



Canada - 2020 Forecast Highlights

IP Traffic

- In Canada, IP traffic will grow 2-fold from 2015 to 2020, a compound annual growth rate of 18%.
- In Canada, IP traffic will reach 4.0 Exabytes per month in 2020, up from 1.7 Exabytes per month in 2015.
- Canada's IP networks will carry 131 Petabytes per day in 2020, up from 57 Petabytes per day in 2015.
- In Canada, IP traffic will reach an annual run rate of 47.7 Exabytes in 2020, up from an annual run rate of 20.8 Exabytes in 2015.
- In Canada, IP traffic will reach 106 Gigabytes per capita in 2020, up from 48 Gigabytes per capita in 2015.
- In Canada, average IP traffic will reach 12 Tbps in 2020, and busy hour traffic will reach 68 Tbps.
- In 2020, the gigabyte equivalent of all movies ever made will cross Canada's IP networks every 1 hours.

Internet Traffic

- In Canada, Internet traffic will grow 2.7-fold from 2015 to 2020, a compound annual growth rate of 22%.
- In Canada, busy hour Internet traffic will grow 4.0-fold from 2015 to 2020, a compound annual growth rate of 32%.
- In Canada, Internet traffic will reach 3.1 Exabytes per month in 2020, up from 1.2 Exabytes per month in 2015.
- Canada's Internet traffic will be 103 Petabytes per day in 2020, up from 40 Petabytes per day in 2015.
- Canada's Internet traffic in 2020 will be equivalent to 9 billion DVDs per year, 782 million DVDs per month, or 1 million DVDs per hour.
- In 2020, the gigabyte equivalent of all movies ever made will cross the Internet every 2 hours.

- Canadian Internet traffic in 2020 will be equivalent to 53x the volume of the entire Canadian Internet in 2005.
- In Canada, Internet traffic will reach 83 Gigabytes per capita in 2020, up from 32 Gigabytes per capita in 2015.
- In Canada, average Internet traffic will increase 2.7-fold by 2020 and will reach 10 Tbps.
- In Canada, busy hour Internet traffic will increase 4.0-fold by 2020 and will reach 53 Tbps.

Wired Wi-Fi and Mobile Growth

- Canada's Fixed/Wi-Fi was 40% of total IP traffic in 2015, and will be 52% of total IP traffic in 2020.
- Canada's Fixed/Wired was 57% of total IP traffic in 2015, and will be 40% of total IP traffic in 2020.
- Canada's Mobile was 3% of total IP traffic in 2015, and will be 8% of total IP traffic in 2020.
- Canada's Fixed/Wi-Fi was 57.6% of total Internet traffic in 2015, and will be 64.9% of total Internet traffic in 2020.
- Canada's Fixed/Wired was 38% of total Internet traffic in 2015, and will be 25% of total Internet traffic in 2020.
- Canada's Mobile was 4.6% of total Internet traffic in 2015, and will be 9.9% of total Internet traffic in 2020.

IP Video

- In Canada, IP video traffic will grow 3-fold from 2015 to 2020, a compound annual growth rate of 20%.
- In Canada, IP video traffic will reach 3.2 Exabytes per month in 2020, up from 1.3 Exabytes per month in 2015.
- In Canada, IP video will be 81% of all IP traffic in 2020, up from 74% in 2015.
- In Canada, Ultra HD will be 20.3% of IP Video traffic in 2020, up from 2.2% in 2015 (87.8% CAGR).
- In Canada, HD will be 67.7% of IP Video traffic in 2020, up from 59.1% in 2015 (23.7% CAGR).
- In Canada, SD will be 12.0% of IP Video traffic in 2020, compared to 38.7% in 2015 (-4.7% CAGR).
- In Canada, consumer IP video traffic will be 87% of consumer IP traffic in 2020, up from 82% in 2015.
- In Canada, business IP video traffic will be 59% of business IP traffic in 2020, up from 43% in 2015.

