COMMERCE COMMISSION NEW ZEALAND
Te Komihana Tauhokohoko

ANNUAL TELECOMMUNICATIONS MONITORING REPORT

2020 Key facts

Date: 16 March 2021 – version 2

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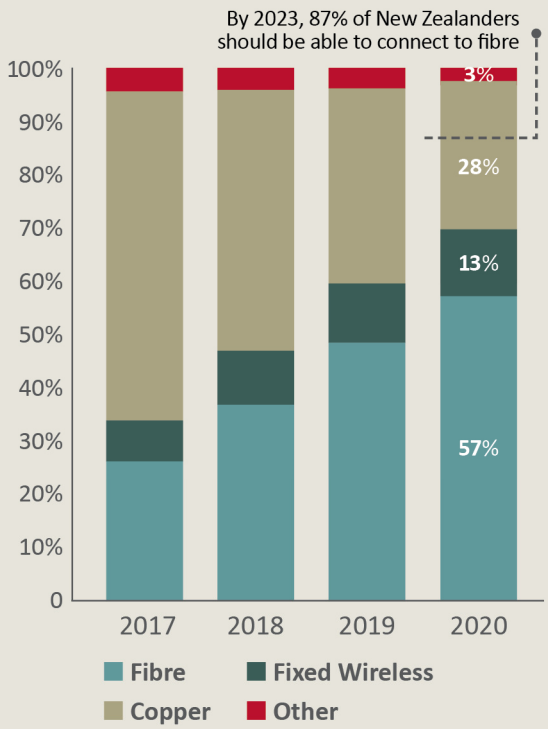
Telco trends 2020

Internet connections



Average monthly usage compared to 2019

Mobile

Data 3.3GB	up 22%
166 minutes	up 4%
120 texts	down 13%

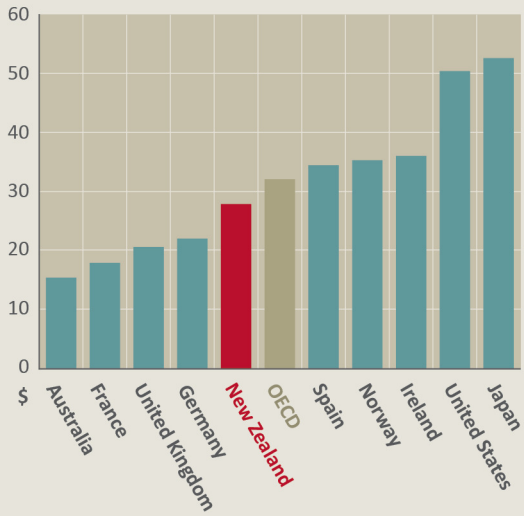
Fixed broadband and landline

Data 284GB	up 37%
Internet connections 1.76m	up 4%
Households with a landline 706k	down 12%

Affordability

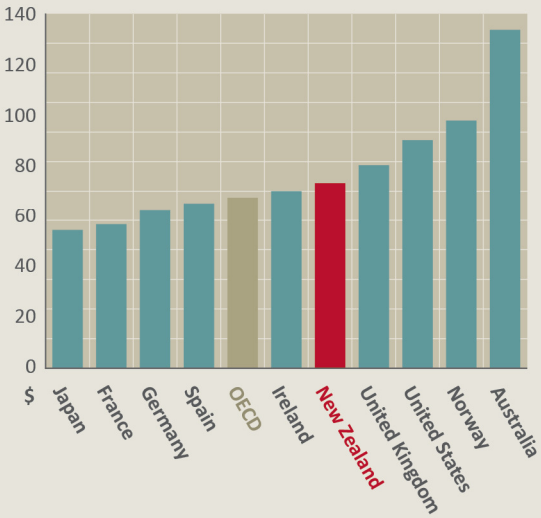
Mobile

100 calls and 2GB monthly



Fixed broadband

Unlimited data on 100Mbps speed connection



New Zealand telecommunications snapshot statistics

	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	2015 /16	2016 /17	2017 /18	2018 /19	2019 /20
Total industry metrics										
Total telecommunications retail revenue ($bn)	5.03	5.25	5.21	5.17	5.11	5.28	5.37	5.42	5.32	5.12
Total telecommunications investment ($bn)	1.24	1.27	1.58	1.69	1.77	1.59	1.58	1.66	1.71	1.61
Fixed line metrics										
Fixed lines (mil)	1.88	1.88	1.85	1.85	1.86	1.87	1.79	1.76	1.85	1.79
Total fixed broadband connections (mil)	1.18	1.27	1.34	1.41	1.45	1.50	1.58	1.65	1.70	1.76
Fixed line broadband connections per 100 population	27.1	29.0	30.4	31.6	32.0	32.5	32.9	33.7	34.4	34.6
Fixed monthly data use per broadband connection (GB)	10	18	26	32	48	69	117	172	207	284
Fixed wireless (000's)	39	31	26	24	20	27	122	165	191	221
Copper broadband lines (000's)[a]	1076	1169	1237	1273	1270	1171	976	806	620	487
UFB (government sponsored fibre) lines (000's)[b]	-	1	10	39	106	241	413	605	821	1004
Chargeable fixed voice call minutes (bn)	6.12	5.71	5.47	5.13	4.66	4.34	3.44	3.10	2.72	2.44
Total fixed line retail revenues ($bn)	2.89	2.86	2.77	2.68	2.58	2.60	2.62	2.58	2.49	2.39
Mobile metrics										
Mobile connections (mil)[c]	5.2	5.4	5.3	5.6	5.8	6.1	6.4	6.4	6.0	6.2
Active mobile connections per 100 population	119	122	119	124	127	129	134	131	122	122
Share mobile pre-paid (%)	65.7	64.9	63.3	63.6	62.3	60.7	60.3	58.1	52.7	51.8
Average monthly mobile data usage (GB)	0.10	0.13	0.21	0.32	0.47	0.72	1.25	2.04	2.75	3.29
Mobile voice call minutes (bn)	4.40	4.42	4.77	5.30	6.63	7.81	8.77	9.34	9.41	10.1
SMS messages sent (bn)	13.6	13.9	13.0	12.0	12.1	11.3	9.2	8.8	8.1	7.3
Total mobile retail revenues ($bn)	2.14	2.38	2.44	2.49	2.54	2.68	2.75	2.83	2.83	2.74

[a] Data from Chorus
[b] Data from Crown Infrastructure Partners (CIP)
[c] Prepay connections for all years are counted as those active in the prior 6 months.

Introduction

Purpose of this report

This is the Commerce Commission's (Commission) 14th annual telecommunications market monitoring report. This report presents key industry metrics and longer-term telecommunications historical trends in New Zealand for 2020.

This report is released under section 9A of the Telecommunications Act 2001 (the Act). Section 9A requires us to monitor competition in, and the performance and development of, telecommunications markets. This monitoring report is additional to our monitoring associated with specific determinations and information disclosure.

Background and data sources

Since 2007, we have collected data from various sources to monitor and understand trends in New Zealand's telecommunications markets, and to inform the industry and the public about our findings.[1]

Each year we send a voluntary questionnaire to the industry requesting information for the financial year ending in June. The data collected in response to our 2020 questionnaire is referred to as the 2020 results in this report.[2]

Aggregated results from our annual industry questionnaire are published alongside this report and are available on our website.[3,4] Revenues and prices are expressed as nominal figures (not adjusted for inflation between years) unless otherwise indicated. Connection numbers, unless otherwise indicated, refer to both residential and business connections. Where more recent industry data is available and used, the different time period is noted.

We thank all the respondents who submitted data and look forward to their continued cooperation. We welcome any comments or feedback on the questionnaire and this report.

1 Telecommunications Act 2001, section 9A.

2 The data from the industry questionnaire is for the 12 months to 30 June 2020 when it is a measure of volume like minutes. Where the data is a snapshot in time such as subscriber numbers, it is the data as at 30 June 2020.

3 The data used in our report is sometimes revised by the respondents or the Commission when it appears inaccurate, an error has been made, or it was an estimate. Consequently, some prior year figures used in previous reports may have been revised.

4 https://comcom.govt.nz/regulated-industries/telecommunications/monitoring-the-telecommunications-market/annual-telecommunications-market-monitoring-report

Key developments in 2020

COVID-19 accelerates growth in fixed broadband data usage

COVID-19 lockdowns in 2020 changed the way Kiwis worked, learned and played. This led to marked growth in fixed broadband usage. Average fixed broadband usage per month increased by 77GB this year to 284GB. This represents a growth rate of 37% compared to 2019 when the growth rate was 15%.

Mobile roaming revenue falls following travel restrictions

Border closures restricting travel led to total mobile roaming revenue dropping 15% to $96.6 million in the year to 30 June 2020. Revenue from domestic customers roaming overseas fell by 20% while revenue from subscribers of overseas networks roaming in New Zealand increased 2% on 2019.

Popularity of uncapped mobile plans rises

In 2020, 14% of residential on-account subscribers purchased uncapped 'endless' or 'unlimited'[5] mobile bundles, up from 7% in 2019. Similarly, 8% of business on-account subscribers purchased uncapped mobile bundles in 2020, up from 2% in 2019.

Copper connections drop 24%

In the year to 30 September 2020, total copper broadband connections dropped 24% to 441,000. This drop occurred across all variants, including higher speed VDSL. This continues the trend seen in 2019 when copper broadband connections dropped 23%.

