stations outperformed FM radio stations in terms of revenues.

**Figure 4.1.12 PBIT and PBIT margin – Ethnic private commercial radio stations**



Source: CRTC data collection

PBITs and PBIT margins for private ethnic commercial AM radio stations increased every year.

c) *Availability of radio and audio services***Table 4.1.6** Number and type of radio and audio services authorized to broadcast in Canada, by language of broadcast

	English-language		French-language		Third-language		All languages	
	2013	2014	2013	2014	2013	2014	2013	2014
<b>Over-the-air radio services</b>								
<b>Canadian Broadcasting Corporation</b>								
CBC Radio One / ICI Radio-Canada Première	38	39	21	21	0	0	59	60
CBC Radio 2 / ICI Musique	14	14	14	14	0	0	28	28
CBC Radio network licences	2	2	2	2	0	0	4	4
<b>Private commercial</b>								
AM stations	110	107	9	9	13	12	132	128
FM stations	470	482	92	92	17	16	579	590
AM and FM network licences	0	0	1	1	0	0	1	1
<b>Religious (music and spoken word)</b>	49	39	25	5	1	1	75	45
<b>Community</b>								
Community	53	51	65	65	3	1	121	117
Developmental	4	6	1	1	0	0	5	7
<b>Campus</b>								
Community-based	36	42	6	6	0	0	42	48
Instructional	8	8	0	0	0	0	8	8
<b>Aboriginal stations</b>	45	41	5	5	4	3	54	49
<b>Other (tourist/traffic, etc.)</b>	50	9	3	1	0	0	53	10
<b>Total number of over-the-air Canadian radio services</b>	879	840	244	222	38	33	1,161	1,095
<b>Multi-channel subscription radio services and audio services delivered by BDUs</b>								
Satellite subscription radio service	2	2	0	0	0	0	2	2
Specialty audio (commercial / non-profit, regional/national)	4	4	0	0	5	5	9	9
Pay audio	0	0	0	0	2	1	2	1
<b>Total number of Canadian radio and audio services</b>	885	846	244	222	45	39	1,174	1,107

Source: CRTC internal database

This table shows the number of radio services approved by the Commission. Not all are necessarily in operation. “Over-the-air radio services” exclude radiocommunication distribution undertakings, rebroadcasters, and radio services exempt from licensing requirements. These figures are as of 31 December 2014.

Recently issued exemption orders for low-power radio stations that provide tourist information or programming from houses of worship have had an impact on this year’s data and have reduced total amounts. For more information relating to these exemption orders, see, respectively, *Exemption order for low-power radio stations that provide tourist information*, Broadcasting Order CRTC 2013-620, 21 November 2013, and *Exemption order for low-power radio stations that provide programming from houses of worship*, Broadcasting Order CRTC 2013-621, 21 November 2013.

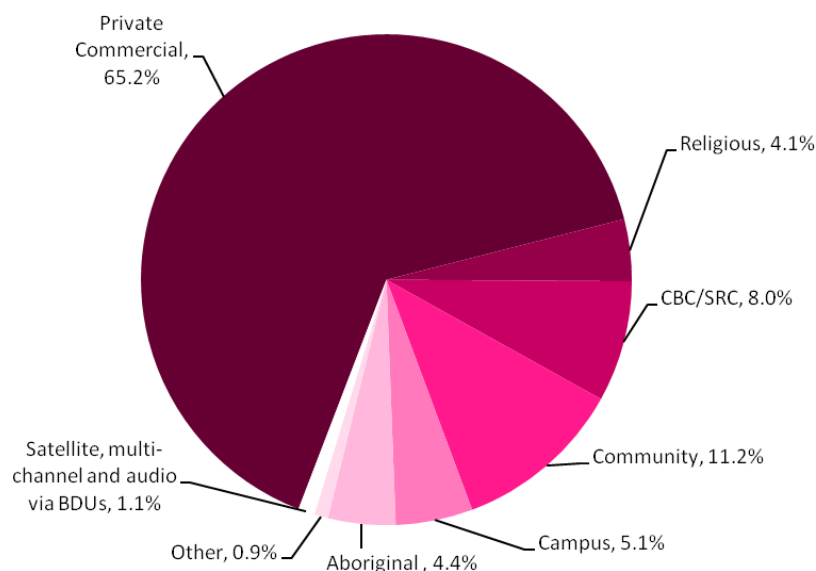


**Table 4.1.7** Number of public/community-based and private radio services authorized to broadcast over-the-air, by province and language of broadcast, 2014

Province/territory	English-language		French-language		Third-language		Total	
	Public/ community	Private	Public/ community	Private	Public/ community	Private	Public/ community	Private
British Columbia	35	111	3	0	0	6	38	117
Alberta	8	115	4	0	0	3	12	118
Saskatchewan	8	51	2	0	0	1	10	52
Manitoba	7	39	3	0	0	1	10	40
Ontario	51	237	14	5	1	13	66	255
Quebec	10	17	58	102	0	7	68	126
New Brunswick	7	32	13	4	0	0	20	36
Nova Scotia	13	36	6	0	0	0	19	36
Prince Edward Island	1	6	1	0	0	0	2	6
Newfoundland and Labrador	12	18	1	0	0	0	13	18
The North	8	7	2	0	0	0	10	7
Canada	160	669	107	111	1	31	268	811

Source: CRTC internal database

Non-commercial, tourist information and emergency radio services, as well as rebroadcasters are excluded. Third-language includes native tongue. This table shows the number of radio services approved by the Commission. All are not necessarily in operation.

**Figure 4.1.13** Types of radio and audio services authorized to broadcast in Canada, as a percentage of all such services, 2014

Source: CRTC data collection

In 2014, private commercial radio stations accounted for over three-quarters of the total number of stations licensed for broadcast in Canada. Other services, such as community radio stations are less represented.

**Table 4.1.8 Number of new over-the-air radio stations licensed**

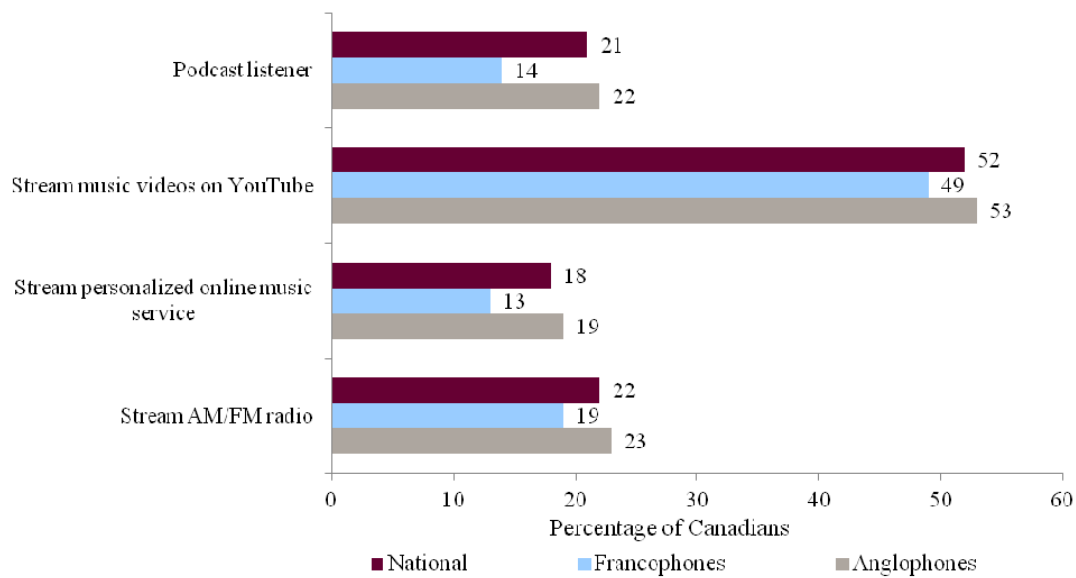
		2010	2011	2012	2013	2014	Total
<i>Number of new over-the-air radio stations approved</i>		16	30	28	25	29	128
<i>Number of stations approved by</i>							
<i>Language</i>	English-language	16	27	26	20	24	113
	French-language	0	2	1	5	2	10
	Third-language	0	1	1	0	3	5
<i>Licence category</i>	Commercial	11	11	18	12	20	72
	Community	2	9	5	7	6	29
	Campus	-	-	-	0	1	1
	Native	1	7	3	0	2	13
	Other	2	3	2	6	0	13
<i>Type</i>	Stand-alone digital	-	-	-	0	0	0
	Digital radio	-	-	-	0	0	0
	AM frequency	-	2	-	0	2	4
	FM frequency	16	28	28	25	27	124
	<i>AM to FM conversions (included in FM)</i>	4	1	2	5	0	12
<i>Process</i>	Competitive	1	1	7	0	5	14
	Non-competitive	15	29	21	25	24	114

Source: CRTC decisions issued from 1 January 2010 to 31 December 2014

The issuance of licences for new radio stations can be an indicator of the health of the radio industry. This table shows the number of stations licensed by language, licence category, type of service and process used in granting the licence.

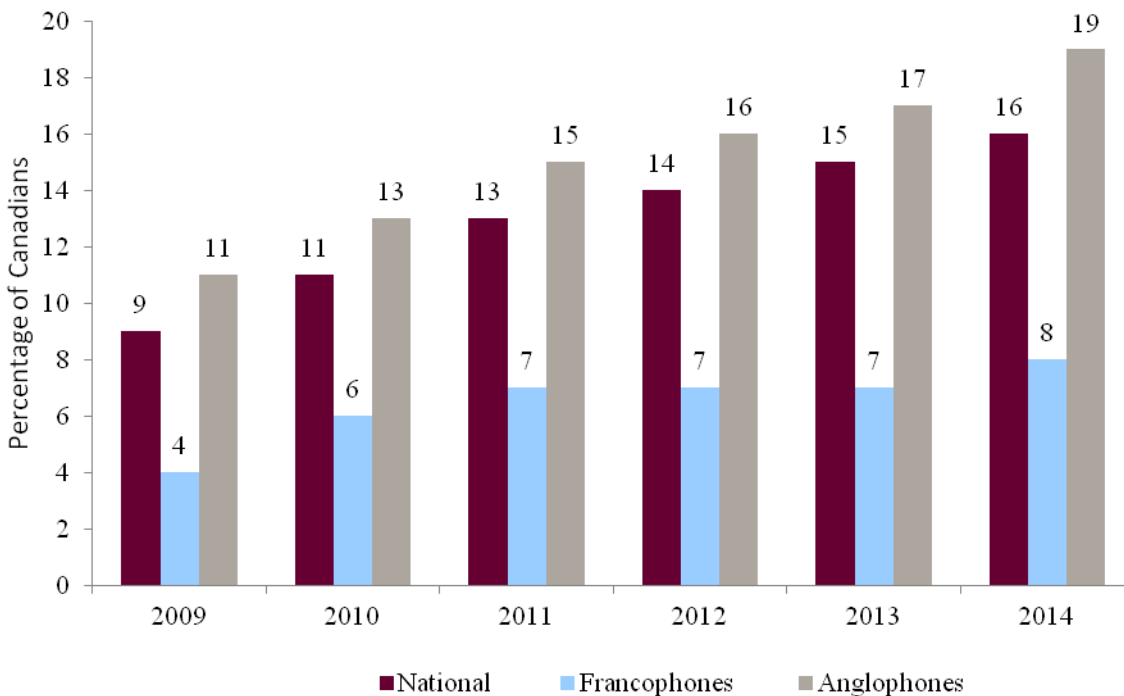
The following are excluded: radiocommunication distribution undertakings, rebroadcasters, pay audio services, specialty audio services, and multi-channel subscription services. The “Other” licence category includes not-for-profit stations, such as those operated in English and in French by the CBC, and Environment Canada.

**Figure 4.1.14 Percentage of Canadians accessing online streamed audio services in the past month, by language group**



Source: MTM, 2014 (respondents: Canadians aged 18+)

**Figure 4.1.15 Satellite radio subscriptions, by language group**



Source: MTM, 2009-2014 (respondents: Canadians aged 18+)

**d) Audience measurement**

**Why measure audiences?**

Audience measurement data is important not only to industry stakeholders, who use the data to help sell air time to advertisers, but also to the CRTC, which uses the data to assess the effectiveness of its policies by understanding the reach of programming across the country and across various demographics.

In this subsection, please note that:

- Audience measurement data is compiled by Numeris (formerly BBM Canada) through the use of portable people meter (electronic data) and diary surveys (written logs). National figures are based on both datasets.
- PPM data includes only PPM meter service stations reported by Numeris on an individual basis in designated PPM markets. All remaining stations, including diary spill stations, are included in the diary data.
- Radio seasons used by Numeris were:
  - 2014 PPM weeks 1-13 (1 September to 30 November, inclusive), all persons 12+, Monday to Sunday, 2 a.m. to 2 a.m. (Total Canada), and Fall 2014 Radio Diary Survey Data (1 September to 26 October, inclusive), all persons 12+, Monday to Sunday, 5 a.m. to 1 a.m. (Total Diary Canada);
  - 2013 PPM weeks 1-13 (26 August to 24 November, inclusive), all persons 12+, Monday to Sunday, 2 a.m. to 2 a.m. (Total Canada), and Fall 2013 Radio Diary Survey Data (2 September to 27 October, inclusive), all persons 12+, Monday to Sunday, 5 a.m. to 1 a.m. (Total Diary Canada);
  - 2012 PPM weeks 1-13 (27 August to 25 November, inclusive), all persons 12+, Monday to Sunday, 2 a.m. to 2 a.m. (Total Canada), and Fall 2012 Radio Diary Survey Data (3 September to 28 October, inclusive), all persons 12+, Monday to Sunday, 5 a.m. to 1 a.m. (Total Diary Canada);
  - 2011 PPM weeks 1-13 (29 August to 27 November, inclusive), all persons 12+, Monday to Sunday, 2 a.m. to 2 a.m. (Total Canada), and Fall 2011 Radio Diary Survey Data (5 September to 30 October, inclusive), all persons 12+, Monday to Sunday, 5 a.m. to 1 a.m. (Total Diary Canada);
  - 2010 PPM weeks 1-13 (30 August to 28 November, inclusive), all persons 12+, Monday to Sunday, 2 a.m. to 2 a.m. (Total Canada), and Fall 2010 Radio Diary Survey Data (6 September to 31 October, inclusive), all persons 12+, Monday to Sunday, 5 a.m. to 1 a.m. (Total Diary Canada).

**Table 4.1.9 Average weekly hours tuned per capita by age group for all Canada**

	2010	2011		2012		2013		2014	
<b>Weekly hours</b>		Diary	PPM	Diary	PPM	Diary	PPM	Diary	PPM
All persons 12+	17.6	17.7	8.3	17.5	7.1	17.0	7.1	16.5	7.0
<i>Annual Growth (%)</i>	<i>-0.6</i>	-	-	<i>-1.1</i>	<i>-14.5</i>	<i>-2.9</i>	<i>0</i>	<i>-2.9</i>	<i>-1.4</i>
Teens 12 – 17	7.0	7.3	4.0	6.9	3.7	6.5	3.7	6.0	3.7
<i>Annual growth (%)</i>	<i>3.0</i>	-	-	<i>-5.5</i>	<i>-7.5</i>	<i>-5.8</i>	<i>0</i>	<i>-7.7</i>	<i>0</i>
18 – 24	11.9	12.5	5.8	12.5	5.0	11.5	4.4	11.4	4.6
<i>Annual growth (%)</i>	<i>-1.0</i>	-	-	<i>0.0</i>	<i>-13.8</i>	<i>-8.0</i>	<i>-12.0</i>	<i>-0.9</i>	<i>4.5</i>
25 – 34	15.8	16.8	6.5	16.6	5.8	16.0	5.7	15.4	5.8
<i>Annual growth (%)</i>	<i>-4.6</i>	-	-	<i>-1.2</i>	<i>-10.8</i>	<i>-3.6</i>	<i>-1.7</i>	<i>-3.8</i>	<i>1.8</i>
35 – 49	19.1	19.8	8.2	19.3	7.8	18.7	7.4	18.0	7.4
<i>Annual growth (%)</i>	<i>-0.4</i>	-	-	<i>-2.5</i>	<i>-4.9</i>	<i>-3.1</i>	<i>-5.1</i>	<i>-3.7</i>	<i>0</i>
50 – 54	21.0	21.3	9.5	20.9	8.8	21.1	8.5	19.8	7.6
<i>Annual growth (%)</i>	<i>1.6</i>	-	-	<i>-1.9</i>	<i>-7.4</i>	<i>-1.0</i>	<i>-3.4</i>	<i>-6.2</i>	<i>-10.6</i>
55 – 64	20.8	20.0	9.5	19.9	7.6	19.4	8.2	18.9	8.0
<i>Annual growth (%)</i>	<i>0.4</i>	-	-	<i>-0.5</i>	<i>-20.0</i>	<i>-2.5</i>	<i>7.9</i>	<i>-2.6</i>	<i>-2.4</i>
65 +	20.7	19.4	12.0	19.1	9.1	18.8	9.3	18.4	9.1
<i>Annual growth (%)</i>	<i>-1.1</i>	-	-	<i>-1.5</i>	<i>-24.2</i>	<i>-1.6</i>	<i>2.2</i>	<i>-2.1</i>	<i>-2.2</i>

Source: Numeris (formerly BBM Canada)

The average number of hours per week per capita is determined by dividing the total number of hours tuned by the population.

This table shows that for the third consecutive year, all age demographics recorded negative growth rates in diary markets.

**Table 4.1.10 Radio tuning share in an average week and average weekly hours tuned by listener for English- and French-language AM and FM stations**

	2010	2011		2012		2013		2014	
<b>Percentage of hours tuned (%)</b>		Diary	PPM	Diary	PPM	Diary	PPM	Diary	PPM
English-language AM	17.4	15.7	21.8	14.7	21.2	14.2	20.9	13.6	22.6
English-language FM	55.3	57.0	55.0	57.5	54.3	58.4	55.4	59.1	56.5
<i>Subtotal</i>	<i>72.6</i>	<i>72.7</i>	<i>76.8</i>	<i>72.2</i>	<i>75.5</i>	<i>72.6</i>	<i>76.2</i>	<i>72.7</i>	<i>79.0</i>
<i>Annual growth</i>	<i>0.0</i>	-	-	-0.7	-1.7	0.6	1.0	0.0	3.7
French-language AM	0.8	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.1
French-language FM	20.0	20.3	22.8	21.3	24.1	20.9	23.2	21.0	20.6
<i>Subtotal</i>	<i>20.8</i>	<i>20.5</i>	<i>22.9</i>	<i>21.4</i>	<i>24.2</i>	<i>20.9</i>	<i>23.4</i>	<i>21.1</i>	<i>20.7</i>
<i>Annual growth</i>	<i>0.5</i>	-	-	4.4	5.7	-2.2	-3.5	1.0	-11.5
Other	6.6	6.9	0.2	6.4	0.3	6.5	0.4	6.2	0.3
<i>Annual growth</i>	<i>-1.5</i>	-	-	-7.2	50.0	1.1	45.1	-4.6	-25.0
<b>Average number of weekly hours per listener</b>	19.4	19.9	9.9	19.6	9.8	19.3	9.7	18.8	9.5
<i>Annual growth</i>	<i>-0.5</i>	-	-	-1.5	-1.0	-1.5	-1.0	-2.6	-2.1
<b>Total average weekly national hours (millions)</b>	515.7	303.8	164.5	303.9	166.5	299.0	167.7	289.0	167.6
<i>Annual growth</i>	<i>-1.8</i>	-	-	0.0	1.2	-1.6	0.7	-3.3	-0.1

Source: Numeris (formerly BBM Canada)

This table shows radio tuning by frequency band and by language of broadcast over the past five years.

The “Other” category is mainly over-the-air tuning to U.S. border stations (diary), but also includes tuning to Internet radio that is not attributed to Canadian over-the-air radio stations, multi-channel subscription (satellite radio) services, pay and specialty audio services, over-the-air and video services available on cable, and unknown sources.

The average number of weekly hours per listener is determined by dividing the total number of hours tuned by reach, which is the number of different persons who tune in for at least one quarter hour within a specified time period, as estimated by Numeris.

**Table 4.1.11      Tuning achieved by the largest English- and French-language private commercial radio operators in Canada in an average week**

Listening hours (millions)	2012		2013		2014	
	Diary	PPM	Diary	PPM	Diary	PPM
English-language radio operators						
Astral	18.8	27.5	N/A	N/A	N/A	N/A
Share	8.6	26.0	N/A	N/A	N/A	N/A
BCE	14.2	12.4	40.5	38.1	34.2	32.4
Share	6.5	11.6	18.6	36.3	16.3	29.3
Pierre-Boivin (BCE in-trust)	N/A	N/A	5.4	7.6	N/A	N/A
Share	N/A	N/A	2.5	0.1	N/A	N/A
Cogeco	-	-	-	-	-	-
Share	-	-	-	-	-	-
Corus	16.1	20.9	21.5	21.0	19.0	18.7
Share	7.4	19.7	9.8	20.0	9.0	16.9
Newcap	19.5	3.2	18.8	2.6	19.2	10.5
Share	8.9	3.0	8.6	2.5	9.1	9.5
Rogers	20.2	21.5	22.5	23.5	21.8	17.3
Share	9.2	20.2	10.3	22.4	10.4	15.6
Total English-language private commercial radio operators	219.3	106.1	218.2	104.8	210.4	110.6
Share	100	100	100	100	100	100
French-language radio operators						
Astral	17.3	8.8	N/A	N/A	N/A	N/A
Share	26.5	26.8	N/A	N/A	N/A	N/A
BCE	N/A	N/A	19.9	8.6	17.4	6.9
Share	N/A	N/A	31.7	26.9	28.8	24.1
Cogeco	7.7	21.4	12.6	21.3	12.7	18.7
Share	11.8	65.2	20.1	66.7	20.9	65.4
Total French-language private commercial radio operators	65.2	32.9	62.7	31.9	60.9	28.6
Share	100	100	100	100	100	100
<b>Total</b>	<b>286.8</b>	<b>139.0</b>	<b>281.3</b>	<b>136.7</b>	<b>289.0</b>	<b>139.2</b>

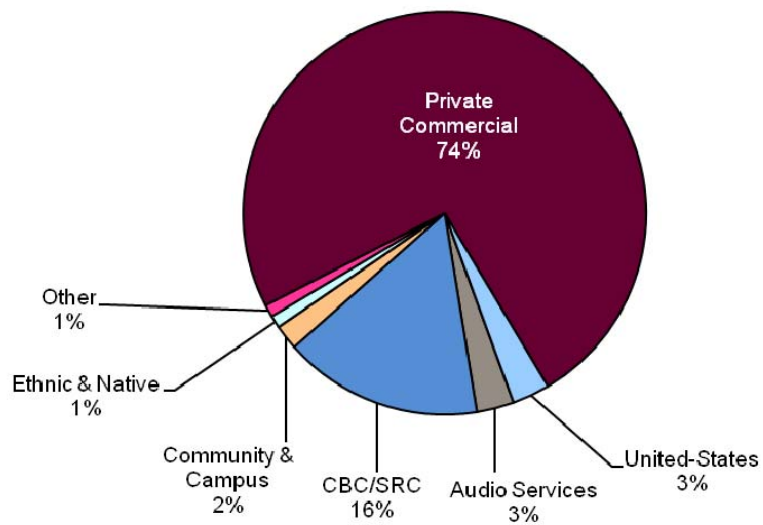
Source: Numeris (formerly BBM Canada)

This table presents tuning data by large radio ownership groups, by language, for the years 2012 through 2014.

Note that:

- In Broadcasting Decision 2013-310, the Commission approved the change in effective control of Astral's 21 French-language and 63 English-language radio stations to BCE, subject to the divestiture by BCE of 10 English-language (7 Astral and 3 BCE) radio stations, and the transfer of their management and control to a trustee (Pierre Boivin), pending their sale to third parties;
- Services being held in trust by Pierre Boivin are indicated separately, but are included in the BCE data (2013); and
- Several divested stations from Pierre Boivin have been acquired by other large private commercial radio operators, hence the fluctuation by operator in listening hours (2013-2014).

**Figure 4.1.16 Radio tuning by station type in diary markets, 2014**



Sources: Numeris (formerly BBM Canada) 2014 and CRTC data collection

This table shows the different types of radio stations tuned by listeners in diary markets in 2014.

The “Audio services” segment includes tuning to multi-channel subscription (satellite radio) services, pay and specialty audio services, over-the-air radio stations, and video services broadcast over cable and the Internet.



**Table 4.1.12 Radio tuning shares - English-language radio station formats in diary markets, 2014**

TOP FORMATS	Audience share	Number of stations
Today's Country	17%	100
CBC Radio One	14%	32
Adult Contemporary	11%	102
Hot AC	10%	80
Classic Hits	8%	69
Album-oriented/mainstream Rock	8%	52
News/Talk	7%	40
Mainstream Top 40/CHR	7%	43
Classic Rock	5%	26
CBC Radio Two	3%	17
<i>Other formats rounding to 100 include: Modern Rock (12 stns, 2%), community/campus/tourism (79 stns, 1%), Gold/Oldies (10 stns, 1%), Adult Standards (1 stn, 1%), Alternative Rock (12 stns, 2%), Classical/Fine Arts (3 stns, 1%), Jazz (1 stn, 0%).</i>		

Sources: Numeris (formerly BBM Canada) Fall 2014 and CRTC data collection

**Table 4.1.13 Radio tuning shares - French-language radio station formats in diary markets, 2014**

TOP FORMATS	Audience share	Number of stations
Adult Contemporary	27%	41
News/Talk	17%	9
Hot AC	13%	19
Mainstream Top 40/CHR	12%	15
Ici Radio-Canada Première	12%	21
Community	6%	53
Ici Musique	4%	14
Classic Hits	2%	3
Classical/Fine Arts	2%	2
Modern/Alternative Rock	1%	1
<i>Other formats rounding to 100 include: Adult Album Alternative (1stn, 1%), Oldies (1 stn, 1%).</i>		

Sources: Numeris (formerly BBM Canada) Fall 2014 and CRTC data collection

Among Canadians in diary markets listening to English-language radio stations, over 50% of listening hours went to CBC Radio One, as well as country, adult contemporary, and hot adult contemporary formats. Among French-language radio station listeners, more than a quarter of listening hours went to the adult contemporary format.

**Table 4.1.14 Radio tuning shares - English-language radio station formats in PPM markets, 2014**

TOP FORMATS	Audience share	Number of stations
News/Talk	17%	11
Adult Contemporary	15%	9
CBC Radio One	12%	5
Mainstream Top 40/CHR	10%	10
Hot AC	9%	4
Mainstream/Modern Rock	8%	9
Classic Rock	7%	5
Classic Hits	7%	7
Country	4%	4
Sports Talk	3%	7
<i>Other formats rounding to 100 are: CBC Radio 2 (6 stns, 3%), Adult Standards (1 stn, 2%), Adult Album Alternative (1 stns, 0.1%), Classical/Fine Arts (1stns, 2%) and Jazz (1 stn, 1%).</i>		

Sources: Numeris (formerly BBM Canada) 2014 and CRTC data collection

**Table 4.1.15 Radio tuning shares - French-language radio station formats in PPM markets, 2014**

TOP FORMATS	Audience share	Number of stations
Adult Contemporary	32%	2
News/Talk	30%	2
CHR	16%	2
ICI Radio-Canada Première	13%	4
Classical Music	4%	1
ICI Musique	3%	4
<i>Other format rounding to 100 are: Traffic (1 stn, 0%)</i>		

Sources: Numeris (formerly BBM Canada) 2014 and CRTC data collection

**e) *Programming contributions and expenditures***

The CRTC uses a number of approaches to achieve the cultural, social, and economic objectives set out in the *Broadcasting Act*. One such instrument has been the establishment of various contribution and expenditure regimes.

In the 2013-2014 broadcast year, commercial radio operators contributed 4 cents per revenue dollar to support Canadian content development (CCD). Collectively, they contributed nearly \$60 million to the development of Canadian content, an increase of 14% over the previous period. Approximately 65% of the funds were a direct result of the conditions of licence issued to new radio stations and the change in ownership or control of existing ones.

The following chart illustrates the extent to which commercial radio stations supported the development of Canadian content.

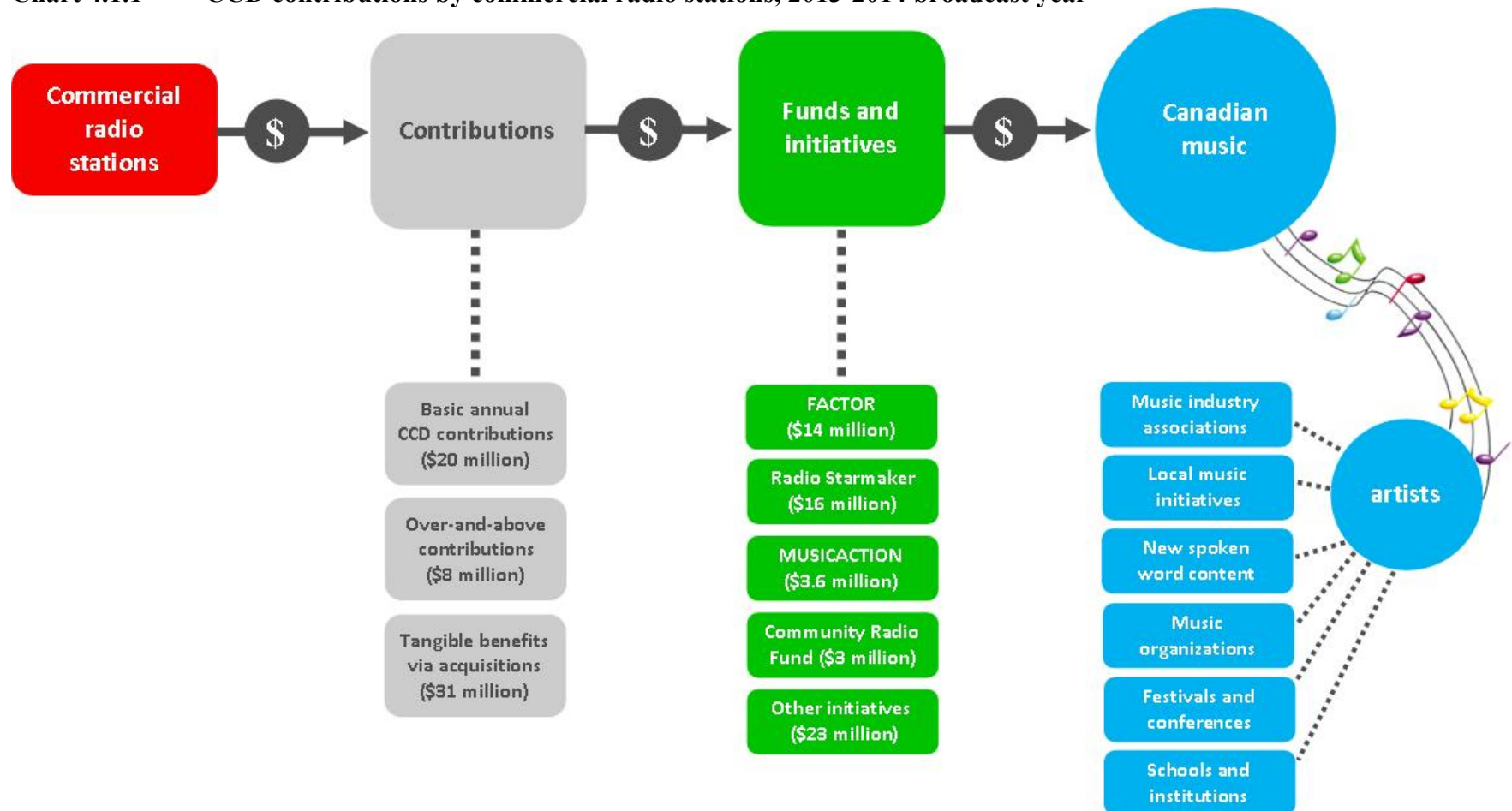
**What are tangible benefits and CCD contributions?**

In the absence of a competitive licensing process relating to transfers of ownership or control of radio or television services, tangible benefits, which are financial contributions proportionate to the value of the transaction (6% minimum for radio and 10% minimum for television service), are required to be made to the broadcasting system by the purchaser of a licensed radio or television service. They are usually paid over five to seven consecutive broadcast years. These benefits are meant to yield measurable improvements to the broadcasting system generally, as well as to the communities served by the service in question. They are incremental to the normal costs of doing business.

Canadian Content Development (CCD) contributions are financial contributions made by radio broadcasters to support the development and promotion of Canadian musical and spoken word content for broadcast. Most applicants make specific CCD commitments as part of applications for new licences and as tangible benefits at the time of transfer of ownership and control of radio stations. Commercial and ethnic stations are further subject to regulations requiring annual CCD contributions.

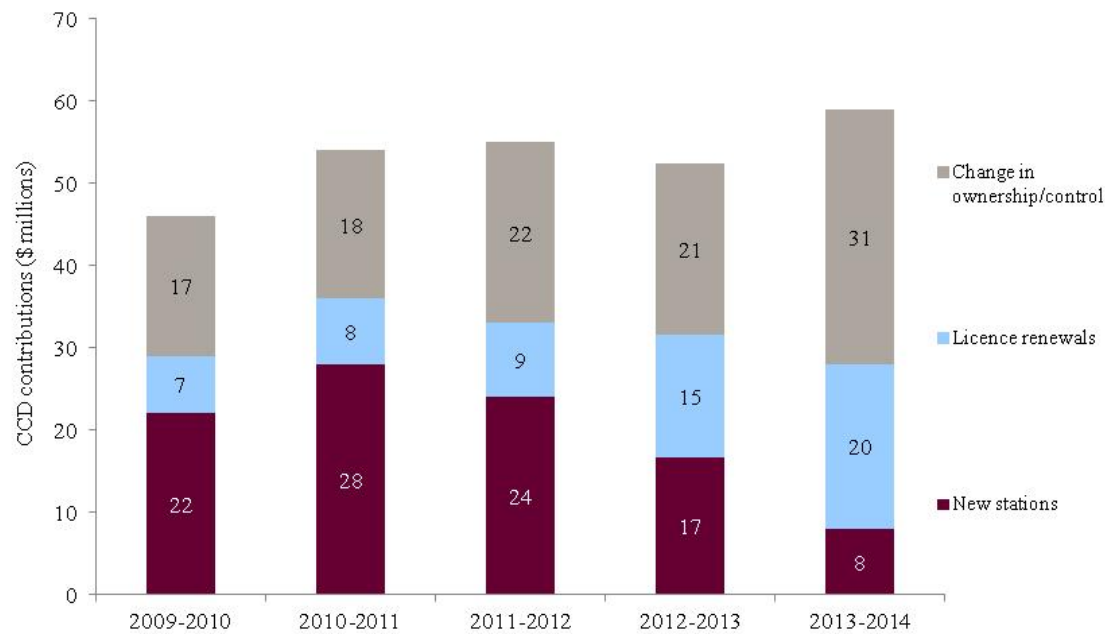
These financial contributions serve, among other things, to foster the creation of Canadian content, to help advance the careers of emerging Canadian artists, and to increase the supply of quality Canadian music in a variety of genres.

**Chart 4.1.1 CCD contributions by commercial radio stations, 2013-2014 broadcast year**



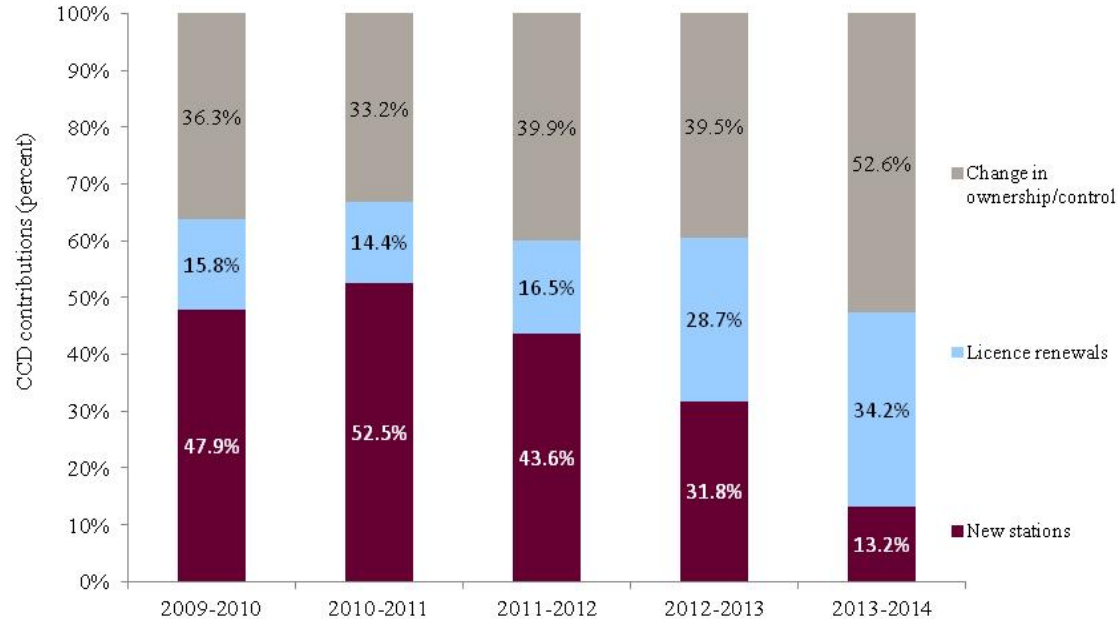
Commercial radio broadcasters support CCD financially as a result of three regulatory processes:  
 Basic annual CCD contributions;  
 Additional contributions over and above the basic CCD contribution (usually related to applications for new licences); and  
 Contributions made in relation to applications for transfers of ownership or control (tangible benefits).

**Figure 4.1.17 CCD contributions by regulatory measure (\$ millions)**



Source: CRTC data collection

**Figure 4.1.18 CCD contributions by regulatory measure (percentage)**



Source: CRTC data collection

In regard to Tables 4.1.22 through 4.1.25:

- Contributions are based on annual payments reported by licensees for the broadcast year (i.e., 1 September to 31 August);
- Contributions include those made under both the CCD and the former Canadian talent development regimes;
- Figures for the 2012-2013 broadcast year include contributions made by pay audio undertakings; and
- The contributions made by satellite radio services have been split between the first licence term and the licence renewal sections (25% and 75%, respectively), based on a licence renewal date of 1 December.

**Table 4.1.16 Summary of annual CCD contributions reported by radio station licensees (\$ thousands)**

		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	CAGR (%) 2009-10 - 2013-14
FACTOR		9,196	10,755	10,545	12,023	13,982	11.0
	<i>Annual growth (%)</i>	-	17	-2	14	16	
MUSICACTION		2,220	1,930	2,538	2,426	3,596	12.8
	<i>Annual growth (%)</i>	-	13	31	-4	48	
CRFC		-	346	1,509	1,721	2,922	-
	<i>Annual growth (%)</i>	-	-	337	14	70	
Music Industry Association		3,237	4,360	3,754	4,335	3,168	-0.5
	<i>Annual growth (%)</i>	-	35	-14	15	-27	
Local music initiatives		10,634	10,833	13,777	10,538	10,731	0.2
	<i>Annual growth (%)</i>	-	2	27	-24	2	
New spoken word content		608	1,340	943	253	292	-16.7
	<i>Annual growth (%)</i>	-	121	-30	-73	16	
Audio content initiatives		-	135	135	531	968	-
	<i>Annual growth (%)</i>	-	-	0	293	82	
Schools and educational institutions		1,875	2,700	2,383	1,431	1,818	-0.8
	<i>Annual growth (%)</i>	-	44	-12	-40	27	
Radio Starmaker Fund/Fonds RadioStar		9,244	10,783	11,783	10,984	15,902	14.5
	<i>Annual growth (%)</i>	-	17	-9	-7	45	
Other eligible CCD initiatives		9,039	10,815	7,713	8,114	6,190	-9.0
	<i>Annual growth (%)</i>	-	20	-29	5	-24	
<b>Total</b>		<b>46,053</b>	<b>53,996</b>	<b>55,080</b>	<b>52,537</b>	<b>59,567</b>	<b>6.6</b>
	<i>Annual growth (%)</i>	-	17	2	-5	14	

Source: CRTC data collection

**Table 4.1.17 Annual CCD contributions reported by new radio station licensees during the first licence term (\$ thousands)**

		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	CAGR (%) 2009-10 - 2013-14
FACTOR		2,014	2,719	2,615	2,818	1,753	-3.4
	<i>Annual growth (%)</i>	27	35	-4	8	-38	
MUSICACTION		552	791	563	242	1	-79.4
	<i>Annual growth (%)</i>	-21	43	-29	-57	-100	
Community Radio Fund of Canada		-	-	165	17	21	-
	<i>Annual growth (%)</i>	-	-	-	-90	22	
Music Industry Association		2,150	2,493	2,221	2,342	1,732	-5.3
	<i>Annual growth (%)</i>	-	16	-11	5	-26	
Local music initiatives		7,120	7,485	9,106	5,524	2,754	-21.1
	<i>Annual growth (%)</i>	-	5	22	-39	-50	
New spoken word content		420	1,139	545	192	155	-22.1
	<i>Annual growth (%)</i>	-	171	-52	-65	-19	
Audio content initiatives		-	0	0	172	585	-
	<i>Annual growth (%)</i>	-	-	-	-	240.1	
Schools and educational institutions		1,179	2,020	1,553	886	516	-18.7
	<i>Annual growth (%)</i>	31	71	-23	-43	-42	
Radio Starmaker Fund/Fonds RadioStar		1,077	1,982	1,038	466	0	-100.0
	<i>Annual growth (%)</i>	389	84	-48	-55	-100	
Other eligible CCD initiatives		7,550	9,714	6,195	3,986	352	-53.5
	<i>Annual growth (%)</i>	279	29	-36	-36	-91	
<b>Total</b>		<b>22,061</b>	<b>28,342</b>	<b>24,001</b>	<b>16,644</b>	<b>7,868</b>	<b>-22.7</b>
	<i>Annual growth (%)</i>	<b>13</b>	<b>28</b>	<b>-15</b>	<b>-31</b>	<b>-53</b>	

Source: CRTC data collection

**Table 4.1.18 Annual CCD contributions reported by radio licensees in the context of licence renewals (\$ thousands)**

		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	CAGR (%) 2009-10 - 2013-14
FACTOR		2,003	2,629	1,971	3,152	4,411	21.8
	<i>Annual growth (%)</i>	-33	31	-25	60	40	
MUSICACTION		1,324	808	727	1,414	1,935	9.9
	<i>Annual growth (%)</i>	-5	-39	-10	95	37	
Community Radio Fund of Canada		-	-	617	1,020	1,305	-
	<i>Annual growth (%)</i>	-	-	-	65	28	
Music Industry Association		647	823	966	1,607	954	10.2
	<i>Annual growth (%)</i>	-	27	17	66	-41	
Local music initiatives		1,809	1,947	2,381	3,352	4,938	28.5
	<i>Annual growth (%)</i>	-	8	22	41	47	
New spoken word content		188	201	398	192	137	-7.5
	<i>Annual growth (%)</i>	-	7	98	-85	125	
Audio content initiatives		0	0	0	0	0	-
	<i>Annual growth (%)</i>	-	-	-	-	-	
Schools and educational institutions		422	473	614	342	948	22.4
	<i>Annual growth (%)</i>	342	-32	12	30	177	
Radio Starmaker Fund/Fonds RadioStar		0	0	246	35	52	-
	<i>Annual growth (%)</i>	-	-	-	-86	45	
Other eligible CCD initiatives		876	873	1,194	4,026	5,716	59.8
	<i>Annual growth (%)</i>	-21	0	37	237	42	
<b>Total</b>		<b>7,269</b>	<b>7,754</b>	<b>9,114</b>	<b>15,010</b>	<b>20,396</b>	<b>29.4</b>
	<i>Annual growth (%)</i>	<b>-34</b>	<b>7</b>	<b>18</b>	<b>65</b>	<b>36</b>	

Source: CRTC data collection









**Table 4.1.19 Annual CCD contributions reported by radio licensees in the context of changes in ownership and/or control (\$ thousands)**

		2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	CAGR (%) 2009-10 - 2013-14
FACTOR		5,179	5,407	5,959	6,053	7,818	10.8
	<i>Annual growth (%)</i>	-9	4	10	2	29	
MUSICACTION		344	331	1,248	770	1,660	48.2
	<i>Annual growth (%)</i>	-65	-4	277	-38	115	
Community Radio Fund of Canada		-	346	727	684	1,596	
	<i>Annual growth (%)</i>	-	-	110	-6	133	
Music Industry Association		440	1,044	567	386	482	2.3
	<i>Annual growth (%)</i>	-	137	-46	-32	25	
Local music initiatives		1,705	1,401	2,290	1,662	3,038	15.5
	<i>Annual growth (%)</i>	-	-18	63	-27	83	
New spoken word content		0	0	0	0	0	
	<i>Annual growth (%)</i>	-	-	-	-	-	
Audio content initiatives		-	135	135	359	383	
	<i>Annual growth (%)</i>	-	-	0	166	7	
Schools and educational institutions		274	207	216	203	354	6.6
	<i>Annual growth (%)</i>	-28	-24	4	-6	75	
Radio Starmaker Fund/Fonds RadioStar		8,167	8,801	10,499	10,483	15,580	18.0
	<i>Annual growth (%)</i>	-22	8	19	0	51	
Other eligible CCD initiatives		613	228	324	102	122	-33.2
	<i>Annual growth (%)</i>	55	-63	42	-68	20	
<b>Total</b>		<b>16,722</b>	<b>17,900</b>	<b>21,965</b>	<b>20,703</b>	<b>31,303</b>	<b>17.0</b>
	<i>Annual growth (%)</i>	<b>-18</b>	<b>7</b>	<b>23</b>	<b>-6</b>	<b>51</b>	

Source: CRTC data collection

*f) Tangible benefits*

**Table 4.1.20 Number of radio service transactions, value of those transactions and corresponding tangible benefits for the period from 1 January 2010 to 31 December 2014 (\$ millions)**

		2010	2011	2012	2013	2014	Total
<b>English-language services</b>							
	Transactions	7	9	5	4	9	<b>34</b>
	Value (\$M)	67.2	316.2	80.4	#756.7	257.7	<b>1,478.9</b>
	Benefits (\$M)	4.0	19.0	4.8	#52.0	15.5	<b>95.3</b>
<b>French-language services</b>							
	Transactions	2	3	2	1	-	<b>8</b>
	Value (\$M)	97.7	-	1.5	357.7	-	<b>456.9</b>
	Benefits (\$M)	8.8	-	0.1	25.0	-	<b>33.9</b>

Sources: CRTC decisions and administrative approvals

In regard to the above:

- The Cogeco/Corus ownership transaction, which occurred in 2010 (see Broadcasting Decision 2010-942), resulted in \$8.8 million in tangible benefits relating to French-language radio initiatives;
- The BCE/CTVglobemedia Inc. ownership transaction, which occurred in 2011 (see Broadcasting Decision 2011-163), resulted in \$17.5 million in tangible benefits; and
- The BCE/Astral ownership transaction, which occurred in 2013 (see Broadcasting Decision 2013-310), resulted in \$71.5 million in tangible benefits. Approximately \$46.5 million of this amount was committed to English-language initiatives and \$25 million to French-language initiatives. In its decision, the Commission directed BCE to divest itself of 10 radio services. These divestitures are expected to generate not less than \$11 million in additional tangible benefit commitments from other purchasers. In December 2013, the Commission approved the divestiture of 3 radio stations (CFQX-FM Selkirk and CHIQ-FM Winnipeg, Manitoba, and CKCE-FM Calgary, Alberta) to the Jim Pattison Broadcast Group Limited Partnership (Pattison). Pattison has committed \$1.8 million in tangible benefits initiatives.

**g) Programming of high standards**

The *Broadcasting Act* sets out that programming provided by broadcasting distribution undertakings should be of high standard. The CRTC deals with programming complaints relating to public and community radio broadcasters, as well as to non-members of the Canadian Broadcast Standards Council (CBSC). The CRTC also deals with issues that are outside the parameters of the codes administered by the CBSC. Of the complaints received by the Commission relating to radio, approximately 58% were referred to the CBSC.

**What is the CBSC?**

The Canadian Broadcast Standards Council (CBSC) is an independent organization that was created by the Canadian Association of Broadcasters (CAB) to administer the standards established by Canada's private broadcasters. The CBSC's membership includes more than 790 private-sector radio and television stations, specialty services, pay services, and networks across Canada, broadcasting in English, French, and third languages.

For more information, visit [www.cbsc.ca](http://www.cbsc.ca).

**Table 4.1.21 Number of radio-related contacts received by the CRTC, by type of issue**

Period	CRTC – policies/decisions	Billing	Quality of service/delivery	Terms and conditions	Accessibility issues	Programming	Loudness	Other
2013-2014	1,042	4	24	2	0	1,299	10	285
2014-2015	847	3	41	3	0	802	9	227

Source: CRTC correspondence tracking system

**Table 4.1.22 Number of radio complaints by subject matter**

Type of complaint	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	Complaints received	Referrals to the CBSC	Complaints received	Referrals to the CBSC	Complaints received	Referrals to the CBSC	Complaints received	Referrals to the CBSC	Complaints received	Referrals to the CBSC
<b>Radio</b>										
Abusive comment	35	5	38	3	64	32	32	8	46	16
Adult content	13	5	14	6	9	3	5	1	4	1
Alcohol advertising	-	-	1	-	4	-	3	-	2	0
Gender portrayal	-	-	5	4	1	-	2	1	2	1
Offensive comment	220	100	258	95	283	135	702	582	317	203
Offensive language	296	266	22	9	50	14	31	13	41	16
<b>Subscription radio (satellite)</b>										
Abusive comment	-	-	-	-	-	-	-	-	-	-

Source: CRTC correspondence tracking system

Together, the CRTC and the CBSC receive and address a range of complaints regarding radio and subscription radio services. This table shows the number of complaints received by the CRTC—and referred to the CBSC—regarding various issues across diverse market sectors for the 2010-2011 through 2014-2015.

The CRTC's correspondence tracking system counts multiple communications from the same client regarding the same complaint as separate units. Consequently, the actual number of complaints received is likely to be slightly lower than the figures indicated.

The category "Abusive comment" includes complaints alleging hatred or contempt incited on air against one of the groups identified in the *Television Broadcasting Regulations, 1987* or the *Specialty Services Regulations, 1990*.

The category "Offensive comment" includes complaints alleging offensive humour, or other comments that do not fall under the "abusive comment" provision in CRTC regulations.

The category "Offensive language" includes complaints alleging offensive language in song lyrics or in spoken word programming.

**Table 4.1.23 Radio complaints handled by the CBSC**

	Radio	Subscription radio (satellite)	Total
Language of broadcast of the program			
English	439	3	442
French	213	0	213
Third language	5	0	5
Other	7	0	7
<b>Total</b>	<b>664</b>	<b>3</b>	<b>667</b>
National origin of the program			
Canadian	633	0	633
Foreign	16	0	16
Other	15	3	18
<b>Total</b>	<b>664</b>	<b>3</b>	<b>667</b>

Source: CBSC, 2013-2014 annual report

This table shows the number of complaints handled by the CBSC by the language of broadcast for the program targeted by the complaint and by the source of the program.

The category “Other” in each case refers to complaints for which there was not enough information for the CBSC to determine either the language of broadcast or the national origin of the program.

**What is the ASC?**

Advertising Standards Canada (ASC) is a national, not-for-profit advertising self-regulatory body. The ASC’s *Canadian Code of Advertising Standards* is regularly updated to ensure it is current and contemporary – keeping pace with consumer and societal expectations.

The ASC responds to complaints by consumers and special interest groups regarding advertising with respect to all media subject to the Canadian Code of Advertising Standards, the principal instrument of advertising self-regulation. In addition, the ASC undertakes pre-clearance functions in five industry categories, which consist of reviewing advertisements based on applicable legislation, regulations, and/or industry codes and guidelines.

Additional information on the ASC can be found at: [www.adstandards.com/en/](http://www.adstandards.com/en/)

**Table 4.1.24 Complaints handled by the ASC**

	2010	2011	2012	2013	2014
Total number of complaints	1,200	1,809	1,310	1,310	1,274
Complaints about radio advertisements	67	85	55	84	64
<i>Percentage of total complaints received</i>	<i>5%</i>	<i>5%</i>	<i>4%</i>	<i>6%</i>	<i>5%</i>

Source: ASC complaint reports

This table shows the number of complaints handled by the ASC relating to advertisements on radio as a percentage of the total number of complaints handled. In 2014, 5% of those complaints related to radio advertisements.

**h) Ownership groups****Table 4.1.25 English-language and French-language radio revenues and number of undertakings reporting for the largest commercial radio operators in Canada**

Radio operators	Revenues (\$ thousands)			Number of radio undertakings reporting			Share of total revenue (%)		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
<b>Largest commercial radio operators</b>									
BCE	157,219	474,226	414,116	33	117	107	10	29	26
<i>Pierre-Boivin (BCE in-trust)</i>	N/A	51,518	N/A	N/A	10	N/A	N/A	3	N/A
Astral	330,488	N/A	N/A	84	N/A	N/A	20	N/A	N/A
Rogers	225,084	224,520	228,485	55	55	55	14	14	14
Corus	181,518	173,909	164,525	37	37	39	11	11	10
Harold R. Steele (Newcap)	116,689	122,365	156,289	60	62	68	7	8	10
Cogeco	106,533	106,613	109,943	13	13	13	7	7	6
Total largest commercial radio operators	1,117,531	1,101,633	1,073,357	282#	284	282	69	68	66
Total commercial radio operators	1,620,316	1,622,658	1,614,158	675	685	695	100	100	100
<b>Largest English-language commercial radio operators</b>									
BCE	157,219	365,516	306,288	33	96	86	12	28	23
<i>Pierre-Boivin (BCE in-trust)</i>	N/A	51,518	N/A	N/A	10	N/A	N/A	4	N/A
Astral	221,826	N/A	N/A	63#	N/A	N/A	17	N/A	N/A
Rogers	225,084	224,520	228,485	55	55	55	17	17	18
Corus	181,518	173,909	164,525	37	37	39	14	13	13
Newcap	116,689	122,365	156,289	60	62	68	9	9	12
Total English-language largest commercial radio operators	902,336	886,310	855,587	248#	250	244	69	67	66
Total English-language commercial radio operators	1,316,992	1,318,387	1,304,651	555	594	575	100	100	100
<b>Largest French-language commercial radio operators</b>									
BCE	N/A	108,710	107,828	N/A	21	21	N/A	42	41
Astral	108,662	N/A	N/A	21	N/A	N/A	42	N/A	N/A
Cogeco	N/A	N/A	N/A	12#	12	12	N/A	N/A	N/A
Total French-language largest commercial radio operators	108,662	108,710	107,828	33#	33	33	42	42	41
Total French-language commercial radio operators	257,940	257,884	263,513	96	97	96	100	100	100

Source: CRTC data collection

This table shows that Canada's six largest commercial radio operators together accounted for nearly 70% of the commercial radio industry's revenues between 2012 and 2014. They also accounted for approximately 40% of the total number of radio undertakings in the country.

Note that:

- The total number of services owned by private, English- and French-language radio operators includes commercial networks and ethnic commercial radio stations. Transfers of ownership or control of radio services to or from ownership groups are deemed to have occurred in the broadcast year in which the proposed transfer was approved by the CRTC and not on the closing date of the transaction. Further, the radio service's entire annual revenue is attributed to its deemed ownership group.
- Cogeco's revenue data have been removed from the category "largest French-language commercial radio corporations" due to residual disclosure issues;
- In Broadcasting Decision 2013-310, the Commission approved the change in effective control of Astral's 21 French-language and 63 English-language radio stations to BCE, subject to the divestiture by BCE of 10 English-language (7 Astral and 3 BCE) radio stations, and the transfer of their management and control to a trustee (Pierre Boivin), pending their sale to third parties; and
- The services being held in trust by Pierre Boivin are indicated separately, but are included in the BCE 2013 data.

## 4.2 Television sector

### Display 4.2.0 Key indicators for the television sector

#### REVENUES

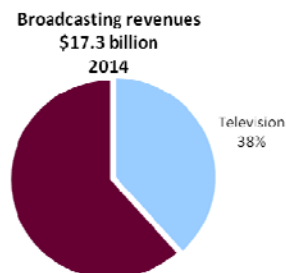
**\$6.6 B**

INCREASE OF 2%  
OVER 2013

#### VIEWING

**27.4 HRS**

CANADIANS (2+)  
WATCH TV  
EACH WEEK



Canadians have access to over 600 Canadian and non-Canadian television services. Most still watch television by traditional means, whether it be over-the-air, or via cable or satellite. However, Canadians are also turning to new platforms and devices connected to the Internet for their viewing needs.

According to 2013-14 audience measurement data, Canadians two years of age and older are watching an average of more than 27 hours of television each week. Nevertheless, younger demographics are watching less television. For example, during that period, the 18-34 demographic watched 20.6 hours of television each week, three hours less than five years earlier.

In 2014, the private conventional television sector reported \$1.8 billion in revenues, compared to over \$4.2 billion for discretionary services. The television industry's five large ownership groups reported over 90% of all television revenues.

The English-language private conventional television sector includes three major ownership groups: BCE (CTV and CTV Two), with a 49% revenue share; Shaw (Global), with a 27% revenue share; and Rogers (City and OMNI), with a 15% revenue share. The French-language private conventional television sector has two major players: Quebecor (TVA), with a 70% revenue share; and Remstar (V), with a 20% revenue share.

In 2014, the CBC, Canada's national public broadcaster, reported \$1.3 billion in revenues, 55% of which was derived from Parliamentary appropriations.

Collectively, broadcasters contributed nearly \$3 billion to Canadian programming expenditures (CPE), 15% of which was spent on programs of national interest (PNI) in 2014. For each dollar earned, television services invested 43 cents in support of Canadian programming during the 2013-2014 broadcast year.

**a) Revenues**

This subsection presents information on television service revenues, specifically, for conventional television and discretionary services (i.e., pay, PPV, VOD, and specialty services). It does not include information on digital media revenues.

**Table 4.2.1 Revenues of television services, by type of service (\$ millions)**

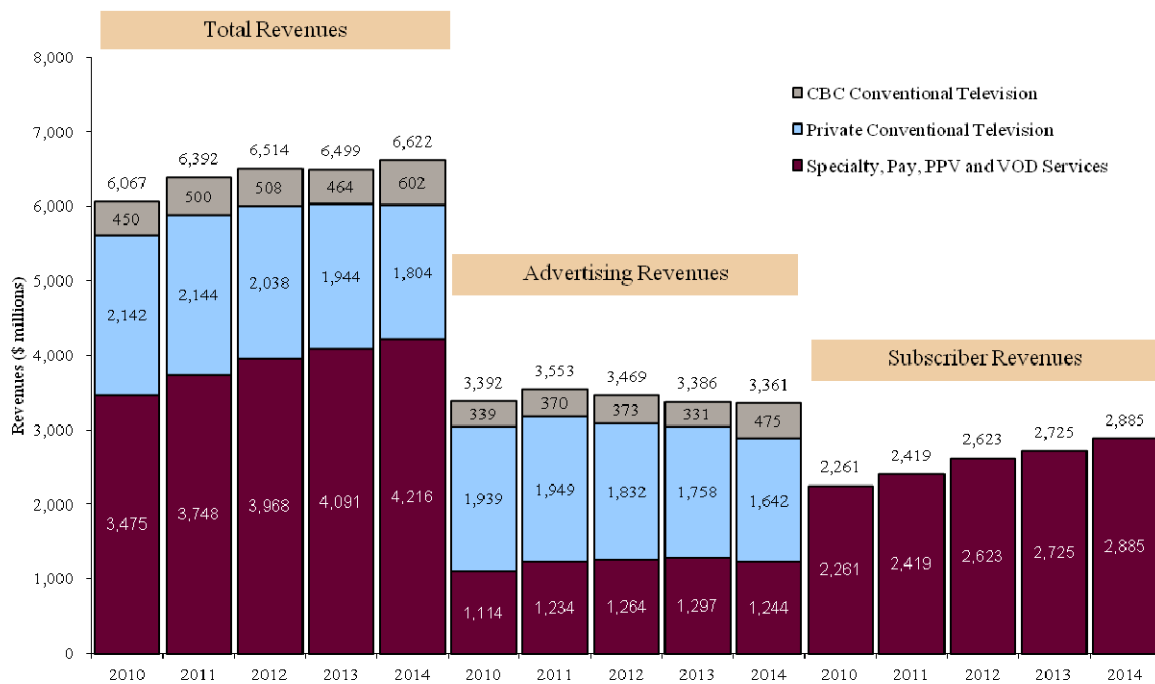
	2011	2012	2013	2014	<i>CAGR (%) 2011-2014</i>
Conventional television services					
Private	2,144	2,038	1,944	1,804	-5.6
CBC (English- and French-language)	500	508	464	602	6.4
Subtotal	2,644	2,546	2,408	2,406	-3.1
Discretionary services					
Pay, PPV, and VOD	856	837	799	788	-2.7
Specialty	2,892	3,130	3,292	3,428	5.8
Subtotal	3,748	3,968	4,091	4,216	4.0
Total	6,392	6,513	6,499	6,622	1.2

Source: CRTC data collection

This table shows the change in television revenues by type of service for the period from 2011 to 2014. CBC parliamentary appropriations are not included.



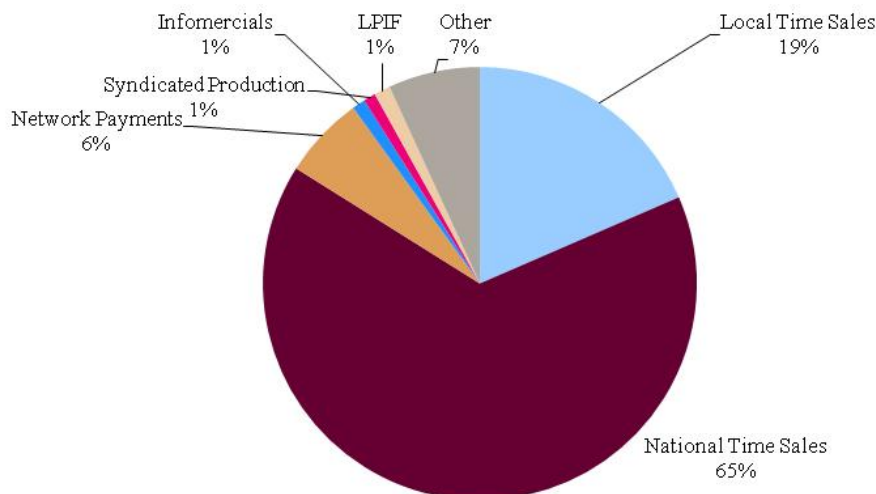
**Figure 4.2.1 Revenues of television services, by type of service (\$ millions)**



Source: CRTC data collection

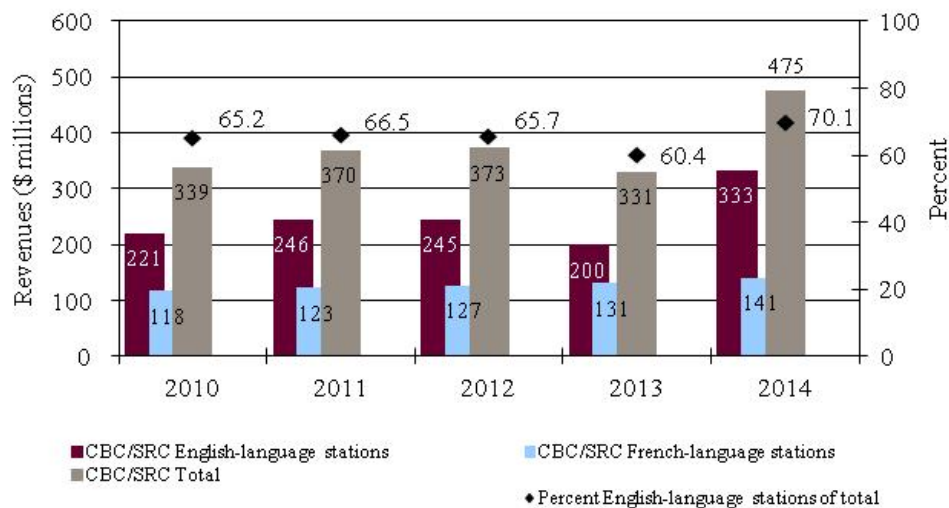
Total revenues include “other revenues” (i.e., those tied to a broadcasting licence but not stemming from broadcasting activities, for example, fundraisers) and funding from the Local Programming Improvement Fund (LPIF). Advertising revenues include infomercial sales. Revenues shown for the CBC do not include parliamentary appropriations.

**Figure 4.2.2 Sources of revenues for private conventional television, 2014**



Source: CRTC data collection

**Figure 4.2.3 Advertising revenues of conventional television stations owned and operated by the CBC**



Source: CRTC data collection

**Table 4.2.2 Advertising and other revenues of conventional television stations owned and operated by the CBC**

Revenues (\$ millions)	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Advertising revenues						
English-language stations	221	246	245	200	333	10.8
Annual growth (%)	15.1	11.3	-0.3	-18.3	66.5	
French-language stations	118	123	127	131	141	4.6
Annual growth (%)	12.4	4.2	3.1	3.1	7.6	
Advertising total	339	370	373	331	475	8.8
Annual growth (%)	14.1	9.1	0.8	-11.2	43.5	
Other revenues	111	130	135	133	127	3.4
Annual growth (%)	16.8	17.1	3.9	-1.8	-4.5	
Total	450	500	508	464	602	7.6
Annual growth (%)	14.8	11.1	1.6	-8.7	29.7	
Parliamentary appropriation	794	839	861	783	726	-2.2
Annual growth (%)	n/a	5.7	2.7	-9.0	-7.3	

Source: CRTC data collection

“Other revenues” include syndication revenues and funding from the Local Programming Improvement Fund (LPIF).

**Table 4.2.3 Advertising and other revenues: private conventional television stations, by language of broadcast**

Revenues (\$ millions)		2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>English-language stations</b>							
Advertising		1,659	1,659	1,540	1,468	1,357	-4.9
	<i>Annual growth (%)</i>	9.2	0.0	-7.2	-4.7	-7.6	
	<i>% of subtotal</i>	92.0	93.0	92.0	92.7	92.0	
Other		135	129	131	115	118	-3.3
	<i>Annual growth (%)</i>	33.1	-4.5	2.0	-11.8	2.6	
	<i>% of subtotal</i>	8.0	7.0	8.0	7.3	8.0	
Subtotal		1,794	1,788	1,672	1,583	1,475	-4.8
	<i>Annual growth (%)</i>	10.7	-0.3	-6.5	-5.3	-6.8	
<b>French-language stations</b>							
Advertising		280	290	291	290	267	-1.2
	<i>Annual growth (%)</i>	-1.9	3.6	0.3	-0.2	-7.9	
	<i>% of subtotal</i>	80.0	81.0	79.0	80.5	81.2	
Other		68	66	75	70	62	-2.3
	<i>Annual growth (%)</i>	5.5	-2.2	13.5	-6.1	-11.4	
	<i>% of subtotal</i>	20.0	19.0	21.0	19.5	18.8	
Subtotal		348	357	367	361	329	-1.4
	<i>Annual growth (%)</i>	-0.5	2.5	2.8	-1.7	-8.9	
<b>Total</b>							
Advertising		1,939	1,949	1,832	1,758	1,624	-4.3
	<i>Annual growth (%)</i>	7.4	0.5	-6.0	-4.0	-7.6	
	<i>% of total</i>	91.0	91.0	90.0	90.4	90.0	
Other		202	195	206	186	179	-3.0
	<i>Annual growth (%)</i>	22.4	-3.6	5.9	-9.8	-3.8	
	<i>% of total</i>	9.0	9.0	10.0	9.6	10.0	
Total		2,142	2,144	2,038	1,944	1,804	-4.2
	<i>Annual growth (%)</i>	8.9	0.1	-5.0	-4.6	-7.2	

Source: CRTC data collection

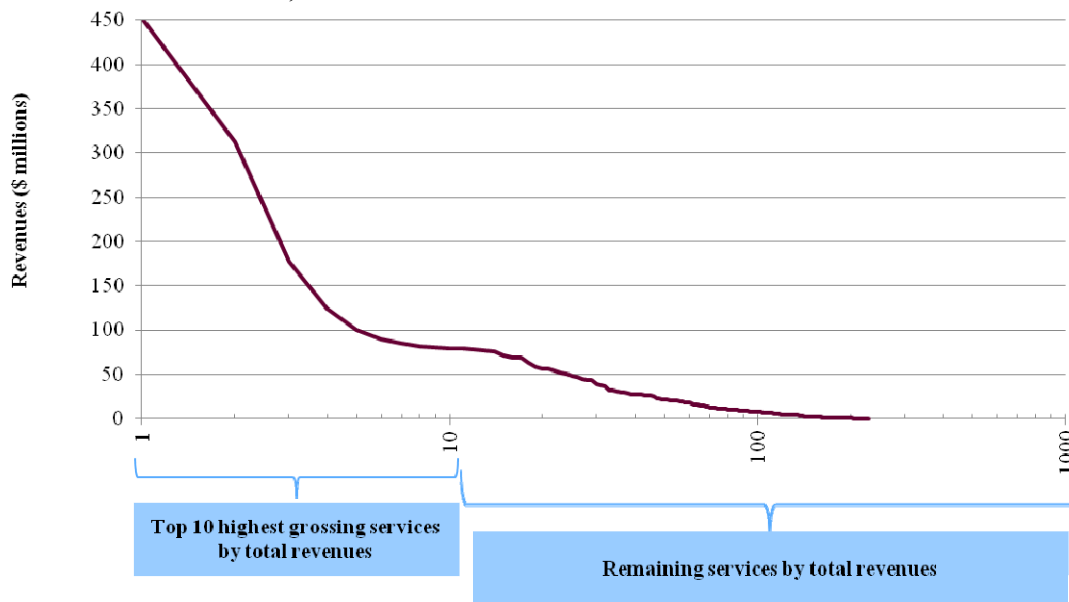
Revenues for English-language private conventional television stations include revenues for ethnic stations since a significant portion of these stations' revenues was derived from English-language programming. "Other" revenues include funding from the LPIF.

**Table 4.2.4 Revenues of discretionary services, by language of broadcast**

Services	Revenues (\$ thousands)			PBIT (\$ thousands)			PBIT margin (%)		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
<i>Specialty services</i>									
<i>English-language</i>									
Category A	1,347,720	1,376,935	1,409,549	489,928	495,284	469,288	36.4	36.0	33.3
Category B	332,660	373,721	375,938	92,747	111,385	112,605	27.9	29.8	29.7
Category C	794,906	850,891	968,017	116,585	218,905	211,780	14.7	25.7	21.9
Subtotal	2,475,285	2,601,547	2,753,504	699,260	825,574	793,673	28.2	31.7	28.8
<i>French-language</i>									
Category A	276,529	296,800	268,732	78,789	91,640	74,712	28.5	30.9	27.8
Category B	29,027	37,418	42,983	-4,206	-2,876	-4,533	-14.5	-7.7	-10.5
Category C	265,686	269,679	282,522	25,089	49,354	34,815	9.4	18.3	12.3
Subtotal	571,243	603,897	594,237	99,672	138,118	104,994	17.4	22.9	17.7
<i>Ethnic and third-language</i>									
Category A	67,856	60,429	57,392	18,080	15,268	9,935	26.6	25.3	17.3
Category B	15,746	26,151	23,246	2,717	2,841	3,851	17.3	10.9	16.6
Subtotal	83,601	86,580	80,638	20,797	18,109	13,786	24.9	20.9	17.1
<i>Total specialty services</i>									
Category A	1,692,105	1,734,163	1,735,672	586,797	602,191	553,935	34.7	34.7	31.9
Category B	377,433	437,291	442,168	91,258	111,350	111,923	24.2	25.5	25.3
Category C	1,060,592	1,120,570	1,250,539	141,674	268,259	246,594	13.4	23.9	19.7
Subtotal	3,130,129	3,292,024	3,428,379	819,729	981,800	912,452	26.2	29.8	26.6
Pay services	457,798	444,785	435,350	101,719	99,297	110,667	22.2	22.3	25.4
PPV services	115,739	99,652	101,326	8,358	10,543	8,336	7.2	10.6	8.2
VOD	263,921	254,532	251,336	-16,597	-8,862	-31,603	-6.3	-3.5	-12.6
Subtotal	837,458	798,969	788,012	93,480	100,978	87,400	11.2	12.6	11.1
<b>Total</b>	<b>3,967,587</b>	<b>4,090,994</b>	<b>4,216,392</b>	<b>913,209</b>	<b>1,082,778</b>	<b>999,852</b>	<b>23.0</b>	<b>26.5</b>	<b>23.7</b>

Source: CRTC data collection

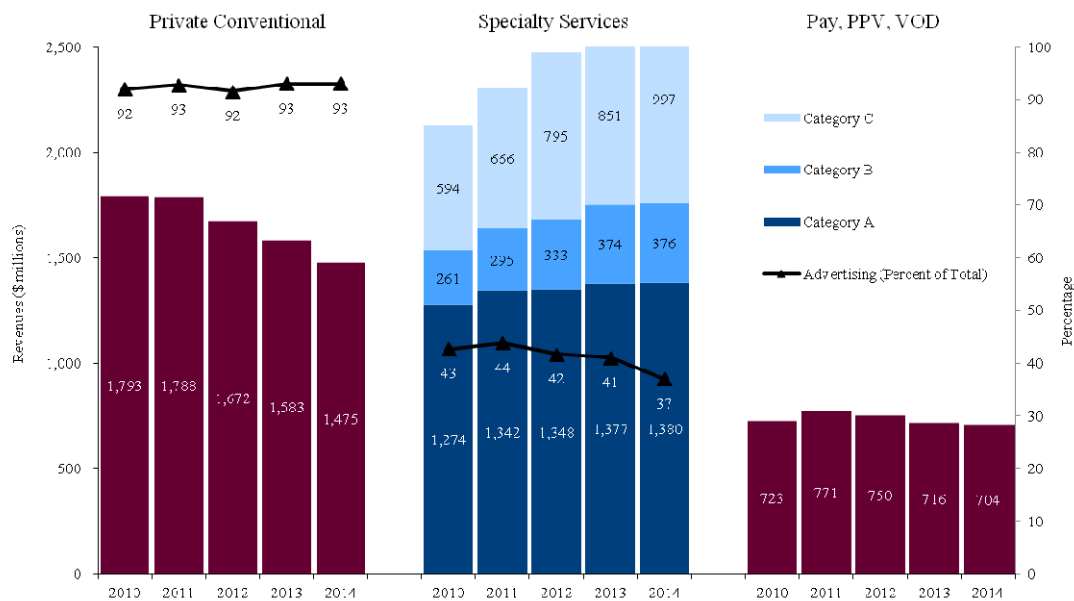
**Figure 4.2.4 Ranking by revenue for individual discretionary services, in descending order, 2014**



Source: CRTC data collection

This graph shows the total revenues reported by individual discretionary services, in descending order, in 2014. Each of the top five services reported at least \$100 million in revenues, while each of the next five services reported between \$80 million to \$90 million in revenues. Each of the next 74 ranked services reported total revenues in excess of \$10 million; each of the next 83 services reported total revenues in excess of \$1 million; and each of the remaining ranked services reported total revenues of less than \$1 million. The top three services were sports networks, and the remaining top ten services belonged to a range of different genres.

