Q4 FY24 Connections Update

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Q4 FY24 overview

> **Fibre connections (including non-address points and LFC areas) increased 10k (Q3 FY24: +12k) and now total 1,084,000***

> **Chorus' fibre footprint now covers 1,506,000 addresses (excluding LFC areas)**
>   - fibre passed another 7,000 addresses in Q4 (Q3: +7k)
>   - overall fibre uptake grew 0.4% to 71.4% in Q4 (Q3: +0.4%)
>   - Auckland +0.1%; Dunedin +0.2%; Wellington no change

> **Broadband connections reduced 3k to 1,185,000***
>   - in Chorus fibre areas, a 9k increase in fibre broadband connections offset a 7k reduction in copper broadband
>   - fibre connections of 500Mbps+ grew by 8k across residential and business plans
>   - Home Fibre Starter (50Mbps) connections grew 9k to 47k

> **Total fixed line connections declined by 9k (Q3: -6k) and now total 1,241,000***
>   - copper broadband and voice connections declined by 19k (Q3: -18k)
>   - voice only disconnections were -6k (Q3: -6k)
>   - copper withdrawal: 1,253 copper broadband cabinets no longer have active customers (Q3: 996 cabinets)

> **Average monthly data usage on fibre grew from 598GB to 623GB**
>   - the proportion of terabyte users (i.e. consuming 1,000GB+ a month) lifted from 15% to 16%

*FY24 totals include fibre and copper DSL broadband connections Chorus is partly subsidising for student households

Fibre comprises 87% of Chorus connections

	30 June 2023	30 Sept 2023	31 Dec 2023	31 March 2024	30 June 2024
Baseband copper (no broadband)	72,000	64,000	57,000	51,000	45,000
Copper ADSL (includes naked)	84,000	75,000	68,000	62,000	56,000
VDSL (includes naked)	83,000	75,000	68,000	62,000	55,000
Data services (copper)	1,000	1,000	1,000	1,000	1,000
Fibre broadband (GPON)	1,021,000	1,041,000	1,052,000	1,064,000	1,074,000
Fibre premium (P2P)	10,000	10,000	10,000	10,000	10,000
Total connections	1,271,000	1,266,000*	1,256,000*	1,250,000*	1,241,000*

- Copper connections declined 19k (~11%) in Q4 and total 157k

- Fibre connections grew 10k (~1%) in Q4 and total 1,084k

* Includes DSL and GPON partly subsidised education connections that were previously excluded from broadband totals

Fibre uptake grew 0.4% to 71.4%

- **71.4% fibre uptake across 1,506,000 passed addresses***
  - uptake +0.4% in Q4
  - +9k fibre connections to addresses**
  - +7k addresses passed in Q4

- **1,294,000 fibre installed addresses**
  - 20k installations in Q4 (Q3:~18k)
  - 212,000 addresses passed by fibre, but fibre socket not yet installed (Q3:226k)

