

**STOCK EXCHANGE ANNOUNCEMENT**

2 December 2024

**Chorus Investor Day 2024**

The attached presentation materials will be delivered at Chorus' Investor Day commencing at 12:45pm (NZT).

The event will be webcast live on [www.chorus.co.nz/webcast](http://www.chorus.co.nz/webcast) and a recording of the presentations will be made available online on Tuesday 3<sup>rd</sup> December.

With the UFB rollout complete, Chorus is in transition from being the Great Network Builder, to becoming the Great Network Operator. The briefing includes further detail on Chorus' recent strategic reset, in 'Our Road to 2030', including:

- a shift to a Purpose-led organisation: "Unleashing potential through connectivity. Enabling better futures for Aotearoa."
- a clear Aspiration for future success: "A simplified all-fibre business with 80 per cent uptake by 2030."
- a more competitive market challenger posture with focus on under-penetrated markets, including new digital equity plans, to drive fibre uptake to 80%
- moving rapidly to retire the legacy copper network by 2030, as demand diminishes, and ultimately reducing direct copper operating expenditure by about \$50 million per annum

Chorus notes a number of growth and optimisation opportunities are actively being explored:

- recycling of about 4,000 kilometres of large copper cabling, over three to seven years, with estimated net proceeds of approximately \$30 million to \$50 million. This is subject to evaluation over FY25.
- reviewing options for non-core high sites with a \$20 million net book value, which may have a better alternative owner in market

- considering post-copper optionality for other land and buildings outside of UFB areas, with a current net book value of about \$75 million
- launching IoT asset management solutions under a new brand, Neura
- developing an alternative revenue model to scale EdgeCentres
- an exclusive memorandum of understanding with Datagrid to investigate the potential for a Trans-Tasman Ring, providing enhanced international and domestic data connectivity
- continuing to advocate for further fibre expansion to rural households through the government's Infrastructure Priorities Planning process

Any growth opportunities requiring further investment will be assessed against Chorus' capital investment framework, noting the cornerstone of that framework is a sustainable dividend that grows at the rate of inflation.

Chorus' strategy will result in a shift to a simpler, more efficient and more competitive all-fibre operator. This is underpinned by fibre regulatory settings that provide greater clarity and stability over the next four years. New Zealand and global trends also clearly back fibre as essential digital infrastructure for reliability and scalability. As bandwidth demand continues to grow, Chorus is forecasting monthly average data usage of 1,000 gigabytes by 2029 as more terrestrial broadcast TV content moves online.

**FY25 guidance reconfirmed**

EBITDA: \$700 million to \$720 million

Gross capital expenditure: \$400 million to \$440 million

Sustaining capital expenditure: \$200 million to \$220 million

Dividend: 57.5 cents per share, unimputed

FY25 guidance is subject to no material adverse changes in circumstances or outlook.

Authorised by:

Mark Aue

Chief Executive Officer

**ENDS**

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# Chorus Investor Day 2024 - Agenda

12:45	Welcome	Mark Aue	CEO
12:50	Board perspective	Mark Cross	Chair
1:00	Strategy	Mark Aue	CEO
1:20	Global broadband trends	Rupert Wood	Analysys Mason – Research Director
1:40	Data demand	Kurt Rodgers	Network Strategy Manager
2:00	Achieving 80% uptake	Elaine Campbell	GM Access
2:20	Q&A		
<b>2:35</b>	<b>Afternoon tea break</b>		
2:50	Infrastructure opportunities	Mike Shirley	GM Infrastructure
3:10	Future-proof fibre	Ewen Powell	Chief Technology Officer
3:25	Regulatory outlook	Julian Kersey	Chief Corporate & Regulatory Officer
3:40	Copper retirement	Anna Mitchell	GM Fibre Frontier
4:00	Financial outlook	Drew Davies	Chief Operating Officer
4:15	Q&A		
4:30	Close	Mark Aue	CEO



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**INVESTOR  
DAY 2024**

# Disclaimer

This presentation:

- Is provided for general information purposes and does not constitute investment advice or an offer of or invitation to purchase Chorus securities.
- Includes forward-looking statements. These statements are not guarantees or predictions of future performance. They involve known and unknown risks, uncertainties and other factors, many of which are beyond Chorus' control, and which may cause actual results to differ materially from those contained in this presentation.
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- Should be read in conjunction with Chorus' audited consolidated financial statements for the year to 30 June 2024 and NZX and ASX market releases.
- Includes non-GAAP financial measures such as "EBITDA". These measures do not have a standardised meaning prescribed by GAAP and therefore may not be comparable to similar financial information presented by other entities. They should not be used in substitution for, or isolation of, Chorus' audited consolidated financial statements. We monitor EBITDA as a key performance indicator, and we believe it assists investors in assessing the performance of the core operations of our business.
- Has been prepared with due care and attention. However, Chorus and its directors and employees accept no liability for any errors or omissions.
- Contains information from third parties Chorus believes reliable. However, no representations or warranties (express or implied) are made as to the accuracy or completeness of such information.

# CHORUS CEO

MARK AUE



# Why we've invited you here today

**Provide greater clarity and transparency on Our Road to 2030**

**Market context has shifted. Reset our Strategy**

**Transitioning from builder to 'Great Network Operator'**

**Purpose and aspiration are clear**

**Capital framework premised on discipline**

**Evolving to a simpler, more efficient, and competitive operator**

# Agenda

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4:30	Close	Mark Aue	CEO

# Who you'll hear from: Chorus speakers



**Mark Cross**  
Chair, Chorus Board



**Mark Aue**  
Chief Executive Officer



**Elaine Campbell**  
Executive GM, Access



**Mike Shirley**  
Executive GM, Infrastructure



**Ewen Powell**  
Chief Technology Officer



**Julian Kersey**  
Chief Corporate and  
Regulatory Officer



**Anna Mitchell**  
Executive GM,  
Fibre Frontier



**Drew Davies**  
Chief Operating Officer



**Kurt Rodgers**  
Network Strategy Manager



# CHORUS BOARD CHAIR

MARK CROSS



# Your Board's beliefs

**Empowering  
our people**

**Fibre is  
future  
proofed**

**Connections,  
connections,  
connections**

**Managed exit  
from Copper**

**Market  
challenger**

**Promote  
digital equity**

**A considered  
approach to  
new  
opportunities**

**An  
appropriate  
capital  
structure**

**Prioritise  
long term  
value  
through  
capital  
allocation**



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OUR ROAD TO 2030

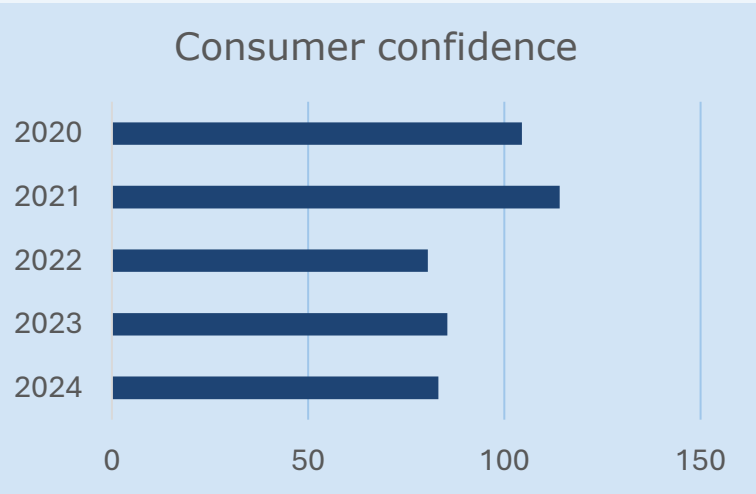
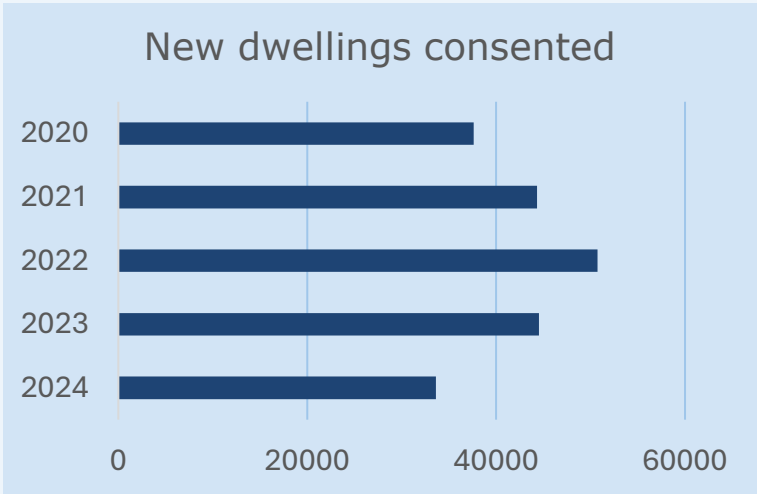
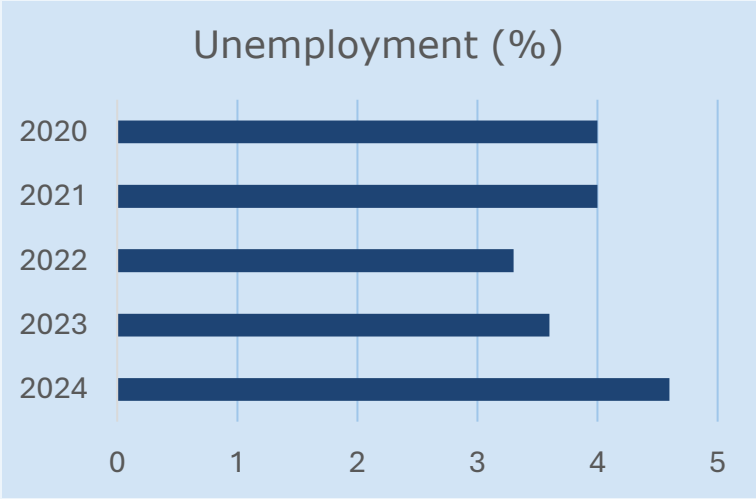
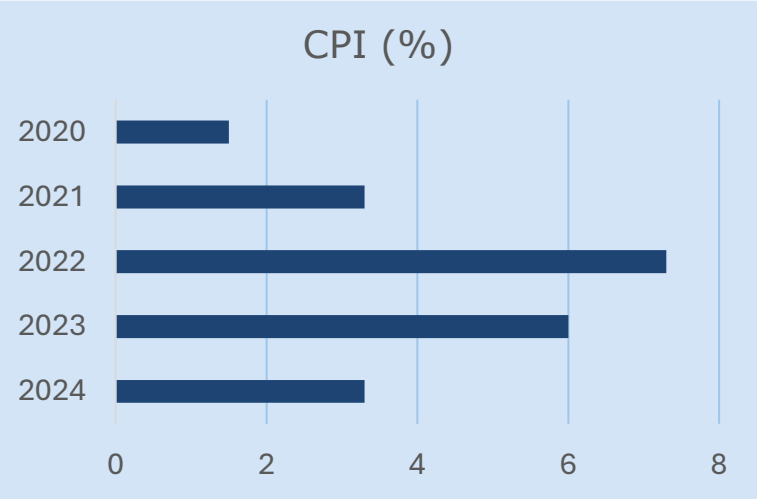
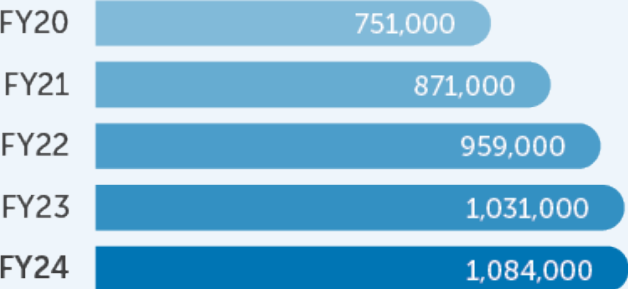
# Fibre has proven resilient in a time of change



REVENUE (\$ million)



FIBRE CONNECTIONS





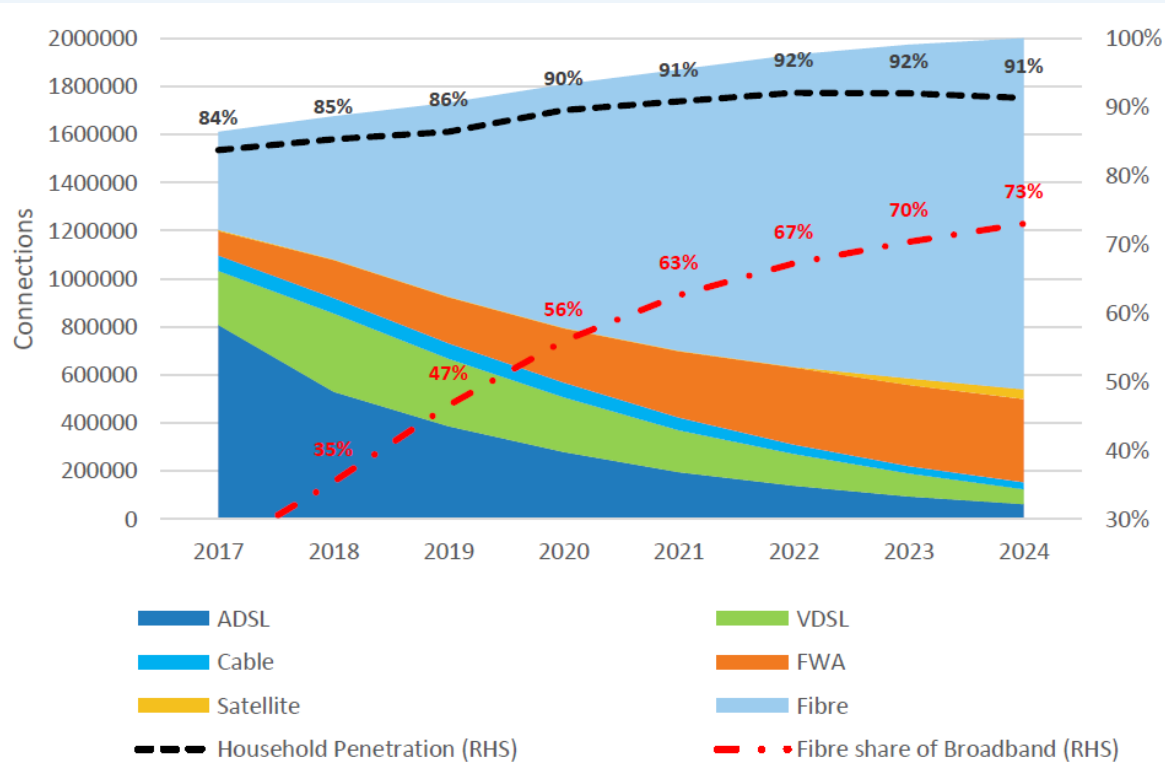
## We have regulatory clarity

### Fibre regime now well established; our focus is legacy copper settings

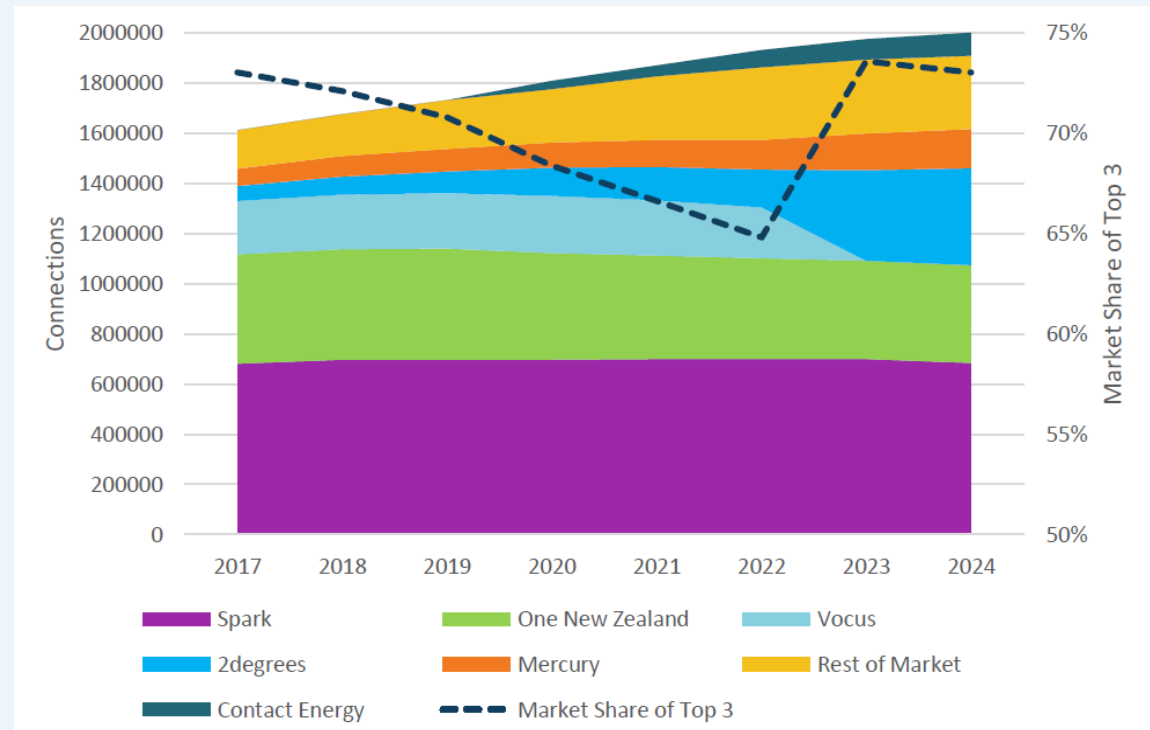
- Fibre RAB has grown through PQP1: \$5.9bn at 31 Dec 2023
- PQP2 period extended to 4 years, up from 3 years for PQP1
- PQP2 capex and opex allowances are workable following constructive feedback process with Commission
- Final PQP2 MAR decision imminent: core RAB depreciation adjustment proposed to reflect MAR tailwinds
- Commission review due in 2025 on copper deregulation

# An evolving broadband market – all NZ

## Household penetration/fibre share %



## Market share by retailer



Source: IDC Telecommunications Market Analysis & Forecast Report 2024

FIGURE 1:  
OVERVIEW OF THE IMPACT OF FIBRE  
INVESTMENT TO THE NEW ZEALAND ECONOMY



Deloitte October 2024 Report:

“Unleashing fibre: The future of digital fibre infrastructure in New Zealand”

C H ● R U S

OUR ROAD TO 2030

# 10-year outlook with 3 distinct horizons

15

**HORIZON 1  
(FY25)**

Embed Adaptive Organisation

'getting future fit for purpose'

**HORIZON 2  
(FY26-29)**

Growth, Simplicity and Efficiency

'accelerating the benefits from our transition'

**HORIZON 3  
(FY30-34)**

All Fibre Business

'future state, single technology'



# ASPIRATION

*Simplified all fibre business with 80%  
uptake by 2030.*





# PURPOSE

*Unleashing potential through connectivity.  
Enabling better futures for Aotearoa.*

# Our Ecosystem

## OUR PEOPLE

- **Enabling better futures for our people:** Flexible working practices, wellbeing days, parental leave policy, subsidised broadband and life/income continuance insurance
- **Diverse & Inclusive workplace** - Gender Tick, Pride Pledge and Accessibility Tick accreditation, Te Ao Māori programme
- **Engaged culture** - Engagement (top 10% of industry), eNPS (top 5% of industry)

## OUR ENVIRONMENT

- **Doing our bit for a low emission future:** Science Based target and supporting Emissions Reduction programme, solar on exchange trial, e-waste programme, energy efficiency focus, Future Fit tool for employees, Recycle a Device support
- **Understanding climate change and nature impacts:** Climate related risk & opportunity register & action plans, nature related opportunity assessment, climate assessment for asset investment and management, transition planning



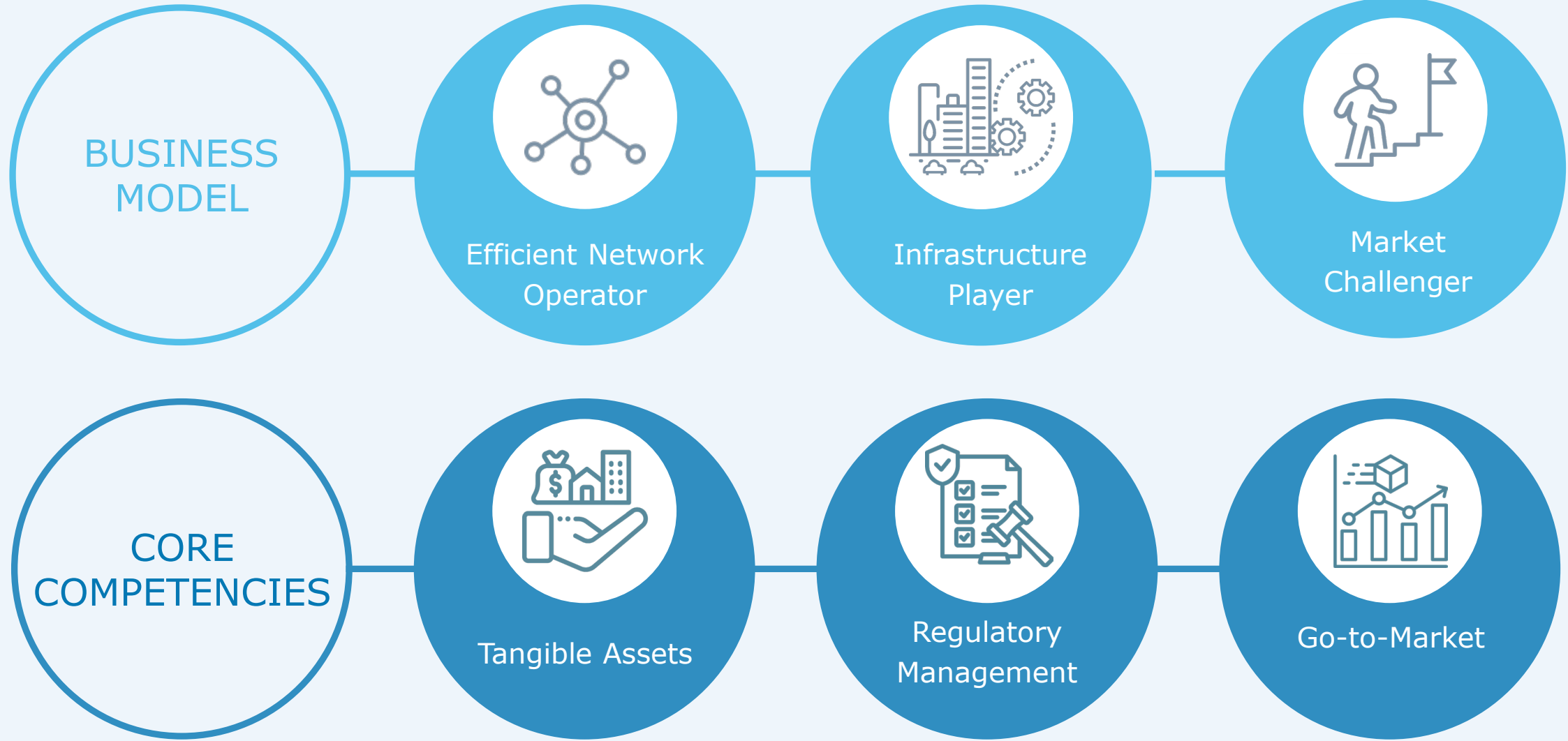
## OUR CUSTOMERS, PARTNERS AND INVESTORS

