

## **STOCK EXCHANGE ANNOUNCEMENT**

21 November 2019

### **Chorus' investor roadshow**

The attached presentation has been prepared by Chorus for an international roadshow scheduled to take place next week.

ENDS

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# Chorus Limited- Debt Investor Presentation

November 2019

DEBT INVESTOR PRESENTATION

CHORUS



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# Presenters



**David Collins**  
Chief Financial Officer

David joined Chorus in December 2018 after 9 years with Aurizon, Australia's largest rail freight operator

David is responsible for ensuring Chorus' strong financial performance, and creating a stable and sustainable business. This includes building relationships with shareholders, debt holders, and the wider investment community



**Andrew Hopkinson**  
Treasurer

Andrew joined Chorus after 17 years with TCNZ where he held a number of roles in finance, before being appointed Treasurer in 2005

Andrew worked on the debt management aspects of the TCNZ / Chorus demerger

Prior to joining TCNZ, Andrew worked at the Reserve Bank of New Zealand in the financial markets group



**Brett Jackson**  
IR Manager

Brett has run Chorus' investor relations programme since the demerger from TCNZ in late 2011

Brett joined Chorus when it was first established as an operationally separate business unit within TCNZ in 2008 and was involved in marketing communications, industry consultation and network bid projects

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# Introducing Chorus

**New Zealand's largest fixed line  
communications infrastructure business**



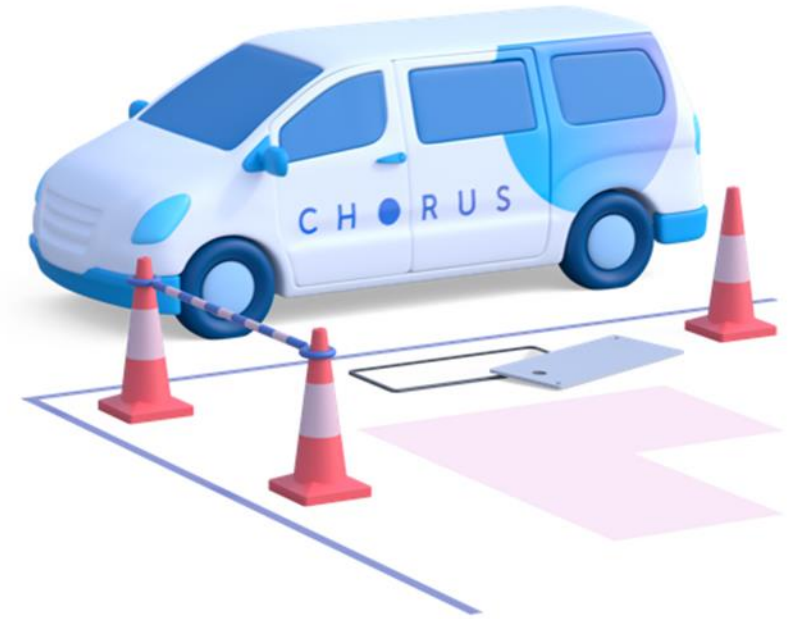
# Key Credit Highlights

- New Zealand's largest fixed line communications infrastructure company
- Building and operating 75% of NZ's planned fibre to the premises footprint
- Fibre partnership with NZ Government: pre-committed, low cost, long-term funding
- Regulated utility framework to underpin financial profile from 2022
- Strong demand for fibre broadband, and population/premises growth
- Strong operating cash flows and financial performance
- Financial flexibility via \$550m bank facility, multi-currency EMTN and NZ dollar retail bond programmes
- Proven commitment to maintaining a BBB credit rating (S&P or equivalent)



# An Overview Of Chorus

- **New Zealand's largest fixed line communications infrastructure business**
  - Established in Dec 2011 following demerger from Telecom NZ
  - ~900 employees, supported by service company contractors and subcontractors
  - Listed on NZX and ASX: CNU
  - ~NZ\$2.5 billion market capitalisation (as at 20/11/19)
- **A nationwide copper and growing fibre (FTTH) network**
  - Wholesale network operator with ~100 retailer customers
  - ~1.45m connections, including ~1.2m broadband
  - 82% of way through 11-year fibre to premises rollout
  - 55% fibre uptake, well ahead of initial rollout target of 20% by 2020
  - Streaming video services driving significant data consumption



Agency	Rating	Outlook
S&P	BBB	Stable
Moody's	Baa2	Stable

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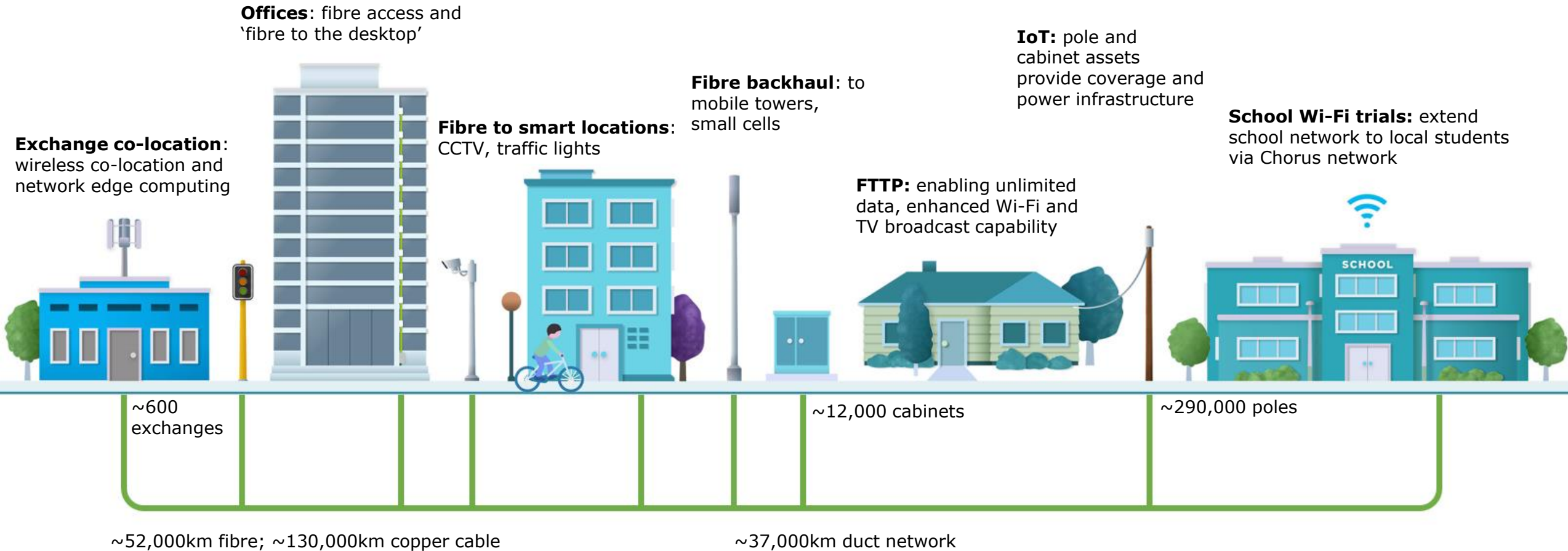
# The Ultra-fast Broadband Initiative

- **Ultra-fast broadband (UFB): a Government objective**
  - original objective (UFB1): fibre to premises covering **75%** of population by 2020
  - subsequent agreements (UFB2 and UFB2+) extended coverage goal to **87% of population by the end of 2022**
- **Chorus was awarded ~75% of the fibre rollout**
  - requirement that Chorus split from Telecom NZ to participate: demerger in December 2011
  - government partnerships with four fibre companies: Chorus, Enable, Northpower, Ultrafast Fibre (WEL Networks)