Legend: Fibre connected | Inactive fibre sockets*** | Fibre socket not yet installed | Fibre uptake (%)
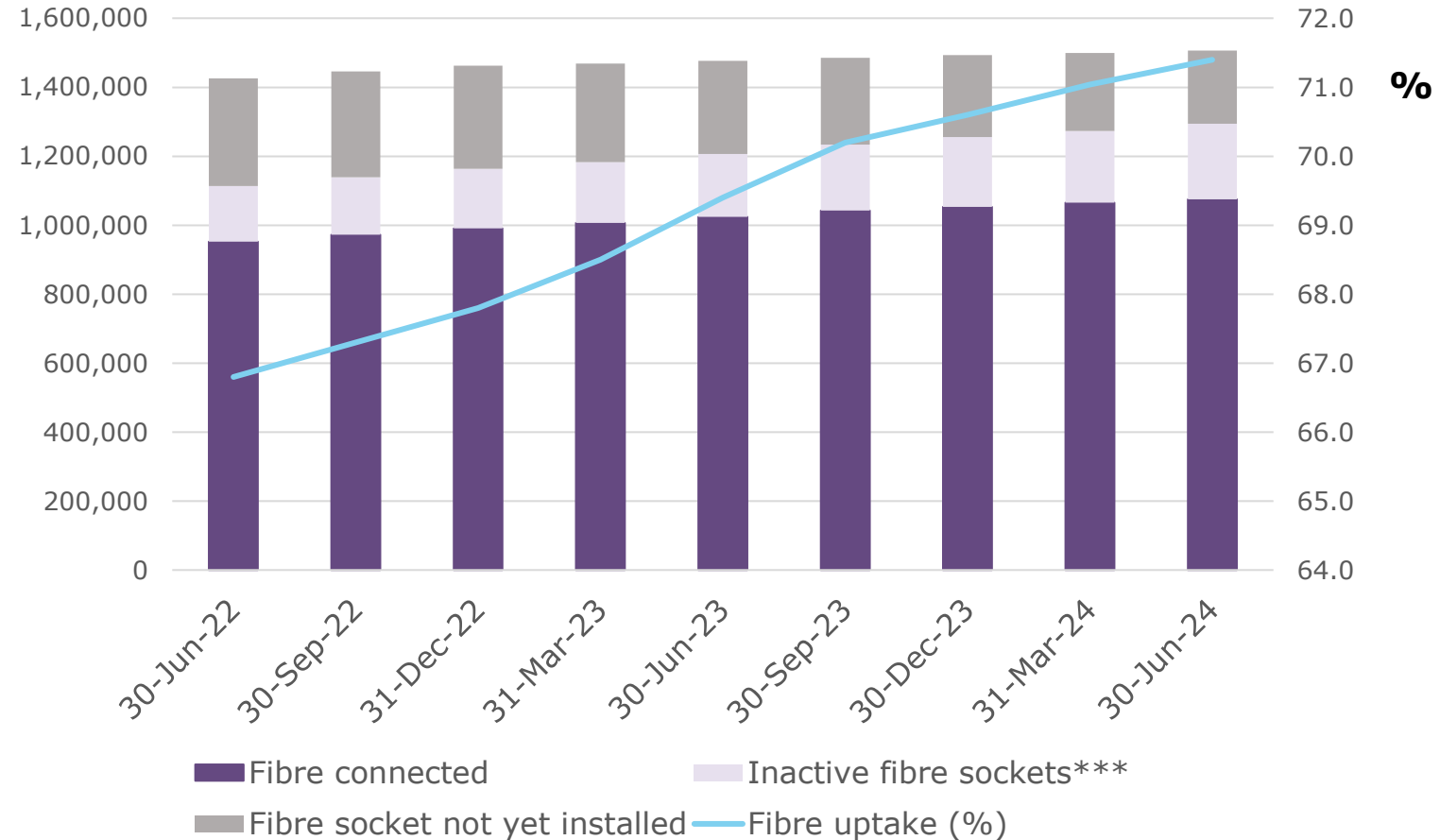
*based on independent address data and Chorus network data for addresses passed by fibre; excludes Chorus fibre in LFC areas
** includes ~7k fibre premium connections to addresses; excludes smart location (GPON) connections and connections in LFC areas
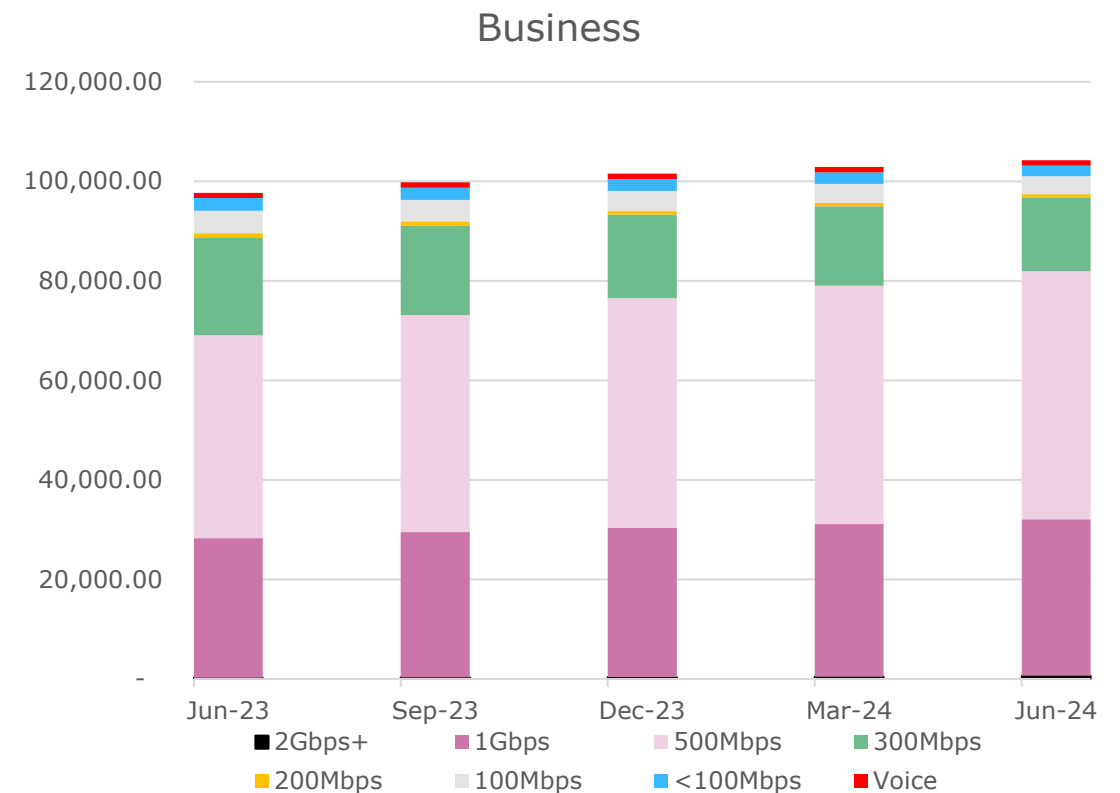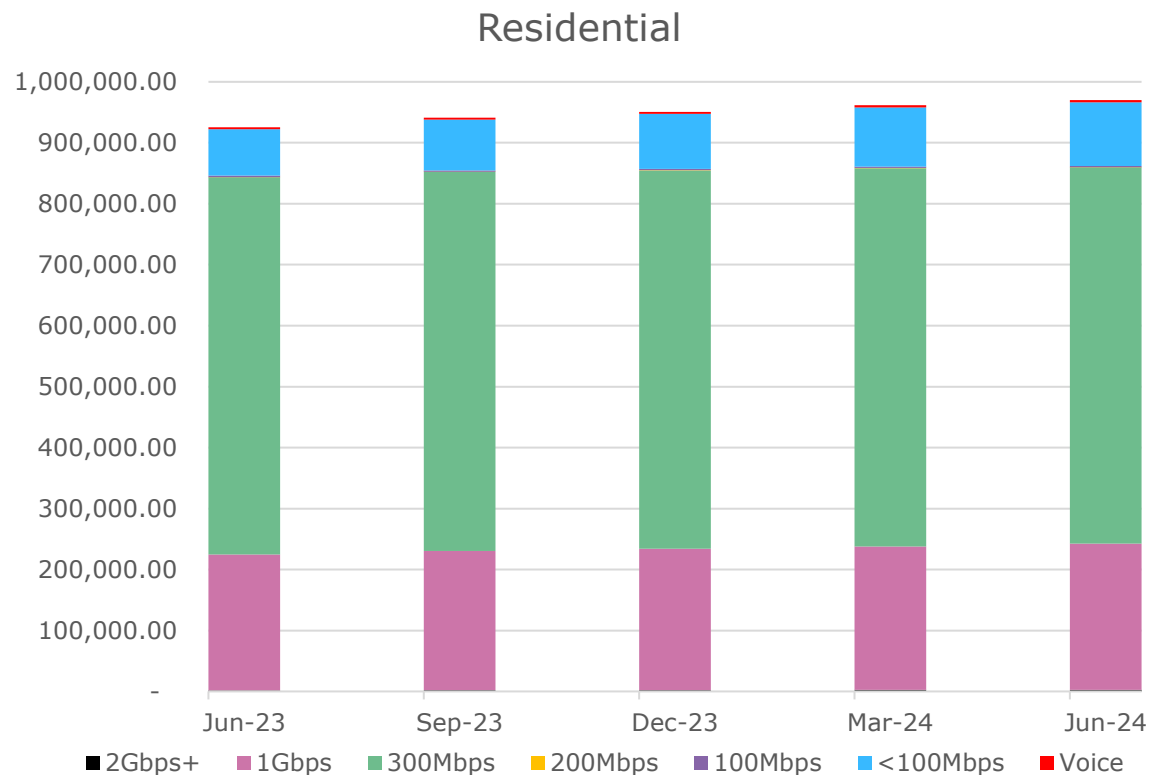*** not active on 30 June 2024