- Telecommunications Forum initiatives on network resilience and climate change
- Worker welfare programme
- Supplier code of practice and supplier forums
- Nokia ESG council participation (Asia region)
- **Collaborating for sustainable action:** Sustainable Business Council, Climate Leaders Coalition, Sustainable Leaders Summit, ESP BraveGen

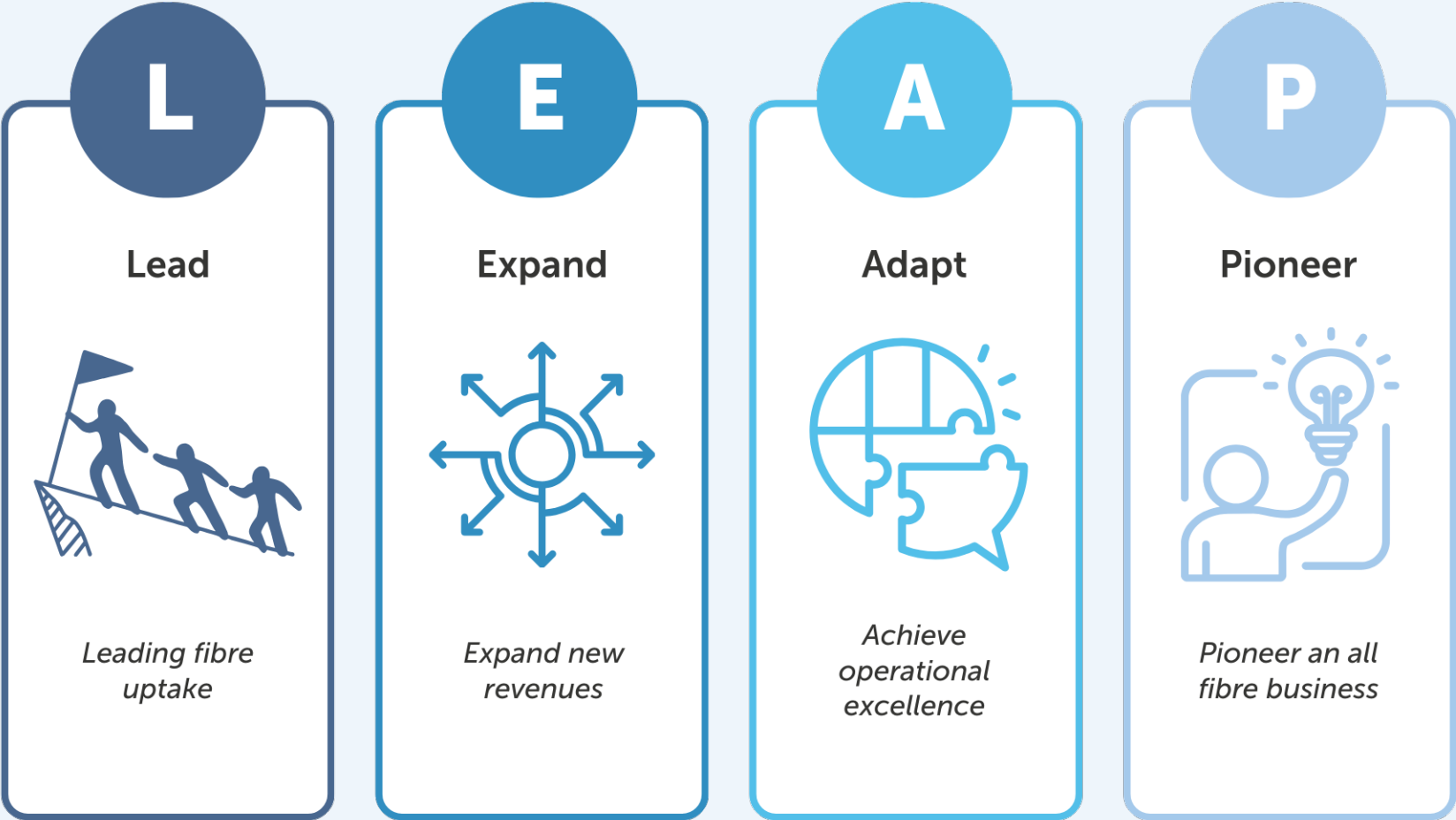
## OUR COMMUNITIES

- Employee volunteering programme
- Cabinet art programme with local councils
- Charitable donations and support for digital inclusion initiatives (Digital Senior expansion into Auckland and regions, Katoa Connect – Hapori Connect Programme, Netsafe get set up for safety)
- New Digital Equity product for vulnerable customers in material hardship

# Capability

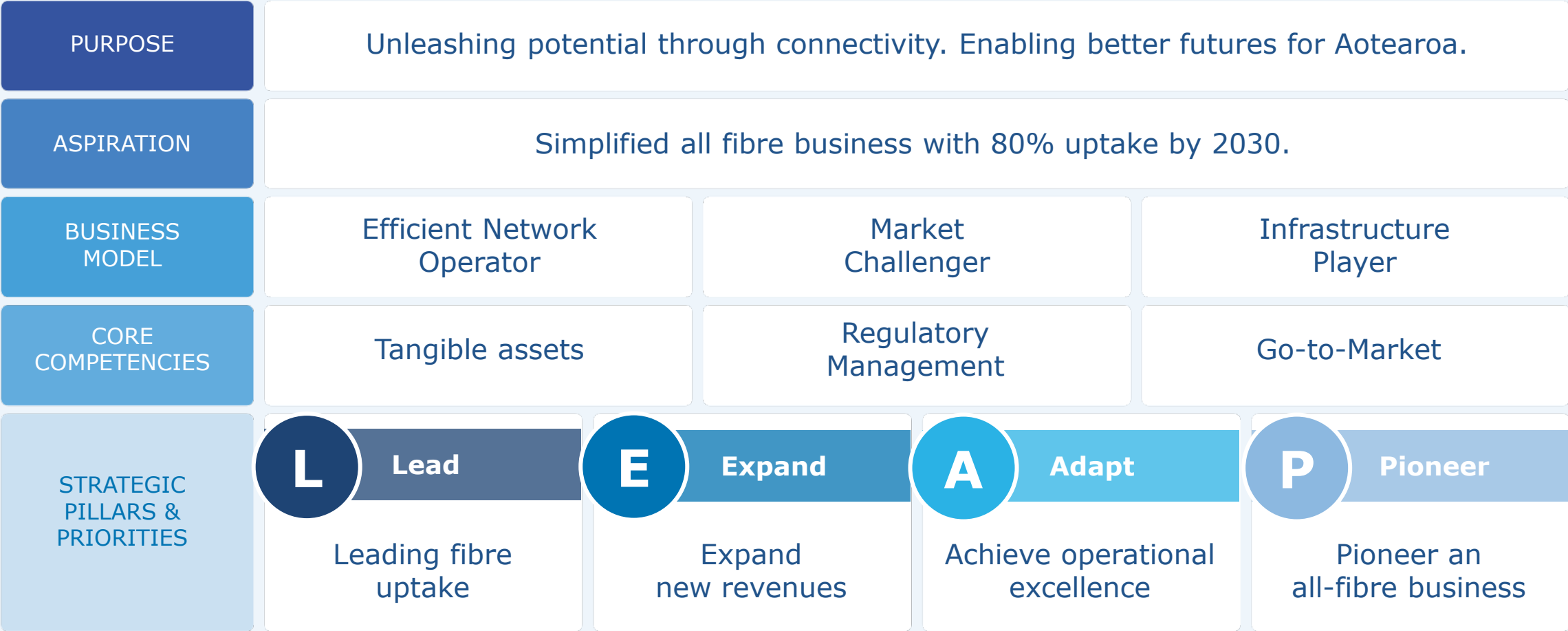


# Strategic Pillars



# Our Road to 2030

## Growth, Simplicity & Efficiency





Chorus Investor Day

## FWA: threat to fibre or a staging post on the road to fibre?



Rupert Wood

2 December 2024



# Fast track to an all-fibre future

# Kurt Rodgers

## Network Strategy Manager

L

Lead



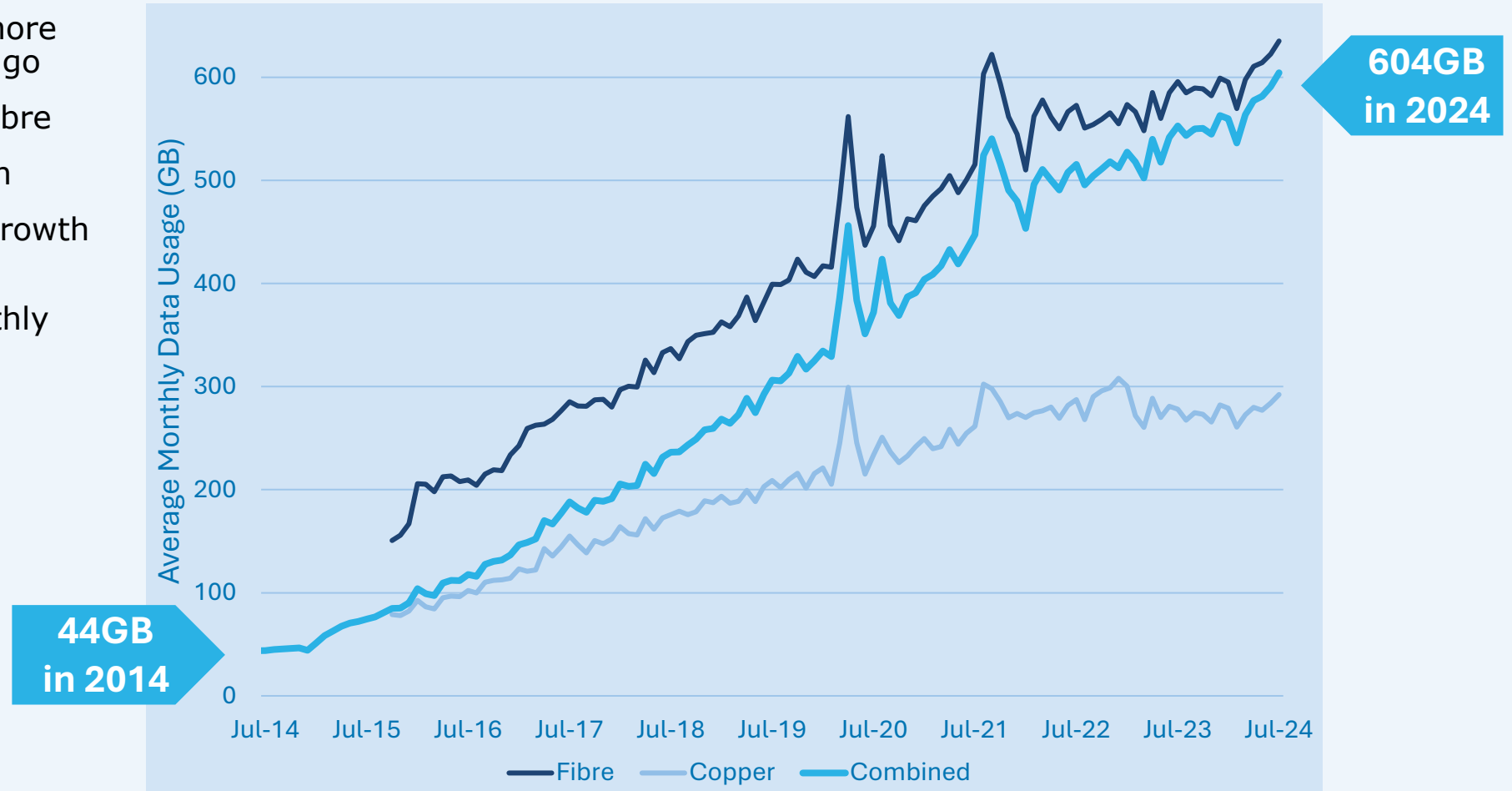
### What does the future hold for data demand?

- We forecast solid growth: average ~1TB by 2029
- Underpinned by broadcast TV switch-over to streaming
- Live sports streaming, 4K and AI would boost growth again
- Only fibre can meet future capacity and reliability needs
- Fixed wireless has constraints and is unlikely to scale
- Wi-Fi 7 removes the in-home handbrake, enabling multi-gig broadband speeds



# 30% per annum data growth over last decade

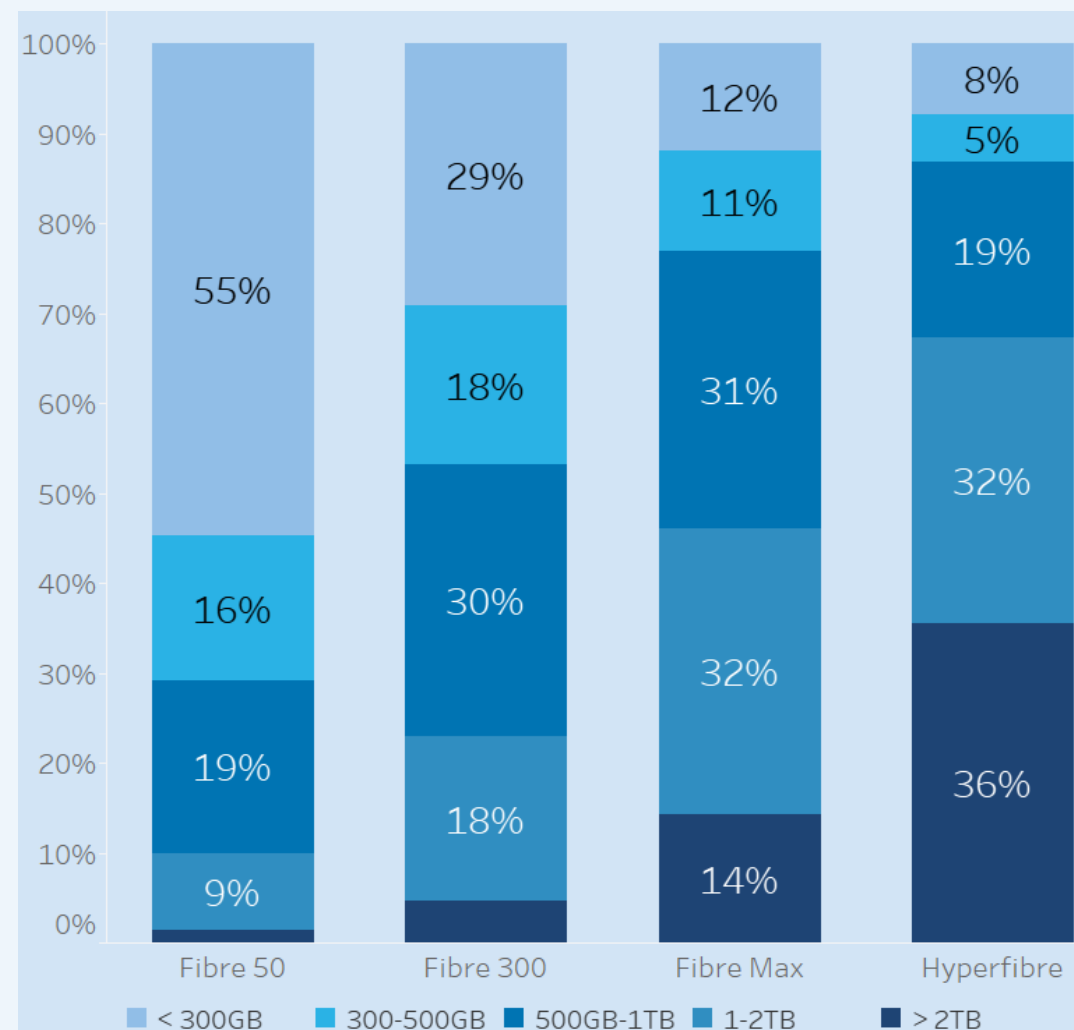
- Customers are using 13x more data today than a decade ago
- 636GB monthly usage on fibre
- 17% using >1TB per month
- Forecast 14% per annum growth over next decade
- Expect ~1TB average monthly usage on fibre by 2029



Source: Chorus Data

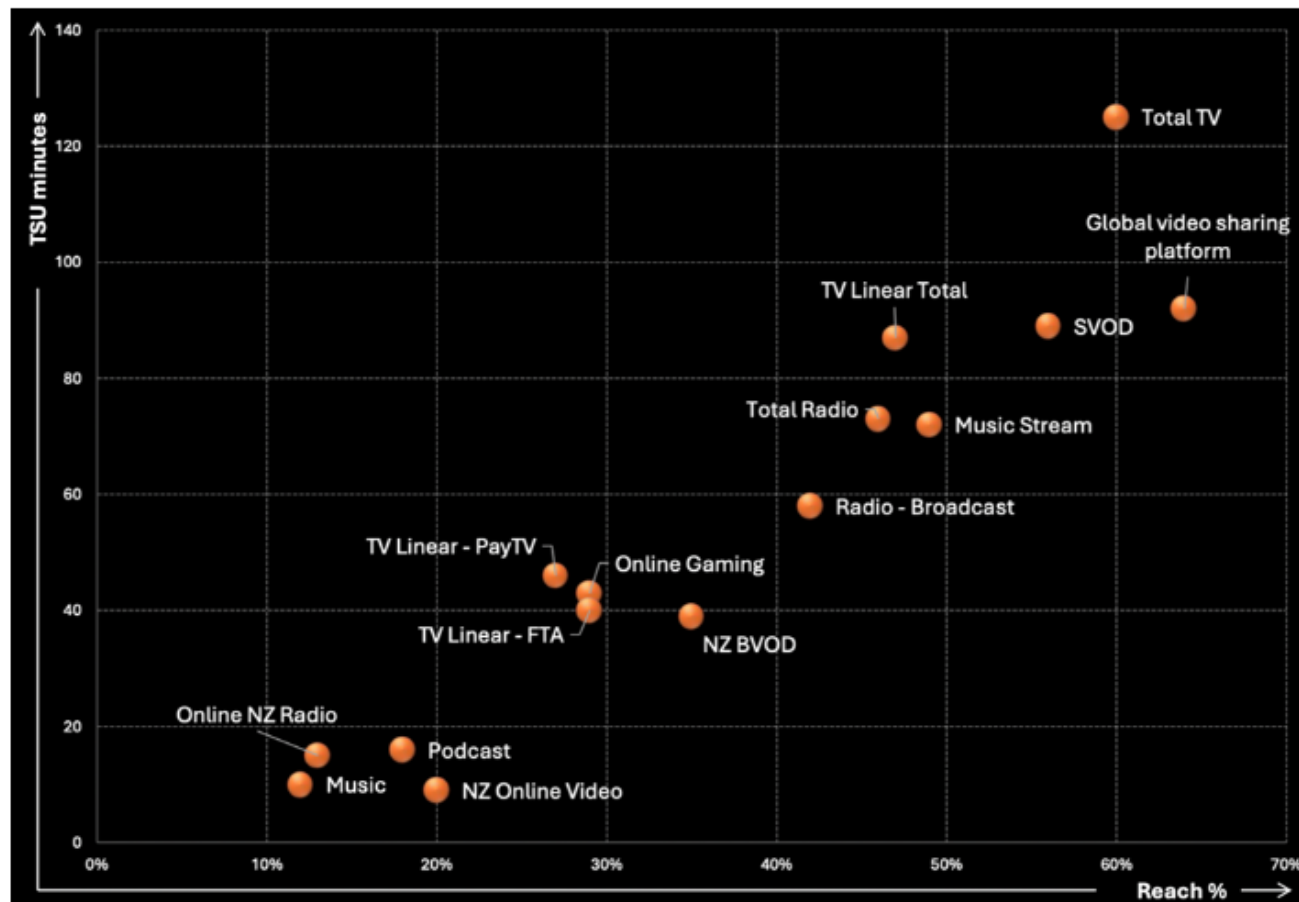
# Data usage by speed tier on our network

- Chorus offers different plans to meet customer needs
- Entry level 50Mbps meets low data needs
- High data users are choosing higher speed plans:
  - 36% of Hyperfibre customers use >2TB
  - 46% of Fibre Max customers use >1TB
  - 53% of 300Mbps customers use >500GB