# Our Network Infrastructure

Copper VDSL to ~80% of lines; Fibre to pass ~1.36m end customers by end 2022



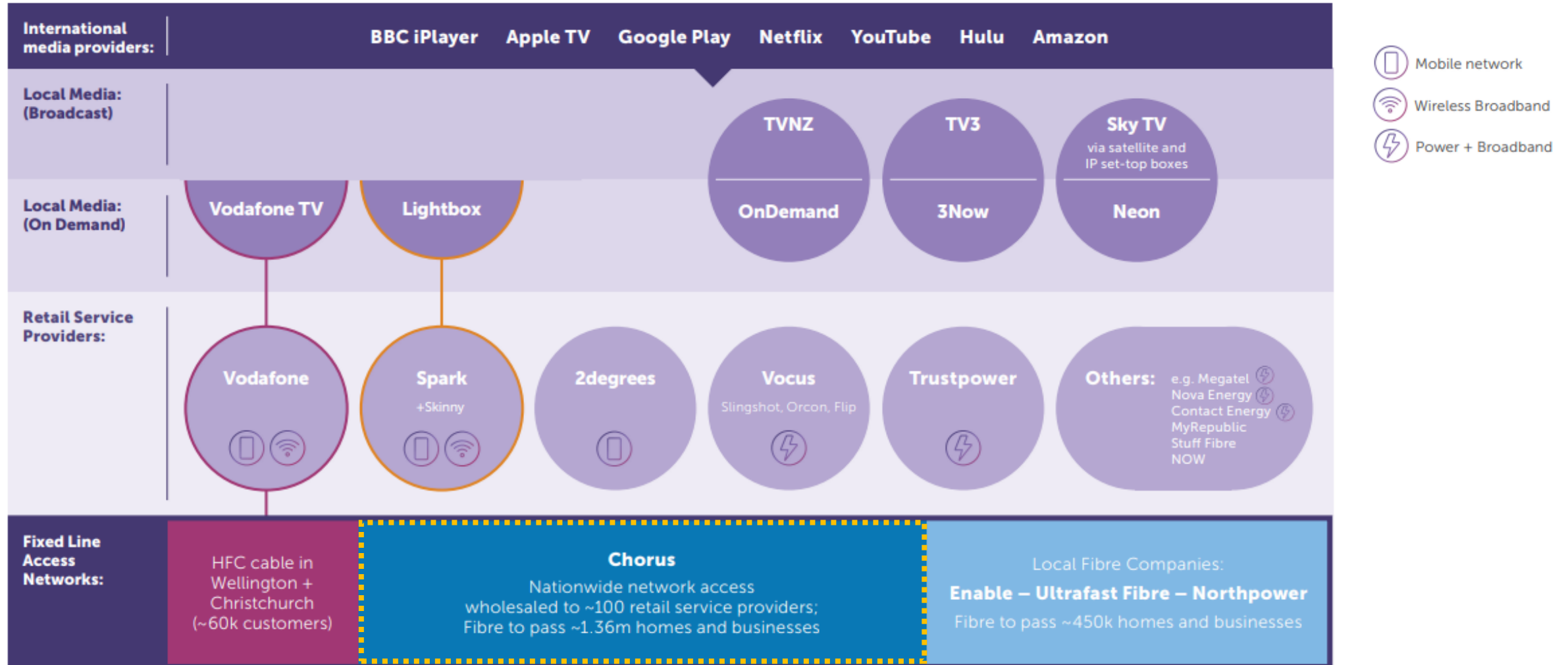
# Business Overview

Chorus' role within the New Zealand  
fixed line market



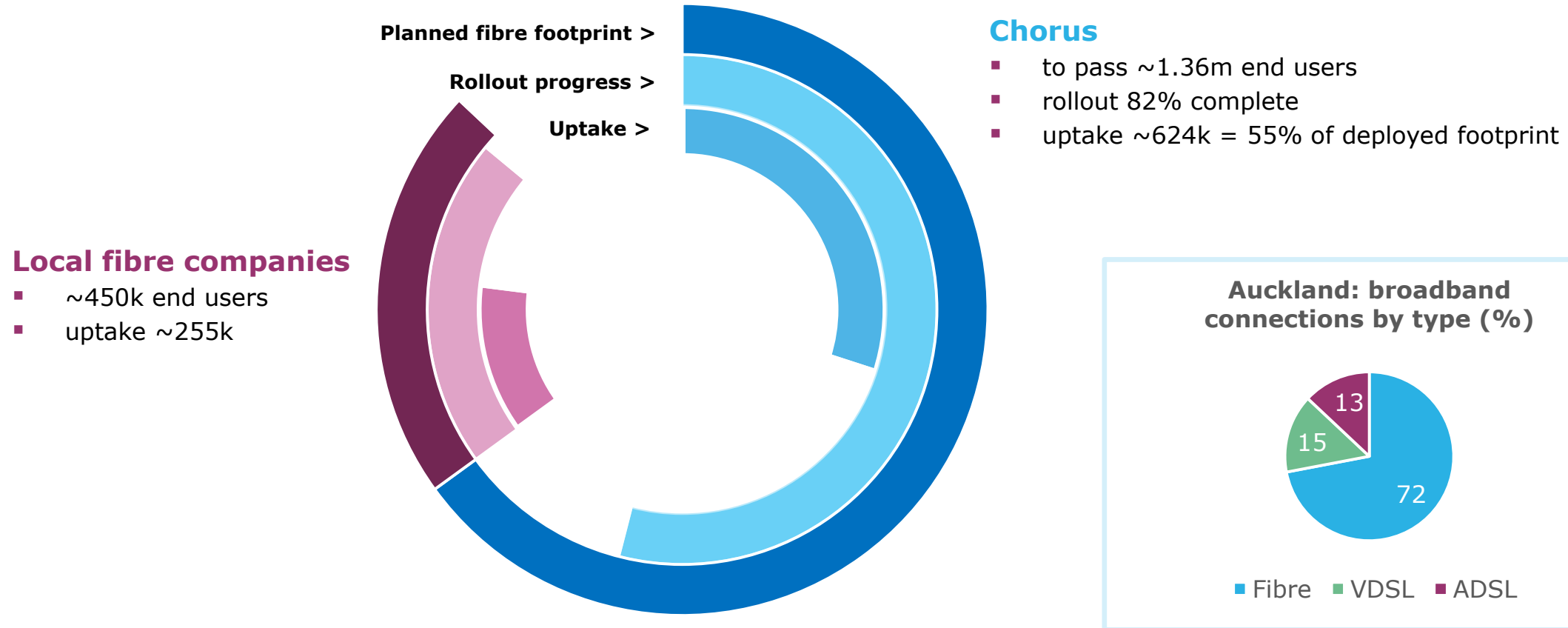


# An Open Access Wholesale Network



Note: Fibre to the premises will cover ~87% of NZ population by the end of 2022

# Fibre to reach 87% of NZ population by 2023



# Premises growth supporting broadband uptake

96,000 dwellings forecast to be consented in Auckland (2019-2024)