Households continue to drop landlines

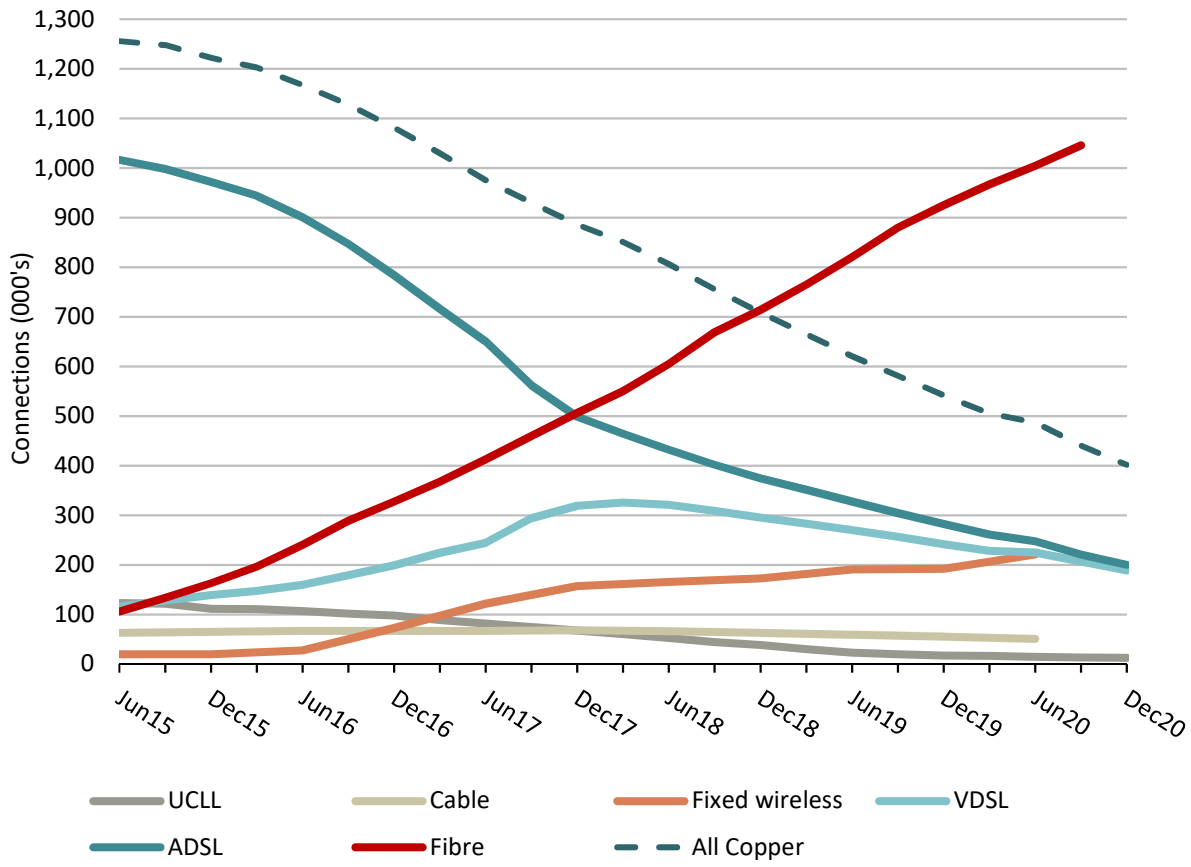
Households continue to move away from landlines for calling with residential landline connections down 12% on last year. Over half of household fixed line connections now have no voice service (naked broadband).

[5] These uncapped data plans are not truly endless or unlimited as they are subject to fair-use terms and MNOs significantly reduce customers' speeds after a certain amount of data has been consumed.

Fixed-line connections

Copper connections drop 24%

Figure 1: Fixed-line broadband connections by technology



Source: Chorus, CIP, annual telecommunications questionnaire

In the year to 30 September 2020, total copper broadband connections dropped 24% to 441,000, split between 220,000 ADSL connections, 207,000 VDSL connections, and 14,000 UCLL connections. As shown in Figure 1, this continues an ongoing trend of copper broadband connections dropping while fibre and fixed wireless broadband connections rise.

From August 2021, Chorus will be able to stop supplying copper services in areas where fibre is available, provided that the consumer protections in the Commission's Copper Withdrawal Code are met.[6]

As at 30 September 2020, around 1.69 million households and businesses were able to connect to the Ultra-Fast Broadband (UFB) fibre network with 1.05 million of them having already moved to fibre.[7]

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6 The Commission published the final Copper Withdrawal Code in December 2020. The Code and Reasons Paper can be found at https://comcom.govt.nz/regulated-industries/telecommunications/regulated-services/consumer-protections-for-copper-withdrawal/copper-withdrawal-code

7 Crown Infrastructure Partners "Quarterly Connectivity Update – Q3: to 30 September 2020"

The UFB2 build is ongoing and at the end of 2022, over 1.8 million households and businesses, or 87% of New Zealanders, should have the ability to connect to fibre.

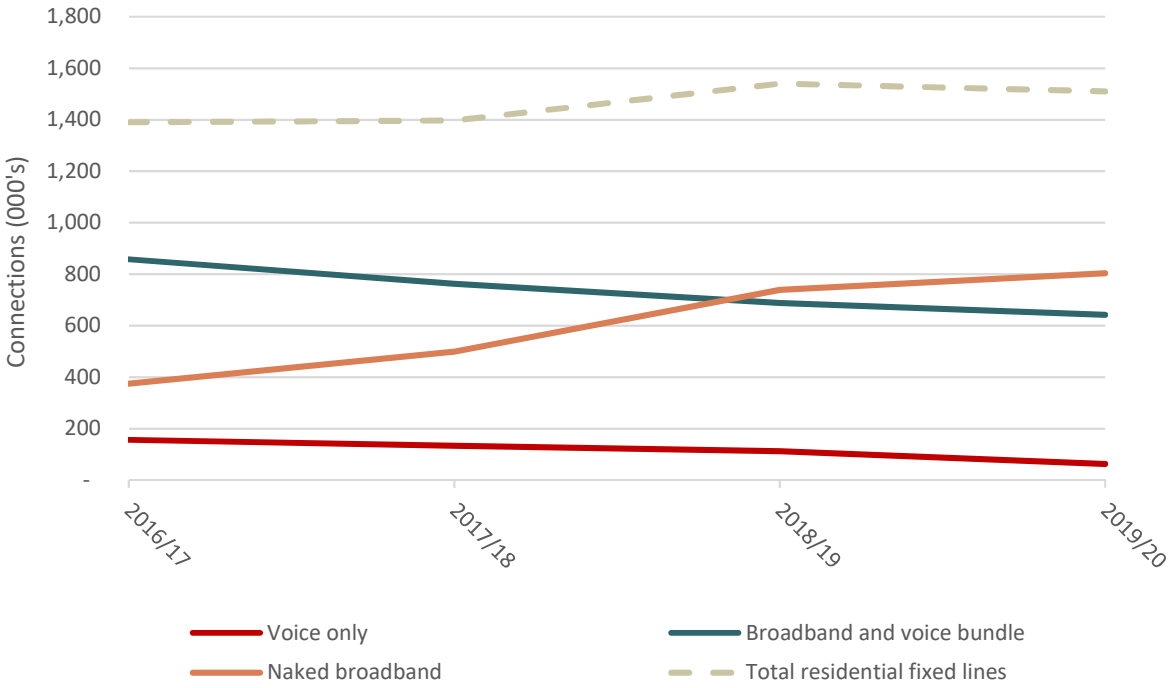
Fixed wireless connections have increased to 221,000 up 16% from last year. As at 30 June 2020, New Zealand ranked third highest out of the OECD countries for fixed wireless broadband connections with 4.5 subscriptions per 100 of population, behind the Czech Republic at 14.9 and the Slovak Republic at 7.9.[8]

Households continue to drop landlines

Consumers are moving away from traditional landline services for calling. Landline connections (including broadband-voice bundles) have continued to decline in 2020, down 12% on last year.

As shown in Figure 2 below, over half of household fixed-line connections now have no voice service (naked broadband). This situation indicates more and more households now opting to not have a home phone.

Figure 2: Residential fixed-lines by connection type



Approximately a third of those households that still have a home phone are using a traditional copper phone line, with the other two-thirds of residential landlines now on newer technologies like fibre and fixed wireless.

In November 2020, the Commission published the 111 Contact Code. The Code supports consumers who can no longer call 111 in a power cut because they have moved to landline technologies like fibre and fixed wireless. These technologies need a power supply in the home to work, meaning they will not work in a power cut, without an independent power source.