Source: Chorus Data

# Audiences are moving online

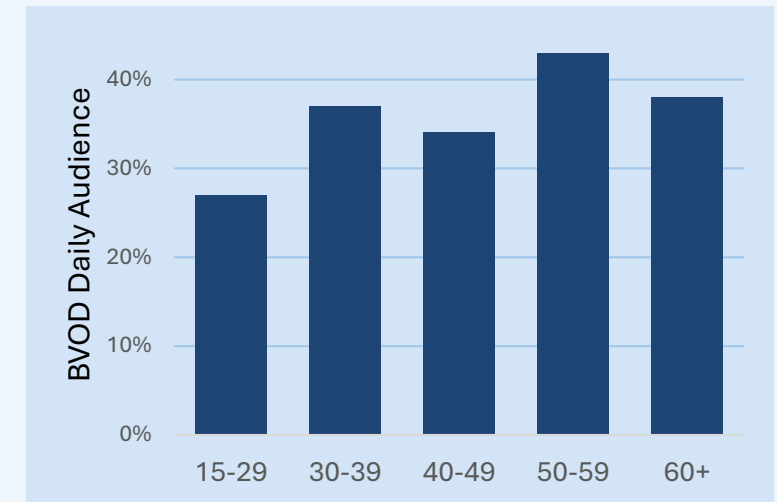
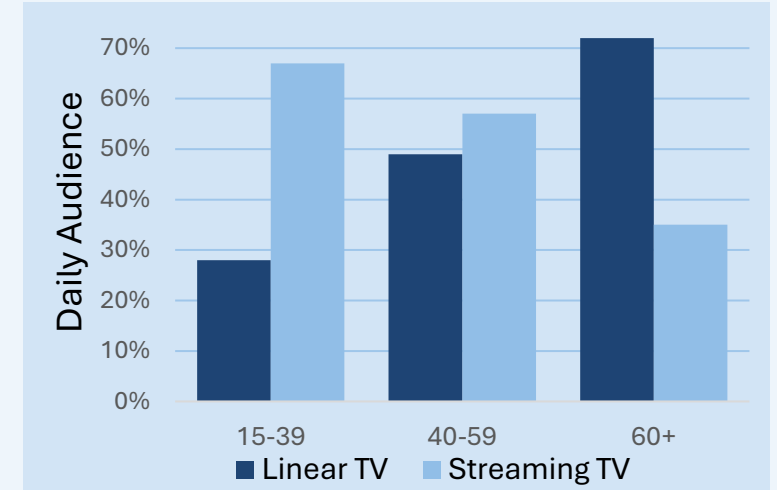
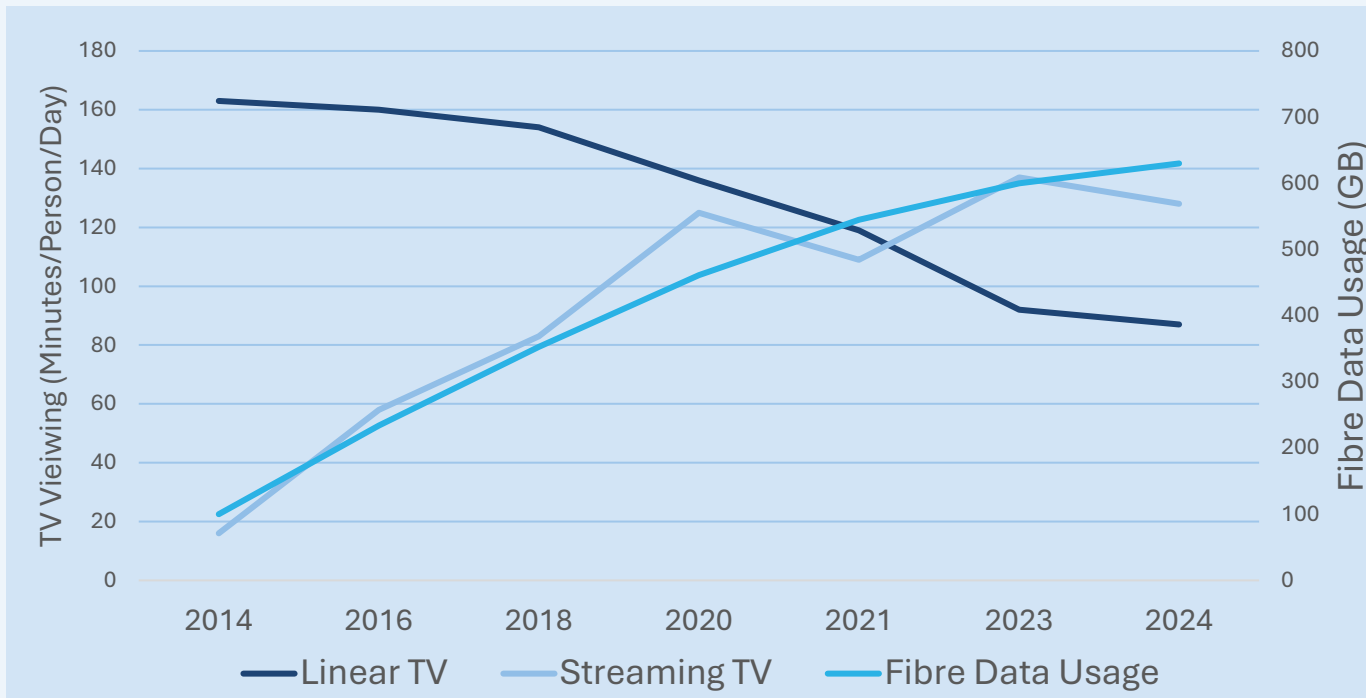


Source: NZ On Air, 2024

- **Global video sharing platforms** have the highest daily reach (64%) and viewing minutes (92 per day)
- **Subscription video on demand (SVOD)** is next highest with 56% reach and 89 minutes/day
- **Linear TV** is declining but still has 47% reach and 87 minutes/day
- **Broadcaster video on demand (BVOD)** is fastest growing with 35% reach and 39 minutes/day

# The transition to streaming TV hasn't finished

- Growth in data usage has tracked the shift from linear to streaming TV
- Older generations are still shifting to streaming
- Broadcaster video on demand is more popular with older viewers

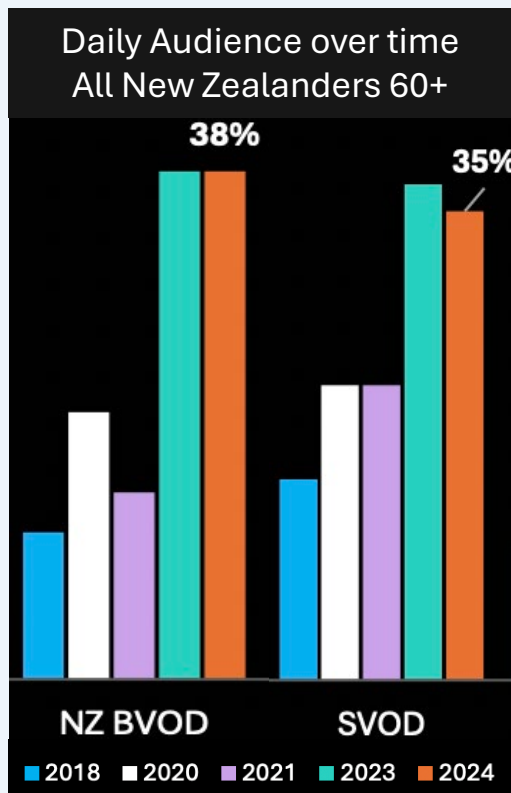


Source: NZ On Air, 2024; Chorus Data

Source: NZ On Air, 2024

# Terrestrial TV switch-off will boost low data households

Video on Demand has very high growth amongst 60+



Source: NZ On Air, 2024

25% YoY growth in streaming volume on TVNZ+ platform

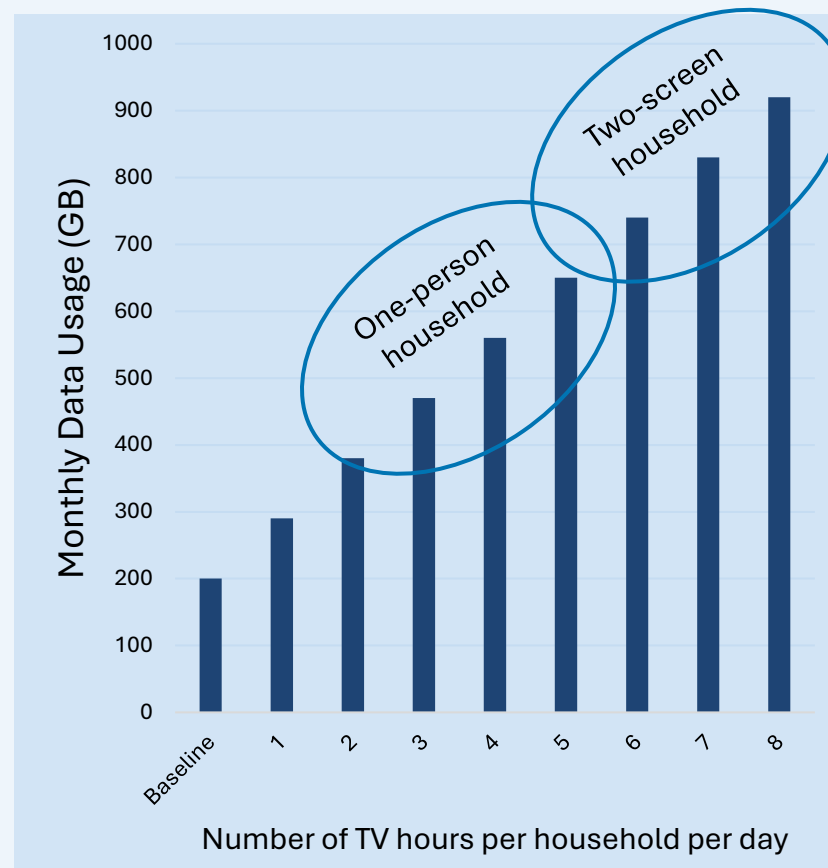
## Digital+ TVNZ's 2030 Strategy

### OUR DIGITALLY-LED FUTURE

TVNZ is well into a multi-year transformation programme that will take us from being a broadcast-led media business to a digital-first media business. It's our objective to be operating as a genuinely digital-first streamer by 2030.

Source: TVNZ Annual Report 2024

60+ age group watch over 3.5 hours of TV per person per day



Source: Chorus Model

# Live Sports, 4K and AI add to data usage and higher peaks

- Live Sports streaming taking off in Europe and US
- Amazon and Netflix are innovating in the sports streaming market
- Sky rolling out hybrid Box and Pod<sup>1</sup>
- 7% increase in SkySportNow customers<sup>1</sup>
- Sky adding 4K next year<sup>2</sup>
- RWC 2027 in Australia at peak time
- Game streaming growing at 12%pa<sup>3</sup> globally
- Emerging AI demand for bandwidth

## Sources:

(1) [Sky Annual Report](#)

(2) [Sky website](#)

(3) [Grand View Research](#)

## BT sees record broadband traffic

December 7, 2023  
By Nik Roseveare



6 Premier League games  
streamed live on Amazon Prime

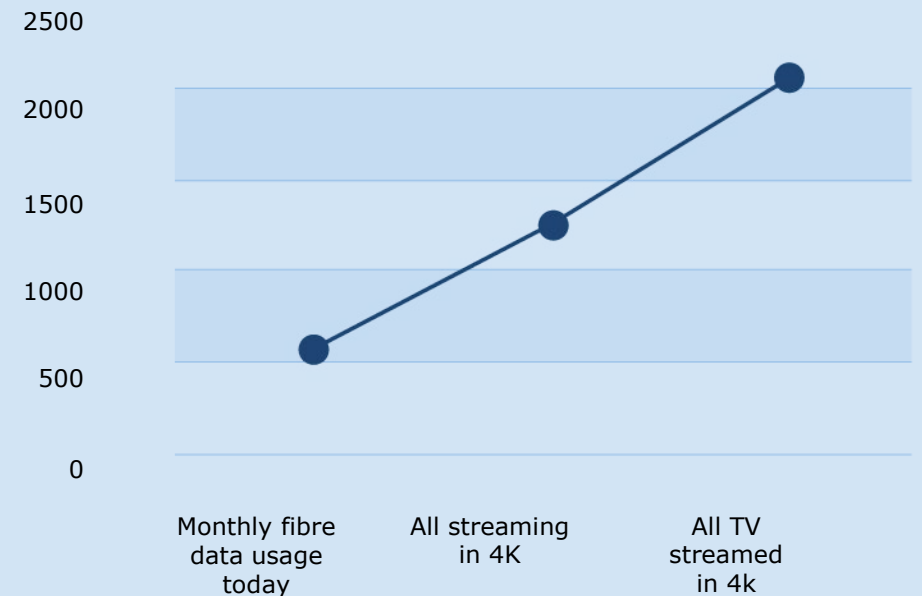
+

Major game update downloads  
Call of Duty Modern Warfare.

<https://advanced-television.com/2023/12/07/bt-sees-record-broadband-traffic/>

## 4k effect on data demand

— Data usage (GB)



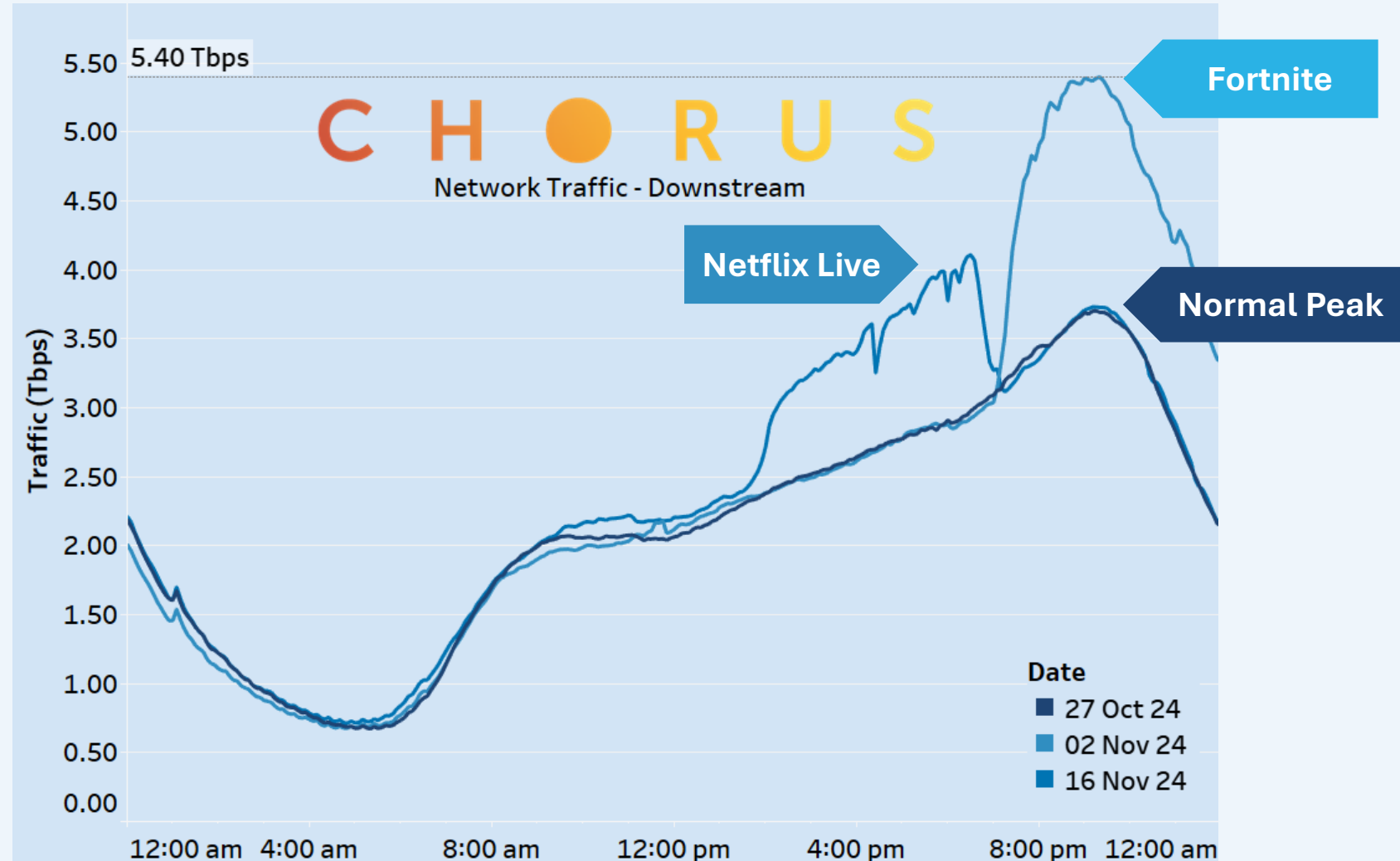
Source: Chorus Model

# Broadband is getting peakier. Fibre has the capacity

- Fortnite Game Download

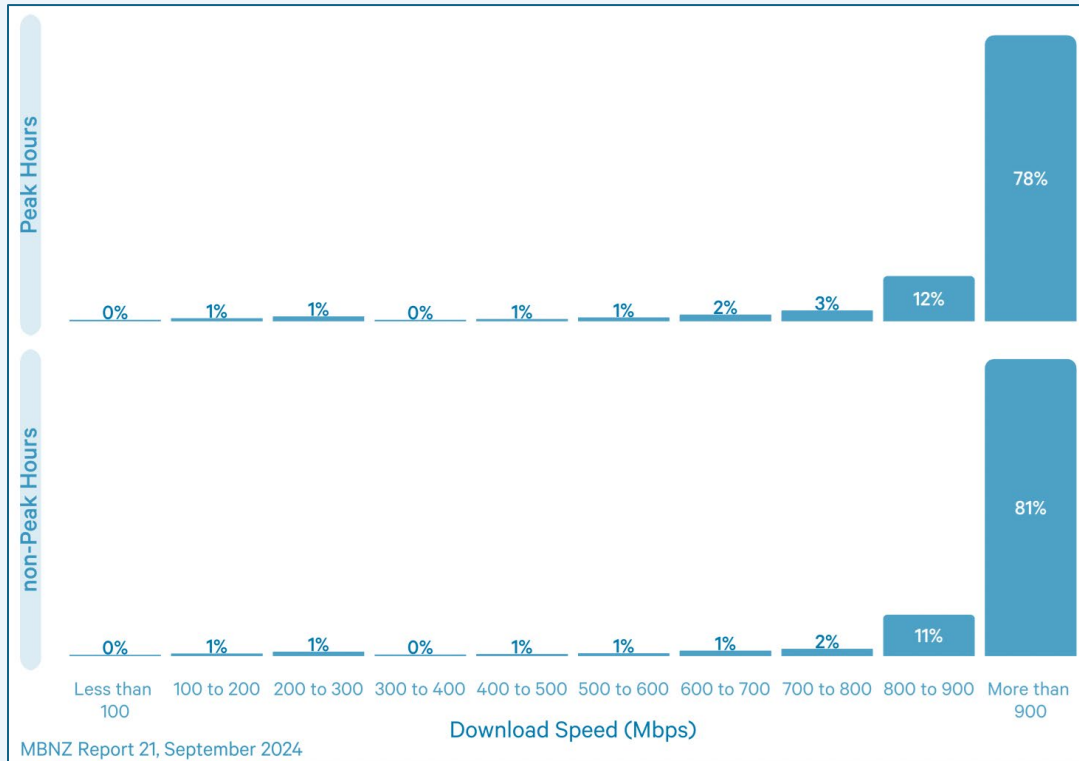


- Netflix Live sports streaming

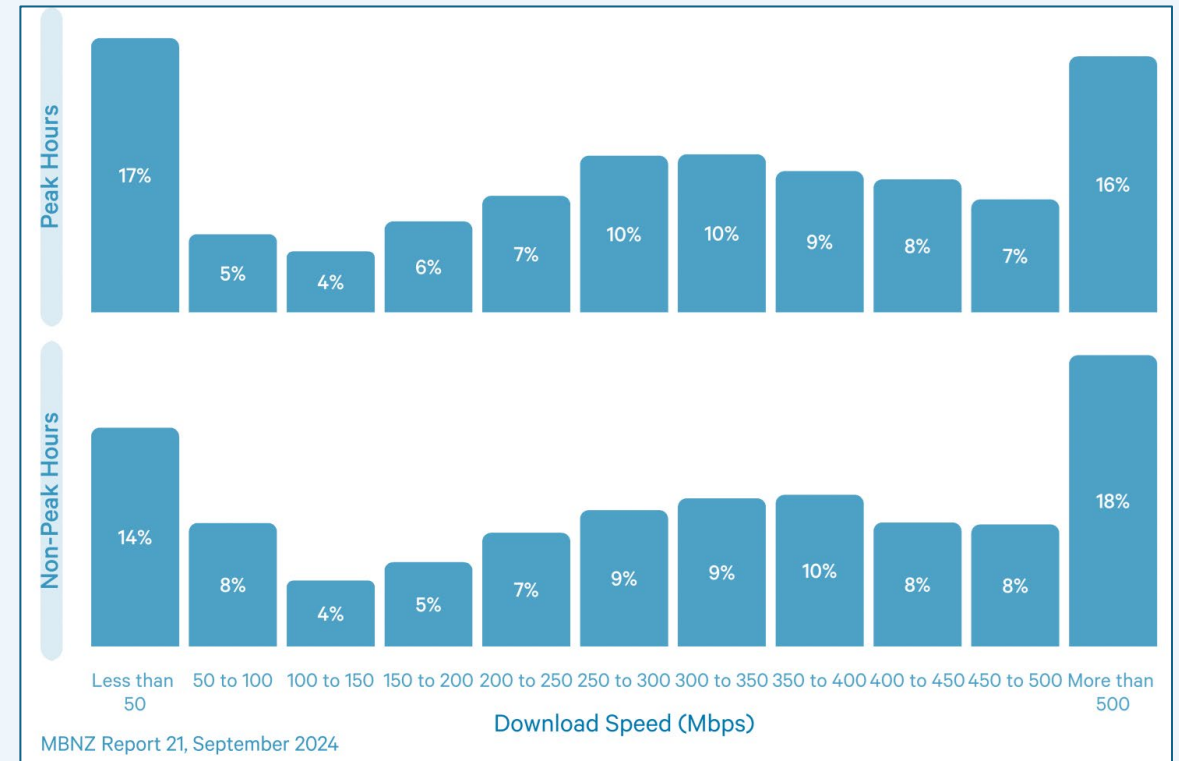


# Fibre is a bullet train. FWA is a rollercoaster

**Fibre delivers a consistent speed experience, at any location and at any time of day**



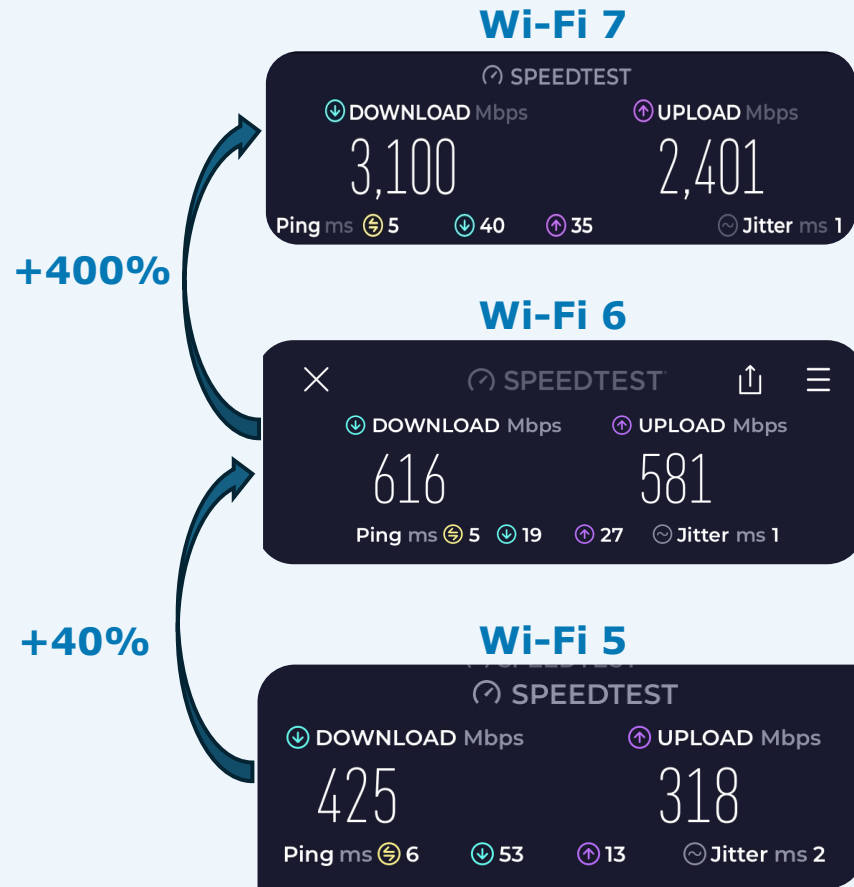
**Fixed wireless performance is unpredictable, it varies by location and time of day**



MBNZ Report - Data from Spark's 5G Fixed Wireless plan



# Wi-Fi 7 opens in-home networks up for even more growth



Source: Chorus Lab Testing

- Wi-Fi 7 provides a huge speed uplift:
  - Wi-Fi 5 to 6 = ~40%
  - Wi-Fi 6 to 7 = ~400% uplift
- Wi-Fi 7 supports 2x more devices than Wi-Fi 6
- Wi-Fi 7 devices are coming to market quickly and prices are dropping
- Wi-Fi 7 now offered with Hyperfibre