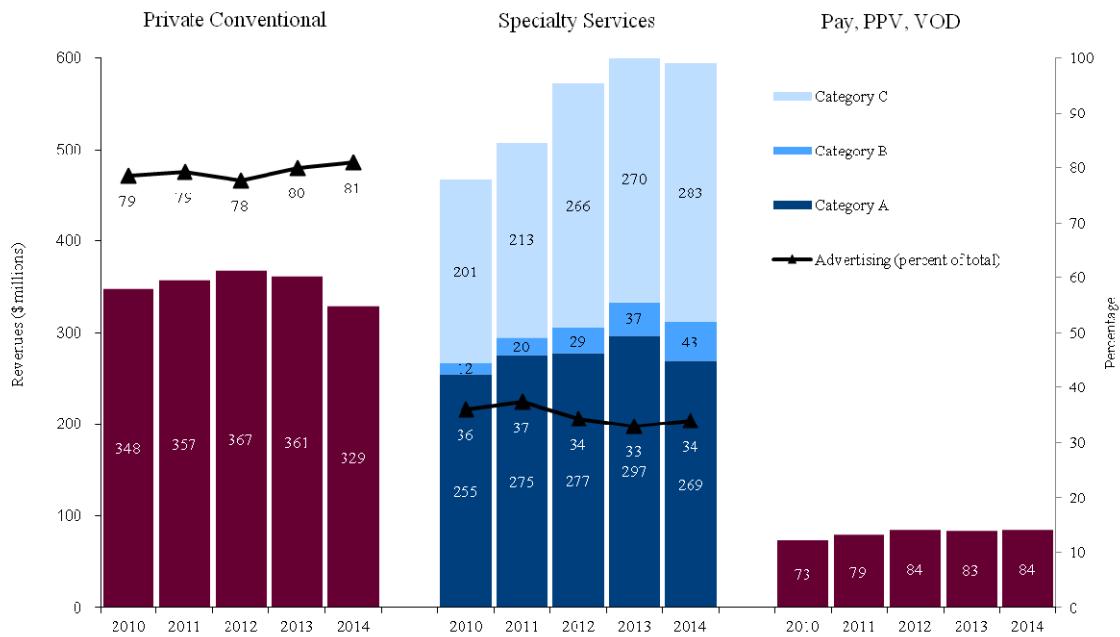
**Figure 4.2.5 Revenues of English-language private conventional television, specialty, and pay, PPV, and VOD services**



Source: CRTC data collection

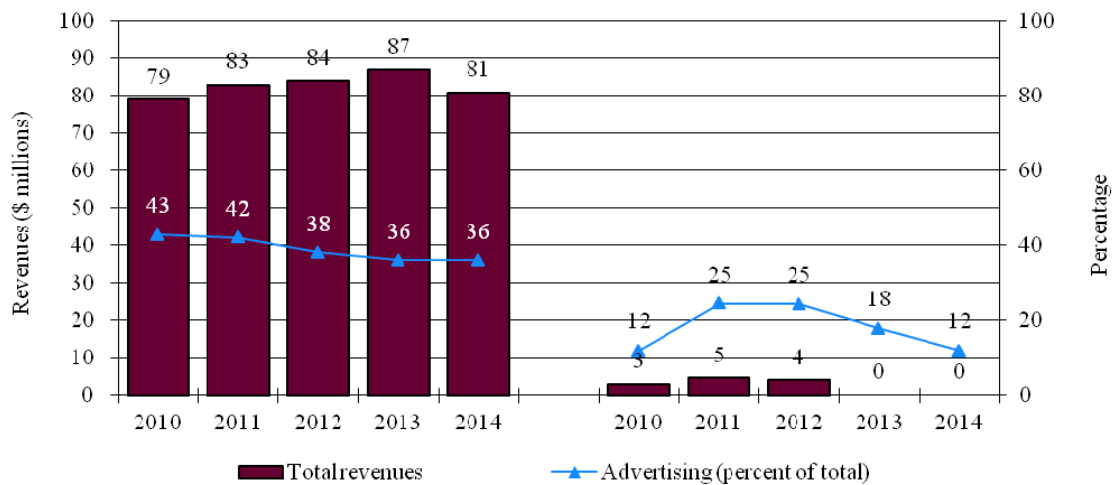
Ethnic conventional television stations have been included under “private conventional” since a significant portion of their revenues is derived from English-language programming. English-language discretionary services include bilingual services.

**Figure 4.2.6 Revenues of French-language private conventional television, specialty, and pay, PPV, and VOD services**



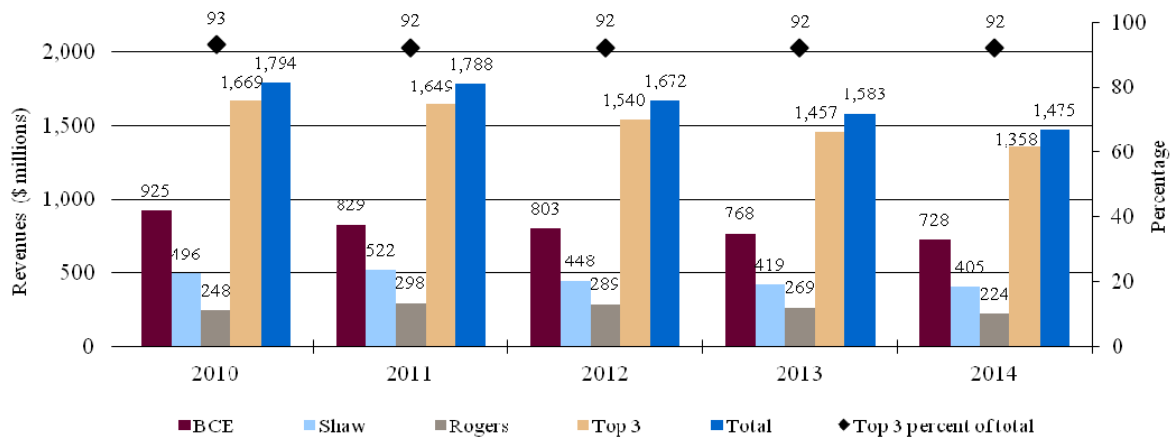
Source: CRTC data collection

**Figure 4.2.7 Revenues of ethnic and third-language specialty and pay services**



Source: CRTC data collection

**Figure 4.2.8 Collective revenues of top three English-language private conventional television ownership groups**

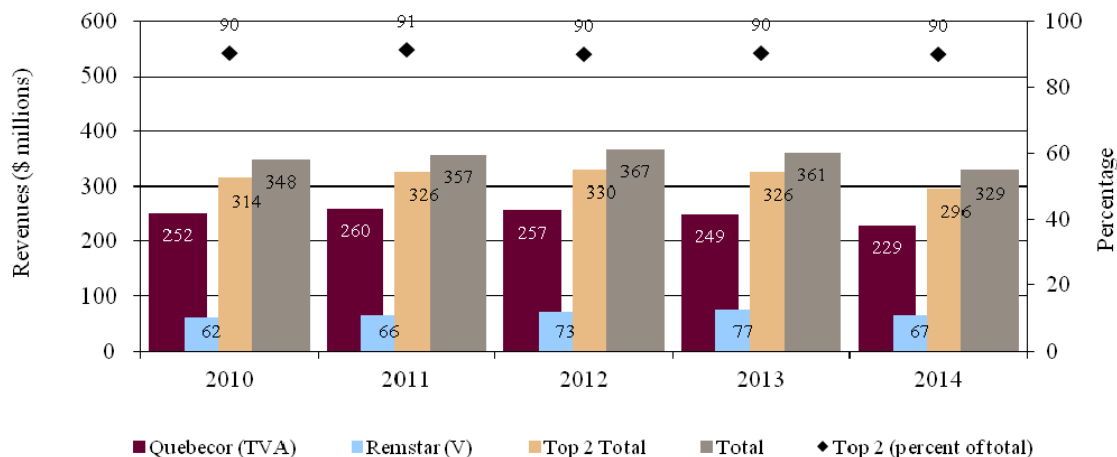


Source: CRTC data collection

This graph shows the revenues of each of the three largest English-language private conventional television ownership groups, as well as the total revenues for all three, in each of the 2010 to 2014 broadcast years. It also shows the total revenues of these three groups as a percentage of the revenues of all groups for the same years. Ethnic private conventional television stations have been included since a significant portion of their revenues is derived from English-language programming.

Each station's total annual revenues are attributed to the ownership group that was deemed to be its owner as of 31 August of that year. Total revenues include funding from LPIF.

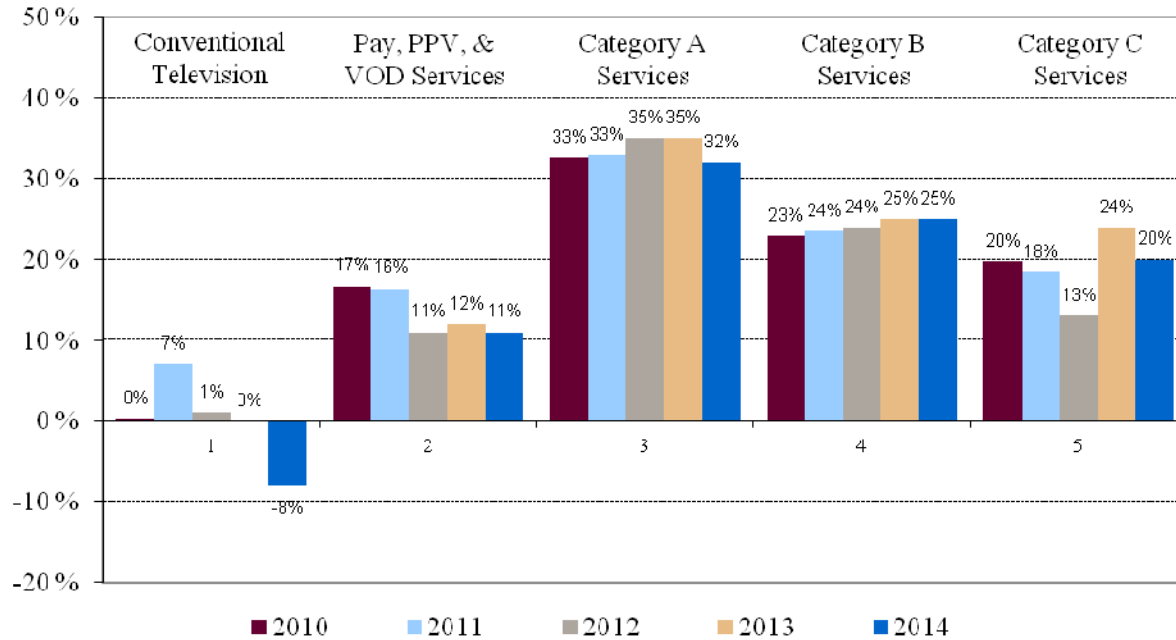
**Figure 4.2.9 Collective revenues of top two French-language private conventional television ownership groups**



Source: CRTC data collection

**b) Financial performance**

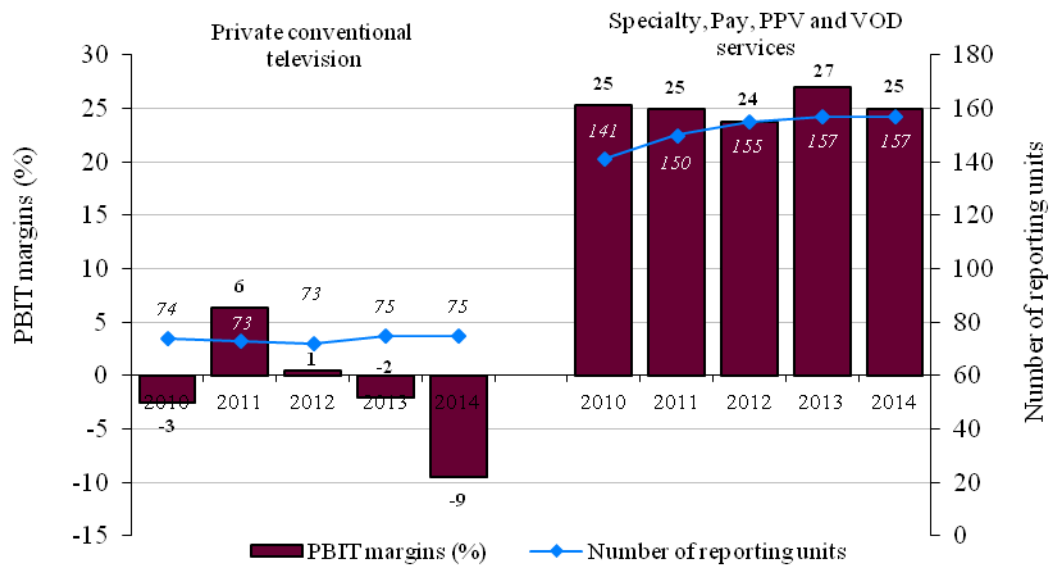
**Figure 4.2.10 Aggregate PBIT margins for private conventional television, pay, PPV, and VOD services, and for Category A, B, and C specialty services**



Source: CRTC data collection

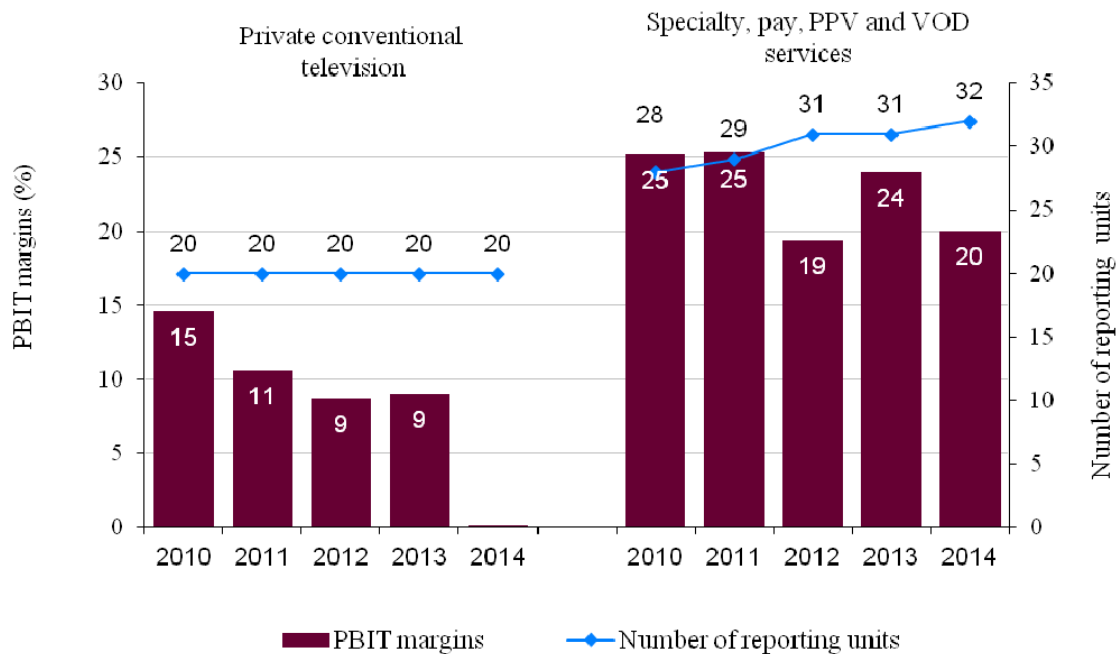


**Figure 4.2.11 Aggregate PBIT margins for English-language private conventional television, specialty, pay, PPV, and VOD services**



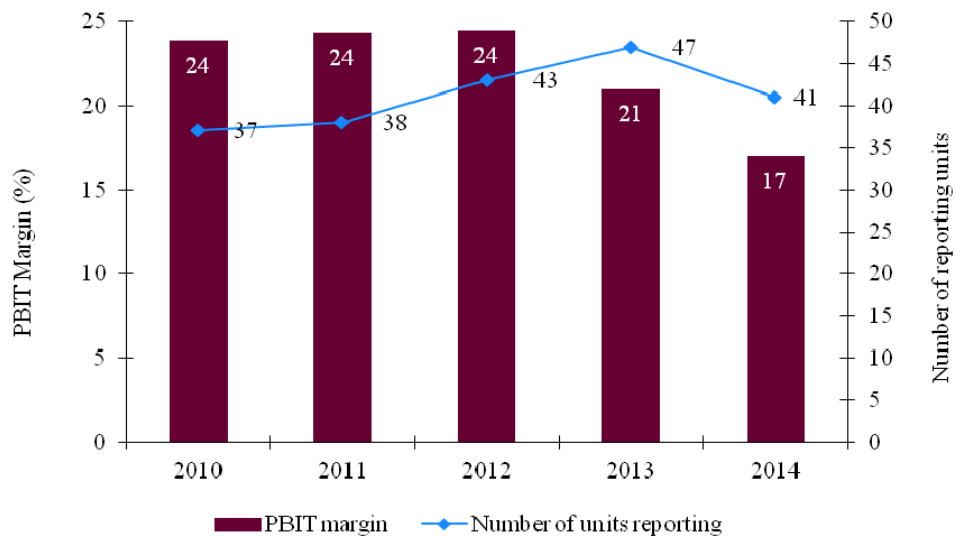
Source: CRTC data collection

**Figure 4.2.12 Aggregate PBIT margins for French-language private conventional television, pay, PPV, VOD, and specialty services**



Source: CRTC data collection

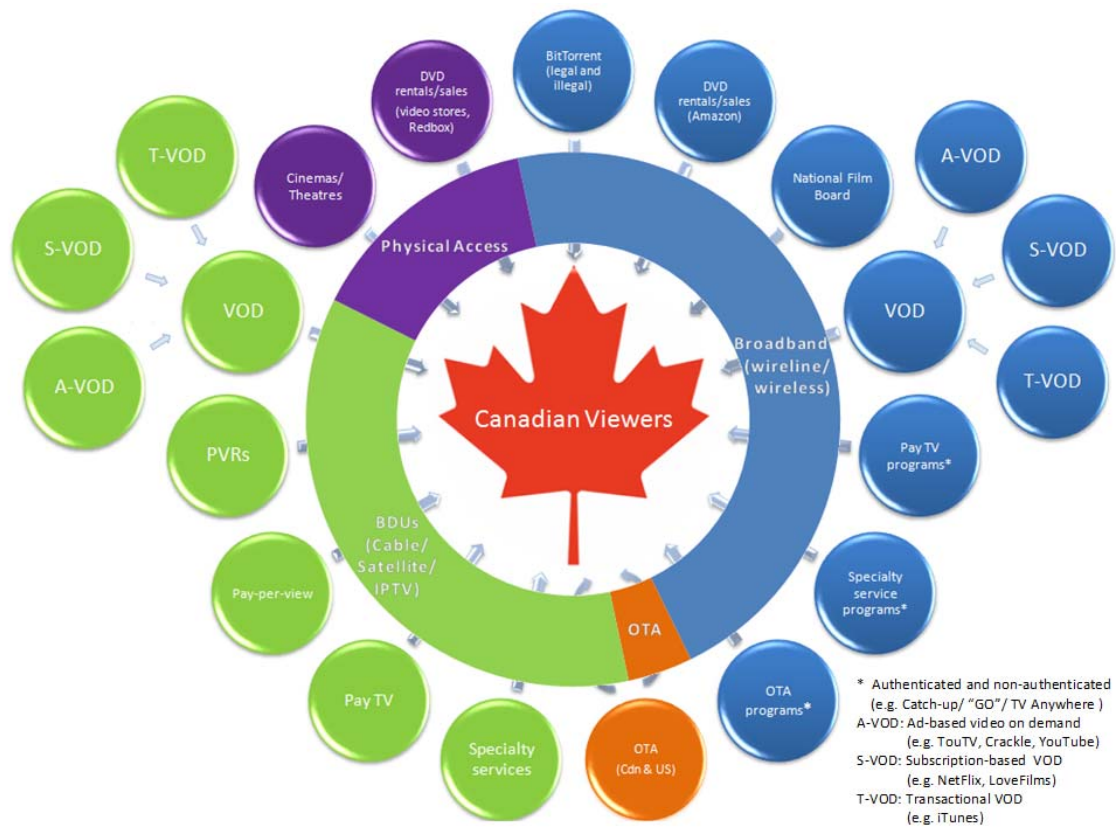
**Figure 4.2.13 Aggregate PBIT margins for ethnic and third-language specialty and pay services**



Source: CRTC data collection

c) *Availability of television and video services*

**Chart 4.2.1**      **Programming sources and platforms**

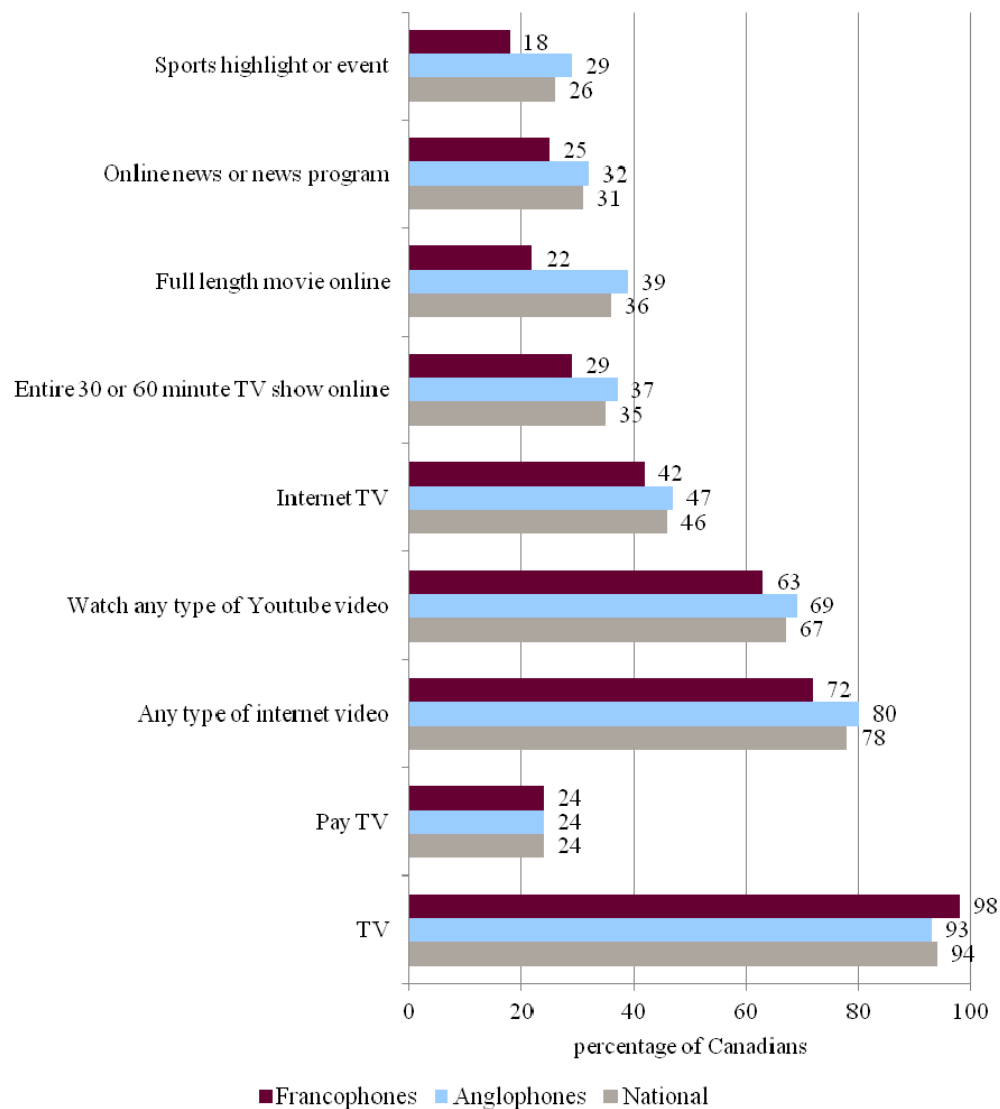


Canadians enjoy multiple sources and means of accessing content, from conventional over-the-air linear broadcasting to digital media provided over the Internet. This chart shows the various categories and types of programming sources and platforms.

For figures and tables with the Media Technology Monitor (MTM) as a source, note that:

- “Internet video” was defined as watching or streaming video available over the Internet (e.g. video clips on YouTube, television programs, sports, movies, etc.); and
- “Internet TV” as watching or streaming television programs or clips available over the Internet.

**Figure 4.2.14 Percentage of Canadians who viewed television and Internet video services and programming in the past month, by language and platform**



Source: MTM 2014 (Respondents: Canadians 18+)

**Table 4.2.5 Type and number of television services authorized to broadcast in Canada, by language of broadcast**

	English-language		French-language		Third-language		All languages	
	2013	2014	2013	2014	2013	2014	2013	2014
<b>Canadian conventional television services</b>								
CBC/SRC (owned and operated)	14	14	13	13	0	0	27	27
Private commercial	64	64	#20	20	6	6	#90	90
Religious	8	8	0	0	0	0	8	8
Educational	#4	4	#3	3	0	0	#7	7
Aboriginal	2	1	0	0	1	0	3	1
<b>Canadian discretionary services</b>								
Specialty Category A services	42	44	15	16	5	5	62	65
Specialty Category B services	74	77	9	10	44	35	127	122
Specialty Category C services	8	8	5	5	0	0	13	3
Pay television services	7	7	2	2	0	0	9	9
PPV services (DTH and terrestrial)	13	10	1	0	0	0	14	10
VOD services	23	23	1	1	2	0	26	24
<b>Other Canadian services</b>								
Community services	11	11	2	2	0	0	13	13
House of Commons (CPAC)	1	1	1	1	0	0	2	2
<b>Non-Canadian services authorized for distribution in Canada</b>								
	104	120	10	11	128	141	242	272
<b>Total</b>	<b>374</b>	<b>392</b>	<b>84</b>	<b>84</b>	<b>186</b>	<b>187</b>	<b>644</b>	<b>663</b>

Source: CRTC internal database

This table shows the types and number of television services that are authorized to broadcast in Canada. Types include conventional television services; various discretionary services (i.e., specialty, pay, PPV, and VOD); community services and the House of Commons (CPAC) service; and non-Canadian programming services authorized for distribution.

In regard to the data:

- Radiocommunication distribution undertakings (RDUs), rebroadcasters, exempt television services, specialty services for which broadcast authority has expired, and some network licences are not included;
- Private commercial does not include private commercial religious stations;
- specialty Category B services include only services that have been launched and have filed annual returns with the Commission;
- Pay television services include only pay services that launched as of 31 December 2012;
- VOD services include services that have been approved but are not necessarily in operation. The number of services presented in the table has decreased following the issuance of *Exemption order for small video-on-demand undertakings*, Broadcasting Order CRTC 2011-60, 31 January 2011;
- Carriage of authorized non-Canadian services is at the discretion of the BDU. Appendix 2 to *List of non-Canadian programming services authorized for distribution – Annual compilation of amendments*, Broadcasting Regulatory Policy CRTC 2015-27, 30 January 2015, sets out a complete list of non-Canadian programming services approved as of 31 December 2014;
- English-language services include those considered bilingual (English/French and English/Native); and other Canadian services exclude community channels reported by BDU licensees.

**Table 4.2.6 Number of Canadian public/community/educational and private conventional television services authorized to broadcast, by province and language of broadcast, 2014**

Province/territory	English-language		French-language		Third-language		Total	
	Public, community and educational	Private conv.	Public, community and educational	Private conv.	Public, community and educational	Private conv.	Public, community and educational	Private conv.
British Columbia	6	12	1	0	0	1	7	13
Alberta	3	16	1	0	0	2	4	18
Saskatchewan	2	6	1	0	0	0	3	6
Manitoba	2	4	1	0	0	0	3	4
Ontario	5	24	3	0	0	2	8	26
Quebec	1	3	10	20	0	1	11	24
New Brunswick	2	3	1	0	0	0	3	3
Nova Scotia	3	3	0	0	0	0	3	3
Prince Edward Island	1	0	0	0	0	0	1	0
Newfoundland and Labrador	1	1	0	0	0	0	1	1
The North	1	1	0	0	0	0	1	1
Canada	27	73	18	20	0	6	45	99

Source: CRTC internal database

Nationally, Canadians have access to 99 private conventional television services and 45 public/community/educational television services. Québec leads all provinces in regard to public, community and education stations (11). Ontario leads all provinces in regard to private conventional television stations (26).

**d) Audience measurement**

In regard to this subsection:

Unless otherwise specified, audience measurement data sourced from Numeris (formerly BBM Canada) was collected by portable people meter (PPM) devices, as opposed to diaries;

The Numeris data presented by linguistic market divides Canada into two sections: (1) all of Canada, excluding Francophone respondents in Quebec; and (2) exclusively Francophones respondents in Quebec;

The television seasons used by Numeris were the following:

-31 August 2009 to 29 August 2010, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.;

-30 August 2010 to 28 August 2011, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.;

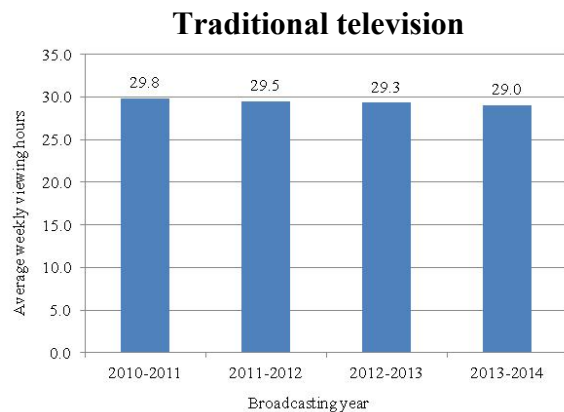
-29 August 2011 to 26 August 2012, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.;

-27 August 2012 to 25 August 2013, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.; and

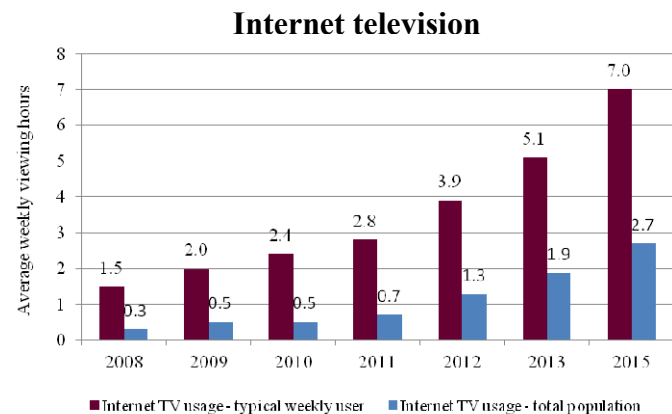
-26 August 2013 to 31 August 2014, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.-27 August 2012 to 25 August 2013, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.; and

-1 September 2013 to 30 August 2014, includes all persons 2+, Monday to Sunday, 2 a.m. to 2 a.m.

**Figure 4.2.15 Average number of hours Canadians watched traditional television (2010-2011 through 2013-2014 broadcast years) and Internet television (2008 to 2015)**



Source: Numeris (formerly BBM Canada)



Source: MTM (respondents: Canadians 18+)

These graphs show the national average number of hours Canadians 18 years of age and older watched traditional television (excluding digital media) and Internet television each week. The graph displaying Internet television data shows the viewing habits of respondents who watch Internet television every week, as well as those of the national average. 2014 data for Internet TV is unavailable and 2015 data is based on MTM's spring survey.

Whereas viewing of traditional television has fallen in the past 4 years, Internet television viewing has increased considerably.

**Table 4.2.7      Average number of hours Canadians watched traditional television each week, by age group**

	2009-10	2010-11	2011-12	2012-13	2013-14
All persons 2+	28.0	28.5	28.2	27.9	27.4
<i>Annual growth</i>		1.8%	-1.1%	-1.1%	-1.8%
Children 2-11	22.4	22.7	22.2	21.6	20.6
<i>Annual growth</i>		1.3%	-2.2%	-2.7%	-4.6%
Teens 12-17	23.0	22.4	22.7	21.0	19.9
<i>Annual growth</i>		-2.6%	1.3%	-7.5%	-5.2%
18-34	23.5	23.0	22.8	21.9	20.6
<i>Annual growth</i>		-2.1%	-0.9%	-3.9%	-5.9%
35-49	25.1	25.3	24.8	24.7	24.0
<i>Annual growth</i>		0.8%	-2.0%	-0.4%	-2.8%
50-64	32.5	33.6	33.1	33.2	33.4
<i>Annual growth</i>		3.4%	-1.5%	0.3%	0.6%
65+	40.4	42.2	41.9	41.5	41.8
<i>Annual growth</i>		4.5%	-0.7%	-1.0%	0.7%

Source: Numeris (formerly BBM Canada)

This table shows the national average of weekly viewing hours by age group. It does not include digital media. For the third consecutive year, average weekly viewing declined across all age groups except for the 65+ age group which saw little movement over the same timeframe.



**Table 4.2.8 Viewing share of Canadian and non-Canadian television services, by language and type of service, for all of Canada, excluding the Quebec francophone market**

Viewing share (%)	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
<b>Canadian services</b>					
<b>English-language</b>					
CBC	6.3	6.4	5.5	5.1	6.9
Private conventional	26.6	25.0	25.6	24.9	25.3
Specialty	36.9	36.0	35.7	36.3	35.6
Pay	6.5	6.3	6.2	5.7	5.3
Digital pay and specialty	5.9	7.0	7.7	9.1	9.4
Other services	2.3	2.3	2.2	2.3	2.0
<b>Total English-language</b>	84.5	83.0	82.8	83.4	84.5
<i>Annual growth (%)</i>		-1.7	-0.3	0.7	1.3
<b>French-language</b>					
CBC	0.1	0.2	0.2	0.1	0.1
Private conventional	0.2	0.1	0.1	0.1	0.1
Télé-Québec	0	0	0	0	0
Specialty	0.4	0.4	0.4	0.4	0.4
Pay	0	0	0	0	0
Digital pay and specialty	0	0	0	0	0
<b>Total French-language</b>	0.8	0.8	0.8	0.7	0.8
<i>Annual growth (%)</i>		4.2	-0.3	-10.4	14.3
<b>Other languages</b>					
Private conventional	1.3	1.3	1.1	0.9	0.6
Specialty	1.0	1.2	1.0	0.9	1.0
Digital	0	0	0	0	0
APTN	0.2	0.2	0.1	0.2	0.2
<b>Total other languages</b>	2.4	2.6	2.3	2.0	1.8
<i>Annual growth (%)</i>		6.1	-12.5	-10.0	-10.0
Community services	0.2	0.3	0.3	0.3	0.3
VOD/PPV	0	0	0	0	0
<b>Total Canadian services</b>	87.9	86.7	86.1	86.4	87.4
<i>Annual growth (%)</i>		-1.4	-0.7	0.3	1.2
<b>Non-Canadian services</b>					
U.S. conventional	4.7	5.3	5.4	5.0	4.5
U.S. specialty	7.3	8.0	8.5	8.8	8.0
International	0	0	0	0	0
<b>Total non-Canadian services</b>	12.1	13.3	13.9	13.7	12.5
<i>Annual growth (%)</i>		9.9	4.5	-1.1	-8.8
<b>Total hours (millions)</b>	<b>709.3</b>	<b>713.2</b>	<b>720.0</b>	<b>712.0</b>	<b>710.7</b>
<i>Annual growth (%)</i>		0.6	1.0	-1.1	-0.2

Source: Numeris (formerly BBM Canada)

**Table 4.2.9 Viewing share of Canadian and non-Canadian television services, by language and type of service, in the Quebec francophone market**

Viewing share (%)	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
<b>Canadian services</b>					
<b>French-language</b>					
CBC	12.5	12.9	11.8	12.8	13.4
Private conventional	32.9	32.3	32.0	32.4	30.8
Télé-Québec	3.2	3.0	2.9	3.0	3.0
TFO	0	0.1	0.1	0.1	0.3
Specialty	36.1	35.1	36.4	34.3	33.6
Pay	4.1	3.6	3.0	2.9	2.7
Digital pay and specialty	3.2	5.1	6.4	7.5	8.7
Total French-language	92.0	92.2	92.7	93.0	92.5
<i>Annual growth (%)</i>		0.2	0.5	0.3	-0.1
<b>English-language</b>					
CBC	0.6	0.5	0.6	0.4	0.8
Private conventional	1.9	1.9	1.7	1.7	1.7
Specialty	2.4	2.3	2.1	1.9	2.0
Pay	0.4	0.4	0.4	0.5	0.5
Digital pay and specialty	0.6	0.8	0.6	0.7	0.7
Other services	0	0	0.1	0	0
Total English-language	6.0	6.0	5.5	5.2	5.7
<i>Annual growth (%)</i>		-0.1	-8.9	-4.3	9.6
<b>Other languages</b>					
Private conventional	0.1	0.1	0.1	0.2	0
Specialty	0	0	0	0	0
Digital	0	0	0	0	0
APTN	0.1	0	0	0.1	0
Total other languages	0.2	0.2	0.2	0.3	0.1
<i>Annual growth (%)</i>		-21.8	46.6	42.9	-66.7
Community services	0.2	0.2	0.2	0.2	0.2
VOD/PPV	0	0	0	0	0
<b>Total Canadian services</b>	98.4	98.5	98.6	98.8	98.3
<i>Annual growth (%)</i>		0.1	0.1	0.2	-0.1
<b>Non-Canadian services</b>					
US conventional	1.0	1.0	0.8	0.8	1.0
US specialty	0.6	0.5	0.6	0.5	0.5
International	0	0	0.1	0.1	0.1
<b>Total non-Canadian services</b>	1.6	1.5	1.5	1.4	1.6
<i>Annual growth (%)</i>		-4.2	-2.3	-2.7	14.3
<b>Total hours (millions)</b>	217.9	219.5	211.3	216.5	220.3
<i>Annual growth (%)</i>		0.7	-3.8	2.5	1.8

Source: Numeris (formerly BBM Canada)

**Table 4.2.10 Average weekly viewing hours for Canadian programs broadcast by Canadian television services, by language market, program origin, and program category**

Viewing hours (millions)	English-language and ethnic services, all of Canada (excluding Quebec francophone market)				French-language services, Quebec francophone market			
	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2010- 2011	2011- 2012	2012- 2013	2013- 2014
News (category 1)	76.5	76.7	84.7	84.8	32.0	29.8	30.7	26.4
% Canadian	100	100	100.0	100.0	99.0	98.8	98.8	98.7
% of total	13.4	13.3	14.6	14.2	15.6	15.0	15.0	13.2
Long-form documentary (category 2(b))	34.7	22.5	21.6	11.2	12.4	11.4	10.9	10.4
% Canadian	40.5	43.8	46.9	48.2	50.5	44.6	42.9	47.0
% of total	6.1	3.9	3.7	3.9	6.1	5.7	5.4	5.2
Other informational (categories 2 through 5, excluding 2(b))	57.0	52.7	52.2	50.2	34.1	32.6	32.7	28.7
% Canadian	51.1	55.6	56.9	59.1	91.3	91.1	91.1	91.3
% of total	10.0	9.1	9.0	8.4	16.6	16.4	16.0	14.4
Sports (category 6)	75.2	84.5	70.9	95.5	12.7	13.4	10.7	17.7
% Canadian	71.4	72.0	65.9	72.9	82.0	82.1	67.8	75.0
% of total	13.2	14.6	12.2	16.0	6.2	6.8	5.3	8.9
Drama and comedy (category 7)	235.8	236.5	237.4	227.5	78.3	75.3	79.8	76.0
% Canadian	19.7	20.1	20.0	19.4	30.2	29.3	29.1	28.8
% of total	41.3	40.9	40.9	38.1	38.2	38.0	39.1	38.1
Music, dance, and variety (categories 8 and 9)	10.7	9.7	10.5	9.0	4.4	3.5	3.8	3.1
% Canadian	41.8	27.4	23.8	34.6	80.8	80.8	81.5	85.4
% of total	1.9	1.7	1.8	1.5	2.2	1.8	1.8	1.6
Game show (category 10)	8.1	4.9	8.1	9.1	8.9	8.9	9.1	9.0
% Canadian	15.1	28.8	26.7	23.6	89.9	92.5	94.1	95.4
% of total	1.4	0.8	1.4	1.5	4.3	4.5	4.5	4.5
General entertainment/ Human interest/ Reality (category 11)	72.3	91.0	94.6	97.6	21.4	23.0	25.9	28.1
% Canadian	28.2	27.7	29.7	31.7	73.9	71.9	68.9	68.2
% of total	12.7	15.7	16.3	16.3	10.4	11.6	12.7	14.1
Other (categories 12 through 15)	0	0	0.1	4.1	0.8	0.4	0.4	18.6
% Canadian	100	98.0	96.4	61.5	98.5	98.2	91.6	67.8
% of total	0	0	0	0	0.4	0.2	0.2	0.0
Total	570.4	578.6	580.1	596.8	205.0	198.2	204.1	199.5
% Canadian	43.1	43.8	43.4	46.1	64.0	63.2	61.4	61.5

Source: Numeris (formerly BBM Canada)

The data in this table and the following three tables are based on Canadian services with available data that incorporate country of origin and program genre.

**Table 4.2.11 Average weekly viewing hours for Canadian programs broadcast by private conventional television services, by language market, program origin, and program category**

Viewing hours (millions)	English-language and ethnic services, all of Canada (excluding Quebec francophone market)				French-language services, Quebec francophone market			
	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2010- 2011	2011- 2012	2012- 2013	2013- 2014
News (category 1)	34.3	35.4	36.7	37.3	11.0	9.4	10.3	9.2
<i>% Canadian</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
<i>% of total</i>	<i>20.0</i>	<i>20.2</i>	<i>21.6</i>	<i>22.0</i>	<i>15.6</i>	<i>14.1</i>	<i>14.8</i>	<i>13.6</i>
Long-form documentary (category 2(b))	2.4	1.0	1.5	1.8	0.9	0.3	0.3	0.2
<i>% Canadian</i>	<i>57.8</i>	<i>91.9</i>	<i>95.2</i>	<i>89.2</i>	<i>95.2</i>	<i>76.4</i>	<i>90.5</i>	<i>79.9</i>
<i>% of total</i>	<i>1.4</i>	<i>0.6</i>	<i>0.9</i>	<i>1.1</i>	<i>1.2</i>	<i>0.4</i>	<i>0.4</i>	<i>0.4</i>
Other informational (categories 2 through 5, excluding 2(b))	12.0	11.0	10.4	10.5	15.9	15.1	14.5	12.3
<i>% Canadian</i>	<i>53.8</i>	<i>58.3</i>	<i>62.2</i>	<i>65.8</i>	<i>99.6</i>	<i>99.6</i>	<i>100</i>	<i>99.8</i>
<i>% of total</i>	<i>7.0</i>	<i>6.3</i>	<i>6.1</i>	<i>6.2</i>	<i>22.6</i>	<i>22.5</i>	<i>20.8</i>	<i>18.3</i>
Sports (category 6)	3.8	11.6	4.6	3.8	0.2	1.3	0	0.7
<i>% Canadian</i>	<i>4.6</i>	<i>66.0</i>	<i>6.5</i>	<i>7.4</i>	<i>100</i>	<i>96.9</i>	<i>85.9</i>	<i>60.9</i>
<i>% of total</i>	<i>2.2</i>	<i>6.6</i>	<i>2.7</i>	<i>2.3</i>	<i>0.2</i>	<i>2.0</i>	<i>0.0</i>	<i>0.1</i>
Drama and comedy (category 7)	70.8	67.1	64.9	65.3	25.2	23.7	26.9	28.4
<i>% Canadian</i>	<i>10.8</i>	<i>10.5</i>	<i>10.3</i>	<i>10.0</i>	<i>24.3</i>	<i>23.9</i>	<i>22.7</i>	<i>22.5</i>
<i>% of total</i>	<i>41.4</i>	<i>38.3</i>	<i>38.1</i>	<i>38.6</i>	<i>35.8</i>	<i>35.3</i>	<i>38.7</i>	<i>42.2</i>
Music, dance, and variety (categories 8 and 9)	6.2	6.3	7.3	5.4	1.9	1.0	0.9	0.3
<i>% Canadian</i>	<i>9.6</i>	<i>3.4</i>	<i>2.0</i>	<i>3.5</i>	<i>74.7</i>	<i>67.5</i>	<i>59.7</i>	<i>71.1</i>
<i>% of total</i>	<i>3.6</i>	<i>3.6</i>	<i>4.3</i>	<i>3.2</i>	<i>2.6</i>	<i>1.5</i>	<i>1.3</i>	<i>0.4</i>
Game show (category 10)	3.1	1.8	5.0	6.0	5.8	6.2	6.6	6.9
<i>% Canadian</i>	<i>0.2</i>	<i>0</i>	<i>3.7</i>	<i>2.9</i>	<i>97.6</i>	<i>97.6</i>	<i>99.5</i>	<i>99.5</i>
<i>% of total</i>	<i>1.8</i>	<i>1.0</i>	<i>2.9</i>	<i>3.5</i>	<i>8.3</i>	<i>9.3</i>	<i>9.6</i>	<i>10.2</i>
General entertainment/ Human interest/ Reality (category 11)	38.7	40.9	40.0	39.1	8.9	9.7	9.7	9.9
<i>% Canadian</i>	<i>22.1</i>	<i>23.7</i>	<i>22.9</i>	<i>29.0</i>	<i>69.4</i>	<i>80.2</i>	<i>81.5</i>	<i>85.9</i>
<i>% of total</i>	<i>22.6</i>	<i>23.4</i>	<i>23.5</i>	<i>23.1</i>	<i>12.6</i>	<i>14.5</i>	<i>14.0</i>	<i>14.8</i>
Other (categories 12 through 15)	0	0	0	0	0.7	0.4	0.3	0
<i>% Canadian</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>0</i>
<i>% of total</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1.0</i>	<i>0.6</i>	<i>0.5</i>	<i>0</i>
Total	171.1	175.0	170.1	169.2	70.3	67.1	69.4	67.2
<i>% Canadian</i>	<i>34.5</i>	<i>38.5</i>	<i>35.9</i>	<i>38.0</i>	<i>68.1</i>	<i>69.3</i>	<i>66.9</i>	<i>64.9</i>

Source: Numeris (formerly BBM Canada)

**Table 4.2.12 Average weekly viewing hours for Canadian programs broadcast by CBC conventional services, by language market, program origin, and program category**

Viewing hours (millions)	English-language and ethnic services, all of Canada (excluding Quebec francophone market)				French-language services, Quebec francophone market			
	2010-2011	2011-2012	2012-2013	2013-2014	2010-2011	2011-2012	2012-2013	2013-2014
News (category 1)	6.8	6.6	7.1	7.2	4.1	3.8	4.4	4.1
% Canadian	100	100	100	100	100	100	100	100
% of total	15.2	17.2	20.4	14.9	14.6	15.4	15.9	13.9
Long-form documentary (category 2(b))	1.7	1.5	1.6	1.3	0.3	0.3	0.3	0.3
% Canadian	97.7	96.1	96.6	98.4	97.2	98.8	93.0	98.7
% of total	3.9	3.8	4.7	2.8	1.2	1.2	1.1	1.0
Other informational (categories 2 through 5, excluding 2(b))	2.4	2.2	2.9	2.1	4.6	4.0	3.6	2.8
% Canadian	100	100	99.9	100	100	100	99.9	99.9
% of total	5.3	5.6	8.3	4.3	16.1	16.0	12.9	9.6
Sports (category 6)	15.4	11.5	9.9	25.4	0.4	0.2	0.3	2.9
% Canadian	98.7	99.9	100	100	100	99.6	100	99.9
% of total	34.4	29.6	28.3	52.6	1.4	1.0	1.0	9.7
Drama and comedy (category 7)	11.1	11.5	9.4	8.6	8.3	7.4	9.0	8.4
% Canadian	46.4	42.6	54.1	56.0	72.8	73.1	70.0	70.0
% of total	24.9	29.6	26.9	17.8	29.1	29.7	32.4	28.6
Music, dance, and variety (categories 8 and 9)	0.1	0.2	0.1	0.1	0.8	1.1	1.4	1.5
% Canadian	78.8	36.2	100	100	99.5	99.4	100	100
% of total	0.2	0.5	0.2	0.2	3.0	4.4	5.1	5.1
Game show (category 10)	4.4	2.5	0.2	0	2.2	1.8	1.7	1.5
% Canadian	0	0	0	0	100	100	100	100
% of total	10.0	6.6	0.5	0	7.9	7.3	6.2	5.1
General entertainment/ Human interest/ Reality (category 11)	2.8	2.8	3.7	3.6	7.6	6.2	7.0	7.9
% Canadian	99.2	99.6	99.5	99.6	99.8	100	100	100
% of total	6.2	7.2	10.6	7.4	26.7	25.0	25.3	26.9
Other (categories 12 through 15)	0	0	0	2.2	0	0	0.0	0.3
% Canadian	0	0	0	100	95.8	100	100	100
% of total	0	0	0	0	0	0	0	0
Total	44.7	38.8	35.0	48.3	28.3	24.8	27.6	29.5
% Canadian	76.1	75.9	86.9	92.1	92.0	92.0	90.2	91.4

Source: Numeris (formerly BBM Canada)

**Table 4.2.13 Average weekly viewing hours for Canadian programs broadcast by Canadian pay and specialty services, by language market, program origin, and program category**

Viewing hours (millions)	English-language and ethnic services, all of Canada (excluding Quebec francophone market)				French-language services, Quebec francophone market			
	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2009- 2010	2010- 2011	2011- 2012	2013- 2014
News (category 1)	35.8	35.1	41.2	40.3	16.9	16.5	16.0	13.1
% Canadian	100	100	100	99.9	98.0	97.8	97.7	97.5
% of total	10.2	9.8	11.2	10.6	16.9	16.5	15.9	12.8
Long-form documentary (category 2(b))	28.4	17.6	16.0	20.0	10.6	10.3	9.8	9.9
% Canadian	36.3	39.0	41.0	41.1	45.8	43.1	41.2	44.6
% of total	8.1	4.9	4.3	5.3	10.6	10.3	9.7	9.6
Other informational (categories 2 through 5, excluding 2(b))	40.4	37.1	36.6	37.6	12.4	12.4	13.5	13.6
% Canadian	46.6	51.4	51.2	55.0	77.8	78.5	79.4	81.7
% of total	11.5	10.3	9.9	9.9	12.5	12.4	13.4	13.3
Sports (category 6)	56.1	61.5	56.5	66.3	12.2	11.9	10.4	14.8
% Canadian	68.4	67.9	64.7	66.3	81.2	80.1	66.9	70.2
% of total	16.0	17.1	15.3	17.5	12.2	11.8	10.4	14.4
Drama and comedy (category 7)	151.9	154.9	159.1	153.6	40.8	40.5	40.2	39.2
% Canadian	21.0	22.1	21.7	21.3	23.5	22.9	23.5	24.5
% of total	43.3	43.0	43.2	40.5	40.9	40.4	40.0	38.1
Music, dance, and variety (categories 8 and 9)	4.4	3.2	3.1	3.5	1.4	1.1	1.3	1.3
% Canadian	85.7	74.1	73.6	81.3	74.0	69.6	72.8	71.8
% of total	1.3	0.9	0.8	0.9	1.5	1.1	1.3	1.3
Game show (category 10)	2.5	2.0	3.2	3.1	0.8	0.8	0.6	0.6
% Canadian	48.0	69.9	62.4	63.0	8.4	32.1	15.9	35.8
% of total	0.7	0.6	0.9	0.8	0.8	0.8	0.6	0.6
General entertainment/ Human interest/ Reality (category 11)	31.6	48.7	53.1	54.8	4.5	6.8	8.7	10.2
% Canadian	28.6	26.1	28.7	29.1	36.9	32.9	28.0	26.4
% of total	9.0	13.5	14.4	14.5	4.5	6.7	8.7	9.9
Other (categories 12 through 15)	0	0	0	0.2	0.1	0	0	0.2
% Canadian	0	0	0	16.7	78.7	56.6	33.3	62.0
% of total	0	0	0	0	0.1	0	0	0
Total	351.2	360.1	368.8	379.3	99.8	100.2	100.5	102.8
% Canadian	42.5	42.6	42.6	43.9	53.5	52.2	50.0	50.8

Source: Numeris (formerly BBM Canada)

**Table 4.2.14 Viewing share of English- and French-language Canadian services, by ownership group and linguistic market**

Viewing share (%)	2011-2012			2012-2013			2013-2014		
	Conventional	Discretionary	Total	Conventional	Discretionary	Total	Conventional	Discretionary	Total
All of Canada, excluding the Quebec francophone market									
BCE	16.7	18.5	35.2	15.4	22.9	38.3	15.6	19.9	35.5
English services	16.7	18.4	35.1	15.4	22.7	38.1	15.6	19.7	35.2
French services	-	0.1	0.1	-	0.2	0.2	-	0.3	0.3
Shaw	8.8	14.3	23.1	8.5	15.0	23.5	8.3	14.3	22.6
English services	8.8	14.3	23.1	8.5	15.0	23.5	8.3	14.3	22.6
French services	-	-	-	-	-	-	-	-	-
Corus	0.2	9.6	9.8	0.3	12.8	13.1	1.7	11.7	13.3
English services	0.2	9.6	9.8	0.3	12.8	13.1	1.7	11.6	13.2
French services	-	-	-	-	0	0	-	0.1	0.1
Rogers	4.7	4.2	8.8	4.6	4.7	9.3	4.5	5.2	9.7
English services	4.7	4.2	8.8	4.6	4.7	9.3	4.5	5.2	9.7
French services	-	-	-	-	-	-	-	-	-
CBC-SRC	6.4	1.7	8.1	5.6	1.8	7.5	8.3	1.9	10.2
English services	6.2	1.6	7.8	5.5	1.8	7.3	8.2	1.8	10.0
French services	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2
Total hours (millions)	249.7	361.0	610.7	237.5	368.3	605.8	238.1	362.5	600.7
Quebec francophone market									
Quebecor	24.0	8.3	32.3	24.4	8.6	32.9	23.4	8.7	32.1
French services	24.0	8.3	32.3	24.4	8.6	32.9	23.4	8.7	32.1
English services	-	0	0	0	0	0	0	0	0
BCE	1.0	7.1	8.1	0.9	21.9	22.8	0.8	21.3	22.1
French services	-	5.5	5.5	-	20.3	20.3	-	19.8	19.8
English services	1.0	1.5	2.5	0.9	1.6	2.5	0.8	1.5	2.3
SRC-CBC	12.3	5.1	17.4	13.0	5.1	18.2	14.5	4.9	19.4
French services	11.7	5.0	16.7	12.6	5.1	17.7	13.7	4.9	18.6
English services	0.6	0.1	0.7	0.4	0.1	0.5	0.8	0.1	0.8
Remstar	8.6	-	8.6	8.6	-	8.6	8.0	0.9	9.0
French services	8.6	-	8.6	8.6	-	8.6	8.0	0.9	9.0
English services	-	-	-	-	-	-	-	-	-
Corus	-	-	-	-	-	-	-	8.0	8.0
English services	-	-	-	-	-	-	0.0	0.3	0.3
French services	-	-	-	-	-	-	-	7.7	7.7
Total hours (millions)	104.1	103.6	207.6	109.3	103.6	212.8	109.7	106.1	215.7

Source: Numeris (formerly BBM Canada)

This table presents viewing data broken down by ownership group.

- Calculations were based on the total average viewing hours for Canadian services, for all persons 2 years of age or older, Monday to Sunday, 2 a.m. to 2 a.m.
- Total viewing was based on viewing for all Canadian conventional stations (including ethnic stations) and Canadian discretionary services (specialty and pay only; excludes PPV and VOD services).
- Where transactions were in progress at the time of data collection, ownership was based on the date of the approval decision, not the official closing date of the transaction. Viewing for the entire television season was attributed to the ownership group holding direct and indirect voting interests greater than 50% on 31 December of each year.
- Totals for Rogers' conventional services include OMNI stations.
- As of 2014, total for Corus' services include Historia, Séries +, Teletoon, Teletoon Retro, Télétoon and Télétoon Rétro, and exclude Télélatino.

**e) *Programming expenditures***

The policy objectives of the *Broadcasting Act* include encouraging the development of Canadian expression and ensuring that each element of the Canadian broadcasting system contributes in an appropriate manner to the creation and presentation of Canadian programming. As such, Canadian broadcasters are required to allocate portions of their annual broadcasting revenues to expenditures on Canadian programming. These expenditures are used to create Canadian programming and to ensure that a diversity of voices and interests are represented in our national broadcasting system.

Television service providers contributed 43 cents per revenue dollar in support of Canadian programming during the 2013-2014 broadcast year. Canadian programming expenditures (CPE) totalled \$3 billion, 15% of which was spent on program of national interest (PNI).

Chart 4.2.2 illustrates the flow of funding to the creation of Canadian programming. A percentage of BDU subscriber revenues is used to fund Canadian discretionary (pay, specialty, PPV and VOD) services, as well as local expression (community television), the Canada Media Fund (CMF), the LPIF, and various independent funds. Commercial television services (specialty, pay, and private conventional OTA) and the CBC rely on funds generated by advertising. Government funding is also provided to the CMF, the CBC (via parliamentary appropriations), and various independent content providers.

**What are PNI?**

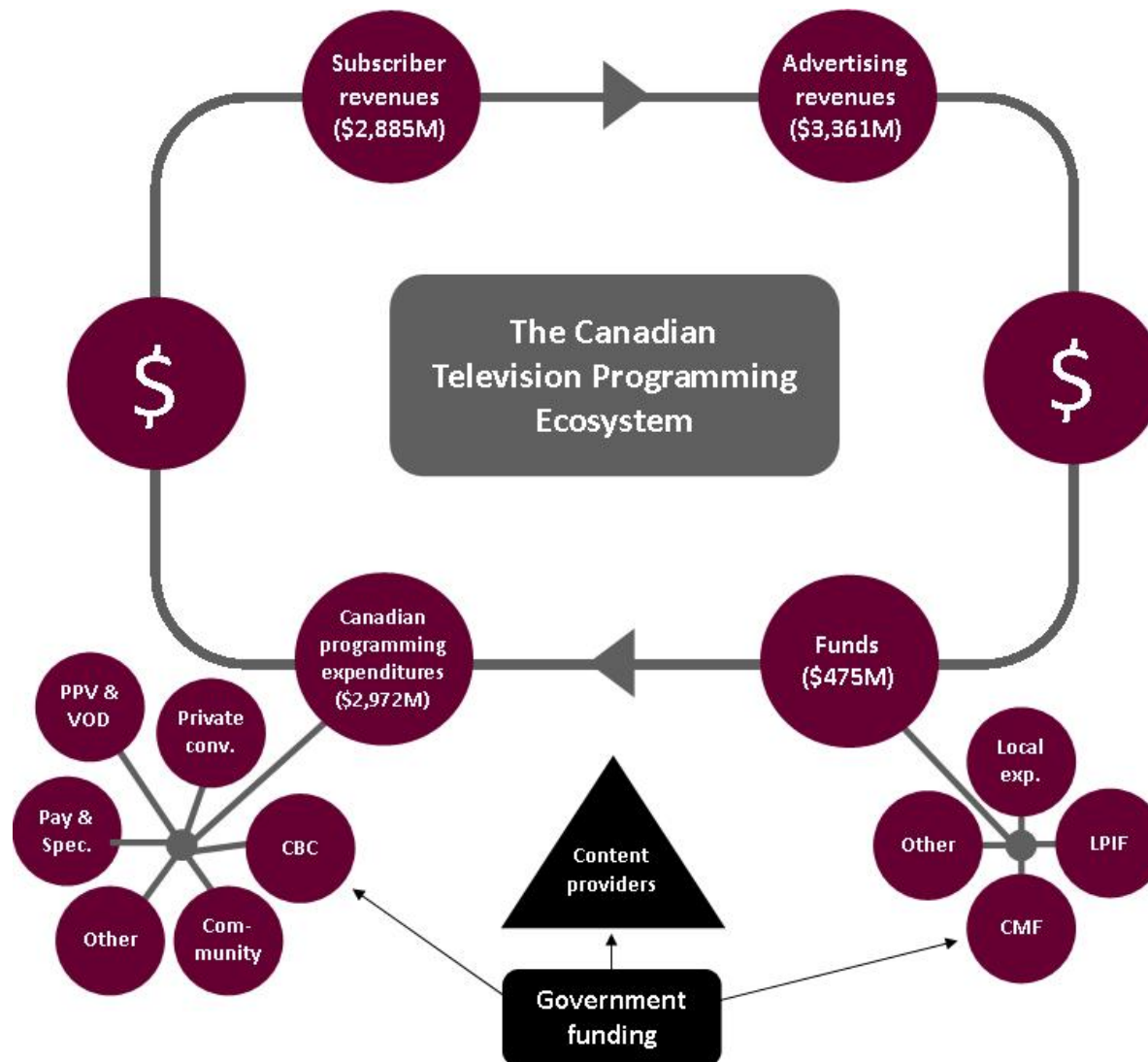
The CRTC has defined programs of national interest (PNI) as including drama and comedy, long-form documentary, and specific Canadian award shows that celebrate Canadian creative talent. For French-language broadcasters, PNI also include music video and variety programs.

For the purposes of this report, PNI expenditures include expenditures in any of the following program categories: long-form documentary (category 2b); drama and comedy (category 7); French-language music, dance, and variety programming (categories 8 and 9); and English-language award shows (subset of category 11).

The data presented in figures 4.2.20 and 4.2.21, and tables 4.2.16 and 4.2.17, include broadcasting undertakings that do not, at the time of this report, have a condition of licence setting out PNI expenditures or exhibition requirements.



Chart 4.2.2 Canadian programming funding ecosystem (2013-2014 broadcast year)



This chart provides an overview of the major sources of television program funding in Canada.

Of the revenues that BDUs collected from subscribers, approximately \$475 million went to various Canadian programming commitments and nearly \$3 billion was allocated to programming services.

Conventional television, pay and specialty services earned \$3.4 billion in advertising revenues, which flowed to programming services. The “Other” category includes low-power, non-profit, community-based television programming undertakings and educational television programming undertakings.

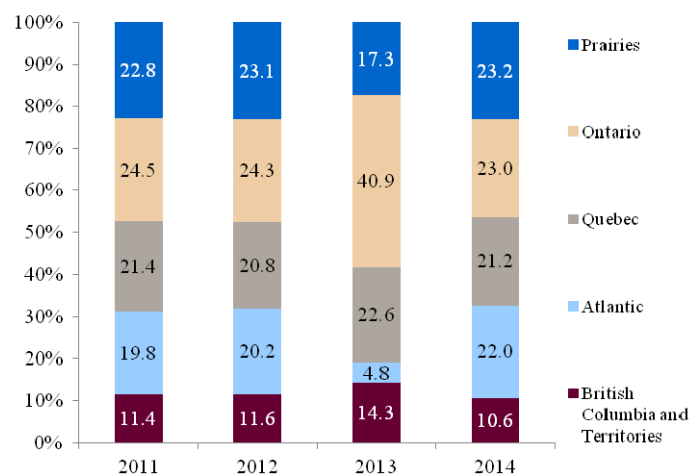
Government funding includes the CBC, CMF and other funding to content providers.

**Table 4.2.15 LPIF allocation and number of recipients**

Broadcast year	LPIF allocation (\$ millions)	Number of recipients		LPIF funding as a percentage of recipients' total revenues (excluding the CBC)
		Licensees	Stations	
2009-2010	100.7	16	79	10.8%
2010-2011	106.7	16	80	10.8%
2011-2012	112.1	16	80	11.1%
2012-2013	74.7	16	74	7.3%
2013-2014	39.3	16	74	7.7%

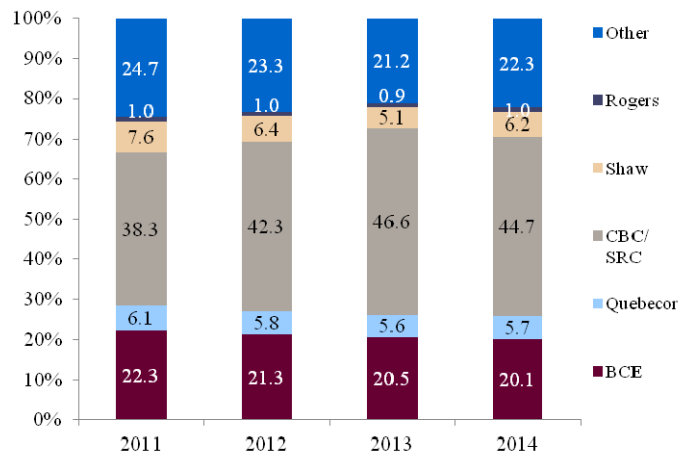
Source: CRTC data collection

The CRTC has decided that the LPIF has fulfilled its purpose and was phased out on August 31, 2014.

**Figure 4.2.16 LPIF allocation, by region**


Source: CRTC data collection

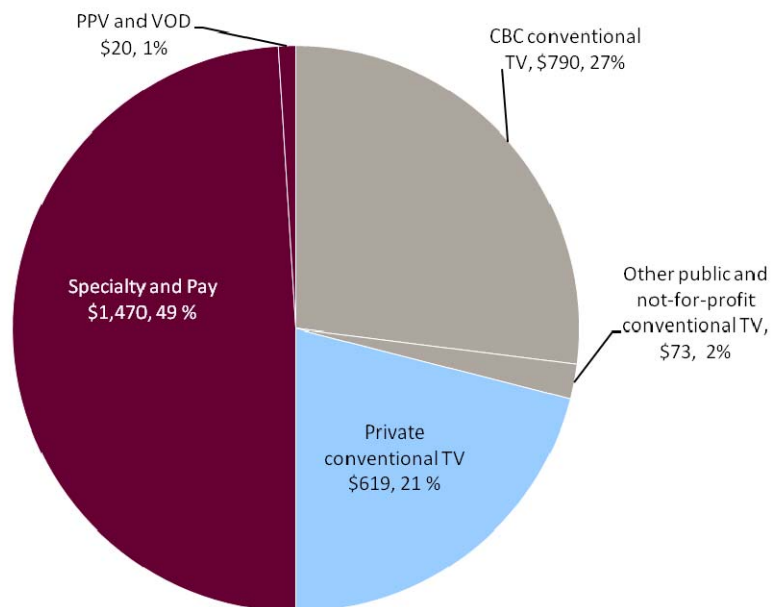
**Figure 4.2.17 LPIF allocation, by ownership group**



The percentages of the LPIF funding allocated to Shaw, Rogers, Quebecor, and smaller entities as a group (Other) all increased during the last year, whereas those allocated to the CBC and BCE decreased.

Source: CRTC data collection

**Figure 4.2.18 CPE on television, by type of service, 2014 (\$ millions)**

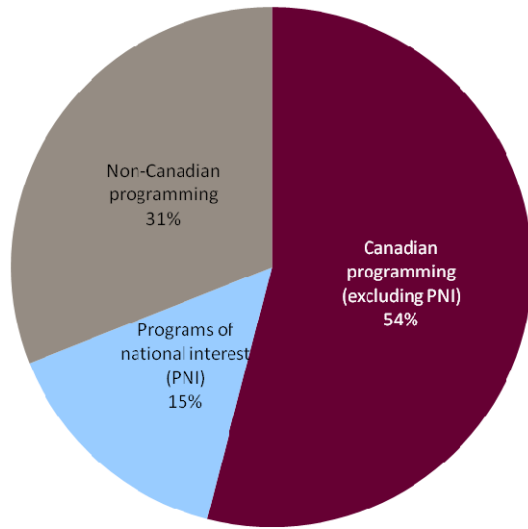


Source: CRTC data collection

This chart shows the amount that broadcasters spent on Canadian programming, by type of service, as well as the percentage of total CPE in each case. Approximately half of the spending went to specialty and pay services.

CPE amounts include spending on Canadian programs broadcast; writedowns of Canadian inventory; script and concept development; and loss on equity for Canadian programs. They also include spending relating to ownership transfer benefits (tangible benefits) and commitments made at the time of licensing. However, they exclude CMF “top-ups” reported by private conventional, specialty, pay, PPV, and VOD television services. CBC conventional television exclude indirect and facility cost allocations.

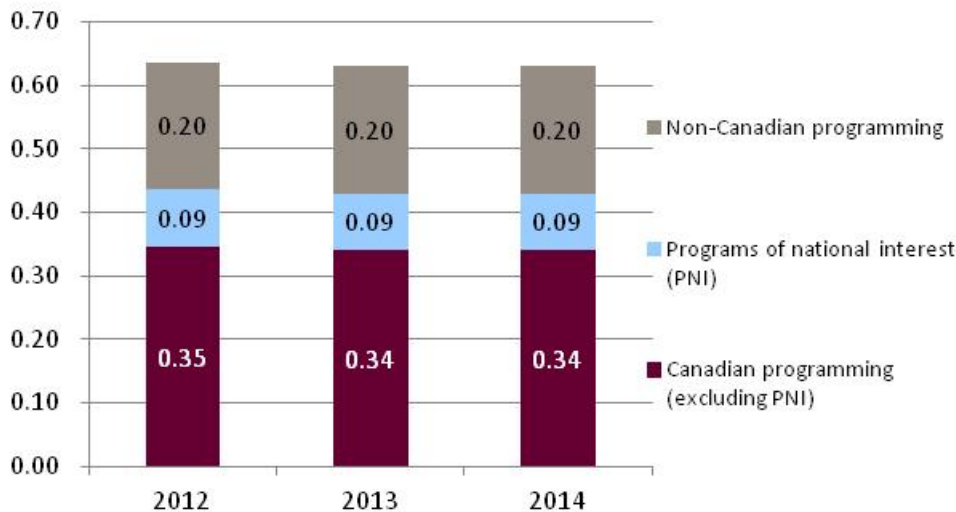
**Figure 4.2.19 Television programming expenditures (\$4.2 billion total), PNI vs. Canadian vs. non-Canadian, 2014**



This chart shows the percentages of expenditures that broadcasters spent on Canadian programming (excluding PNI), PNI, and non-Canadian programming. Approximately 70% of the spending went to Canadian programming (PNI included). Programming of VOD and PPV services, as well as other public and not-for-profit conventional television services, is excluded.

Source: CRTC data collection

**Figure 4.2.20 Programming expenditures per revenue dollar, 2014**



Source: CRTC data collection

This figure shows the amounts that broadcasters spent on Canadian programming (excluding PNI), PNI, and non-Canadian programming, on a per-revenue-dollar basis. For example, it shows that for every dollar of revenue the broadcasters received in 2014, they spent \$0.34 on Canadian programming (excluding PNI), \$0.09 on PNI, and \$0.20 on non-Canadian programming. This chart excludes VOD and PPV services as well as other public and not-for-profit conventional television.