8 https://www.oecd.org/sti/broadband/broadband-statistics/

Under the Code, telecommunications service providers must tell new customers, and remind existing customers at least once a year, that their home phone may not work in a power cut. Providers must also tell their customers how they can protect themselves and where to go for further support.[9]

Retail revenues

Retail telecommunications revenue down

Figure 3: Telecommunications retail revenues by service

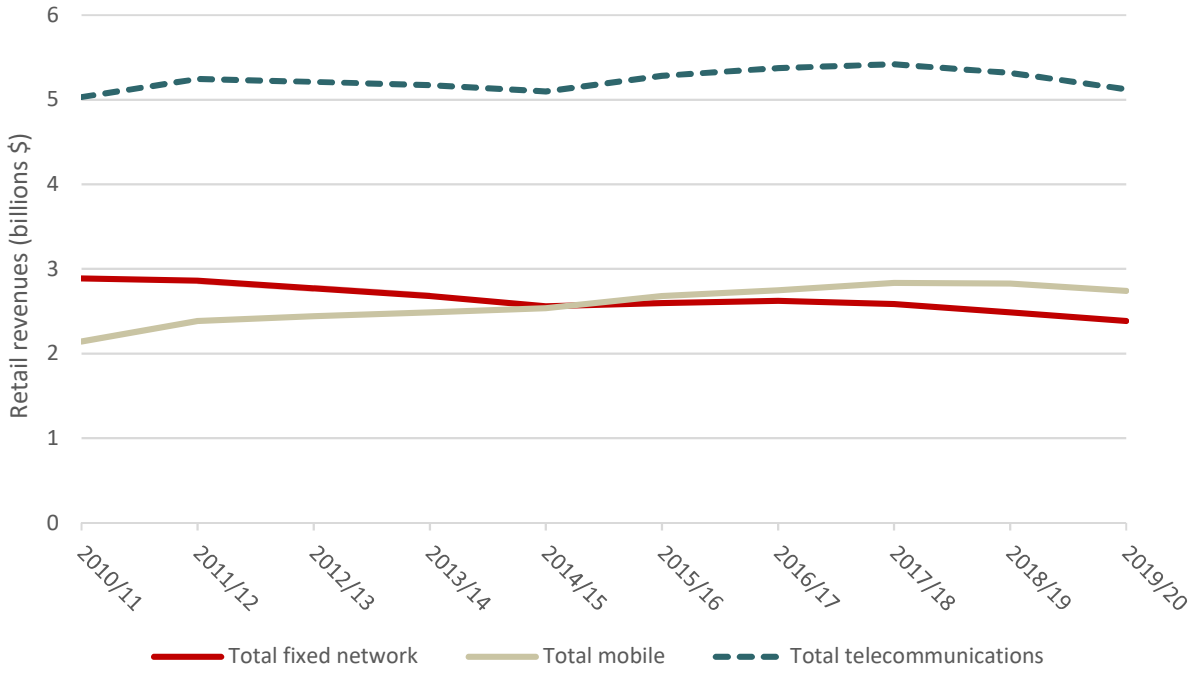
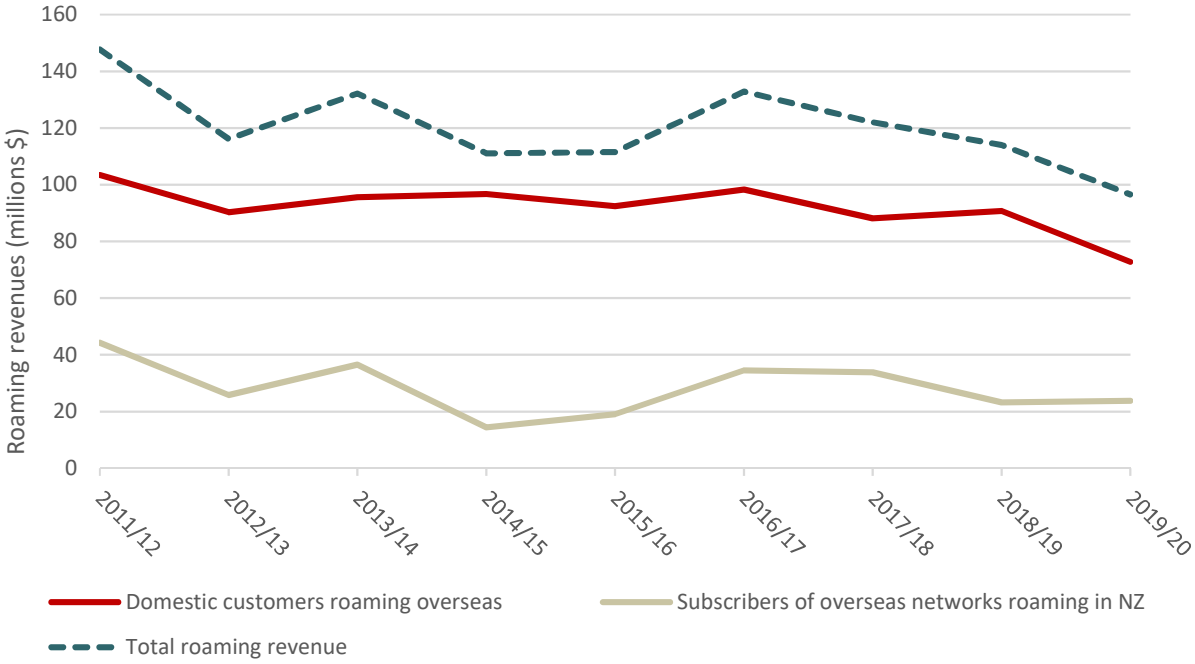


Figure 3 shows that retail telecommunications revenue is down from $5.32 billion in 2019. Mobile revenue was down 3% to $2.74 billion in 2020. This fall in revenue, coupled with the decrease in fixed network revenue of 4% to $2.39 billion, resulted in total retail telecommunications revenue decreasing (by 4%) in 2020 to $5.12 billion.

[9] The 111 Contact Code and Reasons Paper can be found at https://comcom.govt.nz/regulated-industries/telecommunications/projects/commission-111-contact-code

Mobile roaming revenue falls following COVID-19 related travel restrictions

Figure 4: Mobile roaming revenue by type

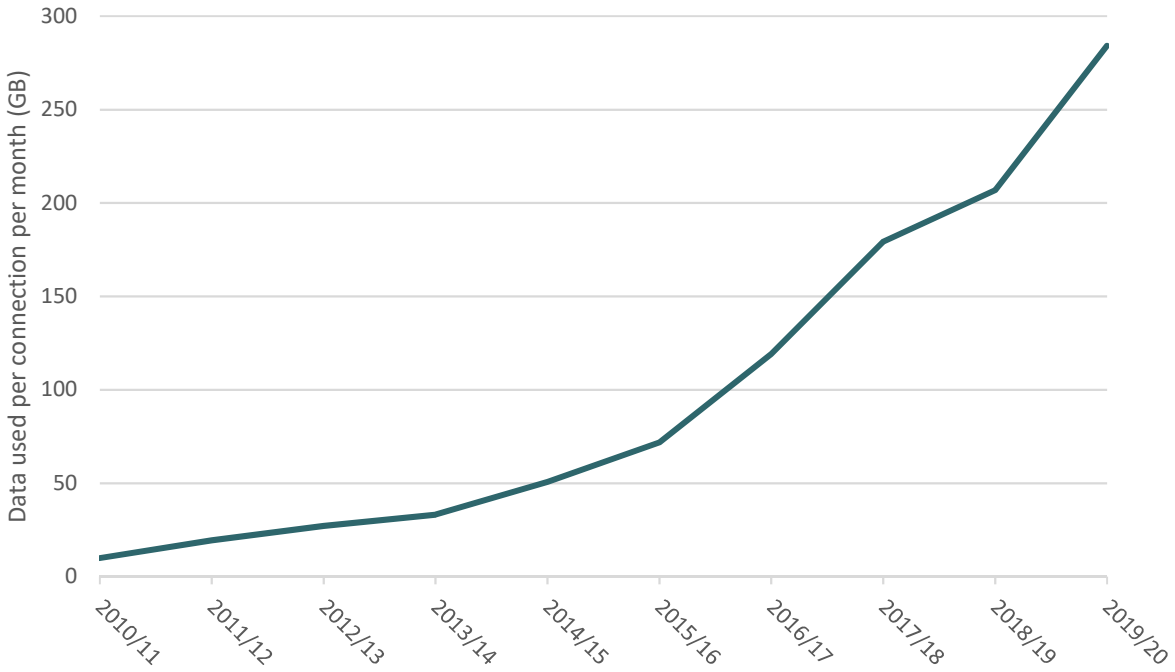


As shown in Figure 4 above, total mobile roaming revenue in the year to 30 June 2020 fell 15% down to $96.6 million. Border closures associated with COVID-19 resulted in revenue from domestic customers roaming overseas dropping by $17.9m compared to the prior year. However, revenue from subscribers of overseas networks roaming in New Zealand increased slightly (2%) to $23.7 million in the year to 30 June 2020.

Growth in data usage

COVID-19 accelerates growth in fixed broadband data usage

Figure 5: Average fixed-line broadband data consumption



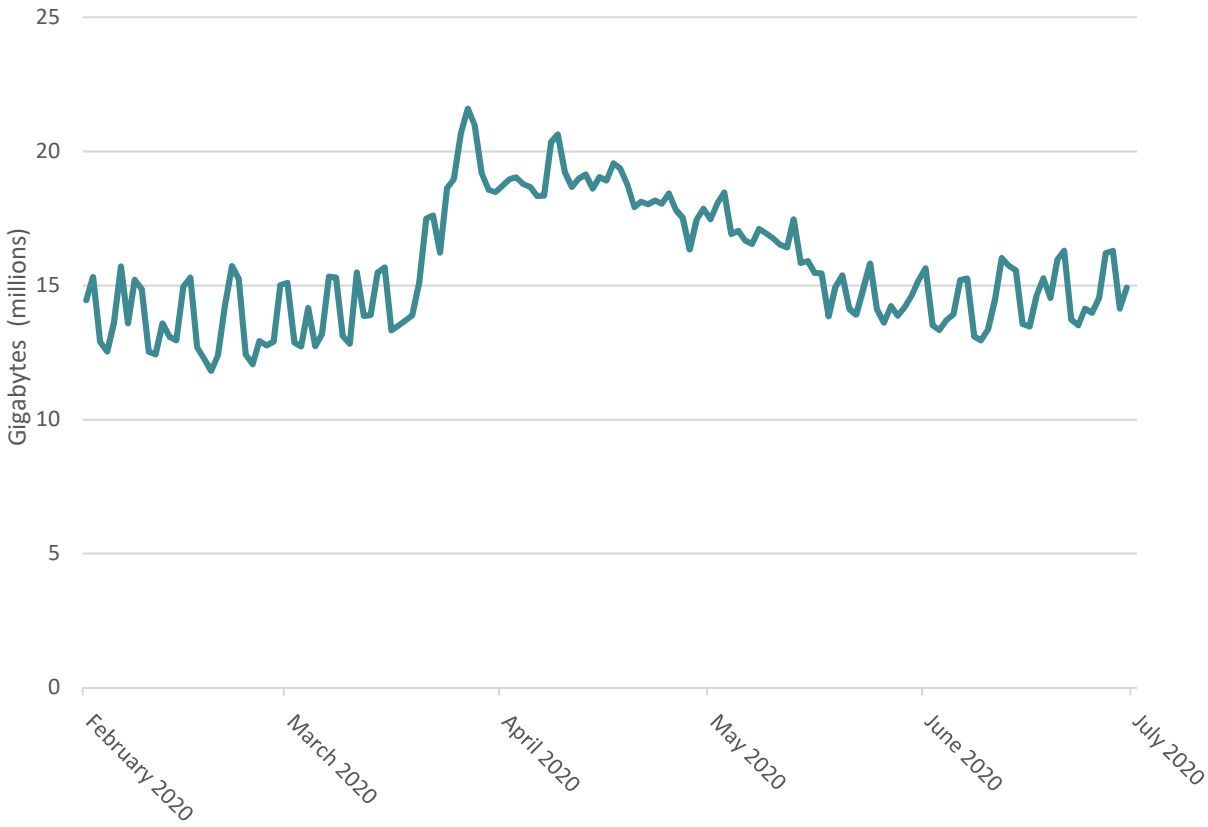
While consumption of fixed broadband has grown year-on-year, COVID-19 lockdowns and the associated changes in the way Kiwis worked, learned and played further pushed up fixed broadband data usage in 2020. Our questionnaire responses indicated that average fixed broadband usage per month increased by 77GB this year to 284GB, as shown in Figure 5 above.[10] This usage represents a growth rate of 37% compared to 2019 when the growth rate was 15%.