Ubiquiti UniFi  
U7-PRO  
(BE11000) Tri-  
Band Wi-Fi ...  
**\$407.26**



TP-Link Deco  
BE25  
(BE5000)  
Dual-Band...  
**\$479.00**

# Elaine Campbell

## Executive General Manager, Access Value Stream



### Driving fibre uptake to 80% by 2030

- Fibre is the global gold standard for broadband technology
- 80% is aspirational but achievable (~240k connections over 6 years)
- NZ fixed wireless market is unique and already highly penetrated
- We're a market challenger, moving from a one-size fits all approach
- Acquisition is our primary focus. We're growing our retention capability
- Winning customer moments that matter are key to growth
- The regulator is playing a greater role in ensuring marketing transparency across broadband technologies

# **Our road to 80% uptake**

**Promoting the superiority of fibre across all channels**

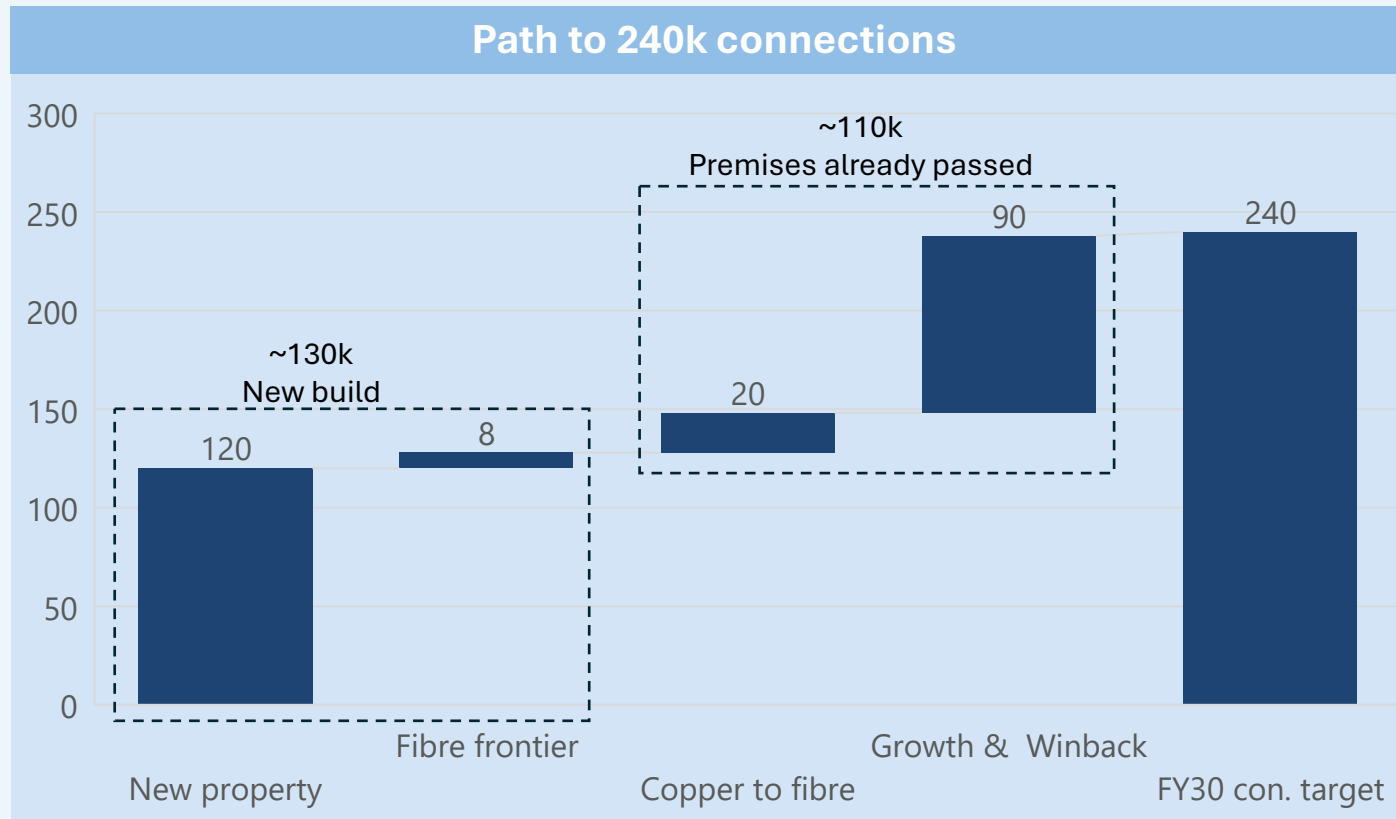
**Maximise  
fibre  
uptake**

**Develop  
propositions  
for under-  
penetrated  
segments**

**Win in  
customer  
moments that  
matter**

# Moving from 72% to 80% uptake requires ~240k connections

Any new build must reach 80% uptake



## FY25 opportunity pools (overlapping)

~180k Under-penetrated segments

~220k Fixed wireless and HFC

~220k Inactive ONTs

~110k UFB2/2+

Maximising **acquisition** on our website

**1.7M** users each year [chorus.co.nz](https://chorus.co.nz)

**NEW ZEALAND RUNS ON FIBRE**



**33k** users per month **speed test**

**14k** users per month **broadband checker**

# Under-penetrated segments is a focus to drive uptake



Digital equity  
proof of  
concept

**Target:**

Severe/material hardship and very low-income households

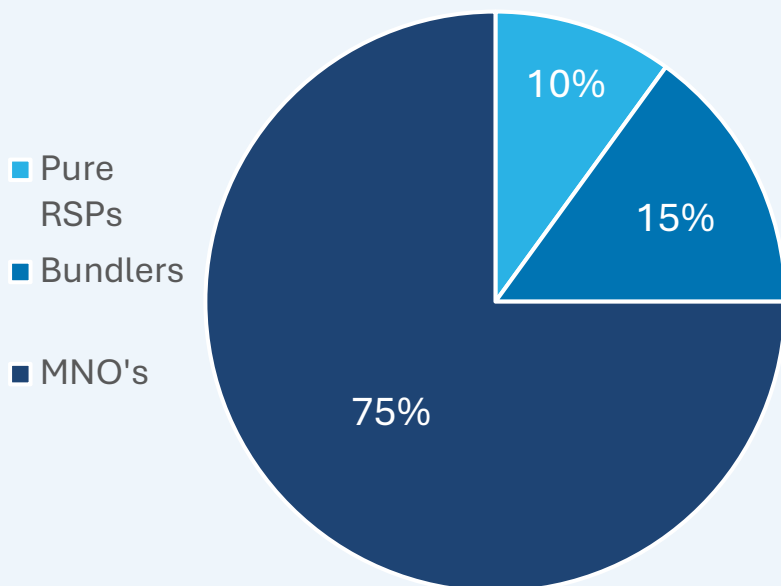
**Proof of Concept opportunity size:**







~7k inactive ONTs



# Moving from one size fits all to tailor offers for RSPs

Chorus Fibre Market Share

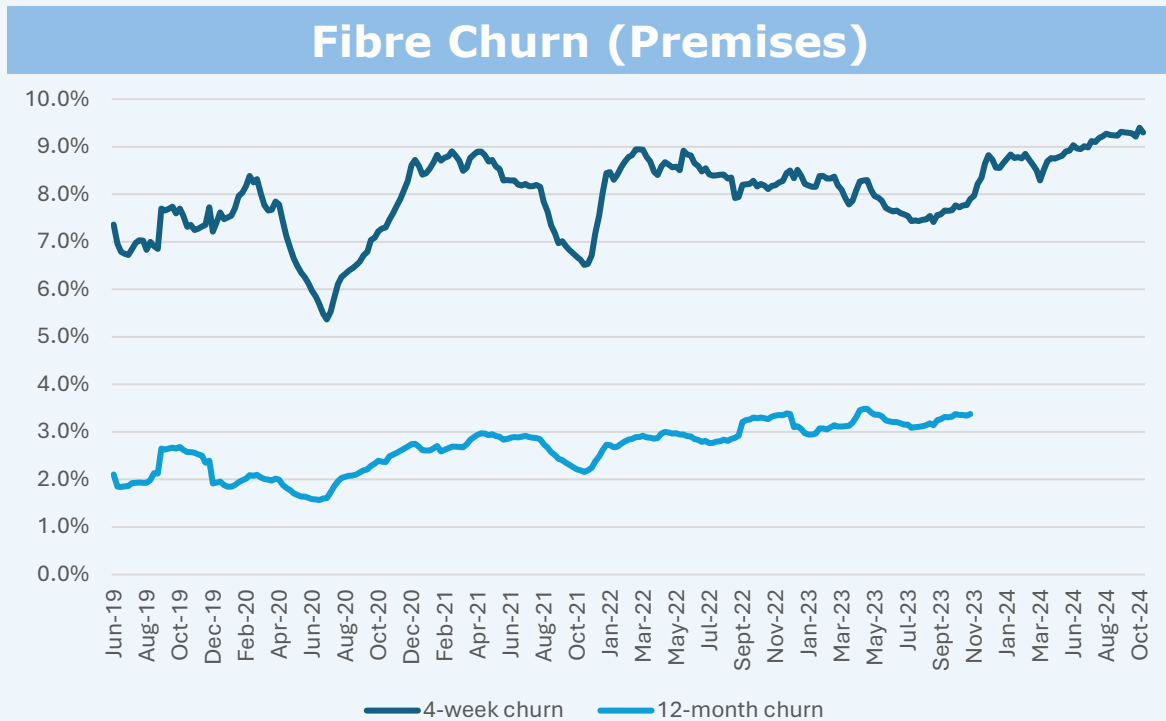


	~580k power customers	~430k fibre customers	
	~450k power customers	~340k fibre customers	
	~940k customers	~245k fibre customers	

Note: numbers are NZ wide

Consumer incentives	Home Fibre Starter	Home Fibre 300	Home Fibre 920	Hyperfibre
<b>New connection</b> (First connection or 12M+ non-connectivity)	\$100	\$200	\$250	\$250
<b>Upgrade</b> (From any plan lower)	-	\$100	\$100	\$200

# Retention is important, we are growing our muscle



~9% premises disconnect for 4+ weeks

~57% premises reconnect within 12 months

12-month premises churn ~4%

Be careful what you switch for

Be in to **WIN** a year's free fibre!

NEW ZEALAND RUNS ON FIBRE CHORUS

Is the grass really greener?

Score a \$400 Prezzy Card!

NEW ZEALAND RUNS ON FIBRE CHORUS

# Delivering an excellent experience creates fibre advocates

Overall fibre to 5G NPS lead **+35**

Basic fibre 9  
 Fibre 300 17  
 Max Fibre 38  
 4G FWA -17  
 5G FWA -14

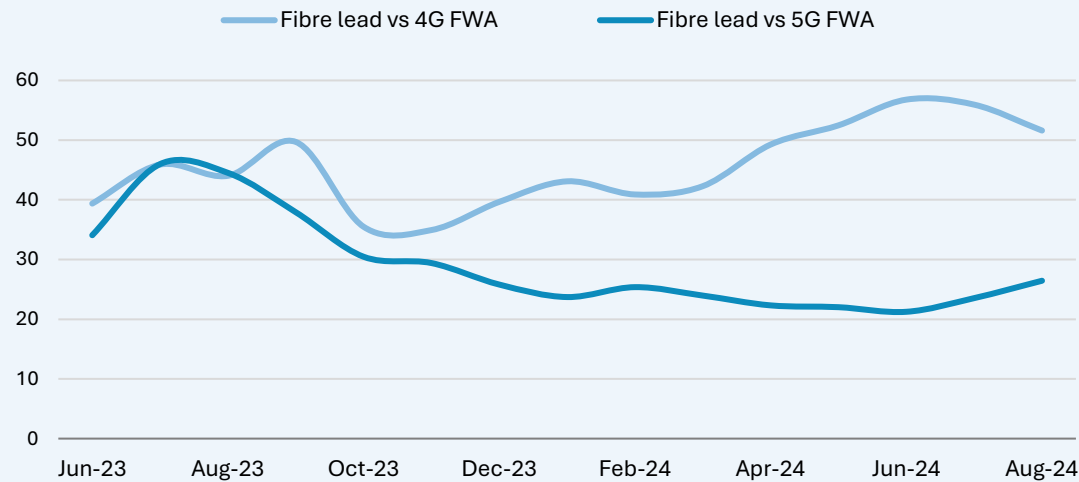
Word of mouth reach  
 Positive: 4-6  
 Negative: 10+  
 88% preference

Install CX  
**8.4**

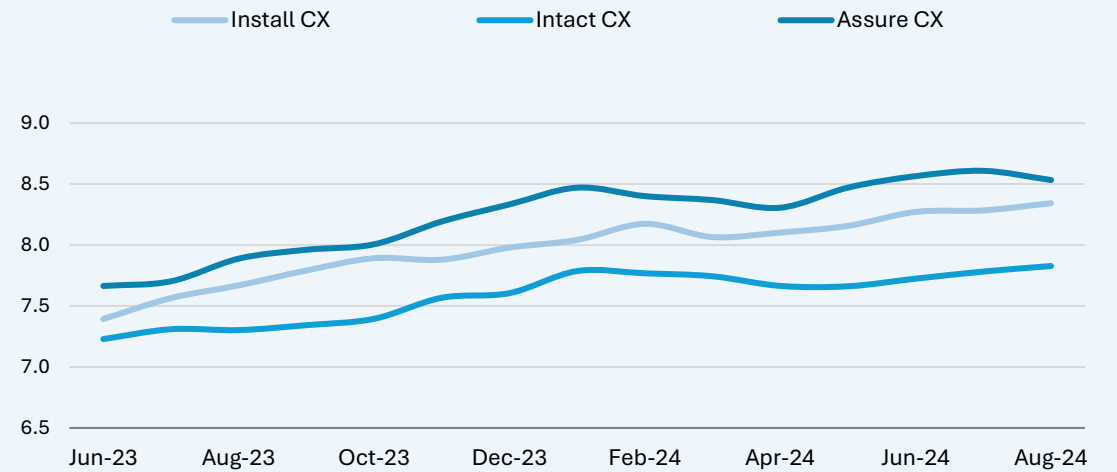
Intact CX  
**7.9**

Assure CX  
**8.5**

NPS lead between fibre and total FWA (3M rolling)



CX improvements over time (3M rolling)





# Fibre is the gold standard and we're making it better

## Fibre Boost 2.0



Investigating introduction of a low-speed plan

From 50/10Mbps to 80/40 or 100/20Mbps

From 300/100Mbps to 500/100Mbps

## In-home trial



In-home coverage performance checks

Network setup support

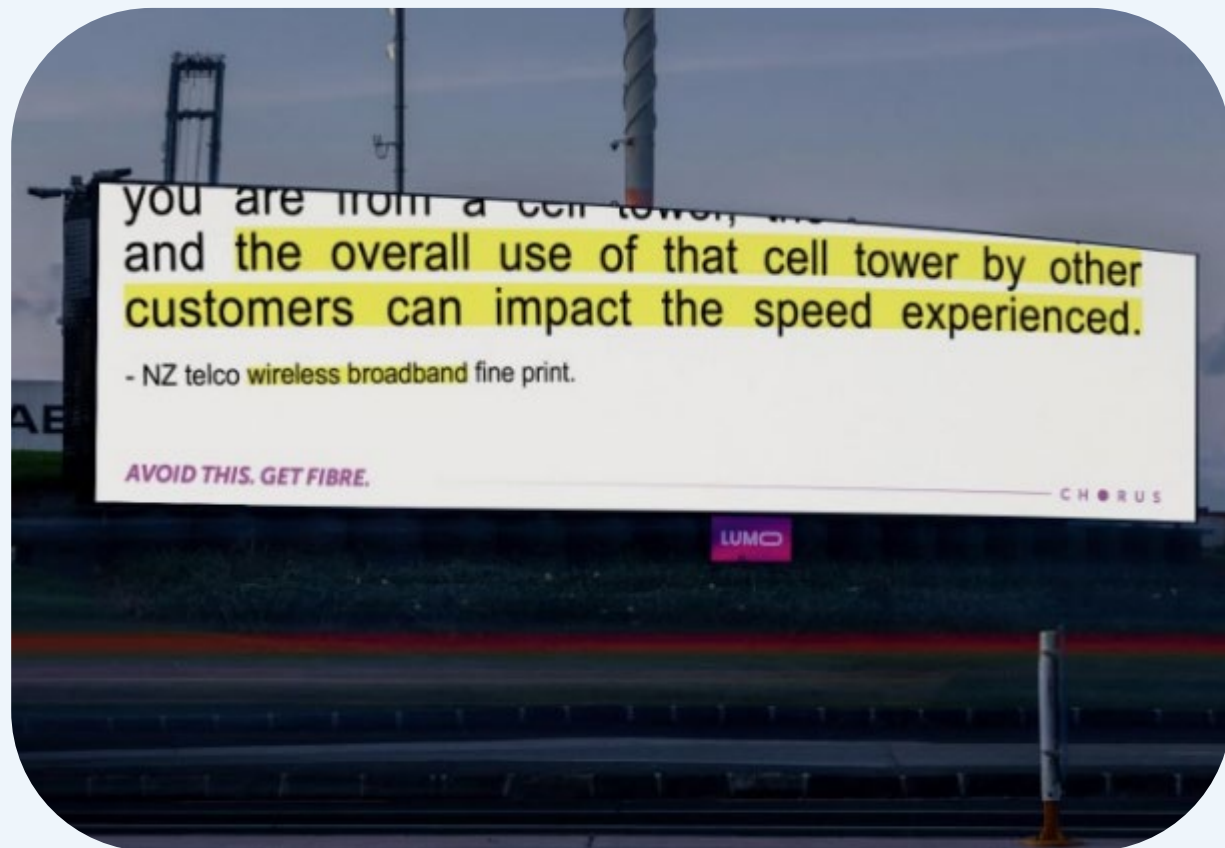
## Hyperfibre



Self-installation of HF ONTs

2G,4G, 8G available with 25G lab-tested

# Fibre is the gold standard. Period.



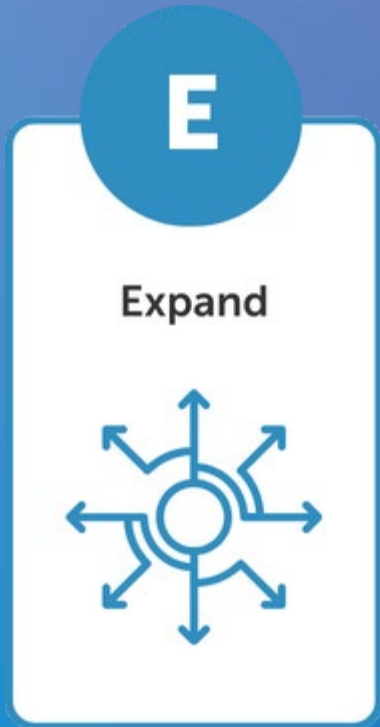


# Q and A



insert picture and send  
to back – see next slide

# Time for a break

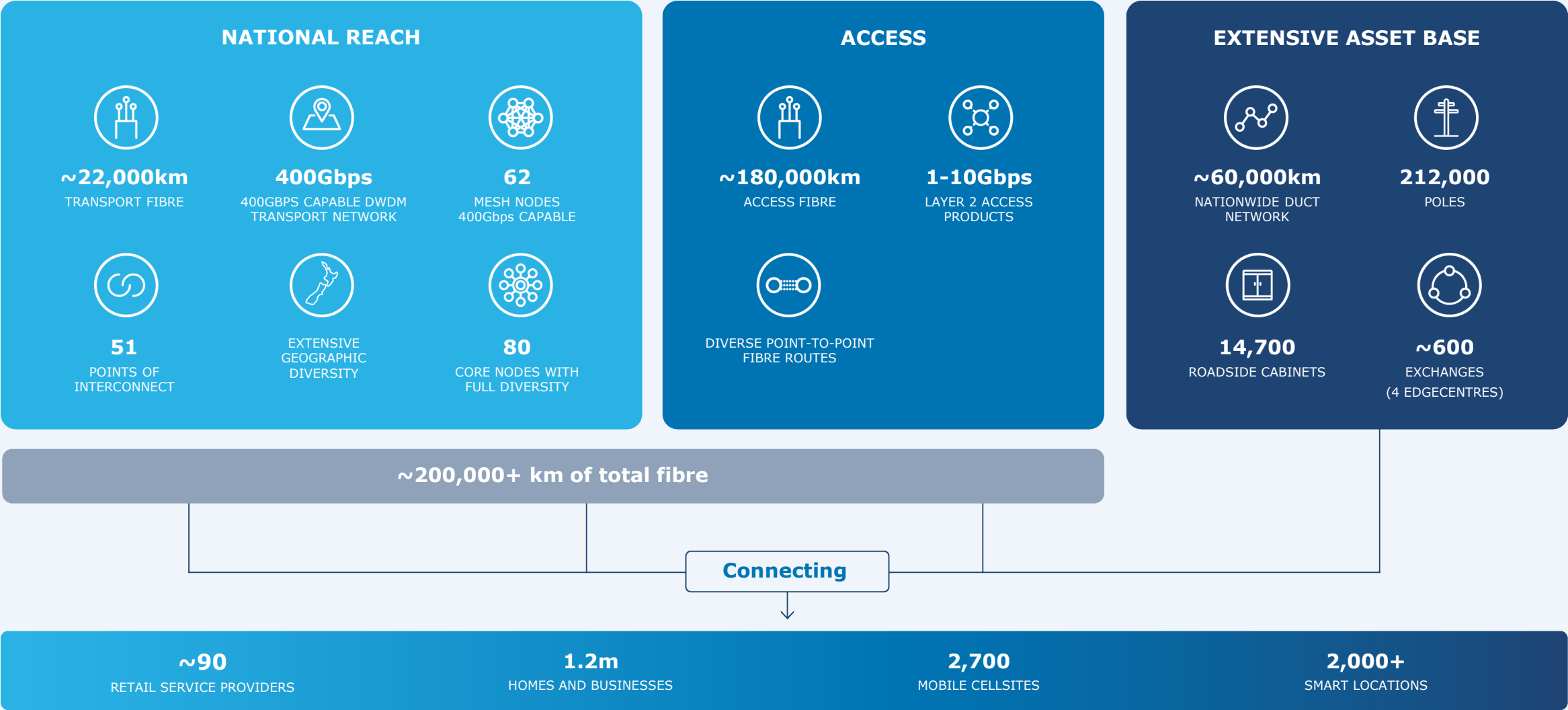


## Mike Shirley Executive General Manager, Infrastructure Value Stream

### Demand for digital infrastructure presents strong growth opportunity for Chorus

- New structure brings dedicated resourcing and prioritisation
- Growth opportunities in our core - Mobile Infrastructure, Data Centre Connectivity, leveraging existing assets
- Our ambition over Horizon 2 is to grow total infrastructure revenues from ~\$155m to \$180-\$200m
- New property development likely to moderate back in volume, but more competitive
- Exploring adjacent opportunities at scale