**Table 4.2.16 PNI expenditures by type of service and program category (\$ millions)**

Program category		2012	2013	2014
Private conventional television	Long-form documentary	16.6	7.9	6.3
	Drama	59.2	66.0	65.8
	Music, dance, and variety (French programming only)	13.4	21.0	19.0
	Award shows (English programming only)	0	2.6	2.3
	Total private conventional television PNI	89.2	97.5	93.4
	<i>% of total</i>	<i>14.6</i>	<i>15.4</i>	<i>14.8</i>
CBC	Long-form documentary	43.8	38.8	30.3
	Drama	160.3	154.9	138.1
	Music, dance, and variety (French programming only)	15.6	16.3	21.5
	Award shows (English programming only)	3.6	3.1	3.1
	Total CBC PNI	223.4	213.0	192.8
	<i>% of total</i>	<i>36.4</i>	<i>33.7</i>	<i>30.6</i>
Discretionary services	Long-form documentary	94.8	105.8	106.1
	Drama	193.5	199.2	220.1
	Music, dance, and variety (French programming only)	9.1	12.0	11.3
	Award shows (English programming only)	2.9	4.7	6.3
	Total discretionary PNI	300.3	321.6	343.8
	<i>% of total</i>	<i>49.0</i>	<i>50.9</i>	<i>54.6</i>
Total	Long-form documentary	155.2	152.5	142.7
	Drama	413.0	420.0	424.0
	Music, dance, and variety (French programming only)	38.1	49.3	51.6
	Award shows (English programming only)	6.5	10.4	11.7
	Total PNI	612.8	632.1	630.0
	<i>% of total</i>	<i>100</i>	<i>100</i>	<i>100</i>

Source: Public disclosure of aggregate annual returns for large ownership groups and CRTC data collection

This table summarizes the PNI expenditures made by the CBC, private conventional television, and discretionary services. The CBC section now includes discretionary services operated by the CBC.

**Table 4.2.17 PNI expenditures by CBC and large private ownership groups, by program category (\$ millions)**

Program category		2012	2013	2014
CBC	Long-form documentary	43.8	38.8	30.3
	Drama	160.3	154.9	138.1
	Music, dance, and variety (French programming only)	15.6	16.3	21.5
	Award shows (English programming only)	3.6	3.1	3.1
	Total CBC PNI	223.4	213.0	192.8
% of total		36.5	33.7	30.6
BCE	Long-form documentary	29.5	43.2	47.0
	Drama	39.4	99.1	96.2
	Music, dance, and variety (French programming only)	0	0	0
	Award shows (English programming only)	2.9	7.3	8.3
	Total BCE PNI	71.8	149.7	151.5
% of total		11.7	23.7	24.0
Astral	Long-form documentary	17.8	-	-
	Drama	64.9	-	-
	Music, dance, and variety (French programming only)	7.3	-	-
	Award shows (English programming only)	0	-	-
	Total Astral PNI	90.1	-	-
% of total		14.7	-	-
Shaw	Long-form documentary	29.1	34.5	27.3
	Drama	30.0	33.7	25.9
	Music, dance, and variety (French programming only)	0	0	0
	Award shows (English programming only)	0	0	0
	Total Shaw PNI	59.1	68.3	53.3
% of total		9.6	10.8	8.5
Corus	Long-form documentary	4.5	5.0	5.8
	Drama	36.3	36.8	71.7
	Music, dance, and variety (French programming only)	0	0	0
	Award shows (English programming only)	0	0	0
	Total Corus PNI	40.8	41.8	77.5
% of total		6.7	6.6	12.3
Rogers	Long-form documentary	3.3#	4.6#	2.8
	Drama	4.4#	5.8#	7.2
	Music, dance, and variety (French programming only)	0	0	0
	Award shows (English programming only)	0	0	0
	Total Rogers PNI	7.7#	10.4#	10.0
% of total		1.3	1.6	1.6
TOTAL	Long-form documentary	155.2	152.5	142.7
	Drama	413.0	420.0	424.0
	Music, dance, and variety (French programming only)	38.1	49.3	51.6
	Award shows (English programming only)	6.5	10.4	11.7
	Total PNI	612.8	632.1	630.0
% of total		100	100	100

Source: Public disclosure of aggregate annual returns for large ownership groups

**Table 4.2.18 CPE for CBC English- and French-language conventional television, by program category (\$ thousands)**

Program category	2010	2011	2012	2013	2014
News (category 1)	203,223	191,924	196,688	212,876	207,331
Annual growth (%)	22.6	-5.6	2.5	8.2	-2.6
Long-form documentary (category 2(b))	#27,052	#39,242	#36,042	30,870	22,337
Annual growth (%)	n/a	45.1	-8.2	-14.4	-27.6
Other informational (categories 2 through 5, excluding category 2(b))	#49,282	#59,292	67,446	63,744	62,792
Annual growth (%)	-55.0	20.3	13.8	-5.5	-1.5
Sports (category 6)	#159,521	157,190	158,698	127,730	258,029
Annual growth (%)	5.4	-1.5	1.0	-19.5	102.0
Drama and comedy (category 7)	#148,868	141,049	158,420	153,529	136,895
Annual growth (%)	13.1	-5.3	12.3	-3.1	-10.8
Music, dance, and variety (categories 8 and 9)	#14,159	12,912	26,120	27,635	27,278
Annual growth (%)	-37.8	-8.8	102.3	5.8	-1.3
Game show (category 10)	#12,234	11,900	16,217	12,933	9,300
Annual growth (%)	-11.4	-2.7	36.3	-20.3	-28.1
General entertainment/ Human interest/ Reality (category 11)	#81,875	94,059	73,474	70,337	64,807
Annual growth (%)	29.4	14.9	-22.3	-3.7	-7.9
Human interest	n/a	n/a	n/a	58,411	49,545
Award shows	n/a	n/a	n/a	7,467	7,725
Reality television	n/a	n/a	n/a	4,460	7,537
Other (categories 12 through 15)	0	2,203	#941	1,139	1,011
Annual growth (%)	0	0	-57.3	21.0	-11.2
<b>Total (categories 1 through 15)</b>	<b>#696,215</b>	<b>709,769</b>	<b>733,635</b>	<b>700,793</b>	<b>789,782</b>
Annual growth (%)	5.8	1.9	3.4	-4.5	12.7

Source: CRTC data collection

The table shows CPE of CBC English- and French-language conventional television services, broken down by program category, from 2010 to 2014. The expenditures exclude indirect and facility cost allocations. Certain programming-related expenses were included as programming costs, consistent with CRTC guidelines. The breakdown for “General entertainment/ Human interest/ Reality” (category 11) is only available as of 2013.

**Table 4.2.19 CPE for private conventional television, by program category (\$ thousands)**

Program category	2010	2011	2012	2013	2014
News (category 1)	304,358	316,922	353,646	355,287	361,050
<i>Annual growth (%)</i>	-250.0	4.1	11.6	0.5	1.6
Long-form documentary (category 2(b))	n/a	n/a	16,600	7,894	6,261
<i>Annual growth (%)</i>	n/a	n/a	n/a	-52.4	-20.7
Other informational (categories 2 through 5, excluding category 2(b))	50,474	55,033	32,150	31,128	29,339
<i>Annual growth (%)</i>	-30.7	9.0	-11.3	-3.2	-5.7
Sports (category 6)	141,011	848	68,485	6,490	1,123
<i>Annual growth (%)</i>	3,607.9	-99.4	7,974.0	-90.5	-82.7
Drama and comedy (category 7)	71,365	58,322	59,169	65,959	65,759
<i>Annual growth (%)</i>	-7.8	-18.3	1.0	11.5	-0.3
Music, dance, and variety (categories 8 and 9)	21,678	33,006	30,241	24,476	22,317
<i>Annual growth (%)</i>	-43.2	52.3	-10.8	-19.1	-8.8
Game show (category 10)	22,933	22,033	17,546	19,394	19,042
<i>Annual growth (%)</i>	83.3	-3.9	-20.4	10.5	-1.8
General entertainment/ Human interest/ Reality (category 11)	68,256	75,577	83,017	92,345	113,897
<i>Annual growth (%)</i>	-17.1	10.7	10.9	11.2	23.3
<i>Human interest</i>	n/a	n/a	n/a	72,953	84,669
<i>Award shows</i>	n/a	n/a	n/a	4,071	3,695
<i>Reality television</i>	n/a	n/a	n/a	15,321	25,533
Other (categories 12 through 15)	1,173	1,173	905	2,444	516
<i>Annual growth (%)</i>	325.0	0	-8.7	170.0	-78.9
<b>Total (categories 1 through 15)</b>	<b>681,248</b>	<b>562,914</b>	<b>661,759</b>	<b>605,415</b>	<b>619,305</b>
<i>Annual growth (%)</i>	13.7	-17.4	17.6	-8.5	2.3
<b>% of total revenue</b>	<b>31.7</b>	<b>26.2</b>	<b>32.5</b>	<b>31.1</b>	<b>34.3</b>

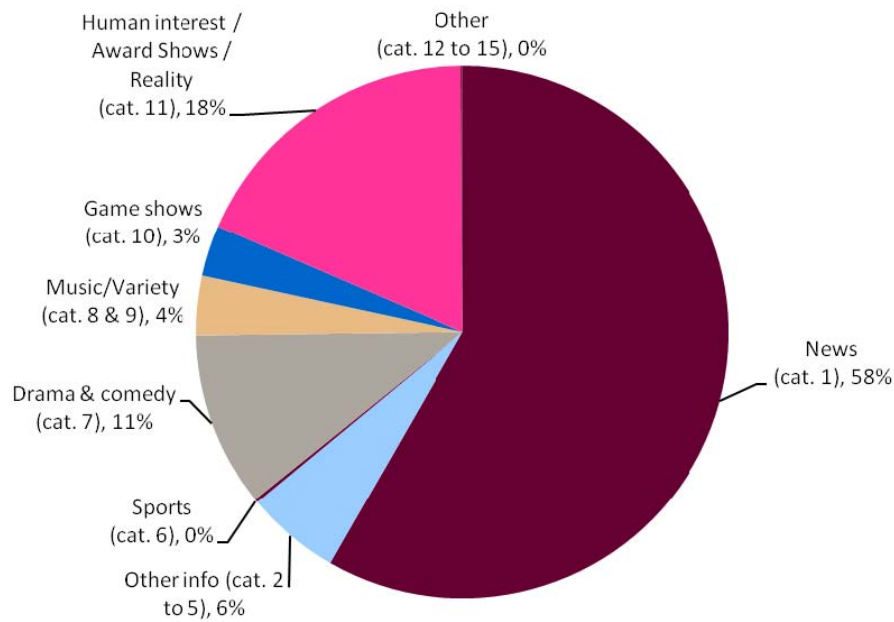
Source: CRTC data collection

CPE amounts include spending on Canadian programs broadcast; writedowns of Canadian inventory; script and concept development; and loss on equity for Canadian programs. They also include spending relating to ownership transfer benefits (tangible benefits) and to commitments made at the time of licensing. However, they exclude CMF “top-ups” reported by private conventional television services.

The breakdown for “General entertainment/ Human interest/ Reality” (category 11) is only available as of 2013.



**Figure 4.2.21 Distribution of CPE for private conventional television services, by program category, 2014**



Source: CRTC data collection

This figure shows the distribution, broken down by program category, of CPE of private conventional television services in 2014.

More than half of the expenditures were made on news programming. Other significant investments were made in general entertainment (including human interest and awards shows), and drama and comedy programming.

**Table 4.2.20 Expenditures on non-Canadian programming by private conventional television services, by program category (\$ thousands)**

Program category	2010	2011	2012	2013	2014
News (category 1)	145	90	57	4,631	594
<i>Annual growth (%)</i>	<i>625.0</i>	<i>-38.0</i>	<i>-36.7</i>	<i>8,081.6</i>	<i>-87.2</i>
Long-form documentary (category 2(b))	n/a	n/a	298	454	603
<i>Annual growth (%)</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>52.3</i>	<i>32.8</i>
Other informational (categories 2 through 5, excluding category 2(b))	5,270	16,522	15,034	9,750	10,975
<i>Annual growth (%)</i>	<i>-57.5</i>	<i>213.5</i>	<i>-7.2</i>	<i>-35.1</i>	<i>12.6</i>
Sports (category 6)	14,823	17,916	17,877	20,269	19,953
<i>Annual growth (%)</i>	<i>7.8</i>	<i>20.9</i>	<i>-0.2</i>	<i>13.4</i>	<i>-1.6</i>
Drama and comedy (category 7)	553,796	480,114	488,652	483,024	516,266
<i>Annual growth (%)</i>	<i>-8.1</i>	<i>-13.3</i>	<i>1.8</i>	<i>-1.2</i>	<i>6.9</i>
Music, dance, and variety (categories 8 and 9)	32,968	31,878	47,333	57,128	28,736
<i>Annual growth (%)</i>	<i>4.0</i>	<i>-3.0</i>	<i>48.5</i>	<i>20.7</i>	<i>-49.7</i>
Game show (category 10)	6,078	11,460	5,278	5,625	8,360
<i>Annual growth (%)</i>	<i>-53.3</i>	<i>88.5</i>	<i>-53.9</i>	<i>6.6</i>	<i>48.6</i>
General entertainment/ Human interest/ Reality (category 11)	164,091	169,059	151,234	151,044	131,529
<i>Annual growth (%)</i>	<i>-4.6</i>	<i>3.0</i>	<i>-10.5</i>	<i>-0.1</i>	<i>-12.9</i>
<i>Human interest</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>90,375</i>	<i>72,813</i>
<i>Award shows</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>14,173</i>	<i>16,152</i>
<i>Reality television</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>46,496</i>	<i>42,564</i>
Other (categories 12 through 15)	6	1,994	51	52	2
<i>Annual growth (%)</i>	<i>-98.8</i>	<i>33,133.0</i>	<i>-43.7</i>	<i>2.4</i>	<i>-96.2</i>
<b>Total (categories 1 through 15)</b>	<b>777,176</b>	<b>729,033</b>	<b>725,813</b>	<b>731,978</b>	<b>717,018</b>
<i>Annual growth (%)</i>	<i>-8.2</i>	<i>-6.2</i>	<i>-0.4</i>	<i>0.8</i>	<i>-2.0</i>
% of total revenue	36.2	33.9	35.6	37.6	39.8

Source: CRTC data collection

For 2012-2014, the numbers shown for “Other informational (categories 2 through 5)” do not include expenditures on category 2(b)) programming. In addition, the breakdown for “General entertainment/ Human interest/ Reality” (category 11) is only available as of 2013.

**Table 4.2.21 Expenditures on non-Canadian programming by private and CBC conventional television services, by program category and linguistic market (\$ thousands)**

Program category	2014	
	English-language	French-language
News (category 1)	594	-
Long-form documentary (category 2(b))	725	44
Other informational (categories 2 through 5, excluding category 2(b))	10,975	13
Sports (category 6)	19,953	-
Drama and comedy (category 7)	506,430	30,584
Music, dance, and variety (categories 8 and 9)	28,700	36
Game show (category 10)	8,360	-
General entertainment/ Human interest/ Reality (category 11)	129,789	1,786
<i>Human interest</i>	<i>71,101</i>	<i>1,757</i>
<i>Award shows</i>	<i>16,152</i>	-
<i>Reality television</i>	<i>42,535</i>	<i>29</i>
Other (categories 12 through 15)	2	58
<b>Total</b>	<b>705,526</b>	<b>32,520</b>

Source: CRTC data collection

Revenues for English-language private conventional television stations include revenues for ethnic stations since a significant portion of these stations' revenues was derived from English-language programming.

**Table 4.2.22 CPE and expenditures on non-Canadian programming reported by specialty services, by language of broadcast and program category (\$ thousands) (Part 1 of 2)**

Program category	CPE			Expenditures on non-Canadian programming		
	2013	2014	Growth (%)	2013	2014	Growth (%)
<b>English-language services</b>						
<i>Number of services reporting</i>	124	126		124	126	
News (category 1)	148,658	152,516	2.6	1,138	829	-27.2
Long-form documentary (category 2(b))	83,182	74,625	-10.3	28,365	31,725	11.8
Other informational (categories 2 through 5, excluding category 2(b))	85,931	102,077	18.8	15,643	5,368	-65.7
Sports (category 6)	337,251	452,314	34.1	71,572	88,377	23.5
Drama and comedy (category 7)	113,715	134,423	18.2	119,209	129,624	8.7
Music, dance, and variety (categories 8 and 9)	20,019	15,070	-24.7	836	1,414	69.1
Game show (category 10)	8,192	10,705	30.7	935	1,154	23.4
General entertainment/ Human interest/ Reality (category 11)	110,147	109,227	0.8	45,967	68,762	49.6
<i>Human interest</i>	66,375	45,617	-31.3	30,715	43,666	42.2
<i>Award shows</i>	4,657	6,291	35.0	20	174	770.0
<i>Reality television</i>	39,115	57,319	46.5	15,232	24,921	63.6
Other (categories 12 through 15)	21,920	21,488	-2.0	1,325	1,203	-9.2
<b>Total (categories 1 through 15)</b>	<b>929,015</b>	<b>1,072,445</b>	<b>15.4</b>	<b>284,990</b>	<b>328,457</b>	<b>15.3</b>
<b>French-language services</b>						
<i>Number of services reporting</i>	27	28		27	28	
News (category 1)	71,331	80,750	13.2	213	0	-100.0
Long-form documentary (category 2(b))	25,765	27,010	4.8	4,650	7,040	51.4
Other informational (categories 2 through 5, excluding category 2(b))	54,205	43,970	-18.9	1,697	2,686	58.3
Sports (category 6)	74,369	90,508	21.7	9,167	10,631	16.0
Drama and comedy (category 7)	24,138	22,904	-5.1	19,332	16,671	-13.8
Music, dance, and variety (categories 8 and 9)	11,985	11,276	-5.9	539	897	66.4
Game show (category 10)	1,173	3,540	201.8	0	0	-
General entertainment/ Human interest/ Reality (category 11)	8,676	13,767	58.7	3,639	5,728	57.4
<i>Human interest</i>	7,916	11,227	41.8	1,282	1,176	-8.3
<i>Award shows</i>	500	494	-1.2	3	10	233.3
<i>Reality television</i>	260	2,046	686.9	2,354	4,542	92.9
Other (categories 12 through 15)	4,527	6,036	33.3	447	453	1.3
<b>Total (categories 1 through 15)</b>	<b>276,170</b>	<b>299,761</b>	<b>8.5</b>	<b>39,683</b>	<b>44,105</b>	<b>11.1</b>

**Table 4.2.22 CPE and expenditures on non-Canadian programming reported by specialty services, by language of broadcast and program category (\$ thousands) (Part 2 of 2)**

Program category	CPE			Expenditures on non-Canadian programming		
	2013	2014	Growth (%)	2013	2014	Growth (%)
<b>Third-language services</b>						
<i>Number of services reporting</i>	45	40		45	40	
News (category 1)	3,734	3,922	5.0	1,412	1,575	11.5
Long-form documentary (category 2(b))	1,371	1,518	10.7	0	0	-
Other informational (categories 2 through 5, excluding category 2(b))	2,796	2,671	-4.5	712	554	-22.2
Sports (category 6)	431	1,250	190.0	963	1,266	31.5
Drama and comedy (category 7)	2,624	3,256	24.1	6,380	6,089	-4.6
Music, dance, and variety (categories 8 and 9)	10,565	6,559	-37.9	1,037	1,302	25.6
Game show (category 10)	470	710	51.1	561	2,702	381.6
General entertainment/ Human interest/ Reality (category 11)	2,482	4,502	81.4	3,969	2,034	-48.8
<i>Human interest</i>	2,234	4,238	89.7	3,967	2,034	-48.8
<i>Award shows</i>	248	264	6.5	2	0	-100.0
<i>Reality television</i>	0	0	-	0	0	-
Other (categories 12 through 15)	1,820	2,085	14.6	698	1,123	60.9
<b>Total (categories 1 through 15)</b>	<b>26,393</b>	<b>26,473</b>	<b>0.3</b>	<b>15,731</b>	<b>16,645</b>	<b>5.8</b>
<b>Total specialty services</b>						
<i>Number of services reporting</i>	196	194		196	194	
News (category 1)	223,723	237,187	6.0	2,764	2,405	-13.0
Long-form documentary (category 2(b))	110,317	103,153	-6.5	33,015	38,764	17.4
Other informational (categories 2 through 5, excluding category 2(b))	143,022	148,718	4.0	18,051	8,607	-52.3
Sports (category 6)	412,051	544,072	32.0	81,702	100,273	22.7
Drama and comedy (category 7)	140,478	160,582	14.3	144,921	152,384	5.1
Music, dance, and variety (categories 8 and 9)	42,570	32,905	-22.7	2,411	3,613	49.9
Game show (category 10)	9,835	14,956	52.1	1,496	3,857	157.8
General entertainment/ Human interest/ Reality (category 11)	121,315	127,496	5.1	53,575	76,524	42.8
<i>Human interest</i>	76,535	61,082	-20.2	35,964	46,876	30.3
<i>Award shows</i>	5,405	7,050	30.4	25	185	640.0
<i>Reality television</i>	39,375	59,364	50.8	17,586	29,463	67.5
Other (categories 12 through 15)	28,268	29,609	4.7	2,470	2,779	12.5
<b>Total (categories 1 through 15)</b>	<b>1,231,578</b>	<b>1,398,679</b>	<b>13.6</b>	<b>340,405</b>	<b>389,206</b>	<b>14.3</b>

Source: CRTC data collection

This table (Parts 1 and 2) shows total CPE and expenditures on non-Canadian programming of English-, French-, and third-language television services, broken down by program category. It also shows annual growth rates between the two study years and lists the number of services reporting in each linguistic category.

The data listed for English-language services include expenditures on bilingual programming and expenditures relating to ownership transfer benefits (tangible benefits) and to commitments made at the time of licensing, but exclude CMF “top-up” funding reported by pay and specialty services.

**Table 4.2.23 CPE reported by PPV and VOD services (\$ thousands)**

	2011	2012	2013	2014	<i>Growth (%) 2011- 2014</i>
Total PPV and VOD services	16,838	16,280	17,317	19,905	18.2
<i>Number of services reporting</i>	30	26	23	24	

Source: CRTC data collection

This table shows the total CPE reported by PPV and VOD services from 2011 to 2014, as well as the number of services reporting and the growth rate during that period.

Expenditures broken down by program category for PPV and VOD services are not available. The amounts shown exclude CMF “top-up” funding reported by PPV and VOD services, but include expenditures relating to ownership transfer benefits (tangible benefits) and to commitments made at the time of licensing.

**Table 4.2.24 Statistical data reported by certain licensed VOD services**

	2013	2014
<b>Number of titles on servers</b>		
Canadian Titles (English)	14,123	29,893
Canadian Titles (French)	9,772	16,667
Canadian Titles (other language)	6	42
Total Canadian Titles	23,901	46,602
<i>Percent of all titles</i>	<i>27%</i>	<i>28%</i>
Non-Canadian Titles (English)	51,088	94,855
Non-Canadian Titles (French)	11,899	21,834
Non-Canadian Titles (other language)	679	670
Total Non-Canadian Titles	63,666	117,359
<i>Percent of all titles</i>	<i>73%</i>	<i>72%</i>
<b>Total (all titles)</b>	<b>87,567</b>	<b>163,961</b>
<b>Number of feature films on servers</b>		
Canadian Titles (English)	2,370	4,934
Canadian Titles (French)	1,347	1,645
Total Canadian Titles (feature films)	3,717	6,579
<i>Percent of all feature films</i>	<i>10%</i>	<i>10%</i>
Non-Canadian Titles (English)	27,029	46,108
Non-Canadian Titles (French)	6,078	13,623
Total Non-Canadian Titles (feature films)	33,107	59,731
<i>Percent of all feature films</i>	<i>90%</i>	<i>90%</i>
<b>Total (all feature films)</b>	<b>36,824</b>	<b>66,310</b>
<b>Number of orders (free and paid)</b>		
Canadian Titles (free)	73,308,236	84,440,016
Canadian Titles (paid)	1,745,300	9,282,531
Total Orders - Canadian Titles	75,053,536	93,722,547
<i>Percent of all orders</i>	<i>32%</i>	<i>27%</i>
Non-Canadian Titles (free)	118,558,564	164,669,690
Non-Canadian Titles (paid)	41,471,066	86,545,739
Total Orders - Non-Canadian Titles	160,029,630	251,215,429
<i>Percent of all orders</i>	<i>68%</i>	<i>73%</i>
Total (free orders) – Canadian and non-Canadian	191,866,800	249,109,706
Total (paid orders) – Canadian and non-Canadian	43,216,366	95,828,270
<b>Total (orders)</b>	<b>235,083,166</b>	<b>344,937,976</b>
<b>Remitted revenue (\$ millions)</b>	<b>4.5</b>	<b>5.8</b>

The 2013 data reflects data reported by 8 licensed VOD services and the 2014 data reflects data reported by 11 licensed VOD services. Titles and feature films data are based on availabilities on servers specifically on 31 August of each year. Orders are based on entire broadcast years ending 31 August. Remitted revenue to Canadian feature film rights holders are based on an entire broadcast year ending 31 August.

f) *Tangible benefits***Table 4.2.25 Value of television transactions and corresponding tangible benefits for the period from 1 January 2010 to 31 December 2014 (\$ millions)**

		2010	2011	2012	2013	2014	Total
<b>English-language services</b>							
#	Transactions	3	5	4	4	2	<b>18</b>
\$	Value (\$M)	2,086.4	2,254.0	106.0	#944.4	174.3	<b>5,565.2</b>
+	Benefits (\$M)	183.4	224.2	18.6	#94.4	17.4	<b>538.0</b>
<b>French-language services</b>							
#	Transactions	-	-	-	3	1	<b>4</b>
\$	Value (\$M)	-	-	-	1,512.8	22.9	<b>1,535.7</b>
+	Benefits (\$M)	-	-	-	151.3	2.3	<b>153.6</b>

- Figures for 2010 include the Shaw/Canwest ownership transaction (see Broadcasting Decision CRTC 2010-782), which resulted in \$180.2 million in tangible benefits.
- Figures for 2011 includes the BCE/CTVglobemedia Inc. ownership transaction (see Broadcasting Decision CRTC 2011-163), which resulted in \$221.8 million in tangible benefits. For the purposes of this analysis, the entire value of the television assets and associated benefits was included in the English-language services category.
- Figures for 2013 includes the BCE/Astral ownership transaction (see Broadcasting Decisions CRTC 2013-310, 2014-62), which resulted in \$188.0 million in tangible benefits. Approximately \$130 million of this amount was committed to French-language initiatives and \$58.3 million to English-language initiatives.
- In Broadcasting Decision 2013-310, the Commission directed BCE to divest itself of 11 specialty television services. Divestiture of these services generated \$60.1 million in additional tangible benefit commitments from other purchasers. Approximately \$36.2 million of this amount was committed to English-language initiatives and \$23.9 million to French-language initiatives. The Commission further stipulated that BCE supplement any shortfall between the total amount of tangible benefits generated on the later sale of Astral's 11 specialty television services and the \$72.7 million of tangible benefits attributed to them under the BCE/Astral transaction. The 2013 figures have been restated, increasing tangible benefits resulting from the BCE/Astral ownership transaction from \$175.4 million to \$188 million.
- In Broadcasting Decisions CRTC 2013-737 and 2013-738, the Commission approved the divestiture of six of these services (Historia, Séries+, TÉLÉTOON Rétro, TELETOON/TÉLÉTOON, TELETOON Retro, and Cartoon Network) to Corus Entertainment Inc. Corus has committed \$40.5 million in tangible benefits: approximately \$21.6 million to French-language initiatives and 18.9 million to English-language initiatives.



- In Broadcasting Decision 2014-388, the Commission approved the divestiture of three of the remaining five services (Disney Junior, Disney XD and Family Channel) to DHX Media Ltd. (DHX). DHX has committed approximately \$17.3 million in tangible benefits to English-language initiatives.
- In Broadcasting Decision 2014-465, the Commission approved the divestiture of remaining two services (MusiquePlus and MusiMax) to Groupe V Média inc. (Groupe V). Groupe V has committed approximately \$2.3 million in tangible benefits to French-language initiatives.

**g) Programming of high standards**

The *Broadcasting Act* sets out that programming provided by broadcasting undertakings should be of high standard. The CRTC deals with programming complaints relating to public and community broadcasters, as well as non- members of the CBSC. The CRTC also deals with issues that are outside the parameters of the codes administered by the CBSC.

The CBSC administers specific codes of broadcast conduct and provides a means of recourse for members of the public regarding the application of the standards set out in the following codes:

CAB Code of Ethics;  
 CAB Violence Code;  
 CAB Equitable Portrayal Code; and  
 Radio Television Digital News Association of Canada (RTDNA Canada) Code of Ethics.

**What is the CBSC?**

The Canadian Broadcast Standards Council (CBSC) is an independent organization created by the Canadian Association of Broadcasters (CAB) to administer standards established by Canada's private broadcasters. The CBSC's membership includes more than 790 private-sector radio and television stations, specialty services, pay services, and networks across Canada. Membership includes broadcasters broadcasting in English, French, and third languages.

For more information, visit [www.cbsc.ca](http://www.cbsc.ca).

**Table 4.2.26 Number of television-related contacts received by the CRTC, by type of issue**

	CRTC – policies/ decisions	Billing	Quality of service/ delivery	Terms and conditions	Disability issues	Programming	Loudness	Other
2013-2014	728	0	148	1	115	1,687	749	189
2014-2015	1,182	0	132	4	132	2,437	595	337

Source: CRTC Correspondence Tracking System

This table summarizes the contacts received by the CRTC, which included questions, comments, complaints, and other communications, broken down by the type of issue raised.

**Table 4.2.27      Television programming complaints received by the Commission and referred to the Canadian Broadcast Standards Council, by sector and issue**

Market sector	Type of complaint	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
		Complaints received	Referrals to CBSC	Complaints received	Referrals to CBSC	Complaints received	Referrals to CBSC	Complaints received	Referrals to CBSC	Complaints received	Referrals to CBSC
Conventional television	Abusive comment	26	-	30	2	30	6	15	5	24	6
	Adult content	52	8	56	11	71	12	73	13	77	13
	Alcohol advertising	4	-	8	-	18	3	9	2	14	1
	Gender portrayal	2	-	9	-	5	1	6	-	3	-
	Offensive comment	135	22	217	43	233	62	164	63	171	25
	Offensive language	41	19	29	3	32	8	45	7	67	15
	Television violence	84	14	76	14	54	8	61	11	68	9
Specialty channels	Abusive comment	-	-	1	-	5	2	2	-	10	6
	Adult content	31	10	23	12	16	9	19	10	19	7
	Alcohol advertising	-	-	-	-	2	1	3	1	-	-
	Gender portrayal	-	-	1	-	1	1	-	-	2	1
	Offensive comment	19	5	161	87	44	23	46	25	51	24
	Offensive language	13	6	7	5	11	7	15	8	8	4
	Television violence	21	5	18	10	13	3	12	6	19	6
Pay and PPV services	Abusive comment	-	-	-	-	-	-	-	-	-	-
	Adult content	32	-	3	-	2	1	1	-	6	1
	Alcohol advertising	-	-	-	-	-	-	-	-	-	-
	Gender portrayal	-	-	-	-	-	-	-	-	-	-
	Offensive comment	-	-	-	-	-	-	-	-	1	1
	Offensive language	-	-	-	-	-	-	-	-	1	-
	Television violence	-	-	-	-	-	-	1	-	1	-

Source: CRTC Correspondence Tracking System

Together, the CRTC and the CBSC receive and address a range of complaints regarding conventional television, pay, specialty and PPV services. This table shows the number of complaints received by the CRTC—and the number referred to the CBSC—regarding various issues across diverse market sectors for the 2010–2011 through 2014–2015 fiscal years (i.e., 1 April to 31 March). Between April 2014 and March 2015, approximately 22% of the complaints relating to television received by the Commission were referred to the CBSC. programming.

The CRTC's Correspondence Tracking System counts multiple contacts from the same client regarding the same complaint as separate units. Consequently, the actual number of complaints received should be slightly lower than the figures indicated.

The category “Abusive comment” includes complaints alleging hatred or contempt incited on air against one of the groups identified in the *Television Broadcasting Regulations, 1987* or the *Specialty Services Regulations, 1990*.

The category “Offensive comment” includes complaints alleging offensive humour, or other comments that do not fall under the “abusive comment” provision in CRTC regulations.

The category “Offensive language” includes complaints alleging offensive language in song lyrics or in spoken word programming.

**Table 4.2.28 Television-related complaints handled by the CBSC, by language of broadcast and origin of the program (2013-2014)**

	Conventional and specialty TV	Pay TV	Total
Language of broadcast			
English-language	599	7	606
French-language	140	3	143
Third-language	6	0	6
Other	5	0	5
Total	750	10	760
Origin of the program			
Canadian	461	1	462
Foreign	232	7	239
Other	57	2	59
Total	750	10	760

The category “Other” in each case refers to complaints for which there was not enough information for the CBSC to determine either the language of broadcast or the national origin of the program.

Source: CBSC annual reports

#### What is the ASC?

Advertising Standards Canada (ASC) is a national, not-for-profit advertising self-regulatory body. The ASC’s *Canadian Code of Advertising Standards* is regularly updated to ensure it is current and contemporary – keeping pace with consumer and societal expectations.

The ASC responds to complaints by consumers and special interest groups regarding advertising with respect to all media subject to the Canadian Code of Advertising Standards, the principal instrument of advertising self-regulation. In addition, the ASC undertakes pre-clearance functions in five industry categories, which consist of reviewing advertisements based on applicable legislation, regulations, and/or industry codes and guidelines.

Additional information on the ASC can be found at: [www.adstandards.com/en/](http://www.adstandards.com/en/)

**Table 4.2.29 Complaints relating to digital advertising and advertising on television, handled by the ASC**

	2010	2011	2012	2013	2014
Total number of complaints	1,200	1,809	1,310	1,310	1,274
Complaints about television advertisements	526	686	559	528	500
<i>% of total complaints received</i>	44	38	43	40	39
Complaints about digital advertisements	n/a	n/a	280	240	289
<i>% of total complaints received</i>			21	18	23

Source: ASC Ad complaints reports

**h) Ownership groups**

The following tables provide an overview of the different broadcasting ownership groups with a controlling interest in various types of discretionary services in 2014. The overview covers the type of services offered, as well as the language of the service, subscriber numbers, revenues, PBIT and PBIT margin for each service.

In regard to this section:

- In *Regulatory framework relating to vertical integration*, Broadcasting Regulatory Policy CRTC 2011-601, 21 September 2011, the Commission stated that it would publish complete financial information for specialty Category A services and for specialty Category B services owned or controlled by a vertically integrated entity. The Commission also stated that for all independent individual specialty Category B services, it would publish partial financial information, including total revenues, total programming expenses, and total Canadian programming expenses. It further stated that it would publish complete financial information for all independent specialty Category B services on an aggregate basis.
- Shaw is affiliated with Corus Entertainment Inc. (Corus), as J.R. Shaw has voting control of both companies.
- Ownership is based on the percentage of direct and indirect voting interest held on 31 December 2013. Where a change in ownership has occurred, the information is based on the date of the approval decision, not the closing date of the transaction.
- The ownership percentages and the financial results presented in the tables are for individual speciality, pay, PPV, and VOD services. The percent ownership is not reflected in these results. For this reason, no totals per ownership group are provided.
- Only services launched as of 31 December 2014 are included in these tables.

The abbreviations used in the following table are defined as follows:

Sp. A = Specialty Category A service

Sp. B = Specialty Category B service

Sp. C = Specialty Category C service Pay A = Pay Category A service

Pay B = Pay Category B service

PPV\*\* = Pay-per-view (\*\*holds both a terrestrial licence and a DTH PPV licence)

VOD = Video-on-demand service VOD = Video-on-demand service

**Table 4.2.30 BCE – Controlling ownership interest in discretionary services, 2014**

	Type of service	Number of subscribers (000)	Revenues (\$) (000)	PBIT (\$) (000)	PBIT margin (%)
<b>English-language</b>					
Animal Planet	Sp. B	2,428	9,143	3,544	38.8
Bell TV On Demand and Vu!	VOD	n/a	3,225	994	30.8
Bell TV On Demand and Vu!	PPV**	n/a	36,555	2,181	6.0
Book Television	Sp. A	823	4,607	2,975	64.6
Bravo!	Sp. A	6,602	53,302	26,653	50.0
Business News Network	Sp. A	6,205	31,851	12,236	38.4
CablePulse 24	Sp. A	3,583	26,776	4,226	15.8
Comedy Gold	Sp. B	839	4,729	2,965	62.7
CTV News Channel	Sp. C	8,218	26,587	8,551	32.2
Discovery Channel	Sp. A	7,560	99,823	27,207	27.3
Discovery Science	Sp. B	1,617	5,606	1,829	32.6
Discovery Velocity (formerly Discovery World)	Sp. B	1,229	25,357	14,301	56.4
E!	Sp. A	7,136	29,349	6,029	20.5
ESPN Classic Canada	Sp. B	956	3,035	1,059	34.9
Fashion Television Channel	Sp. A	729	4,687	1,550	33.1
Investigation Discovery	Sp. B	1,458	9,696	5,562	57.4
Juicebox	Sp. B	253	618	517	83.7
M3	Sp. A	6,043	19,831	2,711	13.7
MTV Canada	Sp. A	6,073	20,768	-4,721	-22.7
MTV2 Canada	Sp. A	1,021	5,078	1,838	36.2
MuchLoud	Sp. B	120	357	239	66.9
MuchMusic	Sp. A	9,240	37,363	-643	-1.7
MuchMoreRetro	Sp. B	252	745	560	75.1
MuchVibe	Sp. B	351	670	502	74.9
Northwestel VOD	VOD	n/a	850	-158	-18.6
Space	Sp. A	6,355	51,086	17,398	34.1
The Comedy Network	Sp. A	5,692	58,631	29,085	49.6
The Movie Network	Pay A	1,153	124,480	26,671	21.4
The Movie Network Encore	Pay A	1,316	21,824	12,134	55.6
The Sports Network (TSN)	Sp. C	9,050	452,188	125,996	27.9
Viewer's Choice Canada	PPV**	2,521	10,107	-700	-6.9
<b>French-language</b>					
Câblevision du Nord de Québec inc.	VOD	n/a	509	38	7.5
Canal D	Sp. A	2,512	44,279	22,191	50.1
Canal D Investigation	Sp. B	260	605	-5,476	-905.2
Canal Vie	Sp. A	2,332	47,541	19,225	40.4
CINÉPOP	Pay B	1,180	10,302	5,571	54.1
Le Réseau des Sports (RDS)	Sp. C	3,241	177,592	44,997	25.3
RDS Info	Sp. A	1,181	7,532	-4,144	55.0
Super Écran	Pay A	624	63,198	21,718	34.4
VRAK.TV	Sp. A	2,052	26,696	6,593	24.8
Ztélé	Sp. A	2,332	25,982	8,526	32.8

Sources: CRTC ownership records and CRTC data collection

**Table 4.2.31 CBC - Controlling ownership interest in discretionary services, 2014**

	Type of service	Number of subscribers (000)	Revenues (\$ (000))	PBIT (\$ (000))	PBIT margin (%)
<b>English-language</b>					
CBC News Network	Sp. C	11,376	89,952	13,729	15.3
Documentary	Sp. A	2,693	6,552	846	12.9
<b>French-language</b>					
ARTV	Sp. A	2,026	15,834	117	0.7
EXPLORA	Sp. B	532	3,830	n/a	n/a
RDI	Sp. C	11,187	56,741	872	0.2

Sources: CRTC ownership records and CRTC data collection

**Table 4.2.32 Cogeco - Controlling ownership interest in discretionary services, 2014**

	Type of service	Number of subscribers (000)	Revenues (\$ (000))	PBIT (\$ (000))	PBIT margin (%)
Cogeco On Demand/Cogeco Sur Demande	VOD	n/a	17,647	4,723	26.8

Sources: CRTC ownership records and CRTC data collection

**Table 4.2.33 Corus- Controlling ownership interest in discretionary services, 2014**

	Type of service	Number of subscribers (000)	Revenues (\$)(000)	PBIT (\$)(000)	PBIT margin (%)
<b>English-language</b>					
ABC Spark	Sp. B	n/a	10,747	n/a	n/a
Cartoon Network	Sp. B	n/a	3,992	n/a	n/a
CMT Canada	Sp. A	10,221	19,624	2,654	13.5
Cosmopolitan TV	Sp. B	n/a	9,670	n/a	n/a
Encore Avenue	Pay A	2,139	20,258	11,185	55.2
EuroWorld SPORT	Sp. B	n/a	54	n/a	n/a
Movie Central	Pay A	927	85,037	6,413	7.5
Nickelodeon	Sp. B	n/a	6,460	n/a	n/a
OWN	Sp. A	6,059	28,502	3,830	13.7
Sundance Channel	Sp. B	n/a	4,937	n/a	n/a
TELETOON Retro	Sp. B	n/a	7,073	n/a	n/a
TELETOON/TÉLÉTOON	Sp. A	8,689	79,332	19,629	24.7
TreeHouse TV	Sp. A	8,365	13,342	4,955	37.1
W Movies	Sp. B	n/a	7,650	n/a	n/a
W Network	Sp. A	7,928	81,407	37,094	45.6
YTV	Sp. A	11,155	80,225	32,582	40.6
<b>French-language</b>					
Historia	Sp. A	1,479	22,347	12,569	56.2
Séries+	Sp. A	1,479	33,406	19,294	57.8
TÉLÉTOON Rétro	Sp. B	n/a	1,693	n/a	n/a
<b>Third-language</b>					
Mediaset Italia	Sp. B	n/a	987	n/a	n/a
Sky TG24 Canada	Sp. B	n/a	363	n/a	n/a
Telesatino	Sp. A	4,327	16,297	7,329	45.0
Teleniños	Sp. B	n/a	33	n/a	n/a
Univision Canada	Sp. B	n/a	1,485	n/a	n/a

Sources: CRTC ownership records and CRTC data collection

**Table 4.2.34 Québecor - Controlling ownership interest in discretionary services, 2014**

	Type of service	Number of subscribers (000)	Revenues (\$ (000))	PBIT (\$ (000))	PBIT margin (%)
<b>French-language</b>					
addikTV	Sp. A	1,253	11,191	1,483	13.3
ARGENT	Sp. A	552	2,354	-534	-22.7
Canal Indigo	PPV**	1,610	10,171	4,012	39.4
Casa	Sp. B	1,069	9,359	1,182	12.6
Illico sur demande	VOD	n/a	56,336	-2,904	-5.2
Le Canal Nouvelles (LCN)	Sp. C	2,662	31,628	7,734	24.5
Moi&cie	Sp. B	692	4,561	-3,220	-70.6
Prise 2	Sp. B	1,065	8,486	2,370	27.9
TVA Sports	Sp. C	1,669	16,560	-18,789	-113.5
YOOPA	Sp. B	798	3,724	-500	-13.4
<b>English-language</b>					
Sun News Network	Sp. C	5,013	8,499	-14,801	-174.2

Sources: CRTC ownership records and CRTC data collection

**Table 4.2.35 Rogers - Controlling ownership interest in discretionary services, 2014**

	Type of service	Number of subscribers (000)	Revenues (\$ (000))	PBIT (\$ (000))	PBIT margin (%)
<b>English-language</b>					
FX Canada	Sp. B	4,035	10,128	-94	-0.9
FXX	Sp. B	353	216	-3,818	-1,769.9
G4	Sp. A	2,257	9,329	4,265	45.7
OLN	Sp. A	5,194	19,947	4,009	20.1
Rogers on Demand	VOD	n/a	49,905	-379	-0.8
Sportsnet	Sp. C	8,290	311,939	48,560	15.6
Sportsnet 360	Sp. A	5,869	29,311	3,653	12.5
Sportsnet One	Sp. C	6,127	78,852	34,107	43.3
Sportsnet PPV	PPV**	28	12,622	2,555	20.2
Sportsnet World	Sp. B	93	11,526	3,172	27.5
The Biography Channel	Sp. A	1,986	7,355	2,056	28.0

Sources: CRTC ownership records and CRTC data collection



**Table 4.2.36 Shaw - Controlling ownership interest in discretionary services, 2014**

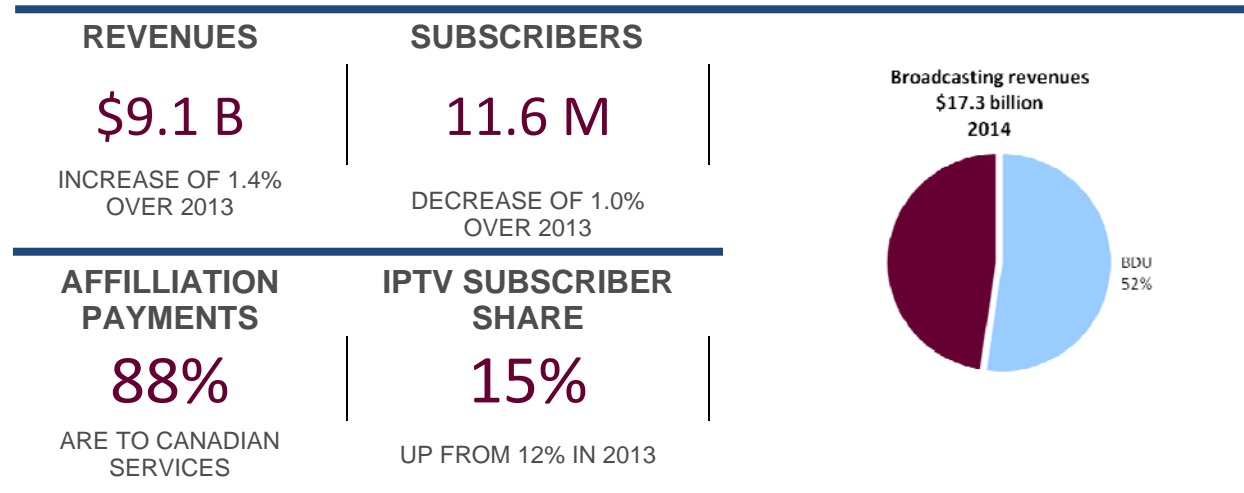
	Type of service	Number of subscribers (000)	Revenues (\$ (000))	PBIT (\$ (000))	PBIT margin (%)
<b>English-language</b>					
Action	Sp. B	4,493	22,364	14,286	63.9
BBC Canada	Sp. B	2,681	10,816	6,310	58.3
BC News 1	Sp. B	924	1,508	-4,755	-315.3
D.I.Y. Network	Sp. B	3,256	12,093	8,406	69.5
DéjàView	Sp. B	1,533	7,983	4,282	53.6
DTOUR	Sp. A	5,336	27,035	13,874	51.3
Food Network Canada	Sp. A	6,201	69,107	37,184	53.8
FYI, (formerly Twist TV)	Sp. A	2,094	7,003	2,924	41.8
H2	Sp. A	2,954	8,094	3,253	40.2
HGTV Canada	Sp. A	7,250	76,620	43,744	57.1
History Television	Sp. A	7,083	77,705	46,609	60.0
Independent Film Channel Canada	Sp. A	1,410	10,344	5,200	50.3
Lifetime	Sp. B	4,025	21,747	8,143	37.4
MovieTime	Sp. B	4,439	15,071	9,284	61.6
Crime + Investigation (formerly Mystery)	Sp. A	3,202	17,778	9,103	51.2
NatGeo Wild	Sp. B	2,906	6,409	1,247	19.5
National Geographic Channel Canada	Sp. B	5,615	27,368	18,363	67.1
Shaw on Demand	VOD	n/a	69,248	3,419	49.4
Shaw Pay-Per-View	PPV**	n/a	14,374	-806	-4.6
Showcase	Sp. A	7,128	75,690	43,222	57.1
Slice	Sp. A	5,230	43,389	8,388	1.9

Sources: CRTC ownership records and CRTC data collection



## 4.3 Broadcasting distribution sector

**Display 4.3.0 Key indicators for the broadcasting distribution sector**



Broadcasting distribution undertakings (BDUs) provide subscription television service to Canadians. They distribute mainly conventional television and discretionary (i.e., pay, specialty, pay-per-view (PPV) and video-on-demand (VOD) services.

The BDU section of this report focuses on three types of BDUs: cable, Internet protocol television (IPTV), and national direct-to-home (DTH) satellite service providers. The Canadian distribution landscape is dominated by cable and DTH satellite BDUs. However, IPTV service providers have recently expanded their distribution networks and increased the number of Canadians they serve. Combined, the five largest BDUs reported 87% of programming distribution revenues.

Canadians have been increasingly turning to sources accessible over the Internet. Online video services are providing Canadians with more choice of where, when and how to access programs. These services include independent, non-affiliated services such as Netflix and YouTube.

Since 2010, over 80% of Canadian households have subscribed to BDU services. Canadians living in urban centres generally have a choice of three to four service providers and/or types of service, while those living in the North and in rural communities usually have access to fewer than three providers.

The providers of discretionary programming services (both Canadian and non-Canadian) receive remuneration from the BDUs that distribute their services. This remuneration is referred to as an affiliation payment, and is based on the number of BDU subscribers who receive the programming service. In 2014, BDUs reported paying \$3.3 million in affiliation payments.

a) **Revenues****Table 4.3.1 Revenues of broadcasting distribution undertakings – Basic and non-basic services**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Revenues (\$ millions)</b>						
Cable	5,402.2	5,604.7	5,482.9 #	5,397.1 #	5,224.4	-0.8
<i>Percentage of total</i>	66.4	65.4	63.2	60.5	57.7	
<i>Annual growth (%)</i>	8.7	3.7	-2.2	-1.6	-3.2	
IPTV	207.8	322.3	585.4	924.7 #	1,284.2	57.7
<i>Percentage of total</i>	2.6	3.8	6.7	10.4	14.2	
<i>Annual growth (%)</i>	37.2	55.1	81.6	57.9	38.9	
DTH and MDS	2,385.3	2,532.1	2,492.4	2,472.2	2,413.8	0.3
<i>Percentage of total</i>	29.3	29.5	28.7	27.7	26.7	
<i>Annual growth (%)</i>	8.6	6.2	-1.6	-0.8	-2.4	
Reporting BDUs subtotal	7,995.4	8,459.1	8,560.8	8,793.9	8,922.4	2.8
<i>Percentage of total</i>	98.3	98.7	98.7	98.5	98.5	
<i>Annual growth (%)</i>	9.3	5.8	1.2	2.7	1.5	
Non-reporting BDUs	134.5 #	111.8 #	113.2 #	132.0 #	132.0	-0.5
<i>Percentage of total</i>	1.7	1.3	1.3	1.5	1.5	
<i>Annual growth (%)</i>	9.7	-16.9	1.2	16.6	0.0	
Total revenues	8,129.9 #	8,570.8 #	8,673.9 #	8,925.9 #	9,054.4	2.7
<i>Annual growth (%)</i>	9.3	5.4	1.2	2.9	1.4	

Source: CRTC data collection

This table shows the annual revenues of cable BDUs, IPTV services and DTH satellite services collected by BDUs for cable, IPTV, and DTH services from 2010 to 2014, as well as the annual and compounded annual growth rates (CAGR) for all years combined. Figures listed for non-reporting BDUs are estimates calculated with the assistance of Statistics Canada for methodology issues. The data are for the 12-month period ending 31 August of each year.

The growth of revenue from IPTV services is noteworthy relative to the other distribution services.

**Basic and non-basic services:** Basic television service is the smallest package of programming or channels to which consumers can subscribe. Non-basic services are the additional channels that can be added to basic service.

**Multipoint distribution service (MDS):** As of 1 September 2011, the Commission no longer issues MDS broadcasting licences. As part of the spectrum auction of the 2596 to 2686 MHz frequency band, which was the band used by MDS licensees, the Industry Canada converted various broadcasting certificates issued to MDS undertakings to Broadband Radio Service (BRS) licences. As of 1 September 2013, there are no MDS undertakings in operation.

**b) Subscriber Data****Table 4.3.2 Broadcasting distribution undertakings subscriber numbers – Basic and non-basic services**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Subscribers (thousands)</b>						
Cable	7,874.4	7,862.3 #	7,700.6 #	7,434.1 #	7,049.5	-2.7
<i>Percentage of total</i>	68.4	66.9	65.6	63.2	60.5	
<i>Annual growth (%)</i>	1.2	-0.2	-2.1	-3.5	-5.2	
IPTV	419.6	657.3	1,002.5	1,381.5 #	1,784.0	43.6
<i>Percentage of total</i>	3.6	5.6	8.5	11.7	15.3	
<i>Annual growth (%)</i>	34.7	56.6	52.5	37.8	29.1	
DTH and MDS	2,862.1	2,877.4	2,825.7	2,691.2	2,559.0	-2.8
<i>Percentage of total</i>	24.8	24.5	24.1	22.9	22.0	
<i>Annual growth (%)</i>	3.7	0.5	-1.8	-4.8	-4.9	
Reporting BDUs subtotal	11,156.0	11,397.0	11,528.9 #	11,506.8	11,392.4	0.5
<i>Percentage of total</i>	96.8	97.0	98.3	97.8	97.8	
<i>Annual growth (%)</i>	2.8	2.2	1.2	-0.2	-1.0	
Non-reporting BDUs	363.7 #	351.8 #	204.0 #	253.7 #	253.7	-8.6
<i>Percentage of total</i>	3.2	3.0	1.7	2.2	2.2	
<i>Annual growth (%)</i>	5.4	-3.3	-42.0	24.4	0.0	
Total subscribers	11,519.8 #	11,748.8 #	11,732.9 #	11,760.6 #	11,646.1	0.3
<i>Annual growth (%)</i>	2.9	2.0	-0.1	0.2	-1.0	

Source: CRTC data collection

This table shows the number of subscribers of cable BDUs, IPTV services, and DTH satellite services from 2010 to 2014, as well as the annual growth rates and the compound annual growth rate (CAGR) for years combined. Figures listed for non-reporting BDUs are estimates calculated with the assistance of Statistics Canada for methodology issues. The number of subscribers is as of 31 August of each year.

**Table 4.3.3 Number of subscribers for the top five Canadian BDUs (thousands)**

Corporations	2011	2012	2013	2014	2015	CAGR (%) 2011-2015
Rogers	2,303	2,276	2,189	2,107	1,983	-3.7
Annual growth (%)	0.3	-1.2	-3.8	-3.7	-5.9	
Shaw	2,219	3,168	3,044	2,883	2,760	-3.8
Annual growth (%)	-0.4	-1.6	-3.9	-5.3	-4.2	
Videotron	1,809	1,854	1,849	1,811	1,771	-0.5
Annual growth (%)	1.3	2.5	-0.3	-2.1	-2.2	
Cogeco	881	873	853	816	780	-3.0
Annual growth (%)	0.8	-0.8	-2.4	-4.3	-4.3	
BCE	2,043	2,112	2,170	2,307	2,658	6.8
Annual growth (%)	3.8	3.3	2.8	6.3	15.2	
Total	10,255	10,283	10,105	9,924	9,953	-0.7
Annual growth	1.0	0.3	-1.7	-1.8	0.3	
% of all subscribers	88.1 #	87.6 #	86.0 #	84.8	n/a	

Source: Corporate quarterly reports

This table shows the number of subscribers for each of the top five Canadian BDUs (based on revenues) within their exclusive market sectors.

The data are as of 31 March of each year with the exception of those for Shaw and Cogeco, which are as of 28 February of each year. The data are for cable BDUs, IPTV services, and DTH satellite services. The data for Shaw include Shaw Direct, and the data for BCE include broadcasting distribution activities by Bell Canada and Northwestel (Northwestel data have been included since 2011). Due to the acquisition of Bell Aliant by BCE, Bell Aliant's television subscribers are included with BCE as of 2015.

**Table 4.3.4 Percentage of households subscribing to BDUs**

	2010	2011	2012	2013	2014
<b>Household subscription rate (%)</b>	84.5	83.5 #	84.2 #	83.7 #	82.0

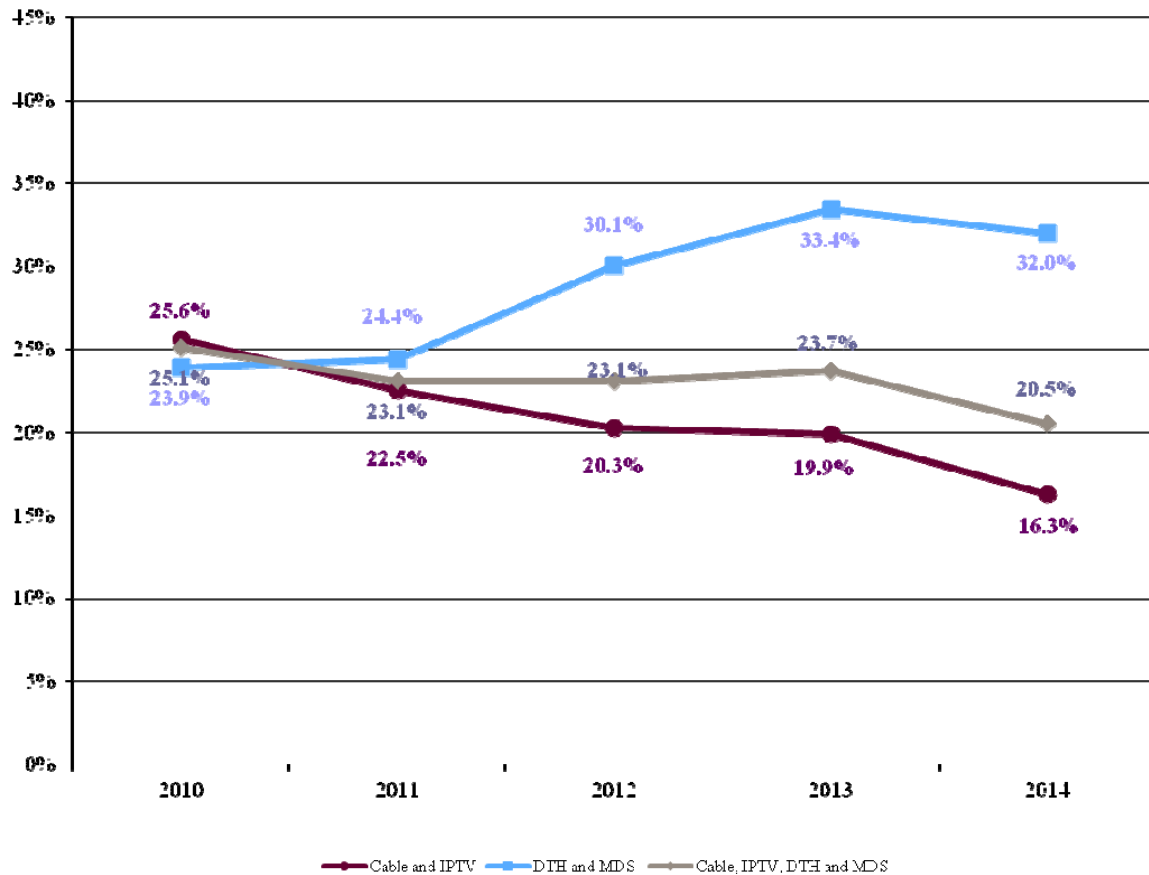
Source: CRTC data collection

**Household subscription rate**

To calculate the household subscription rates, the number of BDU subscriptions at the end of the annual period is divided by the total number of households in Canada.

c) *Financial performance*

**Figure 4.3.1 EBITDA margins achieved by BDUs - Basic and non-basic services**



Source: CRTC data collection

This figure compares the EBITDA margins for cable BDUs and IPTV service providers with those of DTH satellite services and MDS providers, from 2010 to 2014. While these margins declined for cable BDUs and IPTV services, it increased for DTH satellite services and MDS'. The data are for the 12-month period ending 31 August of each year.

**What are EBITDA margins?**

The EBITDA margin, a measure of profitability, represents earnings before interest, taxes, depreciation, and amortization and is expressed as a percentage of total revenues.

**d) Performance indicators****Table 4.3.5 Monthly revenues per subscriber, by type of BDUs**

Monthly revenues/subscriber	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Cable	57.51	59.36	58.72 #	59.43 #	60.12	1.1
Annual growth (%)	7.4	3.2	-1.1	1.2	1.2	
IPTV	47.38	49.88	58.78	64.64	67.61	9.3
Annual growth (%)	0.7	5.3	17.8	10.0	4.6	
DTH and MDS	70.70	73.53	72.84	74.69	76.63	2.0
Annual growth (%)	5.5	4.0	-0.9	2.5	2.6	
All Reporting BDUs	60.54	62.51	62.24 #	63.63 #	64.94	1.8
Annual growth (%)	6.6	3.3	-0.4	2.2	2.1	

Source: CRTC data collection

**Monthly revenues per subscriber**

Monthly revenues per subscriber are calculated by dividing BDUs' annual revenues from basic and non-basic services by the average number of subscriptions in the year. The result is then divided by 12 to obtain the monthly amount. The average number of subscribers is determined by dividing the sum of the number of subscribers at the beginning and at the end of the year by two.

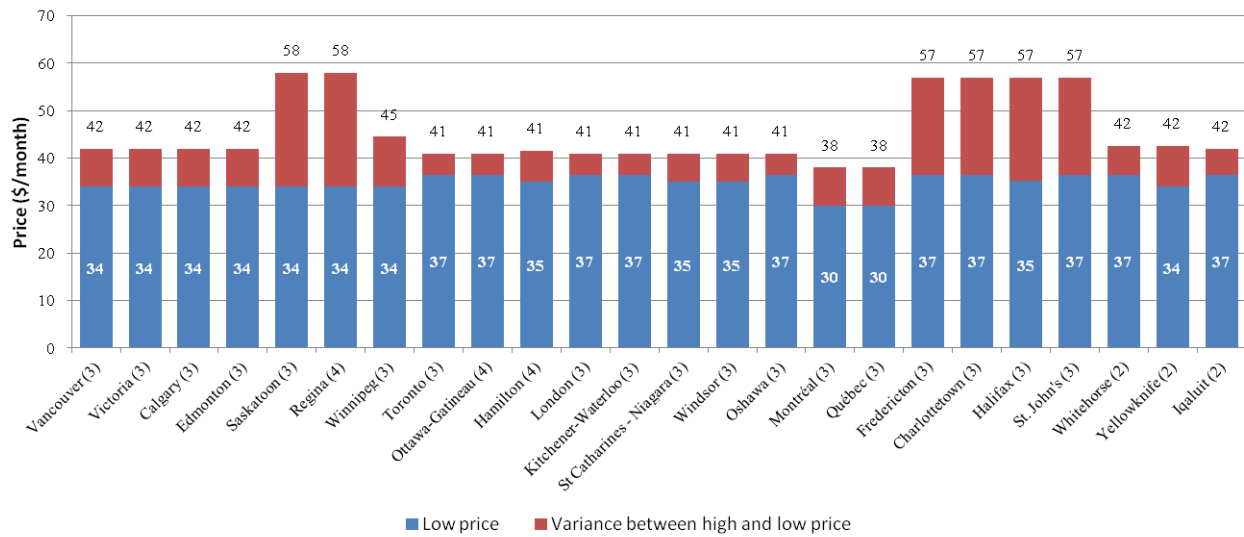
**e) Prices**

Each year, the Commission surveys the prices of basic television service in a number of urban centres and rural communities. The communities chosen for 2014 are set out in Appendix 9. In 2014, data from 24 major urban centres and a select number of rural communities shows that the prices of basic service and the number of channels included in the basic service varied significantly among service providers and across the communities served, for both types of communities.

**Urban centres**

Figure 4.3.2 shows the 2014 prices for BDUs' basic services for Canadians living in 21 major urban centres. For the most part, those Canadians could choose from among three types of service providers: cable, IPTV or DTH satellite. The price of the basic television service varied, from lows of \$30 to \$37 per month to highs of \$38 to \$58 per month.



**Figure 4.3.2 BDU basic service prices by major centre, 2014**

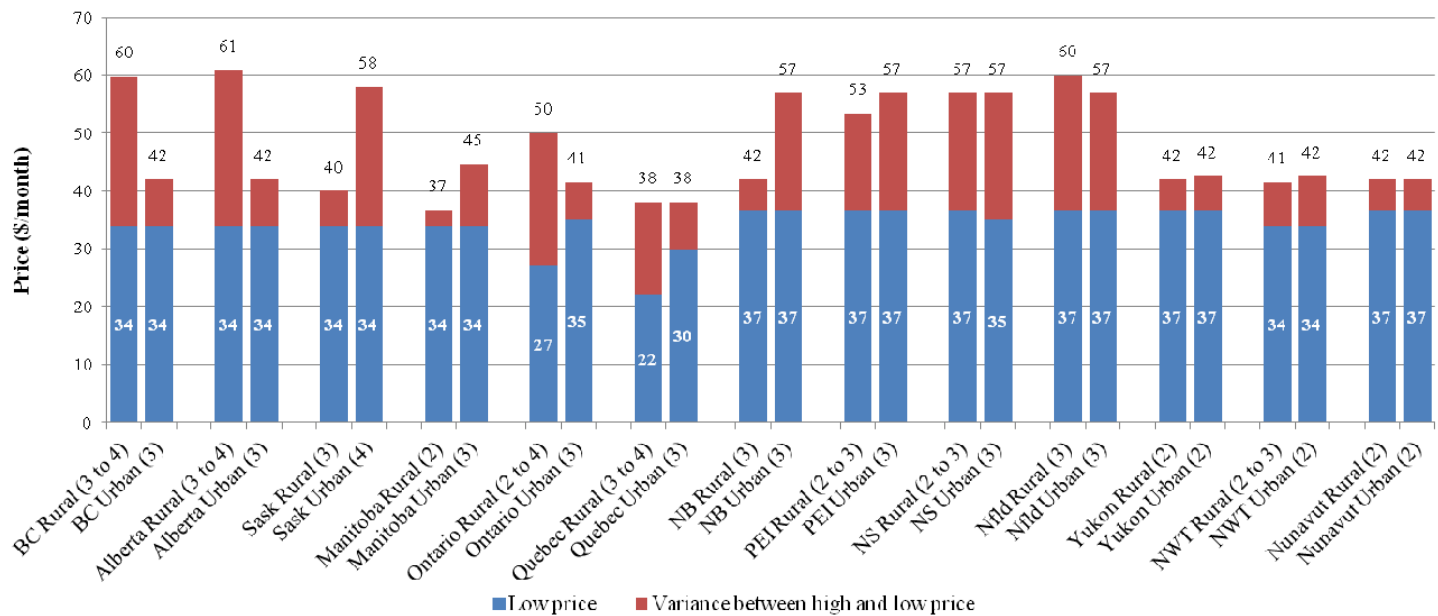
Source: CRTC data collection

In this figure, the blue bar shows the lowest price for each urban centre, and the red bar, the highest price. The number of service providers in each urban centre is indicated in parentheses. As an example, there are three BDU service providers in Vancouver, where the lowest price is \$34 and the highest price is \$42.

The composition of a basic package of television services varied between 27 and 170 channels, depending on location and service provider. The services were generally available in digital and high definition formats, and the programming generally included television, radio, and music channels.

## Rural centres

**Figure 4.3.3 BDU basic service prices by province, urban and rural, 2014**



Source: CRTC data collection

In this figure, the blue bar shows the lowest price available in each province (urban and rural areas surveyed), and the red bar, the highest price. The number of service providers in each province (urban and rural areas surveyed) is indicated in parentheses. As an example, in British Columbia, there are three to four service providers in the rural communities surveyed and three in the urban centres surveyed. The lowest prices offered by these providers for basic BDU service is from \$34 to \$60 per month in the rural communities, and from \$34 to \$42 in urban centres.

The monthly price of basic television service varied across the rural and urban communities surveyed, from lows of \$22-\$37 to highs of \$37-\$60 per month.

### Which communities were included?

Fifty-four rural communities were selected to assess the price of BDU basic service in rural communities. These communities met the following criteria:

- The community was not part of one of the CMAs of the 24 major centres;
- It had a population density of fewer than 400 people per square kilometre, or its population centres had fewer than 1,000 people;
- The number of communities in each province was proportional to the population of the province; and
- The communities were not clustered together.

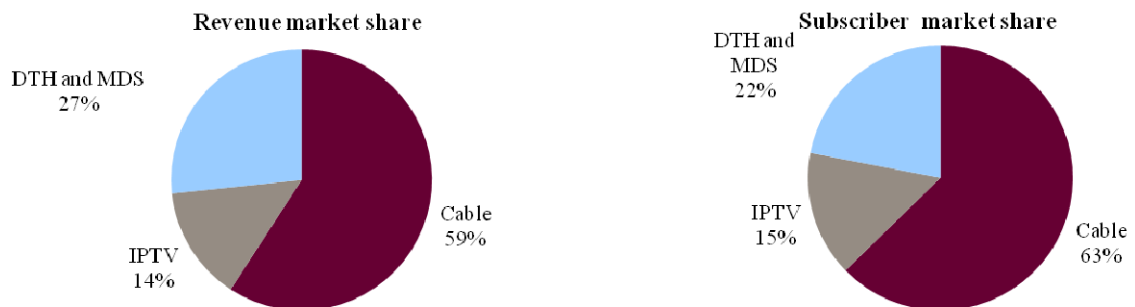
See Appendix 9 for more details.

*f) Competitive landscape*

Cable companies were the first providers of BDU services in Canada. By the mid-1990s, DTH satellite services had entered the Canadian market. More recently, IPTV services have become available.

In 2014, Canadians living in urban centres had access to three types of BDU service providers: cable, IPTV and DTH satellite. In rural areas, just over half of Canadians households were dependent on a DTH satellite service provider. Just less than half of rural Canadian households had access to both cable and DTH satellite service providers.

**Figure 4.3.4 Percentage of revenues and subscribers by type of distribution platform, 2014**



Source: CRTC data collection

**g) Consumer voices****Table 4.3.6 Number of BDU-related received by the CRTC**

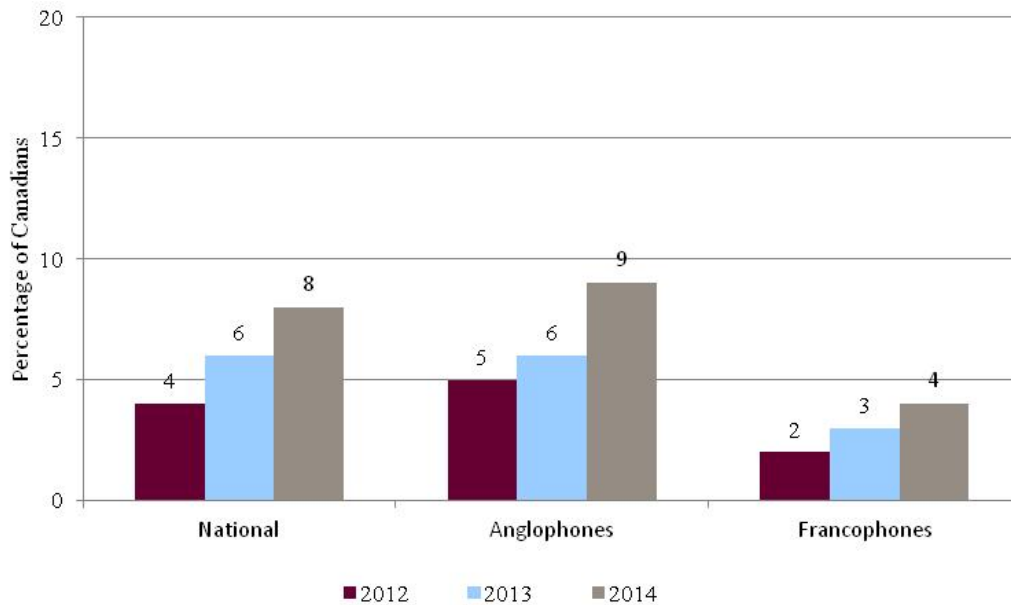
Issue	CRTC policies/decisions	Billing	Prices/Rates	Terms and conditions	Disability issues	Quality of service/Delivery	Competition	Other*	Total
2013-2014	699	1,562	342	336	61	2,062	116	654	5,832
2014-2015	755	1,298	223	313	62	480	110	2,300	5,541

Source: CRTC Correspondence Tracking System.

\*The category “Other” included issues relating to Let’s Talk TV (447 contacts), NHL rights and blackouts (133 contacts), signal substitution (105 contacts), foreign broadcasters (102 contacts), basic services (57 contacts), channel placement (52 contacts), and issues relating to specific events that occurred in the 2014-2015 timeframe.