Uptake by city

> Uptake is measured across "urban areas" as defined by Statistics NZ, rather than the original UFB rollout area

- **Auckland** uptake grew 0.1% to 76.6% in Q4 despite ongoing address growth
- **Dunedin** uptake increased 0.2% to 76.5%
- **Wellington** uptake was flat at 70.7% as address growth offset connections growth

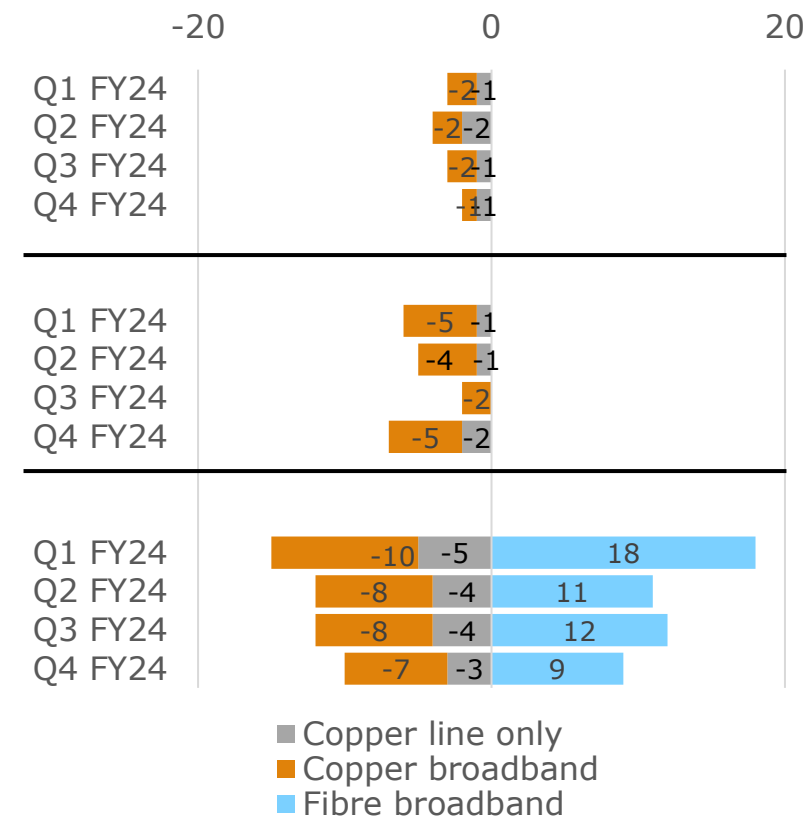**Uptake, by urban area, for fibre passed addresses**
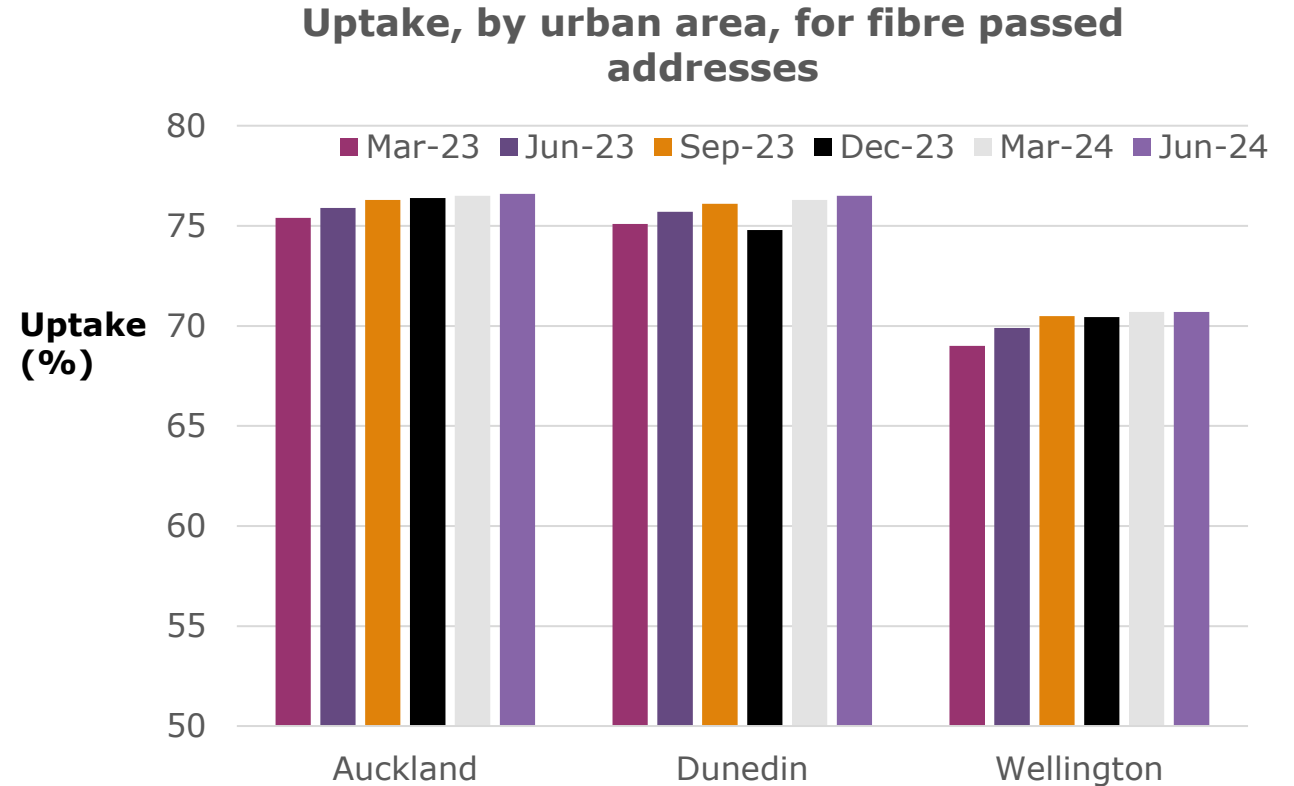
Mass market fibre connections