# New Zealand's largest digital infrastructure 'neutral host'





# Demand for fibre and digital infrastructure continues to grow

NEW

## Chorus Infrastructure

### Existing expertise and revenues

### Exploring adjacent opportunities

FOCUS AREAS

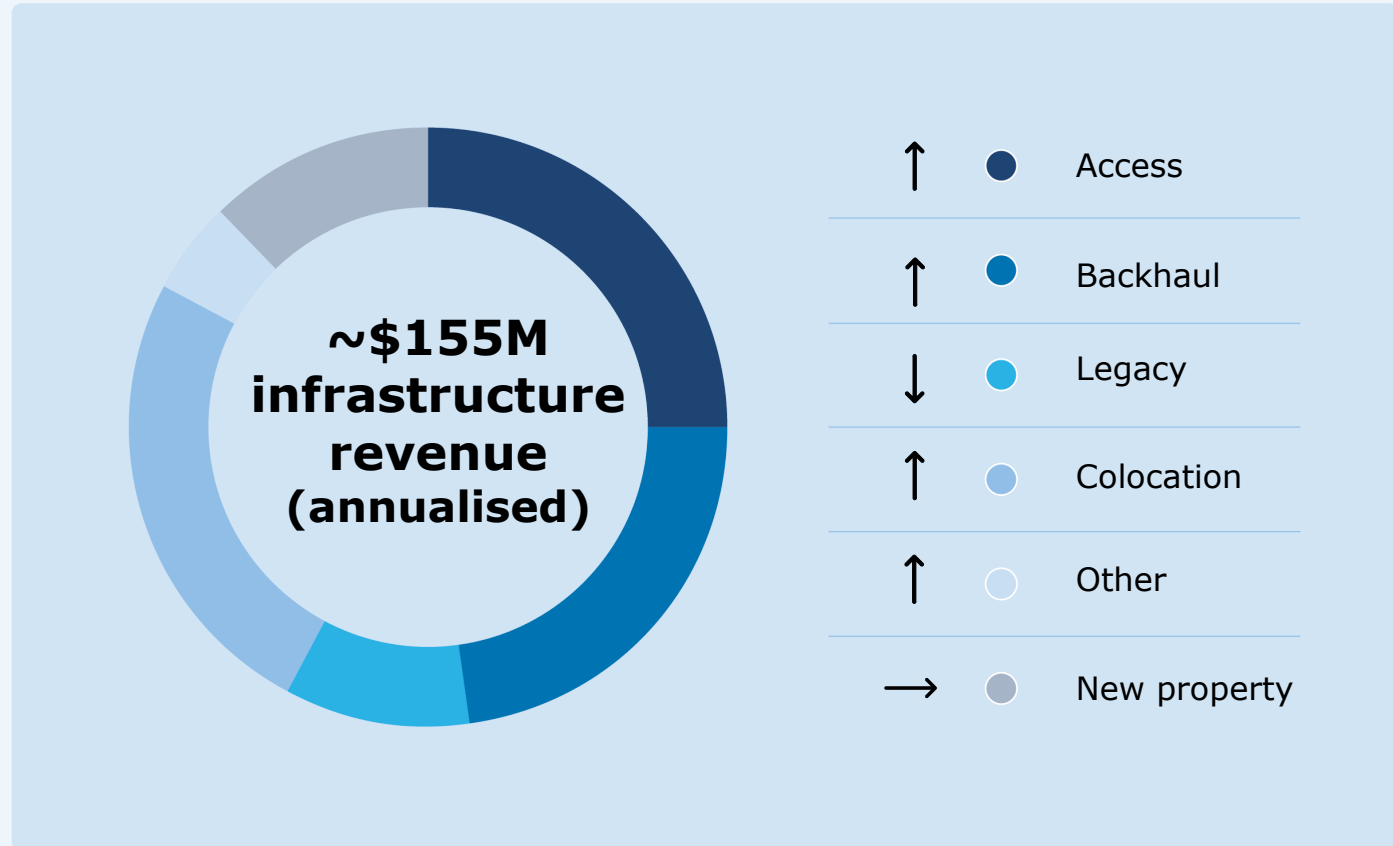


# Infrastructure revenue - overview



**Potential path to \$180m to \$200m annual infrastructure revenue by 2030, with incremental upside opportunities.**

Note: Infrastructure revenue on this slide includes revenue from various financial reporting lines: fibre broadband, fibre premium, field services, infrastructure and value-added network services.

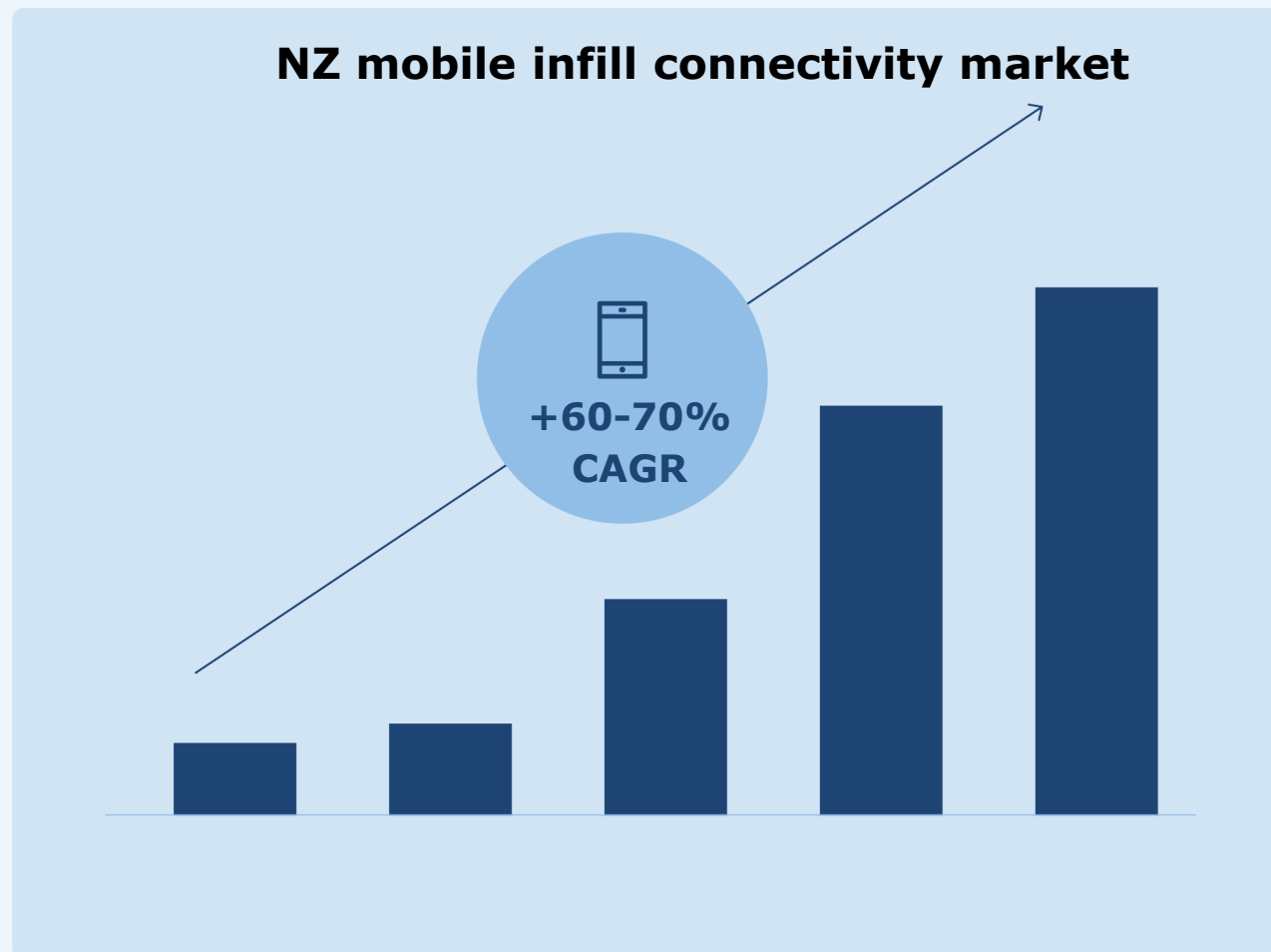




# Mobile Infrastructure segment

**Building on our strong existing mobile backhaul portfolio to grow revenue by:**

- Connecting ~50% of cell sites today and looking to maintain share as market grows
- Helping tower companies connect new macro cell sites
- Using our poles and fibre solutions to enable 5G densification
- Developing potential industry solution - Precision Timing



Source: Chorus estimates



## New property development

### Annual pipeline of new premises supported by ongoing population growth

- Recession has slowed housing growth and funding in wake of post-COVID building boom
- Solid backbook of developments and developer relationships provides ongoing demand
- Focus on customer experience in competitive market



## Smart locations

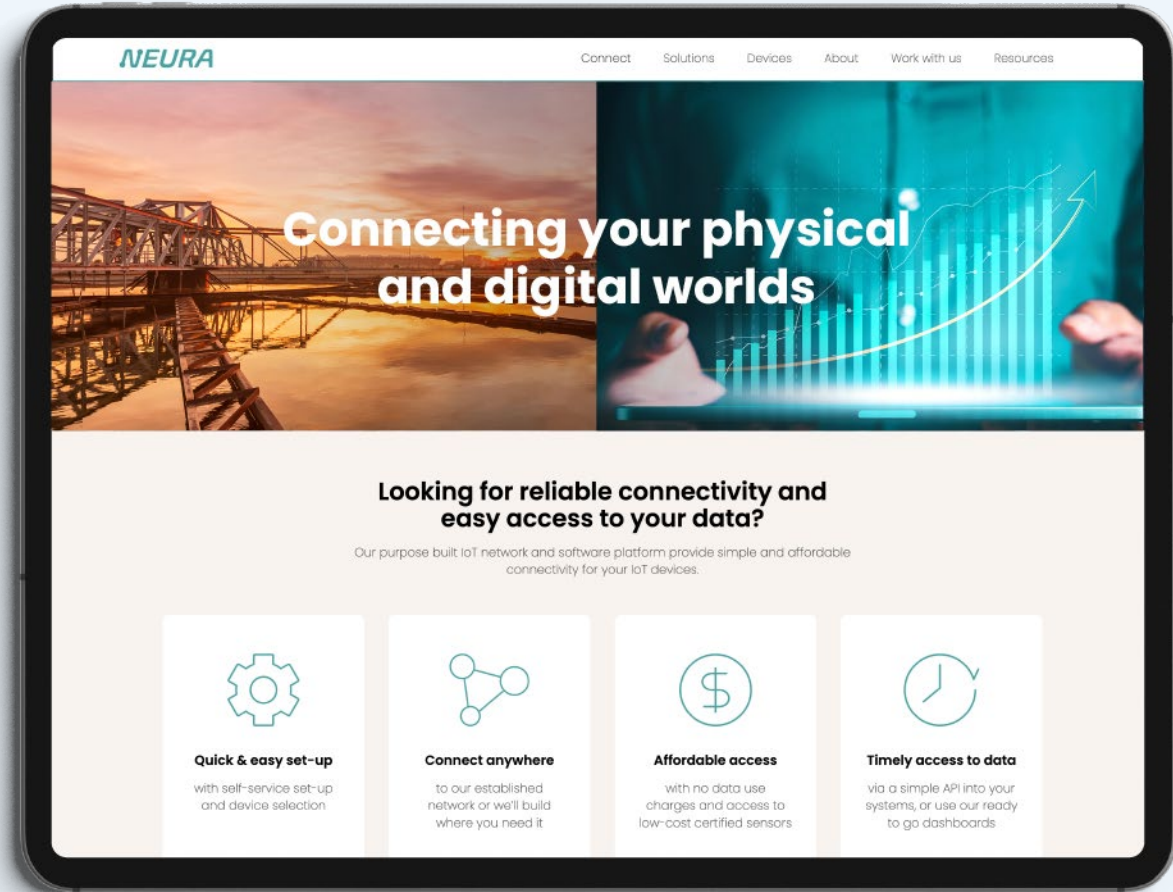
### Fibre connectivity enabling smart towns and cities

- Connecting non-building CCTV, digital billboard and traffic sites
- ~40% growth to 2,000+ connections over last two years
- High quality video needs drive preference for fibre

# Exploring Option 1

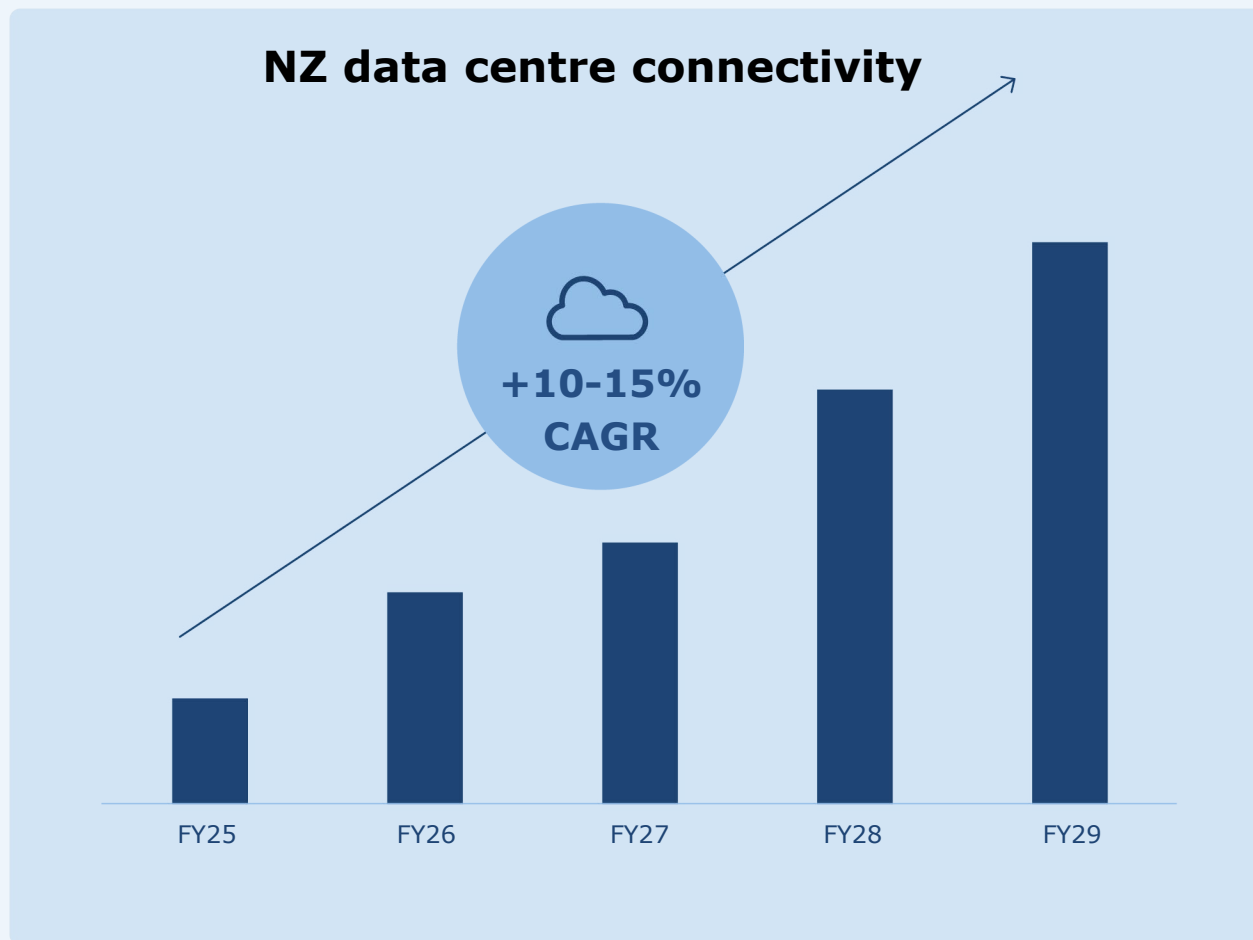
## IoT Solutions with Launch of *Neura*

- *Neura* in-market offering IoT asset management solutions using long-range LoRaWAN technology
- Enables near real-time monitoring and management of critical assets like water, public lighting, power and waste collection
- Ability to utilise Chorus pole assets for lower cost deployment
- Proof of value trials underway

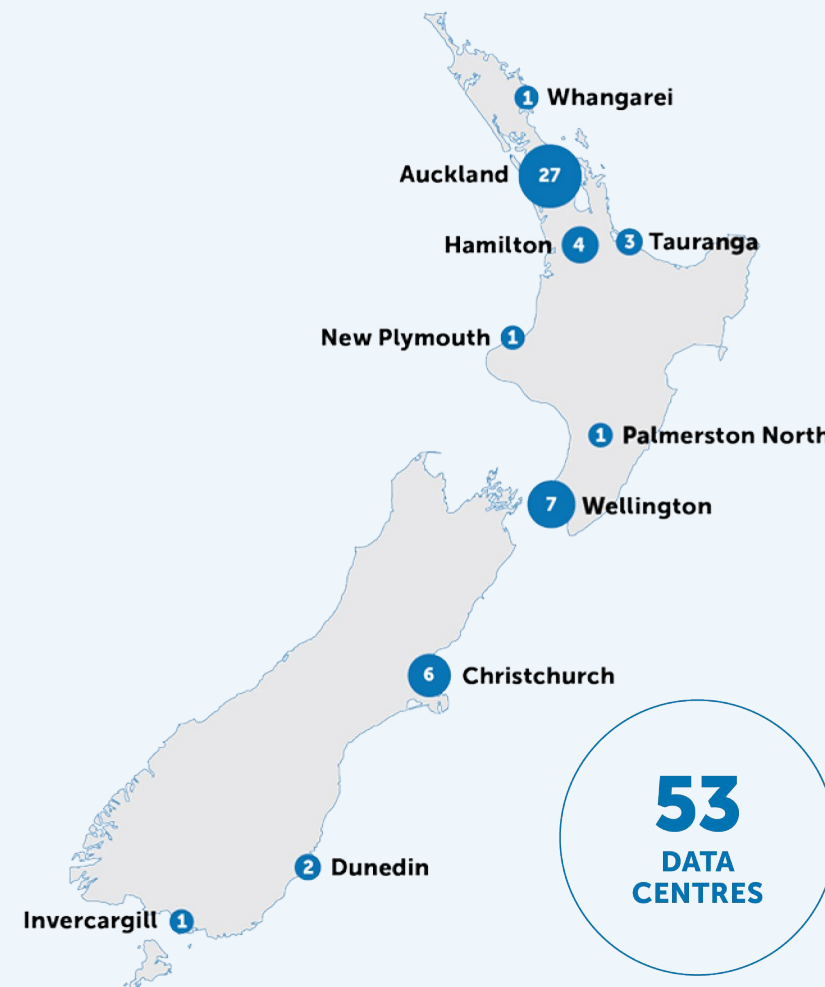


# NEURA

# Cloud migration & AI is driving exponential growth for fibre connectivity



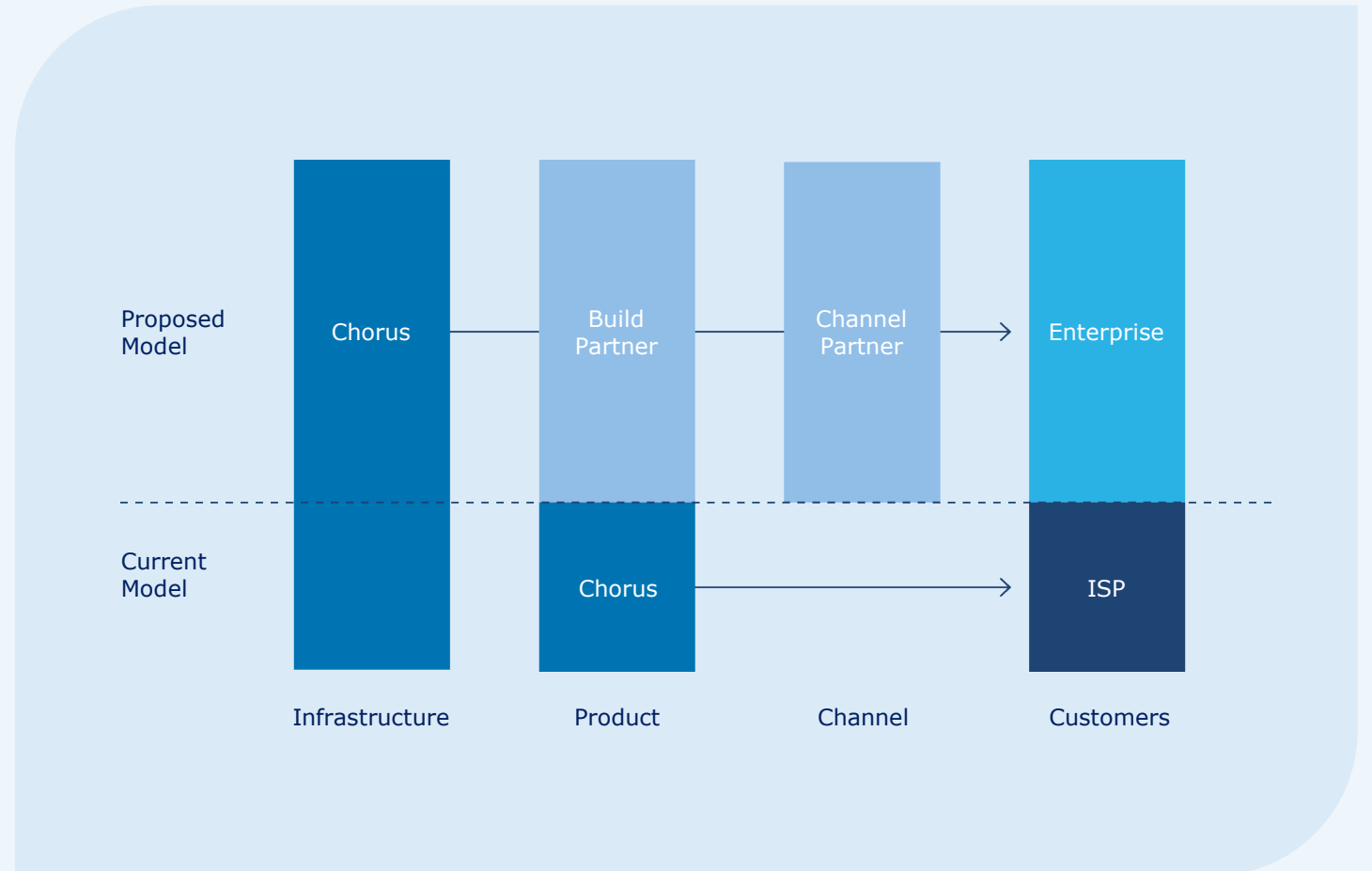
Source: Chorus estimates



# Exploring Option 2

## New Model to Scale EdgeCentres

- EdgeCentres established in 4 Chorus exchanges (Auckland; Tauranga; Wellington, Christchurch)
- Product solution leverages additional co-location space with copper network retirement
- In discussion to develop revenue sharing model with an IT market participant





# Exploring Option 3

## Unlocking Hyperscaler Connectivity

- Investigating opportunity with DataGrid that includes national and trans-Tasman connectivity
- Could unlock a key role for Chorus in burgeoning data centre ecosystem and leverage lower South Island renewable energy
- Builds on Chorus' existing network and plans for enhanced national backhaul
- Exclusive MoU to test demand in 2025



Datagrid (founded by Hawaiki subsea cable founder Remi Galasso) is developing a hyperscale data centre near Invercargill. The facility is to enable an AI training cluster powered by renewable energy, with domestic and international connectivity via a new sub sea cable.