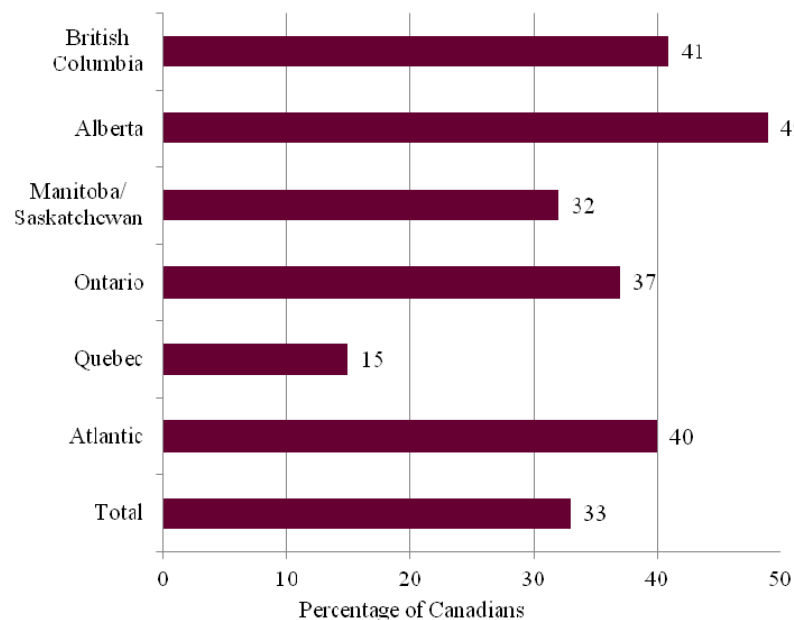
***h) Online television services***

**Figure 4.3.5** Percentage of Canadians who watch TV exclusively online, nationally and by language



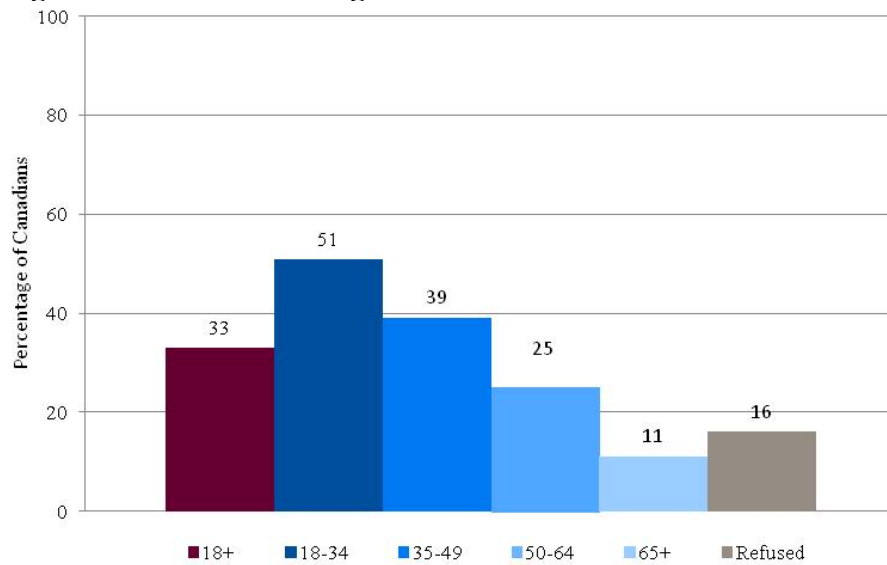
Source: MTM 2012-2014 (Respondents: Canadians 18+)

**Figure 4.3.6** Percentage of Canadians who subscribed to Netflix, by region



Source: MTM 2014 (Respondents: Canadians 18+)

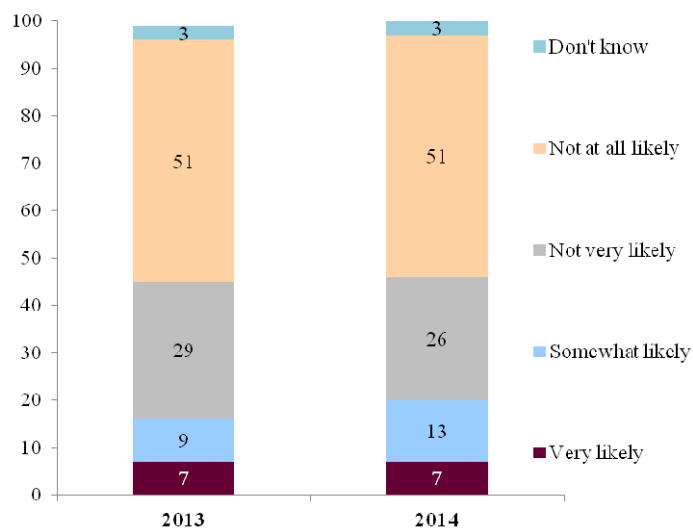
**Figure 4.3.7 Percentage of Canadians who subscribe to Netflix, by age group**



Source: MTM 2014 (Respondents: Canadians 18+)

Younger Canadians are more likely to subscribe to Netflix than older Canadians.

**Figure 4.3.8 Likelihood of Canadians “cutting the cord” on their current traditional TV subscription in the next 12 months, 2013 and 2014 (percentage)**



Source: MTM 2014 (Respondents: Canadians 18+)

**Table 4.3.7 Adoption and growth rates of various video technologies in Canada**

	Adoption (%)					Growth 2010-2014 (%)
	2010	2011	2012	2013	2014	
PVR owner						
Anglophones	23	35	43	46	50	117
Francophones	16	23	39	42	52	225
Internet TV viewer						
Anglophones	31	34	38	42	47	52
Francophones	26	33	34	39	42	62
Netflix subscriber						
Anglophones	n/a	10	21	29	39	290
Francophones	n/a	5	5	7	12	140

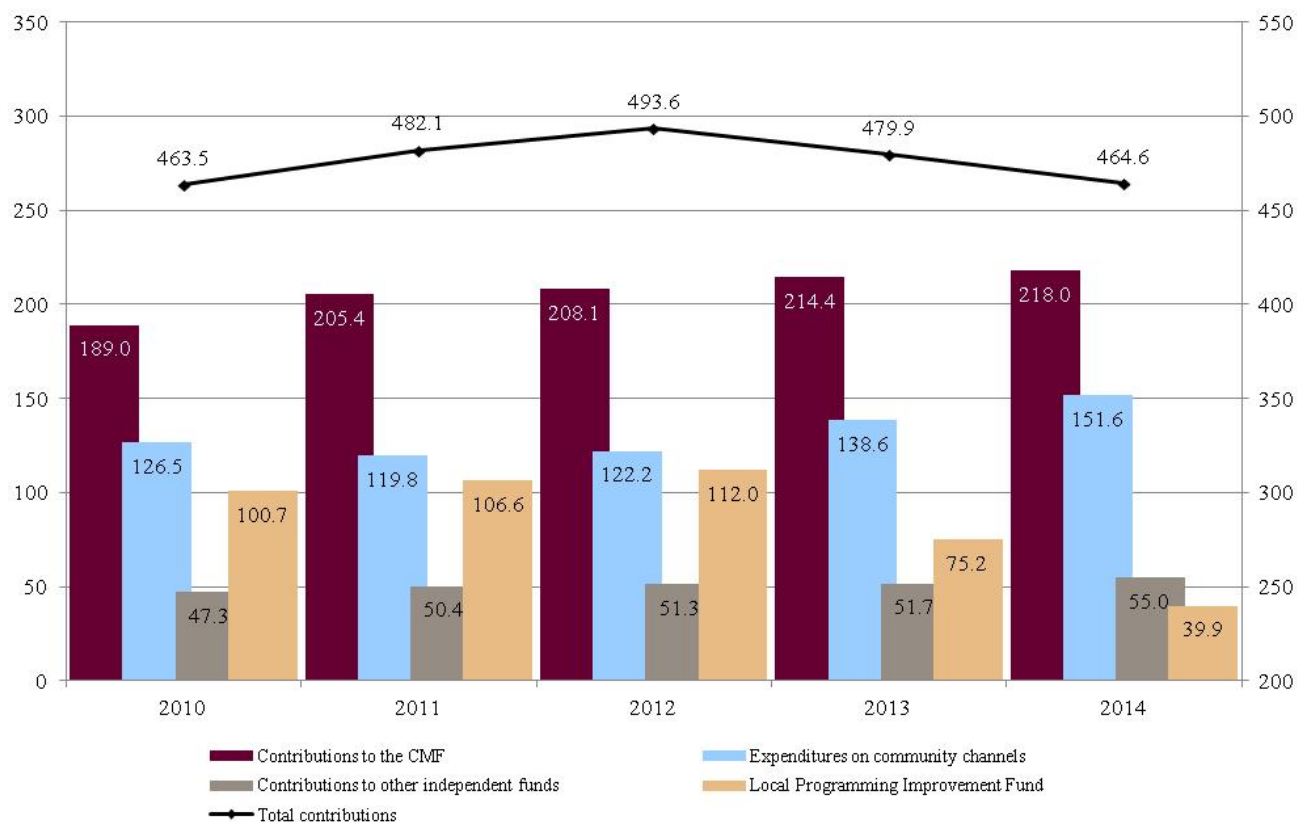
Source: MTM 2010-2014 (Respondents: Canadians 18+, viewed or used in the past month)

This table shows the percentages of Canadians 18 years of age and older who had adopted various video technologies and services each year from 2010 through 2014, as well as the growth in these percentages during that period (for Netflix, from 2011 to 2014). MTM describes “Internet TV” as watching or streaming television programs or clips available over the Internet.

*i) Contribution to Canadian programming*

During the 2013-2014 broadcast year, approximately 5% of BDU revenues were directed to various funds for the production of Canadian programming, such as the Canadian Media Fund or to local expression (i.e. community channels).

**Figure 4.3.9 Contributions to the CMF, LPIF, and other independent production funds, and expenditures on local expression (community channels), as reported by BDUs (\$ millions)**

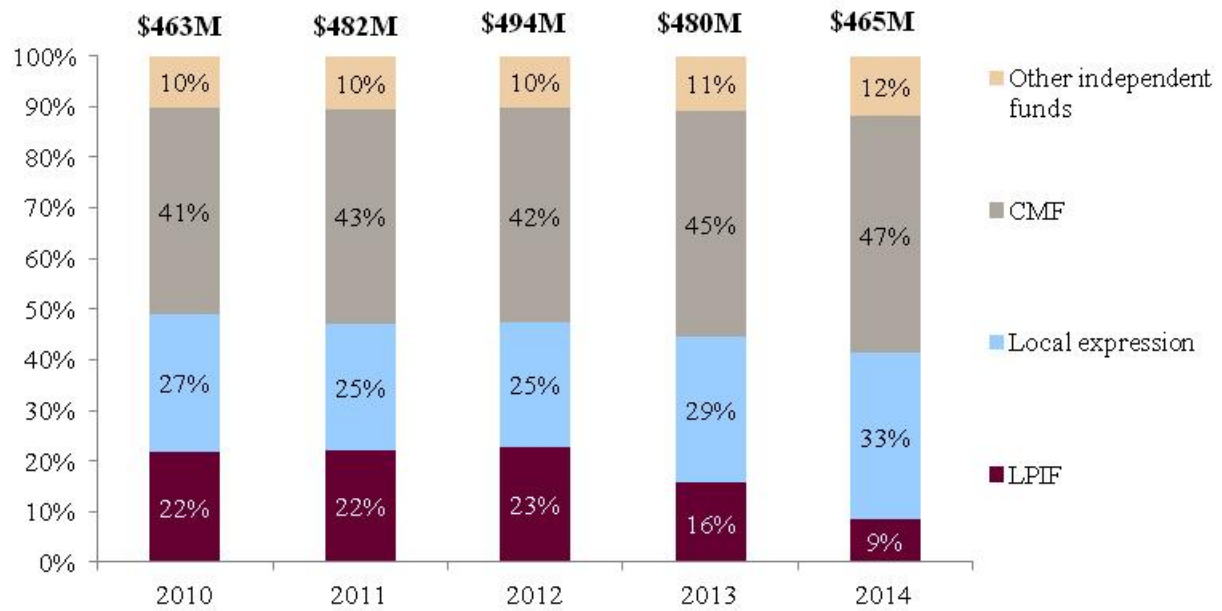


Source: CRTC data collection

This figure shows the contributions made by BDUs to the CMF, the LPIF and other independent production funds, as well as spending on local expression (community channels), during the 12-month period ending 31 August of each year. BDU contributions include contributions reported by cable BDUs, DTH satellite services, MDS's and satellite relay distribution undertakings (SRDUs).



**Figure 4.3.10 Various recipients' shares of BDU contributions to the creation and production of Canadian programming, and total BDU contributions (\$ millions)**



Source: CRTC data collection

j) *Affiliation payments***Table 4.3.8 Affiliation payments made to Canadian and non-Canadian discretionary services reported by BDUs (part 1 of 2)**

		2010	2011	2012	2013	2014	CAGR (%) 2010- 2014
<b>Canadian affiliates</b>							
Affiliation payments made	Cable and IPTV	1,633	1,809	1,930	2,024	2,195	7.7
	<i>Annual growth (%)</i>	11	11	7	5	8	
	DTH and MDS	819	735	726	700	717	-3.3
	<i>Annual growth (%)</i>	11	-10	-1	-4	2	
	Total payments	2,452	2,544	2,656	2,725 #	2,911	4.4
Affiliation payments received	Pay, PPV, and VOD	647	682	671	670	666	0.7
	<i>Annual growth (%)</i>	9	5	-2	0	-1	
	Specialty	1,805	1,862	1,986	2,054	2,245	5.6
	<i>Annual growth (%)</i>	12	3	4	3		
	Total received	2,452	2,544	2,656	2,725 #	2,911	4.4
	<i>Annual growth (%)</i>	11	4	4	3	7	
<b>Non-Canadian affiliates</b>							
Affiliation payments made	Cable and IPTV	243	263	265	285	296	5.0
	<i>Annual growth (%)</i>	18	8	1	8	4	
	DTH and MDS	75	81	86	94	93	5.4
	<i>Annual growth (%)</i>	8	8	5	9	-1	
	Total payments	318	344	351	379	389	5.1
Affiliation payments received	Pay, PPV, and VOD	46	48	34	37	37	-5.7
	<i>Annual growth (%)</i>	21	3	-29	8	-1	
	Specialty	272	296	317	342	352	6.7
	<i>Annual growth (%)</i>	14	9	7	8	3	
	Total received	318	344	351	379	389	5.1
	<i>Annual growth (%)</i>	15	8	2	8	3	

**Table 4.3.8 Affiliation payments made to Canadian and non-Canadian discretionary services reported by BDUs (part 2 of 2)**

		2010	2011	2012	2013	2014	CAGR (%) 2010- 2014
<b>All affiliates</b>							
Affiliation payments made	Cable and IPTV	1,877	2,072	2,195	2,310	# 2,491	7.3
	Percentage Canadian	87	87	88	88	88	
	Percentage of total	68	72	73	74	75	
	Annual growth (%)	12	10	6	5	8	
	DTH and MDS	894	816	812	794	809	-2.4
	Percentage Canadian	92	90	89	88	89	
	Percentage of total	32	28	27	26	25	
	Annual growth (%)	11	-9	0	-2	2	
	Total	2,770	2,888	3,007	3,104	3,300	4.5
Affiliation payments received	Pay, PPV, and VOD	693	730	705	707	702	0.3
	Percentage Canadian	93	93	95	95	95	
	Percentage of total	25	25	23	23	21	
	Annual growth (%)	9	5	-3	0	-1	
	Specialty	2,077	2,158	2,303	2,396	2,598	5.7
	Percentage Canadian	87	86	86	86	86	
	Percentage of total	75	75	77	77	79	
	Annual growth (%)	12	4	7	4	8	
	Total	2,770	2,888	3,007	3,104	3,300	4.5
	Percentage Canadian	89	88	88	88	88	
	Annual growth (%)	11	4	4	3	6	

Source: CRTC data collection

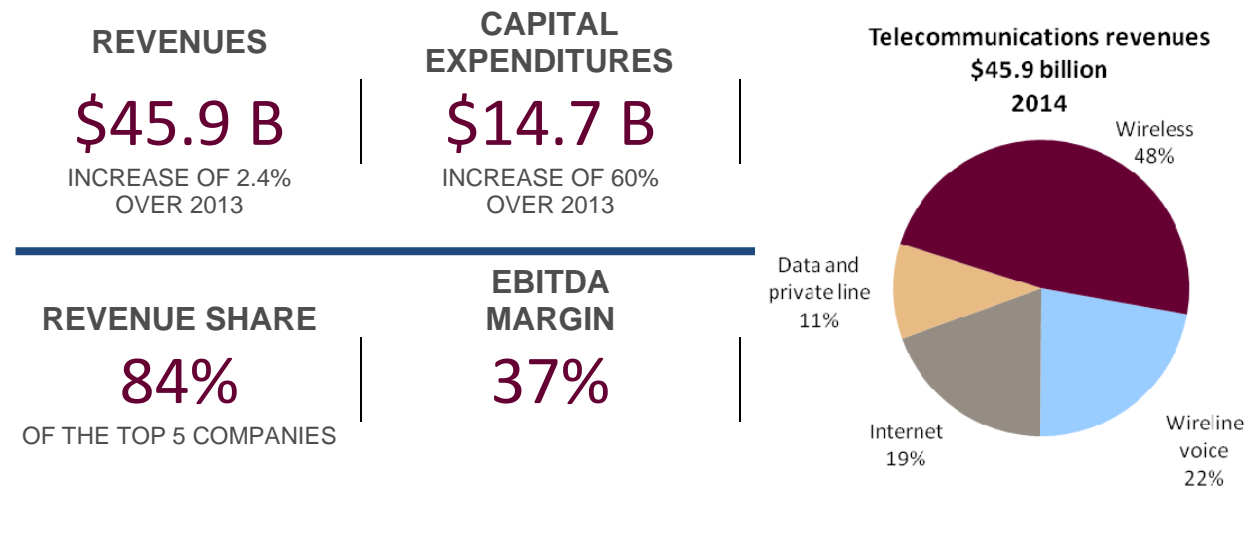
This table provides a detailed breakdown of the amounts of affiliation payments made by BDUs (cable/IPTV vs DTH satellite/MDS) to discretionary services overall, and the amounts of affiliation payments received from discretionary services (pay/PPV/VOD vs specialty), broken down by Canadian and non-Canadian affiliates, for the years 2010 through 2014.

Payments to Canadian affiliates have increased annually by 4.4% since 2010, whereas payments to non-Canadian affiliates have increased by 5.1%. The data are based on the 12-month period ending 31 August of each year.



## 5.0 Telecommunications sector overview

### Display 5.0.0 Key indicators for the telecommunications sector



Canada's telecommunications industry consists of six sectors: local, long distance, Internet, wireless, data, and private line. Approximately 94% of telecommunications revenues were derived from services that are no longer price-regulated. Canada's telecommunication market has been relatively resilient to external economic conditions compared to other communications services. In the midst of a recovering economy, revenues from telecommunications services expanded in each of the last five years by an average annual rate of 2.5%.

In 2014, Canadian telecommunications revenues reached \$45.9 billion, with the vast majority (92%) derived from the retail services and a smaller portion (8%) from the wholesale sector. Service providers supplied retail services to over 12 million households, one million businesses, and, through the wholesale market, 800 other telecommunications entities.

Telecommunications service revenues exclude revenues from the sale and rental of wireline telephone sets. Annual investment in plant and equipment only includes investments made by companies with annual revenues greater than \$100 million.

Large incumbent TSPs captured over 62% of industry revenues. Their main group of competitors, cable-based carriers, accounted for 31% of revenues and 8% of the total number of companies. Resellers comprised nearly 68% of service providers but only 3% of revenues. These enterprises generally acquire wholesale services from incumbent TSPs and/or cable-based carriers to provide telecommunications services to their own customers.

**a) Revenues**

**Table 5.0.1 Telecommunications revenues (retail and wholesale) (\$ billions)**

		2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Wireline	Retail	20.6	20.6	20.7	20.9	21.2	0.7
	Annual growth (%)	-1.9	0.3	0.2	1.2	1.3	
	Wholesale	3.1	3.0	2.9	2.8	2.7	-2.6
	Annual growth (%)	-0.3	-1.4	-3.6	-5.1	-0.3	
	<b>Wireline total</b>	<b>23.6</b>	<b>23.6</b>	<b>23.6</b>	<b>23.7</b>	<b>23.9</b>	0.3
	Annual growth (%)	-1.7	0.0	-0.3	0.4	1.1	
Wireless	Retail	17.5	18.4	19.5	20.2	20.9	4.6
	Annual growth (%)	7.2	5.0	6.1	3.4	3.7	
	Wholesale	0.5	0.7	0.8	1.0	1.0	21.6
	Annual growth (%)	-12.9	51.3	17.1	13.5	9.0	
	<b>Wireless total</b>	<b>18.0</b>	<b>19.1</b>	<b>20.4</b>	<b>21.2</b>	<b>22.0</b>	5.1
	Annual growth (%)	6.6	6.2	6.5	3.8	3.9	
Retail total		38.1	39.0	40.2	41.1	42.1	2.5
	Annual growth (%)	2.1	2.5	3.0	2.3	2.5	
Wholesale total		3.5	3.7	3.7	3.7	3.8	1.8
	Annual growth (%)	-2.2	5.6	0.4	-1.0	2.1	
<b>Total</b>		<b>41.6</b>	<b>42.8</b>	<b>43.9</b>	<b>44.8</b>	<b>45.9</b>	2.5
	Annual growth (%)	1.7	2.7	2.8	2.0	2.4	

Source: CRTC data collection

Revenues from telecommunications services are derived from sales to residential and business consumers (retail revenues) and to other carriers (wholesale revenues). The table displays retail and wholesale revenues for wireline and wireless services for the years 2010 to 2014.

Estimates were made to capture revenues of service providers that did not provide data. In 2014, these estimates were less than 1% of total telecommunications revenues. Revenues derived from the sale and rental of local and access terminal equipment and other non-telecommunications revenues were excluded from wireline retail service revenues.

**b) Forbearance**

In 2014, approximately 94% of telecommunications revenues were from services that the Commission has determined are sufficiently competitive that tariff filings are no longer required.

**Table 5.0.2 Percentage of telecommunications revenues generated by forborne services**

(Percentage)	2010	2011	2012	2013	2014
Local and access	73	76	77	78	79
Long distance	96	95	99	99	97
Internet	98	98	98	97	96
Data and private line	81	83	84	84	89
Wireless	100	100	100	100	100
Overall	92	93	93	94	94

Source: CRTC data collection

This table shows the percentage of telecommunications revenues by market sector that are not regulated by the CRTC from 2010 to 2014. With respect to the local and access market sector, 'access' refers to wireline services that provide telecommunications services access to the subscriber or the telecommunications network.

**Forbearance**

The Commission refrains from regulation when it finds that a service is subject to sufficient competition or where refraining is consistent with the Canadian telecommunications policy objectives. This is referred to as forbearance. Where a service is forborne it is generally relieved of the obligation of a Commission-approved tariff. Other aspects of the service may still be regulated.

**c) Canadian Ownership**

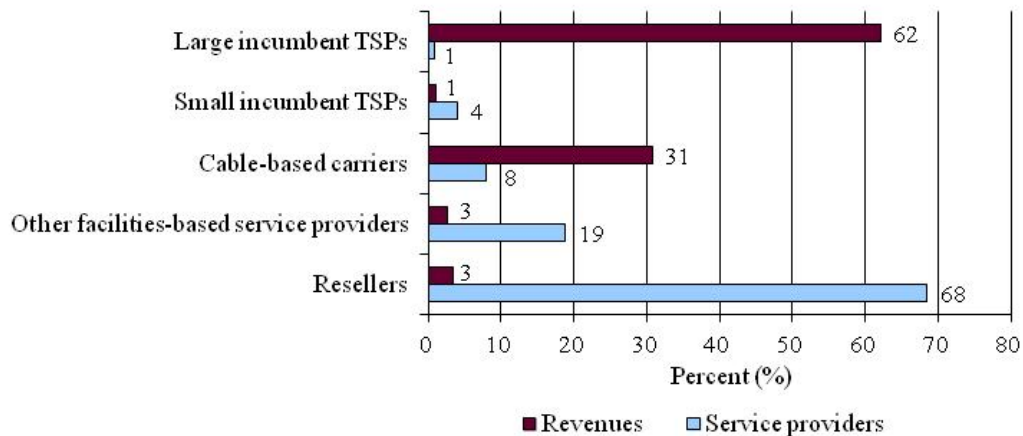
Section 16 of the *Telecommunications Act* addresses the eligibility of Canadian carriers to operate as telecommunications common carriers. For the purposes of applying the provisions of section 16, the Commission has determined that, for the period between the date of release of the 2015 *Communications Monitoring Report* and the date of release of the 2016 edition, the total annual revenues from the provision of telecommunications services in Canada is \$45.9 billion.

**What does section 16 of the *Telecommunications Act* require?**

Subject to certain exceptions, section 16 requires that telecommunications companies that own or operate telecommunication transmission equipment and have Canadian telecommunications revenues greater than \$4.6 billion (i.e. 10% of total Canadian telecommunications revenues) be Canadian owned and controlled.

d) *Number, size, and type of companies*

**Figure 5.0.1 Percentage of telecommunications revenues, by type of provider of telecommunications service, 2014**



Source: CRTC data collection

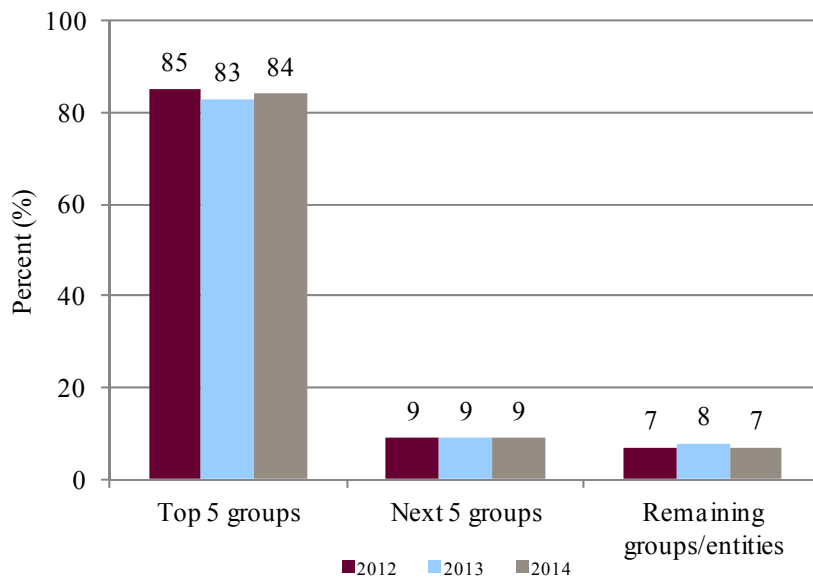
This graph displays the percentage of total revenues captured by type of provider of telecommunications services and the percentage of providers offering service.

The incumbent TSP data displayed above includes revenues from all of their Canadian telecommunications operations, both inside and outside of their traditional operating territory.

Providers of telecommunications services provide diverse information and communications technology (ICT) services, ranging from voice and data telecommunications services to data storage and cloud computing, and other services encompassing both Canadian and non-Canadian activities. In 2014, 59% of the revenues from providers of telecommunications service were from telecommunications services to Canadians. The remaining 41% were from other ICT services, broadcasting distribution services, and non-telecommunications services such as floor space rental services and fleet operations.

The industry is dominated by 10 large companies that collectively, with their affiliates, accounted for 93% of Canadian telecommunications revenues in 2014. The remaining companies accounted for less than \$3.3 billion of these revenues.



**Figure 5.0.2 Percent of total telecommunications revenues by ownership groups**

Source: CRTC data collection

Bell Canada, MTS Inc./Allstream Inc., Rogers, Shaw, and TELUS are Canada's five largest providers of telecommunications services. Combined, including their affiliates, they accounted for more than 84% of total market revenues. The next five largest groups/entities - Bragg, Cogeco, Quebecor, Saskatchewan Telecommunications, and Telesat Canada—accounted for less than 9% of total market revenues. The remaining groups/entities captured 7%.

The top 10 groups/entities are facilities-based service providers, meaning that they own and operate the transmission equipment required to provide telecommunications services. Of the remaining groups/entities, the vast majority are resellers.

Providers of telecommunication service are classified as either incumbent TSPs or alternative service providers. The alternative providers consist of resellers and other facilities-based service providers, which include cable-based carriers.

Incumbent TSPs are the traditional telephone companies. For monitoring purposes, this group of TSPs is further subdivided to identify their activities outside of their traditional or incumbent territory as follows: incumbent TSPs (excluding out-of-territory) and incumbent TSPs (out-of-territory). Additional details on the classifications of providers of telecommunications services can be found in Appendix 8.

The incumbent TSPs' revenues, excluding their out-of-territory revenues, have increased 1.3% annually over the 2010 to 2014 period. Over the same period, revenues for alternative providers of telecommunications service, including the incumbent TSPs (out-of-territory), grew 3.9% annually. Overall the cable-based carriers have experienced the strongest growth in telecommunications revenues, which increased 3.8%, from \$12.2 billion in 2010 to \$14.2 billion in 2014.

**Table 5.0.3 Total telecommunications revenues, by type of service provider (\$ millions)**

			2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Incumbent TSPs	Large incumbent TSPs		26,755.2	27,205.0	27,478.5	27,818.4	28,424.3	1.5
	Small incumbent TSPs		417.5	469.9	474.4	450.4	448.1	1.8
	Subtotal		27,172.7	27,674.9	27,953.0	28,268.8	28,872.3	1.5
	Less: out-of-territory		4,326.1	4,463.5	4,934.6	5,023.3	4,816.1	2.7
	<b>Incumbents (excl. out-of-territory)</b>		<b>22,846.6</b>	<b>23,211.3</b>	<b>23,018.4</b>	<b>23,245.4</b>	<b>24,056.2</b>	1.3
	Percent of total (%)		55	54	52	52	52	
Alternative service providers	Facilities- based carriers	Incumbents (out-of- territory)	4,326.1	4,463.5	4,934.6	5,023.3	4,816.1	2.7
		Cable-based carriers	12,233.7	12,722.1	13,260.2	13,785.5	14,204.1	3.8
		Other carriers	716.3	866.8	1,161.5	1,226.0	1,247.3	14.9
		Subtotal alternative carriers	17,276.1	18,052.5	19,356.2	20,034.9	20,267.5	4.1
	Resellers		1,504.7	1,493.4	1,527.7	1,542.0	1,585.5	1.3
	<b>Total alternative providers</b>		<b>18,780.8</b>	<b>19,545.9</b>	<b>20,883.9</b>	<b>21,576.8</b>	<b>21,853.0</b>	3.9
	Percent of total (%)		45	46	48	48	48	
	Total		41,627.3	42,757.2	43,902.3	44,822.3	45,909.2	2.5

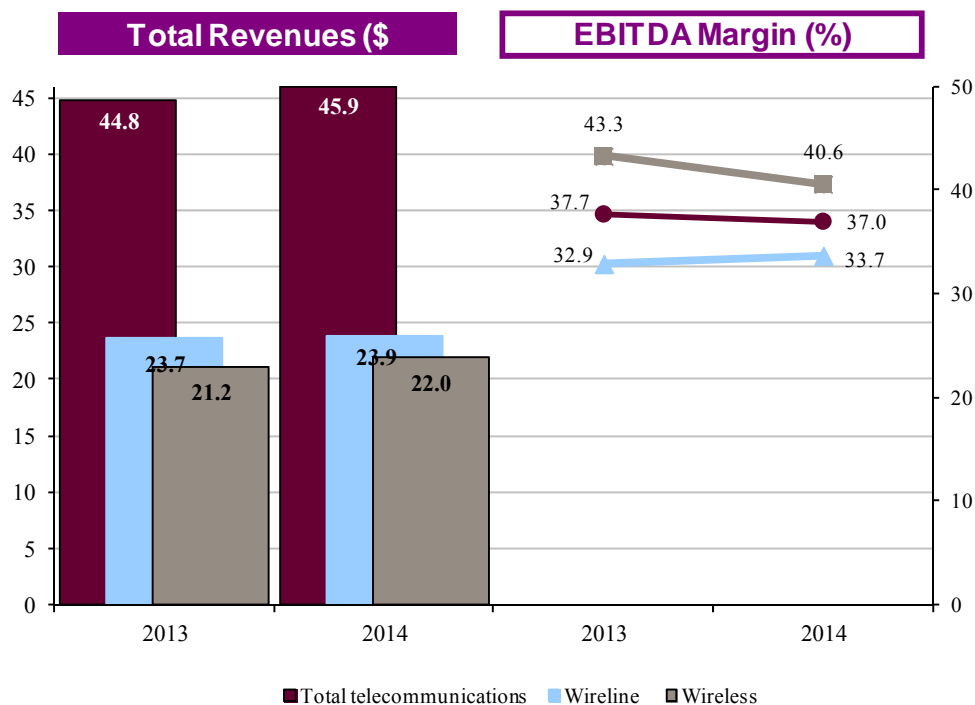
Source: CRTC data collection

This table displays telecommunications revenues by type of TSP for the years 2010 to 2014. It provides subtotals for the incumbent TSPs, excluding their out-of-territory revenues. The out-of-territory revenues are moved to the alternative providers of telecommunications services portion of the table. This adjustment acknowledges that incumbent TSPs are considered alternative TSPs for their out-of-territory operations.

**e) Financial performance**

There are a number of elements to consider in assessing a company's financial performance or profitability. One of these is EBITDA as a percentage of total revenue (EBITDA margins).

**Figure 5.0.3 Telecommunications revenues and EBITDA margins**



Source: CRTC data collection

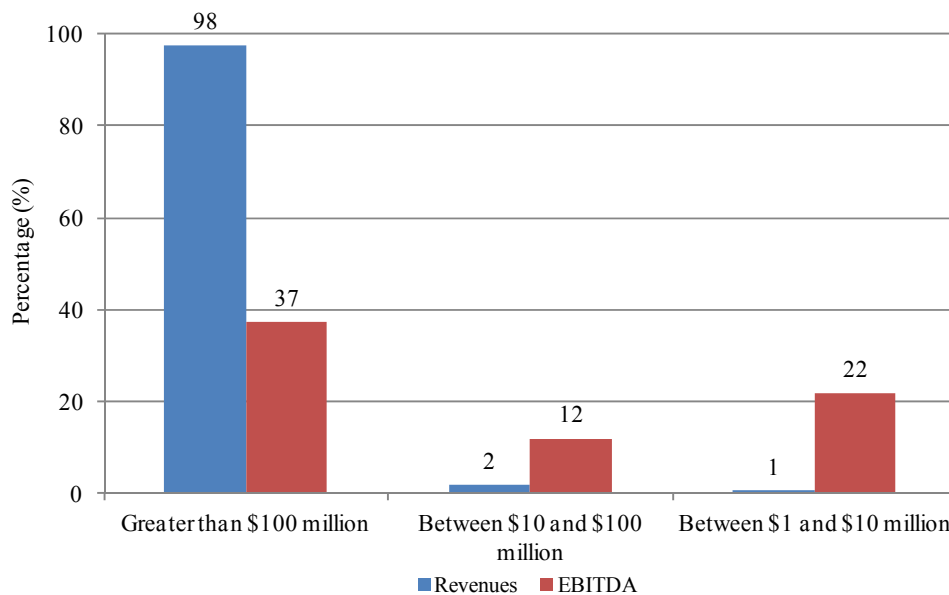
The EBITDA margins are calculated for TSPs that had telecommunications revenues greater than 80% of their total revenues.

This table shows the total growth in telecommunications revenues from wireless and wireline services between 2013 and 2014. It also shows the EBITDA margins for wireless, wireline, and total telecommunications.

Non facilities-based providers (i.e., resellers) generally had lower EBITDA margins. On average, their EBITDA margins were approximately one seventh that of facilities-based service providers.

Large providers of telecommunications service with Canadian telecommunications revenues in excess of \$100 million were generally more profitable than smaller providers of telecommunications service.

**Figure 5.0.4 Percentage of revenues and EBITDA margins by size of entity, 2014**



Source: CRTC data collection

The percentage of revenues and profitability are calculated for TSPs that had telecommunications revenues greater than 80% of their total revenues.

These companies were subdivided into three telecommunications revenue ranges: \$1-\$10 million, \$10-\$100 million, and greater than \$100 million.

The collective EBITDA margin of companies with Canadian telecommunications revenues greater than 80% of their total revenues was 37.0%. As displayed above, companies with revenues in excess of \$100 million displayed the highest EBITDA margin, 37.3%. Companies with telecommunications revenues between \$10 million and \$100 million collectively had a 12.0 % EBITDA margin and those between \$1 and \$10 million had a 21.8% margin.

#### **f) Annual investment in plant and equipment**

‘Annual investment in plant and equipment’ refers to the capital expenditures made to ‘replenish’ or upgrade the network of a provider of telecommunications services. In 2014, these providers spent \$14.7 billion on capital expenditures of which 30% were for access services and 19% were network related. The remaining 52% related to spectrum and non-network activities such as billing and fleet operations.

#### **What are ‘access services’ and ‘network related capital expenditures’?**

‘Access services’ refer to the facilities required to connect the subscriber to the network. Examples include local telephone lines and broadband access facilities.

‘Network related capital expenditures’ refer to expenditures on facilities that connect the access services facilities.

**Table 5.0.4 Telecommunications investments made in plant and equipment, by type of provider of telecommunications service (\$ billions)**

							CAGR (%)	
			2010	2011	2012	2013	2014	2010-2014
Wireline	Incumbent TSPs		4.4	4.6	4.7	4.9	4.8	-2.3
	Annual growth (%)		5.1	5.4	2.0	4.2	-2.3	
	Alternative service providers	Other facilities-based service providers (including cable-based carriers)	2.1	2.4	2.3	1.9	2.3	1.7
		Annual growth (%)	40.2	13.7	-4.6	-17.0	18.7	
		Resellers	0.0	0.0	0.0	0.0	0.0	6.9
		Annual growth (%)	-35.5	33.6	48.8	1.4	-35.2	
		Subtotal	2.2	2.5	2.4	2.0	2.3	1.8
		Annual growth (%)	38.7	13.9	-4.0	-16.7	17.6	
	Wireline total		6.6	7.1	7.1	6.9	7.1	2.1
	Annual growth (%)		14.2	8.2	0.0	-2.8	3.4	
Wireless		1.8	2.5	2.6	2.3	7.5	42.6	
Annual growth (%)		-18.9	35.2	4.9	-11.4	228.8		
Wireline and wireless total		8.4	9.6	9.7	9.2	14.7	15.0	
Annual growth (%)		4.9	14.1	1.2	-5.1	59.7		

Source: CRTC data collection

This table shows the investments made by type of TSP for the period between 2010 and 2014.

The data for the incumbent TSPs includes their out-of-territory operations. The table also excludes TSPs with revenues less than \$100 million since these companies were not required to provide this data.

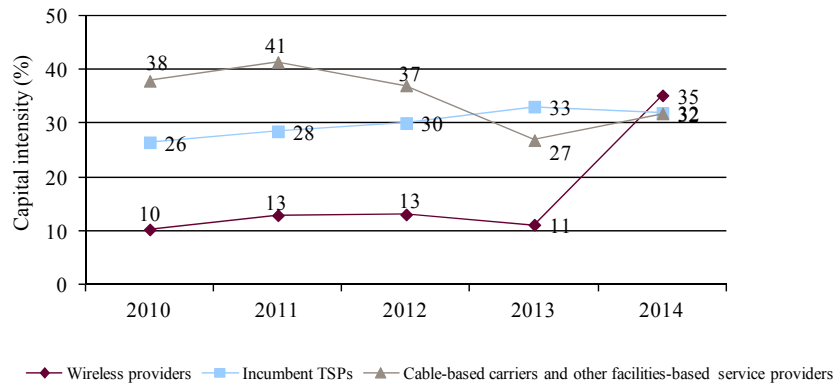
The data above include expenditures made to acquire spectrum. In 2014, wireless capital expenditures increased significantly due to the sale of the 700 MHz spectrum held by Industry Canada.

Since 2010, incumbent TSPs have accounted for approximately 50% of the capital expenditures in the sector. Resellers had the least amount of capital expenditures since they use the transmission facilities of others.

A useful measure to compare annual capital expenditures is “capital intensity.” Under this measure, cable-based carriers and other facilities-based service providers spent on average 31 cents from every revenue dollar over the past two years on wireline facilities compared to 32 cents by the incumbent TSPs.

During the 2010 to 2013 period, wireless service providers had the lowest capital intensity. Over this period, their capital intensity was relatively constant at 12 cents or approximately one-third that of what the cable-based carriers and other facilities-based service providers spent on wireline facilities. In 2014, wireless capital expenditures increased significantly due to the sale of the 700 MHz spectrum held by Industry Canada.

**Figure 5.0.5 Telecommunications capital expenditures as a percentage of revenues, by type of TSP**



**Capital intensity** is a measure of the degree or level a company spends on its plant and equipment. It is derived by dividing annual capital expenditures by annual revenues, expressed as a percentage.

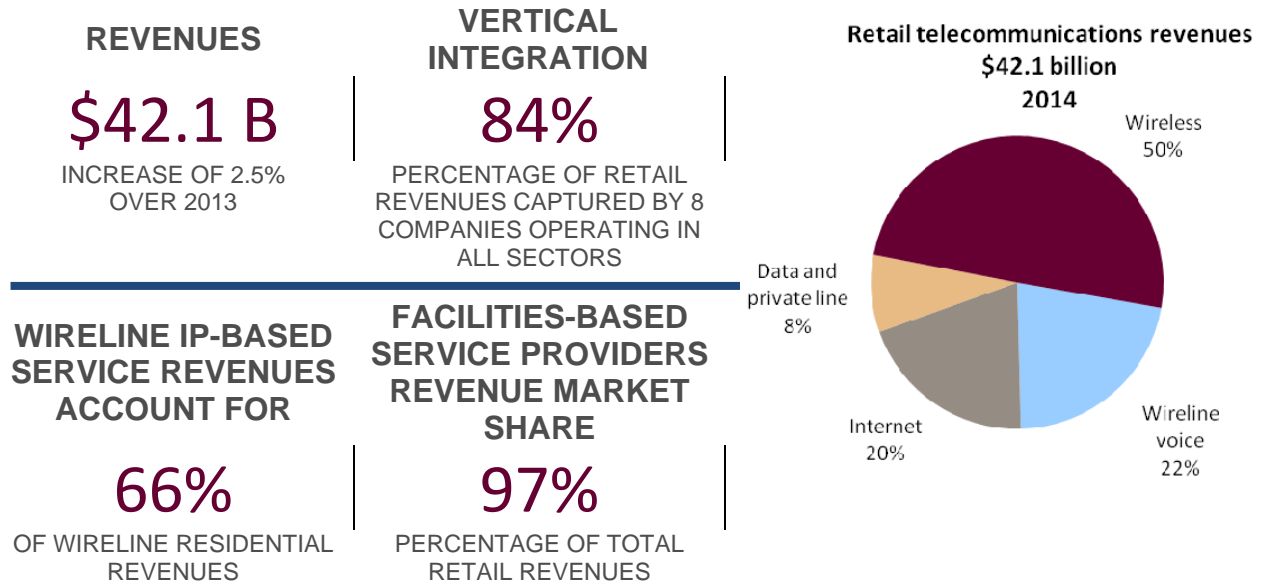
Source: CRTC data collection

This figure shows the capital intensity of TSPs for the period between 2010 and 2014.

The data for the incumbent TSPs includes their out-of-territory operations, while that of alternative TSPs excludes the incumbent out-of-territory operations. TSPs with revenues less than \$100 million are not included as these companies were not required to provide this data.

## 5.1 Telecommunications retail sectors

**Display 5.1.0 Key indicators for the telecommunications retail sectors**



As noted in the previous section, Canada's telecommunications industry consists of six sectors: local, long distance, Internet, wireless, data, and private line.

In 2014, Canadian retail telecommunications revenues were \$42.1 billion, of which 50% were from wireline services. Of the wireline revenues, 57% were from residential services and 43% from business services. The top 5 incumbent TSPs and top 5 cable-based carriers captured 61% and 32% of retail telecommunications revenues, respectively. Collectively, these 10 companies captured 93% of all retail revenues. The remaining 7% of the revenues were garnered by a large number of resellers and other facilities-based service providers. The data suggests that companies which operated in scale and scope (multiple sectors) have clear competitive advantages relative to those who are less integrated.

In 2010, revenues from wireless services were \$17.5 billion or 46% of total retail revenues. By 2014, mobile wireless service revenues increased to \$20.9 billion or 50% of total retail revenues. This growth was driven in large part by increased subscriptions and heightened demand for wireless data services. Data revenues, excluding roaming and other services (e.g. interconnection), have experienced an average annual growth rate of 22.4% between 2010 and 2014.

Wireline revenues have increased at a much slower pace since 2010. Wireline service revenues increased from \$20.6 billion in 2010, or 54% of retail telecommunications revenues, to \$21.2 billion, or 50%, in 2014. This small expansion masks the fact that wireline voice services' revenues have fallen by nearly \$1.7 billion or 16%, since 2010. The number of local lines has also declined from 18.5 million lines in 2010 to 16.4 million lines in 2014. In contrast, wireline data services such as Internet, new data protocols, and data and private line services have experienced strong revenue growth.

In urban centres across Canada, with the exception of the northern territories, there were generally 2-3 local service providers, 3-9 Internet service providers, and 3-5 wireless service providers. In rural centres, there were generally 1-2 local service providers, 2-5 Internet service providers, and 3-5 wireless service providers.

On average, Canadians could expect to pay between \$23 and \$75 per service per month in urban centres and \$23 and \$82 in rural centres, depending on the service. Companies operating in multiple sectors generally offered discounts to customers for purchasing bundled services.

Telecommunications service revenues exclude revenues from the sale and rental of wireline telephone sets. Annual investment in plant and equipment only includes investments made by companies with annual revenues greater than \$100 million.



a) **Revenues**

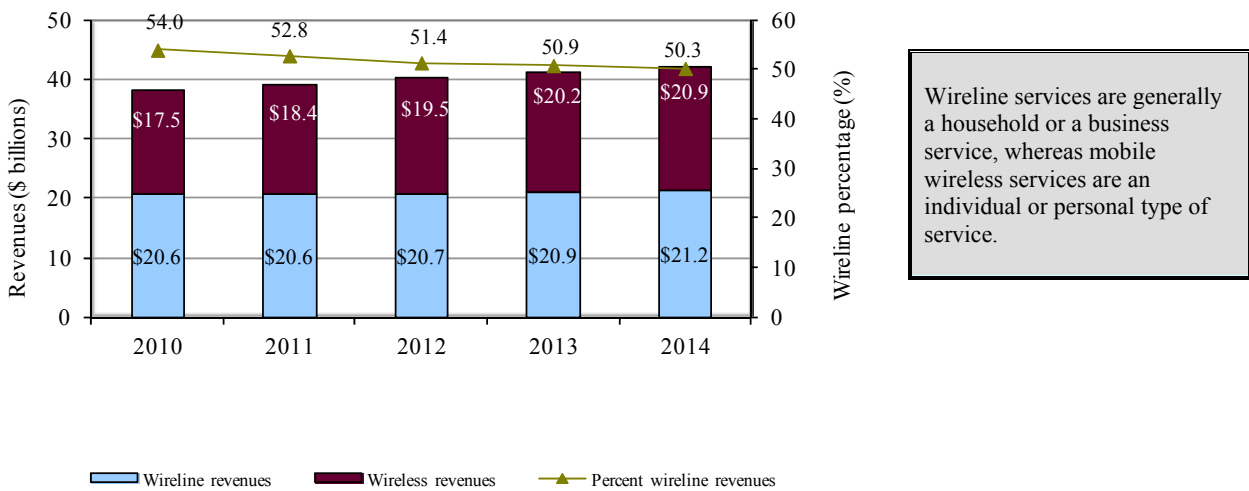
**Table 5.1.1 Telecommunications retail revenues, by market sector (\$ billions)**

			2010	2011	2012	2013	2014	CAGR(%) 2010- 2014
Wireline	Wireline voice	Local	8.3	8.1	7.8	7.7	7.4	-2.7
		Annual growth (%)	-2.6	-2.4	-3.5	-2.0	-2.8	
		Long distance	2.6	2.4	2.1	1.9	1.8	-9.7
		Annual growth (%)	-14.4	-8.6	-11.4	-8.7	-10.0	
	Non-voice	Subtotal	10.9	10.5	10.0	9.6	9.2	-4.2
		Annual growth (%)	-5.7	-3.9	-5.3	-3.5	-4.3	
		Internet	6.4	6.8	7.2	7.7	8.4	6.9
		Annual growth (%)	4.6	5.7	6.0	7.3	8.6	
		Newer data protocols	1.6	1.7	1.8	1.9	1.9	5.2
		Annual growth (%)	5.9	10.4	5.6	2.3	2.8	
		Legacy data protocols, private line, and other	1.6	1.6	1.7	1.7	1.7	0.6
		Annual growth (%)	-5.5	-2.9	4.3	3.6	-2.4	
		Data protocols, private line and other subtotal	3.2	3.3	3.5	3.6	3.6	2.9
		Annual growth (%)	-0.2	3.6	5.0	2.9	0.3	
		Non-voice subtotal	9.6	10.1	10.7	11.3	12.0	5.6
		Annual growth (%)	3.0	5.0	5.6	5.9	6.0	
Total wireline		20.6	20.6	20.6	20.9	21.2	0.7	
Annual growth (%)		-1.9	0.3	0.1	1.4	1.3		
Wireless		17.5	18.4	19.5	20.2	20.9	4.6	
Annual growth (%)		7.2	5.0	6.1	3.4	3.7		
Total		38.1	39.0	40.2	41.1	42.1	2.5	
Annual growth (%)		2.1	2.4	2.9	2.4	2.5		

Source: CRTC data collection

Telecommunications revenues come from a variety of sources. Revenues from wireline voice services come from local telephone and long distance services, while revenues from non-voice services come from Internet services, newer data protocols services (such as Ethernet and IP-VPN), and legacy data protocols services (such as ATM and X.25). Revenues for mobile wireless come from mobile voice and data services, and from the sale and rental of mobiles devices. This table presents a detailed breakdown of the retail revenues and annual growth rates for wireline and wireless services by market sector for the years 2010 to 2014. The CAGR for each market sector for the period of 2010 to 2014 is presented as well.

**Figure 5.1.1 Telecommunications wireline and wireless retail revenues**

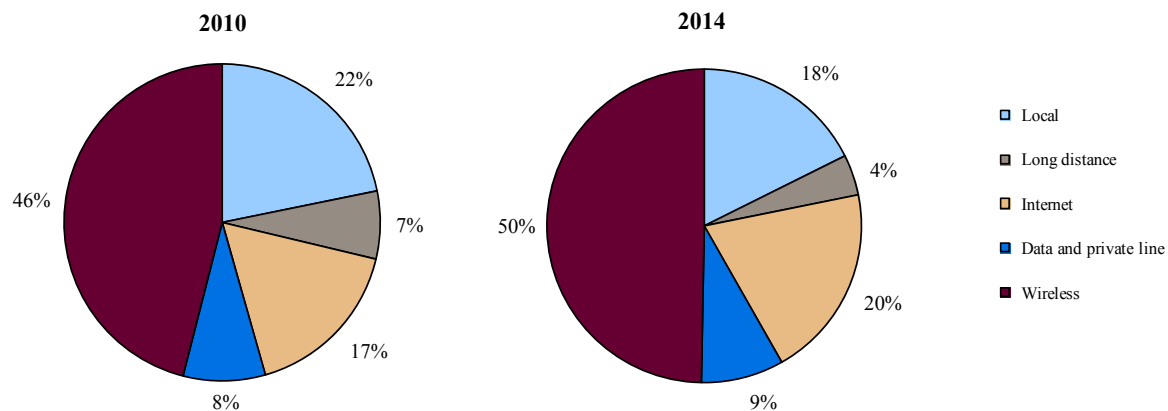


Source: CRTC data collection

This graph presents the retail wireline and mobile wireless revenues for the years 2010 to 2014. Over this period, aggregate revenues from wireline and wireless services have increased steadily. The line on the graph represents retail wireline revenues as a percentage of total retail telecommunications revenues.

In 2013, the most recent period for which telephone penetration data is available from Statistics Canada's Survey of Household Spending, 78.9% of households had wireline service, 84.9% had wireless service, 14.4% had only wireline service and 20.4% had only wireless service.

**Figure 5.1.2 Distribution of telecommunications retail revenues, by market sector**



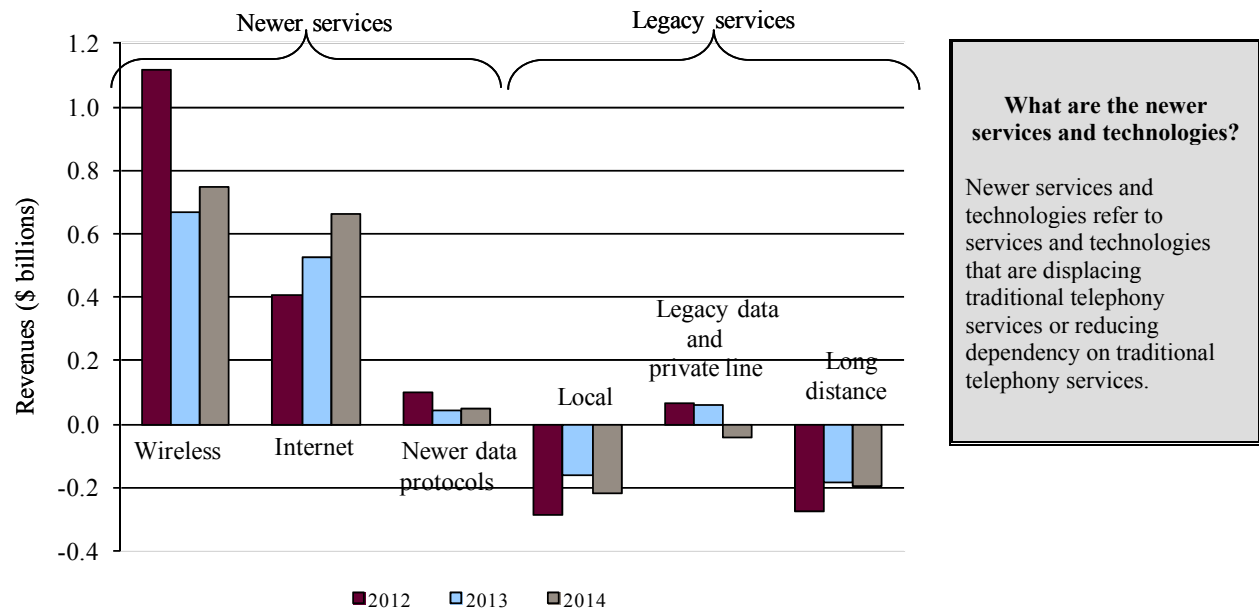
Source: CRTC data collection

These two figures show the distribution of retail telecommunications revenues by market sector for two periods, 2010 and 2014. Wireless data services are captured within the wireless market sector. Wireless services are capturing increasingly larger shares of the market, while the market share of long distance and local telephone services has declined.

**b) Technology indicators**

Technology has been a key driver of growth in the telecommunications industry. It has promoted network efficiencies, and service and product innovation, and facilitated competition. Revenues from legacy services have generally been declining as consumers switch to other services that provide greater functionality and flexibility.

**Figure 5.1.3 Revenues of newer and legacy telecommunications services, by technology**

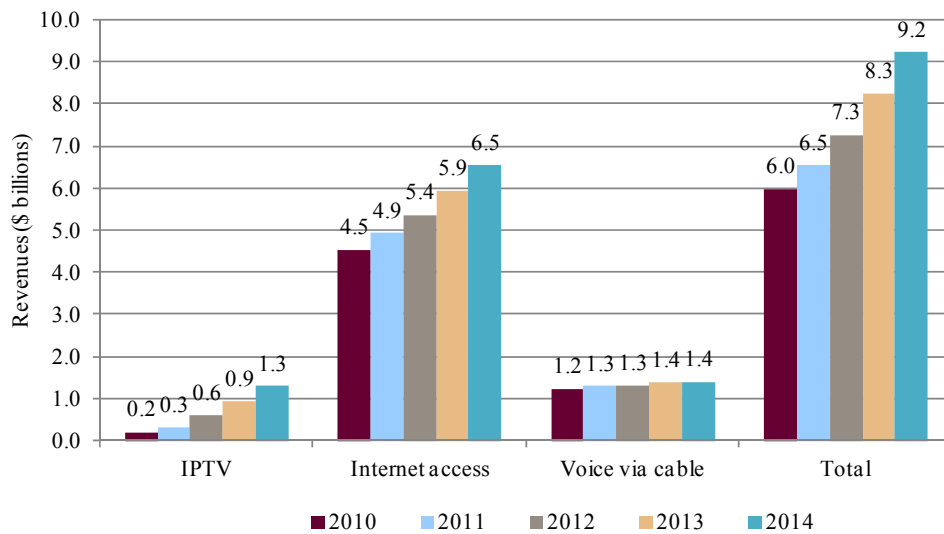


Source: CRTC data collection

New technologies are changing the way Canadians access telecommunications services. This graph shows the annual change in revenues for new technologies such as wireless, Internet, and other services based on data protocols in each of the past three years. The graph also compares the annual revenue change for newer services and for legacy services such as local, legacy data and private line, and long distance services.

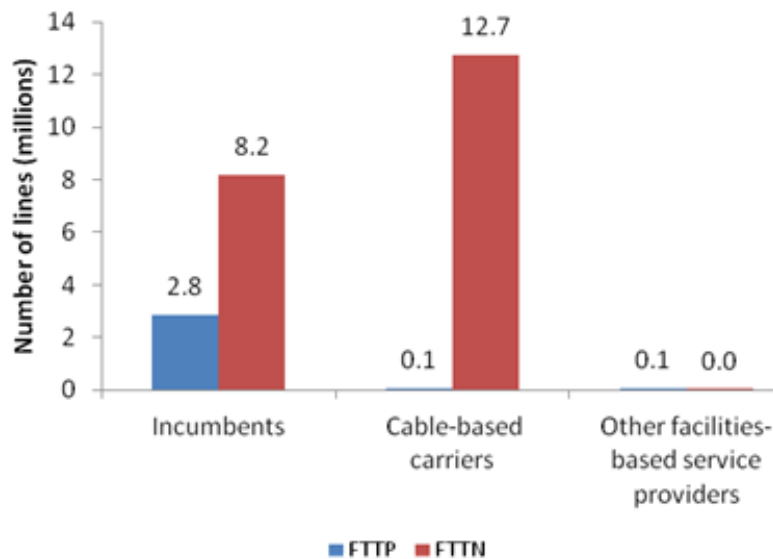
Newer data protocols refer to services using protocols such as Ethernet and IP. Legacy data refers to services using protocols such as X.25 and frame relay.

**Figure 5.1.4 Residential IP-based service revenues**



Source: CRTC data collection

**Figure 5.1.5 Homes passed by fibre-optic cable, 2014**



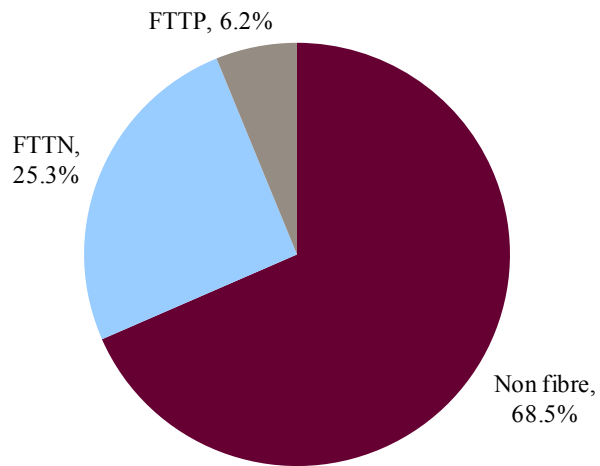
Source: CRTC data collection

A **fibre-optic cable** is a cable containing one or more strands that carry light. The light is used as a medium to transmit data. A fibre-optic cable is excellent for transmission over longer distances and at higher bandwidths or capacity than wire cables.

Number of homes passed refers to the number of homes that can have the telecommunications service using this technology.

Providers of telecommunications service are adopting fibre-based systems (i.e. FTTN and FTTP). This graph shows the number of premises that were either passed by fibre-based lines or that were passed by copper lines connected to a node that was served by a fibre-optic cable. The node connected by fibre-optic cable is the closet node to the premises. A node is a pedestal where connections are made.

**Figure 5.1.6 Percentage of residential lines using fibre-optic cable, 2014**



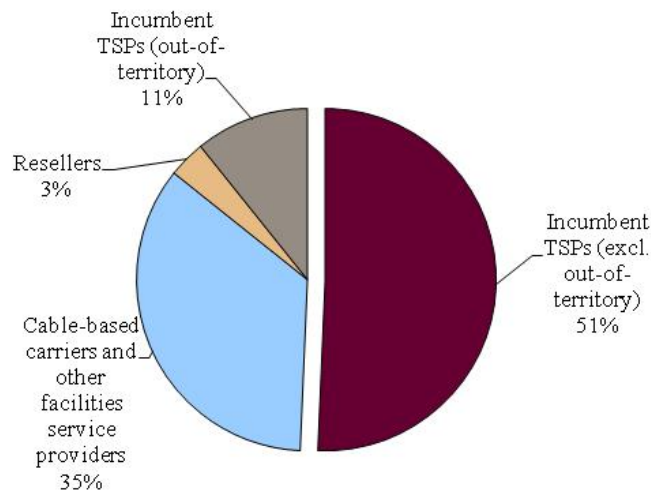
Source: CRTC data collection

TSPs are adopting fibre-based systems (FTTN and FTTP). This table shows the percentage of fibre-based lines as a percentage of total residential lines in 2014.

**c) *Competitive landscape***

Facilities-based providers of telecommunications services accounted for 97% of the retail telecommunication revenues in 2014. Cable-based carriers and other facilities-based alternative providers of telecommunications services are the largest source of competition to the incumbent TSPs.

**Figure 5.1.7 Total retail telecommunications revenue market share, by type of service provider, 2014**



Total retail telecommunications revenues in 2014 were \$42.1 billion. This chart shows the percentage share of the revenues captured by separate groups of providers of telecommunications service. For example, incumbent TSPs captured the largest share of the market, excluding their operations outside their traditional operating territory. Cable-based carriers and other facilities-based alternative providers of telecommunications service captured the next largest share, followed by incumbent TSPs (out-of-territory), and finally, resellers.

Source: CRTC data collection

**Table 5.1.2 Number and percentage of retail telecommunications revenues generated by companies operating in multiple markets**

Number of market sectors	Number of reporting groups or entities operating in these markets					Percentage of telecom revenues generated in these markets			
	2011	2012	2013	2014		2011	2012	2013	2014
6	9	9	9	8		85	83	84	# 84
5	13	16	12	# 11		9	9	10	10
4	17	20	29	# 25		2	2	3	2
3	31	42	33	# 42		1	1	1	1
2	22	22	26	# 22		2	2	1	1
1	34	49	44	# 43		1	2	1	2

Source: CRTC data collection

This table shows the dominance of larger companies in the telecommunications market sectors. For example, although few companies operate in all six telecommunications market sectors (local, long distance, Internet, wireless, data, and private line), these companies captured almost 84% of total market revenues.

#### Company characteristics

Companies with services in five or more market sectors are generally large facilities-based companies with revenues greater than \$100 million. Companies with services in two or fewer market sectors are generally resellers with revenues less than \$10 million.

Affiliated companies are included with their parent company.

In the wireline telecommunications market sectors, alternative service providers made greater revenue gains in the residential market than in the business market. Contributing to this increase are the cable companies that upgraded their cable networks to provide telephony services to their residential television subscribers.

**Table 5.1.3 Wireline telecommunications revenue market share (%), by type of service provider, 2014**

		Residential	Business	Total
Incumbent TSPs (excl. out-of-territory)		48.4	64.1	55.2
Alternative service providers	Incumbent TSPs (out-of-territory)	0.1	11.7	5.1
	Cable-based carriers and other facilities-based service providers	45.7	16.1	32.9
	Resellers	5.8	8.1	6.8
	Subtotal	51.6	35.9	44.8

Source: CRTC data collection

**Wireline market sectors include:**

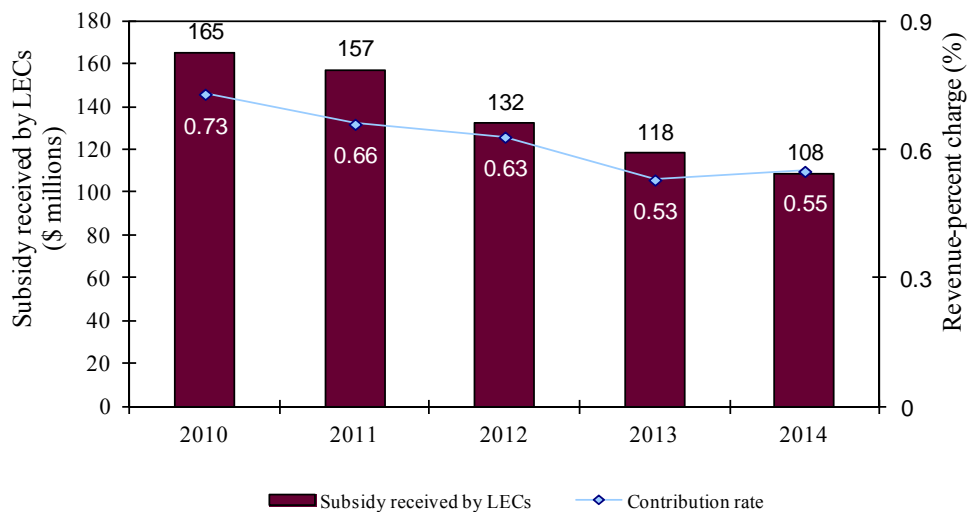
Local telephone market sector  
Long distance market sector  
Internet market sector  
Data and private line market sector

In this table, revenue market shares for wireline telecommunications services are split into residential and business sources for incumbent TSPs (excl. out-of-territory), as well as, alternative providers of telecommunications services, such as resellers, cable-based carriers and other facilities-based service providers, and incumbent TSPs (out-of-territory).

**d) Contribution**

In 2014, approximately 10% of residential telephone lines were in high-cost serving areas. As part of a commitment towards the social and economic objectives of the Telecommunications Act, TSPs, or groups of related TSPs, with at least \$10 million in Canadian telecommunications service revenues, contributed \$108 million towards the provision of residential telephone service in high-cost serving areas that met the basic service objective.

**Figure 5.1.8 Subsidy paid to local exchange carriers and the revenue-percent charge**



Sources: CRTC data collection and decisions

**What is the basic service objective?**

The Commission established the basic service objective in 1999, which reflected the level of service available at that time to most Canadians. The basic service objective ensures that Canadians in all regions have access to affordable, high-quality telecommunications services. Currently, the basic service objective consists of the following:

- Individual line local touch-tone service;
- Capability to connect to the Internet via low-speed data transmission at local rates;
- Access to the long distance network, operator/directory assistance services, enhanced calling features and privacy protection features, emergency services, as well as voice message relay service; and
- A printed copy of the current local telephone directory upon request.



**e) Consumer voices**

In 2014, the CRTC and the Commissioner for Complaints for Telecommunications Services Inc. (CCTS) had 44,000 communications with Canadians regarding telecommunications services. Of these, 62% were with the CRTC and 38% were with the CCTS. Wireless service issues were the most common (40%), followed by Internet issues (21%) and telemarketing issues (16%).

The underlying issues of these complaints were billing errors (33%), contract disputes/terms of service (15%), and service delivery/provision of service (12%).

**What is the CCTS?**

The CCTS is an independent organization dedicated to working with consumers and TSPs to resolve complaints relating to telecommunications services.

The CCTS is responsible for complaints related to services for which the Commission no longer approves rates.

**Table 5.1.4 Number of telecommunications-related contacts received by the CRTC, by type of issue and service, 2014**

Issue	CRTC policies/decisions	Billing /rates	Quality of service	Provision of service	Terms of service	Other	Total	Contacts per 10,000 residential lines, subscribers or payphones
Telemarketing	6,841	-	-	-	-	80	6,921	6.3
Incumbent telephone companies	358	1,789	502	397	263	412	3,721	6.2
Wireless services	1,113	3,504	461	496	1,210	552	7,336	2.5
Internet services	3,402	590	528	499	150	693	5,862	5.0
Telecommunication services	858	439	75	177	62	276	1,887	1.7
Competitive local exchange carriers	68	286	124	106	67	81	732	1.5
Alternative providers of long distance service	30	118	37	26	38	24	273	0.2
VoIP services	102	156	121	97	23	22	521	0.5
Pay telephone services	20	23	3	4	1	11	62	7.3
Total	12,792	6,905	1,851	1,802	1,814	2,151	27,315	

Source: CRTC data collection

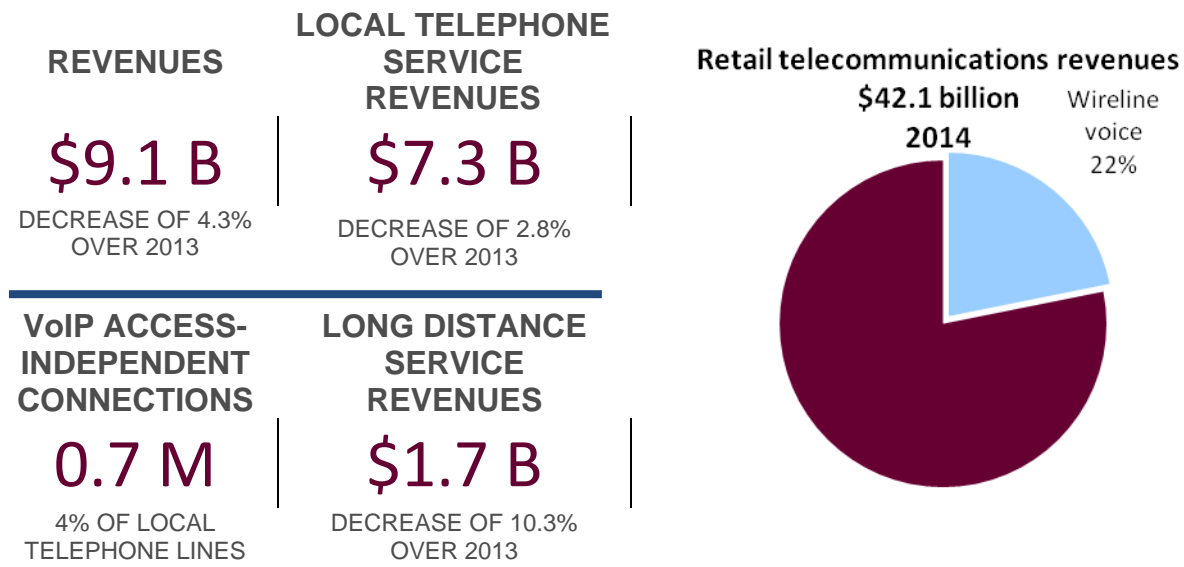
**Table 5.1.5 Summary of issues raised in telecommunications complaints handled by the CCTS (2013-2014)**

Issue	Billing error	Contract dispute	Service delivery	Credit management	Total
Wireless services	4,676	3,379	1,673	439	10,167
Internet access	1,440	723	1,048	104	3,315
Local telephone	1,158	680	834	90	2,762
Long distance	278	88	78	15	459
Directory assistance	5	–	–	–	5
Operator	5	–	–	–	5
White page directories	–	1	3	–	4
<b>Total</b>	<b>7,562</b>	<b>4,871</b>	<b>3,636</b>	<b>648</b>	<b>16,717</b>

Source: CCTS annual reports

## 5.2 Wireline voice retail sector

**Display 5.2.0 Key indicators for the wireline voice retail sector**



The retail wireline voice sector includes both local and long distance telephone service provided by over 150 companies. Wireline voice service revenues and the number of local telephone lines continue to decline as Canadians use other services to meet their communications needs. In 2014, revenues from wireline voice services decreased \$400 million, or 4.3%, from 9.5 billion in 2013; 51% of the decrease was attributable to local revenues and 49% was attributable to long distance revenues.

Two underlying trends are reducing Canadians' reliance on traditional wireline telephone services. First, some Canadians are abandoning wireline telephone service in favour of wireless service. As discussed in section 2, the percentage of Canadian households with only wireless service has increased more than 8 fold over a ten-year period from 2.5% of Canadian households in 2003 to over 20% in 2013. In addition, over 67% of wireless subscribers use smartphones which provide far greater functionality in how and when they can communicate.

Second, access-independent Voice over Internet Protocol (VoIP) provides local telephone service that is similar to traditional telephone service at a fraction of the cost. Typically, this service requires broadband Internet. The number of Canadians subscribing to access-independent VoIP represents approximately 4% of all retail local telephone lines.

The retail wireline voice sector, which includes revenues from local telephone and long distance services, yielded \$9.1 billion in 2014, 81% of which was from local telephone services and 19% from long distance services.

Local telephone service includes unlimited local calling within a specific geographic area, emergency calling (9-1-1), message relay services, access to long distance and dial-up Internet services. Optional add-on services or features include call display, call forwarding, and conference calling. The advent of IP opened the wireline voice market sector to additional TSPs.

Long distance service provides voice communications between two local calling areas. Whereas local service is a monthly subscription service, long distance service is generally billed on a per-minute usage basis.