Internet Video

- In Canada, Internet video traffic will grow 3-fold from 2015 to 2020, a compound annual growth rate of 27%.
- In Canada, Internet video traffic will reach 2.4 Exabytes per month in 2020, up from 745 Petabytes per month in 2015.
- In Canada, total Internet video traffic (business and consumer, combined) will be 78% of all Internet traffic in 2020, up from 64% in 2015.
- In Canada, Ultra HD will be 21.8% of Internet video traffic in 2020, up from 2.8% in 2015 (91.2% CAGR).
- In Canada, HD will be 69.7% of Internet video traffic in 2020, up from 57.0% in 2015 (31.8% CAGR).
- In Canada, SD will be 8.5% of Internet video traffic in 2020, compared to 40.2% in 2015 (-7.1% CAGR).
- In Canada, consumer Internet video traffic will be 83% of consumer Internet traffic in 2020, up from 71% in 2015.

- In Canada, business Internet video traffic will be 60% of business Internet traffic in 2020, up from 44% in 2015.
- In Canada, Internet-Video-to-TV traffic will be 29% of fixed consumer Internet video traffic in 2020, up from 28% in 2015.
- In Canada, Internet-Video-to-TV traffic will increase 3-fold between 2015 and 2020 (25.8% CAGR).
- In Canada, 59 billion minutes (112,592 years) of video content will cross the Internet each month in 2020. That's 22,518 minutes of video streamed or downloaded every second.
- In Canada, 97% of all Internet video traffic will cross content delivery networks in 2020, up from 81% in 2015.
- In Canada, 88% of all Internet traffic will cross content delivery networks in 2020, up from 65% in 2015.

IP VOD

- In Canada, Ultra HD will be 16.7% of IP VOD traffic in 2020, up from 1.5% in 2015 (76.7% CAGR).
- In Canada, HD will be 64.7% of IP VOD traffic in 2020, up from 64.6% in 2015 (8.6% CAGR).
- In Canada, SD will be 18.6% of IP VOD traffic in 2020, compared to 33.9% in 2015 (-3.7% CAGR).

Gaming

- In Canada, Internet gaming traffic will grow 7-fold from 2015 to 2020, a compound annual growth rate of 47%.
- In Canada, Internet gaming traffic will reach 2.4 Exabytes per month in 2020, up from 745 Petabytes per month in 2015.
- In Canada, Internet gaming traffic will be 5% of consumer Internet traffic in 2020, up from 2% in 2015.

Mobile

- In Canada, mobile data traffic will grow 6-fold from 2015 to 2020, a compound annual growth rate of 42%.
- In Canada, mobile data traffic will reach 309 Petabytes per month in 2020, up from 53 Petabytes per month in 2015.
- Canadian mobile data traffic will grow 2 times faster than Canadian fixed IP traffic from 2015 to 2020.
- Canada's Mobile was 3% of total IP traffic in 2015, and will be 8% of total IP traffic in 2020.
- In Canada, mobile data traffic in 2020 will be equivalent to 4x the volume of the entire Canadian Internet in 2005.

Devices

- In Canada, there will be 404.2 million networked devices in 2020, up from 219.0 million in 2015.
- In Canada, there will be 10.7 networked devices per capita in 2020, up from 6.1 per capita in 2015.
- In Canada, 22% of all networked devices will be mobile-connected in 2020.
- In Canada, M2M modules will account for 65% (263.4 million) of all networked devices in 2020, compared to 47% (102.9 million) in 2015, (20.7% CAGR).
- In Canada, PCs will account for 6% (23.3 million) of all networked devices in 2020, compared to 12% (25.7 million) in 2015, (-1.9% CAGR).
- In Canada, Tablets will account for 3% (13.2 million) of all networked devices in 2020, compared to 5% (11.4 million) in 2015, (3% CAGR).