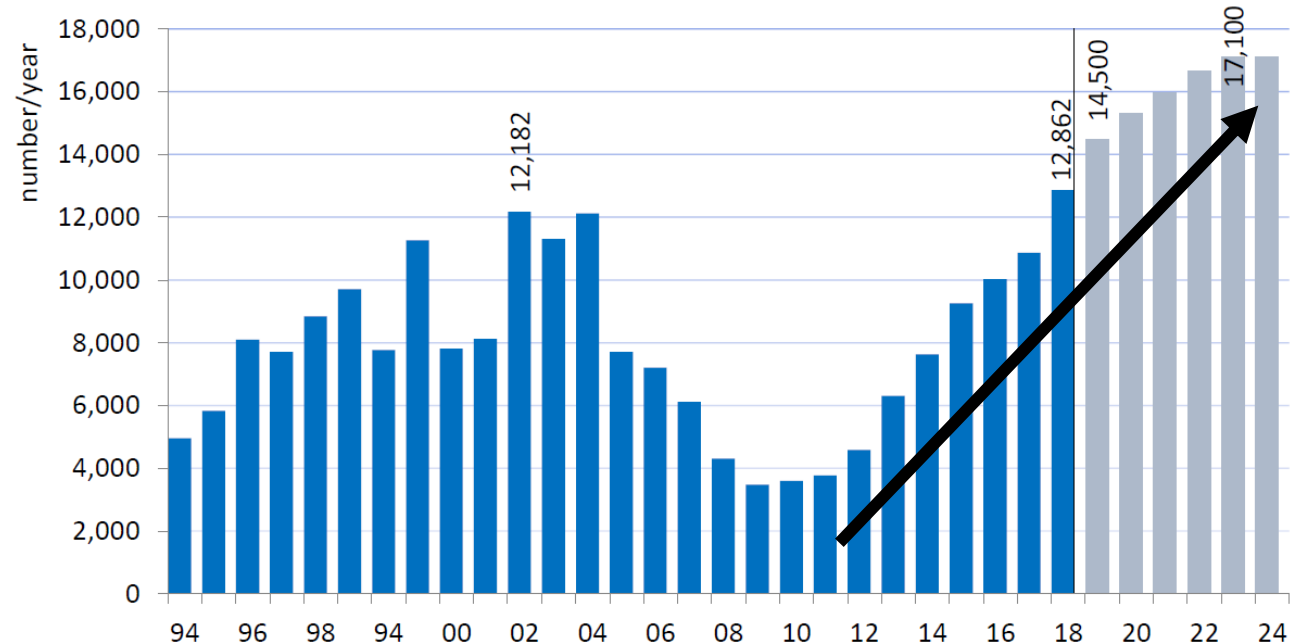
## Auckland

- New peak of ~14k dwelling unit consents in 2019, forecast to keep growing

## New Zealand

- Average of 37,000 new dwellings forecast per annum for the next six years
- Multi-unit dwellings expected to grow from 36% to 41% of new residential dwellings by 2024

Figure 4.1.2 Dwelling units in Auckland, 1994 to 2024



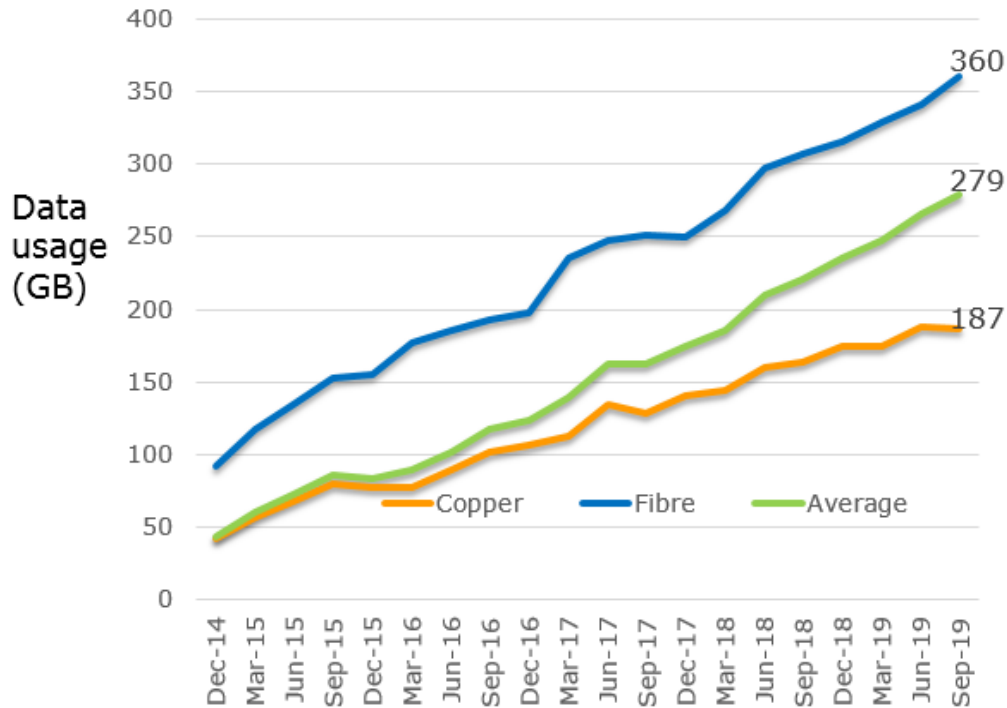
Source: BRANZ/Stats NZ



# Broadband: the 4<sup>th</sup> utility

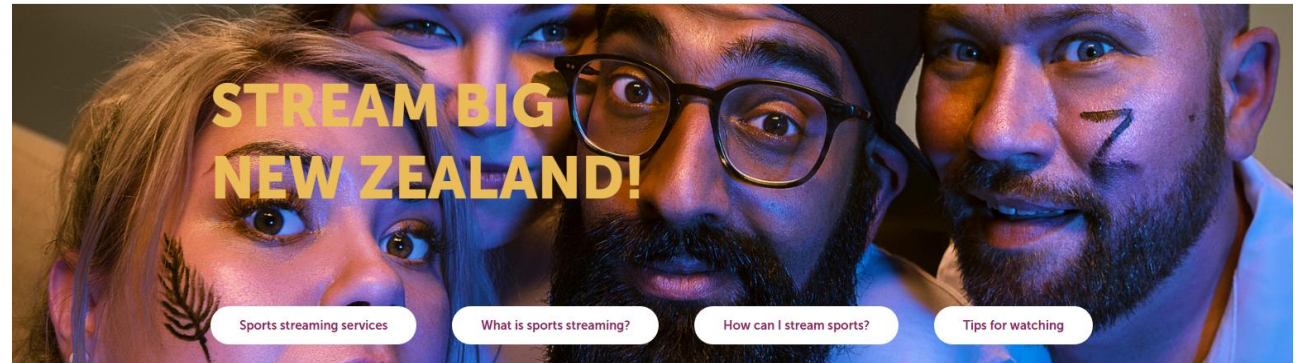
# Unlimited data and streaming are the norm

## Monthly average data usage per connection on our network



## Growing catalogue and quality of streaming content is driving broadband uptake and usage higher

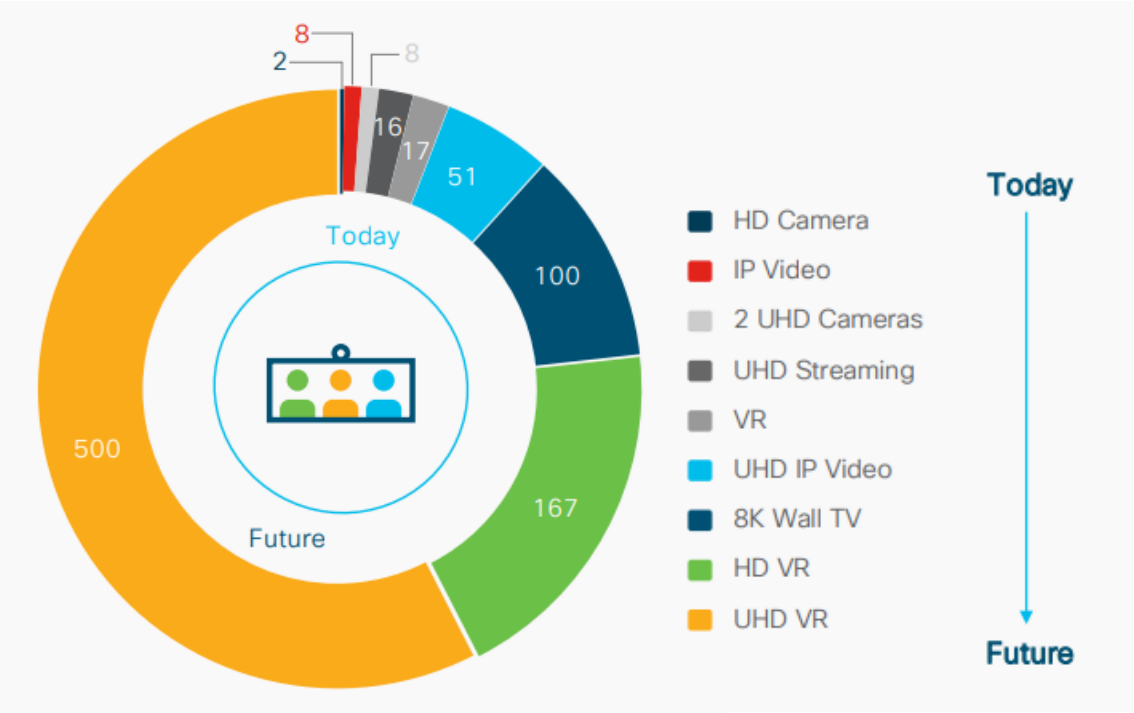
- 2degrees bundle with Amazon Prime
- Stuff launched news and content portal: play stuff
- Sky TV focused on streaming services: *Sky Sport Now*
- New standalone Vodafone TV device to enable online content
- Spark Sport showing English Premier League, Rugby World Cup
  - Rugby World Cup promoted uptake of smart TV's and introduced traditional TV viewers to streaming
  - Chorus network capacity increased ~50% in FY19