**a) Revenues**

**Table 5.2.1 Local and long distance retail revenues (\$ millions)**

	2010	2011	2012	2013	2014	CAGR 2010- 2014
Total retail local revenues	8,308	8,106	7,821	7,661	7,441	-2.7
Annual growth (%)	-2.6	-2.4	-3.5	-2.0	-2.9	
Less: Subsidy received	165	157	132	118	108	-10.1
Annual growth (%)	-18.7	-4.8	-16.2	-10.6	-8.2	
<b>Net local service revenues</b>	<b>8,143</b>	<b>7,949</b>	<b>7,690</b>	<b>7,544</b>	<b>7,333</b>	-2.6
Annual growth (%)	-2.2	-2.4	-3.3	-1.9	-2.8	
Percentage of total (%)	75.6	76.8	78.3	79.5	80.8	
<b>Long distance retail revenues</b>						
	<b>2,634</b>	<b>2,408</b>	<b>2,134</b>	<b>1,949</b>	<b>1,755</b>	-9.7
Annual growth (%)	-14.4	-8.6	-11.4	-8.7	-10.0	
<b>Local and long distance retail revenues</b>	<b>10,777</b>	<b>10,357</b>	<b>9,824</b>	<b>9,493</b>	<b>9,088</b>	-4.2
Annual growth (%)	-5.5	-3.9	-5.1	-3.4	-4.3	

Source: CRTC data collection

Total retail local revenues include revenues from local telephone service provided to residential and business customers. It includes revenues from calling features such as call display, and call forwarding, as well as installation and repair, and excludes revenues from the sale and rental of telephone sets.

Basic local telephone service with access to long distance service is part of the basic service objective. The obligation to serve and the basic service objective are regulatory measures imposed on incumbent local telephone companies. To this end, these companies receive a subsidy from a national contribution fund in which all telephone service providers are required to participate. These subsidies are excluded in the remaining tables and figures of this section.

**Table 5.2.2 Residential local telephone and long distance service revenues, by type of TSP (\$ millions)**

	2010	2011	2012	2013	2014	CAGR 2010-2014
<b>Incumbent TSPs (excluding out-of-territory)</b>						
Local	3,349	3,129	2,906	2,679#	2,545	-6.6
Annual growth %	-5.6	-6.6	-7.1	-7.8	-5.0	
Percentage of total	74.7	74.9	75.7	76.9	78.8	
Long distance	1,136.2	1,050.9	931.4	801	687	-11.8
Annual growth %	-11.8	-7.5	-11.4	-14.0	-14.2	
<b>Total</b>	<b>4,485</b>	<b>4,180</b>	<b>3,837</b>	<b>3,480</b>	<b>3,231</b>	-7.9
Annual growth %	-7.2	-6.8	-8.2	-9.3	-7.1	
<b>Incumbent TSPs (out-of-territory)</b>						
Local	9	12	16	17#	14	13.1
Annual growth %	-1.8	31.7	34.2	6.6	-13.1	
Percentage of total	81.8	92.3	100.0	100.0	93.3	
Long distance	2	1	1	1	0	-28.8
Annual growth %	-16.4	-21.8	-38.1	-18.3	-34.9	
<b>Total</b>	<b>11</b>	<b>13</b>	<b>16</b>	<b>17</b>	<b>15</b>	9.0
Annual growth %	-4.5	23.0	26.7	5.3	-14.0	
<b>Alternative service providers (excluding cable-based carriers)</b>						
Local	137	174	188	164	216	12.0
Annual growth %	-9.2	27.5	7.8	-12.7	31.3	
Percentage of total	27.7	34.5	40.1	43.7	55.0	
Long distance	357	330	281	211	178	15.9
Annual growth %	-24.7	-7.6	-14.9	-25.1	-15.7	
<b>Total</b>	<b>494</b>	<b>505</b>	<b>469</b>	<b>375</b>	<b>393</b>	-5.6
Annual growth %	-21.0	2.1	-7.0	-20.1	4.9	
<b>Cable-based carriers</b>						
Local	1,252	1,285	1,307	1,388	1,399	2.8
Annual growth %	13.9	2.6	1.7	6.2	0.8	
Percentage of total	84.4	85.2	86.2	87.4	88.5	
Long distance	232	223	210	201	180	-6.3
Annual growth %	-1.0	-3.9	-5.9	-4.3	-10.3	
<b>Total</b>	<b>1,484</b>	<b>1,508</b>	<b>1,517</b>	<b>1,589</b>	<b>1580</b>	1.6
Annual growth %	11.3	1.6	0.6	4.8	-0.6	
<b>Total residential</b>						
Local	4,746	4,600	4,417	4,248	4,174	-3.2
Annual growth %	-1.2	-3.1	-4.0	-3.8	-1.8	
Percentage of total	73.3	74.1	75.6	77.8	80.0	
Long distance	1,728	1,606	1,424	1,213	1,045	-11.8
Annual growth %	-13.6	-7.0	-11.4	-14.8	-13.9	
<b>Total</b>	<b>6,474</b>	<b>6,206</b>	<b>5,840</b>	<b>5,462</b>	<b>5,219</b>	-5.2
Annual growth %	-4.8	-4.1	-5.9	-6.5	-4.4	

Source: CRTC data collection

This table displays revenues and annual revenue growth rates from residential local and long distance services, by type of provider, for the years 2010 to 2014. The annual growth rates indicate that residential revenues from both local and long distance services are in decline for all types of service providers except cable-based carriers and to a lesser extent the other alternative service providers. These carriers have increased their revenues from local telephone service and have the lowest decline in revenues from long distance services.

Note that revenues from local telephone services are increasingly exceeding those from long distance service.

**Table 5.2.3 Business local telephone and long distance revenues, by type of TSP (\$ millions)**

	2010	2011	2012	2013	2014	CAGR 2010- 2014
<b>Incumbent TSPs (excluding out-of-territory)</b>						
Local	2,934	2,813	2,664	2,597#	2,488	-4.0
Annual growth %	-2.7	-4.1	-5.3	-2.5	-4.2	
Percentage of total	83.9	85.1	85.6	85.1	83.9	
Long distance	565	491	449	454	479	-4.0
Annual growth %	-15.6	-13.1	-8.5	1.2	5.3	
<b>Total local</b>	<b>3,499</b>	<b>3,304</b>	<b>3,113</b>	<b>3,052</b>	<b>2,967</b>	-4.0
Annual growth %	-5.1	-5.6	-5.8	-2.0	-2.8	
<b>Incumbent TSPs (out-of-territory)</b>						
Local	270	259	306	312	293	2.1
Annual growth %	-12.6	-4.0	18.1	1.9	-5.4	
Percentage of total	70.1	68.5	77.5	79.8	80.5	
Long distance	115	119	89	79	71	-11.6
Annual growth %	-28.2	2.7	-25.0	-10.8	-11.1	
<b>Total</b>	<b>385</b>	<b>378</b>	<b>395</b>	<b>391</b>	<b>364</b>	-1.4
Annual growth %	-18.0	-2.0	4.6	-1.0	-6.6	
<b>Alternative service providers (excluding cable-based carriers)</b>						
Local	49	90	93	141	119	25.0
Annual growth %	-17.0	83.7	3.0	52.7	-15.5	
Percentage of total	26.2	43.5	46.5	49.8	52.2	
Long distance	138	117	108	142	109	-5.8
Annual growth %	-5.6	-15.1	-8.3	31.8	-23.3	
<b>Total</b>	<b>187</b>	<b>207</b>	<b>200</b>	<b>283</b>	<b>228</b>	5.1
Annual growth %	-8.9	10.7	-3.4	41.5	-19.4	
<b>Cable-based carriers</b>						
Local	144	187	210	247	258	15.7
Annual growth %	3.9	29.9	12.3	17.5	4.5	
Percentage of total	62.1	71.1	76.1	80.5	52.2	
Long distance	88	76	66	60	52	-12.4
Annual growth %	-12.2	-14.2	-13.2	-8.2	-13.9	
<b>Total</b>	<b>232</b>	<b>263</b>	<b>276</b>	<b>307</b>	<b>310</b>	7.5
Annual growth %	-2.9	13.2	5.0	11.4	0.9	
<b>Total business</b>						
Local	3,397	3,350	3,273	3,295	3,159	-1.8
Annual growth %	-3.6	-1.4	-2.3	0.7	-4.0	
Percentage of total	62.1	71.1	76.1	80.5	81.6	
Long distance	907	802	711	736	710	-5.9
Annual growth %	-15.8	-11.5	-11.3	3.5	-3.5	
<b>Total</b>	<b>4,303</b>	<b>4,151</b>	<b>3,984</b>	<b>4,031</b>	<b>3,869</b>	-2.6
Annual growth %	-6.4	-3.5	-4.0	1.2	-4.0	

Source: CRTC data collection

This table displays revenues and annual revenue growth rates from business local and long distance services, by type of provider, for the years 2010 to 2014. Similar to the residential market, the business market is in decline, but at a slower rate.

**Table 5.2.4 Long distance retail revenues by type of provider and size (\$ millions)**

Service provider	2010	2011	2012	2013	2014	CAGR 2010-2014
<b>Telecom revenues over \$100 million</b>						
Incumbent TSPs	1,768	1,598	1,444	1,311	1,216	-8.9
<i>Annual growth %</i>	<i>na</i>	-9.6	-9.7	-9.2	-7.2	
<i>Percentage of total</i>	67.1	66.4	67.7	67.3	69.6	
Cable-based TSPs	367	345	272	257	228	-11.2
<i>Annual growth %</i>	<i>na</i>	-6.0	-21.3	-5.3	-11.5	
<i>Percentage of total</i>	13.9	14.3	12.7	13.2	13.0	
Other TSPs	102	78	68	56	45	-18.6
<i>Annual growth %</i>	<i>na</i>	-23.2	-13.1	-17.0	-20.9	
<i>Percentage of total</i>	3.9	3.2	3.2	2.9	2.5	
<b>Subtotal</b>	<b>2,237</b>	<b>2,021</b>	<b>1,783</b>	<b>1,624</b>	<b>1,488</b>	-9.7
<i>Annual growth %</i>	<i>na</i>	-9.6	-11.8	-8.9	-8.4	
<i>Percent of total (%)</i>	84.9	83.9	83.6	83.3	85.1	
<b>Telecom revenues between \$100 million and 10 million</b>	<b>300</b>	<b>292</b>	<b>268</b>	<b>251</b>	<b>197</b>	-10.0
<i>Annual growth %</i>	<i>na</i>	-2.4	-8.4	-6.3	-21.6	
<i>Percentage of total</i>	11.4	12.1	12.5	12.9	11.2	
<b>Telecom revenues below \$10 million</b>	<b>99</b>	<b>95</b>	<b>83</b>	<b>74</b>	<b>64</b>	-10.3
<i>Annual growth %</i>	<i>na</i>	-3.6	-12.6	-10.9	-13.9	
<i>Percentage of total</i>	3.7	3.9%	3.9	3.8	3.6	
<b>Total</b>	<b>2,634</b>	<b>2,408</b>	<b>2,134</b>	<b>1,949</b>	<b>1,749</b>	-9.7
<i>Annual growth %</i>	-5.5	-8.6	-11.4	-8.7	-10.3	

Source: CRTC data collection

This table displays long distance revenues and annual revenue growth, by type of service provider and size, as measured by their total Canadian telecommunications revenues. As a group, TSPs with telecommunications revenues less than \$100 million captured less than 15% of the revenues from long distance services. These smaller service providers generally operate in relatively small niche markets catering to the needs of specific consumers.

**b) Subscriber data**

Local telephone service subscriber data is represented by the number of telephone lines, while minutes are used for long distance.

This section categorizes local telephone lines into two types: managed and non-managed. A managed line refers to telephone service which uses a local service provider's network, and the provider has control over call quality. A non-managed line refers to telephone service that is provided using the public Internet, with the local service provider having less control over the quality of service. This type of local service is referred to as access-independent VoIP.

**Table 5.2.5 Number of retail managed and non-managed local telephone lines (thousands)**

	2010	2011	2012	2013	2014	CAGR 2010- 2014
<b>Managed local telephone lines</b>						
Local telephone lines	18,210	17,869	16,866	16,251 #	15,710	-3.6
Annual growth %	-1.9	-1.9	-5.6	-3.6	-3.3	
Percent of total	98.6	97.8	95.1	93.9	95.8	
<b>Non-managed local telephone lines</b>						
Access independent lines	255	404	861	670#	694	28.4
Annual growth %	28.2	58.4	112.8	20.1	3.5	
Percent of total	1.4	2.2	4.9	6.1	4.2	
<b>Managed and non-managed local telephone lines</b>						
<b>Total</b>	<b>18,466</b>	<b>18,274</b>	<b>17,726</b>	<b>16,921#</b>	<b>16,403</b>	-2.9
Annual growth %	-1.6	-1.0	-3.0	-4.6	-3.1	

Source: CRTC data collection

The number of local telephone lines is in decline. The decline is partially offset by the increase in the number of non-managed lines. Access-independent VoIP (as provided by magicJack, Ooma and others) has grown from 1.4% of wireline connections in 2010 to 6% in 2014 (primarily in the residential market) as customers migrate to lower-cost, IP-based services.

The # symbol denotes a change in the data from what was published in the previous *Communications Monitoring Report*. (refer to Appendix 1 for details)

The number of managed local telephone lines has decreased 13.7% from 18.2 million lines in 2010 to 15.7 million lines in 2014; whereas the number of non-managed local lines has increased 172% from 255 thousand in 2010 to 694 thousand in 2014. However, the total number of telephone lines remained in a state of decline.

As set out in section 2 of this report, Statistics Canada's Survey of Household Spending indicates that the percentage of households subscribing to wireline telephone service has declined from 89.1% in 2010 to 79.9% in 2013, a reduction of approximately 380,000 households. In addition, the survey indicated that the number of households with two or more lines has been declining as well.



**Table 5.2.6 Residential and business local telephone lines by type of TSP (thousands)**

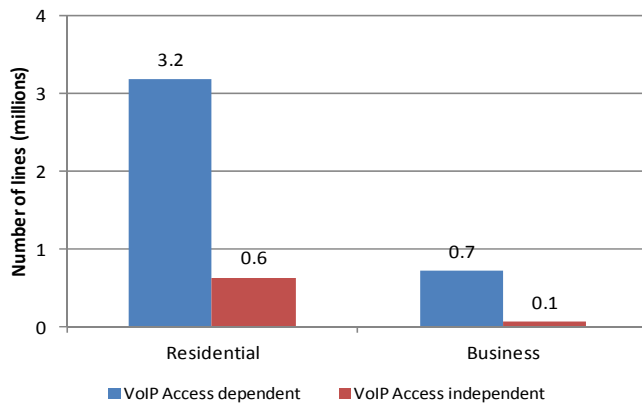
	2010	2011	2012	2013	2014	CAGR 2010- 2014
<b>Incumbent TSPs (excluding out-of-territory)</b>						
Residential	8,142	7,543	6,942	6,389	5,943	-7.6
Annual growth %	-7.7	-7.4	-8.0	-8.0	-7.0	
Business	4,721	4,598	4,445	4,255	4,065	-3.7
Annual growth %	-5.0	-2.6	-3.3	-4.3	-4.5	
<b>Total</b>	<b>12,863</b>	<b>12,141</b>	<b>11,387</b>	<b>10,644</b>	<b>10,008</b>	<b>-6.1</b>
Annual growth %	-6.7	-5.6	-6.2	-6.5	-6.0	
<b>Incumbent TSPs (out-of-territory)</b>						
Residential	27	34	33	53	38	9.2
Annual growth %	-6.1	26.7	-3.5	62.8	-28.4	
Business	638	752	639	635	605	-1.3
Annual growth %	3.3	17.9	-15.0	-0.6	-4.8	
<b>Total</b>	<b>665</b>	<b>786</b>	<b>672</b>	<b>688</b>	<b>642</b>	<b>-0.8</b>
Annual growth %	2.9	18.2	-14.5	2.5	-6.6	
<b>Alternative TSPs (excluding cable-based carriers)</b>						
Residential	510	646	723	482	711	8.6
Annual growth %	12.9	26.6	11.9	-33.3	47.4	
Business	178	225	264	261	224	5.9
Annual growth %	1.1	26.1	17.4	-1.2	-14.0	
<b>Total</b>	<b>689</b>	<b>871</b>	<b>987</b>	<b>743</b>	<b>935</b>	<b>7.9</b>
Annual growth %	9.6	26.5	13.3	-24.7	25.8	
<b>Cable-based carriers</b>						
Residential	3,947	4,061	4,258	4,314	4,247	1.8
Annual growth %	15.2	2.9	4.8	1.3	-1.6	
Business	303	414	422	531	571	17.2
Annual growth %	8.9	36.9	1.9	25.8	7.4	
<b>Total</b>	<b>4,250</b>	<b>4,476</b>	<b>4,681</b>	<b>4,846</b>	<b>4,818</b>	<b>3.2</b>
Annual growth %	14.8	5.3	4.6	3.5	-0.6	
<b>Total retail</b>						
Residential	12,626	12,284	11,956	11,238	10,939	-3.5
Annual growth %	-0.8	-2.7	-2.7	-6.0	-2.7	
Business	5,840	5,989	5,770	5,683	5,465	-1.6
Annual growth %	-3.3	2.6	-3.7	-1.5	-3.8	
<b>Total</b>	<b>18,466</b>	<b>18,274</b>	<b>17,726</b>	<b>16,921</b>	<b>16,403</b>	<b>-2.9</b>
Annual growth %	-1.6	-1.0	-3.0	-4.5	-3.1	

Source: CRTC data collection

This table presents the number of residential and business telephone lines, by type of service provider, and their respective annual growth rates. The total number of telephone lines has declined in both the residential and business markets. However, the number of residential telephone lines have declined more quickly than those of business.

The use of VoIP services in the residential and business markets varies significantly. On the one hand, cable-based carriers provide local telephone service – mostly to residential customers – over their managed network using access-dependent VoIP technology. They leverage existing cable infrastructure to provide local telephone service via their cable networks to their consumers. As a result, these carriers are the largest competitor to the traditional telephone companies in the residential market. Over 39% of households subscribe to local telephone service from a cable-based carrier.

**Figure 5.2.1      Retail VoIP local lines, access-dependent and access-independent, by market (2014)**



Source: CRTC data collection

In 2014, there were 3.9 million access-dependent lines, compared to 0.7 million access-independent VoIP connections.

c) *Performance indicators*

**Table 5.2.7 Local and long distance retail monthly revenues (\$) per line**

	2010	2011	2012	2013	2014	<i>CAGR 2010- 2014</i>
Residential	42.56	41.52	40.16	39.25	39.22	-2.0
<i>Annual growth %</i>	-3.4	-2.5	-3.3	-2.3	-0.1	
Business	60.37	58.49	56.46	58.66	57.84	-1.1
<i>Annual growth %</i>	-2.9	-3.1	-3.5	3.9	-1.4	

Source: CRTC data collection

**Monthly revenues per line**

Monthly revenue per line is calculated by (i) dividing the annual service revenues by the average number of local lines in the year, and then (ii) dividing the result by 12. The average number of lines is determined by dividing the sum of the number of lines at the beginning of the year and at the end of the year by two.

**Table 5.2.8 Long distance retail monthly revenues (\$) per line**

	2010	2011	2012	2013	2014	<i>CAGR 2010- 2014</i>
Residential	11.36	10.74	9.79	8.72	7.85	-8.8
<i>Annual growth %</i>	na	-5.4	-8.9	-10.9	-9.9	
Business	12.72	11.30	10.08	10.71	10.63	-4.4
<i>Annual growth %</i>	na	-11.2	-10.8	6.3	-0.7	

Source: CRTC data collection

**Table 5.2.9 Local telephone service monthly revenues (\$) per line, by type of TSP**

	2010	2011	2012	2013	2014	CAGR 2010- 2014
<b>Residential local service</b>						
Incumbent TSPs (excluding out-of-territory)	32.91	33.25	33.44	33.41	34.39	1.1
Annual growth %	2.2	1.0	0.6	-0.1	2.7	
Incumbent TSPs (out-of-territory)	26.75	32.09	39.22	46.20	26.48	-0.3
Annual growth %	-0.9	20.0	22.2	17.8	-18.2	
Alternative TSPs (excluding cable-based carriers)	23.70	25.14	22.90	22.72	30.12	6.2
Annual growth %	-6.7	6.1	-8.9	-0.8	32.6	
Cable-based carriers	28.31	26.74	26.18	26.99	27.24	-1.0
Annual growth %	-2.0	-5.5	-2.1	3.1	0.9	
<b>Total residential</b>	<b>31.21</b>	<b>30.78</b>	<b>30.37</b>	<b>30.53</b>	<b>31.37</b>	<b>0.1</b>
Annual growth %	0.3	-1.4	-1.3	0.5	2.8	
<b>Business local service</b>						
Incumbent TSPs (excluding out-of-territory)	50.47	50.32	49.10	49.72	49.84	-0.3
Annual growth %	2.8	-0.3	-2.4	1.3	0.2	
Incumbent TSPs (out-of-territory)	35.82	31.06	36.66	40.76	39.40	2.4
Annual growth %	-14.3	-13.3	18.0	11.2	-2.8	
Alternative TSPs (excluding cable-based carriers)	22.97	37.13	31.54	44.86	41.02	15.6
Annual growth %	-29.4	61.6	-15.1	42.2	-8.6	
Cable-based carriers	41.33	43.48	41.86	43.16	39.04	-1.4
Annual growth %	0.0	5.2	-3.7	3.1	-9.6	
<b>Total business</b>	<b>47.65</b>	<b>47.19</b>	<b>46.38</b>	<b>47.96</b>	<b>47.23</b>	<b>-0.2</b>
Annual growth %	0.1	-1.0	-1.7	3.4	-1.5	

Source: CRTC data collection

Average monthly revenues per line have been essentially constant from 2010 to 2014 for both the residential and business markets. However, there were relatively large differences in these revenues among the different types of TSPs.

**Table 5.2.10 Long distance retail revenues (\$) per minute, by type of TSP**

	2010	2011	2012	2013	2014	CAGR 2010- 2014
<b>Residential long distance service</b>						
Incumbent TSPs (excluding out-of-territory)	0.092	0.089	0.088	0.087	0.084	-2.1
Annual growth %	-8.4	-2.3	-2.0	-1.5	-2.7	
Incumbent TSPs (out-of-territory)	0.082	0.084	0.072	0.081	0.071	-3.6
Annual growth %	14.1	2.9	-13.8	12.0	-12.0	
Non-cable, alternative TSPs	0.058	0.049	0.051	0.047	0.043	-6.9
Annual growth %	-2.2	-16.3	4.0	-6.9	-7.1	
Cable-based carriers	0.044	0.043	0.042	0.043	0.043	-0.8
Annual growth %	-4.9	-3.1	-2.4	2.4	-0.3	
<b>Total residential</b>	<b>0.072</b>	<b>0.068</b>	<b>0.067</b>	<b>0.066</b>	<b>0.067</b>	-1.9
Annual growth %	-5.8	-6.6	-0.8	-1.6	1.1	
<b>Business long distance service</b>						
Incumbent TSPs (excluding out-of-territory)	0.059	0.061	0.049	0.050	0.050	-4.0
Annual growth %	-11.7	2.6	-18.8	1.5	0.1	
Incumbent TSPs (out-of-territory)	0.043	0.062	0.032	0.026	0.023	-14.0
Annual growth %	-24.0	12.1	-14.7	-18.7	-8.7	
Non-cable, alternative TSPs	0.051	0.036	0.038	0.044#	0.040	-5.9
Annual growth %	-1.7	-20.2	3.6	15.8	-8.8	
Cable-based carriers	0.028	0.027	0.025	0.024	0.025	-2.8
Annual growth %	-1.7	-20.2	3.6	-2.5	2.9	
<b>Total business</b>	<b>0.046</b>	<b>0.044</b>	<b>0.040</b>	<b>0.043</b>	<b>0.041</b>	-2.8
Annual growth %	-11.0	-4.7	-10.0	8.6	-4.7	

Source: CRTC data collection

This table shows the average long distance revenues per minute for the residential and business markets by type of service provider. On average, residential consumers pay more for long distance service than business customers. In both cases, long distance prices have been trending downward. In 2014, Canadians paid 6.7 cents per minute compared to 4.1 cents by business customers.

Cable-based carriers generally had the lowest price per minute in both the residential and business markets.

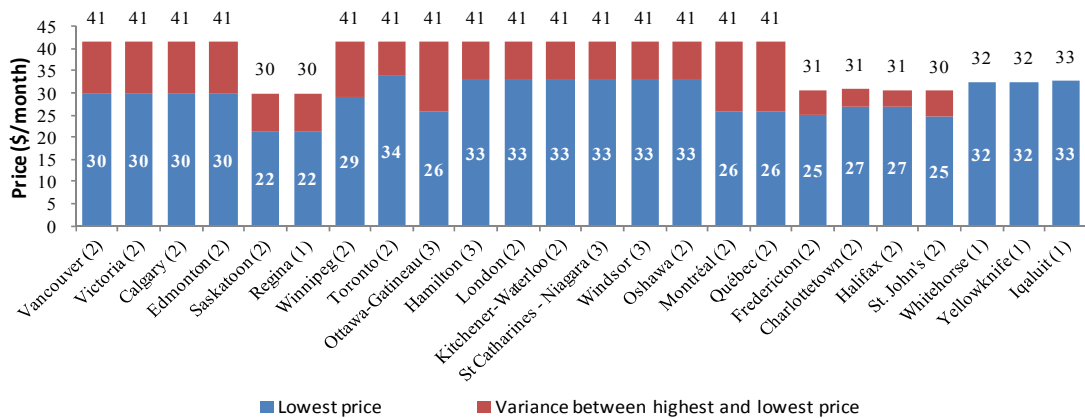
#### d) Price

Basic local telephone service includes unlimited calling within a geographic area, 9-1-1 services, and message relay services, as well as access to long distance services. Approximately 13% of households subscribing to wireline local service subscribe to basic service, while the remaining 87% subscribe to additional local features, which may be bundled with such other services as Internet, television, or wireless. The figures below display the price of basic local telephone service on a stand-alone basis in a number of urban and rural centres.

### Urban centres

The bar charts below display the range of monthly prices of basic local service in 24 major urban centres in Canada. The blue bar displays the lowest price, and the red bar displays the difference between the lowest and the highest price. The number at the top reflects the highest price, while the number in brackets along the horizontal represents the number of providers within the urban centre.

**Figure 5.2.2 Price of basic local telephone service (\$/month) and number of companies providing this service in major urban centres**



Source: CRTC data collection

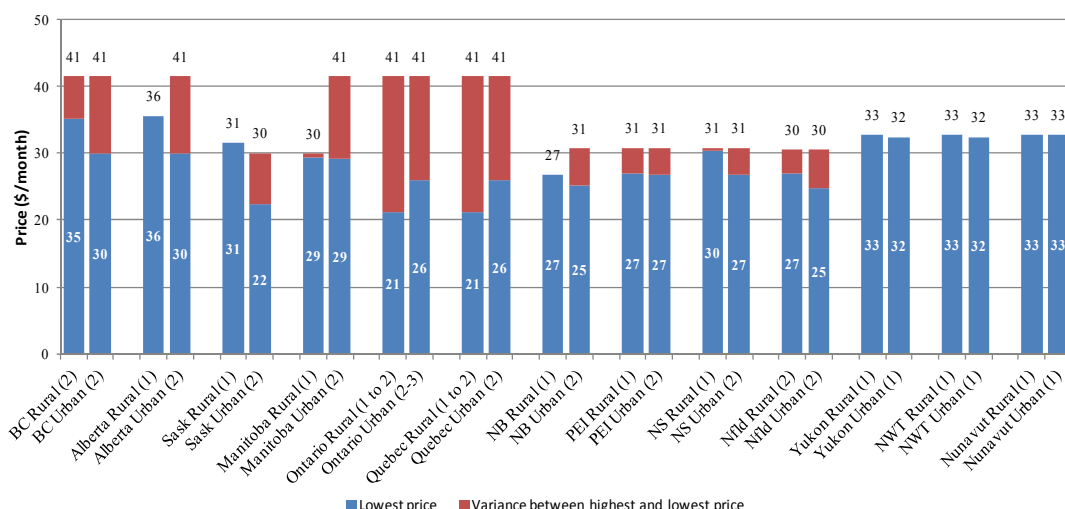
The price of basic local service varied across the major urban centres from \$22 per month in Saskatoon and Regina to \$32 in Whitehorse and Yellowknife and \$34 in Toronto.

In some cases, service providers did not provide the price of basic local telephone service. These companies provided the price for the service that came closest to the definition.

Access-independent VoIP, not included above, is available in many major urban centres.

## Rural communities

**Figure 5.2.3 Price of basic local telephone service (\$/month) and number of companies providing this service in rural communities, by province and territory**



Source: CRTC data collection

This bar chart displays the range of monthly price of basic local telephone service in fifty-four rural communities in Canada. The blue bar displays the lowest price and the red bar displays the difference between the low price and the high price. The number at the top of the bar is the high price. The number appearing in parentheses along the horizontal axis after the name of each province and territory indicates the range in the number of basic local telephone service providers in each rural centre or community responding to the survey.

The price of basic local telephone service in rural communities varied, from lows of between \$21 to \$36 per month to highs of between \$27 and \$41 per month.

In some cases, service providers did not provide basic local telephone service. These companies provided the price for the service that came closest to the definition of basic local telephone service as defined in the survey.

### Which communities were included?

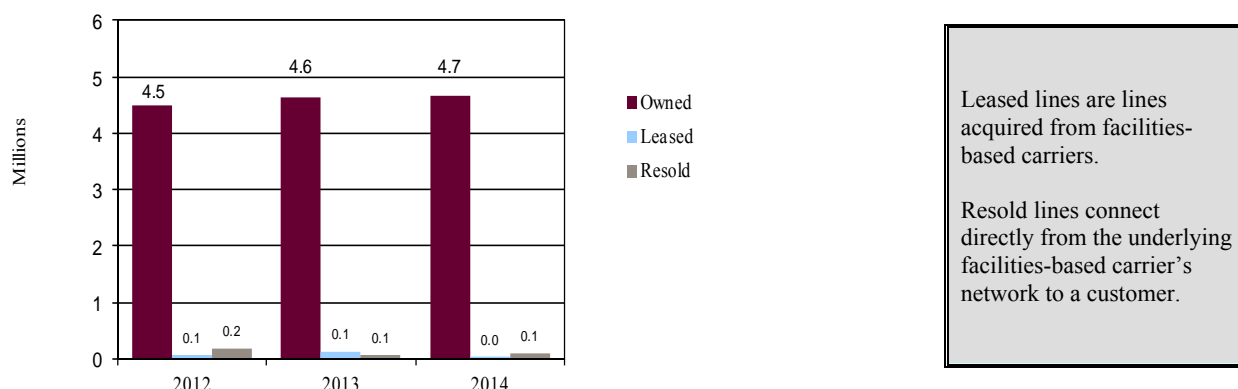
Fifty-four rural communities were selected to assess the price of Internet access service in rural communities. These communities met the following criteria:

- the community was not part of one of the census metropolitan areas of the twenty-four urban centres;
- the community had a population density of fewer than 400 people per square kilometre, or its population centre had fewer than 1,000 people;
- the number of communities selected in each province/territory was proportional to the population of the province/territory; and
- the communities were not clustered together

Appendix 9 contains the list of rural communities.

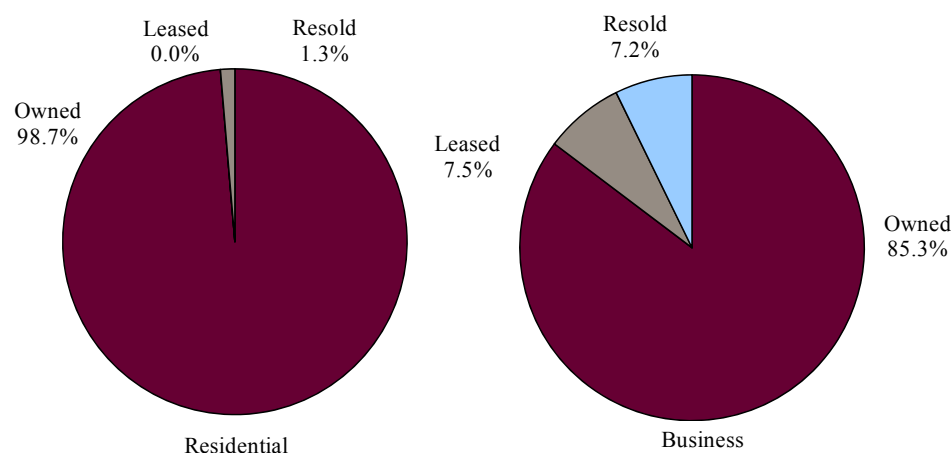
e) *Type of local facilities*

**Figure 5.2.4 Alternative TSP and cable-based carriers local retail lines, by type of facility**



Source: CRTC data collection

**Figure 5.2.5 Alternative TSP and cable-based carriers local residential and business retail lines, by type of facility, 2014**



Source: CRTC data collection

These pie charts compare retail line ownership percentages for the residential and business markets for alternative TSPs. The higher proportion of owned lines in the residential market than in the business market can be attributed to the cable companies.



*f) Competitive landscape***Table 5.2.11 Incumbent TSP (excluding out-of-territory) provincial retail local market share, by line (%)**

Province	2010	2011	2012	2013	2014
British Columbia	67.3	65.2	60.9	61.4	59.7
Alberta	68.2	66.8	64.6	63.6	63.4
Saskatchewan	93.0	92.5	90.9	89.7	89.0
Manitoba	83.7	80.2	77.4	76.1	77.4
Ontario	70.2	67.6	66.4	64.8	65.1
Quebec	62.8	58.0	55.5	53.9	52.5
New Brunswick	85.1	83.1	81.6	72.5	74.3
Nova Scotia	67.8	65.1	65.8	65.6	65.9
Prince Edward Island	74.7	71.7	71.3	71.5	70.8
Newfoundland and Labrador	89.4	90.9	81.2	83.8	76.8
Yukon	n/a	n/a	n/a	99.8	99.0
Northwest Territories	n/a	n/a	n/a	99.9	97.7
Nunavut	n/a	n/a	n/a	100.0	99.7
Canada	69.8	66.9	64.8	63.6	63.6

Source: CRTC data collection

Traditionally, Canada's telecommunications market has been dominated by a handful of large incumbent TSPs. Over time, previously closed markets have opened to competition, largely from the cable-based companies. This table shows the percentage of local retail lines providing service by the incumbent TSPs between 2010 and 2014.

Since 2010, the retail local market share of the incumbent TSPs has been declining in each province.

**Table 5.2.12 Incumbent TSP (excluding out-of-territory) residential and business local retail line market share (%), by area**

Province	Major centre or area	Residential lines		Business lines	
		2013	2014	2013	2014
British Columbia	Vancouver	56.2	53.6	60.6	61.0
	Victoria	44.6	43.1	61.9	57.9
	Remaining areas	65.9	63.4	75.3	73.7
Alberta	Calgary	48.8	46.8	59.0	56.6
	Edmonton	54.6	53.1	63.5	61.6
	Remaining areas	77.4	78.4	87.6	89.5
Saskatchewan	Saskatoon	71.6	69.8	91.9	89.9
	Regina	81.4	79.1	97.0	95.1
	Remaining areas	95.6	95.0	98.9	99.0
Manitoba	Winnipeg	53.3	54.2	87.4	88.3
	Remaining areas	91.9	95.2	92.7	98.8
Ontario	Toronto	53.6	50.3	70.5	75.4
	Ottawa-Gatineau	56.7	49.5	86.8	87.1
	Hamilton	54.5	47.6	68.8	76.9
	London	53.5	50.2	71.4	75.8
	Kitchener-Waterloo	50.8	48.5	73.3	73.6
	St. Catharines-Niagara	57.9	56.1	70.7	79.1
	Windsor	59.8	53.2	61.5	67.3
	Oshawa	50.8	49.9	82.9	87.6
	Remaining areas	73.8	72.7	79.7	84.7
Quebec	Montréal	43.1	41.9	68.9	68.2
	Québec	36.8	34.1	60.9	67.6
	Remaining areas	60.0	55.5	66.6	67.5
New Brunswick	Fredericton	67.5	65.6	98.3	98.4
	Remaining areas	60.0	62.4	98.5	97.4
Nova Scotia	Halifax	50.9	52.7	74.0	74.4
	Remaining areas	67.5	66.2	82.4	83.9
Prince Edward Island	Charlottetown	54.7	56.1	78.8	75.7
	Remaining areas	80.1	78.3	78.0	76.5
Newfoundland and Labrador	St. John's	65.8	64.3	98.2	96.8
	Remaining areas	86.7	71.4	94.4	94.1
Yukon	Whitehorse	100.0	99.5	99.7	98.3
	Remaining areas	100.0	99.8	99.5	99.3
Northwest Territories	Yellowknife	100.0	99.2	99.9	94.8
	Remaining areas	100.0	99.9	99.9	98.6
Nunavut	Iqaluit	100.0	100.0	100.0	100.0
	Remaining areas	100.0	99.7	100.0	99.7

Source: CRTC data collection

This table shows the percentage of residential and business local retail lines providing service from the incumbent TSPs in Canada's major urban centres and in the remaining areas of the province or territory in 2013 and 2014. Major urban centre boundaries are defined using Statistics Canada's census metropolitan area and census agglomeration definitions. In most areas the incumbent TSP's residential line share is lower than their business line share, reflecting, in part, competition from the cable-based companies. Note that the incumbent TSP share of residential lines in Victoria, Calgary, Ottawa-Gatineau, Hamilton, Kitchener-Waterloo, Oshawa, Montréal, and

Québec has dropped to below 50%.

**Table 5.2.13 Large incumbent TSPs' retail long distance revenue market share (%), by region**

Region	2010	2011	2012	2013	2014
B.C., Alberta	68	74	75	74	81
Saskatchewan	83	92	92	92	94
Manitoba	78	84	83	81	83
Ontario, Quebec	61	71	70	69	80
Atlantic	81	83	83	86	88
The North	97	97	97	98	99

Source: CRTC data collection

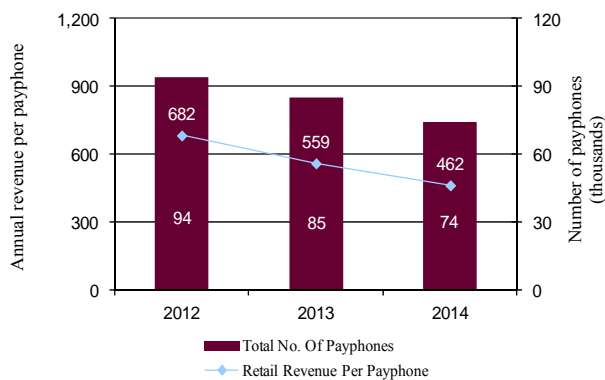
Traditionally, large incumbent TSPs were the sole providers of long distance services in Canada. With the introduction of long distance competition in 1992, other service providers entered the market. This table shows the percentage of retail long distance revenues captured by the large incumbent TSPs.

The North includes Yukon, the Northwest Territories, and Nunavut.

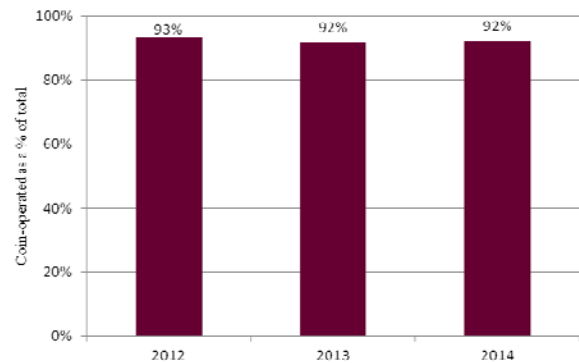
### g) Pay telephone service

**Figure 5.2.6 Large incumbent TSPs' payphone revenues and quantities**

**Number of payphones and retail revenue per payphone**



**Coin-operated payphones as a percentage of total payphones**



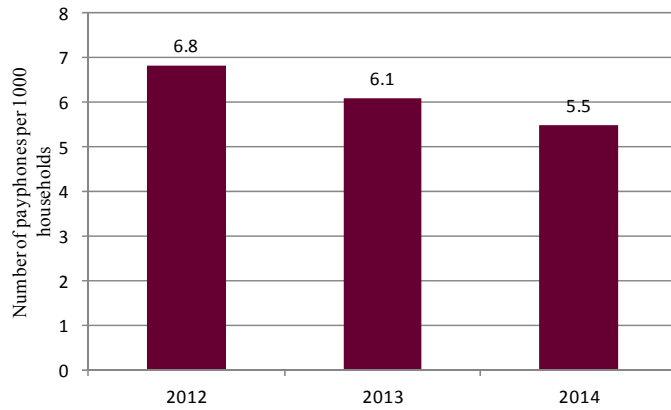
Source: CRTC data collection

The number of payphones owned and operated by the large incumbent TSPs has declined steadily between 2012 and 2014. Per-payphone revenues have also been declining.

Approximately 12% of payphones are equipped with Teletype capability.

In 2014, no payphones were equipped with Internet capability.

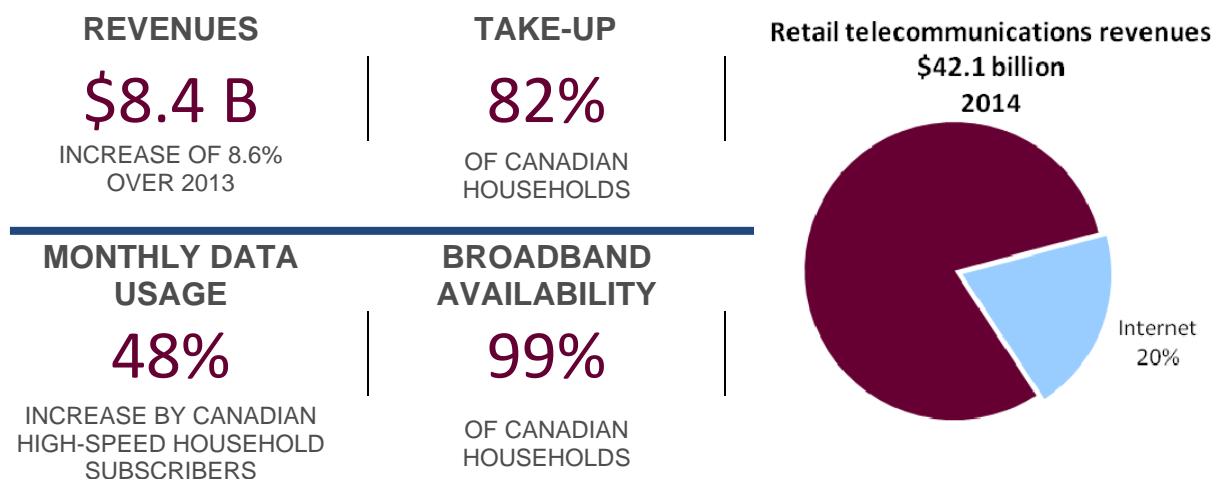
**Figure 5.2.7      Number of payphones per 1,000 households**



Source: CRTC data collection

## 5.3 Retail Internet sector and broadband availability

**Display 5.3.0 Key indicators of the retail Internet sector and broadband availability**



In 2014, Internet service revenues increased 8.6% from \$7.7 to \$8.4 billion; 80% of these revenues (\$6.7 billion) came from residential sources and 20% (\$1.7 billion) came from business sources.

These services were provided by approximately 525 ISPs consisting of traditional telephone and cable companies, fixed-wireless service providers, and resellers. The revenue market share for Internet access for the top 5 companies has declined from 75% in 2013 to 74% in 2014. The share of the cable-based carriers has declined to 49% in 2014, down from 51% in 2013, while the Incumbent TSPs (excluding out-of-territory) have increased from 37% to 38%.

### What is “fixed wireless?”

“Fixed wireless” refers to the use of radio spectrum to provide communications services to subscribers. The connection to the subscriber is from a tower located in the area to the premises of the subscriber.

As noted in Section 2 of the report, Canadian households spent an average of \$38.91 per month on Internet access service in 2014. The ARPU for residential high-speed access subscribers has increased, from \$44.87 in 2013 to \$47.86 in 2014, a 6.7% increase. It has increased at an average annual rate of 6.1% since 2010.

Ninety-six percent of Canadian households can access a download speed of 5 Mbps, which is sufficient for streaming higher quality audio and video content. The vast majority of Canadians (94%) can access these speeds using either landline or fixed-wireless facilities and an additional 1.5% may get access via satellite facilities. Seventy-seven percent of Canadian households subscribe to these services.

At the same time, Canadians are demanding more bandwidth from broadband service providers. The average monthly amount downloaded by residential subscribers increased 49% between 2013 and 2014 to 66.5 GB per month, and an average of 46% annually over the last 5 years, indicating that Canadians are likely using more video content and other high-bandwidth consuming services. Uploads have also increased 43% in 2014, reaching 8.6 GB per month.

#### **Fibre-to-the-premises (FTTP)**

While incumbent TSPs rely mainly on their copper wire local telephone network, they have been making significant use of FTTP.

Cable-based carriers have made less use of this technology.

There were approximately 283 facilities-based providers. These mainly consist of incumbents and cable-based carriers, utilizing DSL, fibre and cable modem facilities, and satellite and fixed wireless-based providers. Fixed wireless is major source of broadband Internet connectivity in rural areas, where 31% of households have access available to them via fixed-wireless services but not fibre, cable, or DSL. While rural Canadians have access to services provided by satellite, capacity limitations restrict practical availability to approximately 1.5% of Canadian households.

There were approximately 242 companies providing services solely through the use of resale facilities provided by the incumbent TSPs and the cable-based carriers. These providers have become an increasingly important source of competition in the industry. Residential high-speed Internet subscriptions through wholesale DSL and cable-based services have more than doubled since 2010.

Industry churn rates varied in 2014. For residential high-speed access subscriptions, the rate is up slightly over last year, going from 1.75% to 1.79%, while for business subscriptions, the rate is down, from 1.67% to 1.37%.

Unless otherwise noted, broadband availability figures exclude wireless mobile technology. Satellite access services in this section refer to direct-to-home satellite, and does not refer to the technology used to connect the community to the Internet.

#### **Digital subscriber line (DSL) - Bringing new services to older facilities**

Incumbent TSPs rely mainly on their copper wire local telephone network using DSL, or fibre-to-the-node (a pedestal in the neighbourhood). In the latter arrangement, copper wires complete the connection to the subscriber.

Deploying fibre to a pedestal decreases the distance that the signals must travel though the copper wires to reach the subscriber. This makes possible faster Internet service and the delivery of television (IPTV).

#### **Broadband target**

In Telecom Regulatory Policy 2011-291, the Commission set a target that all Canadians should have access to broadband speeds of at least 5 megabits per second (Mbps) downstream and 1 Mbps upstream, through a variety of technologies, by the end of 2015. As of December 31, 2014 it is estimated that this service was available to 96% of Canadian households, using a variety of technologies including LTE and satellite.

a) **Revenues**

**Table 5.3.1 Retail Internet service revenues (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Residential						
Dial-up access	96	69	43	32	22	-30.7
High-speed access	4,442	4,853	5,325	5,906	6,508	10.0
<b>Residential total</b>	<b>4,538</b>	<b>4,923</b>	<b>5,369</b>	<b>5,938</b>	<b>6,530</b>	<b>9.5</b>
<i>Annual growth (%)</i>	<i>5.9</i>	<i>8.5</i>	<i>9.1</i>	<i>10.6</i>	<i>10.0</i>	
Business						
Access	1,125	1,142	1,138	1,171	1,248	2.6
Transport	77	52	65	71	72	-1.4
<b>Business total</b>	<b>1,202</b>	<b>1,194</b>	<b>1,202</b>	<b>1,243</b>	<b>1,320</b>	<b>2.4</b>
<i>Annual growth (%)</i>	<i>10.7</i>	<i>-0.6</i>	<i>0.7</i>	<i>3.4</i>	<i>6.2</i>	
<b>Applications, equipment, and other Internet-related services</b>	<b>686</b>	<b>674</b>	<b>625</b>	<b>544</b>	<b>540</b>	<b>-5.8</b>
<i>Annual growth (%)</i>	<i>-11.0</i>	<i>-1.8</i>	<i>-7.3</i>	<i>-13.0</i>	<i>-0.8</i>	
<b>Total</b>	<b>6,426</b>	<b>6,791</b>	<b>7,196</b>	<b>7,724</b>	<b>8,390</b>	<b>6.9</b>
<i>Annual growth (%)</i>	<i>4.6</i>	<i>5.7</i>	<i>6.0</i>	<i>7.3</i>	<i>8.6</i>	

Source: CRTC data collection

This table presents an overview of revenues from residential and business Internet access services as well as other related services. Residential Internet access service revenues have increased more quickly than business access and transport service revenues, 9.5% vs. 2.4%, respectively, over the 2010 to 2014 period.

Revenues from applications, equipment and other services have been declining over time. These services are provided to both residential and business customers, but are not shown separately in this table.

Due to changes in company reporting, business transport service revenues in 2011 are not comparable to those in other years.

The types of Internet services available vary according to the download speed of the Internet connection. The lowest download speed is dial-up, at 64 Kbps. High-speed, which refers to any download speed greater than 256 Kbps. Broadband is defined as any service with a 1.5 Mbps download speed or greater.

**“Business transport”** refers to the transfer of Internet traffic between networks. This is generally used by large business customers.

**Table 5.3.2 Residential Internet service revenues, by type of service (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Incumbent TSPs (excluding out-of-territory)						
Dial-up	64	46	30	20	13	-32.8
High-speed	1,588	1,732	1,860	2,136	2,428	11.2
<b>Total</b>	<b>1,652</b>	<b>1,778</b>	<b>1,890</b>	<b>2,155</b>	<b>2,441</b>	<b>10.3</b>
Annual growth (%)	3.4	7.7	6.3	14.0	13.3	
Cable-based carriers						
Dial-up	1	1	0	0	0	-42.1
High-speed	2,572	2,811	3,065	3,293	3,477	7.8
<b>Total</b>	<b>2,573</b>	<b>2,811</b>	<b>3,065</b>	<b>3,293</b>	<b>3,477</b>	<b>7.8</b>
Annual growth (%)	6.3	9.2	9.1	7.4	5.6	
Alternative service providers (excluding cable-based carriers)						
Dial-up	31	23	12	12	9	-26.7
High-speed	282	310	400	477	603	20.9
<b>Total</b>	<b>313</b>	<b>332</b>	<b>413</b>	<b>490</b>	<b>612</b>	<b>18.2</b>
Annual growth (%)	17.4	6.3	24.0	18.6	25.0	
<b>Total of the above</b>						
Dial-up	96	69	43	32	22	-30.7
High-speed	4,442	4,853	5,325	5,906	6,508	10.0
<b>Residential total</b>	<b>4,538</b>	<b>4,923</b>	<b>5,369</b>	<b>5,938</b>	<b>6,530</b>	<b>9.5</b>
Annual growth (%)	5.9	8.5	9.1	10.6	10.0	

Source: CRTC data collection

**Table 5.3.3 Business Internet service revenues, by type of service (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Internet access</b>						
Incumbent TSPs (excluding out-of-territory)	478	481	499	501	507	1.5
Cable-based carriers	284	309	273	306	350	5.4
<b>Total</b>	<b>762</b>	<b>790</b>	<b>772</b>	<b>807</b>	<b>857</b>	<b>3.0</b>
Annual growth (%)	13.5	3.7	-2.3	4.5	6.1	
Alternative service providers (excluding cable-based carriers)						
Incumbent TSPs (out-of-territory)	81	81	81	79	84	0.8
Remaining alternative service providers	282	272	285	285	307	2.1
<b>Total</b>	<b>364</b>	<b>353</b>	<b>366</b>	<b>364</b>	<b>391</b>	<b>1.8</b>
Annual growth (%)	4.5	-3.1	3.7	-0.4	7.4	
<b>Internet access total</b>	<b>1,125</b>	<b>1,142</b>	<b>1,138</b>	<b>1,171</b>	<b>1,248</b>	<b>2.6</b>
Annual growth (%)	10.4	1.5	-0.4	3.0	6.5	
<b>Transport</b>	<b>77</b>	<b>52</b>	<b>65</b>	<b>71</b>	<b>72</b>	<b>-1.4</b>
Annual growth (%)	15.2	-32.4	25.0	10.4	1.3	
<b>Total business Internet service revenues</b>	<b>1,202</b>	<b>1,194</b>	<b>1,202</b>	<b>1,243</b>	<b>1,320</b>	<b>2.4</b>
Annual growth (%)	10.7	-0.6	0.7	3.4	6.2	

Source: CRTC data collection

Over the 2010 to 2014 period, the business Internet market has increased by 2.4% annually. Of the various providers, cable-based carriers have the highest annual growth rate (5.4%).



b) *Subscriber data***Table 5.3.4 Residential Internet service subscribers, by type of service provider (thousands)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Incumbent TSPs (excluding out-of-territory)</b>						
Dial-up	210	137	97	70	53	-29.1
<i>Annual growth (%)</i>	-26.6	-34.9	-28.8	-27.9	-24.3	
<i>Share of total dial-up (%)</i>	57.3	55.5	53.2	57.1	56.8	
High-speed	3,762	3,874	4,014	4,172	4,375	3.8
<i>Annual growth (%)</i>	2.4	3.0	3.6	3.9	4.9	
<i>Share of total high-speed (%)</i>	37.6	37.2	37.1	37.5	37.9	
<b>Total</b>	<b>3,972</b>	<b>4,011</b>	<b>4,111</b>	<b>4,242</b>	<b>4,428</b>	<b>2.8</b>
<i>Annual growth (%)</i>	0.3	1.0	2.5	3.2	4.4	
<i>Share of total (%)</i>	38.3	37.6	37.4	37.7	38.1	
<b>Cable-based carriers</b>						
Dial-up	10	7	6	2	1	-39.5
<i>Annual growth (%)</i>	-23.0	-28.9	-14.6	-69.2	-28.1	
<i>Share of total dial-up (%)</i>	2.8	3.0	3.5	1.6	1.5	
High-speed	5,642	5,839	5,925	5,931	5,952	1.3
<i>Annual growth (%)</i>	5.3	3.5	1.5	0.1	0.4	
<i>Share of total high-speed (%)</i>	56.4	56.0	54.8	53.3	51.6	
<b>Total</b>	<b>5,653</b>	<b>5,846</b>	<b>5,932</b>	<b>5,933</b>	<b>5,954</b>	<b>1.3</b>
<i>Annual growth (%)</i>	5.2	3.4	1.5	0.0	0.4	
<i>Share of total (%)</i>	54.5	54.8	54.0	52.7	51.2	
<b>Other service providers</b>						
Dial-up	146	102	79	51	39	-28.2
<i>Annual growth (%)</i>	-21.7	-30.1	-22.3	-36.1	-23.3	
<i>Share of total dial-up (%)</i>	39.9	41.5	43.4	41.3	41.7	
High-speed	604	712	870	1,025	1,210	19.0
<i>Annual growth (%)</i>	10.8	18.0	22.1	17.8	18.0	
<i>Share of total high-speed (%)</i>	6.0	6.8	8.1	9.2	10.5	
<b>Total</b>	<b>750</b>	<b>815</b>	<b>950</b>	<b>1,076</b>	<b>1,249</b>	<b>13.6</b>
<i>Annual growth (%)</i>	2.5	8.6	16.6	13.3	16.1	
<i>Share of total (%)</i>	7.2	7.6	8.6	9.6	10.7	
<b>Total of the above</b>						
Dial-up	366	246	183	123	93	-29.1
<i>Annual growth (%)</i>	-24.6	-32.8	-25.7	-32.9	-24.0	
<i>Share of total (%)</i>	3.5	2.3	1.7	1.1	0.8	
High-speed	10,008	10,426	10,809	11,128	11,537	3.8
<i>Annual growth (%)</i>	4.5	4.2	3.7	2.9	3.7	
<i>Share of total (%)</i>	96.5	97.7	98.3	98.9	99.2	
<b>Grand total of dial-up and high-speed</b>	<b>10,375</b>	<b>10,672</b>	<b>10,992</b>	<b>11,251</b>	<b>11,631</b>	<b>2.8</b>
<i>Annual growth (%)</i>	3.1	2.9	3.0	2.3	3.4	

Source: CRTC data collection

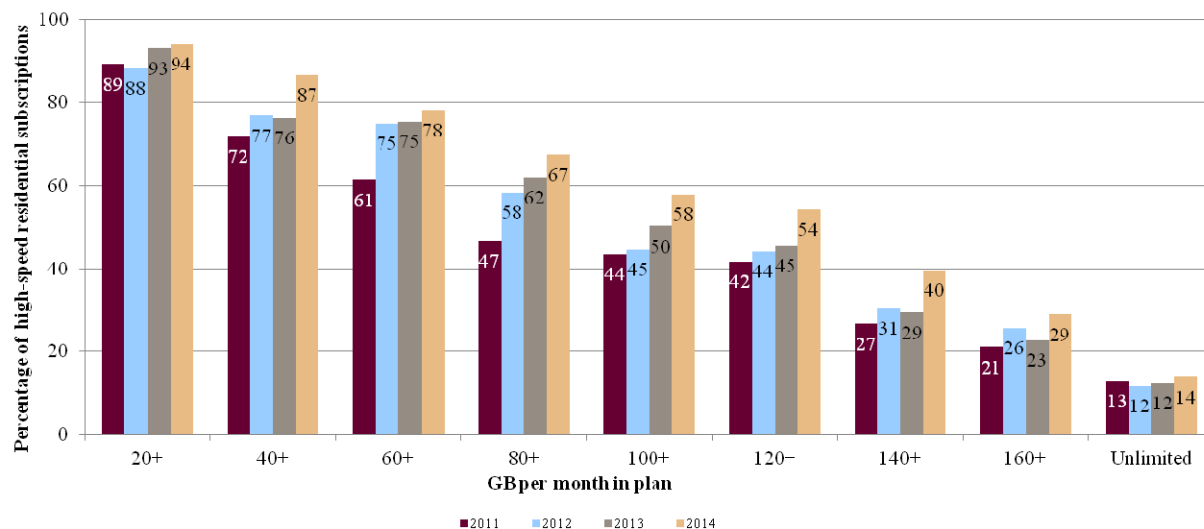
Residential Internet service subscribers receive Internet service from a variety of service providers. This table shows the number of Internet subscribers and the annual growth rates by type of provider for the period from 2010 to 2014. Overall, the annual growth in the number of Internet service subscribers remained relatively stable, at approximately 3%. When compared to Statistics Canada's annual population growth rates, the rate of Internet service subscriber growth was approximately three times that of population growth.

**Table 5.3.5** Number of business Internet access subscriptions, by type of service provider (thousands)

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Dial-up</b>	<b>84</b>	<b>72</b>	<b>61</b>	<b>54</b>	<b>47</b>	<b>-13.5</b>
<i>Annual growth (%)</i>	<i>-26.0</i>	<i>-13.5</i>	<i>-15.2</i>	<i>-11.8</i>	<i>-13.5</i>	
<b>High-speed</b>						
Incumbent TSPs (excluding out-of-territory)	447	452	444	470	487	2.2
<i>Annual growth (%)</i>	<i>3.6</i>	<i>1.3</i>	<i>-1.8</i>	<i>5.8</i>	<i>3.6</i>	
<i>Share of total high-speed (%)</i>	<i>55.2</i>	<i>52.8</i>	<i>50.4</i>	<i>48.6</i>	<i>0.0</i>	
Cable-based carriers	199	232	268	310	347	14.9
<i>Annual growth (%)</i>	<i>13.3</i>	<i>16.6</i>	<i>15.1</i>	<i>15.8</i>	<i>12.2</i>	
<i>Share of total high-speed (%)</i>	<i>24.6</i>	<i>27.1</i>	<i>30.4</i>	<i>32.0</i>	<i>0.0</i>	
Incumbent TSPs (out-of-territory)	11	19	19	17	18	12.6
<i>Annual growth (%)</i>	<i>-8.2</i>	<i>76.5</i>	<i>-3.9</i>	<i>-8.0</i>	<i>3.0</i>	
<i>Share of total high-speed (%)</i>	<i>1.4</i>	<i>2.3</i>	<i>2.1</i>	<i>1.8</i>	<i>0.0</i>	
Alternative service providers (excluding cable-based carriers and incumbent TSPs (out-of-territory))	152	152	150	170	179	4.2
<i>Annual growth (%)</i>	<i>-3.8</i>	<i>-0.2</i>	<i>-1.1</i>	<i>13.1</i>	<i>5.4</i>	
<i>Share of total high-speed (%)</i>	<i>18.8</i>	<i>17.7</i>	<i>17.1</i>	<i>17.6</i>	<i>0.0</i>	
<b>Total high-speed</b>	<b>809</b>	<b>856</b>	<b>881</b>	<b>967</b>	<b>1,031</b>	<b>6.2</b>
<i>Annual growth (%)</i>	<i>4.1</i>	<i>5.8</i>	<i>2.8</i>	<i>9.8</i>	<i>6.6</i>	

Source: CRTC data collection

**Figure 5.3.1** High-speed residential Internet service subscribers, by GB download capacity



Source: CRTC data collection

c) *Performance indicators***Table 5.3.6 Residential Internet service one-month average revenue, by advertised download speed (\$)**

Advertised download speed	2010	2011	2012	2013	2014
Lite and wideband up to 256 Kbps	25.18	33.86	35.97	35.36	36.00
Wideband 300 to 1400 Kbps	28.87	33.03	35.83	35.49	33.80
Broadband					
1.5 to 4 Mbps	33.57	32.87	41.87	31.45	48.05
5 to 9 Mbps	42.23	40.97	44.05	46.10	46.87
10 to 15 Mbps	39.67	42.11	40.62	48.17	48.52
16 Mbps and higher	53.71	51.63	46.83	59.87	54.06
16 to 49 Mbps	51.66	50.76	44.85	58.69	51.96
50 Mbps and higher	75.80	78.06	59.69	66.05	60.90
Total sample	38.96	39.80	43.80	49.64	50.06

Source: CRTC data collection

In general, the average price for high-speed Internet service has been increasing. While some categories have seen price declines, these declines have been offset by movement towards larger, faster packages. All data excludes revenues from modem rentals.

The **one-month average revenue by downstream speed** was calculated by dividing the total one-month revenue in each speed tier provided by the service providers by the total number of subscribers to the service in each speed tier in that month. The month used was December or the closest available month.

**Table 5.3.7      Weighted-average upload/download limits (GBs) of residential Internet service plans, by advertised download speed**

Advertised download speed	2010	2011	2012	2013	2014
Lite and wideband up to 256 Kbps	-	-	-	-	-
Wideband 300 to 1400 Kbps	7.20	14.90	17.89	25.42	27.25
Broadband					
1.5 to 4 Mbps	24.69	69.06	94.93	68.22	52.20
5 to 9 Mbps	49.07	80.81	76.78	48.46	53.36
10 to 15 Mbps	74.55	74.22	106.74	99.84	101.79
16 Mbps and higher	116.90	179.58	160.23	168.94	183.37
16 to 49 Mbps	112.27	176.98	131.50	142.14	159.15
50 Mbps and higher	165.33	236.54	364.80	362.86	283.10
Total sample	48.14	81.11	103.48	99.24	118.27

Source: CRTC data collection

Except for the 2013 year, the amount of gigabytes downloadable in the average package has been going up, as Canadians subscribe to larger Internet packages.

The **weighted-average upload/download limit** was calculated for each downstream speed tier based on the number of subscribers to plans with upload/download limits.

**Table 5.3.8 Residential Internet service upload speed (Kbps) by advertised download speed and average advertised download speed**

Advertised download speed	2010	2011	2012	2013	2014
Lite and wideband up to 256 Kbps	209	178	168	136	162
Wideband 300 to 1400 Kbps	352	314	313	291	283
Broadband					
1.5 to 4 Mbps	584	666	651	768	746
5 to 9 Mbps	870	855	1,118	809	937
10 to 15 Mbps	797	876	2,519	2,407	2,225
16 Mbps and higher	1,735	2,693	4,291	6,656	6,797
16 to 49 Mbps	1,661	2,662	2,912	4,133	4,676
50 Mbps and higher	2,529	3,667	13,199	19,890	13,701
Total sample	769	961	2,009	3,031	3,676
Weighted-average download speed	7,060	8,238	12,610	15,465	21,242

Source: CRTC data collection

The **weighted-average upload speed** was calculated for each advertised download speed tier based on the number of subscribers to the plan. **Weighted-average download speed** was calculated based upon the number of subscribers to each plan for all plans.

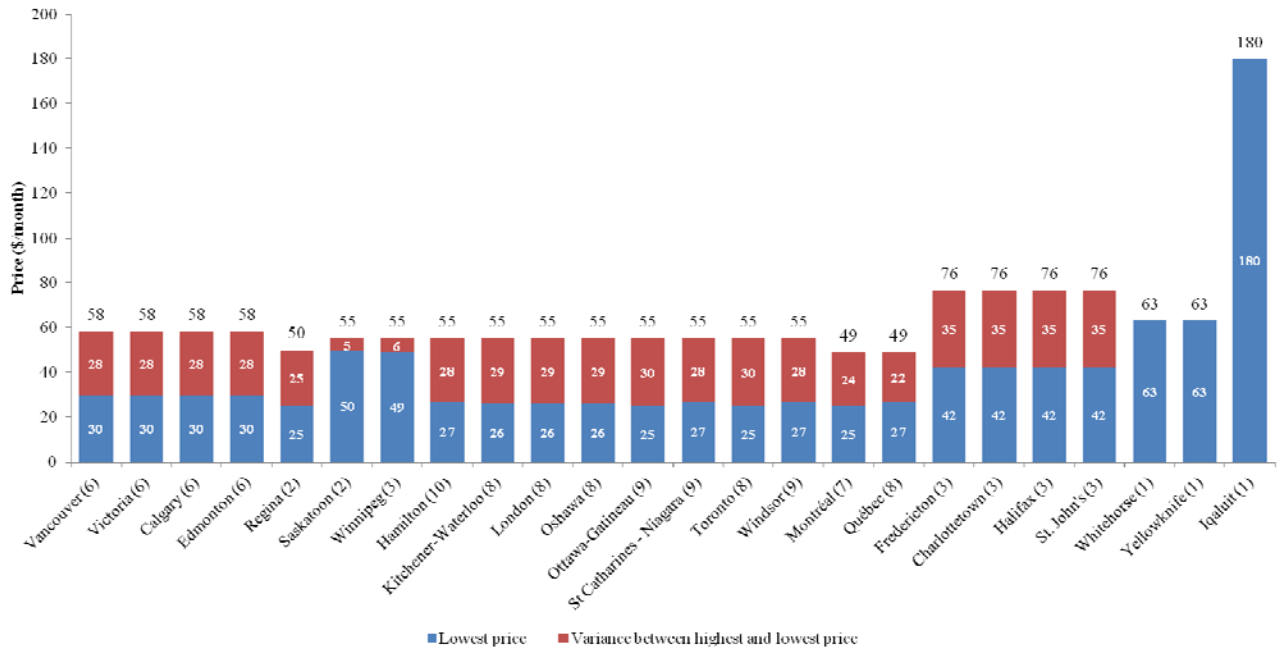
**d) Price**

Approximately 77% of households subscribed to a 5 Mbps download or higher broadband Internet service in 2014, up from 71% in 2013. Urban households generally paid lower prices and had a greater number of Internet service providers to choose from than rural households.

Service providers were asked to report the price of the least expensive service they offered that provides a download speed of at least 5 Mbps. Some service providers only offered options that are greater than 5 Mbps, and these were included in the following tables.

*Urban centres*

**Figure 5.3.2 Price of residential broadband (5 Mbps) Internet access service and number of companies providing this service in urban centres, 2014**



Source: CRTC data collection

This bar chart displays the range in the monthly price of 5 Mbps Internet service in twenty-four urban centres in Canada. The blue bar displays the lowest price, and the red bar displays the difference between the lowest and highest prices. The number at the top of each bar is the highest price. The number appearing in parentheses along the horizontal axis after the name of each urban centre represents the number of ISPs in that urban centre. Satellite service is excluded, but is available in all areas for \$65 per month.

The price of 5 Mbps Internet service varied from lows between \$25 to \$63 per month, and highs between \$50 and \$76 per month, except for services offered in Iqaluit. Subscribers in Iqaluit paid \$180 per month for non-satellite Internet service.

Subscribers living in provincial urban centres generally had a choice of between three and nine providers, while those living in territorial urban centres had a more limited selection.

Data caps that limit the amount that can be downloaded per month were a differentiating feature among the service providers. Low Internet users would generally benefit from these caps, while heavy users would not. Of the 19 service providers,

- eight offered unlimited service;
- ten had data caps, which ranged from 10 to 300 GB; and
- one had data caps that varied by urban centre, and in one urban centre no caps were imposed by that ISP.

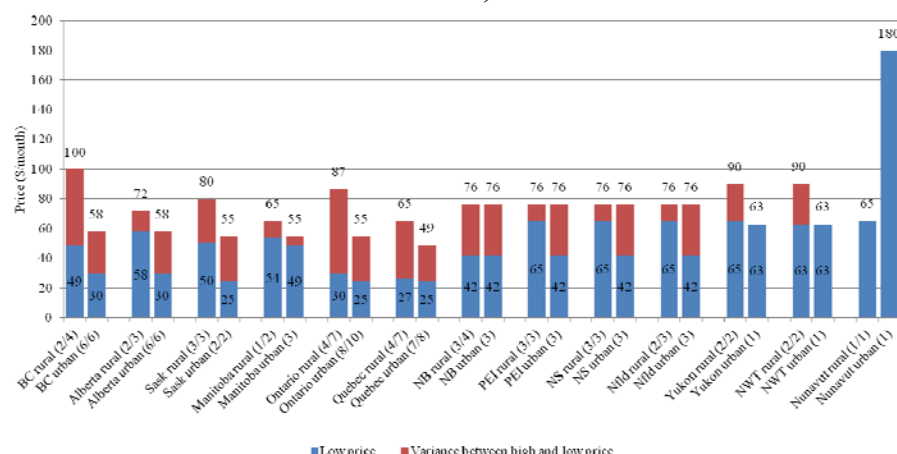
## Rural communities

As displayed in the Figure 5.3.3, the price of 5 Mbps Internet service was generally higher in rural communities than in urban centres, except in New Brunswick.

The price of 5 Mbps Internet service in rural communities varied from lows of between \$27 and \$65 per month, and highs of between \$65 and \$100 per month.

Internet service subscribers living in rural communities generally had fewer service providers to choose from than subscribers living in urban centres. Rural subscribers usually had a choice of between two and four service providers except in Ontario and Quebec.

**Figure 5.3.3 Price comparison of residential broadband (5 Mbps) Internet access service and number of companies providing this service in urban and rural communities, 2014**



Source: CRTC data collection

This bar chart displays the range in the monthly price of broadband (5 Mbps) Internet access service in fifty-four rural communities in Canada. The blue bar displays the lowest price, and the red bar displays the difference between the lowest and highest prices. The number at the top of each bar is the highest price. The number appearing in parentheses along the horizontal axis after the name of each province and territory represents the range in the number of service providers among the communities or centres. For example, “BC rural (2/4)” means that the number of service providers among the rural communities in British Columbia included in the survey varied between 2 and 4

Satellite service is excluded in urban areas, but is available in all areas for \$65 per month.

### Which communities were included?

Fifty-four rural communities were selected to assess the price of Internet access service in rural communities. These communities met the following criteria:

- the community was not part of one of the census metropolitan areas of the twenty-four urban centres;
- the community had a population density of fewer than 400 people per square kilometre, or its population centre had fewer than 1,000 people;
- the number of communities selected in each province/territory was proportional to the population of the province/territory; and
- the communities were not clustered together

Appendix 9 contains the list of rural communities.

**e) Consumer trends**

In 2010, 49.1% of the ISPs' Internet high-speed residential access service revenues were from plans with download speeds between 5 and 9 Mbps. Plans with lower speeds yielded 25.4% of their revenues, while plans with higher speeds captured 25.5%. Four years later, the 5 to 9 Mbps plans no longer yield the highest percentage of revenues having declined to 25.2%, while revenues from lower-speed plans declined to 5.1%, and revenues from higher-speed plans increased to 69.7%.

**Table 5.3.9 Residential Internet service one-month revenue distribution (%), by advertised download speed**

Advertised download speed	2010	2011	2012	2013	2014
Lite and wideband up to 256 Kbps	0.2	0.3	0.3	0.2	0.1
Wideband 300 to 1400 Kbps	4.3	3.6	2.4	2.1	1.3
Broadband					
1.5 to 4 Mbps	20.9	20.3	17.4	4.6	3.6
5 to 9 Mbps	49.1	47.0	41.6	30.5	25.2
10 to 15 Mbps	22.8	16.5	9.3	24.8	24.8
16 Mbps and higher	2.7	12.3	29.1	37.8	45.0
16 to 49 Mbps	2.4	11.8	24.1	31.1	33.1
50 Mbps and higher	0.3	0.6	5.0	6.7	11.9
Total sample	350.0	375.7	427.6	494.9	517.8

Source: CRTC data collection

All data excludes terminal rental revenues. All services are listed without regard to upload speed. 80.0% of high-speed revenues are from a service that meets the Commission target of 5 Mbps download and 1 Mbps upload, compared to 94.9% from services with at least 5 Mbps download and any upload.