- In Canada, Smartphones will account for 8% (32.1 million) of all networked devices in 2020, compared to 10% (22.6 million) in 2015, (7.3% CAGR).
- In Canada, Connected TVs will account for 14% (55.1 million) of all networked devices in 2020, compared to 18% (39.2 million) in 2015, (7% CAGR).
- In Canada, Non-Smartphones will account for 0.1% (599849) of all networked devices in 2020, compared to 2% (4.7 million) in 2015, (-33.7% CAGR).
- In Canada, Other Portables will account for 4% (16.5 million) of all networked devices in 2020, compared to 6% (12.6 million) in 2015, (5.4% CAGR).
- In Canada, 4K TVs will account for 39% (7.4 million) of all flat panel TVs in 2020, compared to 5.3% (447,747) in 2015, (75.1% CAGR).
- Canada's IP traffic from non-PC devices was 55% of total IP traffic in 2015, and will be 73% of total IP traffic in 2020.
- In Canada, PCs accounted for 45% of IP traffic in 2015, and will be 27% of IP traffic in 2020.
- In Canada, TVs accounted for 38% of IP traffic in 2015, and will be 31% of IP traffic in 2020.
- In Canada, Smartphones accounted for 6% of IP traffic in 2015, and will be 19% of IP traffic in 2020.
- In Canada, Tablets accounted for 10% of IP traffic in 2015, and will be 19% of IP traffic in 2020.
- In Canada, M2M modules accounted for 1.6% of IP traffic in 2015, and will be 3.6% of IP traffic in 2020.
- In Canada, PCs accounted for 55% of consumer Internet traffic in 2015, and will be 27% of consumer Internet traffic in 2020.
- In Canada, TVs accounted for 17% of consumer Internet traffic in 2015, and will be 20% of consumer Internet traffic in 2020.
- In Canada, TVs accounted for 13% of total Internet traffic in 2015, and will be 15% of total Internet traffic in 2020.

Speed Evolution

- In Canada, the average fixed broadband speed will grow 2.3-fold from 2015 to 2020, from 19.3 Mbps to 44.2 Mbps.
- In Canada, 96% of fixed broadband connections will be faster than 5 Mbps in 2020, up from 77% today.
- In Canada, 83% of fixed broadband connections will be faster than 10 Mbps in 2020, up from 61% today.
- In Canada, 38.4% of fixed broadband connections will be faster than 25 Mbps in 2020, up from 30.9% today.
- In Canada, 29.1% of fixed broadband connections will be faster than 50 Mbps in 2020, up from 12.6% today.
- In Canada, the average Wi-Fi speeds from mobile devices will grow 2.0-fold from 2015 to 2020, from 15.0 Mbps to 29 Mbps.
- In Canada, the average mobile connection speed will grow 3-fold from 2015 to 2020, reaching 13 Mbps in 2020.

Traffic per User and Household

- In Canada, the average Internet user will generate 71.8 gigabytes of Internet traffic per month in 2020, up 136% from 30.4 gigabytes per month in 2015, a CAGR of 19%.
- In Canada, the average Internet household will generate 166.0 gigabytes of Internet traffic per month in 2020, up 140% from 69.3 gigabytes per month in 2015, a CAGR of 19%.

- In Canada, the average FTTx Internet household will generate 327.6 gigabytes of Internet traffic per month in 2020, 125.1% more than other broadband households.
- In Canada, the average FTTx Internet household generated 159.1 gigabytes of Internet traffic per month in 2015, 145.2% more than other broadband households.
- In Canada, there will be 3 million Internet households (22.0% of all Internet households) generating more than 250 gigabytes per month in 2020.
- In Canada, there will be 1 million households (9.0% of all Internet households) generating more than 500 gigabytes per month in 2020.
- In Canada, there will be 257,438 households (2.0% of all Internet households) generating more than a terabyte per month in 2020.
- In Canada, the average mobile connection will generate 7,104 megabytes of mobile data traffic per month in 2020, up from 1,637 megabytes in 2015.