# 1,000 Gigabytes per month by 2023...

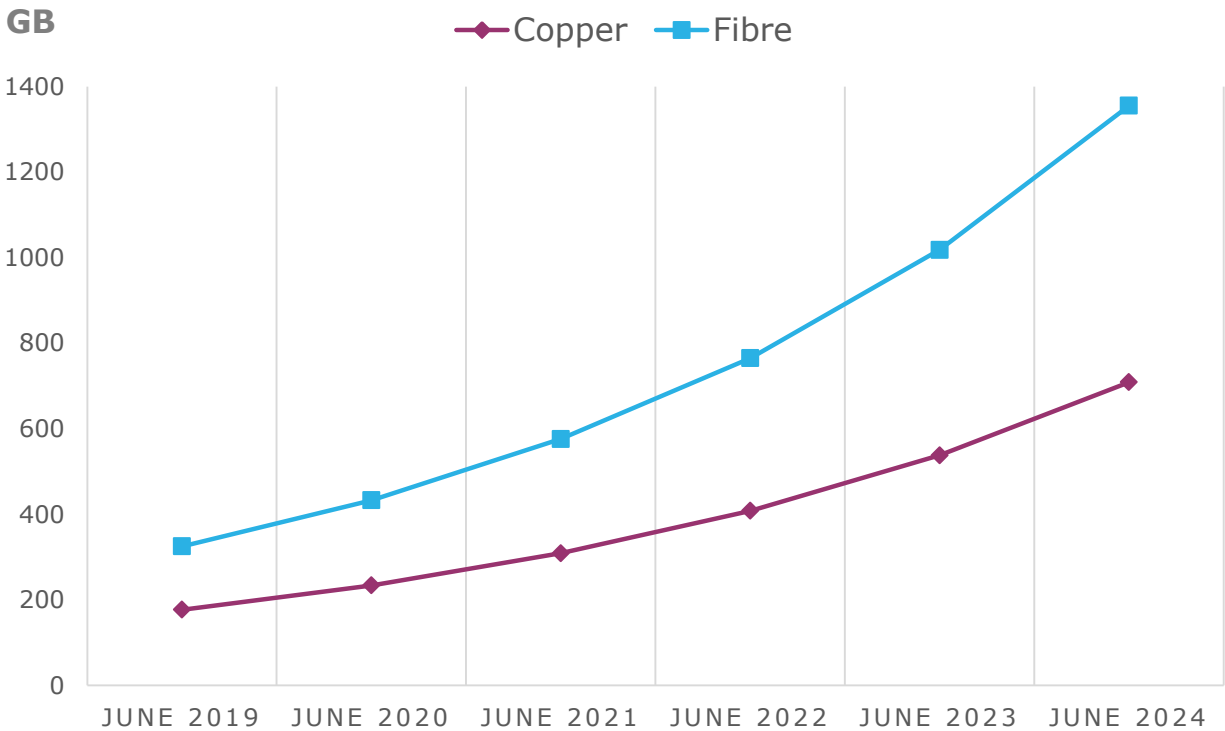
Video content and 4K, 8K to drive usage growth

## Speed requirements in Mbps



Source: Cisco VNI, Forecast and Trends, 2017-2022

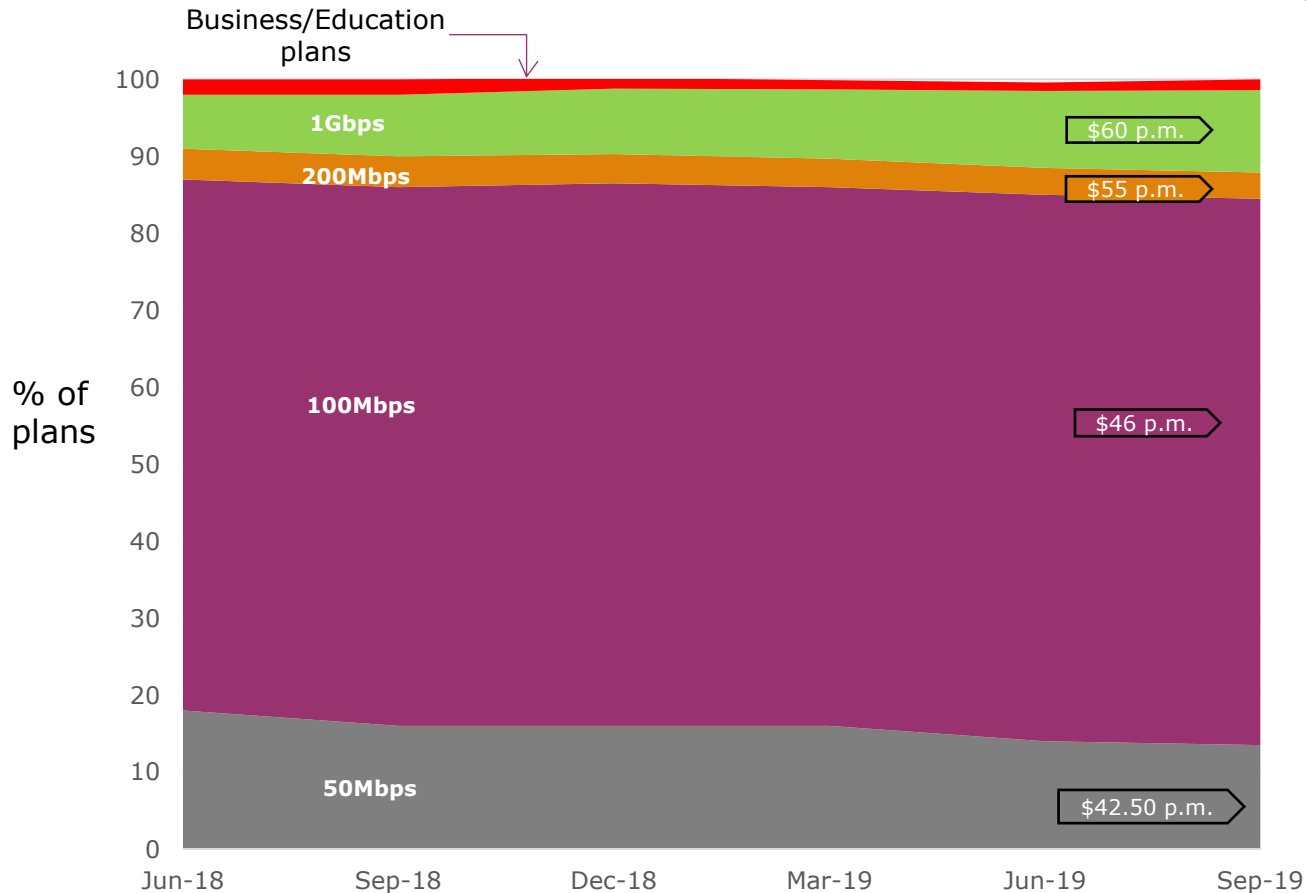
## Chorus Forecast: Average Monthly Broadband Usage