# Ewen Powell

## Chief Technology Officer

A

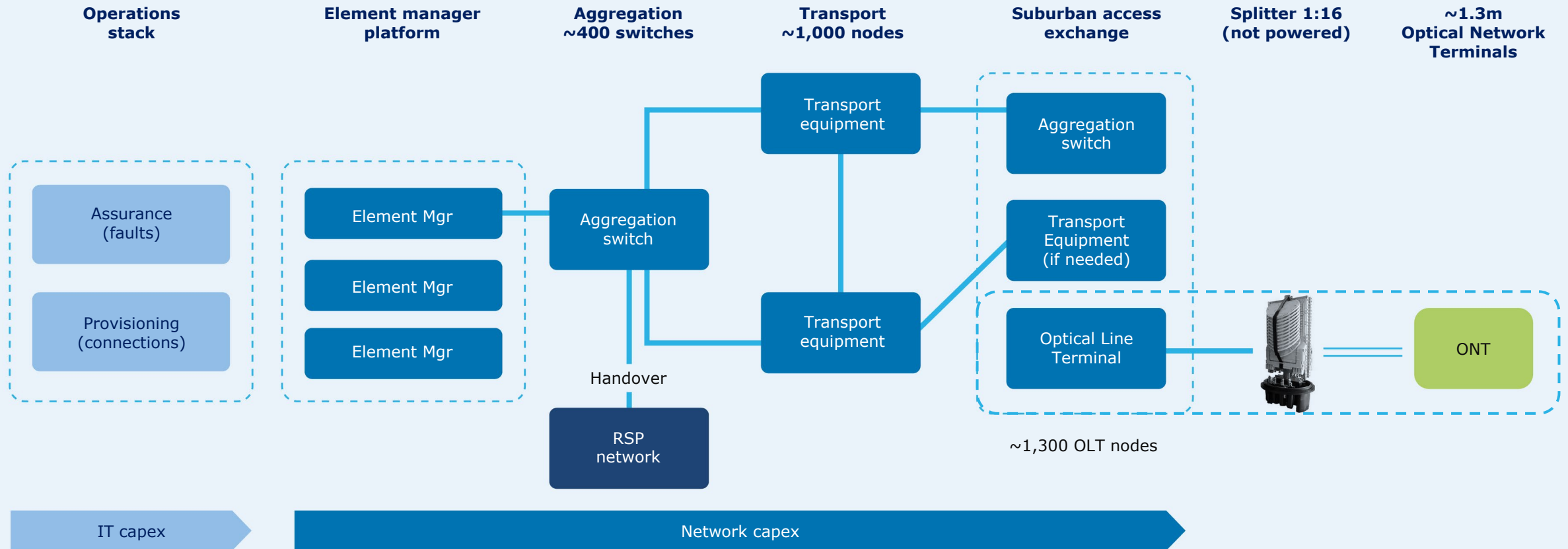
Adapt



### Maximising value from our future-proofed fibre network

- Fibre is a highly reliable and scalable network technology
- We're focused on prudent and efficient asset management
- Growing bandwidth demand and regulatory requirements drive ongoing capacity investment
- Increased demand (e.g. bandwidth, Hyperfibre) and asset lifecycle to shape sustaining capex within \$200m to \$240m annual range across Horizon 2

# A highly reliable, scalable, future-proofed network



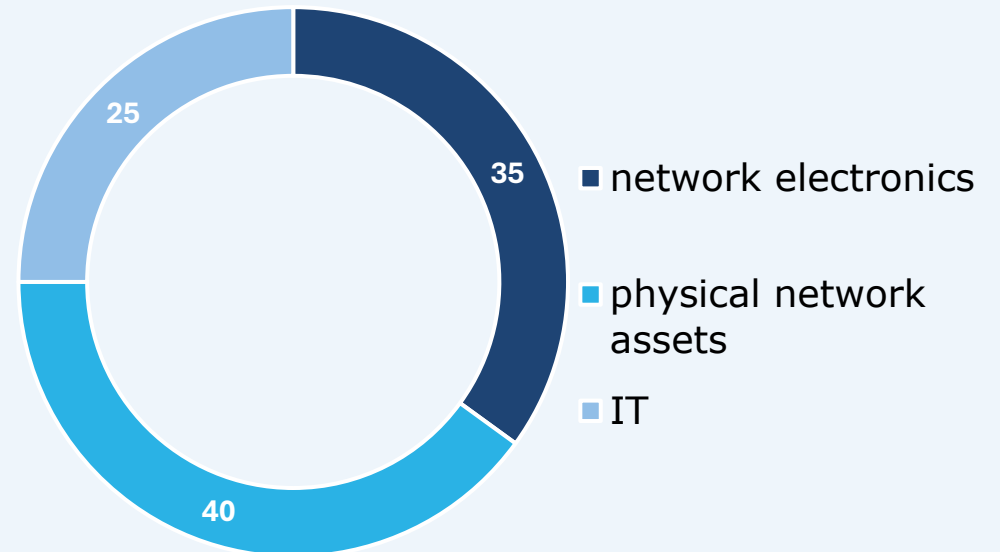


# Prudent and efficient asset management

## Investment drivers

- Connection growth, data growth, asset lifecycle management, product and business improvements
- Regulatory regime drives data-driven decision-making and 10-year asset management planning
- Expect sustaining capex to remain within \$200m to \$240m range through Horizon 2
  - copper spend relating to shared assets, roadworks and poles will change across the period
  - spend at top of range would reflect strong customer demand (e.g. capacity, Hyperfibre upgrades) and lifecycle replacement

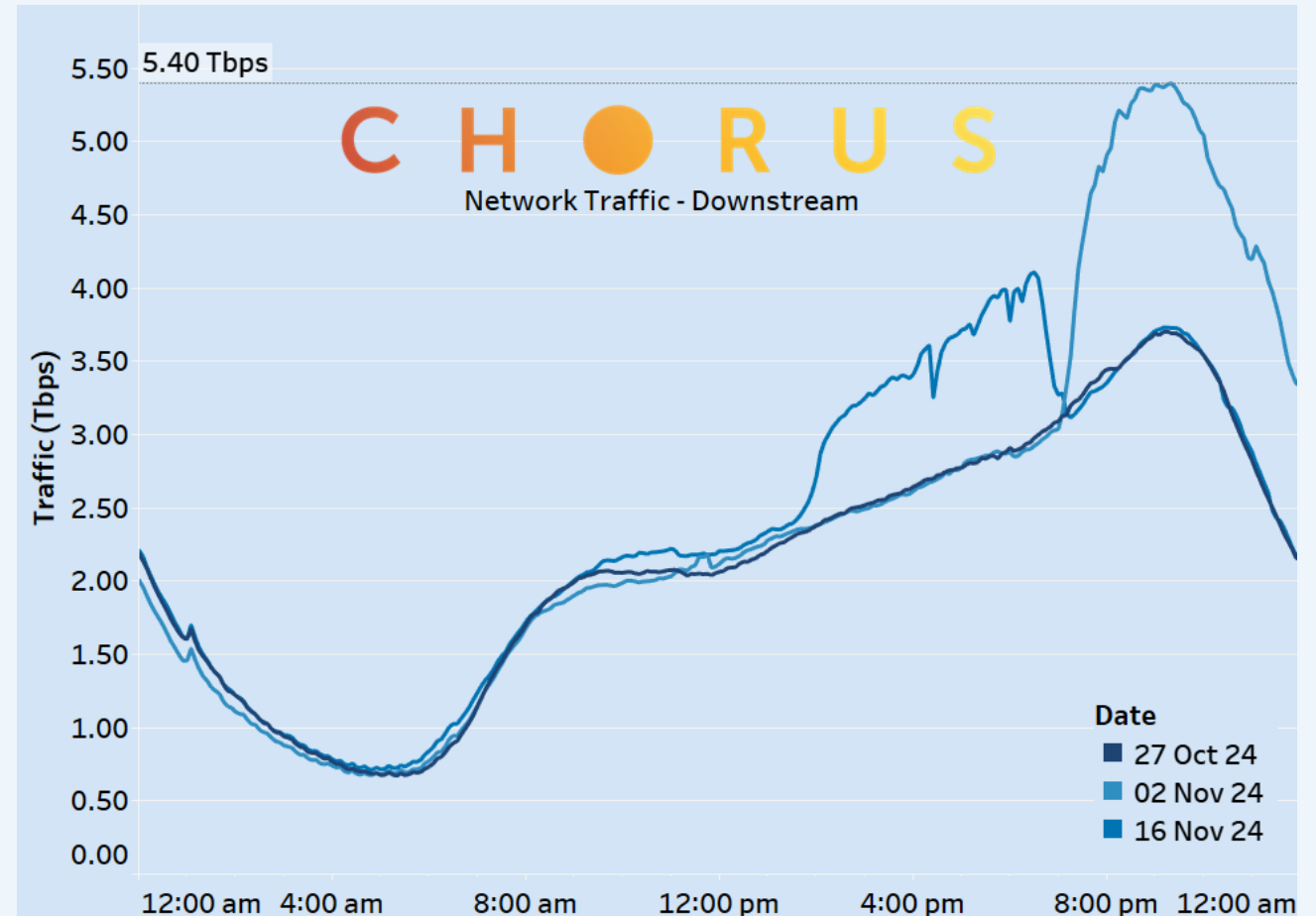
Annual sustaining capex (%)



# Network electronics

## Investment drivers

- **Capacity**
  - Peak bandwidth growth ~21% p.a.
  - 60% utilisation trigger, to stay within 90% regulatory standard
- **Lifecycle**
  - Equipment (5-10yrs); software (2yrs)
  - Investment phased to smooth capital and optimise field activity.
- **Products and customer demand**
  - Multi-gigabit (Hyperfibre) requires replacement ONT
  - Technology roadmap to 25G PON



# Physical network assets

## Investment drivers

### • Lifecycle

- Significant proportion of physical assets pre-date UFB roll-out
- ~8,000km shared legacy fibre 30+ years
- Replacement subject to asset performance (574km planned through PQP2) and investment optimised through timing and partnering

### • General sustain spend and safety

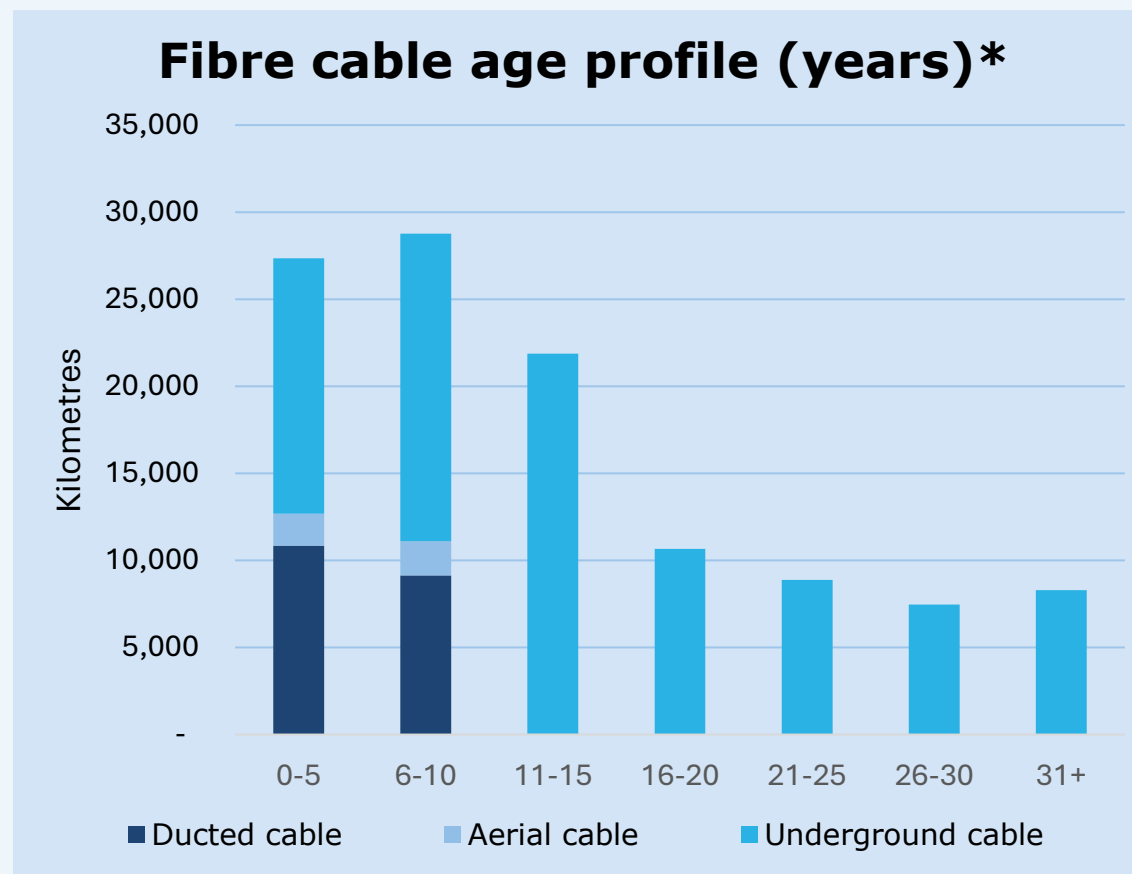
- Seismic strengthening
- Poles, pits and manholes, high sites

### • Third party infrastructure changes

- Roadworks, power network undergrounding

### • Resilience (growth capex if new fibre route)

- ~\$57m in PQP2 for towns with 3,000+ customers and diversified exchanges



\*Excludes service leads



# IT investment

## Investment drivers

- **Lifecycle management**
  - ~50% of IT spend: enterprise, provisioning and assurance systems
  - strong focus on cyber security
- **Process and product development or improvement**
  - ~50% of IT spend on developing new products and systems to support growth initiatives , customer experience and business improvement opportunities
  - 90%+ of fibre processes with RSPs automated
  - AI and machine learning used to optimise work-flow and network service. Future opportunities emerging as AI becomes embedded in many SaaS solutions.

# Julian Kersey

## Chief Corporate & Regulatory Officer

A

Adapt

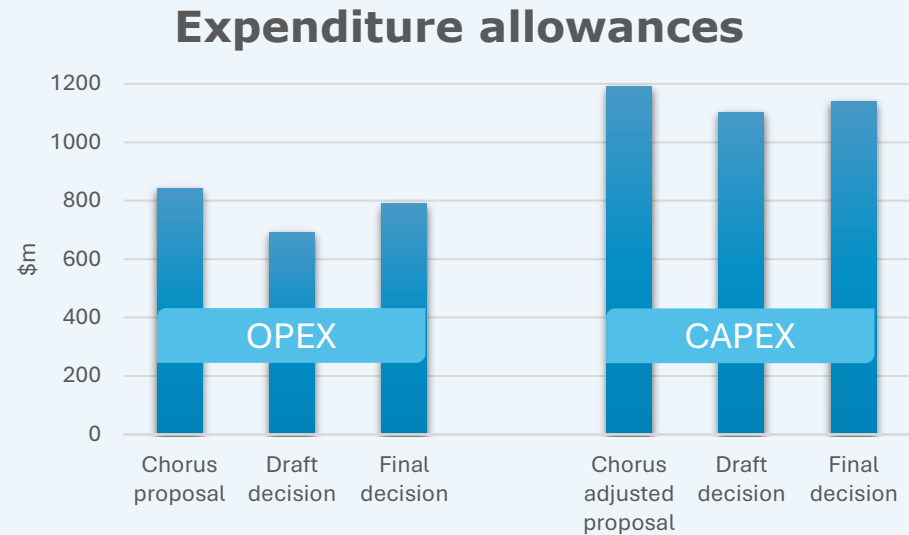


### Regulatory outlook

- Workable outcomes for PQP2 provide certainty and stability
- New Zealand fibre compares well globally
- Regulatory simplification is needed over Horizon 2 with a focus on:
  - copper deregulation; and
  - lighter touch fibre regulation.
- Consumer transparency is critical for fair competition

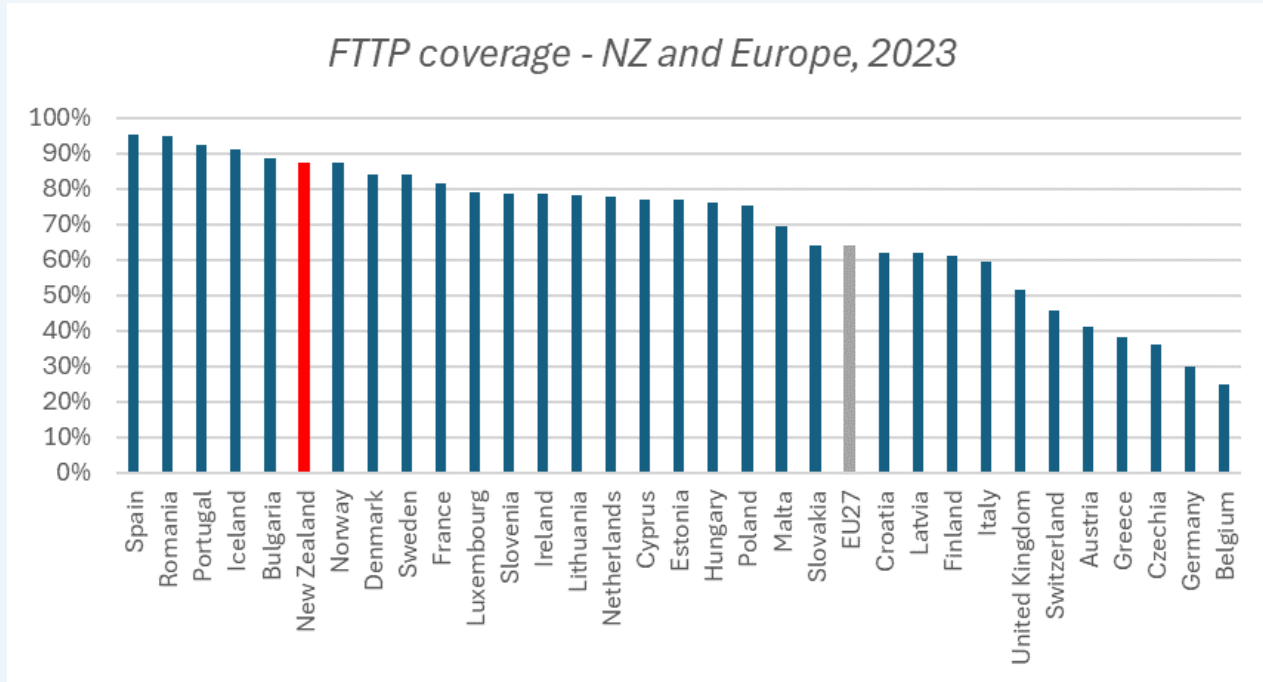
# PQP2 outcomes provide certainty and stability

Opex \$790m	Capex \$1,140m
No change to anchor services	WACC 7.68%



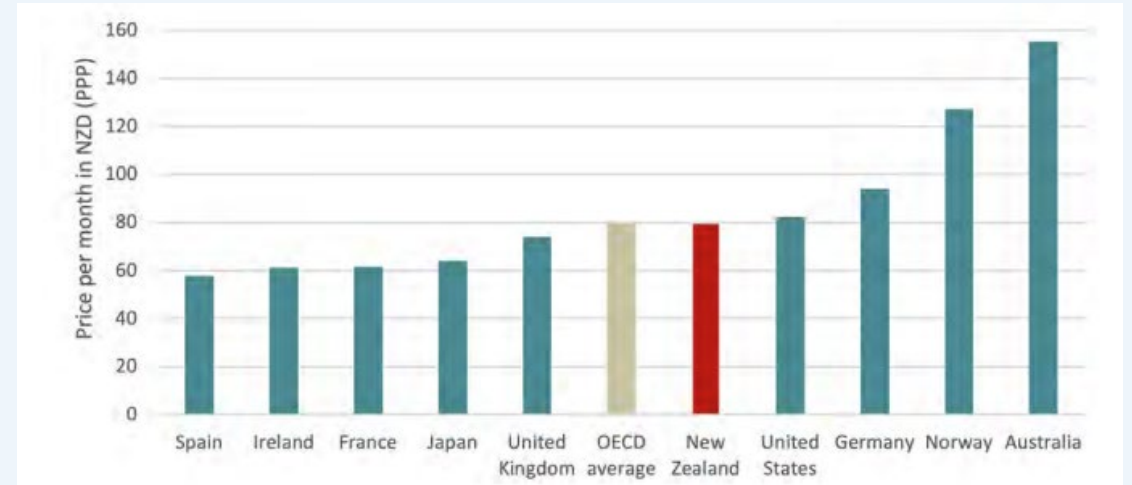
*Note: "adjusted" proposal for capex excludes items where we pulled back our planned spend (eg fibre frontier, hyperfibre)*

# Fibre pricing and coverage compare well globally

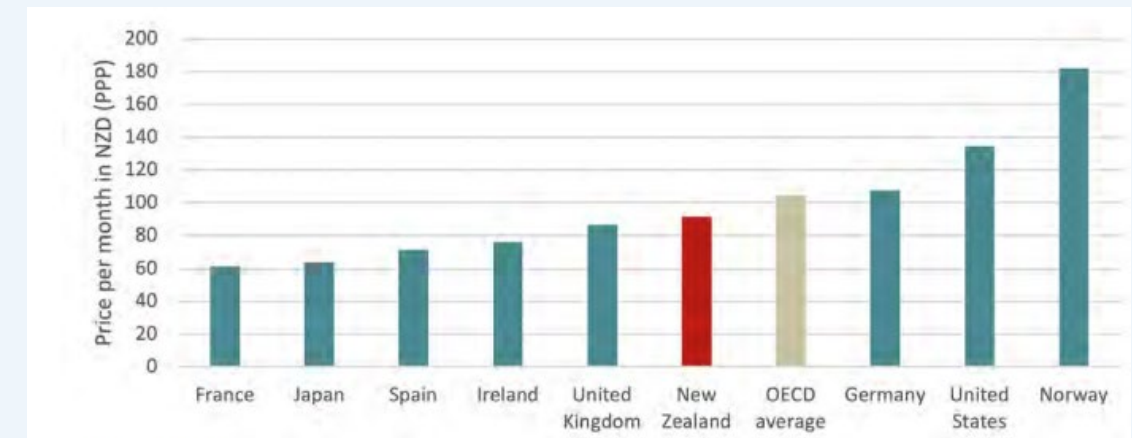


Source: *Broadband Coverage in Europe 2023*, a study by Omdia and Point Topic for the European Commission, with NZ data added