> Home Fibre Starter (50Mbps) connections grew by 9k to 47k; plans below 300Mbps are 11% of residential connections
> business and residential connections of 500Mbps+ grew by 8k
> 79% of business connections are on 500Mbps or faster; 25% of residential plans are on 1Gbps or faster
> Hyperfibre connections of 2Gbps and above grew to 3.5k with ~80% on residential plans

Residential

Business

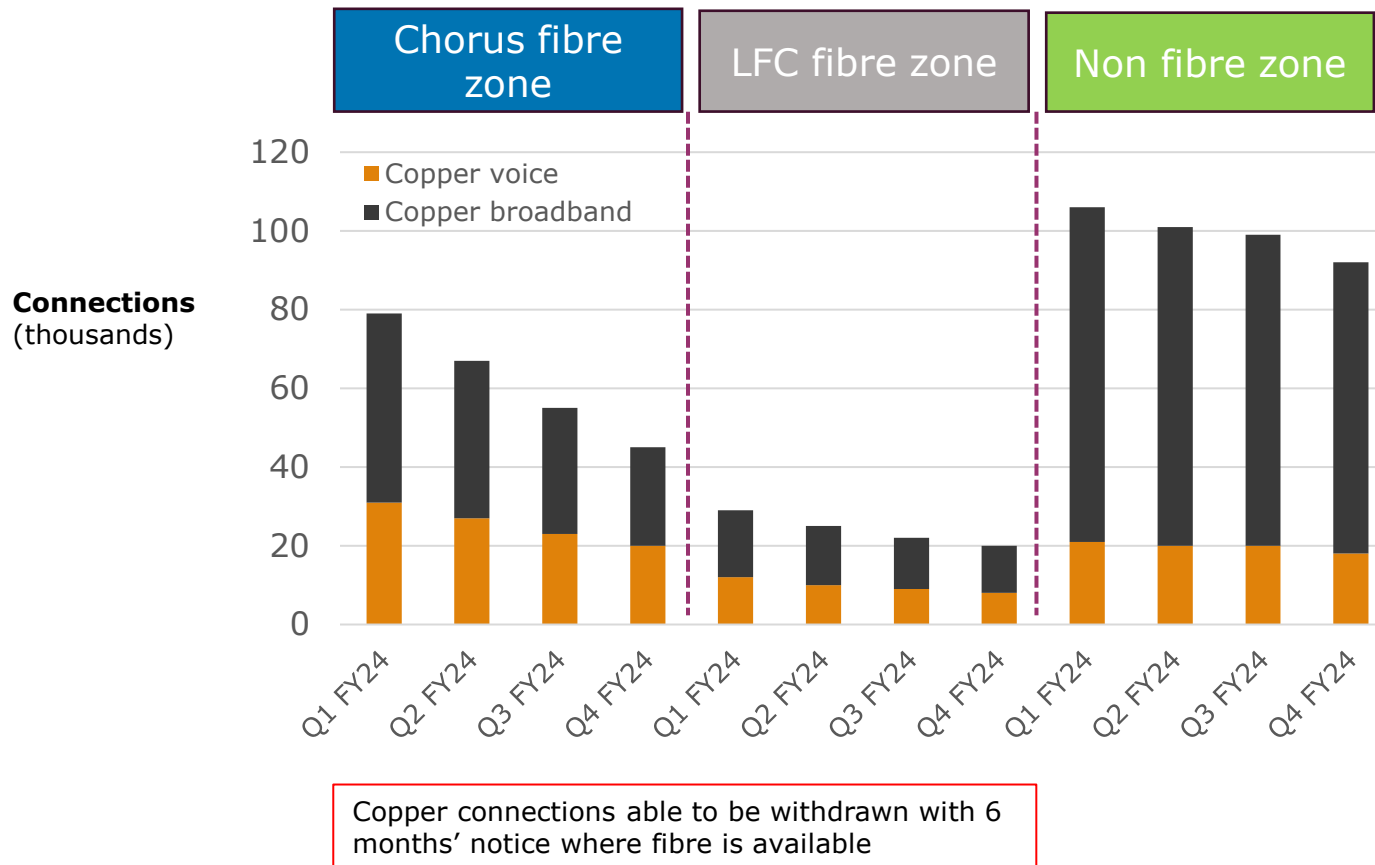# Connection changes by Zone (indicative as at 30 June*)

