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STOCK EXCHANGE ANNOUNCEMENT

29 June 2017

Chorus investor presentation – 29 June

Chorus is delivering the attached presentation to various investors today.

It notes that:

Total fixed line connections decline continued at broadly the same rate in April-May, while broadband decline slowed modestly

- *Ask for better* broadband advertising campaign achieving strong awareness
- new record for fibre orders and connection activity in May
- completing a fibre connection every minute of working day

Shift to utility regulatory framework confirmed by Government announcement on 1 June

Chorus UFB uptake at 35% at end of May

- 264,000 UFB customers with 756,000 able to connect
- May fibre orders were up 33% from same time last year
- UFB2 rollout has commenced in Hokitika

Online video continues to drive significant increases in data traffic

- 1,052Gbps average network throughput at 9pm in May 2017, up 46% from May 2016
- 147GB average monthly household data usage in May (125GB average on copper; 217GB on fibre)

ENDS

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Investor Presentation

29 June 2017

Chorus

OVERVIEW

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REGULATION: MOVING TO A UTILITY MODEL

> **Final regulatory framework policy decisions announced by Government on 1 June**

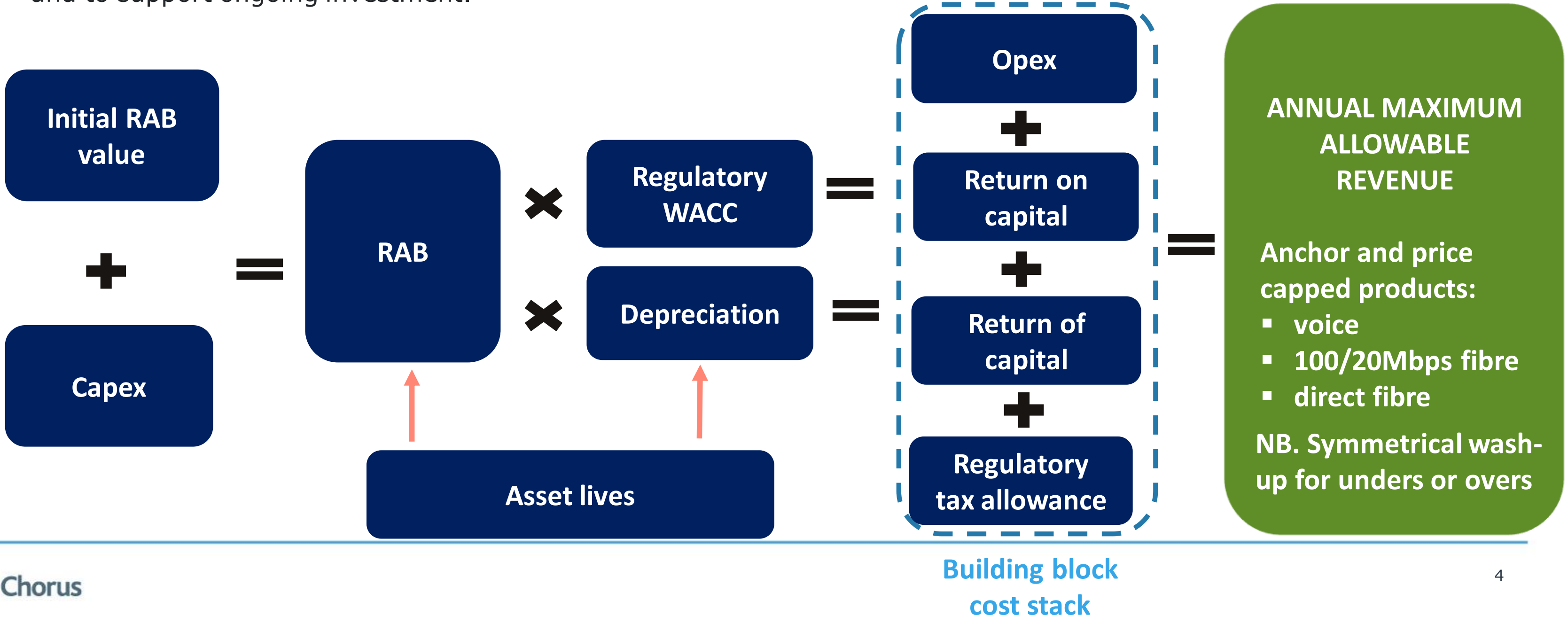
Fibre – post 2020 utility framework	Copper – post 2020 legacy framework
▪ **Regulated asset base (RAB)** to be set by Commerce Commission: o depreciated historic cost for pre 2011 assets o depreciated actual cost for post 2011 assets and o increased by unrecovered losses incurred pre 2020 o no retrospective efficiency review ▪ **Revenue cap** with commercial geographically averaged pricing except for: o two anchor products (voice only + entry level broadband - 100/20Mbps fibre) at 2019 prices + CPI o similar price cap for direct fibre access o after 2023 the Commission can review the revenue cap model, as well as the anchor products subject to specified conditions & statutory criteria	**Where fibre is available:** ▪ Copper network to be deregulated and Telecommunications Service Obligation (TSO) removed ▪ Chorus can withdraw copper service, subject to minimum consumer protection requirements **Where fibre is <u>not</u> available:** ▪ Copper remains regulated and TSO applies ▪ Copper pricing capped at 2019 levels with CPI adjustments ▪ Commission required to review pricing framework no later than 2025