Price for Fibre 300 (or equivalent) – Sept 2023



Price for Fibre 1 gig (or equivalent) – Sept 2023



Source: TechInsights



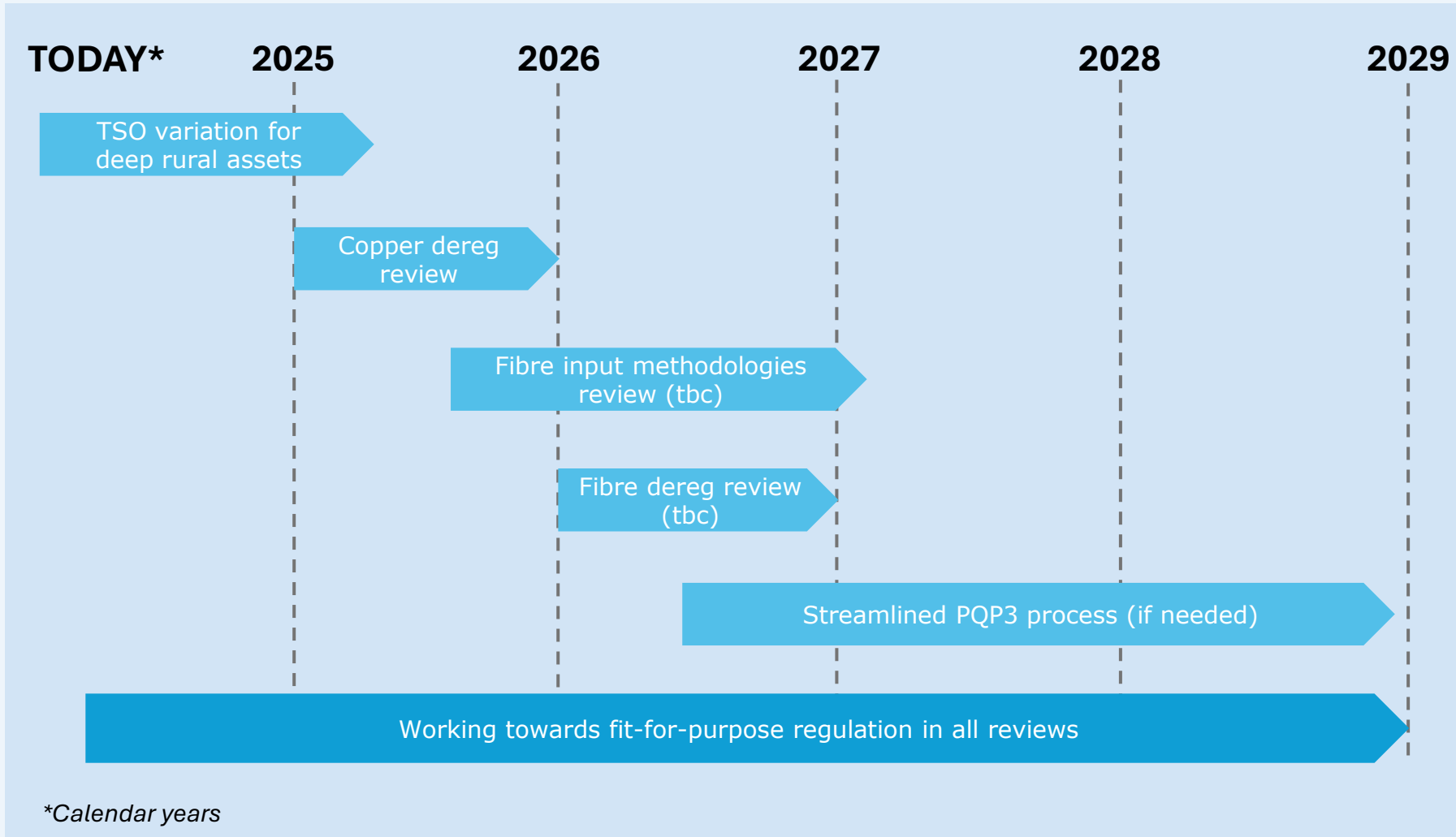
# Time to take stock

## Existing framework reflects out of date market assumptions

<b>Chorus: ~1.1m connections</b> (service some major centres – e.g. Auckland, Wellington, Dunedin)	<b>Local Fibre Companies (LFCs): ~375k connections</b> (service some major centres – e.g. Hamilton, Tauranga, Christchurch)	<b>Fixed Wireless Networks: ~350k connections</b> (service all major centres)
Non-discrimination (treat RSPs equally)		None
Business line restriction (cannot retail)		None
Unbundling requirement		None
Revenue cap + Information Disclosure	Information Disclosure only	None
Anchor products (CPI only price increases on fibre voice, 100Mbps, direct fibre)	None	
Averaged urban/non-urban pricing	No restriction	
Legacy TSO outside Specified Fibre Areas	No TSO requirement	
Legacy 10% ownership cap	No restriction	

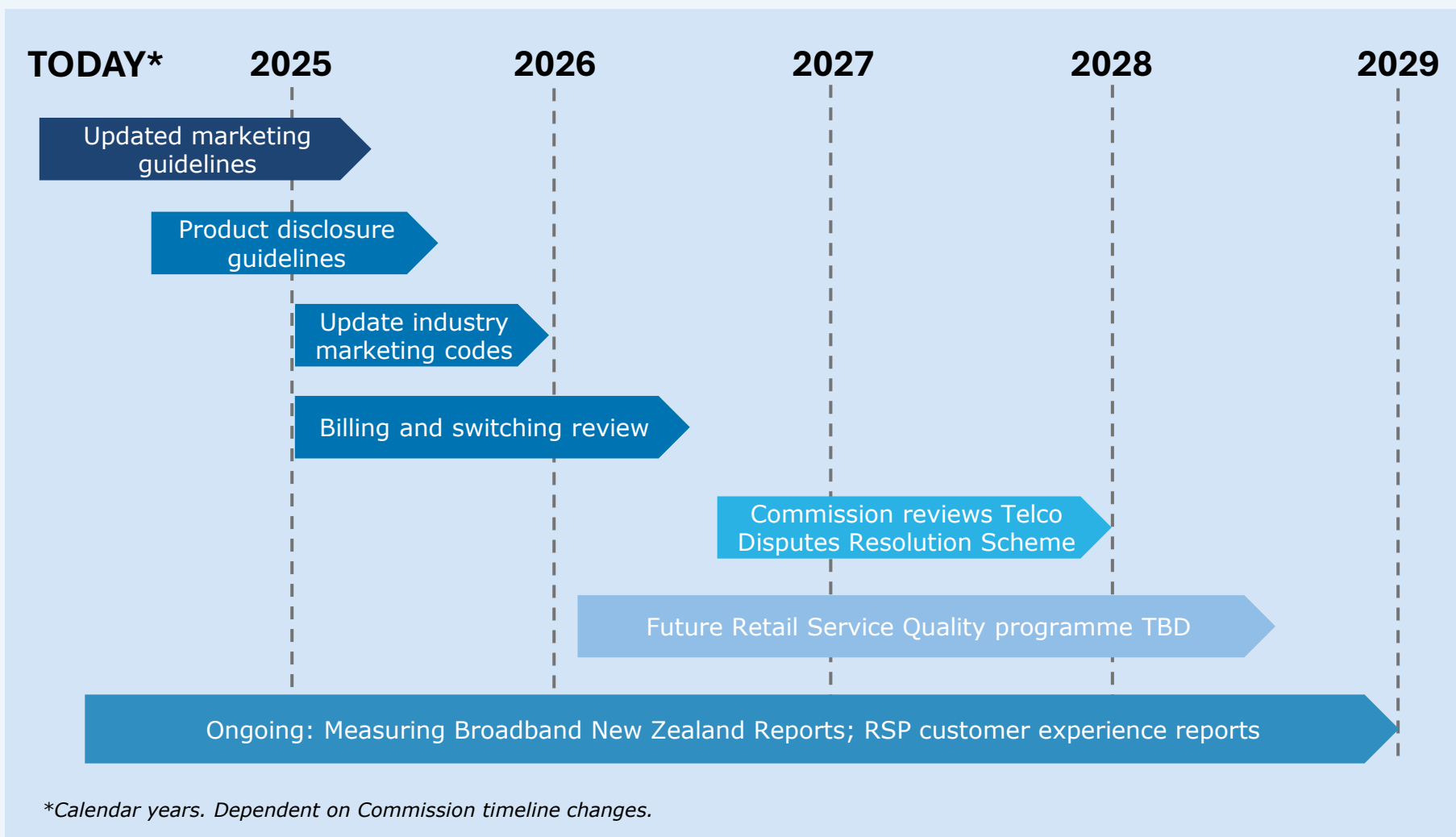


# Pathway to simplification by 2030



- TSO obligation is outdated
- No case for continued regulation of copper
- Fibre market very different from 2018
- Information disclosure-only regulation is better
- Opportunity now to simplify rules and save cost

# Consumer transparency opportunities



Enabling informed customer decisions

Consistent shopping journey and unbiased up-front info

More meaningful comparisons between products

Shining a light on how different broadband services perform



# Anna Mitchell

## Executive General Manager, Fibre Frontier Value Stream

### Copper retirement and fibre expansion

- Accelerated copper retirement by 2030 is achievable
- Customer outcomes key to delivering on our strategy
- Copper savings building over the coming years, essential to staying FCF+
- Fibre Frontier build tracking well, with strong early interest and uptake
- A strong economic case for fibre expansion for New Zealand

# Focusing on copper retirement by 2030

## End-to-end copper retirement

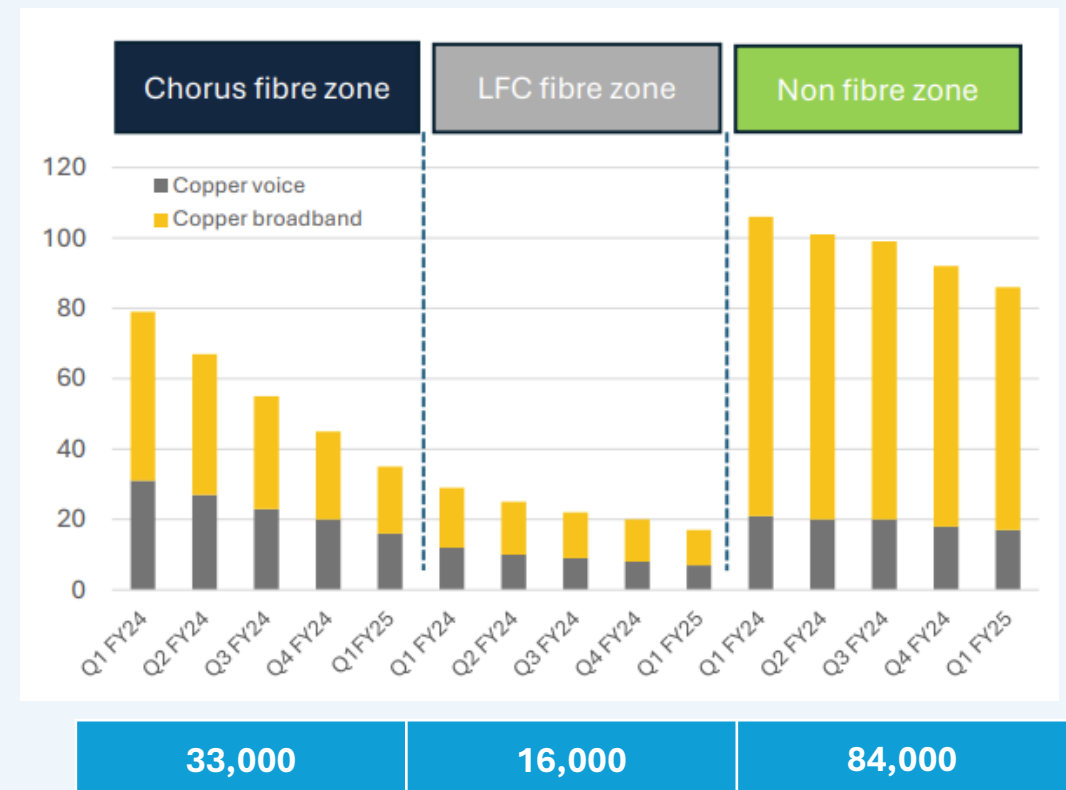
Customer transition

Asset optimisation and reuse

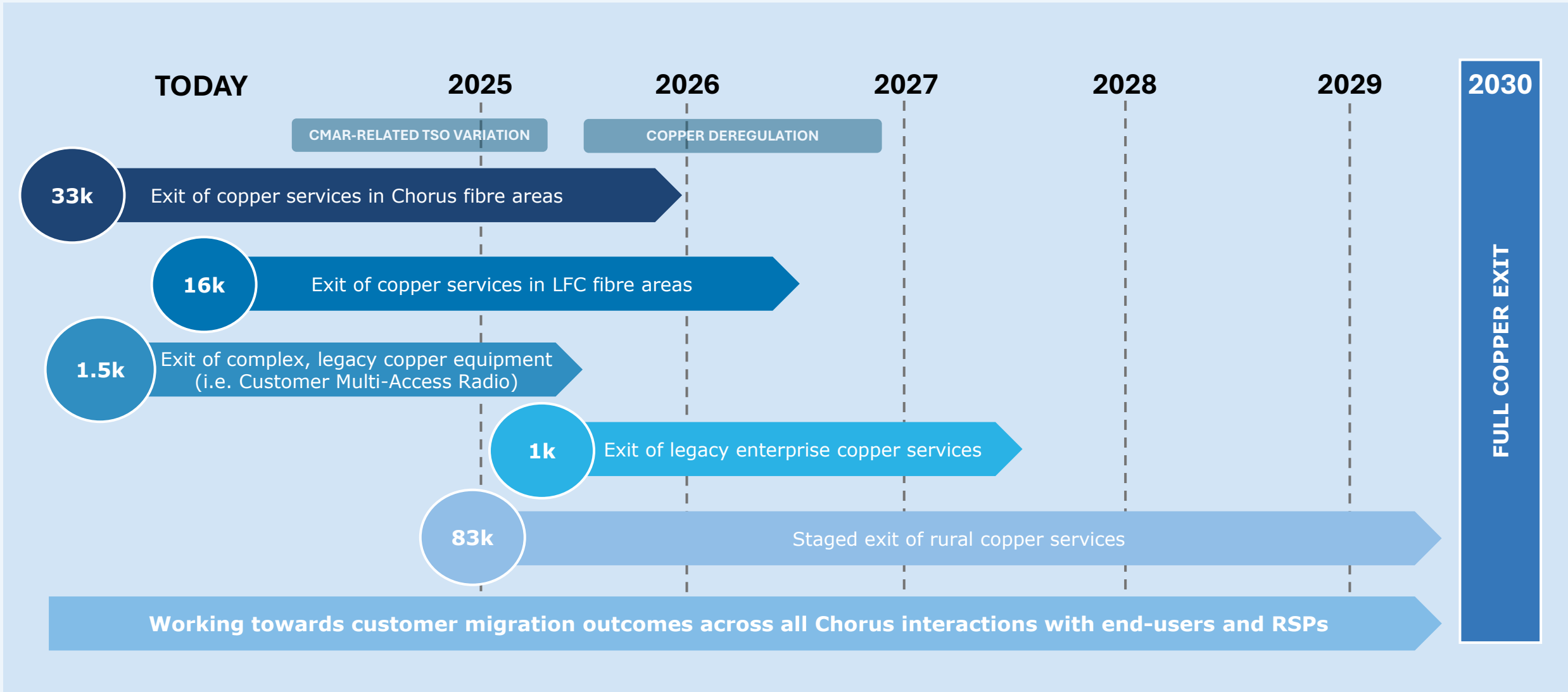
Decommissioning and disposal

- **Organisational alignment** to optimise programme delivery
- Prioritising encouraging and enabling **customer transition and migration**
- Implementing **data-driven tactical approaches** using forecast connections and network costs

**133,000** copper connections remaining (31 Oct)



# Pathway to copper retirement by 2030



# Rural telco market has changed significantly since CNU listed

97%

Rural copper consumers can now access terrestrial wireless alternatives

\$270m

Spent by govt on wireless in rural New Zealand since 2016 – not including the 5G spectrum allocation for extended coverage

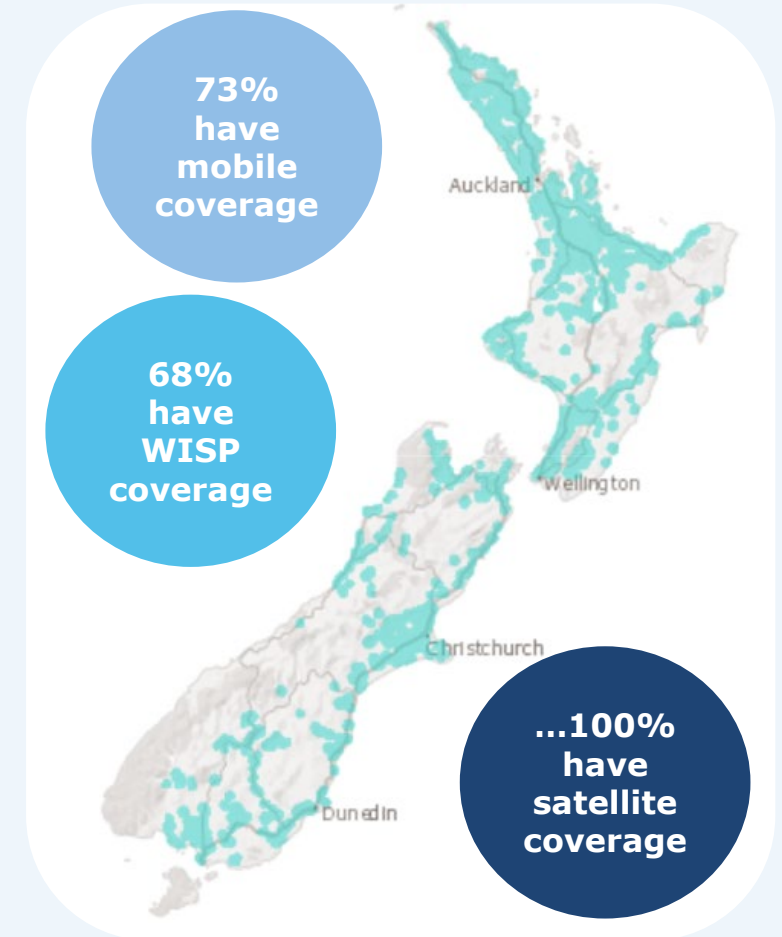
\$79pm

'Residential Lite' Starlink service launched earlier this year

73%

Remaining Chorus copper connections not subject to TSO

Of 345k rural premises...



Commerce Commission Annual Monitoring Report 2023 (Aug 24), Starlink.

# Reducing costs in line with declining customer numbers

Cabinets remaining	Chorus Fibre Areas	LFC Fibre Areas	Non-Fibre Areas
5,150	1,000	650	3,500

- Average savings per cabinet **~\$2,500p.a.** (electricity and avoided network maintenance)
- Over **1,500** cabinets closed to date
- Cumulative net savings of **\$50m from cabinet shutdown** between FY25 and FY30
- **100 exchanges** in Chorus Fibre Areas with fewer than 50 connections
- Copper capex to continue to steadily decline to 2030





# Retirement of Customer Multi-Access Radio systems

Technology surpassed by modern alternatives

Customer numbers have halved in past two years

Serving ~1,300 addresses

800+ sites were used to provide service

Fault rate 15x higher than fibre

Costs significantly exceed revenue

CHORUS

## Changing the way we communicate

### Voice calling for rural communities

For decades Kiwis in rural parts of New Zealand have relied on traditional phone lines to keep in touch. That's been changing and we now have mobile phones, wireless technology, and modern satellite technology which have opened up a world of voice calling options over the internet.

Not only do these options provide more flexibility and functionality than a landline delivered over the copper network, but they can be cheaper too. Plus you can keep your landline phone handset to use with these newer technologies if you prefer.

Over the next decade, Chorus plans to retire the copper network, so it could be worth trying one of the alternative phone services sooner rather than later.

Each option outlined below takes a few simple steps to set up and has the potential to greatly improve the way you communicate.

#### What are my voice calling options?

**MOBILE**  
If your property has mobile coverage, you can use your mobile phone to make and receive voice calls. Mobile phones are simple and easy to use and it's cheaper than paying for both a mobile and a landline phone.

**Things to be aware of:**  
Check the detail of your mobile plan to make sure you have enough calling minutes.

**WI-FI CALLING**  
If your property doesn't have mobile coverage, but you have a broadband service, then you may be able to use your mobile phone to make and receive voice calls over Wi-Fi. Most mobile providers and smartphones support this feature. Wi-Fi calling only uses a small amount of data to provide a good voice quality so most broadband services, including wireless and satellite, will comfortably support it.

Once you know your mobile phone provides this, it's easy to enable in the settings on your device, and it's just like making a regular mobile phone call.


**Things to be aware of:**  
Some older mobile phones might not support Wi-Fi calling. Like mobile calls, Wi-Fi calling may deduct calling minutes from your mobile plan. Because Wi-Fi voice calling relies on the internet, it can be affected during an internet outage.