The impact of COVID-19 alert level changes on fixed broadband usage can be seen in Figure 6 on page 12.[11] Usage spiked at the end of March when New Zealand moved up to alert level 4. Usage then gradually reduced as New Zealand moved down alert levels from late April until we reached alert level 1 on 8 June 2020.

[10] This is an average for whole year to 30 June 2020 for all fixed-line connections. This is not comparable to the monthly broadband usage averages published by Chorus.

[11] Figure 6 only shows broadband usage on the Chorus network so may not be indicative of the usage trends on other local fibre companies' networks, fixed wireless, satellite or HFC cable usage.

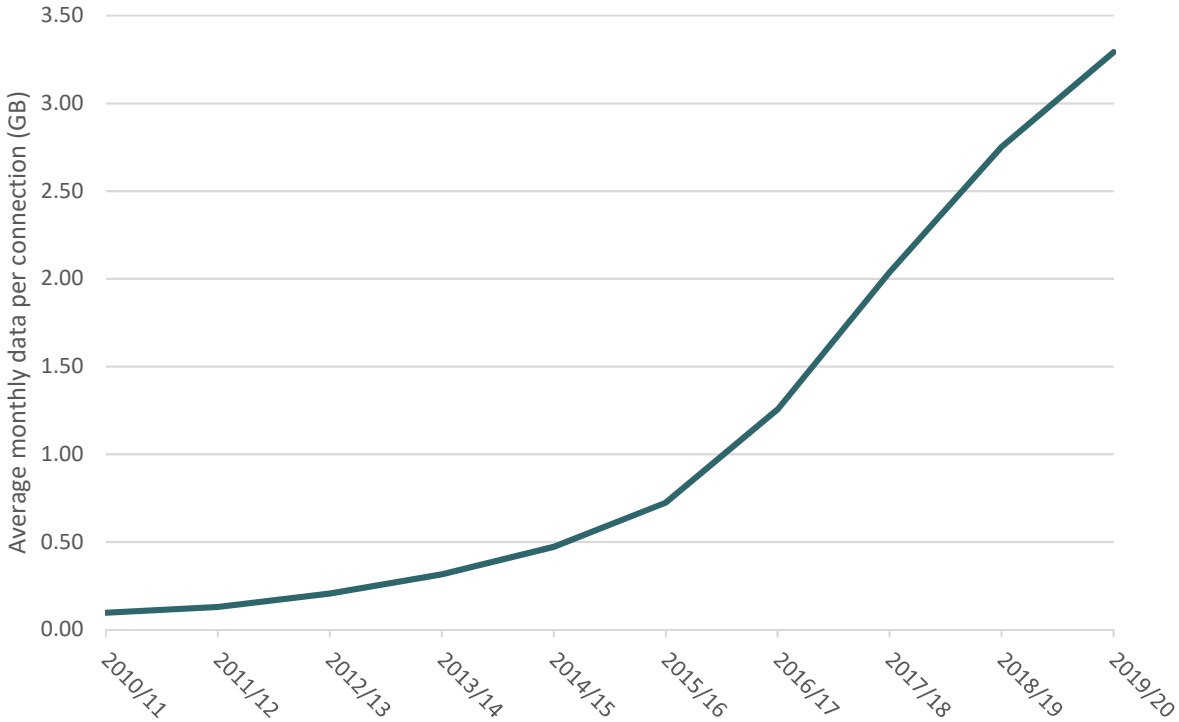
Figure 6: Daily broadband usage on Chorus' network



Source: Chorus via Statistics New Zealand's COVID-19 data portal

Mobile data consumption continues to grow

Figure 7: Mobile data consumption[12]



The amount of data consumed over mobile networks by retail customers continued to grow in 2020, as shown in Figure 7. The average amount of mobile data consumed per connection is now 3.29GB per month. However, the rate of usage growth did ease, with growth this year of 20% compared to 2019 when growth was 35%.

Uptake of uncapped 'endless' or 'unlimited' data bundles by on-account customers has grown considerably since 2019. 14% (or 233,000) of residential on-account subscribers now purchase uncapped mobile bundles, up from 7% in 2019.

Similarly, 8% of business on-account subscribers purchased uncapped mobile bundles in 2020, up from 2% in 2019.

[12] Calculated based on connections who have used mobile data.

OECD price benchmarking

Each year we benchmark prices New Zealanders are paying for common plans for fixed-line broadband and mobile against the OECD. We use the database that has been prepared by the Teligen division at Strategy Analytics.[13, 14]

Price of high-speed fixed broadband plans drops

Most consumers of fixed-line telecommunications services buy either a bundle that includes both a voice and broadband service or naked broadband. The remaining 4% of residential consumers purchase a voice-only service.

To get an indication of how New Zealand fixed-line broadband prices compare to those overseas, we compared the New Zealand price against an OECD average price for fixed broadband services for various levels of usage and speed.[15]

The entry level home broadband plan offered by most retailers now offers 60GB to 150GB of data. With 85% of consumers on unlimited plans, we continued to use:

- 60GB, 150GB and 500GB of data for the benchmarking this year;
- 500GB as a proxy for unlimited plans; and
- Varying speed levels to reflect the capabilities provided to customers and technologies able to provide these speeds. For example, the ultra-high user category (900Mbps) can only be provided with fibre or HFC cable technologies.

The price of the cheapest high user and ultra-high user broadband only plans have decreased $10 since 2019, to $73, as shown in Table 1 below.

We note that there are some limitations to the cheapest offer that meets these categories:

- The high user plan can only be purchased for $73 if a customer also purchases a pay-monthly mobile plan from Vodafone; and
- The cheapest ultra-high user plan is an HFC cable plan so is only available in parts of Wellington, Kapiti and Christchurch.

[13] Teligen typically collects plan information on the incumbent providers who serve at least 70% of customers in a given country.

[14] The countries included in calculating the average vary because not all have comparable plans.

[15] Spark, Vodafone, Slingshot and Orcon are the only New Zealand brands included in Teligen's fixed-line broadband benchmark dataset.

Table 1: Fixed-line broadband only benchmarking

		Price in NZD (PPP) Dec-20		Price difference from 2019	
Broadband only	**NZ rank in OECD**	**NZ**	**OECD average**	**NZ**	**OECD average**
Entry level 60GB 10Mbps	31/37	$65	$53	+$12	+$1
Medium user 150GB 30Mbps	30/37	$73	$58	+$3	no change
High user Unlimited (500GB) 100Mbps	26/37	$73	$67	-$10	no change
Ultra-high user Unlimited (500GB) 900Mbps	12/33	$73	$111	-$10	-$79

Source: Strategy Analytics

Meanwhile, the price of the cheapest entry level fixed broadband only plan has increased from $53 last year (2019) to $65 this year (2020). This increase results from Vodafone no longer offering its Basic Home Broadband packages.

As shown in Table 2 below, the price of the cheapest high user and ultra-high user broadband and voice bundles decreased $6 to $84 this year (2020).

Like naked broadband, the ultra-high user category is the only broadband and voice bundle category where New Zealand prices are cheaper than the OECD average.

Table 2: Fixed-line broadband and voice benchmarking

		Price in NZD (PPP) Dec-20		Price difference from 2019	
Broadband + voice	**NZ rank in OECD**	**NZ**	**OECD average**	**NZ**	**OECD average**
Entry level 60GB 10Mbps	23/29	$75	$65	+$12	-$1
Medium user 150GB 30Mbps	22/29	$80	$70	+$6	-$2
High user Unlimited (500GB) 100Mbps	21/28	$84	$77	-$6	-$2
Ultra-high user Unlimited (500GB) 900Mbps	10/22	$84	$115	-$6	-$8

Source: Strategy Analytics

Entry level mobile plan prices steady

New Zealand mobile phone users are now consuming an average of 3.29GB of data per connection per month along with 166 minutes of voice.