Legislation to be introduced in second half of 2017 (NB. General Election 23 September 2017)

REGULATION: BUILDING BLOCK MODEL (BBM)

> **A regulatory framework that supports efficient private sector investment to meet network upgrades and increasing consumer demands through ongoing incentives to innovate, invest and improve efficiency for the long term benefit of consumers.**

- Legacy focus on promotion of infrastructure competition no longer a Government priority for fixed line access regulation.
- Government says the Commission should allow UFB providers the opportunity to earn normal returns over the lifetime of their investments (financial capital maintenance concept). An investment grade credit rating is a pre-requisite to receive UFB funding and to support ongoing investment.

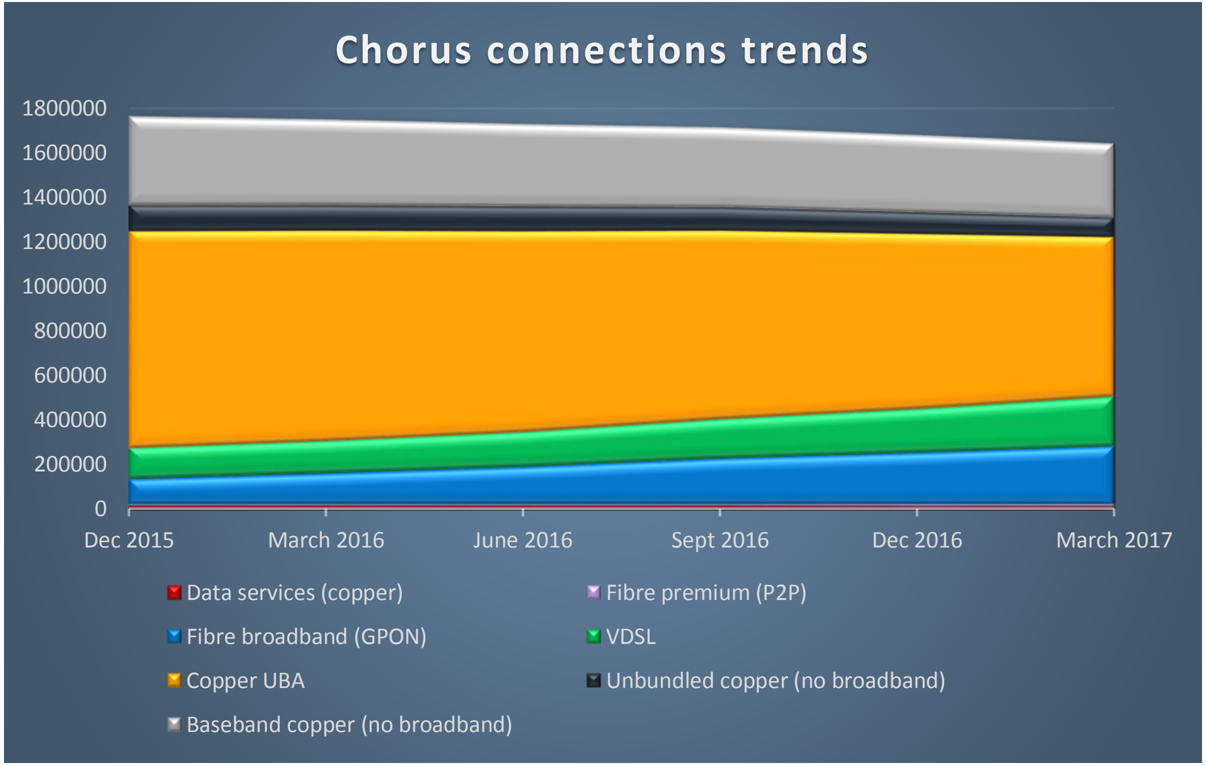


REGULATION: BBM DETAILS

> **The Commission will set the upfront input methodologies to provide a transparent and predictable guide to how regulated assets will be treated under the new framework**
- draft legislation may provide further clarity on BBM details that are not yet prescribed