In 2014, Canadians continued to subscribe to higher-speed Internet access services than in 2010. In 2010 the most common plans were those with download speeds of 5 to 9 Mbps, representing 45.3% of all subscriptions. Plans with lower speeds attracted 30.3% of all subscriptions, and plans with higher speeds represented 24.4% of subscriptions. Four years later, the 5 to 9 Mbps plans are no longer the most popular. The percentage of subscribers to these plans declined to 26.9%. Interestingly, in 2014 the percentage of subscribers to lower-speed plans less than 5 Mbps declined to 5.8%, while the percentage of subscribers to higher-speed plans greater than 9 Mbps grew to 67.2% since 2010.



**Table 5.3.10 Residential Internet service one-month subscriber distribution (%), by advertised download speed**

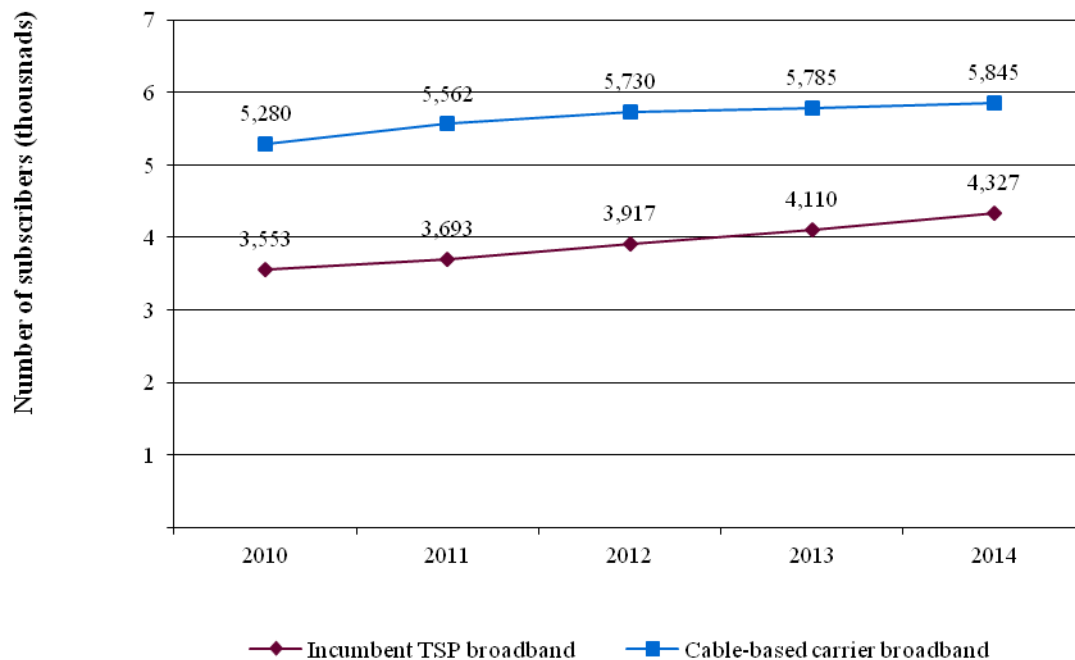
Advertised download speed	2010	2011	2012	2013	2014
Lite and wideband up to 256 Kbps	0.3	0.4	0.3	0.3	0.2
Wideband 300 to 1400 Kbps	5.8	4.3	2.9	2.7	1.9
Broadband					
1.5 to 4 Mbps	24.2	24.6	18.2	7.3	3.7
5 to 9 Mbps	45.3	45.6	41.3	32.8	26.9
10 to 15 Mbps	22.4	15.6	10.1	25.6	25.6
16 Mbps and higher	2.0	9.5	27.2	31.4	41.6
16 to 49 Mbps	1.8	9.2	23.5	26.3	31.9
50 Mbps and higher	0.2	0.3	3.6	5.0	9.8
Total sample	8,983.1	9,440.3	9,761.1	9,970.1	10,345.1

Source: CRTC data collection

This table indicated that, over time, faster speeds attract more subscriptions. 79.2% of high-speed subscribers take a service that meets the Commission target of 5 Mbps download and 1 Mbps upload, compared to 94.2% that take a service with at least 5 Mbps download and any upload. Eighty-one percent of Canadian households subscribe to some form of high-speed service.

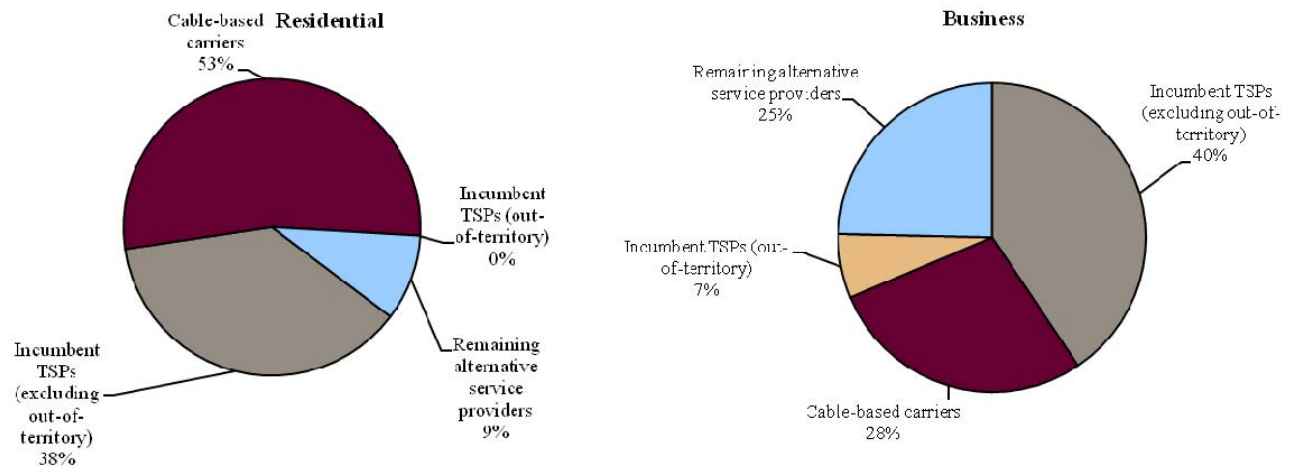
#### f) *Competitive landscape*

**Figure 5.3.4 Broadband subscriptions – Incumbent TSPs vs. cable-based carriers**



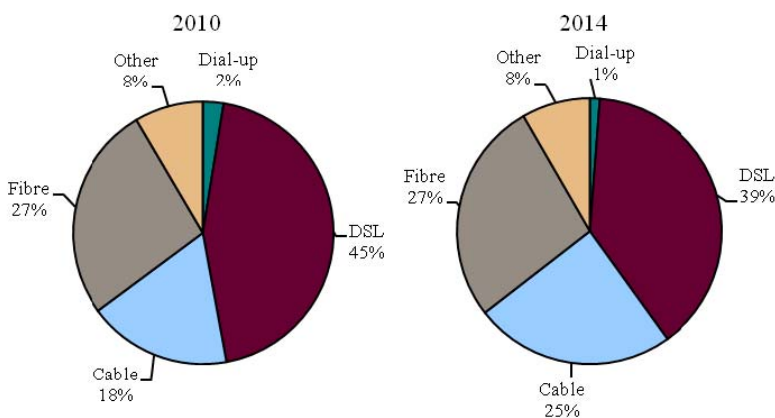
Source: CRTC data collection

**Figure 5.3.5 Internet access service revenue shares, by market and by type of service provider, 2014**



Source: CRTC data collection

**Figure 5.3.6 Business Internet access service revenues by access technology, 2010 vs. 2014**



Source: CRTC data collection

Business Internet access revenue is derived from services providing using a variety of access technologies. The “Other” segment in the charts refers to other technologies, such as fixed-wireless and satellite technologies.

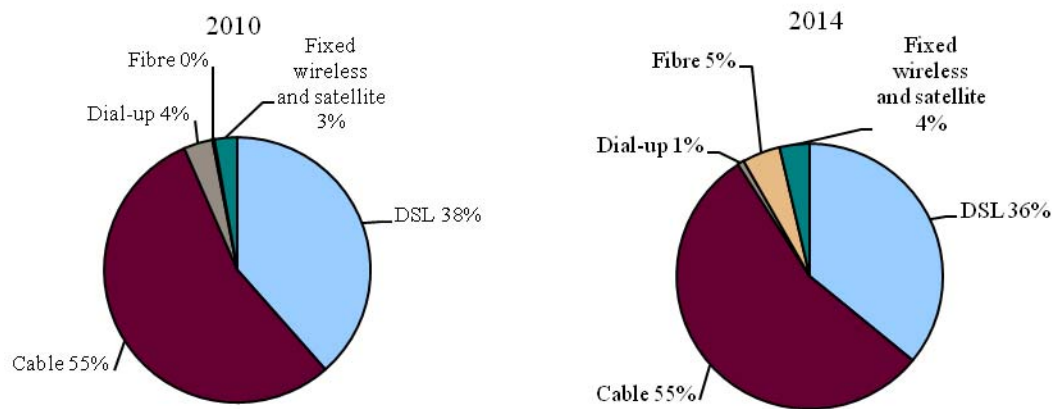
**What is meant by “satellite?”**

Satellites can provide Internet access service. Connections are established between an Earth station on the ground (using equipment such as satellite dishes) and a satellite in space. Satellites can support various frequency bands (C-, Ku-, and Ka-band).

Satellite Internet service delivered using the C-band requires a large satellite dish and is typically used to serve a community. Ka-band, and to a lesser degree Ku-band, satellite Internet access can be offered using a small satellite dish located at the customer’s premises.

Only direct-to-home services are counted as satellite in this section.

**Figure 5.3.7 Residential Internet access service subscriptions by access technology, 2010 vs. 2014**



Source: CRTC data collection

Canadians can access broadband using either wireline or wireless facilities. These facilities support evolving services, which make new experiences possible for Canadians, ranging from television and radio, to new and highly interactive services and programs offering greater consumer control and choice. Connected consumers can engage with the digital world with their devices at the time and place of their choice.

The rest of this section examines the availability of broadband Internet access services, the capacity requirements that must be met for participation in the digital environment, as well as the impacts of these requirements on consumer behaviour. It also looks at certain technologies as they relate to Canada's broadcasting and telecommunications sectors.

### g) Capacity requirements

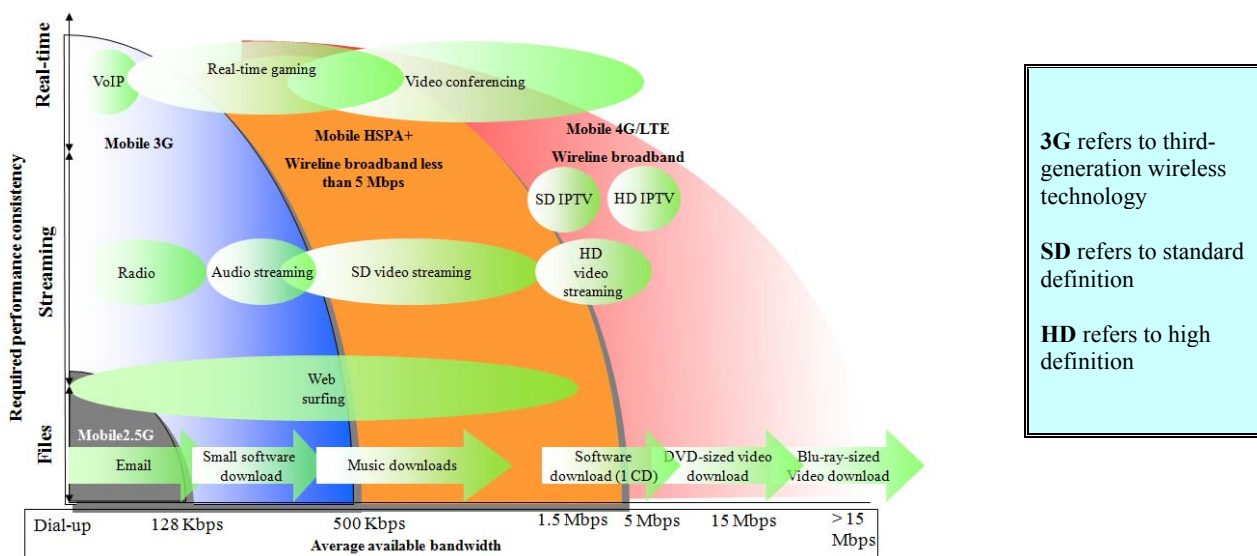
This section examines the extent to which Canadians have access to broadband Internet service and the associated capacity requirements.

Fixed and mobile broadband services [i.e. Evolved High-Speed Packet Access (HSPA+) and Long Term Evolution (LTE)] are available to over 99% of households in Canada. Canadians are accessing the growing volumes of content, whether audio, video, or data, that are being made available online. Spurring this development is the adoption by Canadians of advanced handheld devices (e.g. smartphones, tablets).

There were approximately 525 Internet service providers in operation across Canada providing broadband access using a combination of DSL, cable modem, fibre-optic, satellite, and fixed-wireless facilities. These services are available to 97% of Canadian households not including satellite, and with satellite they are available to 99%.

Wireless service providers also provided broadband service. As displayed in the ‘Wireless retail market sector’ section of this report, 67% of wireless service subscribers in 2014 had advanced handheld devices capable of accessing the digital world.

**Figure 5.3.8 Popular Internet applications – Bandwidth requirements**

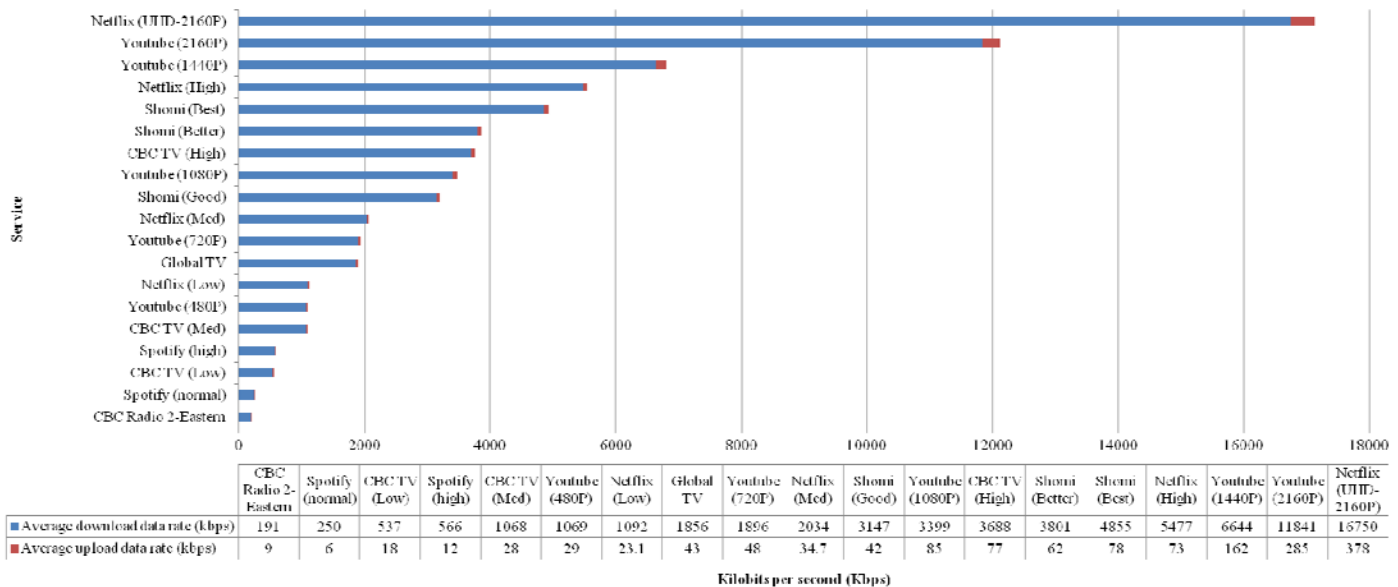


Source: CRTC Technology Resource Centre

### Bit rates

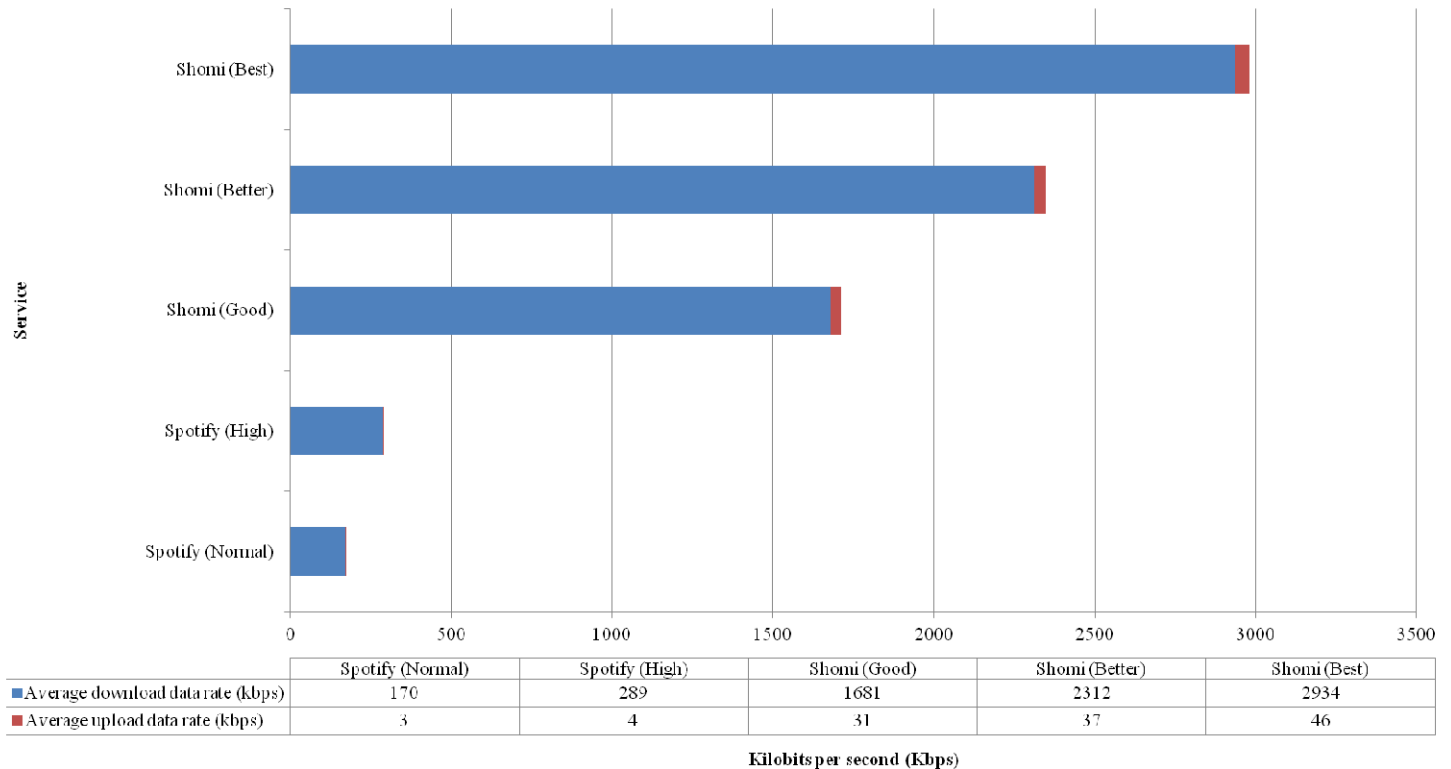
Figures 5.3.9 and 5.3.10 illustrate the Internet access speed requirements for a number of commonly accessed online services on both wireline and mobile networks. These figures provide detail regarding average upload and download data rates required by each service. Some services do not allow for manual selection of the quality and/or speed setting, but rather adjust their quality automatically. See Appendix 10 for more details.

**Figure 5.3.9 Average data rate (speeds) of select services over a wireline broadband Internet connection, 2014**



Source: CRTC Technology Resource Centre

**Figure 5.3.10 Average data rate of select services over a mobile broadband Internet connection, 2014**

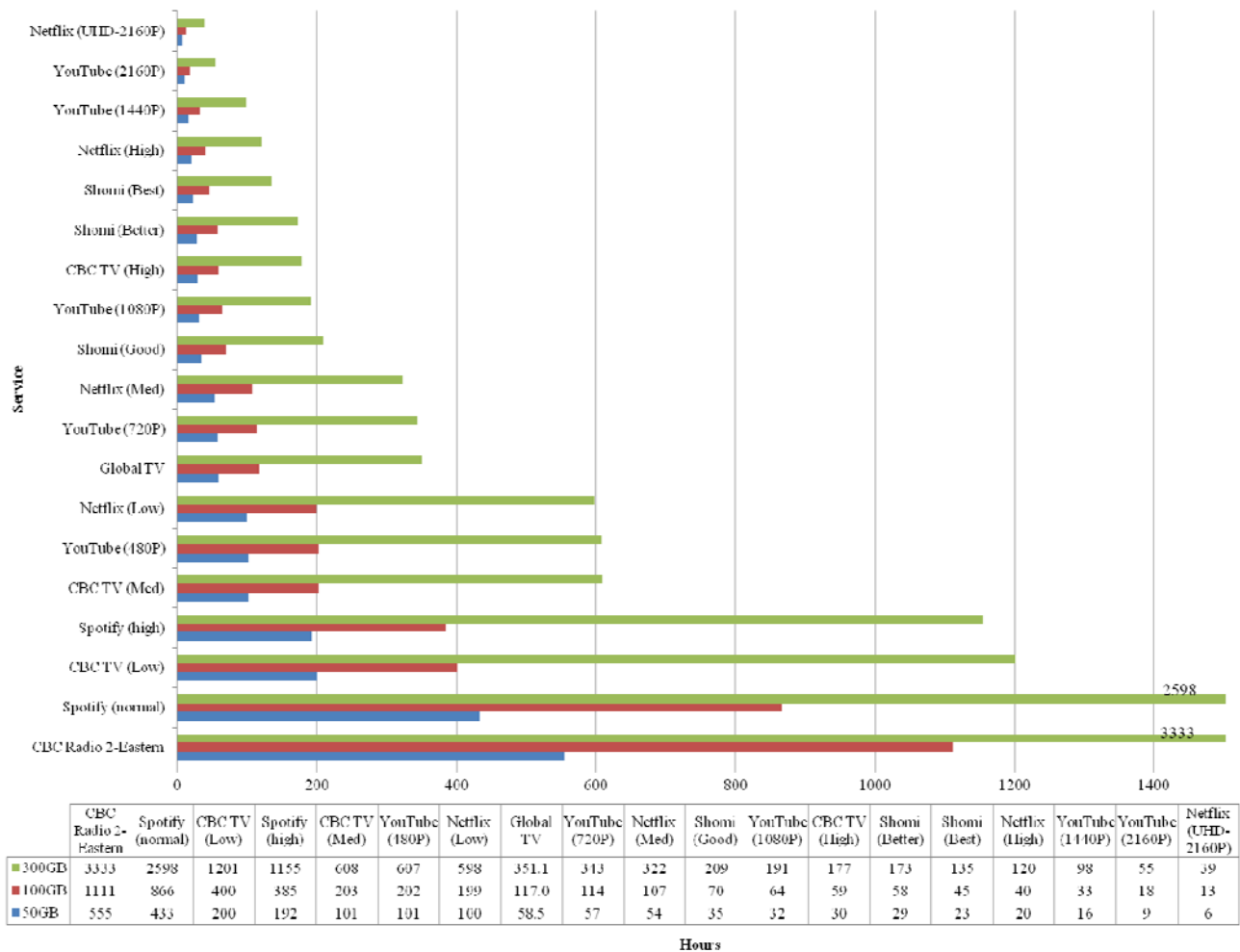


Source: CRTC Technology Resource Centre

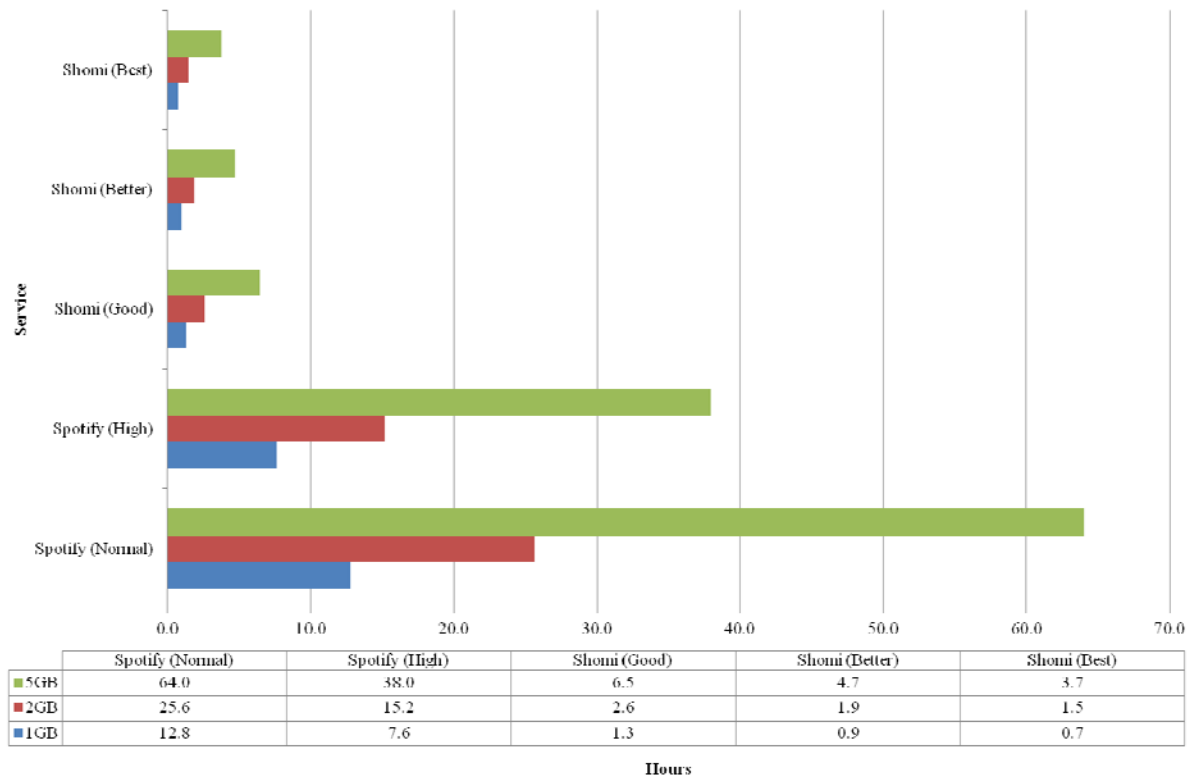
## Data Caps

Figures 5.3.11 and 5.3.12 illustrate the number of hours each service can be used before reaching the limit of the various usage caps based on the information from the previous tables. Figure 5.3.11 shows typical wireline broadband monthly usage caps, while Figure 5.3.12 shows typical mobile broadband monthly usage caps.

**Figure 5.3.11 Number of usage hours before typical wireline monthly broadband capacity thresholds are reached, by service, 2014**



Source: CRTC Technology Resource Centre

**Figure 5.3.12 Number of usage hours before typical mobile monthly broadband capacity thresholds are reached, by service, 2014**

Source: CRTC Technology Resource Centre

Although some services offer manual control over the quality of streaming (and thereby control of data consumption), other services attempt to maintain the highest quality possible, which may result in higher data consumption. There are various ways to monitor data usage. For both wireline and wireless broadband connections, service providers typically provide usage-tracking tools and automatic alerts that can inform consumers when they're nearing their limit. For those without access to such tools, third party applications may be utilised.

Due to the limited number of measurement samples and the wide variety of network configurations and equipment, the reported average bandwidth and capacity used is for illustrative purposes only and results obtained may vary in different settings.

### h) Key indicators

#### Broadband Calculation

Broadband availability is calculated by utilising information provided by ISPs. Locations are considered serviced if their dissemination block representative point falls within broadband coverage. Data may not take into account capacity issues, or issues with regard to line-of-sight.

Information does not take into account upload speeds. Inclusion of a 1 mbps upload speed requirement into the 5 Mbps category will affect results.

**Table 5.3.11 Key telecommunications availability indicators**

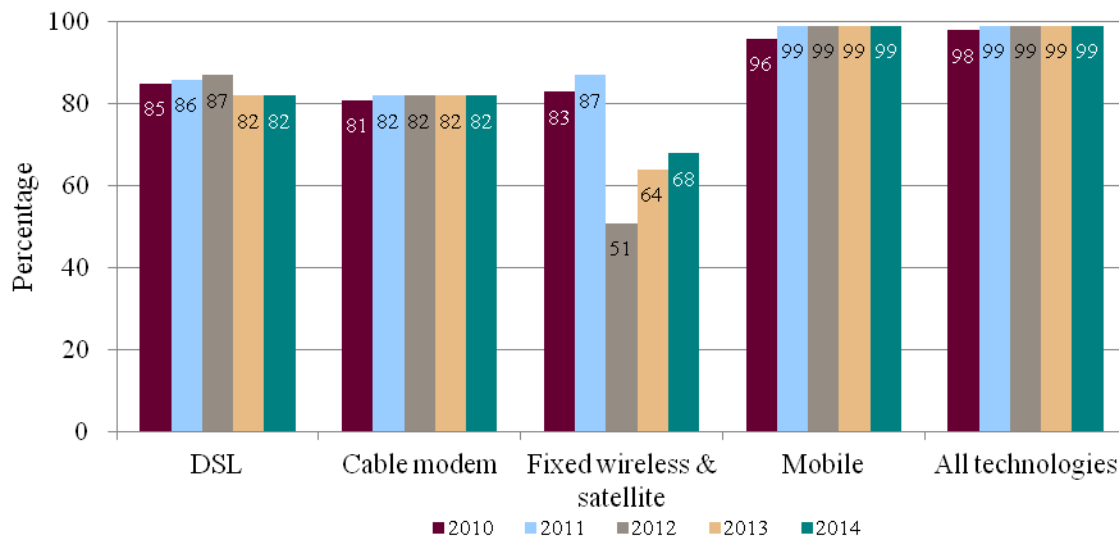
Platform	Availability (% of households)				
	2010	2011	2012	2013	2014
Mobile broadband					
3G/3G equivalent	98	99	99	99	99
HSPA+	96	99	99	99	99
LTE	n/a	45	72	81	93
Wireline broadband					
DSL	85	86	87	82	82
Cable modem	81	82	82	82	82
Fixed wireless	82	86	50	63	68
IPTV	22	34	45	56	65
Digital satellite	National	National	National	National	National

Source: CRTC data collection

Not all broadband technologies are available in all parts of the country. This table lists the various types of mobile and wireline broadband technologies [as well as IPTV and digital satellite technologies], and shows the percentage of households nationally, for the years from 2010 to 2014, that were able to access such technologies. The decline in the availability of fixed wireless services in 2012 and of DSL in 2013 was due to the deactivation of the Inukshuk network and the deployment of fibre technology, respectively.

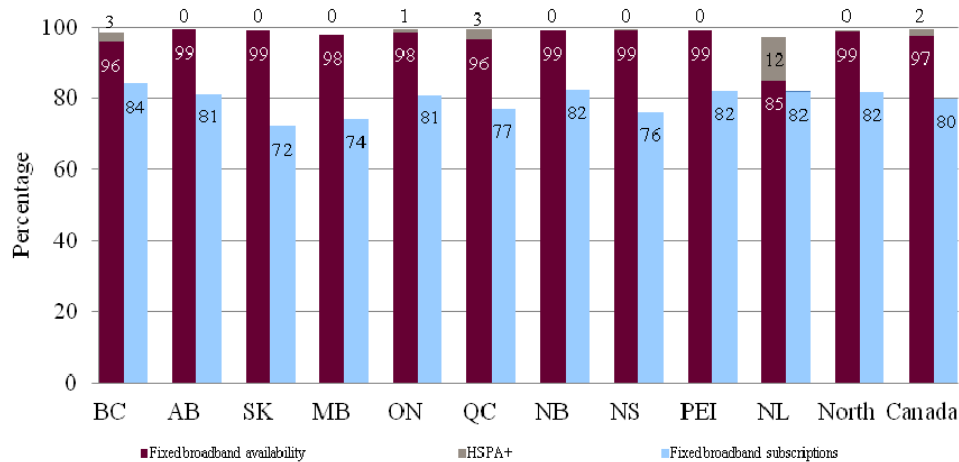


**Figure 5.3.13 Broadband availability (percentage of households)**



Sources: Industry Canada and CRTC data collection

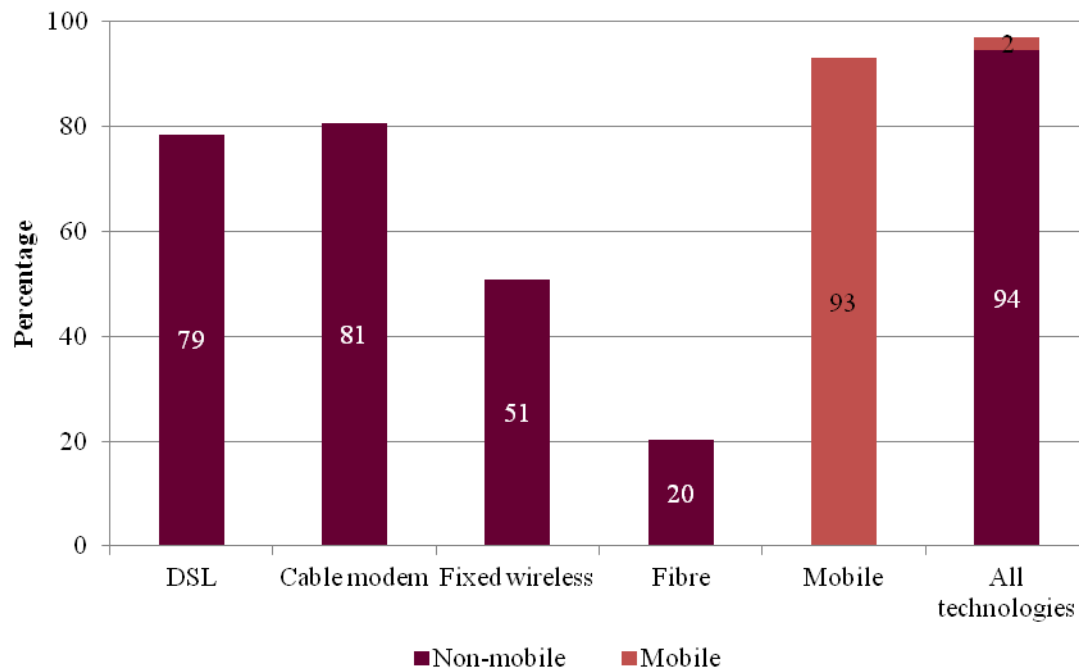
**Figure 5.3.14 Broadband availability vs. broadband subscriptions by province/territory, 2014**



Sources: Industry Canada and CRTC data collection

The availability and take-up rates of broadband services vary from province to province. The provinces of New Brunswick and Saskatchewan have arrangements to provide broadband service via satellite at terms and conditions similar to those for wireline service. In the province of Prince Edward Island, HSPA+ is available to households without access to other means of broadband service at terms and conditions equivalent to those for wireline service. These arrangements have been taken into account in the “fixed broadband availability” bars in the graph. These data exclude satellite broadband service for availability, but they are included for subscriptions. HSPA+ shows the contribution that including HSPA+ technology would have on availability.

**Figure 5.3.15 Broadband, 5 Mbps availability (percentage of households), 2014**

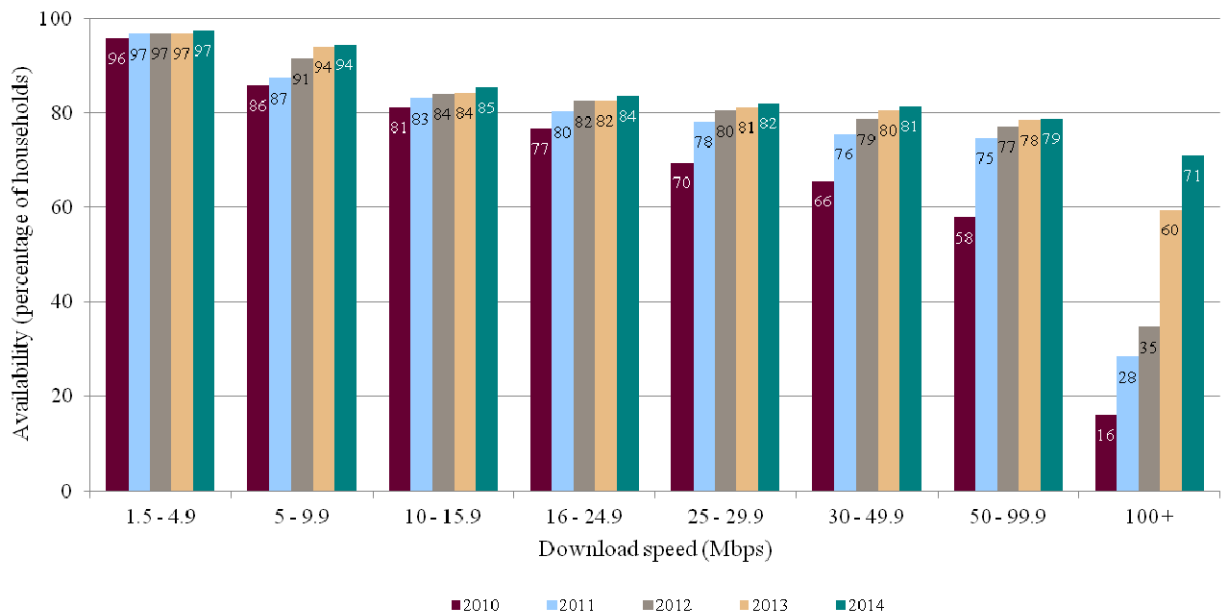


Source: CRTC Data collection

Broadband download speeds of at least 5 Mbps are available to Canadian households on a variety of platforms. This bar graph shows the availability rates of broadband access through DSL, cable modem, fixed-wireless, fibre, and mobile technologies, as well as the availability rate of all technologies at this speed. Satellite service is excluded; however, it would add approximately 1.5% to the availability of 5 Mbps broadband services.

i) **Broadband availability**

**Figure 5.3.16 Broadband availability by speed (percentage of households)**



Sources: Industry Canada and CRTC data collection

The availability of broadband service at higher speeds has been expanding in Canada. This graph excludes satellite and mobile technologies.

**Table 5.3.12 Broadband availability nationwide, by speed and number of platforms (percentage of households), 2014**

Number of platforms	1.5 Mbps and higher	5.0 Mbps and higher	10.0 Mbps and higher	16.0 Mbps and higher	25.0 Mbps and higher	30.0 Mbps and higher	50.0 Mbps and higher	100 Mbps and higher
1	3	6	19	20	21	23	50	63
2	10	10	56	59	56	54	29	9
3	34	43	10	5	5	5	0	0
4	53	38	0	0	0	0	0	0
	99	96	85	84	82	81	79	71

Sources: Industry Canada and CRTC data collection

This table shows the percentage of households nationwide that have access to broadband technologies at varying speeds, and over four platforms: DSL/Fibre, cable modem, fixed-wireless, and mobile (HSPA+ and LTE). At one end of the availability spectrum, broadband platforms at speeds of at least 5 Mbps are available to 96% of Canadian households. At the other end of the spectrum, two broadband platforms at a speed of more than 100 Mbps are available to 9% of Canadian households.

The effects of line bonding (using more than one line to provide service) on DSL were not considered. This mainly affects speeds above 50 Mbps.

The total at the bottom of each column indicates the percentage of Canadian households that can access the speeds noted for each column. This table excludes satellite technologies.

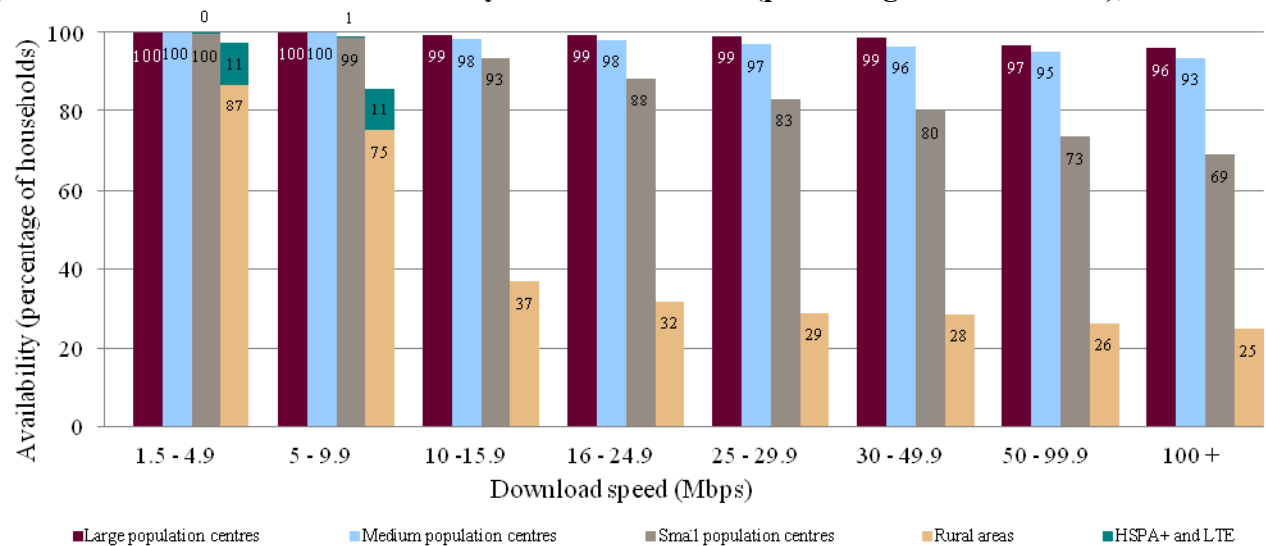
**Table 5.3.13 Broadband availability, by speed and province/territory (percentage of households), 2014**

Province/territory	1.5-4.9 Mbps	1.5-4.9 Mbps with HSPA+	5-9.9 Mbps	5-9.9 Mbps with LTE	10-15.9 Mbps	16-24.9 Mbps	25 Mbps or higher
British Columbia	96	98	93	96	91	90	88
Alberta	99	99	98	99	86	85	81
Saskatchewan	99	99	88	88	74	60	58
Manitoba	98	99	95	95	77	69	69
Ontario	98	99	97	99	87	86	86
Quebec	96	99	94	96	85	83	81
New Brunswick	99	99	90	95	83	83	83
Nova Scotia	99	99	87	95	84	83	81
Prince Edward Island	99	99	77	99	62	60	53
Newfoundland and Labrador	85	97	82	90	71	71	63
Yukon	99	99	96	96	69	62	60
Northwest Territories	97	97	91	91	76	50	42
Nunavut	99	99	33	33	0	0	0

Sources: Industry Canada and CRTC data collection

Not all regions of the country have similar access to broadband technologies. This table shows the regional availability of broadband technology, by province and territory, in 2014. Since satellite is a service with a national footprint, it is excluded from this table.

**Figure 5.3.17 Broadband availability – Urban vs. rural (percentage of households), 2014**



Sources: Industry Canada and CRTC data collection

Broadband technology availability differs between Canada's urban and rural areas, particularly in terms of technologies that offer faster download speeds. This table shows the percentage of Canadian households in large, medium, and small population centres, as well as in rural areas, that can access various broadband services.

Small population centres are areas that have a population of between 1,000 and 29,000. Medium population centres have a population of between 30,000 and 99,999. Large population centres have populations greater than 100,000. Rural areas have a population of less than 1,000, or fewer than 400 people per square kilometre.

The HSPA+ and LTE bars show the additional contribution that inclusion of these technologies would make to the respective categories.

Satellite is excluded.

**Table 5.3.14      Adoption of various video technologies in Canada**

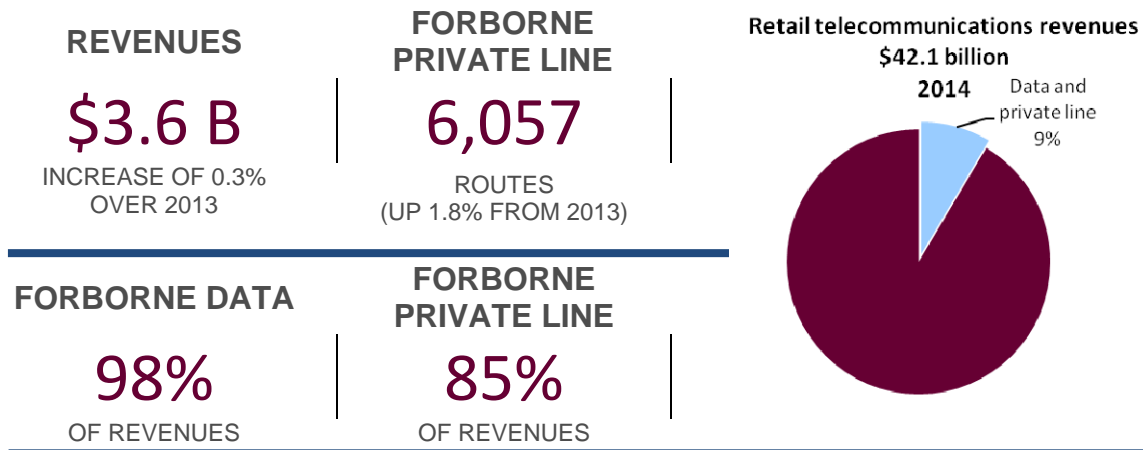
	Adoption (%)				
	2010	2011	2012	2013	2014
Internet TV					
Anglophones	31	34	38	42	47
Francophones	26	33	34	39	42
Internet video on cell/smartphone					
Anglophones	9	12	14	23	38
Francophones	4	8	8	16	27
Internet use on tablet					
Anglophones	<i>n/a</i>	<i>n/a</i>	23	33	44
Francophones	<i>n/a</i>	<i>n/a</i>	14	25	37
Internet video on tablet					
Anglophones	<i>n/a</i>	6	12	20	26
Francophones	<i>n/a</i>	3	7	16	25

Source: MTM 2010-2014 (Respondents: Canadians 18+)

This table shows the rates of adoption and growth rates of various video technologies among Canadian consumers. Over the past years, the popularity of video and television streaming to personal electronic devices has grown greatly.

## 5.4 Data and private line retail sector

**Display 5.4.0 Key indicators for the data and private line retail sector**



Data and private line services refer to those services sold by TSPs to business customers for the transmission of data, video, and/or voice traffic. These communications channels provide private, highly secure communications between locations.

Canadian businesses were served by approximately 191 entities offering data and private line services in 2014. Of these, incumbent telecommunications service providers (incumbent TSPs or incumbent providers) accounted for approximately 15%, and alternative service providers, such as cable-based carriers, utility telcos, and resellers, accounted for the remaining 85%.

Data services are packet-based services that intelligently switch data through carrier networks. They make use of (a) new data protocols such as Ethernet and IP, or (b) legacy protocols such as X.25, asynchronous transfer mode (ATM), and frame relay to transmit data.

These services are provided by both in-territory incumbent TSPs and their competition, with competitors having around 43% of the total market, including network management and equipment. Notable is the increase over time in the activity of cable-based carriers in the newer protocol space.

Private line services provide a non-switched dedicated communications connection between two or more points to transport data, video, and/or voice traffic. These services include high-capacity digital transmission services and digital data systems, as well as voice-grade and other analog systems. Transmission facilities include copper wire and fibre-optic cable. Private line services make use of transmission facilities such as OC-3 fibre optic lines, DS-1 copper facilities, etc.

In the private line space, the market is dominated by the in-territory operations of the incumbent TSPs. Of the alternative service providers, independent operators are the largest provider category.

**a) Revenues**

**Table 5.4.1 Data and private line retail revenues (\$ millions)**

	2010	2011	2012	2013	2014	<i>CAGR (%) 2010-2014</i>
<b>Data</b>						
Data protocols	1,740	1,833	1,893	1,917	1,952	2.9
<i>Annual growth (%)</i>	-0.2	5.3	3.3	1.2	1.8	
Other	654	732	796	832	857	7.0
<i>Annual growth (%)</i>	5.1	11.9	8.7	4.6	3.0	
Total data protocols and other	2,394	2,565	2,689	2,749	2,809	4.1
<i>Annual growth (%)</i>	1.2	7.1	4.9	2.2	2.2	
<b>Private line</b>	807	751	793	834	784	-0.7
<i>Annual growth (%)</i>	-4.2	-7.0	5.6	5.2	-6.0	
<b>Total data and private line</b>	3,201	3,316	3,482	3,583	3,593	2.9
<i>Annual growth (%)</i>	-0.2	3.6	5.0	2.9	0.3	

Source: CRTC data collection

This table shows retail data and private line revenues for the years from 2010 to 2014. Data services were classified into one of two categories: (a) services making use of data protocols such as Ethernet and IP, X.25, ATM, and frame relay; or (b) other services such as network management and networking equipment.



**Table 5.4.2 Retail data service revenues, by classification of data protocol used (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>New protocols</b>						
Ethernet	451.4	478.6	482.7	483.0	464.7	0.7
Annual growth (%)	-6.4	6.0	0.9	0.1	-3.8	
IP	995.9	1,124.4	1,189.7	1,217.9	1,284.1	6.6
Annual growth (%)	14.4	12.9	5.8	2.4	5.4	
Other protocols	118.9	125.9	154.0	167.3	170.9	9.5
Annual growth (%)	-5.9	5.7	22.3	8.6	2.2	
<b>Total new protocols</b>	<b>1,566.2</b>	<b>1,728.9</b>	<b>1,826.4</b>	<b>1,868.1</b>	<b>1,919.8</b>	<b>5.2</b>
Annual growth (%)	5.9	10.4	5.6	2.3	2.8	
<b>Legacy protocols</b>	<b>173.6</b>	<b>103.6</b>	<b>67.1</b>	<b>48.9</b>	<b>32.4</b>	<b>-34.3</b>
Annual growth (%)	-34.3	-40.3	-35.3	-27.1	-22.1	
<b>Total data protocols</b>	<b>1,740.0</b>	<b>1,832.5</b>	<b>1,893.4</b>	<b>1,917.0</b>	<b>1,952.1</b>	<b>2.9</b>
Annual growth (%)	-0.2	5.3	3.3	1.2	1.8	

Source: CRTC data collection

This table shows the retail data service revenues realized by service providers. The data services were classified as services making use of (a) new data protocols such as Ethernet and IP or (b) legacy protocols such as X.25, ATM, and frame relay. The table charts growth in these revenues over the period from 2010 to 2014.

**Table 5.4.3 Private line retail revenues, by type of service provider (\$ millions)**

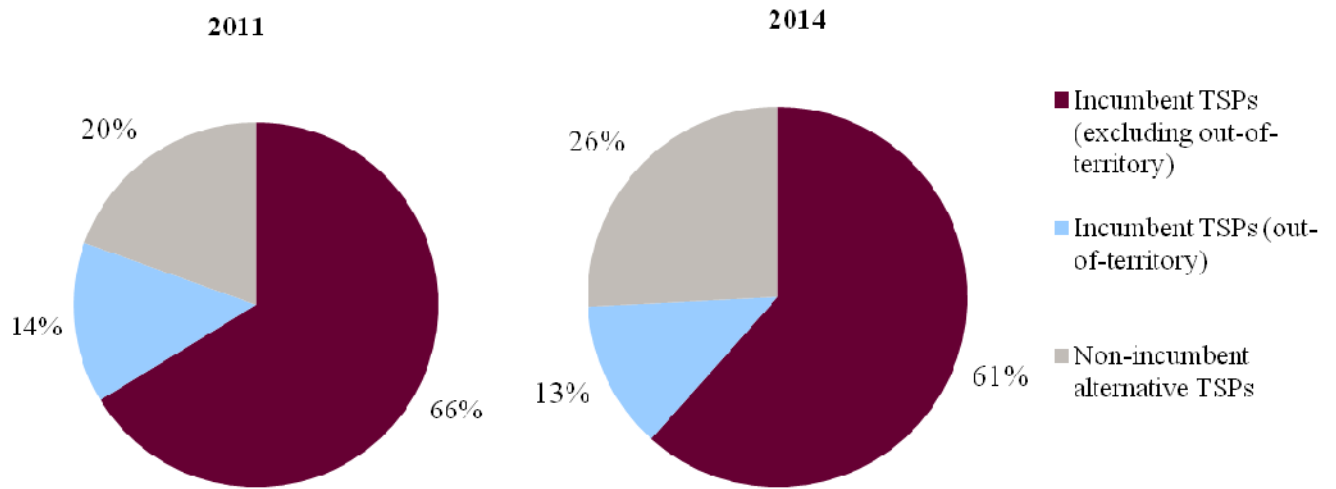
	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Incumbent TSPs (excluding out-of-territory)</b>	<b>681</b>	<b>625</b>	<b>610</b>	<b>641</b>	<b>593</b>	<b>-3.4</b>
Annual growth (%)	4.9	-8.2	-2.4	5.0	-7.5	
<b>Alternative service providers</b>						
Incumbent TSPs (out-of-territory)	53	45	41	42	41	-6.5
Annual growth (%)	-52.9	-15.7	-8.0	1.6	-2.9	
Cable-based carriers	34	48	49	54	61	15.3
Annual growth (%)	-25.3	39.7	2.3	9.7	12.9	
Alternative service providers (excluding cable-based carriers)	38	33	92	97	90	23.5
Annual growth (%)	12.2	-14.8	183.2	5.4	-7.8	
<b>Total alternative service providers</b>	<b>126</b>	<b>125</b>	<b>183</b>	<b>193</b>	<b>191</b>	<b>11.0</b>
Annual growth (%)	-34.8	-0.3	45.6	5.7	-1.0	
<b>Total private line</b>	<b>807</b>	<b>751</b>	<b>793</b>	<b>834</b>	<b>784</b>	<b>-0.7</b>
Annual growth (%)	-4.2	-7.0	5.6	5.2	-6.0	

Source: CRTC data collection

**b) Competitive landscape**

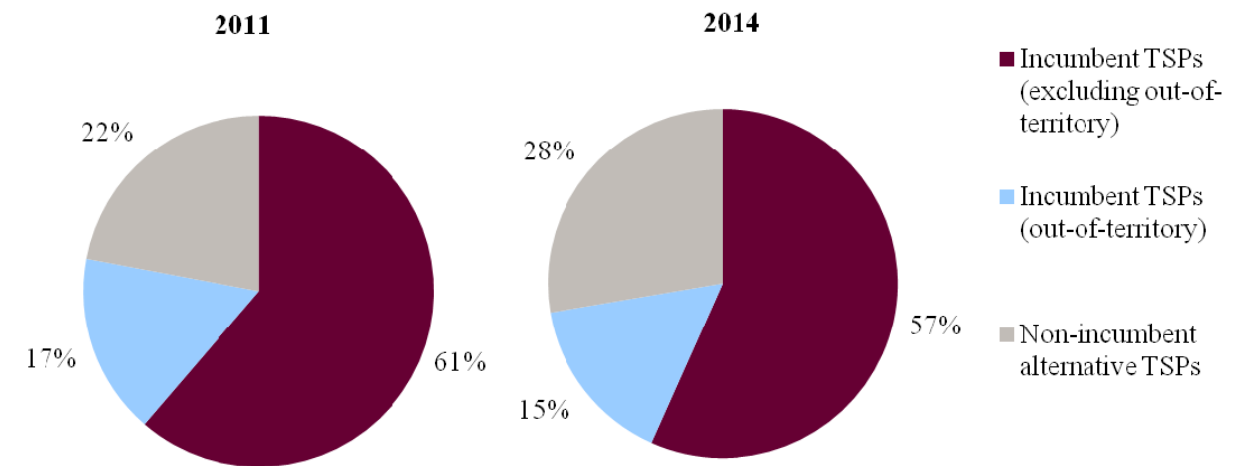
Although incumbent TSPs accounted for only approximately 15% of the entities providing data and private line services, they captured 74% of retail revenues. The remaining 85% of entities providing these services, consisting of cable-based carriers, other carriers, and resellers, accounted for 26% of retail revenues.

**Figure 5.4.1 Retail data and private line revenue market share (%), by type of service provider**



Source: CRTC data collection

**Figure 5.4.2 Retail data service revenue market share (%), by type of service provider**



Source: CRTC data collection

**Table 5.4.4      Retail data service revenue market share (%), by service provider and by classification of data protocol used**

	2010	2011	2012	2013	2014
<b>New data protocols</b>					
<b>Incumbent TSPs (excluding out-of-territory)</b>	<b>57</b>	<b>52</b>	<b>48</b>	<b>49</b>	<b>48</b>
<b>Alternative service providers</b>					
Incumbent TSPs (out-of-territory)	18	20	19	17	18
Cable-based carriers	4	7	10	12	12
Alternative service providers (excluding cable-based carriers)	21	21	23	22	22
<b>Total alternative service providers</b>	<b>43</b>	<b>48</b>	<b>52</b>	<b>51</b>	<b>52</b>
<b>Legacy data protocols</b>					
<b>Incumbent TSPs (excluding out-of-territory)</b>	<b>56</b>	<b>61</b>	<b>55</b>	<b>53</b>	<b>55</b>
<b>Alternative service providers</b>	-	-	-	-	-
Incumbent TSPs (out-of-territory)	-	-	-	-	-
Cable-based carriers	-	-	-	-	-
Alternative service providers (excluding cable-based carriers)	-	-	-	-	-
<b>Total alternative service providers</b>	<b>44</b>	<b>39</b>	<b>45</b>	<b>47</b>	<b>45</b>
<b>All data protocols</b>					
<b>Incumbent TSPs (excluding out-of-territory)</b>	<b>57</b>	<b>52</b>	<b>48</b>	<b>49</b>	<b>48</b>
<b>Alternative service providers</b>	-	-	-	-	-
Incumbent TSPs (out-of-territory)	-	-	-	-	-
Cable-based carriers	-	-	-	-	-
Alternative service providers (excluding cable-based carriers)	-	-	-	-	-
<b>Total alternative service providers</b>	<b>43</b>	<b>48</b>	<b>52</b>	<b>51</b>	<b>52</b>

Source: CRTC data collection

This table shows the percentage of retail data revenues realized by service providers through the use of new and legacy data protocols, with alternate service providers having more revenues than the incumbent TSPs since 2012 in total and for newer data protocols. Incumbent TSPs in their own territories continue to have the majority of revenues for legacy data services. However, when factoring all services, including network management and equipment, incumbent TSP operations within their incumbent territories continue to dominate, as shown in Figure 5.4.2.

Due to changes in company reporting in 2010 and 2011, results for incumbent providers when operating outside their traditional geographic areas are not consistent with those reported in previous years. In addition, these providers did not report revenues from data services using other protocols separately before 2010. This had less than a 2% impact on the results in 2010.

**Table 5.4.5      Retail private line revenue market share (%)**

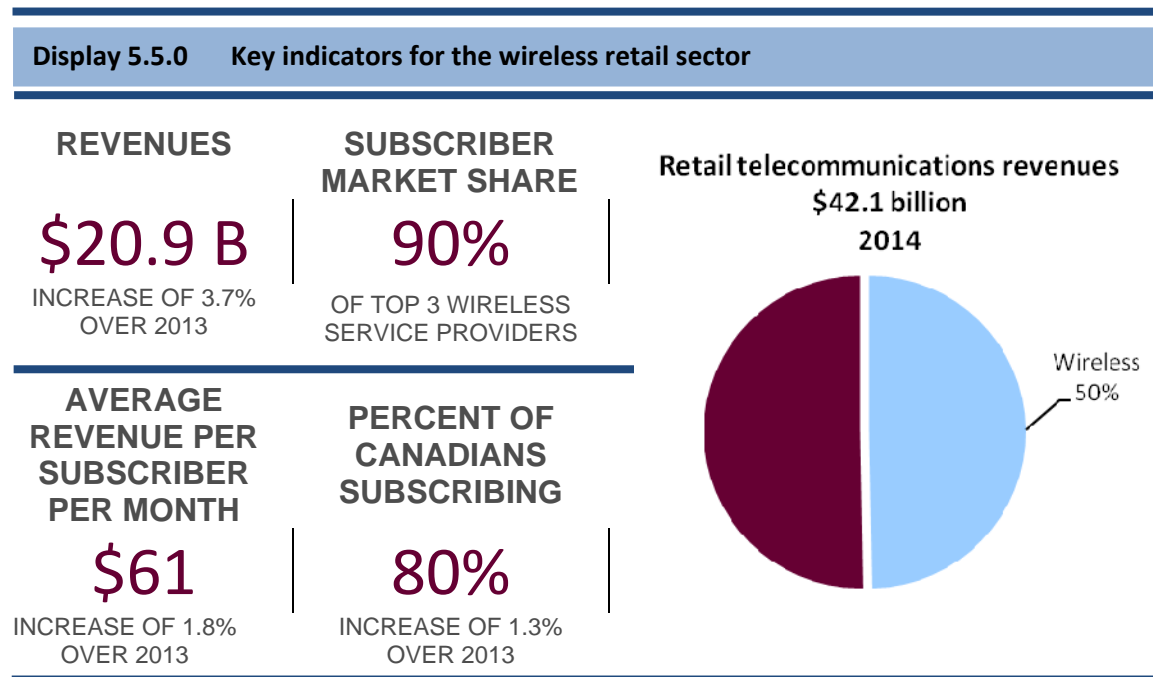
	2010	2011	2012	2013	2014
<b>Incumbent TSPs (excluding out-of-territory)</b>	<b>84</b>	<b>83</b>	<b>77</b>	<b>77</b>	<b>76</b>
<b>Alternative service providers</b>					
Incumbent TSPs (out-of-territory)	7	6	5	5	5
Cable-based carriers	4	6	6	6	8
Alternative service providers (excluding cable-based carriers)	5	4	12	12	11
<b>Total alternative service providers</b>	<b>16</b>	<b>17</b>	<b>23</b>	<b>23</b>	<b>24</b>

Source: CRTC data collection

This table shows the revenue shares for the incumbent TSPs when providing service to their business customers, both within and outside of their traditional geographic areas, and for alternative service providers (i.e. cable-based carriers, utility telcos, and resellers), for the years from 2010 to 2014. Incumbent TSPs continue to dominate in this service category,

Due to changes in company reporting in 2010 and 2011, results for incumbent providers when operating outside their traditional geographic areas are not consistent with those reported in previous years. In addition, due to new reporting by alternative service providers, 2012 results may not be comparable to results for previous years.

## 5.5 Wireless retail sector



The wireless retail market remained the largest communications market sector with revenues of \$20.9 billion and a growth rate of 3.7% in 2014.

Canada's wireless networks enable Canadians to access services that are comparable to wireline services. Wireless service providers (WSPs) provide voice, data, Internet, and video services. The differentiating factors for these services tend to be mobility and price. Based on MTM statistics, the three most popular activities by Canadian smartphone owners were text messages, Internet access, and email. Currently, wireless services are much more of an individual, rather than a shared service within households.

Wireless networks cover approximately 20% of Canada's geographic land mass and reach 99% of Canadians. The advanced wireless network that supports handsets, such as smartphones, tablets, and turbo sticks, is also available to 99.3% of Canadians. The long-term evolution (LTE) network, which delivers even higher speeds than previous generation networks, is available to approximately 92.8% of Canadians. Not only were these networks serving over 28.8 million Canadian subscribers, there were also over 2.6 million machine-to-machine connections reported in 2014.

In addition to such advanced wireless networks as LTE which provide broadband Internet access, wireless service providers have established over 14,000 publicly available WiFi hotspot locations across the country by the end of 2014 (number of free and for-pay WiFi hotspot locations reported in 2014). This provided Canadians an additional method of accessing voice and data communication services on their handheld and other wireless communication devices. WiFi hot spots also provide wireless subscribers a means to minimize potential roaming charges.

Over the past five years, the percentage of Canadian who subscribed to wireless services increased slightly from 79% to 80%, however, the subscriber growth rate had declined from 7.9% to 1.5%. At the same time, Canadians have shifted the way in which they use their mobile devices, by placing an emphasis on data usage rather than voice services. Canadians' appetite to access mobile applications, multi-media services, social networking, Internet browsing, and other data intensive activities have driven wireless data growth to over 14.9% in 2014, and, on average, 22.4% over the past five years.

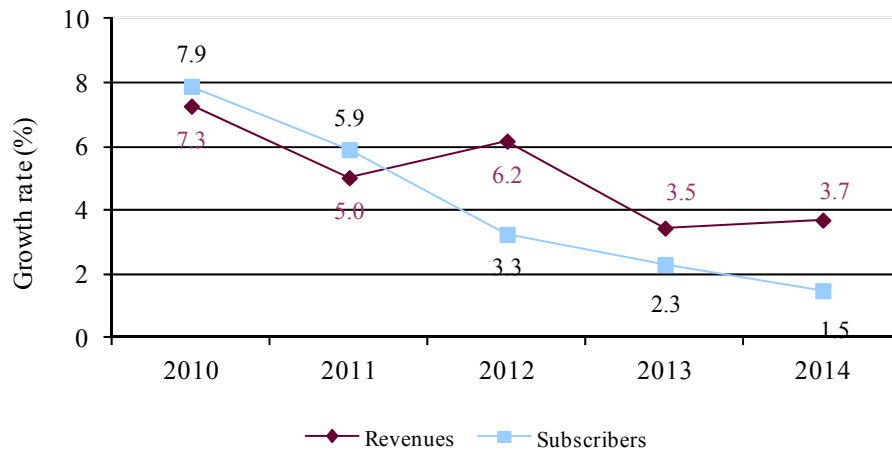
The implementation of [the Wireless Code](#) in 2013, which ensured that consumers of wireless services could better understand their contracts, established consumer-friendly business practices, and significantly limited the early cancellation fees that were previously sought by retail wireless service providers; this also enables consumers to take advantage of competitive offers at least every two years. Approximately 67% of post-paid plans in 2014 had contracts that were equal to or less than two years, compared to 44% in 2013. Canadians can expect these figures to continue to increase as WSPs adapt and modify their plans to adhere to the rules within the Wireless Code.

In terms of provider choice, Canadians were served by three large national WSPs, collectively accounting for 90% of wireless service subscribers. A number of smaller, regional, facilities-based WSPs and a small number of mobile virtual network operators and resellers accounted for the remaining 10%. In both urban centres and rural communities, Canadians generally had a choice of between two and six WSPs. Over the past several years, the Government of Canada has taken a number of measures to encourage greater competition in the wireless market so that Canadians benefit from more choice, lower prices, and better service.

In 2014, wireless service providers invested \$7.5 billion in their wireless network infrastructure. Wireless capital investments took a significant leap due to the sale of the 700 MHz spectrum held by Industry Canada. The amount of capital investment as a percentage of total wireless revenues, or capital intensity, rose to 34% compared to 11% in 2013.

a) **Revenues**

**Figure 5.5.1 Wireless service revenue and subscriber growth rates (excluding paging)**



Source: CRTC data collection

This table shows revenue and subscriber growth rates for WSPs from 2010 to 2014. Revenue growth was relatively constant between 2010 and 2012, in the 5 to 7% range, even though subscriber growth rates declined. In 2014, the wireless revenue growth rate inched higher to 3.7% and subscriber growth rates slipped to 1.5%, the lowest in 10 years.

**Table 5.5.1 Retail wireless and paging service revenues (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Wireless	17,487.4	18,368.6	19,504.8	20,179.3	20,927.9	4.6
Annual growth (%)	7.3	5.0	6.2	3.5	3.7	
Paging	41.9	38.2	21.8	18.4	17.3	-19.9
Annual growth (%)	-13.0	-9.0	-42.8	-15.6	-6.3	
<b>Total revenues</b>	<b>17,529.3</b>	<b>18,406.7</b>	<b>19,526.6</b>	<b>20,197.7</b>	<b>20,945.2</b>	4.6
Annual growth (%)	7.2	5.0	6.1	3.4	3.7	

Source: CRTC data collection

This table shows the growth in revenue for the wireless and paging service markets from 2010 to 2014. Revenues from paging services, which predate wireless voice communication services, declined.

**Table 5.5.2 Retail wireless and paging service revenue components (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Basic voice	10,285.0	9,816.5	9,486.8	8,818.7	8,665.5	-4.2
Annual growth (%)	0.1	-4.6	-3.4	-7.0	-1.7	
Long distance	1,275.9	1,286.2	1,255.6	1,160.3	880.4	-8.9
Annual growth (%)	6.2	0.8	-2.4	-7.6	-24.1	
Paging	41.9	38.2	21.8	18.4	17.3	-19.9
Annual growth (%)	-13.0	-9.0	-42.8	-15.6	-6.3	
Terminal equipment including handheld devices	1,159.0	1,401.9	1,532.8	1,501.5	1,673.7	9.6
Annual growth (%)	4.8	21.0	9.3	-2.0	11.5	
Data	3,866.1	5,046.1	6,233.2	7,546.1	8,672.6	22.4
Annual growth (%)	29.0	30.5	23.5	21.1	14.9	
Roaming and other	901.4	817.8	996.3	1,152.8	1,035.7	3.5
Annual growth (%)	25.2	-9.3	21.8	15.7	-10.2	
Total data, roaming, and other	4,767.5	5,863.9	7,229.5	8,698.8	9,708.3	19.5
Annual growth (%)	28.3	23.0	23.3	20.3	11.6	
<b>Total</b>	<b>17,529.3</b>	<b>18,406.7</b>	<b>19,526.6</b>	<b>20,197.7</b>	<b>20,945.2</b>	4.6
Annual growth (%)	7.2	5.0	6.1	3.4	3.7	

Source: CRTC data collection

This table shows the service revenue components of the wireless market for the years 2010 to 2014. These components include voice, long distance, paging, hardware, data, roaming, and other. Mobile television revenues are included within data revenues.



**Table 5.5.3 Prepaid and postpaid retail wireless service revenues (basic voice, long distance, and data) (\$ millions)**

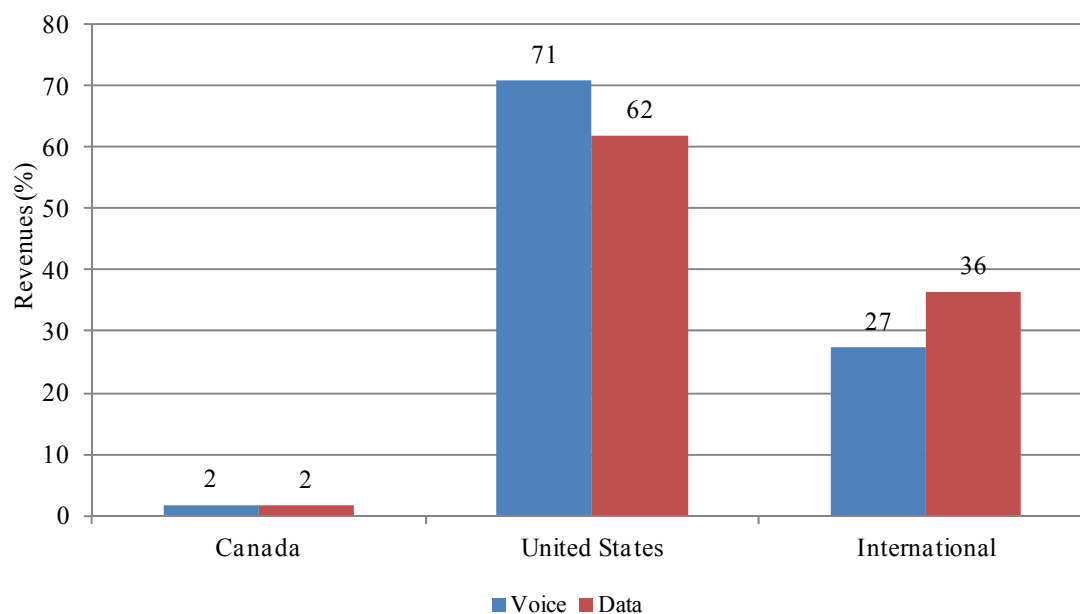
	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Prepaid	1,042.9	978.2	877.3	790.4	877.3	-5.6
Annual growth (%)	na	-6.2	-10.3	-9.9	11.0	
Postpaid	14,296.2	14,957.3	15,762.3	16,303.6	17,179.5	6.3
Annual growth (%)	na	4.6	5.4	3.4	5.4	
<b>Total</b>	<b>15,339.1</b>	<b>15,935.5</b>	<b>16,639.6</b>	<b>17,094.0</b>	<b>18,056.8</b>	5.6
Annual growth (%)	na	3.9	4.4	2.7	5.6	

Source: CRTC data collection

Canadians have a choice of either prepaid or post-paid wireless services. With prepaid services, a significant portion of services and usage is paid prior to consuming the services. With post-paid services, a significant portion of services and usage is paid subsequent to consuming the services.

This table shows the revenues from and revenue growth in both service plan options over the period from 2010 to 2014.

**Figure 5.5.2 Roaming revenues, by type and destination, 2014**



Source: CRTC data collection

WSPs extend their coverage area to areas where they do not have facilities by making arrangements with other WSPs that do have facilities in those areas to offer service to their end-users. When a subscriber uses the facilities of another WSP, the subscriber is said to be “roaming.” This graph shows the percentage of roaming-out revenues that were derived within Canada, the United States, and internationally. SMS and MMS revenues were excluded from the data revenue component within this particular figure.