32% of on-account residential consumers purchase mobile plans with more than 8GB of data. We have therefore included in our mobile benchmarking this year an 'ultra-high' category with unlimited minutes and 20GB of data.

Table 3 shows that New Zealand's benchmarked mobile prices were below the OECD average for the entry level and medium user categories but above the OECD average for the high user and ultra-high user category.

Table 3: Mobile phone services benchmarking

		Price in NZD (PPP) Nov-20		Price difference from 2019	
Mobile phone services	**NZ rank in OECD**	**NZ**	**OECD Average**	**NZ**	**OECD average**
Entry level 30 calls + 500MB	11/37	$18	$24	no change	-$2
Medium user 100 calls + 2GB	17/37	$28	$32	no change	-$4
High user 300 calls + 5GB	27/37	$47	$42	-$1	-$8
Ultra-high user Unlimited calls + 20GB	22/34	$76	$68	+$4	-$11

Source: Strategy Analytics

Changes in New Zealand prices since 2019 were mixed with: [16]

- The entry level and medium category remaining unchanged at $18 and $28 respectively;
- The high user category decreasing $1 to $47; and
- The ultra-high user category increasing $4 to $76.

Although the price of the ultra-high category has increased by $4, the data allowance of the plan that meets this basket has also increased from a capped plan with 33GB to an uncapped plan with 40GB of data at unthrottled speeds.

[16] Skinny, Spark and Vodafone are the only New Zealand brands included in Teligen's mobile benchmark dataset

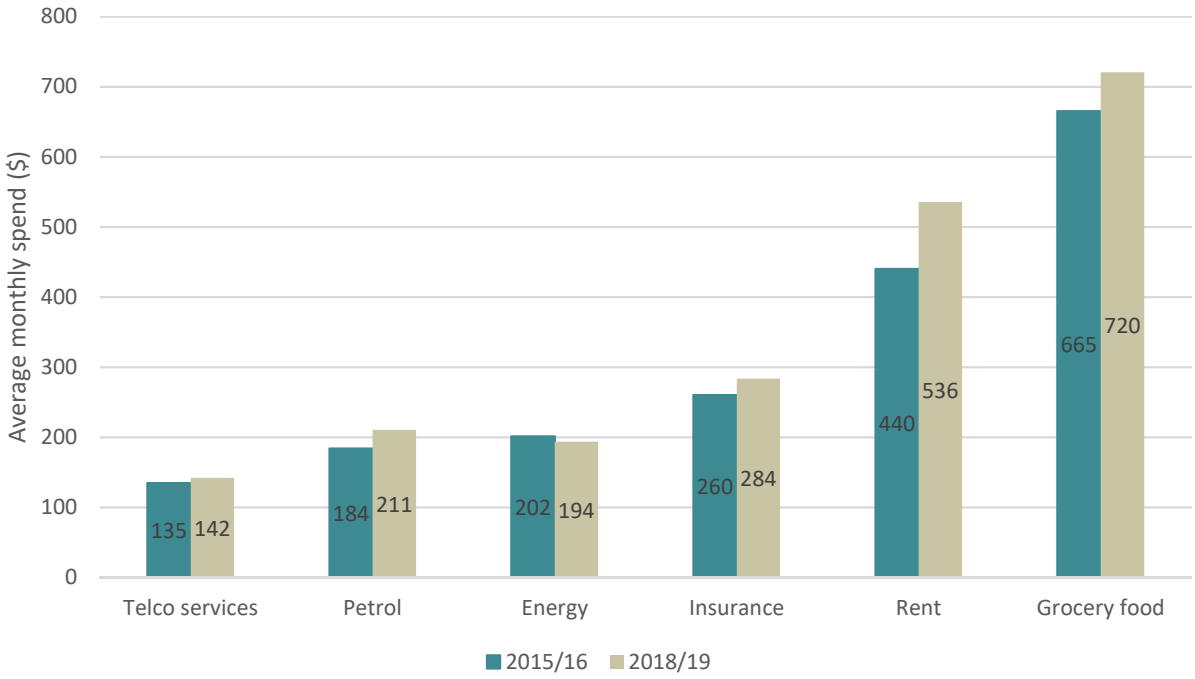
Household expenditure on telecommunications

Average monthly expenditure on telecommunications increases

Statistics New Zealand's Household Economic Survey (HES) collects information on household expenditure on a three-yearly basis. Data from the most recent survey for the year ended 30 June 2019 was released in March 2020.

Figure 8 below shows the average household spend on common household bills per month based on the most recent HES data. On average, households spent $142 per month on telecommunications services in 2019 up from $135 in 2016.

Figure 8: Average monthly household expenditure on common household bills



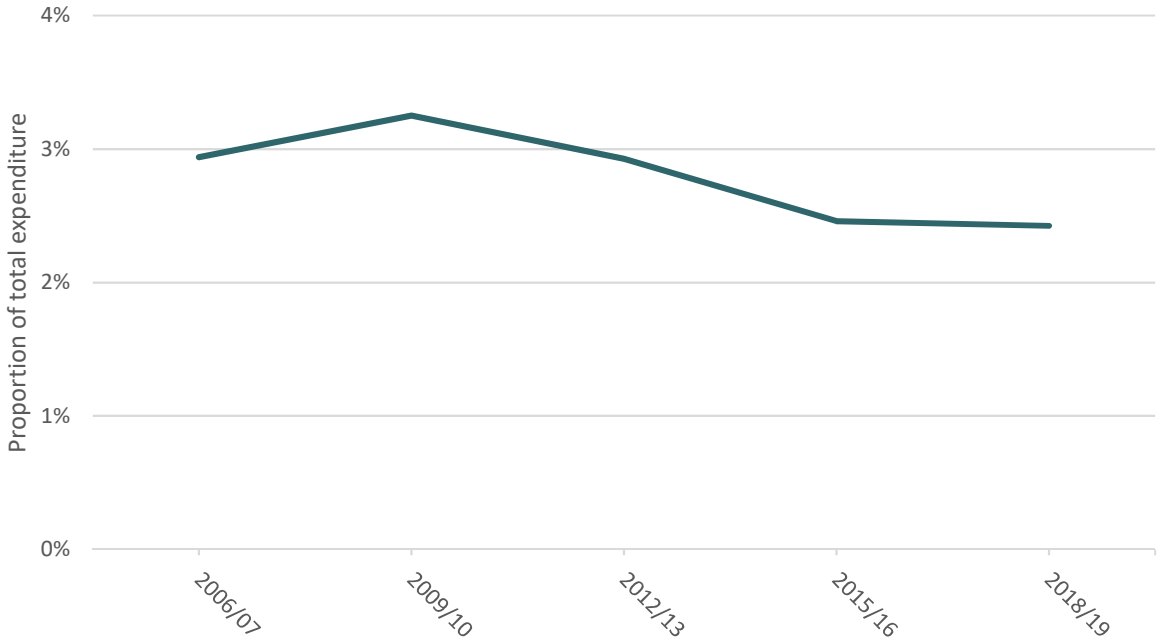
Source: Statistics New Zealand, household economic survey

Of these common household bills, only energy (such as electricity and gas) showed a decrease in expenditure between 2016 and 2019. Overall, the 2019 HES estimated that, on average, households spent a total of $5,857 per month on goods and services.

Telecommunications expenditure as a proportion of total expenditure stable

As shown in Figure 9, household expenditure on telecommunications as a proportion of total household expenditure is relatively stable. In 2019, the HES estimated that expenditure on telecommunications services was 2.42% of total estimated annual household expenditure. This represents a small decrease from 2016 when telecommunications expenditure was estimated to be 2.46% of total estimated household expenditure.

Figure 9: Telecommunications expenditure as a proportion of total expenditure

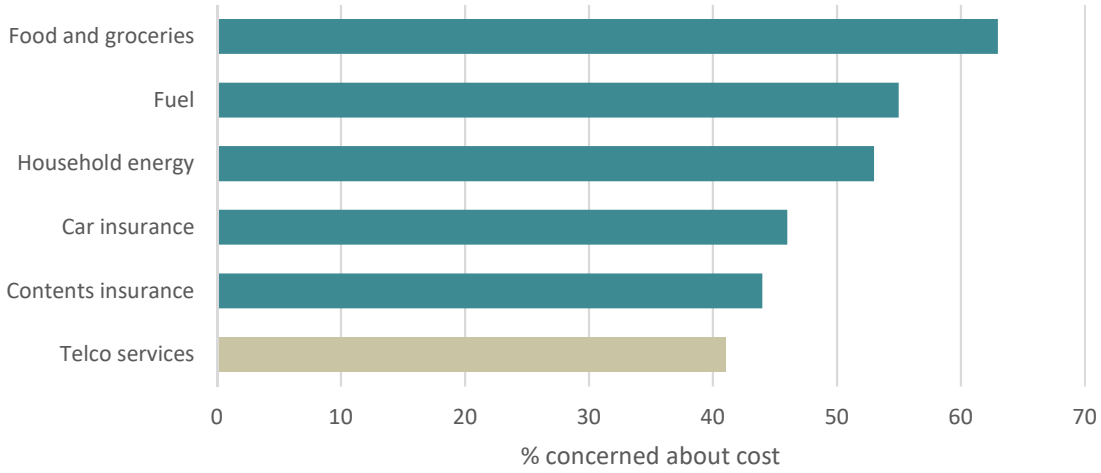


Source: Statistics New Zealand, household economic survey

Consumers concerned about the costs of telecommunication services

ConsumerNZ conducts an annual nationally representative survey of consumers. The 2020 survey included a question about what everyday costs concerned them. 41% of consumers highlighted telecommunications services as an everyday cost that they were concerned with, as shown in Figure 10.