Other fibre company (LFC) zone	Copper lines (no broadband)	8,000	Local Fibre Company and fixed wireless provider activity is driving a gradual decline in copper connections.
	Copper broadband lines	12,000	
	Fibre broadband lines (GPON)	3,000	
	TOTAL	**23,000**	
Non-fibre addresses (i.e. Chorus fibre not available)	Copper lines (no broadband)	18,000	Ongoing decline in copper connections due to mobile/fixed wireless/satellite footprint expansion.
	Copper broadband lines	74,000	
	TOTAL	**92,000**	
Chorus fibre zone	Copper lines (no broadband)	20,000	Covers all addresses outside of LFC UFB rollout zone where Chorus fibre is available. Fibre footprint is growing as a result of new property development. Copper connections are reducing as Chorus retires its copper network.
	Copper broadband lines	25,000	
	Fibre broadband lines (GPON)	1,068,000	
	TOTAL	**1,113,000**	

Quarterly change ('000s) by zone

* Excludes ~13k fibre premium and data services (copper) and smart location connections

Copper withdrawal: 30k connections under notice

| Chorus fibre zone | LFC fibre zone | Non fibre zone |

Connections (thousands)

Legend: Copper voice, Copper broadband

X-axis categories: Q1 FY24, Q2 FY24, Q3 FY24, Q4 FY24 (repeated across three zones)

Copper connections able to be withdrawn with 6 months' notice where fibre is available

> **~82,000 copper withdrawal notifications issued (cumulative) in fibre areas**
>   - copper service ceased for ~52,000 notified connections; ~30k currently under notice
>   - 1,253 copper broadband cabinets closed (Q3: 996); 1,416 under closure notice
>   - broadband retention rate of 78% across closed cabinets

> **managed migration initiatives: activation of installed fibre sockets (ONTs)**
>   - ~6k sockets activated in Q4 (Q3: ~6k)
>   - 59% of activations were offnet addresses (Q3: 58%)