## b) Subscriber data

**Table 5.5.4 Number of wireless and paging service subscribers**

		2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Subscribers (thousands)	Wireless	25,344.6	26,844.3	27,720.6	28,363.8	28,788.9	3.2
	Annual growth (%)	7.9	5.9	3.3	2.3	1.5	
	Paging	240.8	219.0	186.3	161.5	146.7	-11.6
	Annual growth (%)	-5.1	-9.0	-14.9	-13.3	-9.1	
ARPU (\$/month)	Wireless	59.68	58.66	59.58	59.97	61.03	0.6
	Annual growth (%)	-0.8	-1.7	1.6	0.7	1.8	

Source: CRTC data collection

This table shows the growth in the number of subscribers to wireless and paging services between 2010 and 2014. From 2010 to 2014, the number of subscribers to paging services, which predate wireless voice communication services, declined.

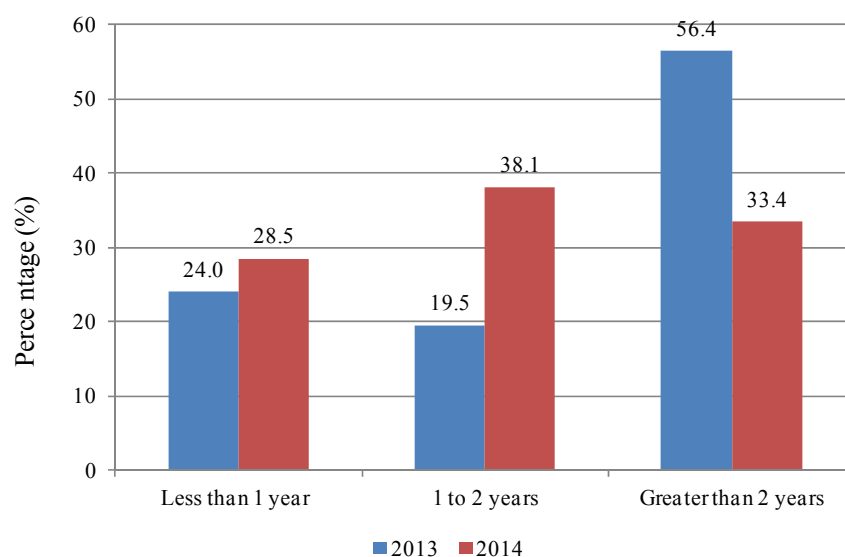
**Table 5.5.5 Number of post-paid wireless service subscribers as a percentage of total wireless service subscribers**

	2010	2011	2012	2013	2014
Post-paid	79	78	81	83	86

Source: CRTC data collection

From 2010 to 2014, Canadians subscribing to wireless services favoured postpaid services.

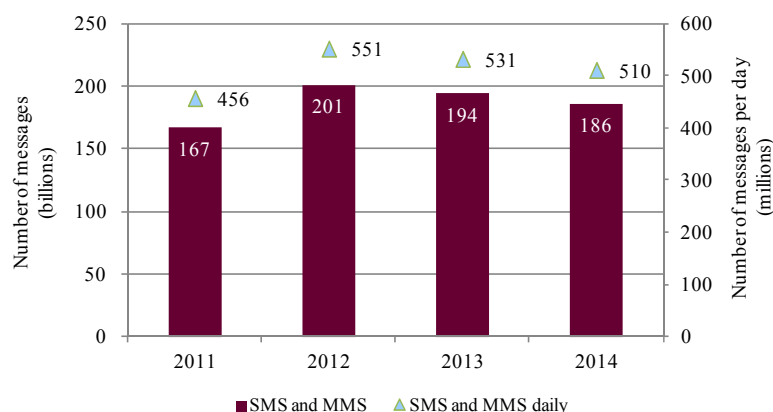
**Figure 5.5.3 Percentage of wireless service contracts by duration**



This chart shows the percentage of post-paid plans that were under contract for less than 1 year, for 1 to 2 years, and for greater than 2 years.

With the implementation of the [Wireless Code](#) in 2013, the percentage of post-paid plans with contracts of more than 2-years has declined significantly.

Source: CRTC data collection

**Figure 5.5.4 Total number of MMS and SMS messages**

Source: CRTC data collection

Short message service (SMS) enables the transmission of text messages of up to 160 characters in length between subscribers.

Multi-media messaging service (MMS) is similar to SMS, but it enables the transmission of multimedia content, such as pictures and videos, between subscribers.

This table shows the growth in the number of messages sent and received by Canadians via SMS and MMS per day and annually for the period 2010 to 2014. The total number of SMS and MMS messages was restated for 2010 to 2012 to include estimates for a company that was overlooked in those years.

**Table 5.5.6 Average mobile data usage (MB/month)**

	2014
Average per subscriber	637
Average usage per advanced handheld device subscribers	988

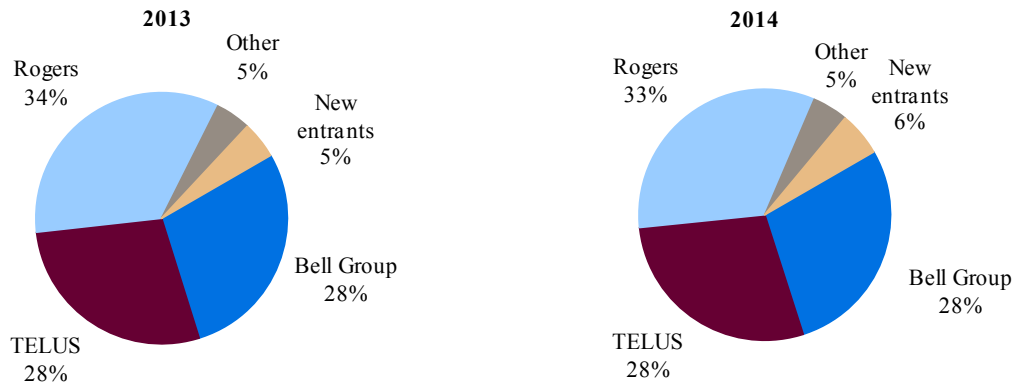
Source: CRTC data collection

This table shows the average mobile data usage across all retail subscribers and the average data usage across subscribers who own advanced handheld devices.

The average wireless data usage per subscriber and per advanced handheld device subscriber were calculated by dividing total retail data usage (upload/download data) for the year by the average number of subscribers at the beginning and at the end of the year. Subscribers to voice with data and data-only plans were classified as advanced handheld device subscribers.

c) *Competitive landscape*

**Figure 5.5.5 TSPs' wireless subscriber market share**



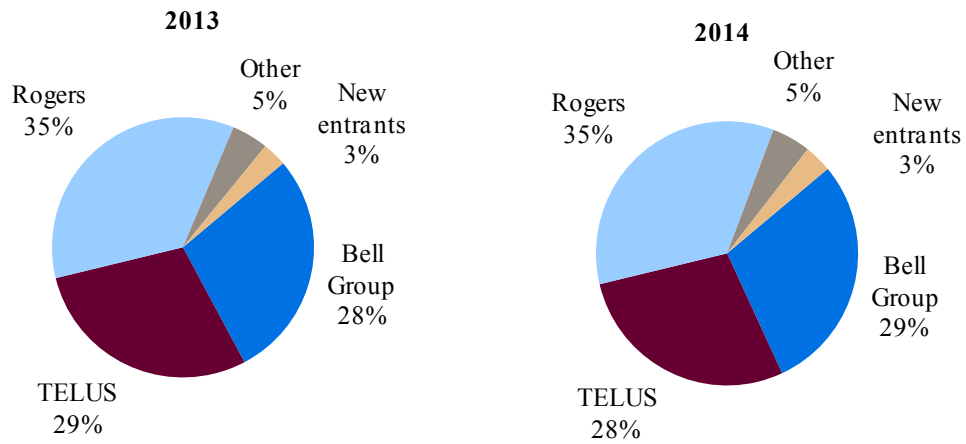
Source: CRTC data collection

These charts show the percentage of subscribers to wireless services in 2013 and 2014 for Canada's three major TSPs: the Bell Group of companies (Bell Group), Rogers Communications Partnership (Rogers), and TELUS. Collectively, Bell, Rogers, and TELUS had 90% of wireless subscribers in 2013, and 2014.

The "Other" category includes TSPs such as MTS Allstream, SaskTel, and other small TSPs. The "New entrants" category refers to the new wireless entities that acquired spectrum in Industry Canada's 2008 AWS spectrum auction and were still operating as a competitor to Bell Group, Telus and/or Rogers in 2014. These entities included: Data & Audio Visual Enterprises Wireless Inc.; Globalive Wireless Management Corp., operating as WIND Mobile; Videotron s.e.n.c.; and more recently, Bragg Communications Incorporated, operating as Eastlink.

The "Bell Group" category includes Bell Canada; Bell Mobility; Latitude Wireless; NorthernTel, Limited Partnership; Northwestel Mobility; Télébec, Limited Partnership; and Virgin Mobile. In 2013, Public Mobile's figures were included with those of TELUS.

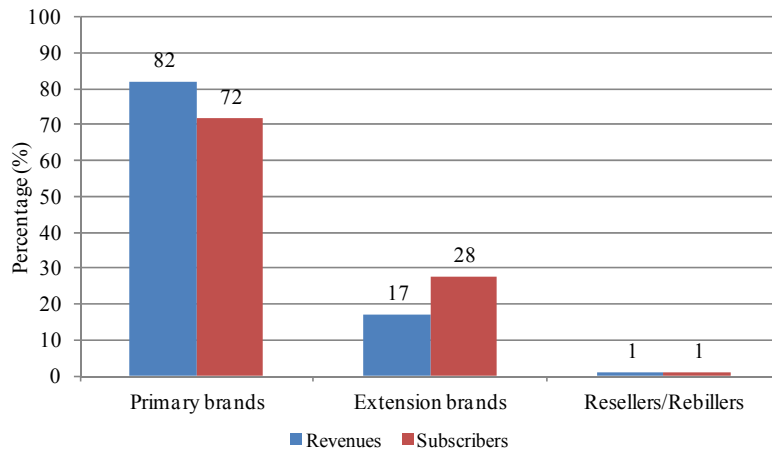
**Figure 5.5.6 TSPs' wireless service revenue market share**



Source: CRTC data collection

These charts show the percentage of revenues from wireless services in 2013 and 2014 for Canada's three major TSPs: the Bell Group, Rogers, and TELUS. Collectively, Rogers, Bell, and Telus had 92% of all wireless revenues in 2013 and 2014.

**Figure 5.5.7 Percentage of revenues and subscribers derived via primary brands, extension brands, and resellers/rebillers, 2014**



Source: CRTC data collection

Canadian WSPs market wireless services through primary and extension brands. By marketing their services through various market segments, WSPs are able to differentiate service offerings to potentially affect the competitive landscape in regional markets. This graph depicts the revenues and subscribers garnered through primary brands, extension brands, and reseller/rebiller arrangements.

Extension brands are brand names created by companies to serve specific customer needs. These names are in addition to the companies' established or main brand.

Extension brands are sometimes referred to as "flanker brands." Some Canadian flanker brands include Fido, Solo, and Koodo.

Resellers/rebillers are companies that rely mainly on the large, facilities-based operators to package, market, bill, and deliver their mobile services, e.g., PC mobile, Petro-Canada Mobility, and SpeakOut 7-Eleven.

**Table 5.5.7      Average revenue per user (\$/month)**

	2014
ARPU of Canada's three major WSPs	62.0
ARPU of the other WSPs	61.3
ARPU of the new entrants	39.8

Source: CRTC data collection

This table compares the combined ARPU of the three major WSPs to that of the new entrants and the other WSPs.

**Table 5.5.8      Average monthly churn rates (%)**

	2010	2011	2012	2013	2014
Bell Mobility	1.9	2.0	1.7	1.6	1.5
Rogers Communications	1.5	1.8	1.8	1.7	1.6
TCC	1.6	1.7	1.5	1.4	1.3

Sources: Companies' annual reports and CRTC data collection

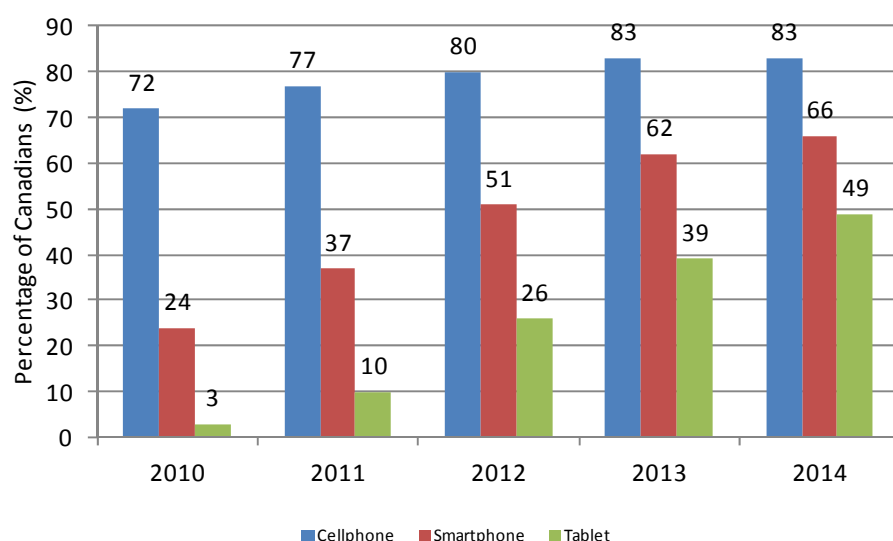
The average churn rate is a measure of subscriber turnover. It is derived by dividing the number of subscribers that have left a wireless service by the total number of wireless service subscribers.

This table shows the average churn rate for three major WSPs from 2010 to 2014. Customers may leave their WSP for a number of reasons, including dissatisfaction with the service, taking advantage of competitive offers, and pricing issues.

**d) Technology indicators**

The following tables and charts indicate the extent to which Canadians are adapting to a digital communication system. Advanced handheld devices, tablets, and other wireless devices that provide access to the Internet are continually increasing demand for wireless capacity.

**Figure 5.5.8 Mobile device penetration**



Source: MTM 2014 (Respondents: Canadians aged 18+)

This graph shows the percentage of Canadians, 18 years of age and older, who owned regular cell phones, smartphones, and tablets, from 2010 to 2014. The use of smartphones and tablets increases the volume of data traffic on the network.

**Table 5.5.9 Mobile device penetration, by linguistic group (%)**

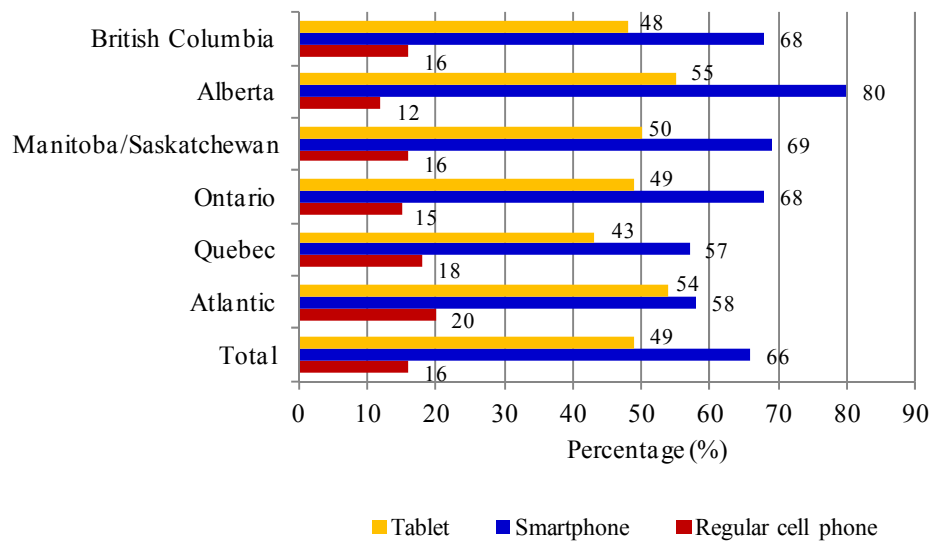
Mobile device ownership	2010		2011		2012		2013		2014	
	Anglo	Franco	Anglo	Franco	Anglo	Franco	Anglo	Franco	Anglo	Franco
Cellphone	74	63	80	67	83	71	86	74	86	75
Smartphone	27	14	41	26	55	39	66	49	69	54
Tablet	4	2	12	6	28	17	42	30	51	41

Source: MTM 2014 (Respondents: Canadians aged 18+)

This table shows the percentage of Francophones and Anglophones in Canada who own cellphones, smartphones, and tablets, from 2010 to 2014. Cellphone owners include people who own either a cellphone or a smartphone.



**Figure 5.5.9 Mobile device penetration, by region**



Source: MTM 2014 (Respondents: Canadians aged 18+)

Canadians who reside in the western provinces are generally more likely to adopt smartphones and tablets than Canadians who reside in the eastern provinces.

**Table 5.5.10 Number and percentage of advanced handheld devices, by province and territory**

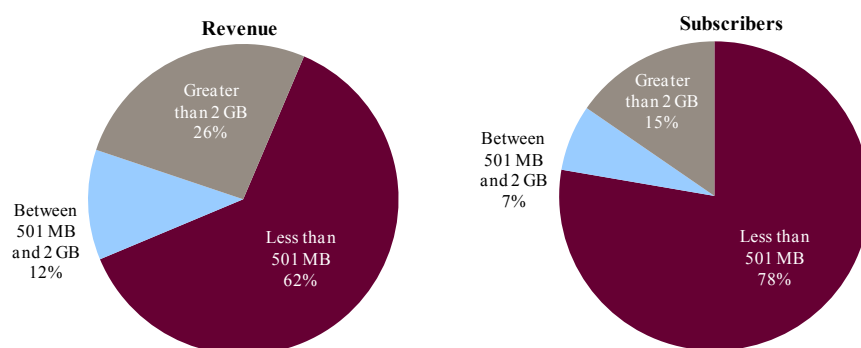
	2013			2014		Annual growth (%)
Province/territory	Number of advanced handheld devices (000's)	Percentage of total advanced handheld devices (%)		Number of advanced handheld devices (000's)	Percentage of total advanced handheld devices (%)	
British Columbia	2,388	14	#	2,559	13	7
Alberta	2,477	14	#	2,657	14	7
Saskatchewan	596	3		653	3	10
Manitoba	804	5	#	864	4	8
Ontario	6,938	39	#	7,999	41	15
Quebec	3,202	18	#	3,450	18	8
New Brunswick	346	2		358	2	3
Nova Scotia	460	3	#	479	2	4
Prince Edward Island	65	0		70	0	7
Newfoundland and Labrador	269	2	#	289	1	8
The North	53	0		55	0	4

Source: CRTC data collection

Advanced handheld devices offer more than voice functions. They often support MMS, Internet email functions, and video. The number of advanced handheld devices is a measure of the extent to which Canadians are participating in the digital economy.

This table shows the number of advanced handheld devices that were in use in each region of the country in 2013 and 2014, as well as the number of advanced handheld devices expressed as a percentage of all advanced handheld devices in use.

**Figure 5.5.10 Mobile data-only plan revenues and subscribers, by data plan capacity, 2014**

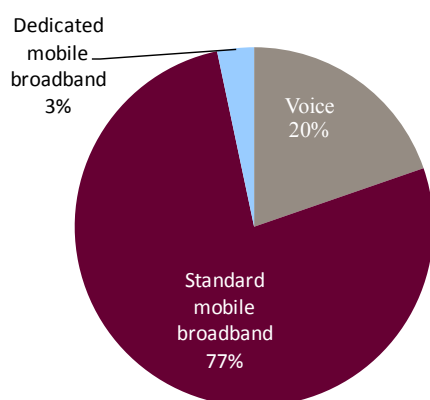


Data-only plans include built-in and portable access devices, such as hubs, sticks, dongles, and laptops.

Source: CRTC data collection

These charts show the percentages of revenues and subscribers realized by WSPs by data plan capacity in 2014. Of the total number of subscribers, 5% were reported to be data-only subscribers.

**Figure 5.5.11 Percentage of mobile revenues, voice vs. standard broadband vs. dedicated broadband, 2014**



A standard mobile broadband user is someone who owns a smartphone or a regular cellphone with a subscription to a data and voice plan. (Mobile phone plans with browsing only are excluded from this category.)

A dedicated mobile broadband user refers to someone with a subscription to dedicated data services over a mobile network. These subscriptions are purchased separately from voice services, either as a stand-alone service (modem/dongle) or as an add-on data package to voice services, which requires an additional subscription.

Source: CRTC data collection

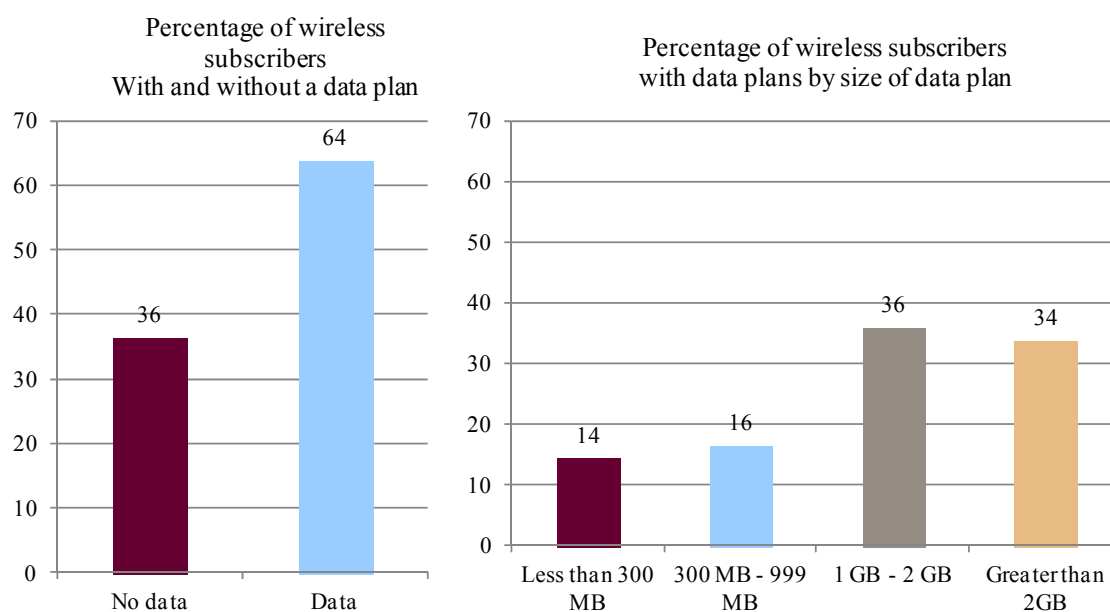
This chart shows the percentage of revenues that WSPs derive from customers who subscribe to voice plans, standard broadband plans, and dedicated broadband plans in 2014.

**Table 5.5.11 Mobile broadband subscribers**

	2011	2012	2013	2014	CAGR (%) 2011- 2014
<b>Standard mobile broadband</b>					
Number of subscribers (millions)	12.0	13.0	16.1	17.7	13.7
Percentage of all subscribers (%)	44	47	57	61	
Annual growth (%)	na	8.0	24.3	9.5	
<b>Dedicated mobile</b>					
Number of subscribers (millions)	1.2	1.3	1.5	1.6	11.1
Percentage of all subscribers (%)	4	5	5	6	
Annual growth (%)	na	12.3	10.5	10.4	
<b>Total mobile broadband</b>					
Number of subscribers (millions)	13.2	14.3	17.6	19.3	13.5
Percentage of all subscribers (%)	48	51	62	67	
Annual growth (%)	na	8.4	#	23.0	#

Source: CRTC data collection

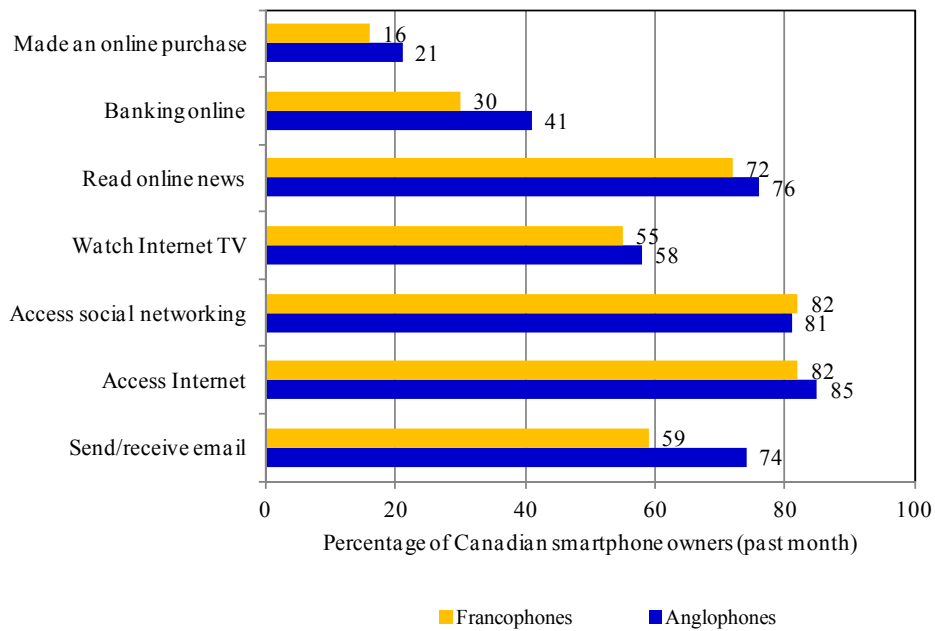
From 2011 to 2014, Canadians increasingly used broadband technology on mobile devices.

**Figure 5.5.12 Percentage of mobile subscriber, by type of plans, 2014**


Source: CRTC data collection

The data reported in this dual bar chart represents over 85% of total mobile subscribers. The chart on the left shows the percentage of subscribers with and without a data plan. The chart on the right shows the percent distribution of subscribers with a data plan, by size of the plan. Due to the difficulty of reporting corresponding voice and SMS services associated with each defined data plan, the assumption was made that all data plans included voice and text messaging services.

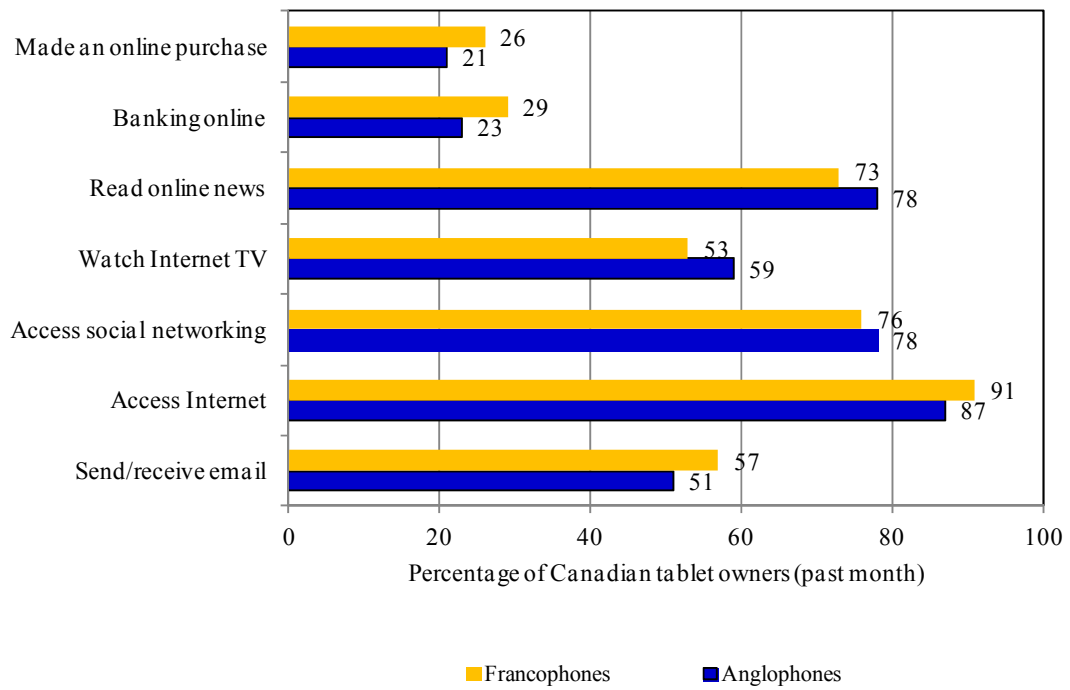
**Figure 5.5.13 Popular Internet and mobile activities performed by Canadians on their smartphone**



Source: MTM 2014 (Respondents: Canadians aged 18+)

This graph shows the activities that Francophones and Anglophones carry out using their smartphones.

**Figure 5.5.14 Popular Internet and mobile activities performed by Canadians on their tablet**



Source: MTM 2014 (Respondents: Canadians aged 18+)

e) *Performance indicators***Table 5.5.12 Average wireless service revenue per subscriber**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Average wireless service revenue per subscriber (\$/month)	59.7	58.7	59.6	60.0	61.0	0.6
Annual growth (%)	-0.8	-1.7	1.6	0.7	1.8	

Source: CRTC data collection

Average wireless service revenue per subscriber is a useful measure of the revenues WSPs receive per subscriber. Conversely, from a consumer perspective, it is a measure of consumers' expenditures on wireless services. This table shows the average revenue per user for wireless services for the years 2010 to 2014.

The average wireless service revenue per subscriber was calculated by dividing total annual wireless service revenues by the average number of subscribers during the year. The result was then divided by twelve to obtain a monthly result. The average number of subscribers was determined by dividing the sum of the number of subscribers at the beginning and at the end of the year by two.

**Table 5.5.13 Average wireless service revenues per subscriber, by province and territory (excluding paging)**

Province/territory	2010	2011	2012	2013	2014
British Columbia	62.59	63.84	62.55	63.42	62.48
Alberta	71.89	75.82	72.82	74.10	81.30
Saskatchewan	63.45	53.51	57.83	58.72	62.16
Manitoba	52.07	53.07	54.99	59.42	60.97
Ontario	62.04	58.18	60.60	58.93	59.50
Quebec	52.79	51.08	51.46	53.69	49.35
New Brunswick	55.11	53.15	54.62	55.65	55.56
Nova Scotia	57.76	55.26	57.22	58.15	56.26
Prince Edward Island	52.15	52.01	55.47	52.86	56.38
Newfoundland and Labrador	53.78	53.86	58.70	60.61	61.18
The North	82.02	105.43	94.31	135.44	81.09

Source: CRTC data collection

This table shows the average revenue per user for WSPs in each region of the country for the years 2010 to 2014 based on provincial revenue and subscriber data reported. Estimates were made for companies that were not required to provide provincial and territorial data.

## f) *Price*

The price structure of wireless services is based on usage. To assess the price of wireless services in urban centres and in rural communities, four baskets were used and both flanker and primary service brands were considered. These baskets were adopted from the report on *Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions* (2014).

- The Level 1 mobile service basket represents introductory or low-usage types of plans that offer 150 minutes of voice service, with no SMS or Internet data service per month.
- The Level 2 mobile service basket encompasses low- to mid-tier types of plans that provide customers with at least 450 minutes of voice service, 300 SMS, and no Internet data services per month.
- The Level 3 mobile service basket comprises plans representative of a typical smartphone user that offer at least 1200 minutes of voice service, 300 SMS, and 1 GB of Internet data per month.
- The Level 4 mobile service basket is geared towards smartphone users who want access to unlimited voice and SMS, along with 2 GB of Internet data per month.

### **What is the report on *Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions*?**

This report provides a 2014 update to the previous annual telecommunications price comparison studies conducted over the period from 2008 to 2014 by Wall Communications Inc. for the CRTC and Industry Canada.

The individual services covered by the study include wireline, mobile wireless, broadband Internet, and mobile Internet services.

For more information, please consult the following link:

<http://crtc.gc.ca/eng/publications/reports/rp140714.htm>

Most noticeable changes in 2014 compared to 2013 were the narrowed price variance between the lowest and highest price in all service baskets and the shift in the number of WSPs in various service baskets and community centres. An increase in the number of providers was the result of a new service provider entering the wireless market sector, as well as existing service providers who expanded into new urban and rural communities across Canada. A decrease in the number of providers in a number of areas was mainly due to consolidation in the wireless market sector.

### *Urban centres*

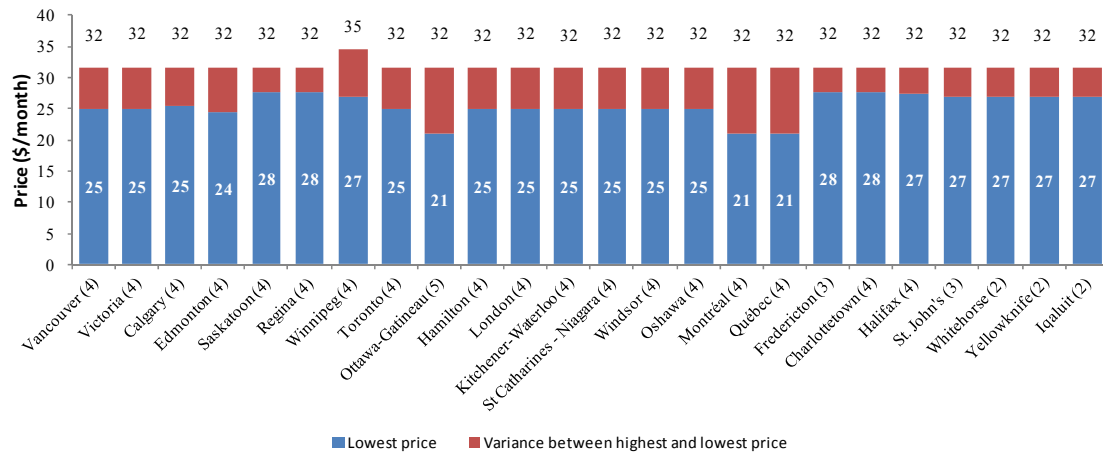
Urban centres having four or more WSPs had the largest price variance between the lowest and highest price reported, as well as the lowest prices in all four service baskets. The variance between lowest and highest prices across all service baskets in any given urban centre was wide, ranging from a low of \$4 to a high of \$46. The average price variances between lowest and highest prices for the Level 1, 2, 3, and 4 service baskets were \$6, \$10, \$18, and \$22, respectively.

In cities where at least one of the new entrants offered wireless service, prices were significantly lower for all four service baskets. Although the results of the pricing survey suggest that the existence of more competitors leads to lower prices, this analysis does not take into consideration certain factors that could affect certain facets of consumer value, such as network coverage, quality of service, and bundling options.



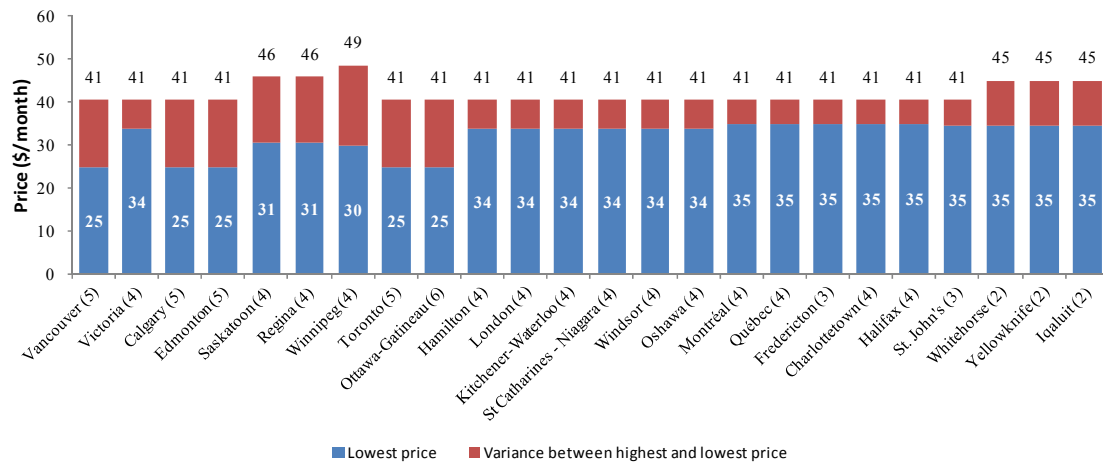
The following four bar charts display the range in the monthly price of a Level 1, Level 2, Level 3, and Level 4 wireless service basket in 24 urban centres in Canada. The blue bar displays the lowest price, and the red bar displays the difference between the lowest and the highest price. The number at the top of each bar is the highest price. The number appearing in parentheses along the horizontal axis after the name of each urban centre represents the number of local WSPs.

**Figure 5.5.15 Price of a Level 1 basket wireless service (\$/month) and number of companies providing the service in a number of select cities**



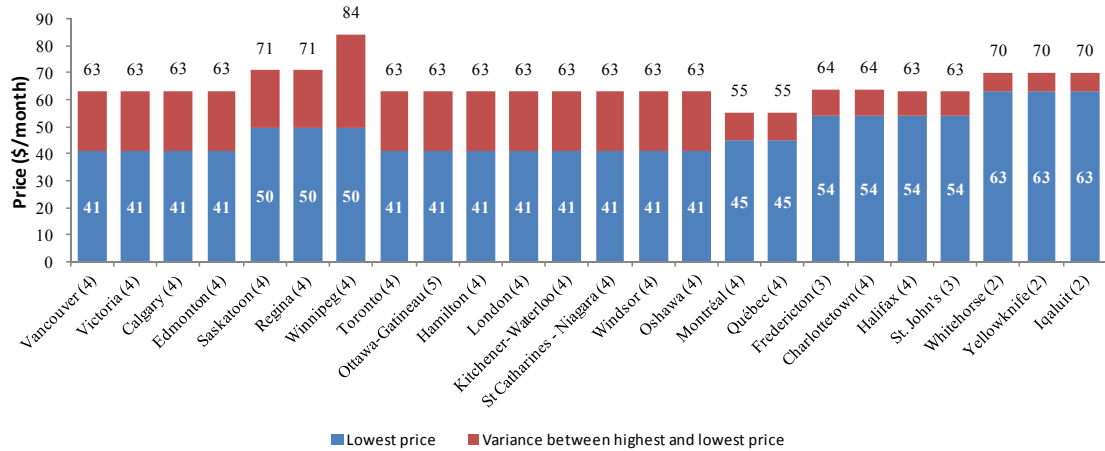
Source: CRTC data collection

**Figure 5.5.16 Price of a Level 2 basket wireless service (\$/month) and number of companies providing the service in a number of select cities**



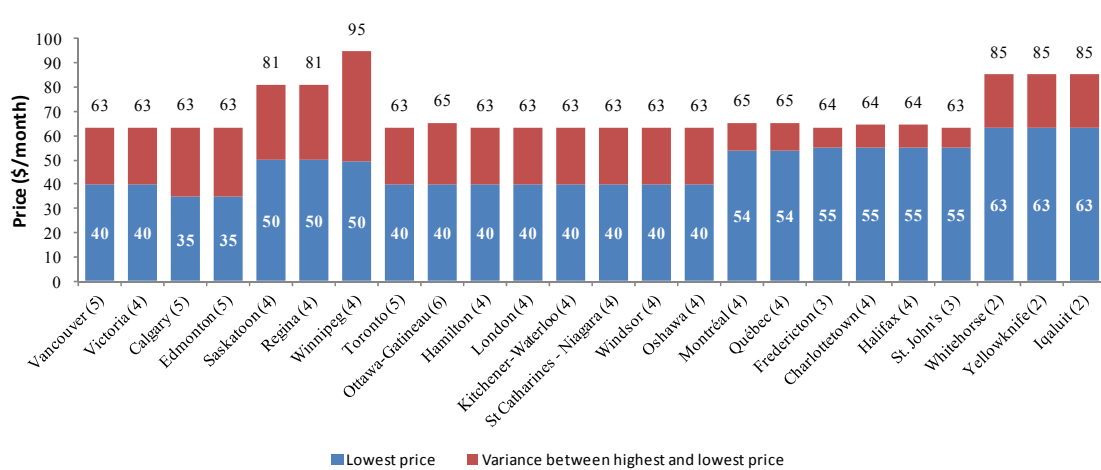
Source: CRTC data collection

**Figure 5.5.17 Price of a Level 3 basket wireless service (\$/month) and number of companies providing the service in a number of select cities**



Source: CRTC data collection

**Figure 5.5.18 Price of a Level 4 basket wireless service (\$/month) and number of companies providing the service in a number of select cities**



Source: CRTC data collection

### *Price comparison of urban and rural wireless services*

To assess the price of wireless services in rural communities, 54 rural communities were selected, and the price of wireless services in these communities was compared to that in urban centres.

The price of wireless services in rural communities, across all service baskets, was generally equal to or higher than that in urban centres.

The variance between the lowest and highest price of wireless services across all service baskets in rural communities, by province and territory, was wide, ranging between \$0 and \$46. This variance was also wide in the urban centres.

The average price variances among rural communities for Level 1, 2, 3, and 4 service baskets were \$5, \$9, \$14, and \$16, respectively. In the urban centres for the identical service baskets, the price variances were \$5, \$10, \$16, \$21, respectively.

#### **What rural communities were included in this comparison?**

54 rural communities were selected to assess the price of wireless services. These communities met the following criteria:

- They were not part of one of the census metropolitan areas of the 24 urban centres;
- They had population densities of fewer than 400 people per square kilometre, or their population centres had fewer than 1,000 people;
- The number of communities in each province/territory was proportional to the population of the province/territory; and
- The communities were not clustered together.

Appendix 4 contains the list of rural communities.

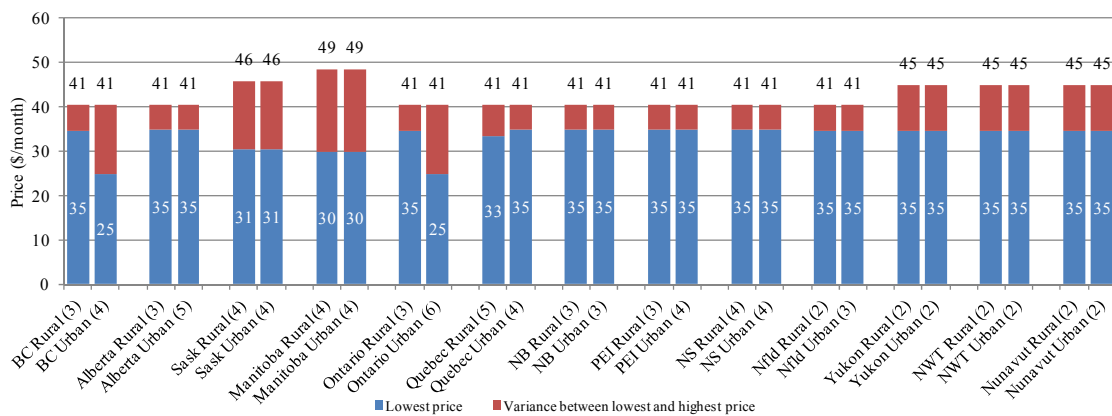
The following four bar charts display the range in the monthly price of wireless services in urban centres and rural communities in Canada, by province and territory. The blue bar displays the lowest price, and the red bar displays the difference between the lowest and the highest price. The number at the top of each bar is the highest price. The number appearing in parentheses along the horizontal axis after the name of each province and territory represents the number of local WSPs.

**Figure 5.5.19 Price of a Level 1 basket wireless service (\$/month) and number of companies providing the service in urban centres and rural communities**



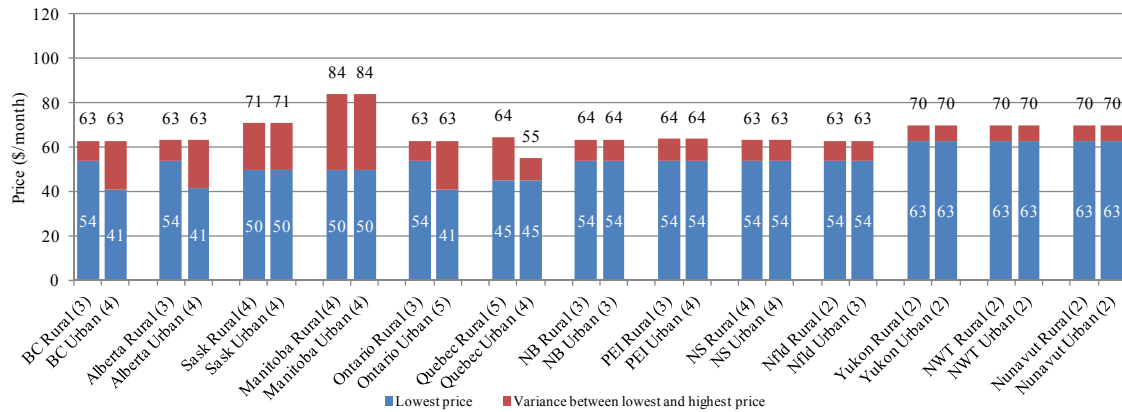
Source: CRTC data collection

**Figure 5.5.20 Price of a Level 2 basket wireless service (\$/month) and number of companies providing the service in urban centres and rural communities**



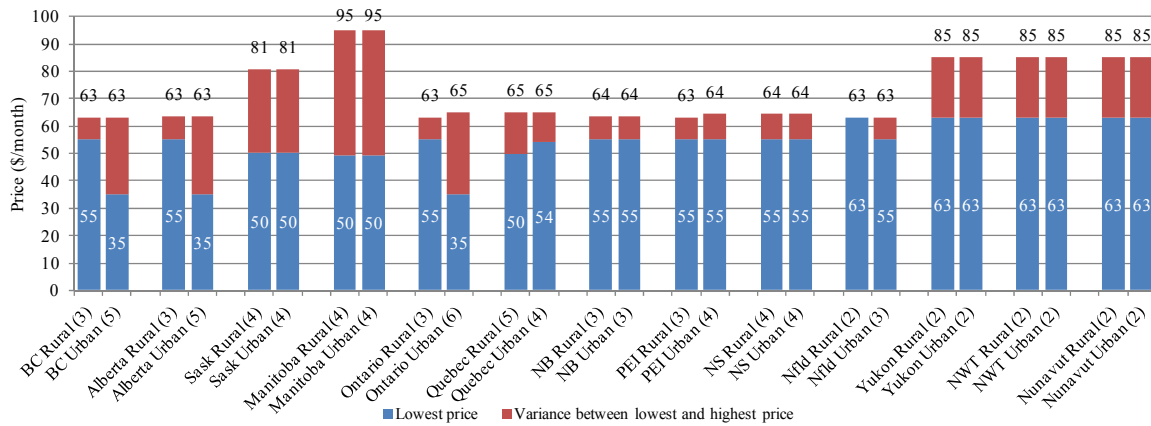
Source: CRTC data collection

**Figure 5.5.21 Price of a Level 3 basket wireless service (\$/month) and number of companies providing the service in urban centres and rural communities**



Source: CRTC data collection

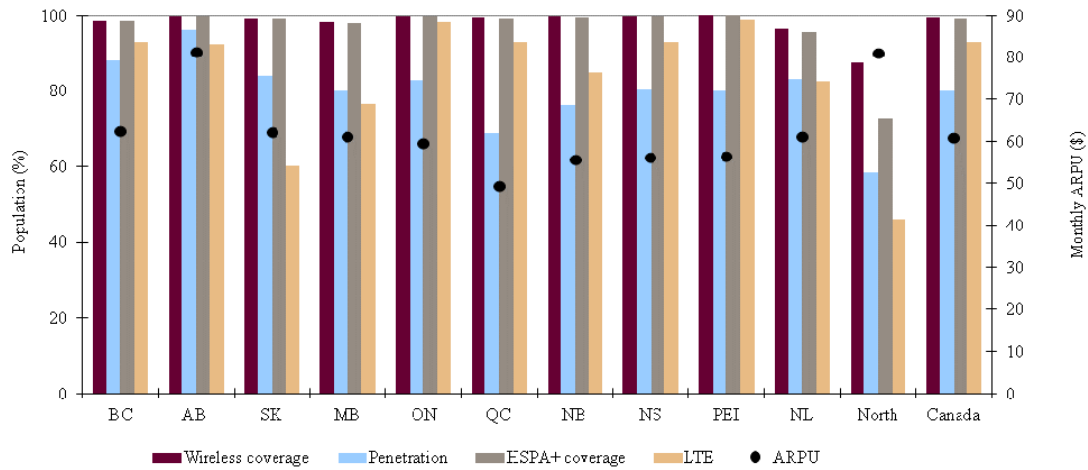
**Figure 5.5.22 Price of a Level 4 basket wireless service (\$/month) and number of companies providing the service in urban centres and rural communities**



Source: CRTC data collection

g) *Coverage/availability details*

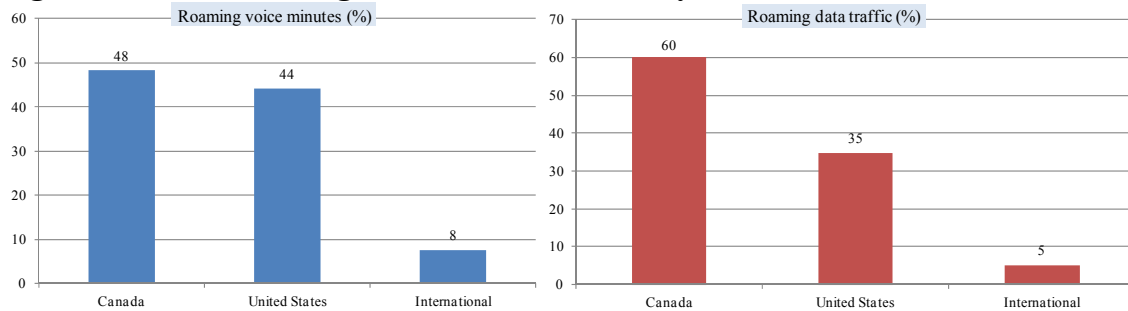
**Figure 5.5.23 Wireless coverage, penetration, and ARPU by province and territory, 2014**



Source: CRTC data collection

This table shows wireless coverage and penetration rates for various wireless technologies such as LTE and HSPA+, by percentage of population for each province and the territories. The table also shows the average monthly revenue per user in each region.

**Figure 5.5.24 Roaming voice and data traffic by destination, 2014**



Source: CRTC data collection

WSPs extend their coverage area to areas where they do not have facilities by making arrangements with other WSPs that do have facilities in those areas to offer service to their end-users. When a subscriber uses the facilities of another WSP, the subscriber is said to be “roaming.” This dual chart shows the percentage of voice minutes and data traffic, excluding MMS and SMS, derived from roaming-in and roaming-out within Canada, the United States, and internationally.

**Table 5.5.14 Wireless coverage, penetration, and average revenue per subscriber, by province and territory, 2014**

Province/territory	Coverage (%)			Penetration rate (%)	ARPU (\$/month)
	Wireless	HSPA+	LTE		
British Columbia	98.7	98.6	92.8	88.0	62.48
Alberta	99.8	99.8	92.4	95.9	81.30
Saskatchewan	99.3	99.3	60.0	84.1	62.16
Manitoba	98.3	97.7	76.6	79.9	60.97
Ontario	99.9	99.8	98.2	82.8	59.50
Quebec	99.4	99.2	92.8	68.6	49.35
New Brunswick	99.7	99.6	84.9	76.2	55.56
Nova Scotia	99.8	99.8	92.9	80.5	56.26
Prince Edward Island	99.9	99.9	99.0	79.9	56.38
Newfoundland and Labrador	96.3	95.6	82.6	83.2	61.18
The North	87.5	72.7	45.9	58.4	81.09
Canada	99.4	99.3	92.8	80.1	60.93

Source: CRTC data collection

This table shows wireless coverage and penetration rates for various wireless technologies, such as LTE and HSPA+, by percentage of population for each province and the territories. The table also shows the average monthly revenue per user in each region.

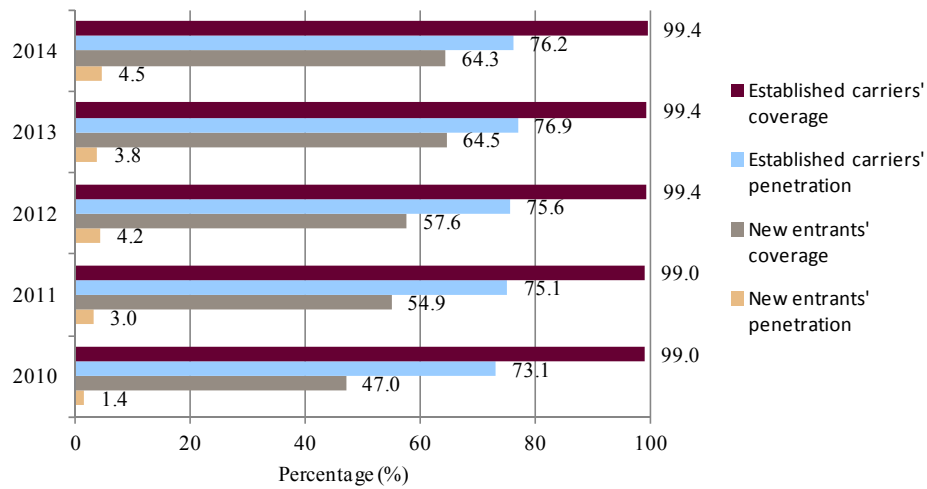
**Table 5.5.15 Number of different wireless networks, expressed as a percentage of population covered, by province and territory, 2014**

Province/territory	Number of networks				
	None	1 only	2 only	3 only	4 or more
British Columbia	1%	2%	33%	11%	53%
Alberta	0%	0%	35%	9%	56%
Saskatchewan	1%	25%	71%	3%	0%
Manitoba	2%	2%	21%	75%	0%
Ontario	0%	0%	25%	33%	42%
Quebec	1%	4%	5%	18%	73%
New Brunswick	0%	4%	92%	4%	0%
Nova Scotia	0%	4%	14%	82%	0%
Prince Edward Island	0%	1%	17%	82%	0%
Newfoundland and Labrador	4%	49%	47%	0%	0%
The North	13%	27%	60%	0%	0%
Canada	1%	3%	25%	25%	46%

Source: CRTC data collection

This table represents the number of different wireless networks, in terms of radio access facilities, in each of the provinces and territories. In many provinces, facilities-based wireless service providers who own spectrum share the same radio access facilities to offer telecommunications services to the public.

**Figure 5.5.25 Established carriers' coverage and penetration vs. new entrants' coverage and penetration**

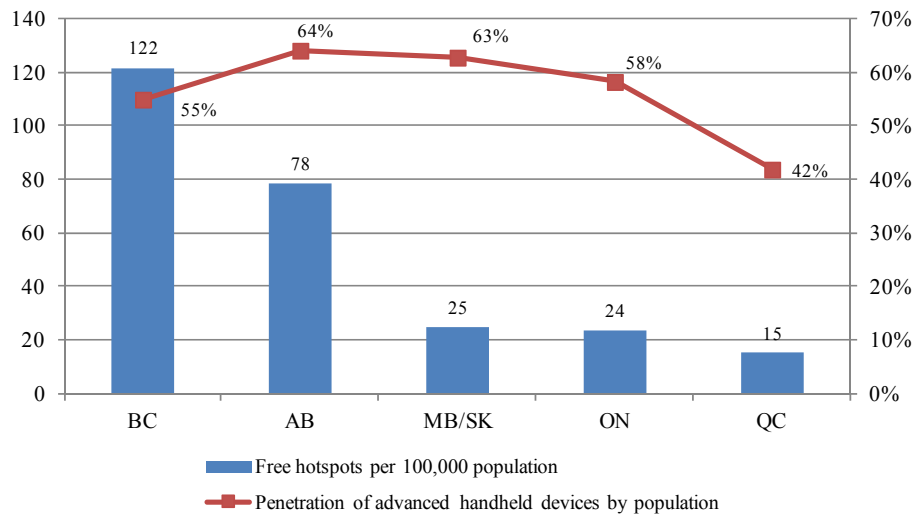


Source: CRTC data collection

Canada's wireless service market is dominated by established carriers. These companies offer significantly more coverage and achieve higher subscriber penetration rates than the new entrants.



**Figure 5.5.26 Number of WiFi hotspot locations and penetration of advanced handheld devices, 2014**



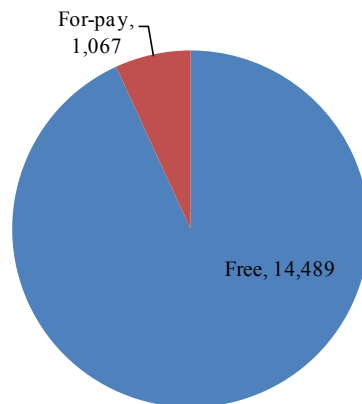
Source: CRTC data collection

WiFi hotspots are an important way in which TSPs attempt to differentiate their services from each other, as well as a way to extend their brand. Major providers in western Canada have moved towards providing free hotspots, as shown in the above chart.

Only hotspots provided by the major TSPs are included, which may exclude independently run free hotspots provided by hotels, restaurants, and other public facilities.

Data for the Maritimes and the North is not reported due to the confidentiality of the data.

**Figure 5.5.27 Number of free and pay-for-use WiFi hotspot locations in Canada, 2014**

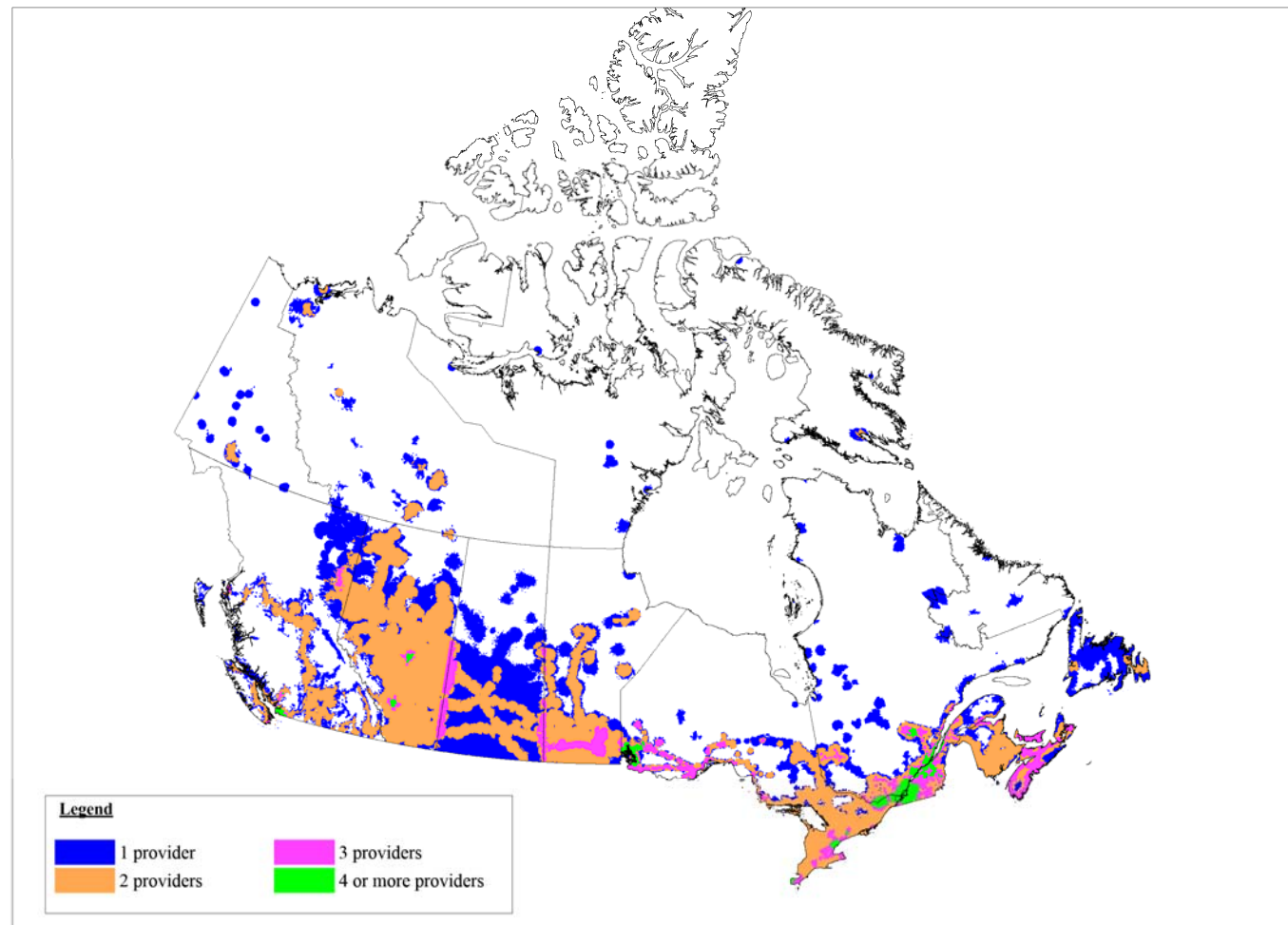


Source: CRTC data collection

The above chart shows the number of free and pay-for-use WiFi hotspots provided by major TSPs in Canada. Hotspots are locations where Internet access via 802.11 WiFi technology is provided to the public. Free is defined as having no charge for at least 1/2 hour of access, even if access requires being a paid customer to the location.

This does not include hotspots that only provide access to existing customers of other telecommunications services.

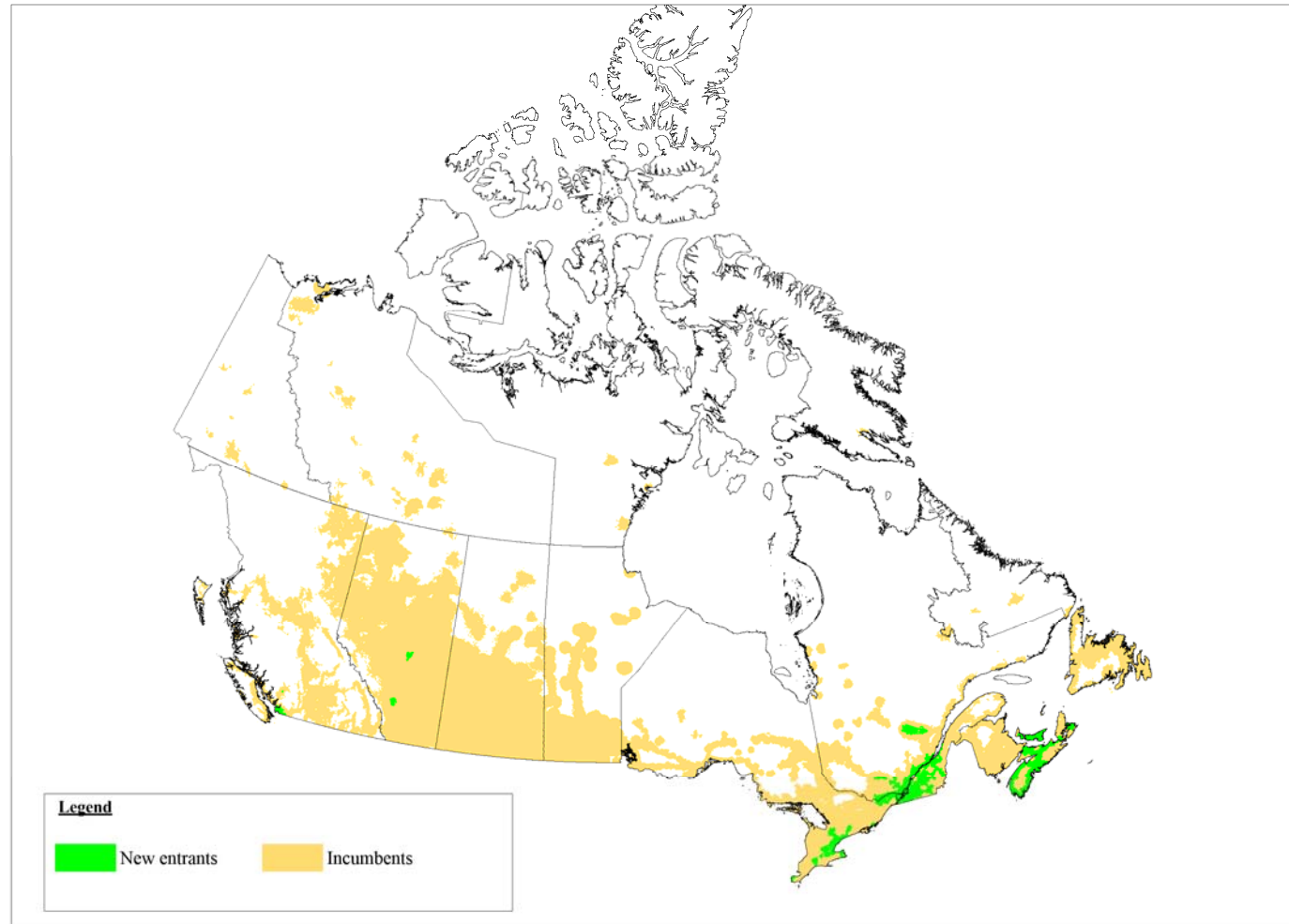
**Map 5.5.1 Wireless service availability by number of facilities-based WSPs, 2014**



Source: CRTC data collection

This map shows the cross-country availability of wireless services from facilities-based WSPs.

**Map 5.5.2**      **Wireless HSPA+ service availability by incumbent and new-entrant facilities-based WSPs, 2014**



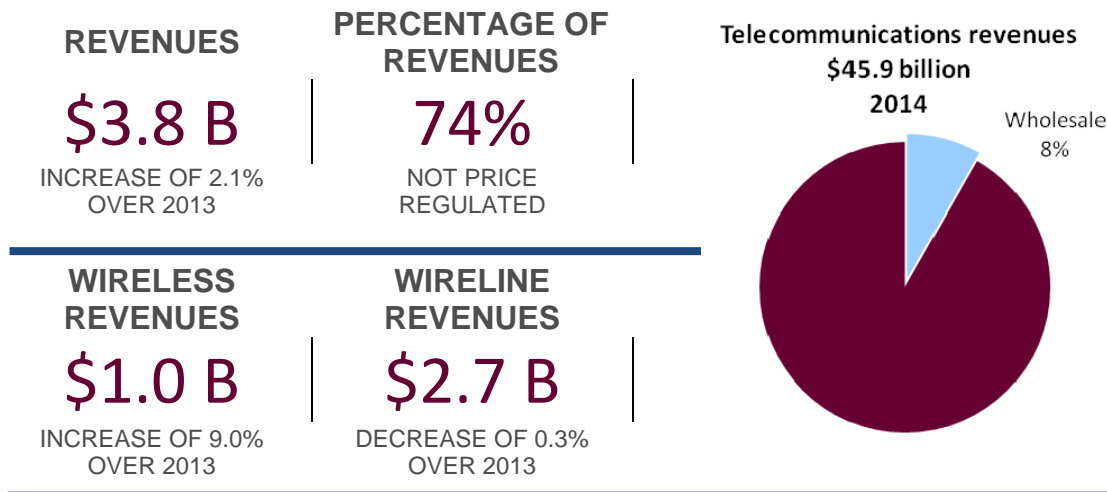
Source: CRTC data collection

This map shows the cross-country availability of HSPA+ technology by incumbent and new-entrant facilities-based WSPs.



## 5.6 Wholesale telecommunications sector

**Display 5.6.0 Key indicators for the wholesale sector**



Wholesale services are services provided by a TSP (telecommunications service provider) to another provider of telecommunication services for use in the provision of telecommunications services. All providers of telecommunications services rely on wholesale services to varying degrees. Resellers of telecommunications services depend more on wholesale services than companies that have their own facilities to provide service. In 2014, for the purposes of providing wireline services, resellers spent 48 cents out of every revenue dollar for wholesale services compared to less than 6 cents for service providers that have facilities.

The availability of wholesale services is a major factor that ultimately provides greater choice to Canadians in the telecommunications market. In 2014, the telecommunications wholesale market was \$3.8 billion of which 27% was for the provision of wireless services and 73% for wireline services.

Independent ISPs are frequently dependent on access services of the Incumbent TSPs and the cable-based carriers in order to connect to their customers. Over the years, sales of cable-based access services, known as TPIA (Third Party Internet Access), to independent ISPs have increased, and now it is the most popular means of access to residential subscribers. This has resulted in greater competitiveness on the part of independent ISPs.

Wholesale from wireless services is an increasingly important part of the telecommunications landscape. Joint network building by several large carriers allow them to minimize overall costs and reduce the need for duplicate networks. Roaming rates have recently been reduced, allowing network providers the ability to provide better roaming capability for their customers. Since 2010, network sharing and roaming revenues have increased at an average annual rate of 26.4%.

**a) Revenues**

**Table 5.6.1 Wholesale telecommunications revenues (\$ billions)**

	2010	2011	2012	2013	2014	<i>CAGR (%) 2010-2014</i>
<b>Wireline</b>	<b>3.1</b>	<b>3.0</b>	<b>2.9</b>	<b>2.8</b>	<b>2.7</b>	-2.6
<i>Annual growth (%)</i>	-0.3	-1.4	-3.6	-5.1	-0.3	
<b>Wireless</b>	<b>0.5</b>	<b>0.7</b>	<b>0.8</b>	<b>1.0</b>	<b>1.0</b>	21.6
<i>Annual growth (%)</i>	-12.9	51.3	17.1	13.4	9.0	
<b>Total</b>	<b>3.5</b>	<b>3.7</b>	<b>3.7</b>	<b>3.7</b>	<b>3.8</b>	1.8
<i>Annual growth (%)</i>	-2.2	5.6	0.4	-1.0	2.1	

Source: CRTC data collection

This table presents an overview of wireline and wireless wholesale revenues, as well as the annual growth rates for each year, and the average annual growth rates over the 2010 to 2014 period. The table shows that wireline wholesale revenues have been declining since 2010, while wireless wholesale revenues have been increasing. The wireless wholesale market excludes fixed-wireless services.