Figure 10: Percent of consumers concerned about everyday costs



Source: ConsumerNZ, 2020 consumer survey

This is a drop from 2018 when 49% of consumers highlighted telecommunications services as an everyday cost that they are concerned about.

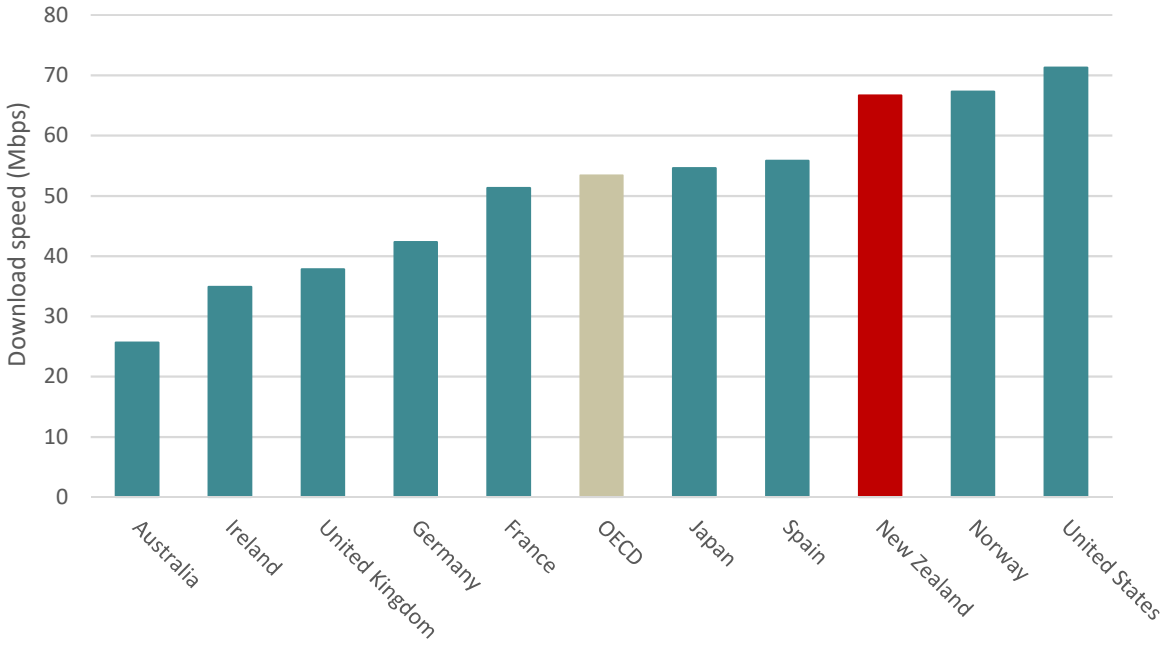
Broadband speeds

Average broadband download speeds exceed OECD average

The website Cable.co.uk creates a yearly worldwide broadband speed league based on data gathered internationally by Measurement Lab (M-Lab). The league ranks the average download speed on fixed broadband connections.[17]

In 2020, New Zealand ranked 12th in the OECD, with average fixed broadband download speeds of almost 67Mbps.[18] Figure 11 below compares New Zealand against the same subset of OECD countries shown in the affordability graphs on page 3. New Zealand's average fixed broadband download speeds exceed Australia, Japan and the OECD average of 53Mbps.

Figure 11: Average broadband download speed



Source: Cable.co.uk

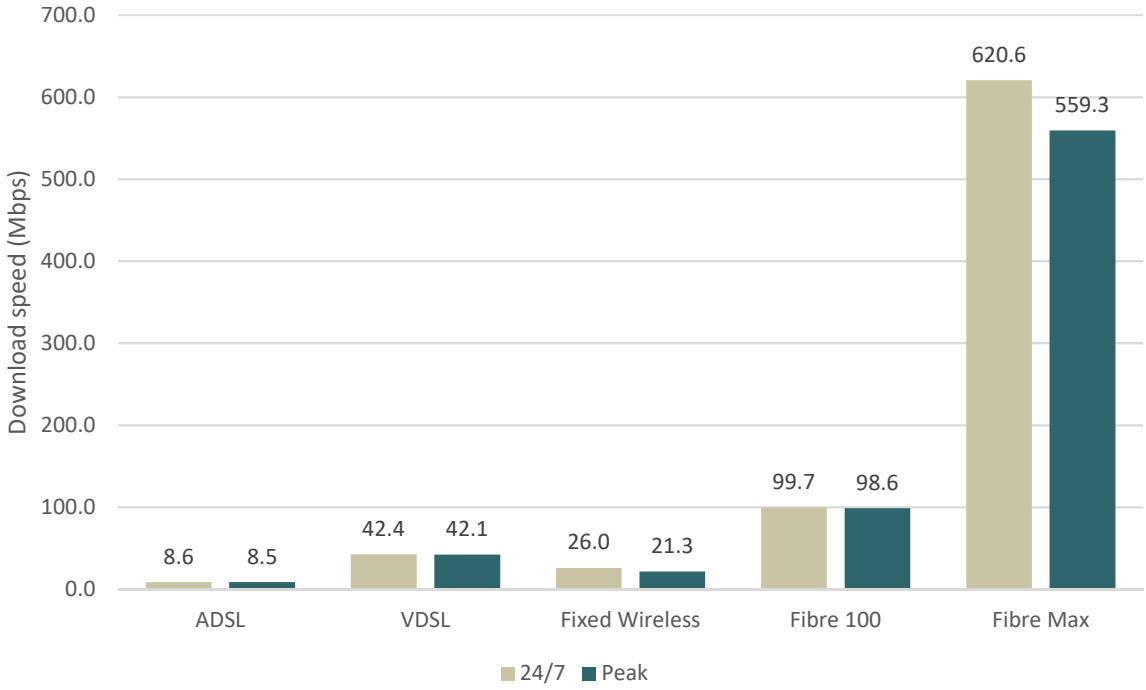
Local performance

We released our Spring 2020 Measuring Broadband New Zealand (MBNZ) Report on 9 December 2020. This report from independent testing partner SamKnows provided a breakdown of the broadband speeds by technology in New Zealand, as shown in Figure 12 below.

[17] Full results and methodology can be found at https://www.cable.co.uk/broadband/speed/worldwide-speed-league/#map

[18] Due to M-lab's platform upgrade, 2020 download speeds are not comparable with 2019 download speeds.

Figure 12: Average broadband download speed by technology



Source: Measuring Broadband New Zealand Spring Report, December 2020

The Spring 2020 report includes further breakdown of the technology results by areas (North Island/ South Island, Region, Urban/ Rural), and a retailer breakdown for Fibre 100 plans.

The report also includes tests showing the performance you can expect to see on popular social media, online gaming, video streaming, and video conferencing services. The full report and previous reports can be found on our MBNZ reports webpage.[19]

Impact of COVID-19 lockdown on NZ internet performance

New Zealand entered alert level 4 in response to the COVID-19 pandemic on 26 March 2020. The huge increase in the number of New Zealanders staying connected, working and learning from home caused heavy demand on broadband networks during the lockdown period.

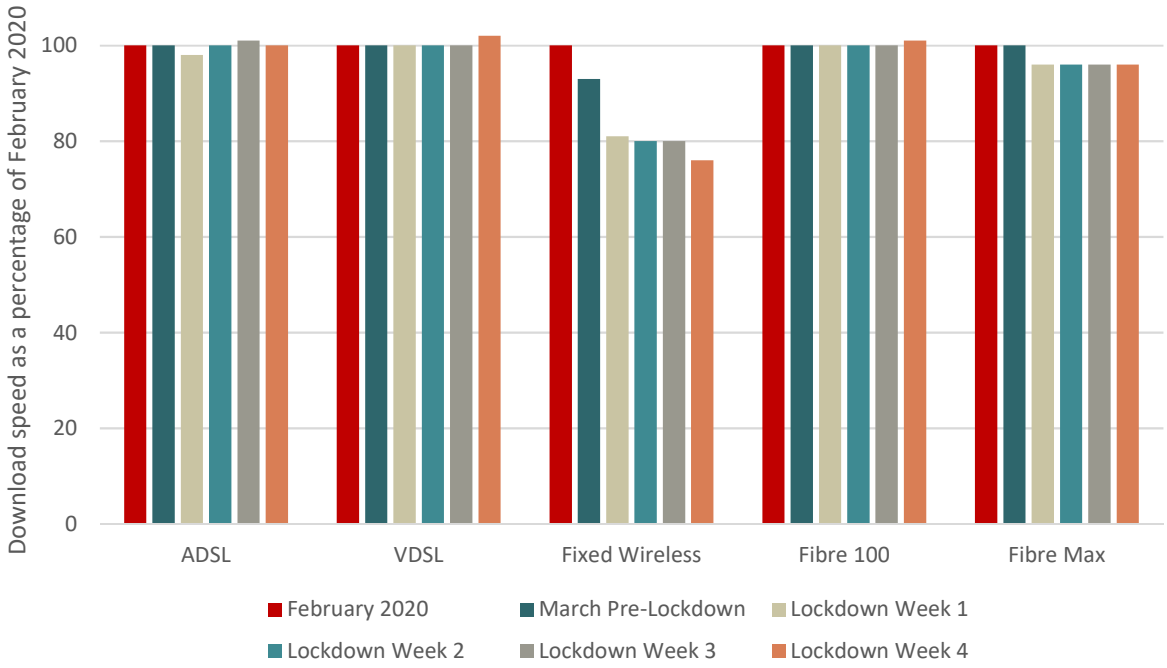
During the first week of lockdown, wholesale provider Chorus released regular reports on the volume of traffic passing through its network.[20] The reports showed that internet usage was at a record high immediately following lockdown with levels stabilising after 7 to 8 days. Throughout the lockdown, Chorus reported that, while traffic volume was high (see Figure 6 on page 12), it was within the range designed to be accommodated by its network.