# Active wholesaler campaigns driving ARPU growth

## Total mass market fibre uptake by plan type



- **46,000** mass market fibre connections added in Q1 (vs 43k in Q4 FY19)
  - 1Gbps connections grew to 69k (Q4 FY19: 58k) and are now ~11% of mass market fibre connections
  - Second tier retailers continue to grow market share with some promoting 1Gbps at ~\$85p.m.
  - 100Mbps connections stable at 71%
  - UFB prices capped to 2022 with annual CPI adjustment

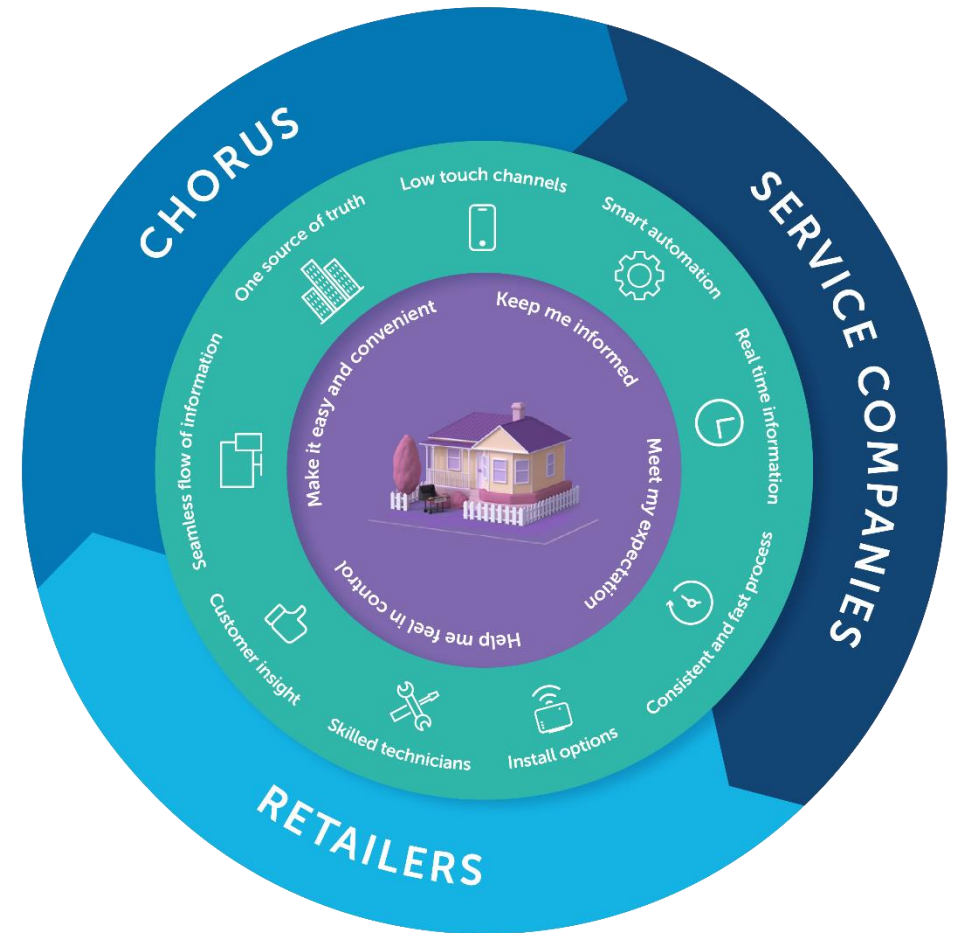
## 10G PON in development, 25G PON on the roadmap

- New Hyperfibre products, initially as 2 & 4 Gbps services were recently launched
- Hyperfibre will enable new technologies and experiences, fundamentally changing the possibilities for how we live, work and innovate

# Streamlining and simplification

## Accelerating our transformation programme

- **Assure:** new channel launched; identifying opportunities to solve faults proactively and remotely
- **Intact connections:** make it easier and faster for customers to get service switched on
- **Fibre connect:** keep refining our process; emphasis on reducing reschedules and cancellations
- **Property developers:** manage growing premises volumes and lift developer experience
- **Complex orders:** new channels for non-premises connections



# Growing our portfolio

## Moving from innovation to product phase

- **Edge Centre Colocation:** 3 sites open for data centre space; ~30% of space filled
- **Smart locations:** growing demand for non-building connections (e.g. CCTV)
- **Fibre to desktop:** market identified; exploring channels to market
- **Wi-Fi ONT:** device being deployed as part of standard installation; considering Wi-Fi service options





# Regulatory Framework

# Legislation passed in November 2018

87% of population where fibre will be available by end of 2022 →	→ Remaining 13% of population
<b>Fibre access network</b> <ul style="list-style-type: none"><li>▪ Regulated asset base (RAB) with revenue cap to be determined by Commerce Commission</li><li>▪ Price caps on contracted fibre products with annual inflation adjustment, until 2022. Price caps then only apply to fibre voice service, a fibre broadband service and direct fibre</li><li>▪ Unbundled fibre (commercial price) to be available in UFB1 areas from 2020 and UFB2 areas from 2026</li><li>▪ Three years after new regime commences, the Commission can review the revenue cap model and anchor products, subject to specified conditions and statutory criteria</li></ul>	<b>Copper – where fibre is available:</b> <ul style="list-style-type: none"><li>▪ Copper network to be deregulated and Telecommunications Service Obligation (TSO) removed</li><li>▪ Chorus can withdraw copper service subject to minimum consumer protection requirements being developed by the Commission and due by mid-2020</li></ul> <b>Copper – where fibre is <u>not</u> available:</b> <ul style="list-style-type: none"><li>▪ Copper remains regulated and TSO applies</li><li>▪ Copper pricing capped at 2019 levels with CPI adjustments</li><li>▪ Commission required to review pricing framework no later than 2025</li></ul>

# Overview of current RAB implementation

## The Commerce Commission is implementing the new framework

On 19 November, the Commerce Commission released its draft Input Methodologies decision, following extensive submissions from Chorus and investors. Key changes from the Commission's 'emerging views' paper published in May were:

- Higher WACC following an upward revision of:
  - the asset beta from 0.46 to 0.49; and
  - Market Risk Premium from 7% to 7.5% (applicable after 2020)
- Tax losses to be carried forward to implementation date
- More favourable treatment of Crown financing

The Input Methodologies are expected to be finalised by mid 2020, followed by Price-Quality decisions in mid 2021.