Monthly average data usage on fibre 623 gigabytes

Monthly average data usage per connection*
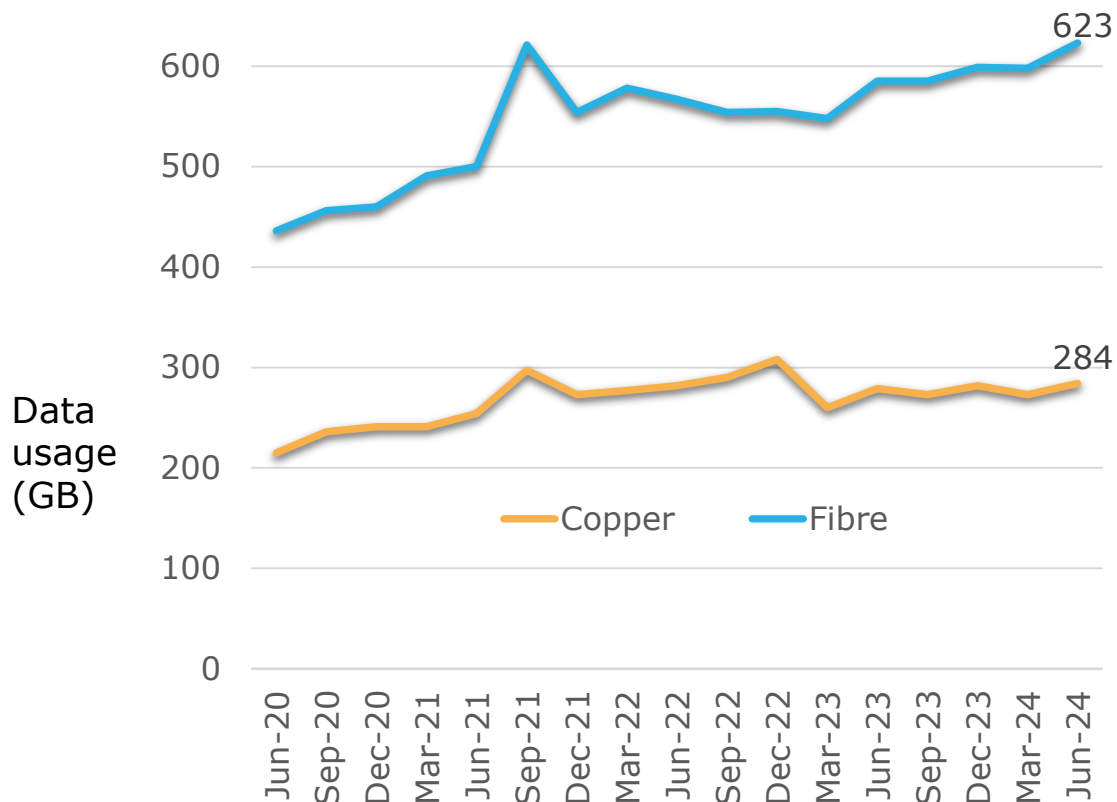
> monthly average data usage on fibre grew to 623GB in June, surpassing the prior peak of 621GB in Sept 2021 during pandemic lockdowns