19 https://comcom.govt.nz/regulated-industries/telecommunications/monitoring-the-telecommunications-market/monitoring-new-zealands-broadband/Reports-from-Measuring-Broadband-New-Zealand

20 See Chorus' COVID-19 media releases 24 March 2020 to 3 April 2020, for example https://company.chorus.co.nz/covid-19-chorus-network-broadband-traffic-update-6

Despite those increases in traffic, the MBNZ testing showed that copper and fibre download speeds stayed fairly steady for most households, as shown in Figure 13.

Figure 13: Impact of lockdown on download speeds



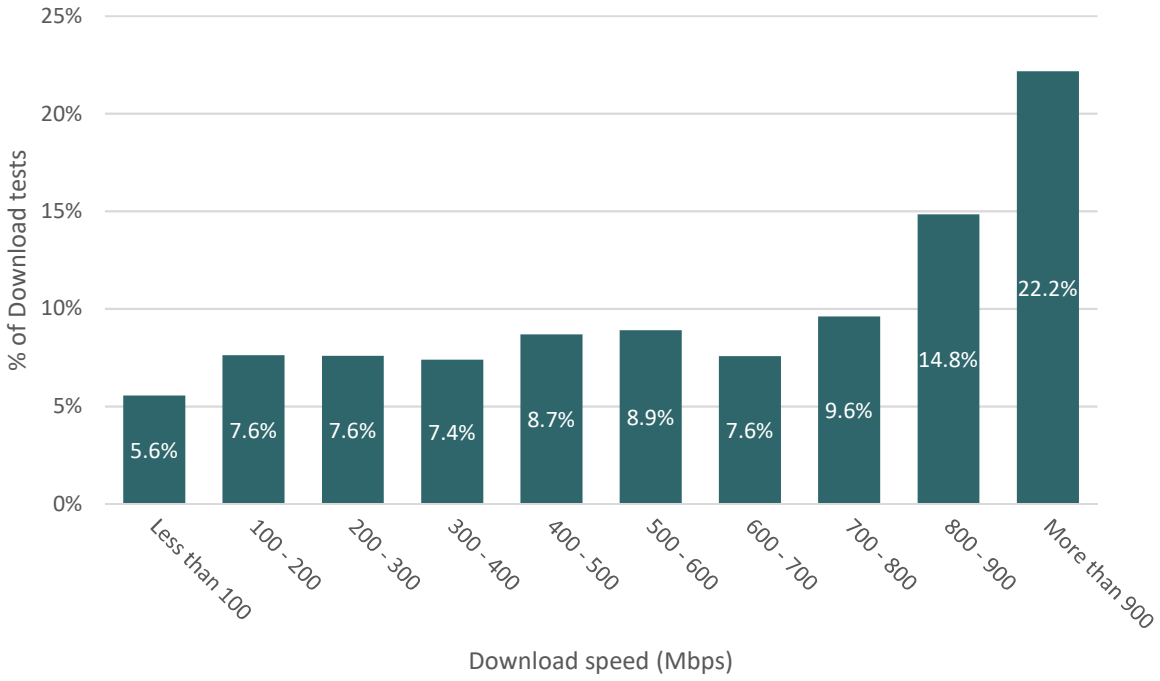
Source: Measuring Broadband New Zealand Autumn Report, May 2020

On average, download speeds for copper (ADSL and VDSL) and Fibre 100 plans continued to perform well, with average download speeds unaffected. Average download speeds for the fastest plan that we test, Fibre Max, decreased by about 4%, which most consumers would not notice given the high speeds on these plans. By contrast, average download speeds for fixed wireless decreased by around 25%, reflecting the susceptibility of performance of these services to loads on the mobile networks over which they are provided.

Fibre Max investigation

FibreMax products generally promise download speeds of around 700 to 950 Mbps but since the MBNZ testing programme was launched in 2018, testing has shown that the performance of Fibre Max plans has varied greatly (see Figure 14 below).

Figure 14: Distribution of download speed tests results on Fibre Max plans



Source: Measuring Broadband New Zealand Spring Report, December 2020

To help identify the cause of the inconsistent performance, in 2020 a working group of retailers and fibre wholesalers worked with the Commission and independent testing partner, SamKnows.

In December 2020, a Fibre Max Status Update Report was published that outlines the conclusions from the investigation into Fibre Max performance.[21] Multiple factors were discovered during the investigation and the resulting network changes implemented are helping to lift the performance of Fibre Max plans.

Two retailers have already seen their average download speeds improve by 150-250 Mbps. There are further changes planned to enhance the performance of Fibre Max plans including improvements to wholesale equipment.

This investigation highlighted the value of the programme for improving internet performance for all New Zealanders.

The next testing report, due to be released in the April 2021, will further assess the improvement of Fibre Max plans and results by retailers.

[21] The Fibre Max Status Update Report can be found at https://comcom.govt.nz/regulated-industries/telecommunications/monitoring-the-telecommunications-market/monitoring-new-zealands-broadband/Reports-from-Measuring-Broadband-New-Zealand; and a more detailed Fibre Max Investigation Report can be found at https://comcom.govt.nz/regulated-industries/telecommunications/monitoring-the-telecommunications-market/monitoring-new-zealands-broadband

Industry investment

Fibre investment drops while mobile investment rises

In recent years, telecommunications industry investment has been led by Chorus and the Local Fibre Companies (LFCs), as shown in Figure 15 below. However, with the UFB build now 93% complete, investment by Chorus and the LFCs has dropped. This drop has led to overall investment decreasing by 6% to $1.61 billion in 2020.

Figure 15: Telecommunications investment

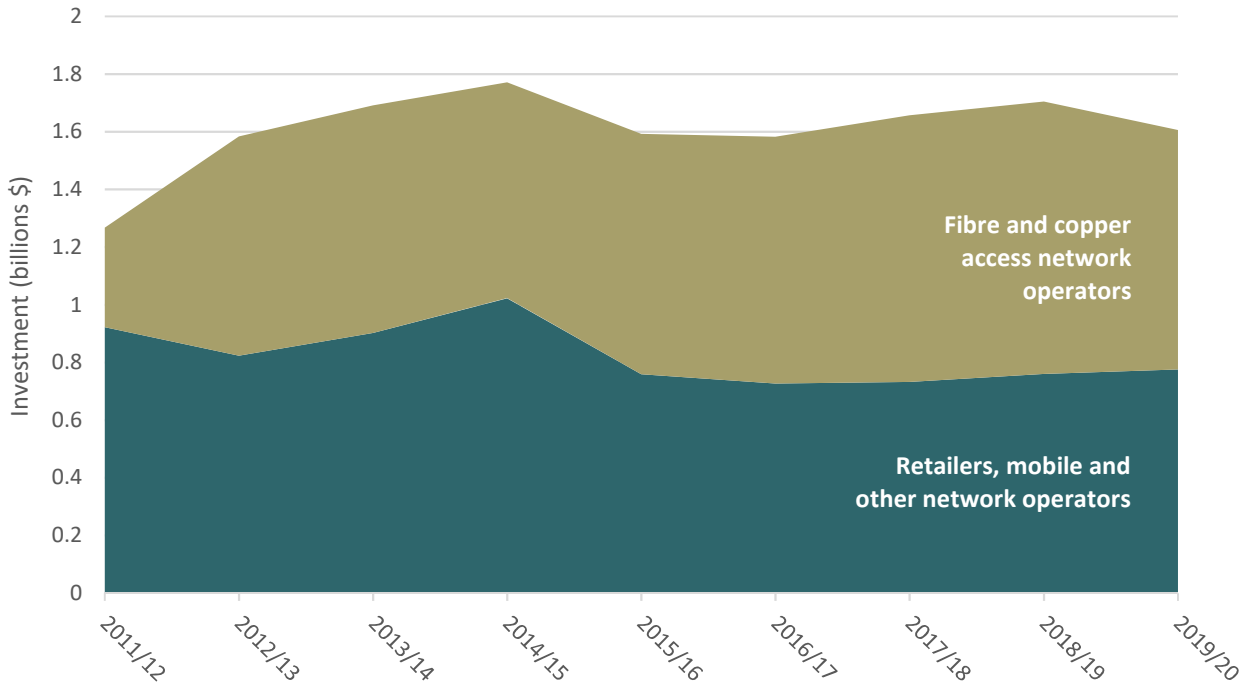
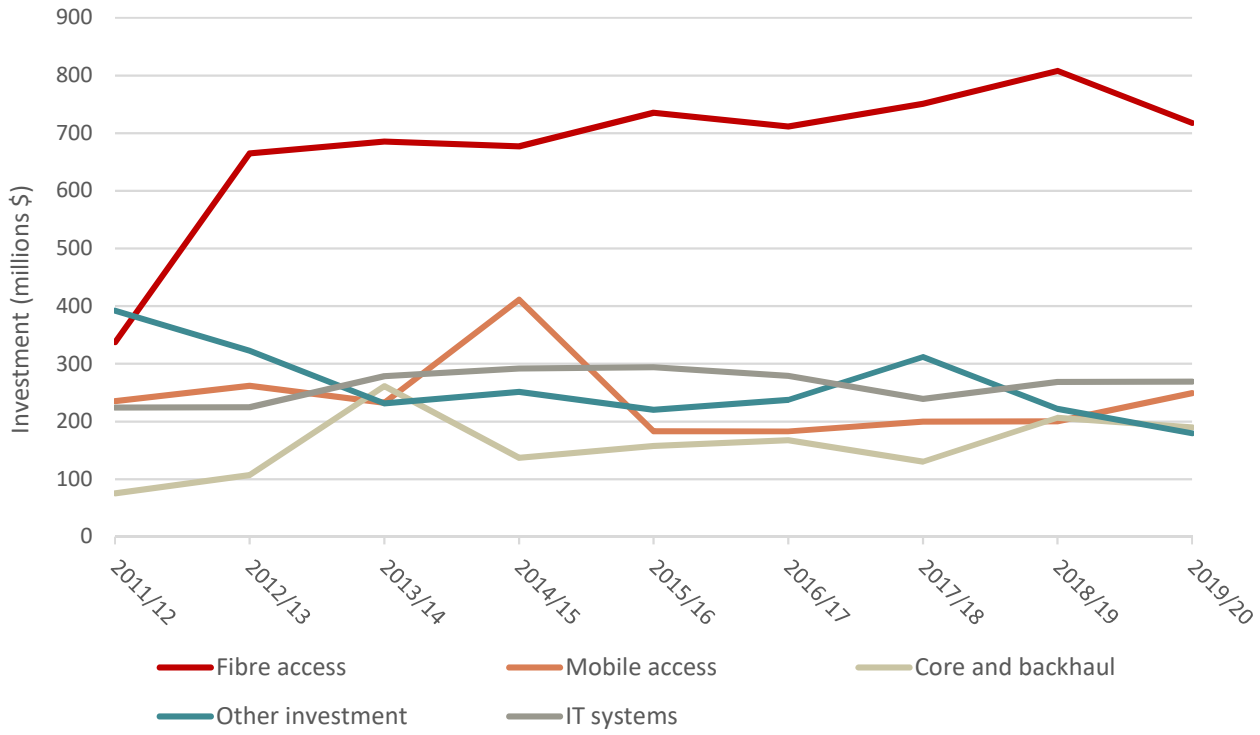