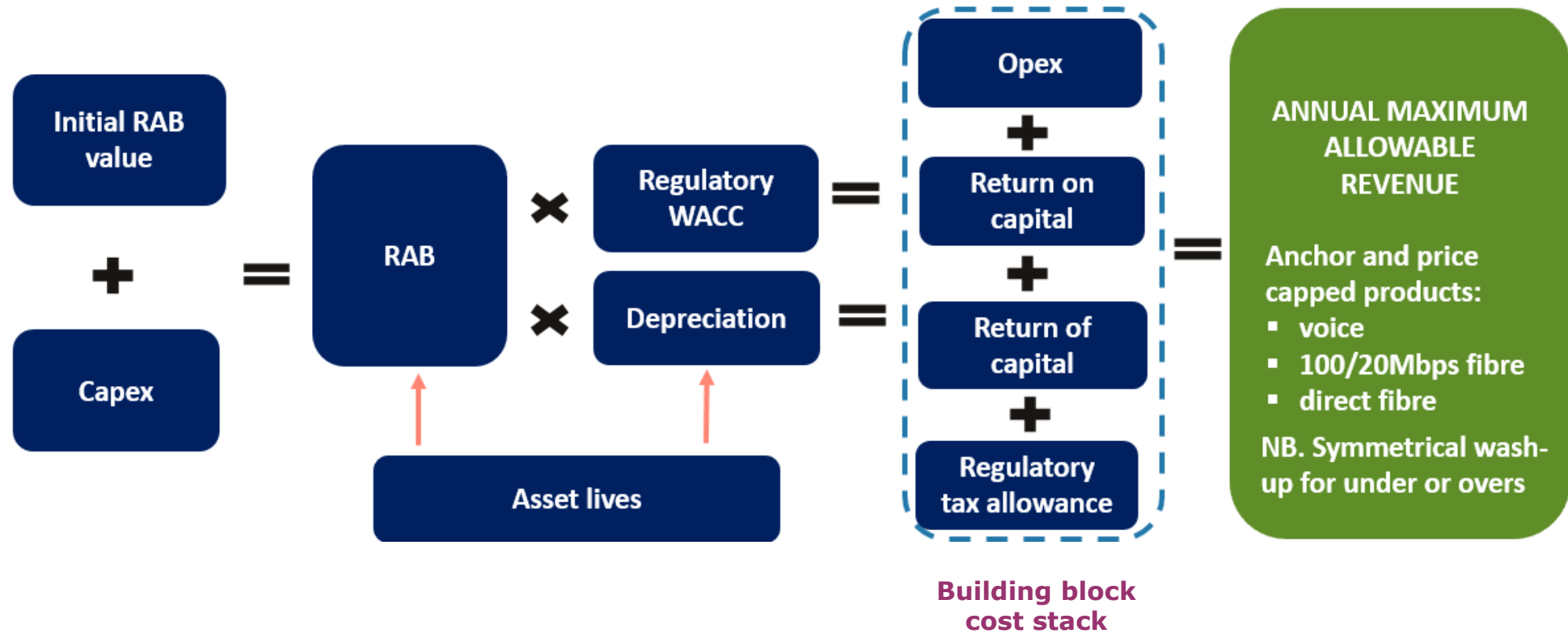
### Indicative fibre regulation timeline

June 2020	Input methodologies final decision due (the "rule book")
Q4 2020	Draft price-quality path
Q2 2021	Final price-quality path (sets the revenue and RAB)

# Regulated Asset Base implementation

- Commerce Commission will determine the starting value of the RAB, regulatory WACC, cost allocations, expenditure allowances and maximum allowable revenue

Illustrative Only





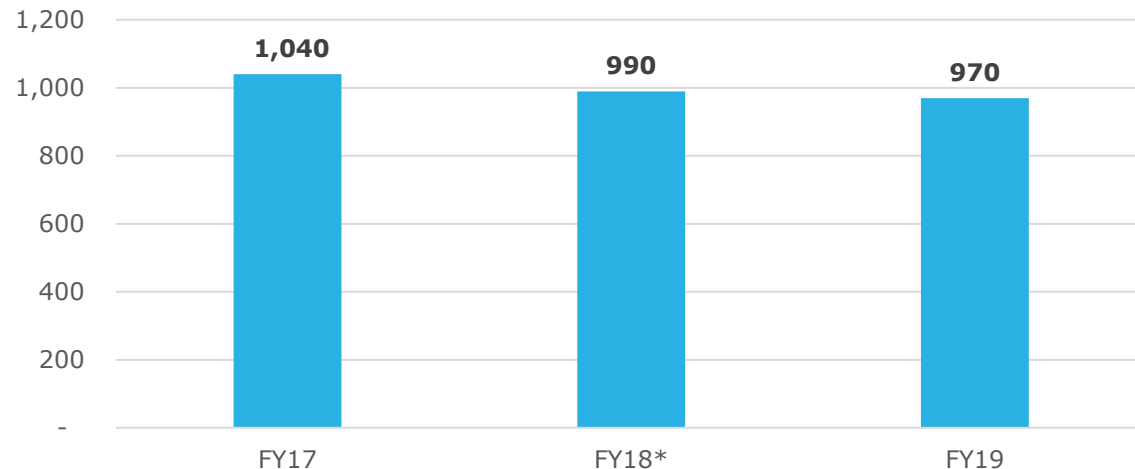
# FINANCIAL HIGHLIGHTS

Financial overview and  
capital management



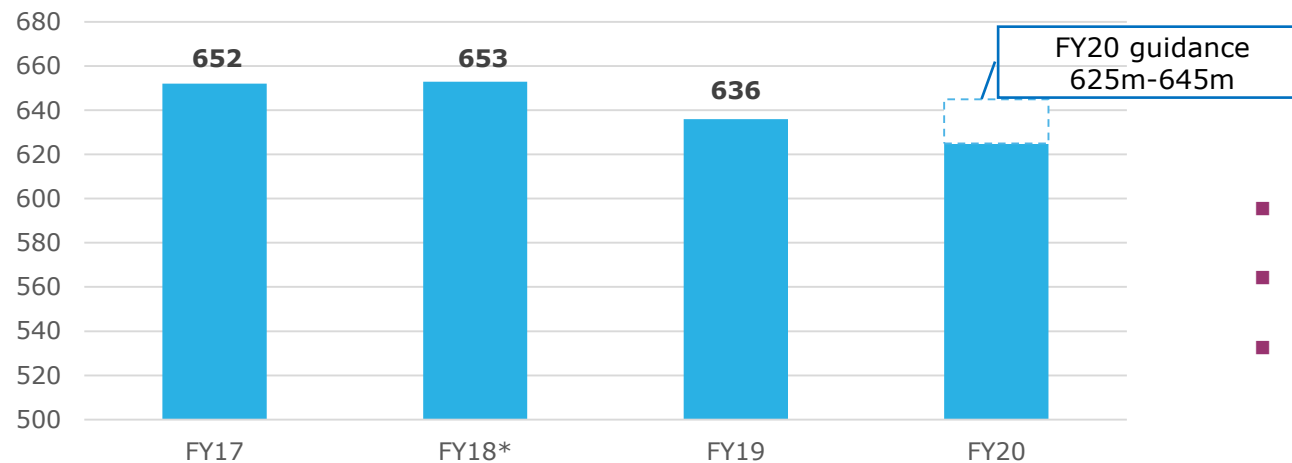
# Financial snapshot

## Revenue (\$m)



- Revenue has reduced due to:
  - copper line loss in areas where Chorus is not building the fibre network
  - fixed wireless competition
- Revenue loss partially offset by:
  - strong fibre uptake
  - customers moving to higher priced plans (e.g. 1Gbps, enhanced business plans)

## EBITDA (\$m)

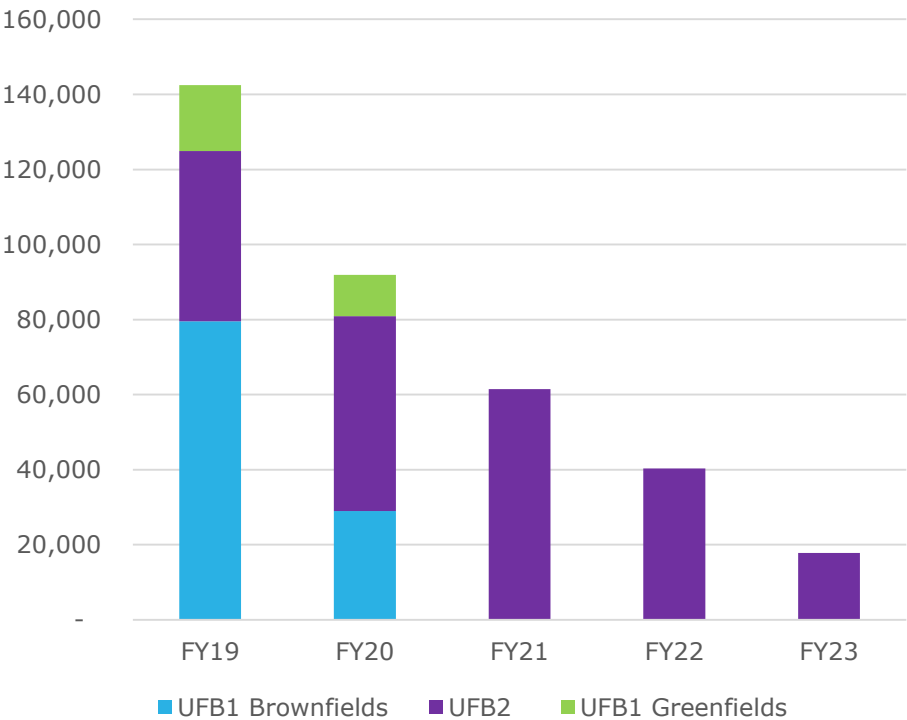


- Expect to return to modest EBITDA growth in FY20
- Expect continued broadband and ARPU growth
- Ongoing programmes to reduce costs