> the proportion of fibre connections using more than 1 terabyte of data was 16%

> copper usage increased from 273GB in March to 284GB

* includes upstream traffic

OECD data shows an accelerating shift to fibre

Driven by the need for high-quality broadband

Broadband access technologies as share of total fixed broadband subscriptions in OECD countries, June 2023
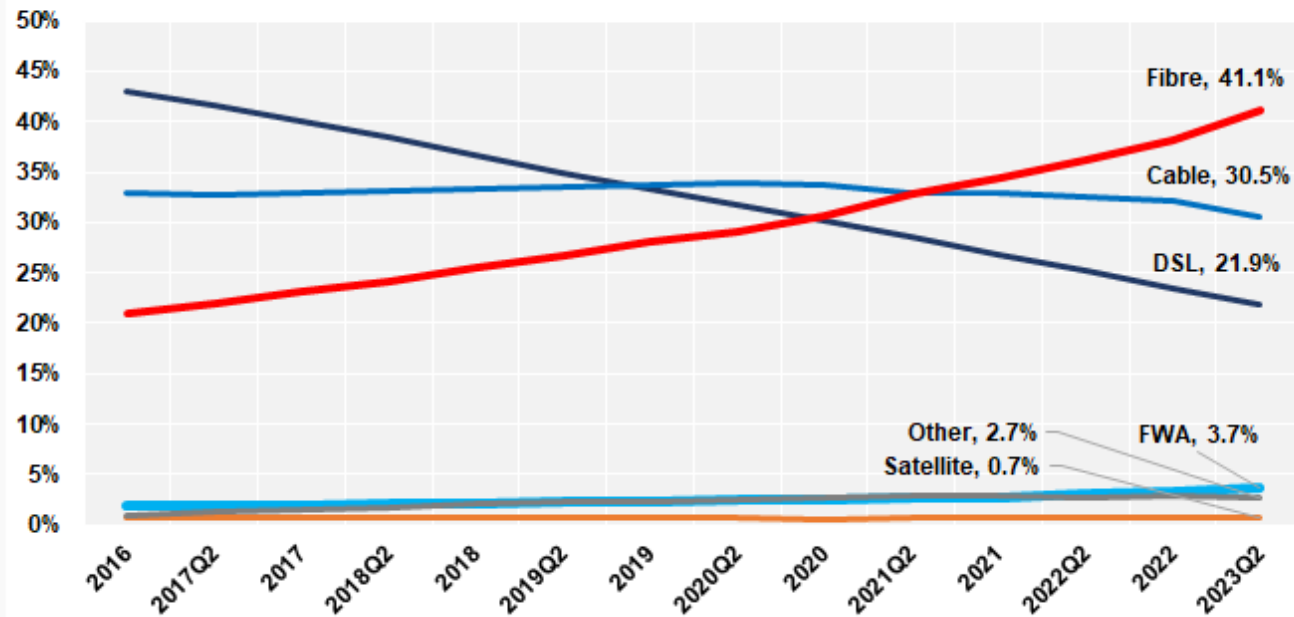
"The recovery from the COVID-19 pandemic leaves no doubt: the future is digital, enabled by globally interconnected high-quality broadband networks. Applications across all sectors of the economy, from online education, telemedicine and sustainable development, to smart factories, smart hospitals to automated vehicles, increase the overall demand on networks.
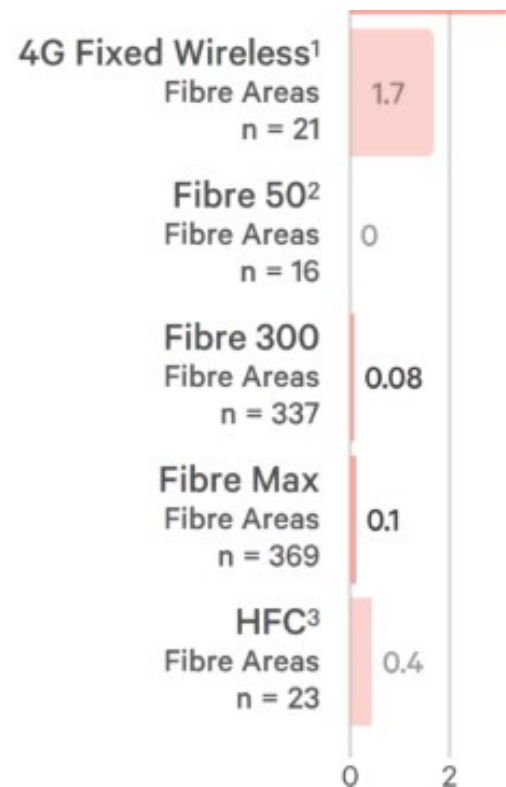
All these applications require the ability to move much more data across networks and require high-quality networks, characterised by high speeds, high reliability (i.e. few errors or delays measured by packet loss), and improved network response times (i.e. low latency)."
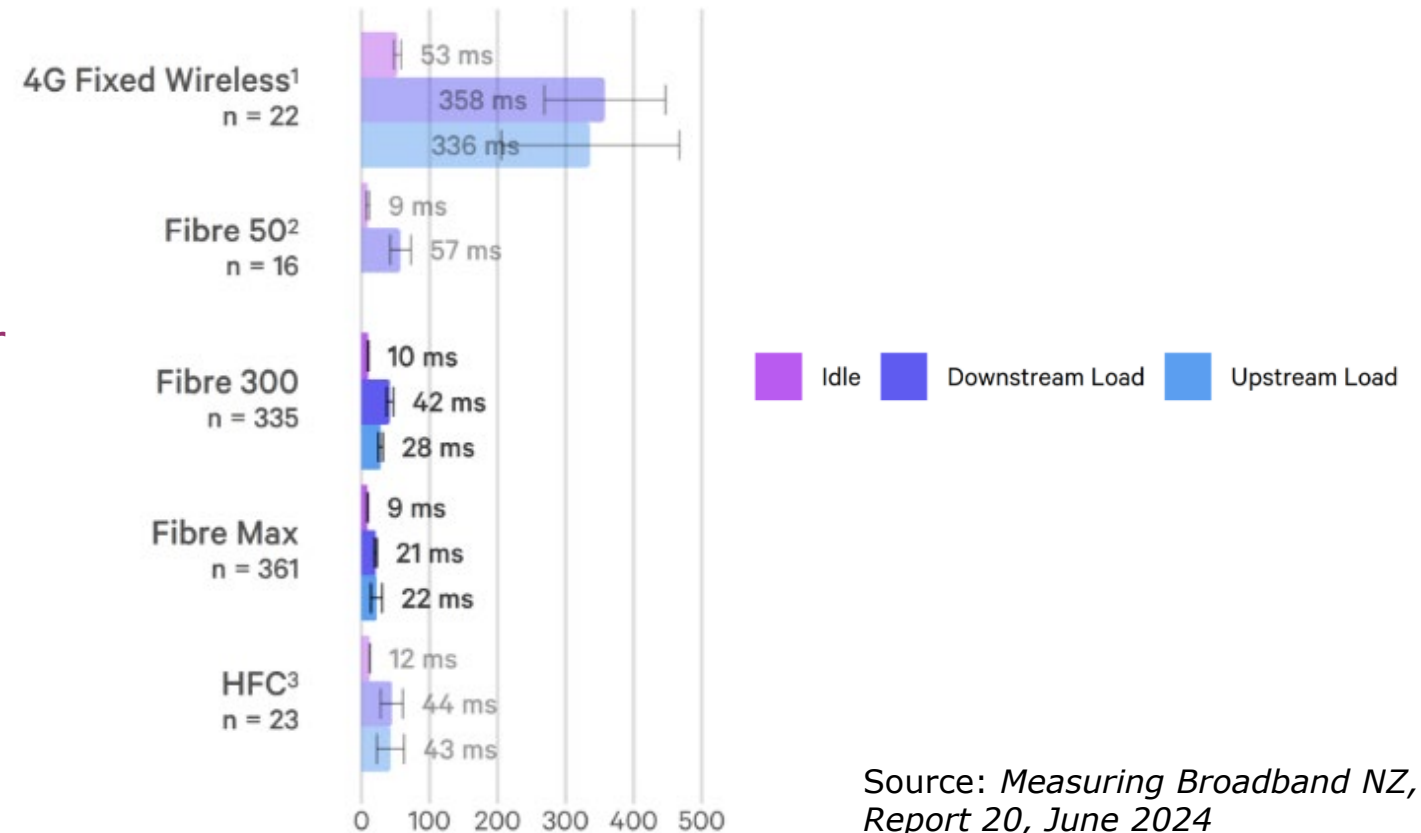**OECD – *Broadband Networks of the Future*, July 2022**

Source: OECD https://www.fibre-systems.com/article/fibre-fwa-experience-strongest-growth-three-years-oecd-countries