Figure 16 below shows investment broken down by component. In 2020, investment in the fibre access network decreased 11% to $718 million, while investment in the mobile access network increased by 24% to $249 million. This lift in mobile access network investment is likely due to the rollout of 5G starting.

Investment in the core and backhaul network was down on last year to $190 million while IT systems investment was unchanged from last year at $269 million. Other investment, which includes copper access investment, decreased 19% in 2020 to $269 million.

Figure 16: Investment by component



Market shares

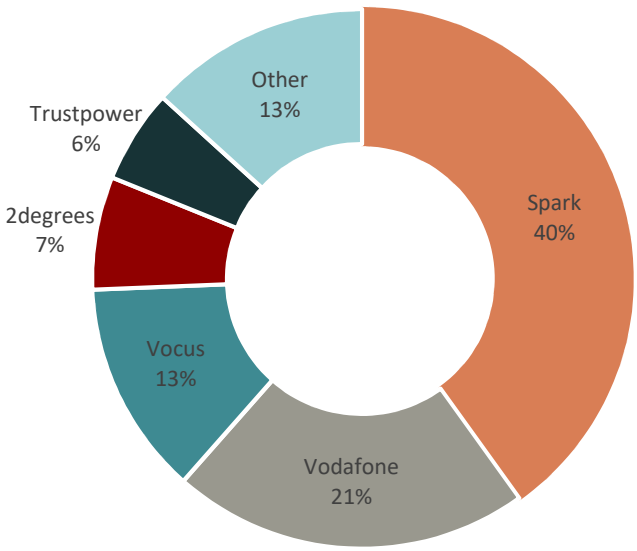
Fixed broadband market

Figure 17 shows the 2020 estimated market shares of the largest retailers of fixed-line broadband by number of connections.

The smaller retailers continue to grow their share of market connections with the market share of 'Other' providers' increasing from 11% in 2019 to 13% this year.

2degrees overtook Trustpower to become the 4th largest provider with 7% of the market. Spark's market share, which includes its sub-brand Skinny, marginally decreased from 41% in 2019 to 40% in 2020. Vodafone's market share also dropped, from 24% in 2019 to 21% in 2020. While Vocus' market share remained steady at 13%.

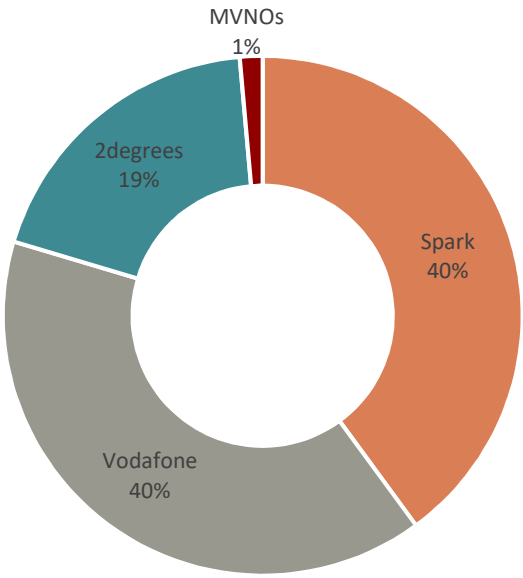
Figure 17: Estimated fixed broadband retailer market share by connections



Mobile market

Figure 18 shows the 2020 market shares of the main mobile market operators plus the five Mobile Virtual Network Operators (MVNOs) included in our questionnaire (Compass, Kogan Mobile, Trustpower, Vocus, and Warehouse Mobile).

Figure 18: Mobile market shares by subscribers[22]



Vodafone and Spark (including its sub-brand Skinny) both take 40% of the market each. MVNO subscribers make up the final 1.4% of the mobile market with 88,500 subscribers, up 10% on last year.

Both Kogan Mobile and Trustpower were included for the first time in our questionnaire with Kogan Mobile launching in September 2019 on the Vodafone network and Trustpower launching in the first half of 2020 on the Spark network.

[22] Market shares are not directly comparable to 2019 due to a methodological change. The graph included in the 2019 report used a mix of publicly reported subscriber numbers and responses to our questionnaire (which use different prepay subscriber definitions), while the 2020 graph only uses responses to our questionnaire.

Market monitoring updates

Ongoing section 9A studies

Measuring Broadband New Zealand (MBNZ)
Our MBNZ programme aims to provide consumers with independent information on broadband performance across different technologies, providers and plans to help them choose the best broadband for their household.

We have so far released six reports that compare technologies across several measures including download and upload speeds, video streaming, social media, online gaming and video conferencing services performance. Our December 2020 report also included geographic and provider comparisons for the Fibre 100 plan.

We are still looking for volunteers to complete our sample of 3,000. Adding more volunteers to the programme will enable us to show more comparisons of providers and geographic regions across all the measures and plans we test.

To volunteer go to www.measuringbroadbandnewzealand.com.

Mobile bill review
The purpose of our section 9A study of mobile bills was to understand how well consumers match their purchasing decisions with their mobile usage, how they consume different types of mobile services, such as add-ons and casual rates, and whether relatively passive consumers could save money if they changed their purchasing behaviour.

In March 2021 the three mobile network operators committed to implement a set of measures to provide greater access and transparency of spend and usage information for consumers. These measures will be implemented by the three network operators by the end of 2021, and should enable consumers to assess whether they are on the right mobile plan for their needs

Upcoming section 9A work

Consumer retail service quality survey
We have commissioned a large-scale survey to measure consumers' experience of specific areas of telecommunications retail service quality, for example, customer service and the speed and performance of their telecommunications services.

Information from the survey will steer the focus of the Commission's activities to resolve any issues of poor quality. We also intend to publish information from the survey to help consumers choose their phone or broadband services.

List of defined terms

ADSL	Asymmetric Digital Subscriber Line – a type of DSL
CIP	Crown Infrastructure Partners – Crown agency formerly known as Crown Fibre Holdings
DSL	Digital Subscriber Line – method of transmitting high-speed data and, if necessary, voice simultaneously over a copper phone line
GB	Gigabyte. 1 gigabyte = 1024 megabytes
HES	Household Economic Survey – Statistics New Zealand survey which collects information on household income, savings, and expenditure
HFC cable	Hybrid Fibre-Coaxial cable – broadband network in parts of Wellington, Kapiti and Christchurch which uses fibre-optic and copper cabling
LFC	Local Fibre Company - these are the four companies contracted with government agency Crown Infrastructure Partners to deploy the UFB fibre network
M-Lab	Measurement Lab – an open source project dedicated to providing an open, verifiable measurement platform for global network performance
MB	Megabyte – a multiple of the unit byte for measuring the quantity of digital information
MBNZ	Measuring Broadband New Zealand – a programme run by the Commission to measure the broadband performance of New Zealand households
Mbps	Megabits per second – used to measure data transfer speeds of high bandwidth connections, such as fibre, Ethernet and cable modems
MVNO	Mobile Virtual Network Operator – an operator that provides mobile phone services but does not generally have its own licensed frequency allocation of radio spectrum or much of the infrastructure required to provide mobile telephone service. It therefore relies on buying services from an operator with a full mobile network. The amount of control it has over the services it offers will vary according to the nature of its agreement
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing Power Parity – an exchange rate designed to equalise standard-of-living differences between countries, and generally accepted as an appropriate conversion method for non-tradable goods and services
SMS	Short Message Service – commonly known as a text messaging, is a service for sending short messages between mobile devices
The Act	The Telecommunications Act 2001
UCLL	Unbundled Copper Local Loop – a Chorus copper line that connects a phone user to the local exchange that can be accessed by retail telecommunications providers to provide a voice and broadband service
UFB	Ultra-Fast Broadband – the name given to the Government's initiative to roll out a fibre-to-the-premises access network to give households and businesses access to very high-speed broadband
VDSL	Very High Bitrate (high-speed) DSL