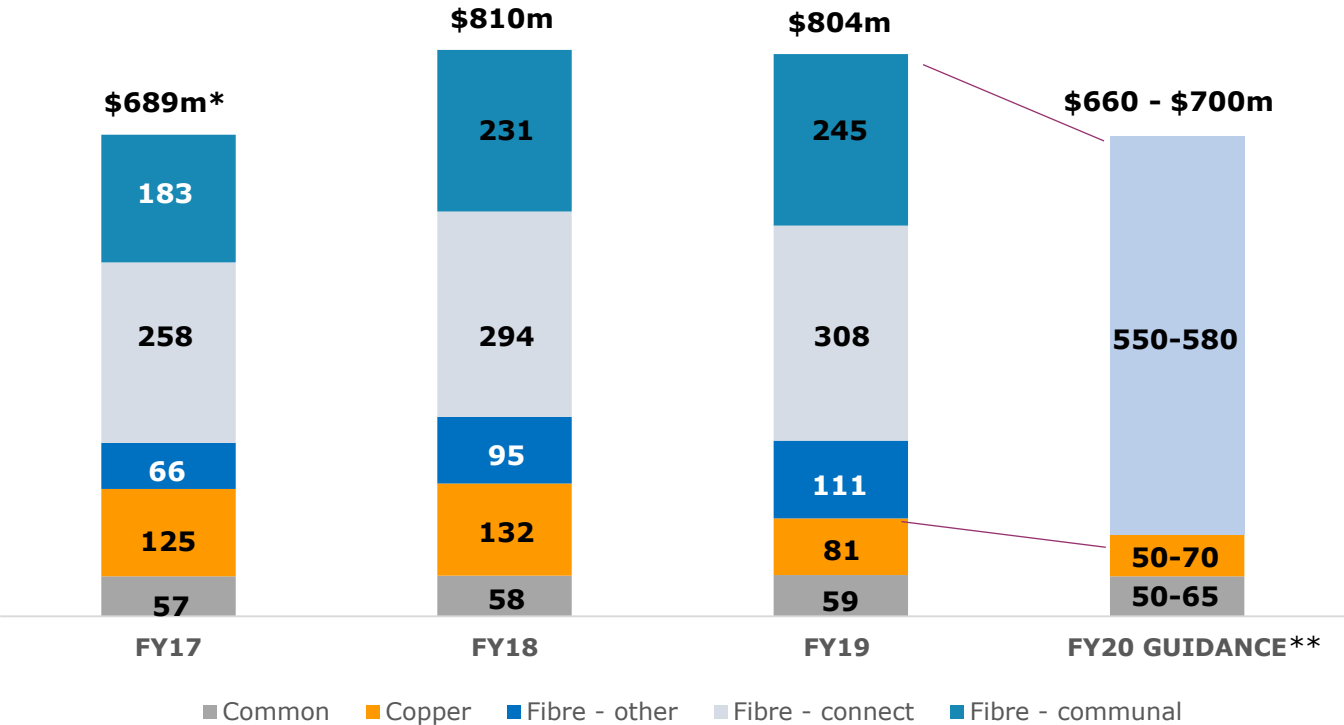
\* New accounting standards IFRS 9, 15 and 16 were adopted from FY18

# We've passed our capex peak

UFB rollout schedule (premises)

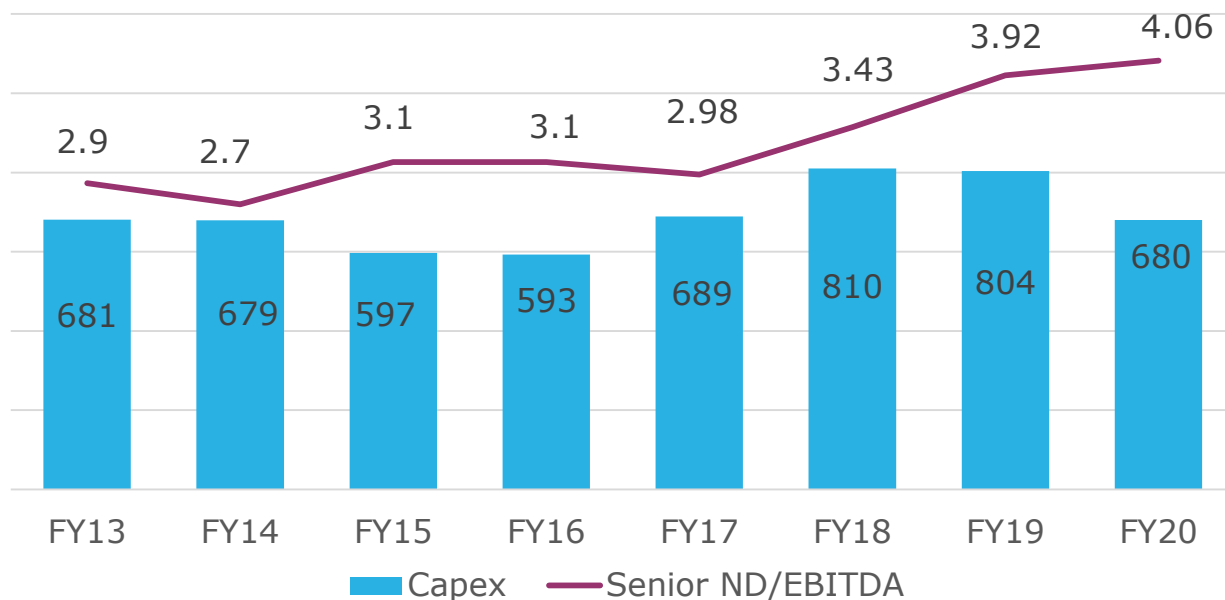


Capex



\*FY17 capex adjusted for NZ IFRS  
\*\*FY20 subtotals are not additive

# Leverage follows Capex



\*4.06x calculated at mid guidance levels

## Key Financial ratios:

- Bank covenant - Net Senior Debt/EBITDA 4.75x
- Credit rating down driver - Net Senior Debt/EBITDA on a sustained basis
  - > 4.25x (S&P)
  - > 4.20x (Moody's)