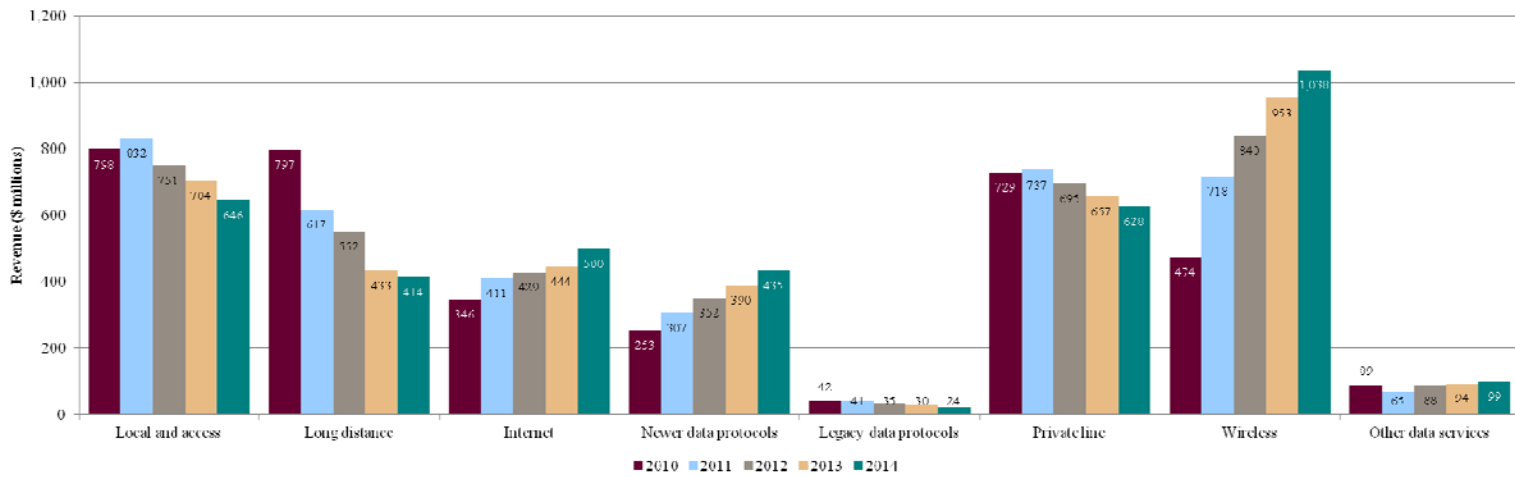
**Table 5.6.2 Wholesale telecommunications revenues, by market sector (\$ millions)**

			2010	2011	2012	2013	2014	CAGR (%) 2010- 2014
Wireline	Voice	Local and access	798	832	751	704	646	-5.2
		Annual growth (%)	-3.1	4.3	-9.8	-6.2	-8.3	
		Long distance	797	617	552	433	414	-15.1
		Annual growth (%)	2.2	-22.6	-10.6	-21.5	-4.5	
	Voice subtotal	1,595	1,449	1,303	1,137	1,059	-9.7	
	Annual growth (%)	0.0	-0.1	-0.1	-0.1	-6.8		
	Non-voice	Internet	346	411	429	444	500	9.6
		Annual growth (%)	-2.9	18.6	4.4	3.5	12.6	
		Newer data protocols	253	307	352	390	435	14.5
		Annual growth (%)	17.0	21.3	14.6	11.0	11.3	
		Legacy data protocols	42	41	35	30	24	-13.1
		Annual growth (%)	-25.4	-2.2	-14.5	-12.5	-22.1	
		Other data services	89	65	88	94	99	2.7
		Annual growth (%)	125.8	-26.7	35.2	6.4	5.3	
		Data subtotal	384	413	475	515	557	9.8
		Annual growth (%)	23.2	7.6	15.0	8.4	8.2	
Private line		729	737	695	657	628	-3.7	
Annual growth (%)		-8.0	1.1	-5.7	-5.5	-4.4		
Non-voice subtotal	1,459	1,561	1,599	1,615	1,685	3.7		
Annual growth (%)	-0.1	7.0	2.4	1.0	4.3			
Total wireline	3,055	3,010	2,901	2,753	2,744	-2.6		
Annual growth (%)	-0.3	-1.4	-3.6	-5.1	-0.3			
Wireless	Mobile	474	718	840	953	1,038	21.6	
Annual growth (%)	-12.9	51.3	17.1	13.4	9.0			
Total		3,529	3,728	3,742	3,706	3,783	1.8	
Annual growth (%)		-2.2	5.6	0.4	-1.0	2.1		

Source: CRTC data collection

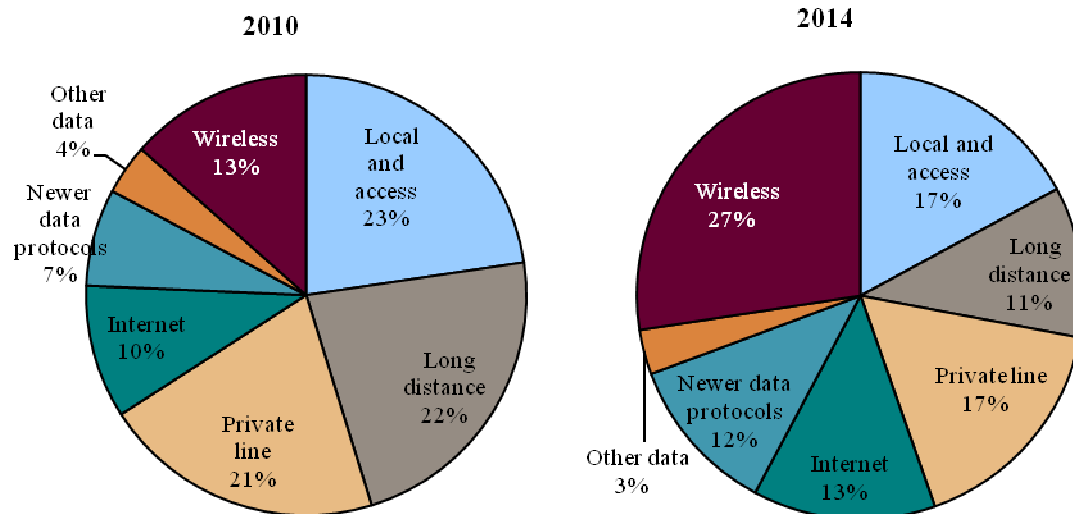
Voice wholesale revenues have declined 9.7% annually since 2010, whereas wireline non-voice revenues have increased 3.7%. The strongest revenue growth was in newer services such as Internet and mobile wireless services, and data services using newer data protocols such as Ethernet and IP. These services have increased between 9.6% and 21.6% annually since 2010.

**Figure 5.6.1 Wholesale telecommunications revenues, by market sector**



Source: CRTC data collection

**Figure 5.6.2 Percentage distribution of wholesale telecommunications revenues, by market sector (2010 vs. 2014)**

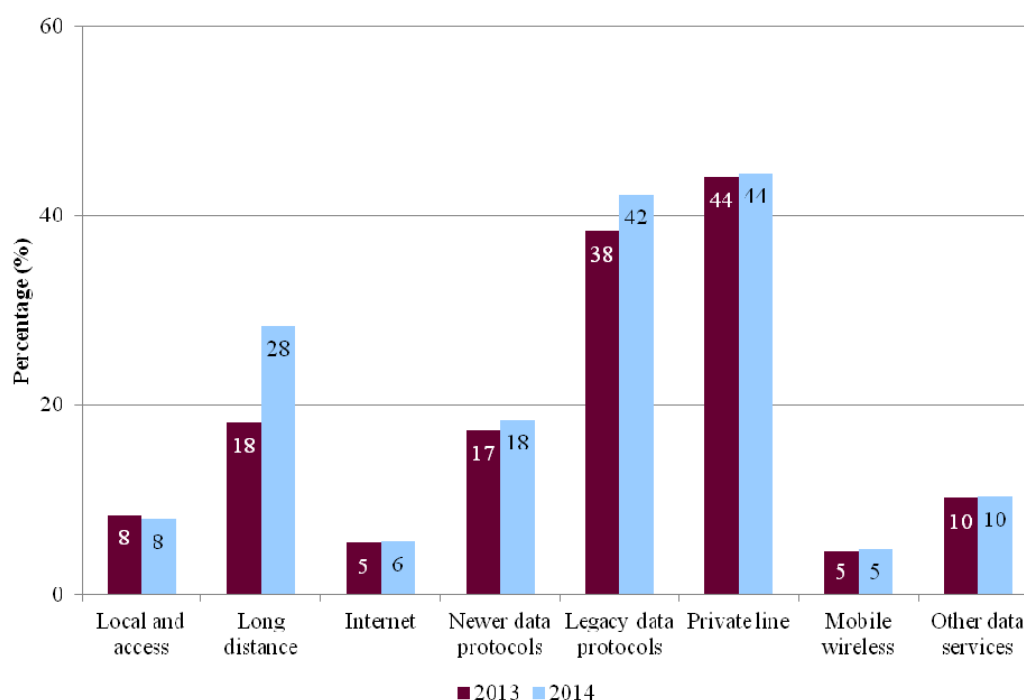


Source: CRTC data collection

These pie charts compare the percentage distribution of wholesale service revenues between 2010 and 2014. During this period, revenues from mobile wireless wholesale services have increased as a percentage of total wholesale revenues, from 13% in 2010 to 27% 2014. They make up the largest percentage of wholesale revenues, followed by local and access and private line.



**Figure 5.6.3 Wholesale telecommunications revenues as a percentage of total revenues, by market sector**



Source: CRTC data collection

**Table 5.6.3 Local wholesale telecommunications revenues, by major component (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010 – 2014
Interconnection	276	254	220	212	198	-7.9
Centrex	89	88	76	64	57	-10.4
PSTN access	288	354	327	304	283	-0.4
Unbundled loops	79	60	47	44	40	-15.9
Other revenues	42	42	44	42	52	5.2
<b>Total</b>	<b>774</b>	<b>798</b>	<b>714</b>	<b>665</b>	<b>629</b>	<b>-5.0</b>

Source: CRTC data collection

This table displays local and access wholesale revenues by major component. Providers of telecommunications services use these components to provide retail telecommunications service. For example, unbundled loops can be used by an alternative service provider to provide local telephone service to its retail customers. In addition, interconnection allows the customers of one service provider to contact the customers of another service provider.

**Table 5.6.4 Local wholesale telecommunications revenues, by province (\$ millions)**

Province	2010	2011	2012	2013	2014
British Columbia	67	77	60	44	59
Alberta	69	87	58	58	45
Saskatchewan	9	9	8	9	8
Manitoba	34	32	31	28	19
Ontario	356	357	341	302	274
Quebec	197	194	174	176	174
New Brunswick	20	17	17	17	16
Nova Scotia	25	22	22	24	29
Prince Edward Island	2	2	2	3	3
Newfoundland and Labrador	6	9	9	10	10
Yukon	0	1	1	1	1
Northwest Territories	0	1	1	1	1
Nunavut	0	0	0	0	0
<b>Total</b>	<b>785</b>	<b>809</b>	<b>725</b>	<b>674</b>	<b>638</b>

Source: CRTC data collection

**Table 5.6.5 Internet-related wholesale revenues, by type of service (\$ millions)**CAGR  
2010-2014

	2010	2011	2012	2013	2014	
Higher capacity access and transport	42	53	45	52	73	15.0
Annual growth (%)	-12.2	26.4	-15.7	15.5	42.1	
Lower capacity access	218	266	303	336	369	14.0
Annual growth (%)	2.3	21.7	14.2	10.8	9.7	
Other wholesale services	86	92	81	56	58	-9.5
Annual growth (%)	-10.0	6.9	-12.2	-30.5	2.7	
<b>Wholesale total</b>	<b>346</b>	<b>411</b>	<b>429</b>	<b>444</b>	<b>500</b>	9.6
Annual growth (%)	-2.9	18.6	4.4	3.5	12.6	

Source: CRTC data collection

Internet-related Wholesale revenues consist of services that provide access for TSPs to the Internet, to allow TSPs to connect directly to their subscribers, or to provide Internet related equipment, applications or other miscellaneous services. In the above table, they are divided into three categories.

1) In “Higher capacity access and transport”, “Higher capacity access” refers to fibre-based Internet access services. “Transport” refers to the transfer of Internet traffic between networks.

2) “Lower capacity access” includes services that connect TSPs directly to their end-users, typically for the purpose of providing Internet access. This includes wholesale DSL and Cable (TPIA) services under the wholesale high-speed access (HSA) framework. It also includes sales of non-fibre Internet connectivity between TSPs.

3) “Other wholesale services” includes sales and rental equipment, applications, and other Internet-related services between TSPs.

**Table 5.6.6 Wholesale HSA revenues, by service component (\$ millions)**

	2012	2013	2014	CAGR (%) 2012-2014
Access	183	200	213	8.1
<i>Growth rate (%)</i>	n/a	9.6	6.5	
Capacity	30	54	107	89.2
<i>Growth rate (%)</i>	n/a	82.2	96.4	
Interface and other	32	33	27	-8.5
<i>Growth rate (%)</i>	n/a	3.3	-18.9	
<b>Total wholesale HSA services</b>	<b>244</b>	<b>287</b>	<b>347</b>	<b>19.1</b>
<i>Growth rate (%)</i>	n/a	17.7	20.6	

Source: CRTC data collection

The Commission has mandated that DSL and cable facilities be made available to third-party providers utilizing the wholesale HSA framework. Wholesale HSA has the following components: “Access”, which is paid per month for each end-user customer that they service via wholesale HSA. It may or may not include a charge for the assumed amount of capacity a user may use. “Capacity” is a charge that can be levied by the facility owner for capacity on their network in increments of 100 Mbps. Other charges include “Interface” which is the basic connection to the carrier, and other fees for services such as installation and modem equipment.

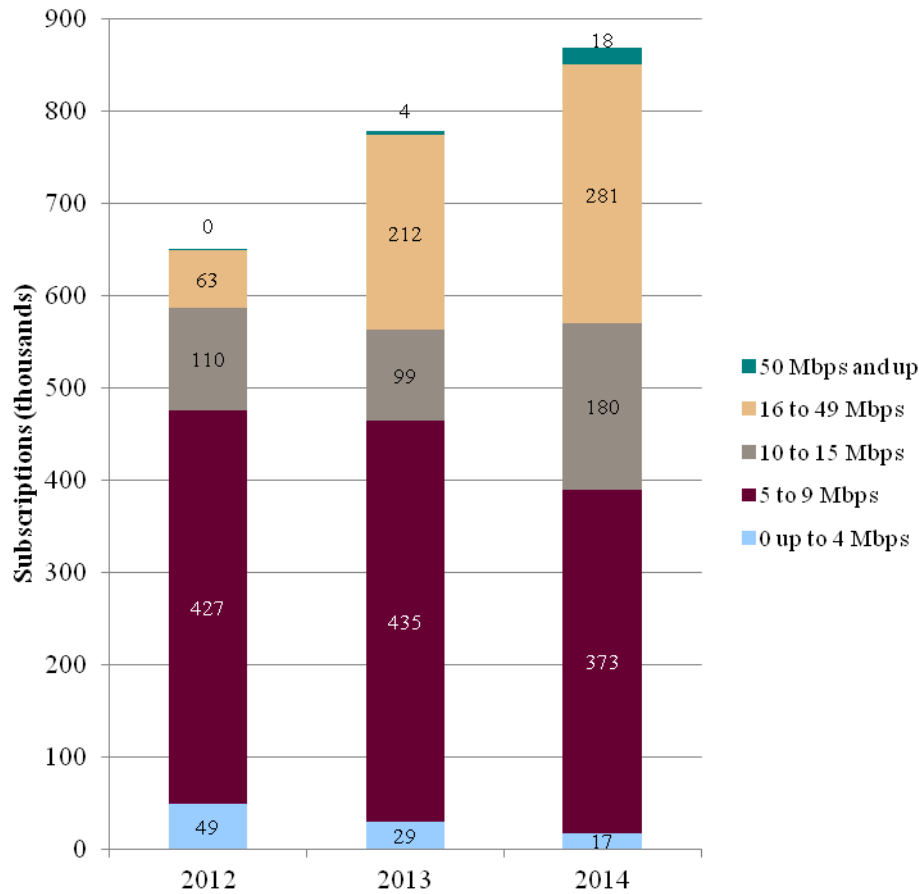
**Table 5.6.7 DSL and cable wholesale high-speed access, by type of service (thousands)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Cable-enabled subscriptions	28	76	187	305	393	93.0
<i>Annual growth (%)</i>	36.8	169.1	145.7	63.3	28.6	
DSL-enabled subscriptions	442	468	458	462	480	2.1
<i>Annual growth (%)</i>	6.7	6.0	-2.1	0.8	3.9	
<b>Total DSL and cable</b>	<b>470</b>	<b>544</b>	<b>645</b>	<b>767</b>	<b>873</b>	<b>16.7</b>
<i>Annual growth (%)</i>	8.2	15.8	18.6	18.9	13.8	

Source: CRTC data collection

The vast majority of the above subscriptions are covered under the wholesale HSA framework, as described above. Over time, TSPs have been making increased use of wholesale DSL and cable facilities to connect to their end-users.

**Figure 5.6.4 Wholesale HSA enabled subscriptions, by service speed in Mbps (thousands)**



Source: CRTC data collection

Wholesale HSA services are available at various speeds for end-user access. Over time, TSPs have availed themselves of higher-speed services to enable connectivity to their end-users. The above subscriptions are for residential and business end-user locations. Totals may not exactly match previous tables due to the use of different data sources.

**Table 5.6.8 Data protocol wholesale revenues, by service category (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
<b>Newer protocols</b>						
Ethernet	197	221	225	259	288	10.0
Annual growth (%)	13.7	12.4	1.8	14.7	11.5	
IP	42	69	99	102	118	29.6
Annual growth (%)	253.5	65.0	43.2	3.9	15.0	
Other	14	17	28	30	29	18.6
Annual growth (%)	-53.8	16.8	64.7	6.2	-3.1	
<b>Total newer protocols</b>	<b>253</b>	<b>307</b>	<b>352</b>	<b>390</b>	<b>435</b>	14.5
Annual growth (%)	17.0	21.3	14.6	11.0	11.3	
<b>Legacy protocols</b>	<b>42</b>	<b>41</b>	<b>35</b>	<b>30</b>	<b>24</b>	-13.1
Annual growth (%)	-25.4	-2.2	-14.5	-12.5	-22.1	
<b>Total data protocols</b>	<b>295</b>	<b>348</b>	<b>386</b>	<b>421</b>	<b>458</b>	11.7
Annual growth (%)	8.3	18.0	11.2	8.9	8.9	

Source: CRTC data collection

The data services were classified as services making use of (a) newer data protocols such as Ethernet and IP, or (b) legacy protocols such as X.25, ATM, and frame relay. This table displays the revenues from wholesale data services by the protocol used in the service from 2010 to 2014.

**Table 5.6.9 Wireless mobile wholesale revenues, by type of service (\$ millions)**

	2010	2011	2012	2013	2014	CAGR (%) 2010-2014
Interconnection and roaming	350	607	736	811	892	26.4
Annual growth (%)	n/a	73.3	21.3	10.3	10.0	
Other	124	111	105	142	146	4.1
Annual growth (%)	n/a	-10.6	-1.6	35.3	3.1	
<b>Wholesale total</b>	<b>474</b>	<b>718</b>	<b>840</b>	<b>953</b>	<b>1,038</b>	21.6
Annual growth (%)	-12.9	51.3	17.1	13.4	9.0	

Source: CRTC data collection

Interconnection and roaming services are sold to other wireless service providers. The service allows the service provider to exchange their traffic and extend their geographic coverage area. 'Other' services mainly consist of, but are not limited to, arrangements for a wireless provider to provide wireless services for another company's customers, also known as resale or MNVO arrangements.

**b) Subscriber data**
**Table 5.6.10 Local and access lines, by type of TSP (thousands)**

	2010	2011	2012	2013	2014	CAGR (%) 2010 – 2014
Incumbent TSPs (excluding out-of-territory)	515	525	495	447	467	-2.5
<i>Annual growth (%)</i>	-3.4	1.9	-5.8	-9.6	4.3	
<i>Percent of total</i>	59	53	47	53	64	
Incumbent TSPs (out-of-territory)	266	322	247	236	191	-7.9
<i>Annual growth (%)</i>	-11.2	21.0	-23.3	-4.6	-18.8	
<i>Percent of total</i>	31	32	24	28	26	
Other alternative providers of telecommunications service	83	135	267	149	68	-5.0
<i>Annual growth (%)</i>	-15.7	61.4	98.4	-44.1	-54.4	
<i>Percent of total</i>	10	13	26	18	9	
Cable-based carriers	5	16	33	5	4	-0.8
<i>Annual growth (%)</i>	-	262.4	100.5	-85.2	-9.6	
<i>Percent of total</i>	0	2	3	1	1	
<b>Total wholesale lines</b>	<b>870</b>	<b>999</b>	<b>1,042</b>	<b>837</b>	<b>730</b>	<b>-4.3</b>
<i>Annual growth (%)</i>	-6.7	14.8	4.4	-19.7	-12.8	

Source: CRTC data collection

This table displays the number of local and access wholesale lines by type of service provider, as well as growth rates and the percentage of wholesale lines by type of service provider for the years 2010 to 2014. Over this period, in-territory incumbent TSPs' share of wholesale lines increased from 59% in 2010 to 64% in 2014.

**c) Competitive landscape**
**Table 5.6.11 Wireline wholesale telecommunications revenue market share, by type of provider of telecommunications service (percentage)**

	2010	2011	2012	2013	2014
<b>Incumbent TSPs (excl. out-of-territory)</b>	<b>64.8</b>	<b>70.6</b>	<b>72.1</b>	<b>72.3</b>	<b>71.5</b>
Alternative service providers					
Incumbent TSPs (out-of-territory)	16.1	15.1	12.7	11.3	10.5
Facilities-based alternative service providers (includes cable-based carriers)	16.6	11.7	12.1	12.8	14.0
Resellers	2.6	2.7	3.1	3.5	4.0
<b>Subtotal</b>	<b>35.2</b>	<b>29.4</b>	<b>27.9</b>	<b>27.7</b>	<b>28.5</b>

Source: CRTC data collection

This table displays wireline wholesale revenues market share by type of TSPs for the years 2010 to 2014. Over this period, Incumbent TSPs have increased their share of wholesale revenues. With a 72% share of wholesale revenues, they have the largest share of the wholesale market.

**Table 5.6.12 Local and access revenues, by type of provider of telecommunications service (\$ millions)**

	2010	2011	2012	2013	2014	<i>CAGR (%) 2010 – 2014</i>
Incumbent TSPs (excluding out-of-territory)	653	682	623	588	570	-3.3
<i>Annual growth (%)</i>	-1.1	4.5	-8.7	-5.5	-3.1	
<i>Percent of total</i>	82	82	83	84	88	
Incumbent TSPs (out-of-territory)	105	112	85	69	55	-15.0
<i>Annual growth (%)</i>	-8.6	6.5	-24.2	-18.5	-20.6	
<i>Percent of total</i>	13	13	11	10	9	
Other alternative service providers of telecommunications service	21	22	34	36	12	-12.7
<i>Annual growth (%)</i>	-20.8	1.6	56.5	6.5	-65.7	
<i>Percent of total</i>	3	3	5	5	2	
Cable-based carriers	19	17	10	11	9	-17.8
<i>Annual growth (%)</i>	-13.9	-11.5	-41.1	10.4	-20.7	
<i>Percent of total</i>	2	2	1	2	1	
<b>Total wholesale</b>	<b>798</b>	<b>832</b>	<b>751</b>	<b>704</b>	<b>646</b>	-5.2
<i>Annual growth (%)</i>	-3.1	4.3	-9.8	-6.2	-8.3	

Source: CRTC data collection

This table displays revenues from local and access wholesale services by type of service provider, as well as growth rates and the percentage of wholesale revenues by type of service provider for the years 2010 to 2014. Over this period, incumbent TSPs maintained over 82% of these revenues.

**Table 5.6.13 Long distance revenues, by type of provider of telecommunications service (\$ millions)**

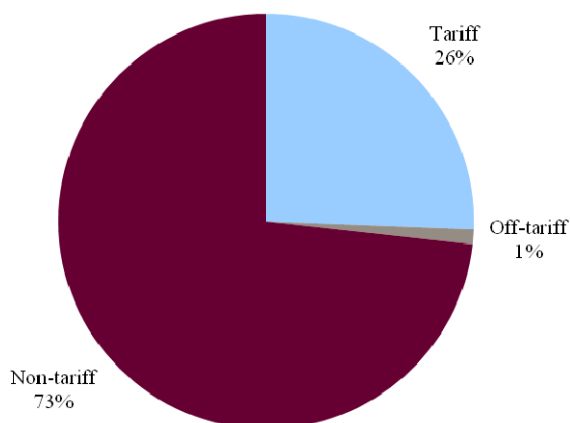
	2010	2011	2012	2013	2014	CAGR (%) 2010 – 2014
Incumbent TSPs (excluding out-of-territory)	311	315	323	254	228	-7.5
<i>Annual growth (%)</i>	-16.6	1.3	2.6	-21.4	-10.5	
<i>Percent of total</i>	39	51	59	59	55	
Incumbent TSPs (out-of-territory)	229	205	138	106	94	-20.1
<i>Annual growth (%)</i>	-1.1	-10.5	-32.5	-23.5	-11.7	
<i>Percent of total</i>	29	33	25	24	23	
Other alternative providers of telecommunications service	64	55	72	59	81	6.3
<i>Annual growth (%)</i>	57.7	-13.7	30.7	-17.2	36.8	
<i>Percent of total</i>	8	9	13	14	20	
Cable-based carriers	194	42	18	13	11	-50.7
<i>Annual growth (%)</i>	42.9	-78.2	-56.5	-26.6	-15.2	
<i>Percent of total</i>	24	7	3	3	3	
<b>Total wholesale</b>	<b>797</b>	<b>617</b>	<b>552</b>	<b>433</b>	<b>414</b>	<b>-15.1</b>
<i>Annual growth (%)</i>	2.2	-22.6	-10.6	-21.5	-4.5	

Source: CRTC data collection

This table displays revenues from long distance wholesale services by type of service provider, as well as revenue growth rates and the percentage of wholesale revenues by type of service provider for the years 2010 to 2014. Wholesale long distance service includes the resale of long distance minutes that one service provider has acquired from another services provider. Providers of prepaid long distance calling cards rely on these services. Over this period, incumbent TSPs had a 7.5% annual decline in these revenues, whereas non-incumbent alternative service providers had a 6.3% annual increase.

#### d) Forbearance

**Figure 5.6.5 Telecommunications wholesale service revenues, by type of tariff, 2014**



Source: CRTC data collection

#### What are tariff, off-tariff and non-tariff wholesale services?

Tariff services are services whose rates, terms, and conditions are set out in a Commission-approved tariff.

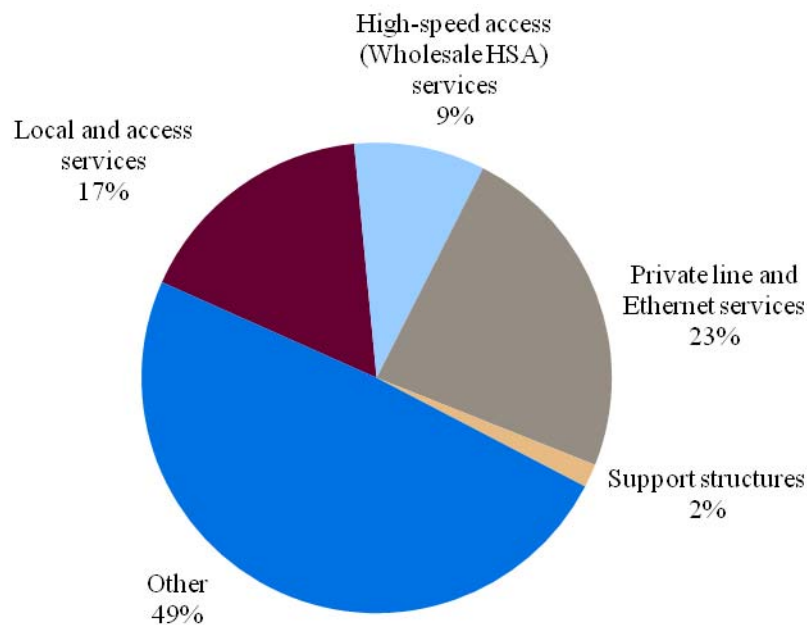
Non-tariff services are those telecommunications services whose rates, terms, and conditions are not set out in a Commission-approved tariff.

Off-tariff services are those whose prices are filed with the Commission but for which the parties have agreed to an alternate price.

Tariff services revenues now exclude off-tariff services.



**Figure 5.6.6 Telecommunications wholesale service revenues, by type of service, 2014**



Source: CRTC data collection

This pie chart displays the percentage of revenues from wholesale services by type of wholesale service. For purposes of this chart, support structure revenue was included in wholesale revenues.

Approximately 74% of wholesale revenues were from non-tariff services and those services where the parties have agreed to an alternate price.

**Table 5.6.14 Percentage of telecommunications wholesale revenues generated by forborne services**

(percentage)	2010	2011	2012	2013	2014
Local and access	58	60	61	61	59
Long distance	97	96	99	99	97
Internet	54	59	56	41	35
Data	85	86	86	87	86
Private line	53	54	53	53	54
Wireless	100	100	100	100	100

Source: CRTC data collection

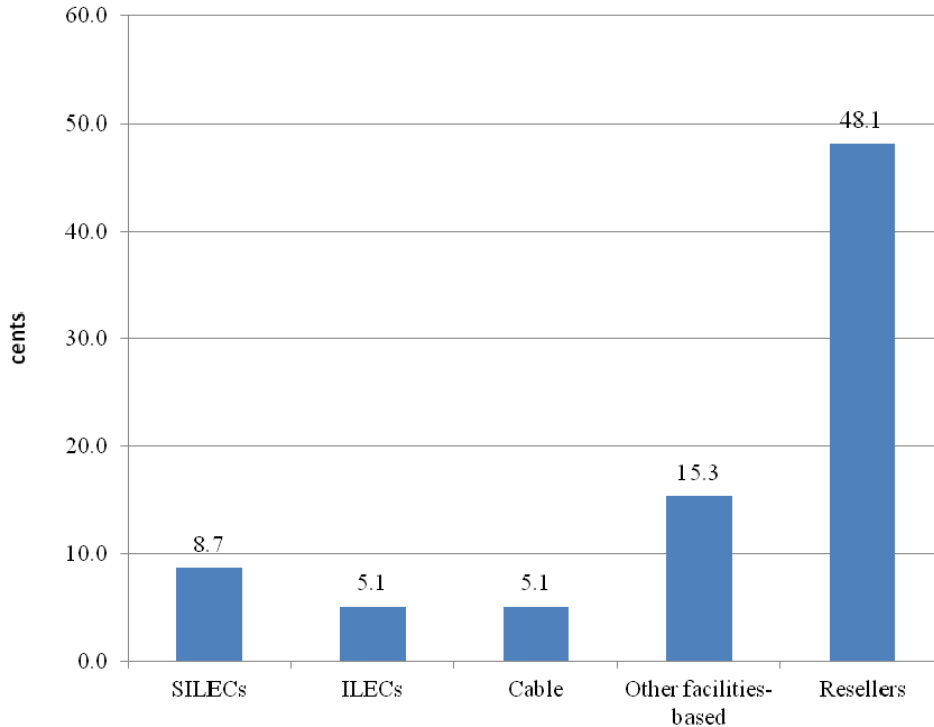
This table displays the percentage of wholesale telecommunications revenues from services that are not provisioned in accordance with a Commission-approved tariff.

Additional companies reported in 2012.

**e) Inter-provider expenses**

Wholesale service revenues are the inter-provider expenses of providers of telecommunications services acquiring these services. All companies purchase telecommunications services from another carrier. The extent to which service providers rely on these services depends on the nature of their operations.

**Figure 5.6.7 Inter-provider expenses per revenue dollar for wireline services**



Source: CRTC data collection

Inter-provider expense per revenue dollar compares the expenses incurred by a TSP in acquiring wholesale services to its telecommunications revenues for wireline services.

It is derived by dividing total annual inter-provider expenses by annual telecommunications revenues. This calculation includes all revenues from telecommunications services, including revenues from telecommunications services requiring no or limited dependency on wholesale services.

This table shows the extent to which various providers of telecommunications services rely on wholesale services. In total, facilities-based providers of telecommunications service spend less than 6 cents of every revenue dollar on wholesale telecommunications services, whereas resellers – service providers that do not own or operate transmission facilities – are very dependent. They spend 48 cents of every dollar on these services.

## **Methodology**

This report is based on (1) the responses from broadcasting and telecommunications undertakings to the CRTC's annual surveys, issued jointly by Statistics Canada and the CRTC (referred to collectively as "CRTC data collection"); (2) data collected from other sources, including Statistics Canada, Industry Canada, company-specific financial reports, Numeris, and the Media Technology Monitor (MTM) reports; and (3) information previously filed with the CRTC in the context of regulatory proceedings. Unless otherwise noted, all broadcasting data in this report are for the 12-month period ending 31 August for the years quoted, whereas all telecommunications data, including Internet service data, are for the 12-month period ending 31 December for the years quoted.

Broadcasting-related data is reported as collected, while some telecommunications data may be adjusted or estimated.

With respect to residential broadband availability data, the Commission coordinates with Industry Canada to collect data on the availability of broadband Internet access services to Canadians. The Commission has collaborated with the provincial and territorial governments, as well as other federal government agencies and departments, to identify communities that do not have access to broadband services. The resulting data will assist the federal, provincial, and territorial governments in analyzing the broadband availability performance in both urban and rural communities. Combining these data collection initiatives enables the reporting burden on the industry to be reduced, uniform definitions and methodologies to be employed, and the quality of the data presented in this report to be enhanced.

Certain figures published in previous years' monitoring reports have been restated in this year's report to better reflect the developments in the markets or industry and to allow for a more meaningful comparison. Other figures may have changed as a result of service providers resubmitting previous years' data.

All revised numbers are identified using a number sign (#).



## Data collection and analysis

### Data collection

Statistics Canada collects data under the authority of the *Statistics Act*, and the CRTC collects data under the authority of the *Broadcasting Act* and the *Telecommunications Act*. Statistics Canada uses the data to develop national accounts. The CRTC uses them to monitor the broadcasting and telecommunications industries' performance and adherence to regulations, as well as the overall effectiveness of the CRTC's regulatory frameworks. The data are used in the development of policy and regulation by a variety of stakeholders. Data collected are used to measure the financial performance of broadcasting and telecommunications service providers and to maintain and update the CRTC's data on the administration of broadcasting and telecommunications fees. Data are collected, to varying degrees, from all broadcasting and telecommunications service providers under the regulation and supervision of the CRTC. These service providers operate private and public radio, television, and broadcasting distribution services; pay, pay-per-view, video-on-demand, and specialty services; and wireline and wireless telecommunications services.

Broadcasting service providers (also known as broadcasting licensees) and telecommunications service providers complete annual surveys outlining financial information and quantitative data for each broadcast and calendar year, respectively. The data collected are published in annual financial and statistical summaries of revenues and, in the case of broadcasting licensees, expenditures, such as expenditures on Canadian programming. Summaries of broadcasting licensees' data are prepared and published on the CRTC's website at <http://www.crtc.gc.ca/eng/stats.htm>. The data collected are also used to produce the CRTC's *Communications Monitoring Report*.

Broadcasting regulations require broadcasting service providers to complete an annual survey. The *Telecommunications Act* requires providers of telecommunications services to provide data upon request by the CRTC. Both types of service providers access and submit the survey forms electronically using the CRTC's secure web-based Data Collection System (DCS).

The broadcasting survey covers the 12-month period ending 31 August of each year. All broadcasting service providers have until 30 November to complete and submit their annual survey forms. The telecommunications survey covers the 12-month period ending 31 December of each year. Telecommunications survey forms that request data about facilities and the price of services are launched in January, and the respondents have until 28 February to complete and submit them. The remaining telecommunications survey forms are launched in February, and the respondents have until 30 March to complete and submit them.

As part of the broadcasting survey, commercial radio broadcasters must report on their contributions to Canadian content development (CCD). Broadcasting distribution undertakings (BDUs) must submit information regarding their contributions to the creation and production of Canadian programming. This information enables the CRTC to ensure that broadcasters are complying with their conditions of licence or regulatory requirements in this regard.

As part of the telecommunications survey, the CRTC requires providers of telecommunications services to maintain and update their data on registration lists, and to provide data for the operation of the revenue-based contribution regime and the assessment of telecommunications fees. The total annual revenues from the provision of telecommunications services in Canada are also used to assess the eligibility of carriers to operate as telecommunications common carriers under section 16 of the *Telecommunications Act*.

## Data analysis

The CRTC analyzes the survey data to ensure that the information provided is accurate and complete. Year-over-year comparisons are made to identify any significant or unexplained changes, and the CRTC follows up with respondents as required to resolve or obtain explanations of any anomalies. The CRTC also subjects the data to computerized edits designed to ensure accuracy and internal consistency. When necessary, the CRTC compares reported data with audited financial information. The data or their derivatives (such as average revenues per line or per minute) are also compared with established benchmarks.

The objectives of this analysis are as follows:

- To ensure the accuracy and validity of the data collected in order to (a) provide Canadians with high-quality data to support their participation in CRTC processes and their informed decision making, and (b) support the CRTC's evidence-based decision-making process;
- To allow for the analysis of trends in the major categories of revenue and expenditures listed in the annual forms over a five-year period, particularly with reference to the previous year;
- To allow the Commission to reconcile actual expenditures with regulatory requirements;
- To ensure that the summary of financial data for operations connected to broadcasting licensees, included in the annual returns, corresponds to the data presented in the financial statements required of broadcasting licensees in accordance with the regulations referenced in Circular No. 404; and
- To maintain up-to-date registration lists of providers of telecommunications services on the CRTC website.

Revisions may be made to the data submitted, and to this report, after they are published. These revisions are generally the result of late receipt of data, modifications made by the respondents to previously filed data, or errors detected following data publication. Finally, certain figures published in the *Communications Monitoring Report* from previous years may be restated for consistency purposes. By way of example, such restatements can result from reclassifications undertaken with a view to better reflect market segments or industry developments. Historically, revisions have generally not had a major impact on the results of the data collection process. All such changes are either indicated by the # symbol appearing beside the revised number or noted in the text below the relevant table or figure.

Most of the tables and figures included in this report are derived from the data submitted via the DCS, while others are derived using data from Statistics Canada and Industry Canada or from other third-party reports. Inconsistencies may arise between data sources, given that the companies surveyed, the definitions used, and the level of detail requested may differ for each source. The data source is therefore identified beneath each table and figure in the report.





## Glossary

*Disclaimer: these definitions are provided for information purposes only and are not legally binding.*

### Broadcasting

Term	Definition
<b>Abusive comment</b>	A comment that, when taken in context, tends to or is likely to expose an individual or a group or class of individuals to hatred or contempt on the basis of race, national or ethnic origin, colour, religion, sex, sexual orientation, age or mental or physical disability.
<b>Advertising Standards Canada</b>	A national, not-for-profit advertising self-regulatory body that responds to complaints by consumers and special interest groups regarding advertising with respect to all media subject to the <i>Canadian Code of Advertising Standards</i> , the principal instrument of advertising self-regulation. In addition, it undertakes pre-clearance functions in five industry categories, which consist of reviewing advertisements based on applicable legislation, regulations, and/or industry codes and guidelines.  Additional information on the ASC can be found at: <a href="http://www.adstandards.com/en/">www.adstandards.com/en/</a>
<b>Affiliation payment</b>	The remuneration that providers of pay and specialty programming services receive from broadcasting distribution undertakings that distribute their services.
<b>Audio services</b>	Includes multi-channel subscription (satellite radio) services, pay and specialty audio services, over-the-air radio stations, and video services broadcast over cable and the Internet.
<b>Basic Services</b>	Basic service is the service distributed in a licensed area by a broadcasting distribution undertaking as a package consisting of programming services whose distribution is required by the Commission.
<b>Broadcasting sector</b>	Radio, television and distribution undertakings, comprised of public, private and community elements.
<b>Broadcaster</b>	An entity that controls an undertaking that broadcasts programming.
<b>Broadcasting Distribution Undertaking</b>	Providers of subscription television service to Canadians by redistributing programming from conventional over-the-air television and radio stations. They also distribute pay audio, pay television, pay-per-view, video-on-demand, and speciality services. Examples include cable (delivered through coaxial cables), satellite, and Internet Protocol Television (IPTV).
<b>Canada Media Fund (CMF)</b>	A fund that fosters, promotes, develops and finances the production of Canadian content and relevant applications for all audiovisual media platforms. Its financing is obtained from government and private sources.  <a href="http://www.cmf-fmc.ca/">http://www.cmf-fmc.ca/</a>
<b>Canadian Broadcast Standards Council</b>	An independent organization created by the Canadian Association of Broadcasters to administer standards established by Canada's private broadcasters. Its membership includes more than 790 private-sector radio and television stations, specialty services, pay services, and networks from across Canada, broadcasting in English, French, and third languages.

	<a href="http://www.cbse.ca/english/">http://www.cbse.ca/english/</a>
<b>Canadian Content Development (CCD) contributions</b>	Financial contributions made by broadcasters to initiatives that aid in the development and promotion of Canadian musical and spoken word content for broadcast.
<b>Canadian Programming Expenditures (CPE)</b>	The proportion of gross annual broadcasting related revenues that a licensee is required, by condition of licence, to spend on the production of Canadian programming for broadcast.
<b>Category A/B/C Services</b>	<p><b>Category A</b> – A service that focuses on a specific genre (for example, music, children’s programming, weather, comedy programming). It is protected from competition from non-Canadian services and Category B services. All broadcasting distribution undertakings must carry these services.</p> <p><b>Category B</b> – A service that focuses on a specific genre, that is not competitive with any Category A or Category C service. Category B services do not have any specific carriage rights.</p> <p><b>Category C</b> – A service that operates in either of the competitive genres of national news or mainstream sports. There are no specific carriage rights for Category C Sports services. Category C News services must be made available in the best possible discretionary package consistent with their genre. They must also be made available to subscribers on a stand-alone basis.</p>
<b>“Cut the cord”</b>	The process of cutting cable connections to change to low-cost television through over-the-air free broadcast via antenna or online video service broadcast over the Internet.
<b>Discretionary services</b>	A programming service that is not included in the basic service and that is distributed to subscribers on a discretionary basis for a fee separate from and in addition to the fee charged for the basic service.
<b>Independent Production Funds</b>	Established third-party funds that support creators of a variety of programming and other content. They help ensure that creators have access to financial and other support, including support for national and international promotion, across all audiovisual platforms. Canadian independent production funds are certified by the Commission according to criteria announced in Contributions to Canadian programming by broadcasting distribution undertakings, Broadcasting Regulatory Policy CRTC 2010-833, 9 November 2010.
<b>Internet audio</b>	Listening or streaming audio services available over the Internet.
<b>Internet Protocol television (IPTV)</b>	Internet Protocol television is a system through which television services are delivered using Internet protocol over a private, managed network as opposed to traditional over-the-air (OTA), cable television or satellite.
<b>Internet radio</b>	Listening or streaming AM/FM radio stations available over the Internet.
<b>Local Programming Improvement Fund (LPIF)</b>	A fund designed to improve the quality of local programming in non-metropolitan television markets across Canada. It was discontinued in August 2014.
<b>Multi-channel subscription service (MDS)</b>	In the context of the <i>Communications Monitoring Report</i> , refers to subscription satellite radio services.
<b>Numeris</b>	A Canadian audience measurement organization; the primary provider of viewership numbers

	for television and radio outlets in Canada (formerly the Bureau of Broadcast Measurement, or BBM Canada).
<b>Offensive comment</b>	A comment expressing offensive humour or other comments that do not fall under the “abusive comment” provision in CRTC regulations.
<b>Offensive language</b>	Offensive language in song lyrics or in spoken word programming.
<b>On-Demand Services</b>	A system that allows users to select and watch/listen to video or audio content when they choose to, rather than having to watch at a specific broadcast time (for example, a video-on-demand or pay-per-view service).
<b>Over-the-air (OTA) television service</b>	A television service that may be accessed by Canadians with the use of an over-the-air antenna.
<b>Pay Television services</b>	Generally, a service that provides commercial-free movies and series programming, and that is only available from broadcasting distribution undertakings.
<b>Personal video recorder (PVR)</b>	A consumer electronics device or application software that records video in a digital format to a disk drive, USB flash drive, SD memory card, SSD or other local or networked mass storage device (also known as digital video recorder, or DVR).
<b>Portable people meter (PPM)</b>	A system that measures how many people are exposed or listening to individual radio stations and television stations. The PPM is worn like a pager and detects hidden audio tones within a station or network's audio stream, logging each time it finds such a signal.
<b>Programs of National Interest (PNI)</b>	<p>The CRTC has defined programs of national interest (PNI) as including drama and comedy, long-form documentary, and specific Canadian award shows that celebrate Canadian creative talent. For French-language broadcasters, PNI also include music video and variety programs.</p> <p>For the purposes of this report, PNI expenditures include expenditures in any of the following programming categories:</p> <ul style="list-style-type: none"> <li>• long-form documentary (category 2b);</li> <li>• drama and comedy (category 7);</li> <li>• French-language music, dance, and variety programming (categories 8 and 9); and</li> <li>• English-language award shows (subset of category 11).</li> </ul>
<b>Service bundle</b>	A group of related services that are sold as a package and provide financial gain.
<b>Tangible Benefits</b>	<p>In the absence of a competitive process relating to changes of ownership or effective control of radio or television programming services, the applicant is required to make financial contributions (called “tangible benefits”) that will yield measurable and significant improvements to the Canadian broadcasting system as a whole and to the communities served by the service(s) in question.</p> <p>Tangible benefits are proportionate to the size and nature of the transaction and must be incremental to the normal cost of doing business. As a general rule, applicants are expected to make tangible benefit contributions representing a percentage (6% for radio and 10% for television services) of the value of the transaction and are usually paid over a five to seven period.</p> <p>Tangible benefits is one means, used by the Commission, of ensuring the best possible proposal by the applicant and that approval is in the public interest, consistent with the overall objectives of the Broadcasting Act.</p>

<b>Video-on-demand (VOD)</b>	A service that allows viewers to choose the program they wish to watch and the time they wish to watch it, and for which a fee is generally charged. This type of service is available from service providers, such as cable or satellite companies, and is increasingly becoming available over the Internet.
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## Telecommunications

<b>Term</b>	<b>Definition</b>
<b>Access Services</b>	The facilities required to connect a subscriber to a communications network. Examples include local telephone lines and broadband access facilities that connect to subscribers' premises.
<b>Broadband Internet</b>	High-speed Internet, with access of at least 1.5 Mbps.
<b>Churn rate</b>	A measure of the number of customers a service provider loses on a monthly basis relative to that service provider's total subscriber base. It is calculated by dividing the numbers of customers that have cancelled service in a month by the total number of subscribers for that service provider.
<b>Commissioner for Complaints for Telecommunications Services (CCTS)</b>	<p>The CCTS is an independent organization dedicated to working with consumers and service providers to resolve complaints about telephone and Internet services. Its structure and mandate were approved by the CRTC.</p> <p>The CCTS handles complaints about most telecommunications services provided to individuals and small businesses, including home phone, wireless, Internet, and VoIP services.</p> <p>CCTS is also responsible for administering the Wireless Code</p> <p><a href="https://www.ccts-cprst.ca/">https://www.ccts-cprst.ca/</a></p>
<b>Connections</b>	Access to one or more communications services, such as local telephone services, Internet access service, wireless service, and broadcast distribution services. Wireless service can be either mobile or fixed. Broadcast distribution can be cable, satellite direct-to-home, or IPTV.
<b>Dedicated Mobile Broadband User</b>	A user who subscribes to a data-only plan for access data services on a mobile network. These data plan subscriptions are purchased separately from voice services, either as a stand-alone service subscription (hub, dongle, stick, or cellular modem) or as a separate subscription data package to a voice service plan.
<b>Fixed-wireless</b>	A wireless network that uses either licensed or unlicensed spectrum to provide communications services (voice and/or data), where the service is intended to be used in a fixed location.
<b>Forbearance</b>	The action of refraining from regulation.

<b>HSPA/HSPA+/LTE</b>	<p>High-speed Packet Access (HSPA) and Long-Term Evolution (LTE) are the protocols or standards used for communications between a mobile phone and cell towers in mobile networks. HSPA is also referred to as 3G (third generation) cellular while LTE is referred to as 4G (fourth generation) cellular. LTE is the current standard that is now widely deployed in most mobile networks.</p> <p>HSPA+, or evolved High-speed Packet Access, is a form of HSPA that uses technical measures to provide faster transmission speeds.</p>
<b>Latency</b>	Delay between transmission and receipt of signal.
<b>Machine-to-machine (M2M) communication</b>	<p>Networking of intelligent communications-enabled remote devices that permit information to be automatically collected or exchanged without human intervention.</p> <p>For example, vending machines reporting inventory levels.</p>
<b>Megabits per second (Mbps)</b>	A theoretical unit of measurement of the speed for data transfer over a transmission medium (e.g. copper, co-axial cable, fibre optics, or wireless), consisting of 1,000,000 bits per second or 125,000 bytes per second where a byte consists of 8 bits.
<b>Network-related Capital Expenditures</b>	Money that is spent on communications networks (e.g. landline, cable, and wireless) for equipment, labour, software, etc. that, in accordance with accounting practices, can be capitalized in a company's financial records.
<b>Private Line</b>	A transmission facility that carries dedicated communications between two or more points. A private line is not connected to the PSTN (public switched telephone network) and the communications carried over the private line are not switched.
<b>Satellite Internet Services</b>	<p>Access to the Internet can be facilitated in remote areas by using satellite transport in two ways. One is a direct-to-home service where a subscriber has a small antenna (typically in the Ka-band) at their premises. The other is where a provider of telecommunications services has an agreement with a satellite operator for satellite transport services (typically in the C-band, which requires large antennas) that is connected to a terrestrially-based distribution system in a community.</p> <p>Typically, access to Internet services via satellite is only used in communities where there is no suitable terrestrially-based transmission service.</p>
<b>Short Message Service (SMS)/Multi-media Messaging Service (MMS)</b>	<p>SMS is a text messaging service that uses standardized communications protocols to allow phones (typically mobile phones) to exchange short text messages. Due to the methodology used to transmit text messages over mobile wireless networks, these messages are restricted in length to 140 octets (where an octet is 8 bits). Messages of a longer length are broken down by the sending device into SMS of 140 octets that are subsequently reassembled into the complete message by the receiving device.</p> <p>MMS expands the core SMS capability to allow the sending of multi-media content such as pictures, short video clips, news and entertainment content, or marketing material such as coupons and product images.</p>
<b>Standard Mobile Broadband User</b>	An individual who owns a smartphone or a regular cellphone with a subscription to a data and voice plan. (Mobile phone plans with browsing only are excluded from this category.)
<b>Tariff/Non-tariff/Off-tariff</b>	Tariff services are services whose rates, terms, and conditions are set out in a

<b>services</b>	<p>Commission-approved tariff.</p> <p>Non-tariff services are those telecommunications services whose rates, terms, and conditions are not set out in a Commission-approved tariff.</p> <p>Off-tariff services are those whose prices are filed with the Commission but for which the parties have agreed to an alternate price.</p>
<b>Voice over Internet Protocol (VoIP)</b>	VoIP is a digital communications technology makes use of IP packets carried over packet-switched network(s). There are generally two types of networks used for VoIP services. The first is the open/public Internet and the other is dedicated or managed IP networks operated by carriers such as cable companies, usually referred to as access-dependent VoIP. When the public Internet network is used for VoIP service, this is referred to as access-independent VoIP.
<b>WiFi hotspot</b>	A physical location that offers, through a local area wireless computer networking (Wi-Fi) technology, Internet access over a wireless local area network through the use of a router connected to a link to an Internet service provider.

### Other

<b>Term</b>	<b>Definition</b>
<b>Compound annual growth rate (CAGR)</b>	The year-over-year growth rate of an amount over a specified period of time.
<b>Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) margins</b>	EBITDA is an accounting measure calculated using a company's net earnings before deducting interest, taxes, depreciation, and amortization. EBITDA is a measure of the performance of a company's current operations with its current assets, as it is a measure of a company's profitability before the effects of financing are considered.

### **List of acronyms used in the report**

ARPU	average revenue per user
ASC	Advertising Standards Canada
ATM	asynchronous transfer mode
AWS	advanced wireless service
BDU	Broadcasting distribution undertaking
CAGR	compound annual growth rate
Capex	capital expenditure
CBC	Canadian Broadcasting Corporation
CBSC	Canadian Broadcast Standards Council
CCD	Canadian Content Development
CCTS	Commissioner for Complaints for Telecommunications Services
CMF	Canadian Media Fund
CPE	Canadian programming expenditures
CPI	Consumer Price Index
CRTC, the Commission	Canadian Radio-television and Telecommunications Commission
DCS	Data collection system
DSL	digital subscriber line
DTH	direct-to-home
EBITDA	earnings before interest, taxes, depreciation and amortization
FTTH	fibre-to-the-home
FTTP	fibre-to-the-premises
FTTN	fibre-to-the-node
GB	gigabyte
HSA	high speed access
HSDS	high-speed digital service
HSPA	high-speed packet access
HSPA+	evolved high-speed packet access
ICT	Information and communications technology
IP	Internet Protocol
IPTV	Internet Protocol television
IP-VPN	Internet Protocol – virtual private network
ISDN	integrated services digital network

ISP	Internet service provider
Kbps	kilobits per second
LAN	local area network
LPIF	Local programming improvement fund
LTE	long-term evolution
MB	Megabyte
Mbps	megabits per second
MDS	multipoint distribution service
MMS	multimedia messaging service
MTM	Media Technology Monitor
MVNO	mobile virtual network operator
M2M	Machine-to-machine
n/a	not available
NAS	Network access service
PBIT	profit before interest and taxes
PNI	programs of national interest
PPM	portable people meter
PPV	pay-per-view
PSTN	public switched telephone network
PVR	personal video recorder
RDU	radiocommunication distribution undertaking
SMS	short message service
TPI	telephone price index
TPIA	third-party Internet access
TSP	telecommunications service provider
TTY	teletypewriter
VOD	video-on-demand
VoIP	voice over Internet Protocol
WAN	wide area network
WSP	wireless service provider
3G	third-generation
4G	fourth-generation



**Circulars, decisions, public notices, orders, notices of consultation, regulatory policies and codes referenced in the report**

Circular No. 404	<i>Requirements for the Filing of Financial Statements with the Broadcasting Annual Return, Circular No. 404, 23 August 1994</i>
Broadcasting Decision 2010-782	<i>Change in the effective control of Canwest Global Communications Corp.'s licensed broadcasting subsidiaries, Broadcasting Decision CRTC 2010-782, 22 October 2010</i>
Broadcasting Decision CRTC 2010-942	<i>Transfer of effective control of various commercial radio programming undertakings from Corus Entertainment Inc. to Cogeco inc., Broadcasting Decision CRTC 2010-942, 17 December 2010</i>
Broadcasting Decision CRTC 2011-163	<i>Change in effective control of CTVglobemedia Inc.'s licensed broadcasting subsidiaries, Broadcasting Decision CRTC 2011-163, 7 March 2011</i>
Broadcasting Decision CRTC 2012-394	<i>Global News Plus BC – Specialty Category B service, Broadcasting Decision CRTC 2012-394, 20 July 2012</i>
Broadcasting Decision 2013-207	<i>The Score – Change in effective control and licence renewal and amendment, Broadcasting Decision CRTC 2013-207, 30 April 2013</i>
Broadcasting Decision 2013-283	<i>TVtropolis – Acquisition of assets, Broadcasting Decision CRTC 2013-283, 11 June 2013</i>
Broadcasting Decision 2013-310	<i>Astral broadcasting undertakings – Change of effective control, Broadcasting Decision CRTC 2013-310, 27 June 2013</i>
Broadcasting Decision 2013-530	<i>CityNews Channel (formerly known as CITY News (Toronto)) – Revocation of licence, Broadcasting Decision CRTC 2013-310, 1 October 2013</i>
Broadcasting Decision 2013-737	<i>TELETOON/TÉLÉTOON, TELETOON Retro, TÉLÉTOON Rétro and Cartoon Network – Change of effective control; TELETOON/TÉLÉTOON, TELETOON Retro and TÉLÉTOON Rétro – Licence renewal and amendment, Broadcasting Decision CRTC 2013-373, 20 December 2013</i>
Broadcasting Decision 2013-738	<i>Historia and Séries+ – Acquisition of assets and change in effective control Broadcasting Decision CRTC 2013-738, 20 December 2013</i>
Broadcasting Decision 2014-62	<i>Change of effective control – Follow-up to the Astral-BCE transaction, Broadcasting Decision CRTC 2014-62, 17 February 2014</i>
Broadcasting Decision 2014-388	<i>Change in the effective control of Disney Junior, Disney XD and Family Channel from Bell Media Inc. to DHX Media Ltd. and licence amendments, Broadcasting Decision CRTC 2014-388, 24 July 2014</i>

Broadcasting Decision 2014-465	<i>MusiquePlus and MusiMax - Change in effective control and licence amendments</i> , Broadcasting Decision CRTC 2014-465, 11 September 2014
Broadcasting Order 2011-60	<i>Exemption order for small video-on-demand undertakings</i> , Broadcasting Order CRTC 2011-60, 31 January 2011
Broadcasting Public Notice 1990-89	<i>Native Broadcasting Policy</i> , Broadcasting Public Notice CRTC 1990-89, 20 September 1990
Broadcasting Public Notice 1999-117	<i>Ethnic Broadcasting Policy</i> , Broadcasting Public Notice CRTC 1999-117, 16 July 1999
Broadcasting Public Notice 2006-143	<i>Exemption order respecting certain network operations</i> , Broadcasting Public Notice CRTC 2006-143, 10 November 2006
Telecom Regulatory Policy 2013-271	<i>The Wireless Code</i> , Telecom Regulatory Policy CRTC 2013-271, 3 June 2013

**List of Canadian companies referenced in the report and their full names**

Access Communications	Access Communications Co-operative Limited
Astral	Astral Media Inc.
BCE	Bell Canada Enterprises
Bell Aliant	Bell Aliant Regional Communications, Limited Partnership
Bell Mobility	Bell Mobility Inc.
Bragg	Bragg Communications Incorporated
CBC	Canadian Broadcasting Corporation
Cogeco	Cogeco Data Services Inc., Cogeco Cable Canada LP, Cogeco Cable Québec General Partnership, Cogeco Cable Canada General Partnership
Corus	Corus Entertainment Inc.
Distributel	Distributel Communications Limited
EastLink	EastLink Inc.
Lansdowne	Lansdowne Rural Telephone Co. Ltd
MTS Allstream	MTS Allstream Inc.
Northwestel	Northwestel Inc.
Québecor	Québecor Media Inc.
Primus	Primus Telecommunications Canada Inc.
Remstar	Remstar Broadcasting Inc. (V)
Rogers	Rogers Media Inc., Broadcasting Limited, Rogers Communications Partnership
SaskTel	Saskatchewan Telecommunications
Shaw	Shaw Communications Inc.
Sogetel	Sogetel inc
SRC	Société Radio-Canada
TELUS	TELUS Communications Company, TELUS Services Inc.
Télébec	Télébec, Limited Partnership
Télé-Québec	Société de télédiffusion du Québec
Videotron	Videotron Ltd., Videotron G.P.
WIND	WIND Mobile Corp.
Xplornet	Xplornet Broadband Inc., Xplornet Communications Inc.
Yak	YAK Communications (Canada) Corp.



### **Telecommunications market sector description**

#### **A) Wireline voice**

Wireline voice-related telecommunications services can be divided into two broad market segments: (i) local and access services, and (ii) long distance services.

##### **i) Local and access services**

The local and access segment is composed of wireline services relating to access and connectivity to the public switched telephone network (PSTN), and includes services used by both retail and wholesale customers.

Local wireline telephone service enables customers to place unlimited calls within a defined local calling area for a basic monthly fee. This service is either access-dependent or access-independent. Access-dependent service includes managed wireline access from the telecommunications service provider to the customer, a connection to the PSTN, and a telephone number. Access-independent service does not include the managed wireline access component. Customers of access-independent service must subscribe to broadband Internet service, which serves as the access component.

Local wireline telephone service includes automated call answering, business Centrex, and Integrated Services Digital Network (ISDN) services, as well as other ancillary services such as inside wiring, installation and repair, teleconferencing, and miscellaneous local services.

Local and access services include (a) local services provided to other providers of telecommunications services on a wholesale basis, and (b) access services for interconnection between carriers and other service providers, including switching and aggregation.

##### **ii) Long distance services**

Retail long distance services encompass wireline voice traffic to locations outside the local calling area. These services are sold in a variety of ways, such as through a standard per-minute charge, a monthly subscription plan, calling cards, or in a bundle with other services.

Wholesale long distance services are provided (a) under connection arrangements between a facilities-based telecommunications service provider and a long distance service provider to transit long distance minutes, or (b) on a wholesale, bulk, long-distance-minute basis by facilities-based telecommunications service providers to resellers of long distance services.

B) Internet

Internet-related telecommunications services can be divided into two broad market segments:

(i) Internet access and transport, and (ii) Internet applications and other Internet-related services.

i) Internet access and transport

Internet access service involves the provision of an Internet Protocol connection to an end-user, which enables the end-user to exchange application traffic with Internet hosts and other end-users. Internet access service consists of the following three major components:

- a) a data connection between a modem at the end-user's location (such as a residential dwelling) and the Internet service provider (ISP);
- b) ISP facilities, which include
  - o routers, to switch traffic between ISP end-users and the Internet at large;
  - o servers, to provide in-house ISP services, such as email; and
  - o network management elements; and
- c) a connection from the ISP to the Internet.

Internet access services are available at a variety of speeds. Low-speed, or narrowband, access services operate at speeds of up to 64 kilobits per second and are typically provided using dial-up access lines. High-speed access services, including wideband [up to 1.5 megabits per second (Mbps)] and broadband (faster than 1.5 Mbps), generally operate using digital subscriber line (DSL) technologies, coaxial cables, terrestrial wireless technologies, satellites, or fibre-optic cables.

Internet transport service is a type of Internet connectivity service typically sold to ISPs and some larger business customers. Internet transport capacity is provided over Internet backbone facilities that carry aggregated traffic across domestic and international links between Internet traffic switches or routers. Internet transport service provides partial control over the movement of customers' Internet traffic. In some cases, peering arrangements between Internet backbone service providers substitute for the outright purchase of Internet transport by one ISP from another.

ii) Internet applications and other Internet-related services

A growing number of Internet application services, including email and Web hosting, piggyback on Internet connectivity services. Internet application services are typically bundled together with Internet access services. However, telecommunications service providers also participate in emerging stand-alone business Internet application service markets, which include services such as premium Web hosting services, Internet data centre and off-site data storage services, and security and firewall services.

C) Data and private line

Data services include managed local area network (LAN) and wide area network (WAN) services for data, video, and voice networks within a metropolitan area or on a national or international scale. Data services include legacy protocols such as X.25 (packet switched WAN communication), Asynchronous Transfer Mode (ATM), and frame relay; newer protocols such as Ethernet and Internet Protocol-Virtual Private Network (IP-VPN); and the provisioning and management of networks and related equipment.

Private line services provide the capability to link two or more locations over dedicated facilities for the purpose of transporting data, video, or voice traffic. These services include high-capacity digital transmission services (at speeds ranging up to gigabit speeds over fibre), as well as voice-grade and other analogue services. Transmission facilities for private line services include copper wire, fibre-optic cable, and satellite facilities.

D) Wireless

Wireless services are composed of telecommunications services provided via mobile wireless access facilities. These services include mobile telephony, mobile data (such as text and multimedia messaging), roaming, wireless Internet access, and paging services. Data and private line services by satellite are included in the “Data and private line” section of this report, while mobile telephone services are included in the “Wireless” section of this report.

In addition to enabling voice communications over wireless networks, new wireless technologies are enabling users to send text messages and multimedia messages, including photos, graphics, videos, and audio clips, from one device to another and from one carrier to another. Data usage is expected to continue to grow as existing and new carriers forge network agreements and expand and upgrade their networks, and as terminal equipment makers introduce new devices.





### Classification of Canadian TSPs

For the purposes of monitoring and reporting on the state of competition in the telecommunications market sectors, providers of telecommunications services operating in Canada are classified into two broad categories: incumbent providers and alternative providers. The category into which a given provider falls may change from one year to the next as a result of mergers or acquisitions in the industry. For example, if a provider acquires or establishes a company that provides mobile (wireless) service, the wireless company takes the same classification as the parent provider. Companies providing telecommunications services are classified according to the structure set out below.

- 1) ***Incumbent providers*** are the companies that provided local telecommunications services on a monopoly basis prior to the introduction of competition. For the purposes of this report, these companies' operations outside their traditional operating territories are included in the "alternative providers" category. Incumbent providers are subdivided into large and small providers.
  - a) ***Large incumbent providers*** serve relatively large geographical areas, usually including both rural and urban populations, and provide wireline voice, Internet, data and private line, wireless, and other services. The large incumbent providers are Bell Aliant; Bell Canada; MTS Allstream; Northwestel, SaskTel; Télébec, and TELUS.
  - b) ***Small incumbent providers*** serve relatively small geographical areas (mostly municipal areas generally located in less densely populated regions) in Ontario, Quebec, and, in one instance, British Columbia. Due to the limited size of their serving areas, these companies do not typically provide facilities-based long distance services. However, they provide a range of wireline voice, Internet, data and private line, and wireless services. Examples of small incumbent providers are Lansdowne in Ontario and Sogetel in Quebec.
- 2) ***Alternative providers*** are either: i) providers of telecommunications services that are not incumbent providers as described in 1) above; or ii) incumbent providers conducting out-of-territory operations, such as Bell Canada conducting operations in Alberta and British Columbia or MTS Allstream, conducting operations across Canada. Alternative providers are subdivided into facilities-based and non-facilities-based providers.
  - a) ***Facilities-based alternative providers*** own and operate telecommunications networks. This group is further subdivided into facilities-based incumbent providers (out-of-territory) and facilities-based non-incumbent providers.
 

Facilities-based non-incumbent providers are further subdivided into cable-based carriers, utility telcos, and other carriers.

    - ***Cable-based carriers*** are the former cable monopolies that also provide telecommunications services (e.g. wireline voice, Internet, data and private

line, and wireless services). These providers include such companies as Bragg, Cogeco, Rogers, Shaw, and Videotron.

- *Utility telcos* are providers of telecommunications services whose market entry, or whose corporate group's market entry, into telecommunications services was preceded by a group-member company's operations in the electricity, gas, or other utility business.
  - *Other carriers* own physical transmission facilities (e.g. intercity, intra-city, or local transmission facilities). These service providers include such companies as Xplornet.
- b) *Non-facilities-based alternative providers* do not own or operate a telecommunications network. These companies are referred to as resellers, since they generally acquire telecommunications services from other providers and either resell those services or create their own network from which to provide services to their customers. Examples of non-facilities-based alternative providers are Distributel, Primus, Yak, and independent Internet service providers.

### Rural communities included in service price assessment

According to the 2011 Census, approximately 19% of Canadians lived in rural communities. To assess the price of communications services for this segment of the population, 54 rural communities were selected. These communities represented 3% of Canadians living in rural communities and were selected based on the following criteria:

- The community was not part of one of the census metropolitan areas of the 24 urban centres listed in Table A.4.2 below;
- The community had a population density of fewer than 400 people per square kilometre, or its population centres had fewer than 1,000 people per centre;
- The number of communities selected in each province/territory reflected that province's or territory's proportion of the total population of Canada; and
- The communities were not geographically clustered.

**Table A.9.1 List of rural communities**

Province	Community
British Columbia	Barriere
	Bowser
	Cobble Hill
	Hazelton
	Kaslo
	Keremeos
	Thrms
Alberta	Cremona
	Evansburg
	Glendon
	Hythe
	Wabasca
Saskatchewan	Broadview
	Gull Lake
	Naicam
	Redvers
	Spiritwood
Manitoba	Ashern
	La Broquerie
	Norway House
	Pine Falls
	Southport
Ontario	Bayfield
	Ripley
	Bancroft
	Echo Bay
	Emsdale
	Ingleside
	Lion's Head

Province	Community
Quebec	L'Islet
	La Guadeloupe
	Lac-Des-Écorces
	New Carlisle
	Laterrière
	Rock Island
	Saint-Honoré (Témiscouata)
New Brunswick	Cap-Pelé
	Florenceville
	Lamèque
Prince Edward Island	Crapaud
	Hunter River
	Morell-St. Peters
Nova Scotia	Bear River
	Mahone Bay
	Wedgeport
Newfoundland and Labrador	Burin
	Harbour Main
	New Harbour

Territory	Community
Yukon	Dawson City
	Mayo
Northwest Territories	Fort Simpson
	Fort Smith
Nunavut	Cape Dorset
	Igloodik

**Table A.9.2 List of urban centres**

Province	Urban centre
British Columbia	Vancouver
	Victoria
Alberta	Calgary
	Edmonton
Saskatchewan	Saskatoon
	Regina
Manitoba	Winnipeg
Ontario	Toronto
	Ottawa – Gatineau
	Hamilton
	London
	Kitchener – Waterloo
	St. Catharines – Niagara
	Windsor
	Oshawa

Province	Urban centre
Quebec	Montréal
	Québec
New Brunswick	Fredericton
Prince Edward Island	Charlottetown
Nova Scotia	Halifax
Newfoundland and Labrador	St. John's

Territory	Community
Yukon	Whitehorse
Northwest Territories	Yellowknife
Nunavut	Iqaluit

Major centre boundaries are defined using Statistics Canada's census metropolitan area and census agglomeration definitions.

## Broadband measurement at the Technology Resource Centre

The CRTC gathered data using a test environment focused on replicating how a typical consumer would utilize online streaming services. The services were accessed over the Internet via both wireline residential broadband and mobile LTE networks using mainstream off-the-shelf devices. The devices used to measure over the wireline network included a Windows-based PC and various streaming players while those used to measure over the mobile network included Android and iOS based tablets and smartphones. While a web-browser was used to access the services on the PC, the other devices utilized customized applications (Apps) created for their respective operating systems.

The speed of the network connection on which the services were measured was significantly higher than the maximum observed data rate requirements of any of the services measured. Multiple measurements were collected using a variety of tools and techniques on a relatively “idle” network without interfering applications or services.

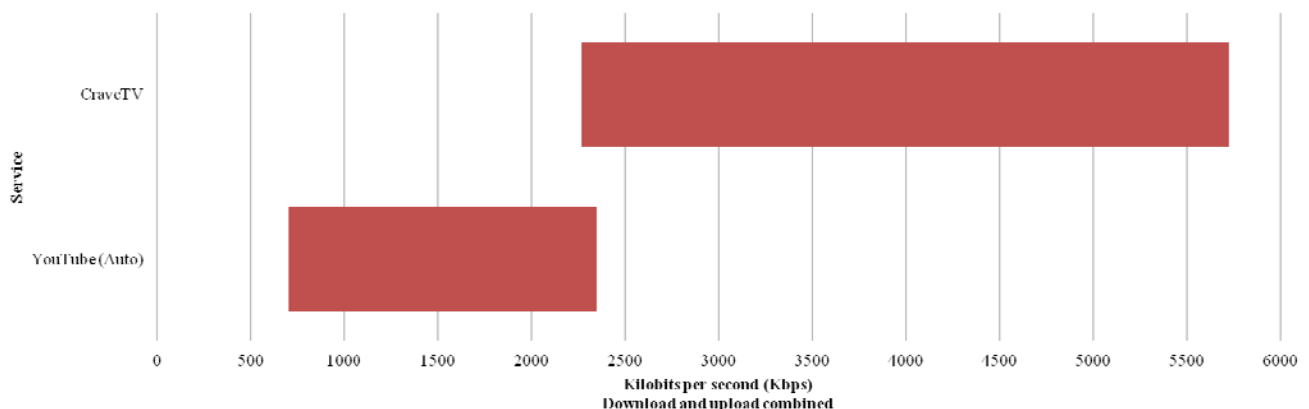
### Automatic bit rates

In a typical consumer scenario, the available bandwidth at any given moment can vary due to numerous reasons, including resource sharing between multiple devices on a home network or moving around to/from different coverage areas on a mobile network. Although the end-user’s internet connection is one factor in determining the quality and stability of a stream, other factors can include network congestion, server load, network/server latency, and end-user device capability. Increasingly, services can dynamically adjust their quality (and therefore the amount of data consumed) based on several factors that contribute to a stable audio and/or video stream to the end-user. Figures A.10.1 and A.10.2 illustrate the range of Internet access data rates observed for some services that automatically adjust their quality settings on both wireline and mobile networks respectively.

#### What is latency?

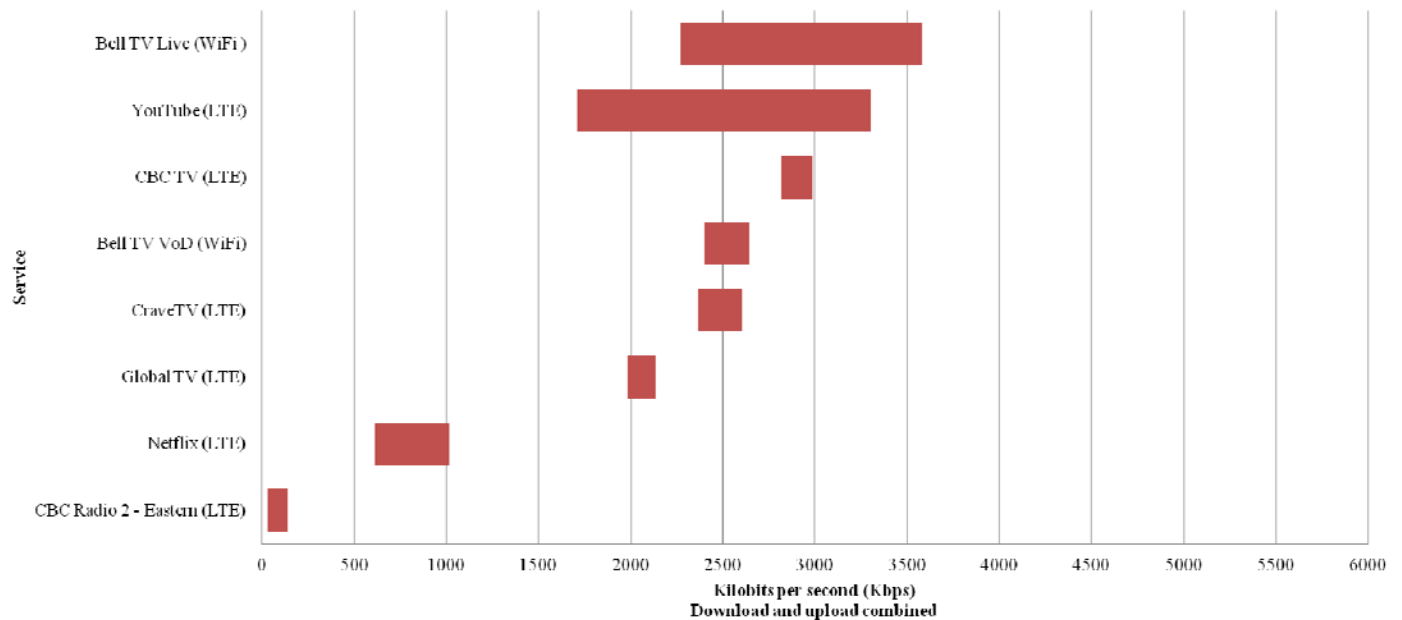
Latency refers to the delay in data reception.

**Figure A.10.1 Ranges of automatic data rate for services over a wireline broadband Internet connection**



Source: CRTC Technology Resource Centre

**Figure A.10.2 Ranges of automatic data rate for services over a mobile broadband Internet connection**



Source: CRTC Technology Resource Centre

The streaming services deliver their data in different patterns, some with single large bursts with gaps in between, and others with more continuous data. The measurements were conducted over sufficient periods of time such that a representative average could be obtained. It should also be noted that most services can modify their burst size dynamically thus making the average rate an important factor in determining the data rate requirement for most services.