MBNZ report shows reliability and consistency of fibre
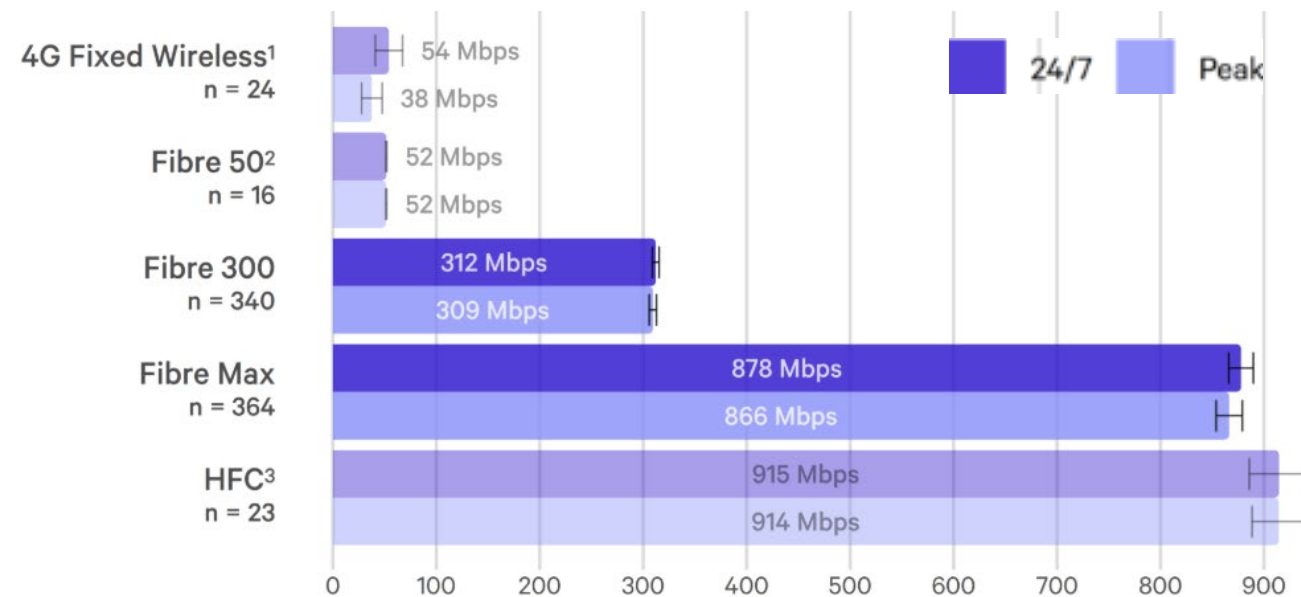
Disconnection rate (per day)

4G Fixed Wireless[1] Fibre Areas n = 21	1.7
Fibre 50[2] Fibre Areas n = 16	0
Fibre 300 Fibre Areas n = 337	0.08
Fibre Max Fibre Areas n = 369	0.1
HFC[3] Fibre Areas n = 23	0.4

Lower is better

Average latency under load (milliseconds)

4G Fixed Wireless[1] n = 22: 53 ms / 358 ms / 336 ms

Fibre 50[2] n = 16: 9 ms / 57 ms

Fibre 300 n = 335: 10 ms / 42 ms / 28 ms

Fibre Max n = 361: 9 ms / 21 ms / 22 ms

HFC[3] n = 23: 12 ms / 44 ms / 43 ms

Idle | Downstream Load | Upstream Load
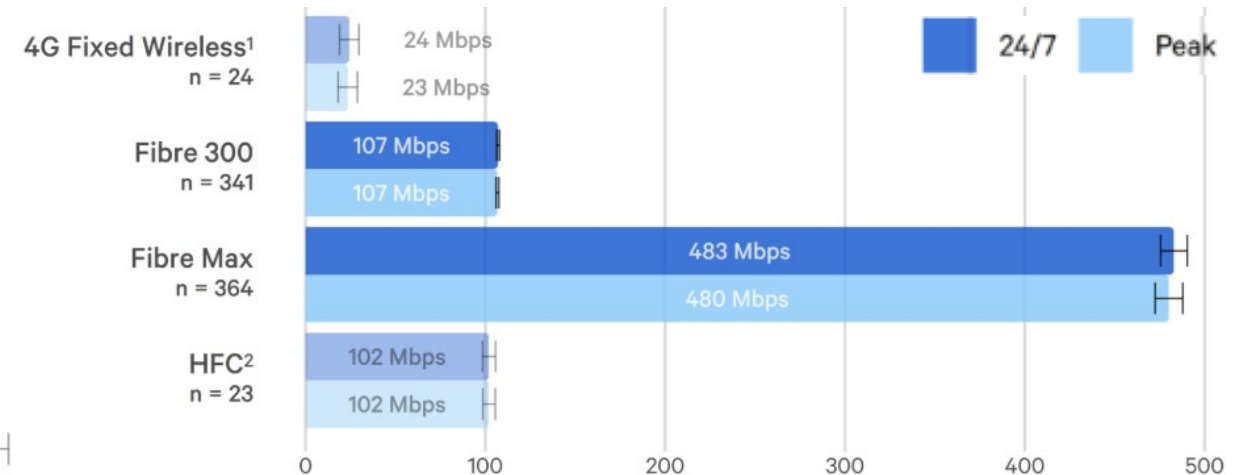
Source: *Measuring Broadband NZ, Report 20, June 2024*

Average Download Speed (Mbps)

Average Upload Speed (Mbps)

Source: *Measuring Broadband NZ, Report 20, June 2024*

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