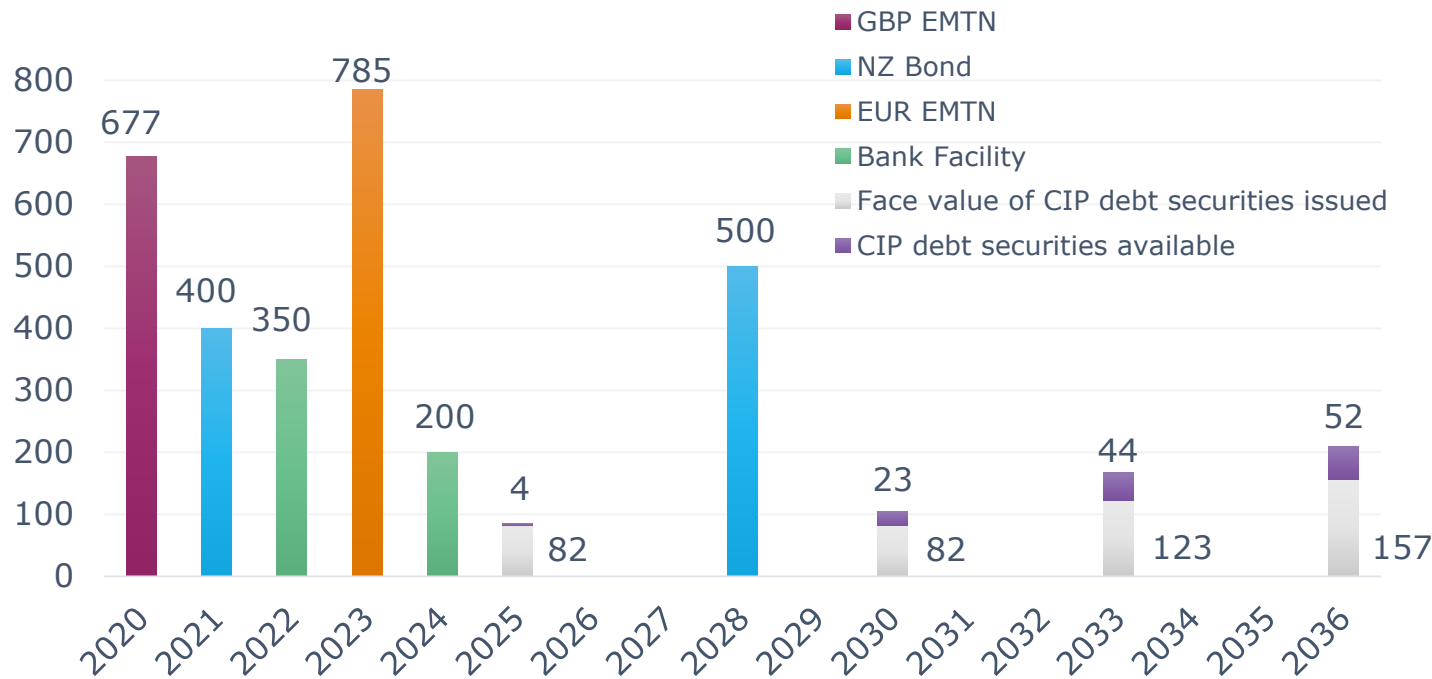
- Capex peaked in FY18 & FY19, leverage to peak in FY20
- UFB1 will be completed in December 2019
- Leverage will reduce in line with lower capex/growing free cash flow in future years
- FY20 gross capex guidance:
  - \$660m-\$700m
- FY20 EBITDA guidance:
  - \$625-645m



# Capital management

- Chorus Limited is rated **BBB** (stable) by Standard & Poor's and **Baa2 (stable)** by Moody's.
- The Chorus Board considers that a '**BBB' credit rating or equivalent is appropriate for a company such as Chorus**. We maintain capital management and financial policies consistent with these ratings.
- Chorus maintains **ready access to ample liquidity** across cash balances and availability under its bank facilities, as well as remaining capacity under the arrangement with Crown Infrastructure Partners (CIP) with respect to UFB fibre rollout capex
  - Chorus can issue debt securities to the Crown up to a total face value of \$570 million. These securities are non – interest bearing, repayable in tranches between 2025 and 2036, and rank equally with all other unsecured, unsubordinated creditors of Chorus
  - Chorus can issue equity securities to the Crown up to a total face value of \$766 million, which pay no dividends until 2025 – at which point dividends are phased in between 2025 and 2036, and are deferrable (optional and mandatory) on a non-cumulative basis
  - To date \$982 million of securities have been issued to the Crown, leaving \$354 million of crown funding available
- Chorus' financial bank facility covenants require its senior debt ratio to be **no greater than 4.75 times**

# Debt and Liquidity



As at 31 Oct 2019, borrowings of \$2,426m comprised of:

- \$ 65m drawn from bank facilities
- \$677m equivalent at hedged rates GBP259.82m due April 2020
- \$400m NZD bond due May 2021
- \$784m equivalent at hedged rates EUR500m due October 2023
- \$500m NZD bond due December 2028

**\$2,426m Total gross debt**

Bank Facilities

- \$350m Evergreen, May 2022
- \$250m Evergreen, May 2024
- \$550m

Crown Financing (\$m) at 31 October 19	Drawn	Available	Total	
Face Value CIP Debt Securities	444	21	465	UFB1 \$465m
	-	105	105	UFB2/2+ \$105m
Face Value CIP Equity Securities	444	21	465	UFB1 \$465m
	94	207	301	UFB2/2+ \$301m
<b>Total Crown Financing</b>	<b>982</b>	<b>354</b>	<b>1,336</b>	

# Making New Zealand better



We take a long term view of our network infrastructure investments and our people take pride in delivering an asset for New Zealand's ongoing social and economic betterment

The broadband networks we build and maintain are aligned with the infrastructure-focused elements of the United Nations Sustainable Development Goals. Our networks enable sustainable cities and communities, decent work and economic growth, quality education, good health and well-being and climate action

Our People	Keeping Communities Connected	Enabling Climate Action	Waste and Recycling	Cybersecurity and Privacy
<ul style="list-style-type: none"> <li>We're committed to building a culture that's inspiring for our employees and drives the desired brand experience for our customers</li> <li>Equip our people with the tools and skills needed to support the changes within the business</li> <li>Employee Benefits: Wellbeing &amp; Volunteer Days</li> <li>Diversity and Inclusion</li> </ul>	<ul style="list-style-type: none"> <li>New Zealanders place great reliance upon the availability of our network both as a utility service for their daily lives and businesses, as well as a critical lifeline service in times of emergency</li> <li>We work to ensure the 1.45 million connections on our network receive stable and reliable service</li> <li>Average duration of network interruptions in FY19 across fibre and copper network was 18 hours, down from 21 hours in FY18</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced broadband connectivity opens up alternative business models and communications options that reduce the need for carbon emitting activity</li> <li>During FY19 we completed our programme to replace air conditioning units that relied on ozone depleting refrigerant</li> <li>We expect our investment in fibre to help us achieve an 80% reduction in our scope 1 and 2 emissions, from our FY12 base year, by 2030</li> </ul>	<p>We have an extensive waste minimisation process for network activities</p> <div> <div>279</div> <div>Tonnes of metal recovered for recycling</div> </div> <div> <div>279</div> <div>Tonnes of ducting recovered for recycling</div> </div> <div> <div>10</div> <div>Tonnes of e-waste diverted from landfill</div> </div>	<p>As a wholesale network operator our cybersecurity risks are different from those of retail service providers. We don't hold direct personal information of the consumers connecting to our network. For the limited information we hold, we adhere to the requirements of the New Zealand Privacy Act</p> <p>The Telecommunications Information Privacy Code (2003) also stipulates that we must not collect telecommunications information except in limited exceptional circumstances</p>

# Appendix: Key Terms

Term	Description
<b>ADSL</b>	Asymmetric digital subscriber line – a communication technology allowing high-speed data transfer over copper-based access networks in the local loop
<b>ARPU</b>	Average revenue per user
<b>CIP</b>	Crown Infrastructure Partners
<b>FTTH</b>	Fibre to the home
<b>GBs</b>	Gigabits per second. A measure of data consumption
<b>HFC</b>	Hybrid fibre copper
<b>IoT</b>	Internet of things – network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators, and network connectivity which enables these objects to be connected and exchange data.
<b>LFC</b>	Local fibre company – the companies responsible for the roll out, provisioning and maintenance of the UFB network
<b>Mbps</b>	Megabits per second. A measure of network speed
<b>ONT</b>	Optical network terminal. General term for a specialised piece of network equipment that terminates a single dark fibre and is located at the End User premises
<b>PON</b>	Passive optical network. A line consisting of optical fibres spliced end- to- end possibly via a splitter
<b>RAB</b>	Regulated asset base
<b>VDSL</b>	Very high bit rate digital subscriber line - the highest speed variant of ADSL technology
<b>WACC</b>	Weighted average cost of capital



# Thank you