#### How to enable Wi-Fi calling on your smartphone:

**iPhone:**  
Go to Settings > Phone > Wi-Fi calling  
Toggle on Wi-Fi Calling

**Samsung:**  
Open Settings  
Select Connections  
Toggle on Wi-Fi Calling

**For more information:**  
[spark.co.nz/help/mobile/understand/wifi-calling/](http://spark.co.nz/help/mobile/understand/wifi-calling/)  
[one.nz/our-networks/wifi-calling/](http://one.nz/our-networks/wifi-calling/)  
[2degrees.nz/help/mobile-help/calling-features/wifi-calling](http://2degrees.nz/help/mobile-help/calling-features/wifi-calling)




Nevis Country-set repeater station, South Island

# Demand for fibre outside current footprint is strong



10k premises due for completion mid-2025



First **10 builds are complete** and over **1,000 addresses passed**



Build currently underway in **25 areas** across NZ



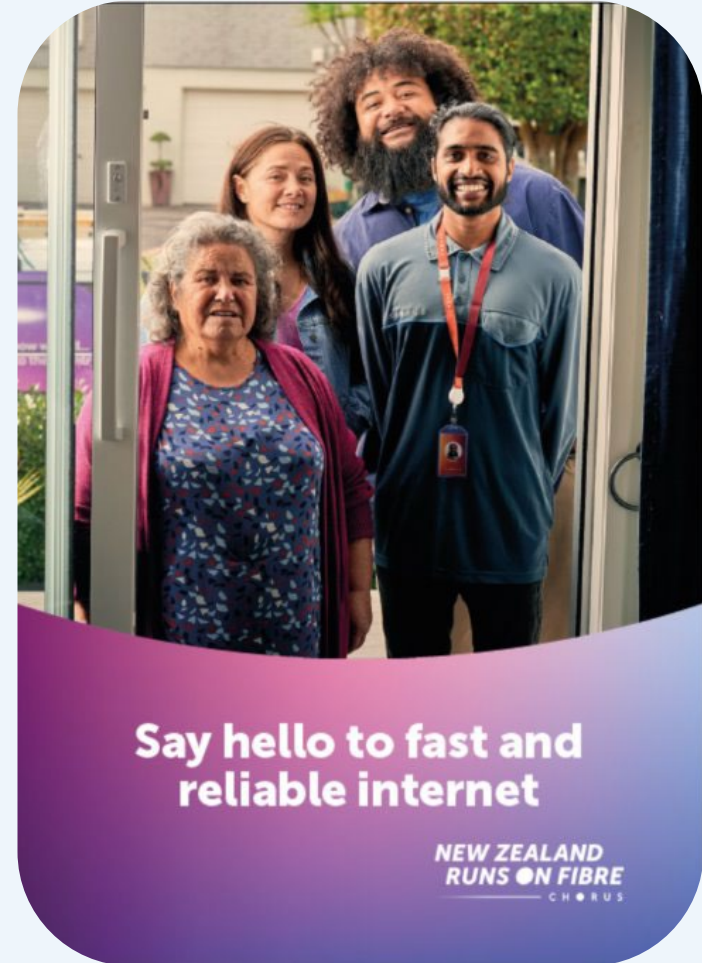
Over **3,000** expressions of interest – nearly **70%** in first 10 areas



Over **500 installs to date** with more than **300 already live**



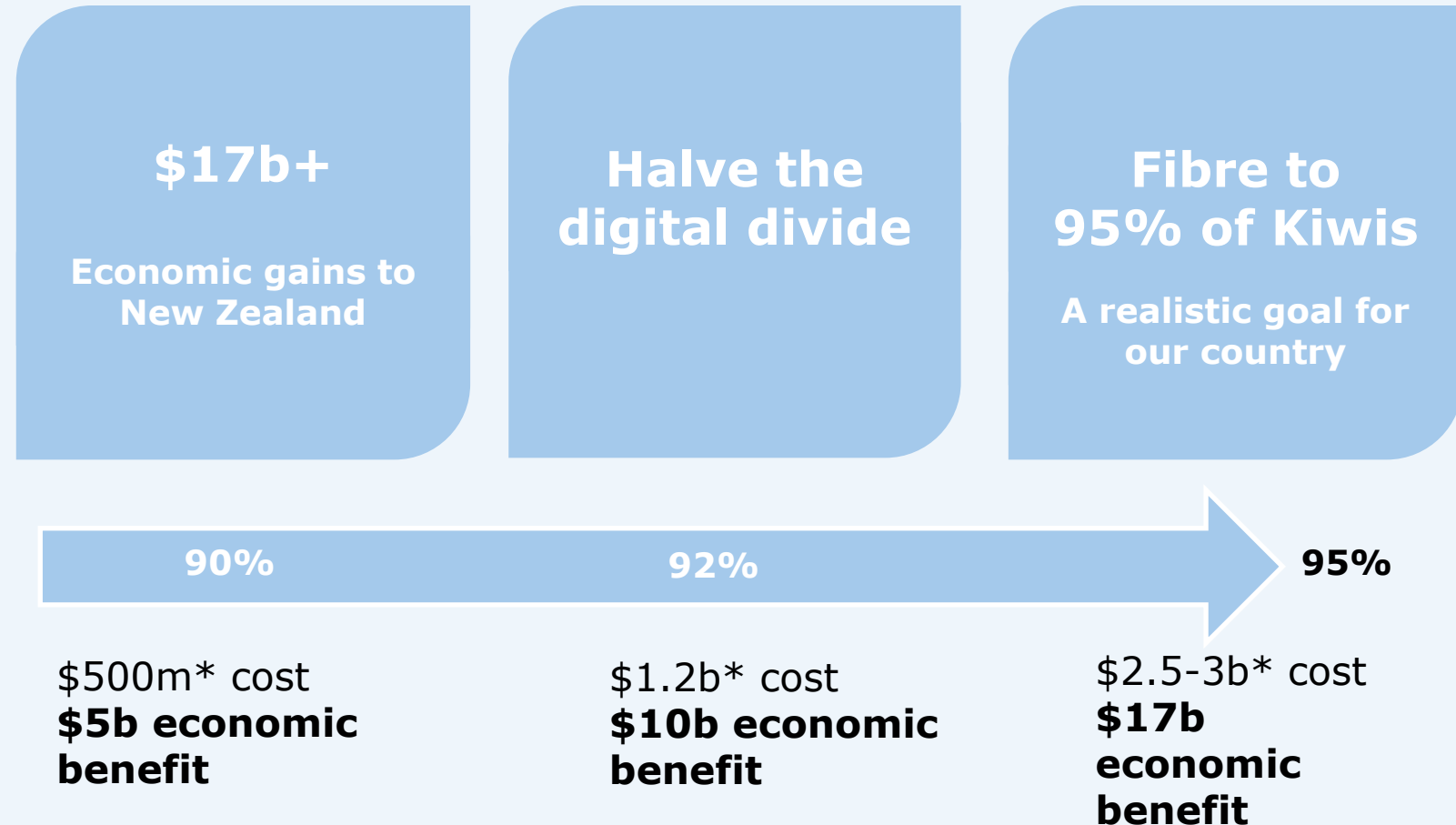
**40%** connections to date from offnet addresses



# Exploring Option 4

## Fibre Expansion

- NZIER and Deloitte reports show significant socio-economic benefits from high-capacity broadband
- We're encouraging government to consider fibre as part of its Infrastructure Priorities Pipeline
- Chorus would need to meet IRR hurdles to invest in further expansion



*\*combined communal and connection cost*

# Drew Davies

## Chief Operating Officer



### A solid fibre business with clear upside in Horizon 2

- Enabling our Value Streams to drive growth and optimise operations
- Immediate focus on streamlined go-to-market capability and simplification
- Copper retirement to release \$50m+ of annual direct copper opex by 2030
- Exploring a number of portfolio asset optimisation opportunities
- Strong PQP2 MAR tailwinds and core RAB to grow to ~\$5.2bn through PQP2
- Capital management principles and policy drive investment discipline and sustained dividend growth

# We're getting future fit

## FY25 guidance unchanged from what we have informed you previously

- EBITDA: \$700m-\$720m\*
- Sustaining capex: \$200m-\$220m
- Gross capex: \$400m-\$440m
- Dividend\*: 57.5cps unimputed

*\*subject to no material adverse changes in circumstances or outlook*

## Where we're headed with our Operations focus

- Continually working with our RSP's on new incentives and products for fibre bundling, such as Fibre Boost
- For the Access Value Stream, we're optimising our Go-To-Market processes to be more adaptive from development to product launch
- For the Infrastructure Value Stream, we're increasing the depth of capabilities to support the new opportunities
- Overall Enterprise focus on improving cost efficiency via simplification and streamlining our operating model into Horizon 2

# Copper cost outlook

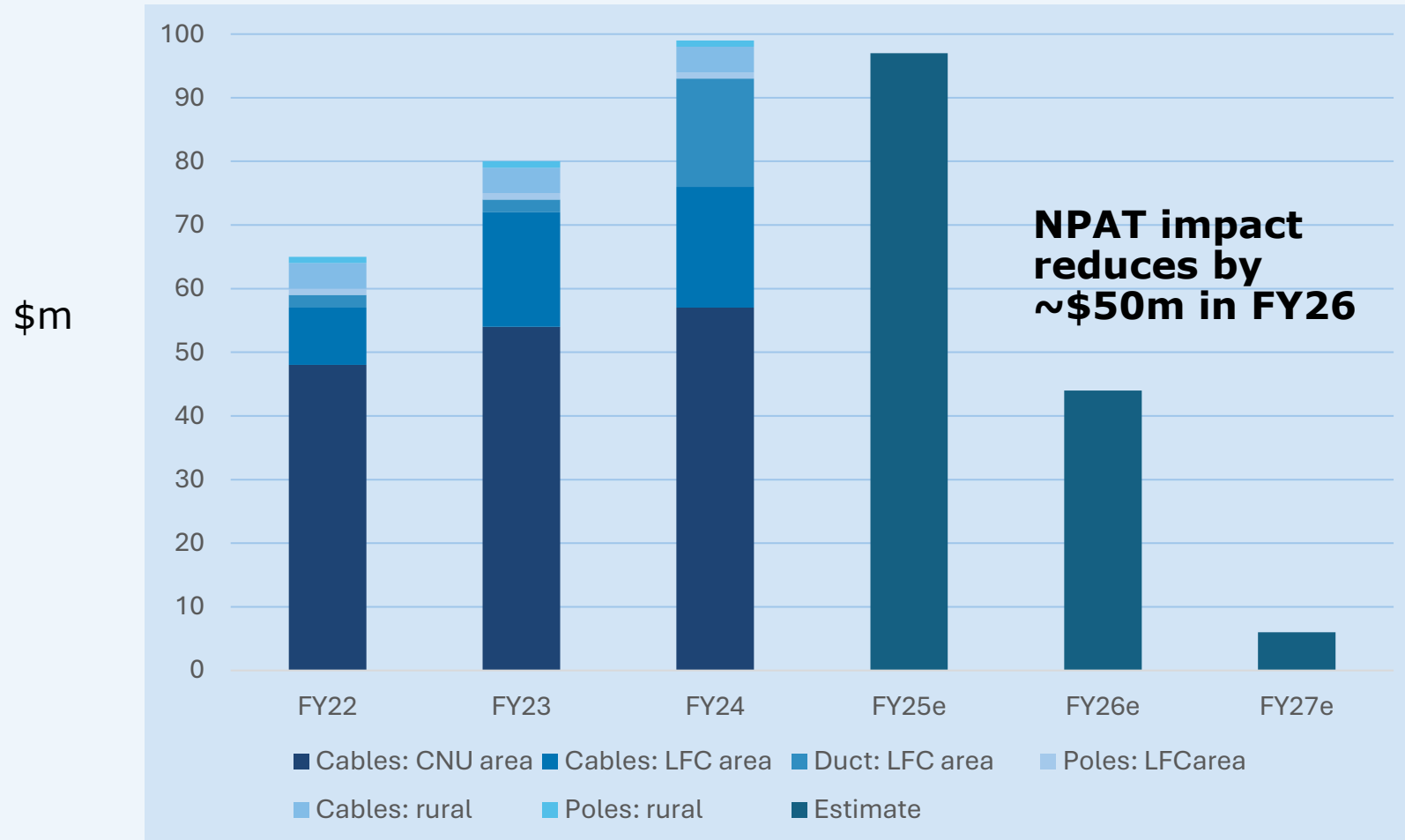
## Tight cost control keeps direct copper revenues and costs FCF positive

- Copper capex, net of contributions, \$15m (FY24) and declining as activity transitions to fibre
- Direct copper opex of ~\$54m (FY24) steps down as copper customers migrate to other networks, or to fibre with a lower cost to serve

Direct copper expenses*	FY24 \$m	Outlook to 2030 copper retirement
Network maintenance	27	Reducing as customers migrate to alternative networks: includes faults from the exchange and/or cabinet, through to customer premises
IT	10	Step-change once customer numbers remove need for scale systems
Other network costs	5	\$4m of exit costs in FY24; ongoing exit costs subject to pace of copper retirement and copper recycling programme
Electricity	12	Steady decline as network equipment shuts down
<b>TOTAL</b>	<b>54</b>	

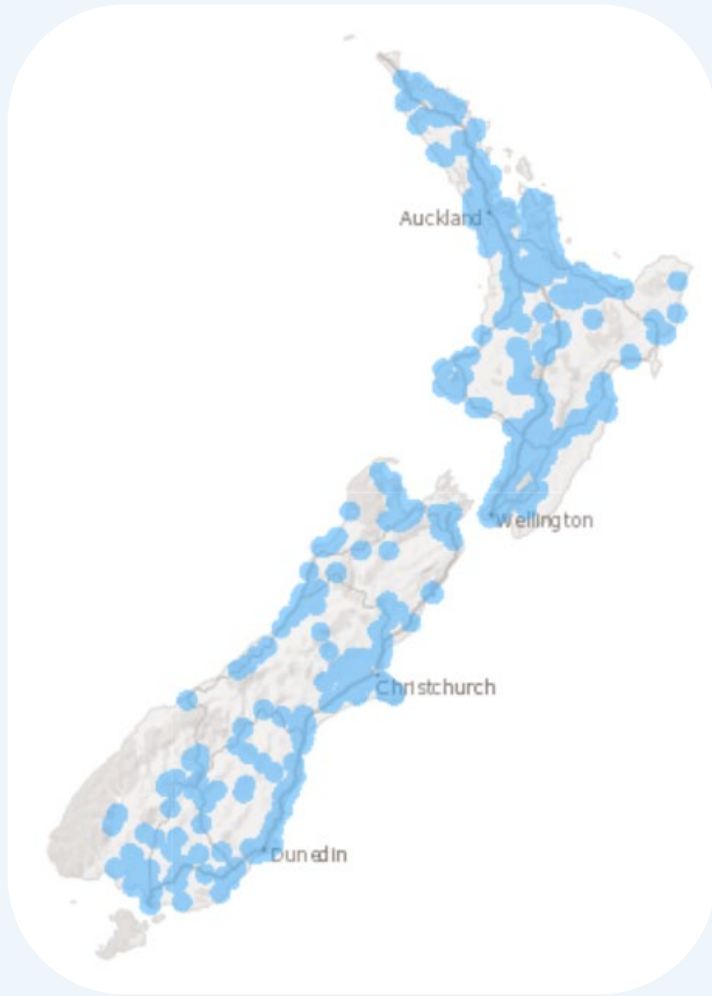
*\*Note: this summary excludes shared costs and potential property maintenance savings from property optimisation*

# Accelerated copper depreciation rolls off rapidly





# Optimising options for our asset portfolio



## Our assets

**~600 exchanges**

**~1,100 high sites**

**130,000km copper cable**

**212,000 poles**

**14,700 cabinets**

**~60,000km duct**

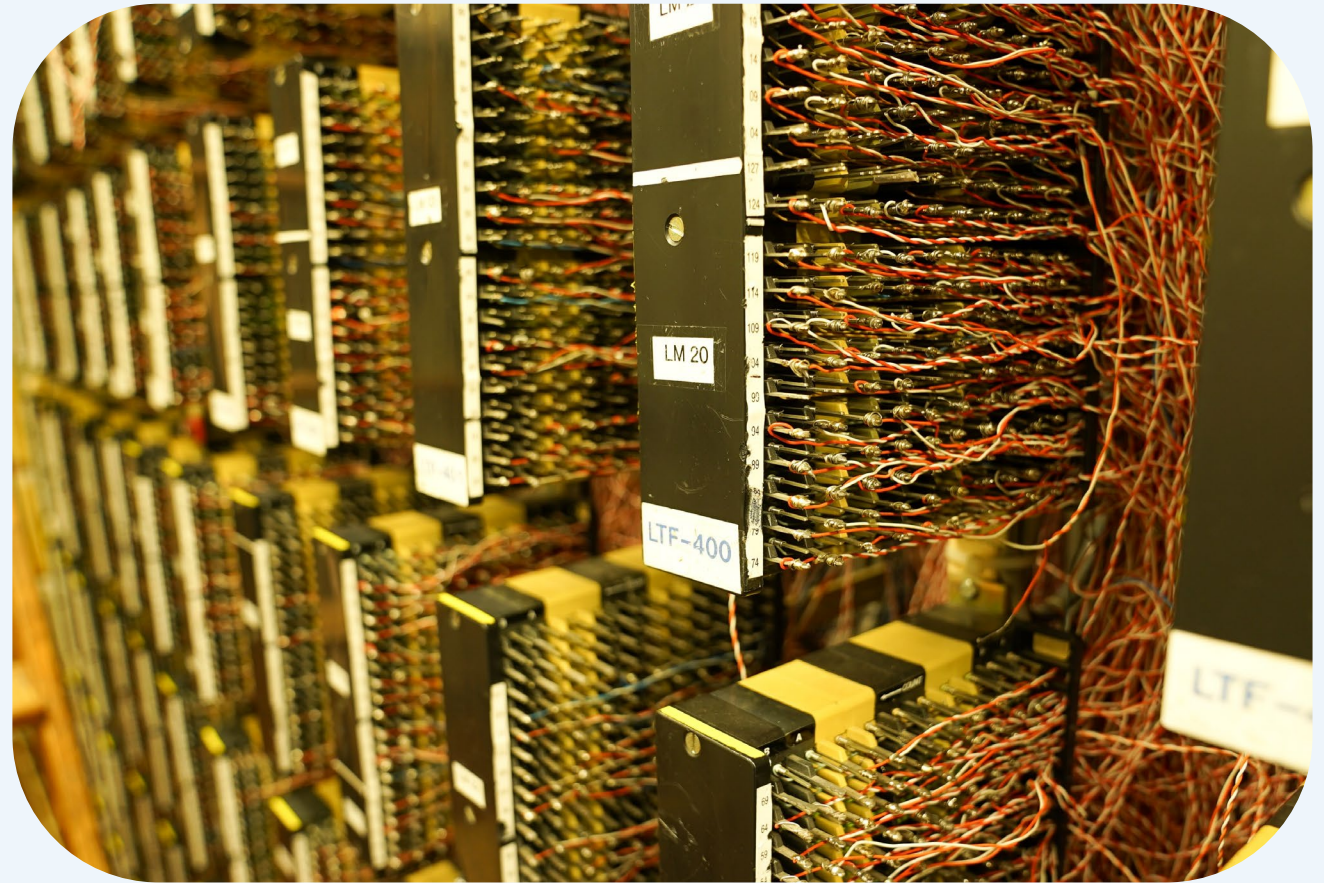
## Optimisation options

- EdgeCentre co-location in emptied copper spaces
- Sale of non-RAB exchanges as copper removed
- Potential sale of primary sites to towercos
- Sale to customers or exit retired sites (e.g. CMAR)
- Recycle retired copper cable where economic
- Possible 5G mobile/IoT use
- Sale or exit in non-fibre areas
- Potential re-use for other urban telco/utility services, or new innovations such as EV charging, distributed energy
- Potential re-use for other urban telco/utility services

# Exploring Option 5

## Asset Optimisation on Copper Recovery

- ~4,000km of large copper cable that is economic to recycle
- Trial to assess practicality and economics of cable removal in H2 FY25
- Expect ~3 to 7-year programme



**Estimated \$30m-\$50m net proceeds opportunity for large copper cable recycling at current prices**

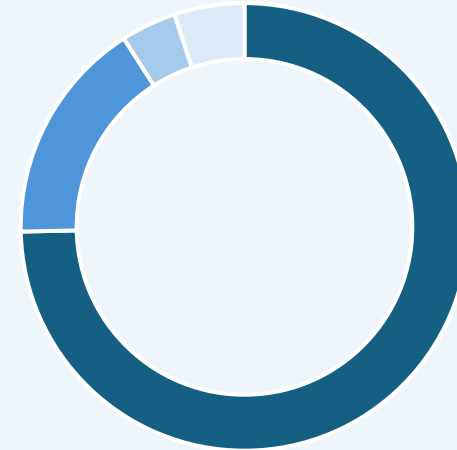
## Exploring Option 6

### Asset Optimisation on High Sites and Property Sales

- Land and buildings NBV of \$375m (FY24)
- A review is underway of our nationwide high sites portfolio to assess potential options for sale/disposal in FY26
- Chorus' need for other non-RAB land and buildings will reduce as the copper network is retired

### Land & Buildings: Net Book Value \$375m

- UFB area
- LFC area
- Other area
- High sites



- **~\$20m of 'high sites'** are located across a mix of areas and are used principally for remote network connectivity and wireless co-location  
*(Note: this category includes a large number of low value rural sites)*
- A further **~\$75m** of land and buildings assets are in LFC and other non-UFB areas that may become surplus – unless required as key fibre transport sites.



# MAR and RAB outlook provides certainty to 2028

- Expect final MAR (due next week) to be higher than draft, given final expenditure allowances and our depreciation tilt
- Strong MAR tailwinds in PQP2: WACC 7.68%; ~\$200m wash-up; ~\$85m tax building block from 2028; CPI wash-up in year 1; CIP 'benefit' deduction reduces ~\$6m with refinancing
- We expect to add \$10m-\$20m opex p.a. (to be recovered via wash-up) as copper shuts down in CNU fibre areas from end 2026
- Expect core RAB to grow from \$4.77bn (Dec 2023) to ~\$5.2bn through PQP2, subject to depreciation tilt

<b>PQP2 MAR</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Draft MAR	\$908m	\$947.4m	\$983.1m	\$1,017.9m

<b>PQP2 allowances</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Opex*	\$189.6m	\$196.3m	\$200.7m	\$202.9m
Capex**	\$327.6m	\$290.6m	\$261.3m	\$260.0m

\* opex allowance excludes ~\$20m p.a. of pass-through costs included in MAR

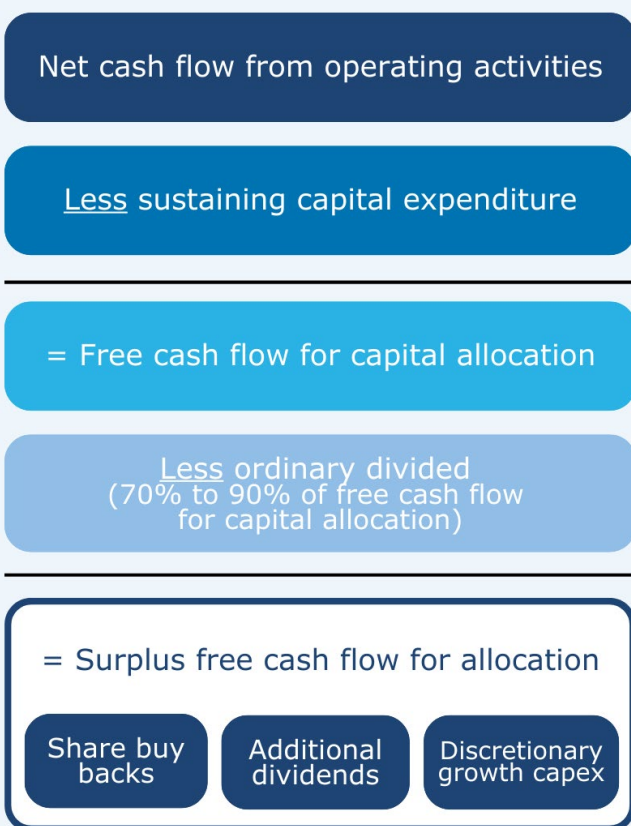
\*\* capex allowance may increase subject to installation demand and any future incentive proposal



# Capital management principles and policy

## A digital infrastructure business maximising long-term value and returns

Dividend policy: pay an ordinary dividend of 70% to 90% (on average, over time) of net cash flow from operating activities less sustaining capital expenditure



Capital allocation underpinned by free cash flow from an essential regulated infrastructure asset

Deliver a sustainable growing dividend, at least in real terms

Use balance sheet to fund discretionary growth capex - up to 4.75x ND/EBITDA

Discretionary growth capex must deliver greater value than returning funds to shareholders

# Q and A



## Recap: Fast track to an all-fibre future

**We're moving quickly to become an all-fibre business by 2030**

**New market challenger posture supports push for 80% uptake**

**Regulatory settings on fibre provide clarity and stability for next 4 years**

**Focus on leveraging our infrastructure, with new market adjacencies to explore**

**Copper retirement provides opportunities for efficiencies**

**We are enabling better futures for Aotearoa**



Thanks for  
joining us