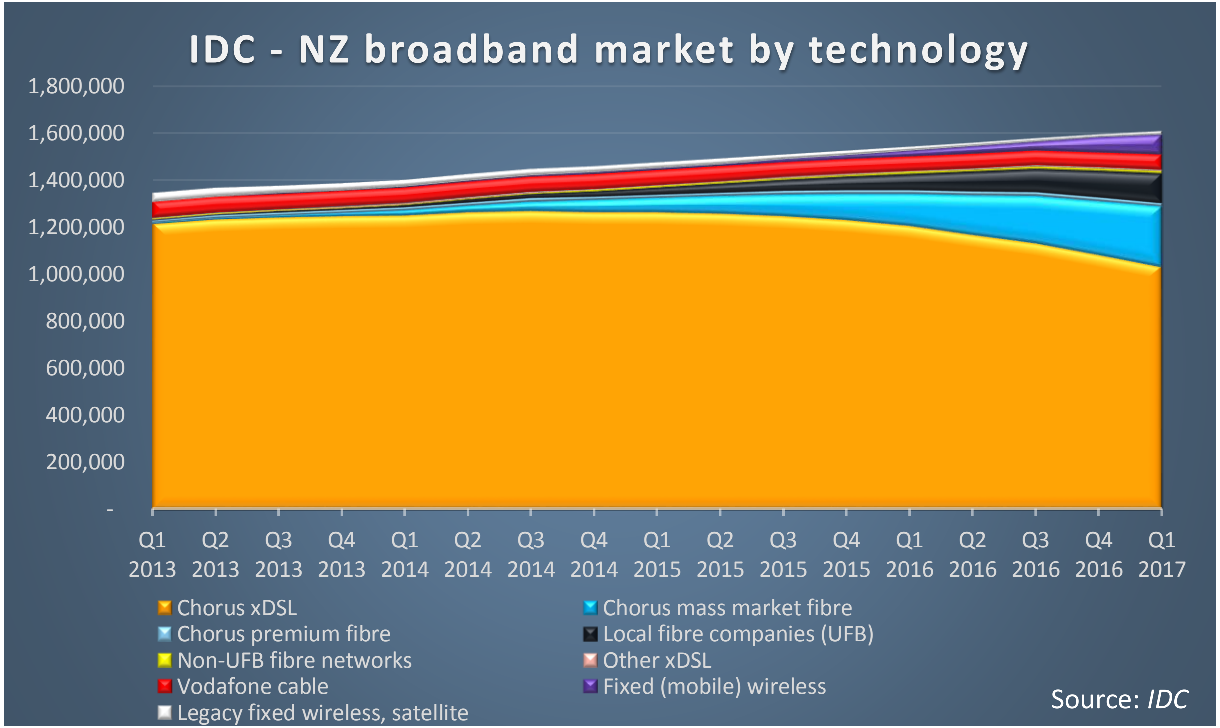
	Chorus view
Assets	Total Chorus assets less copper specific assets and less a % of shared assets (backhaul). Post 2011 investment including shared infrastructure driven by fibre upgrade.
Opening asset valuation	Commission to determine asset valuation methodologies consistent with legislative direction on fundamental points: use of DHC (book value) for pre 2011 assets, DAC for post 2011 assets. Initial RAB must include all costs to meet UFB obligations, standard and non standard UFB installation costs, and unrecovered UFB losses. No retrospective efficiency.
Regulatory WACC	5.56% mid point for Dec 2015 copper decisions. Higher WACC justifiable in a BBM.
Opex	Total Chorus opex less copper specific spend.
Revenue cap (and price caps)	Form of control prescribed for 2020. Revenue cap to be sufficient to cover all costs and allow a reasonable return. Consistent with other utilities in NZ with a symmetrical wash up. Commercial flexibility on non-anchor products and demand mix as between anchor/non-anchor products is critical to enable a fair chance to reach the revenue cap and the aims of BBM regulation of critical infrastructure.
Funding	RAB reflects actual costs of the assets regardless of how financed. CFH funding was part of commercial construct. Substantial private sector risk taken on to support accelerated build and take up including performance hurdles and potential penalties with no guarantees on success or regulatory and market risks.

CHORUS CONNECTION TRENDS



> **Chorus connections declining as:**
- voice only lines diminish either through migration to broadband and/or mobile/wireless
- other Crown fibre partners grow broadband share (~125k connections at 31 March)
- fixed (mobile) wireless operators encourage existing customers onto their own networks

NZ BROADBAND MARKET – BY TECHNOLOGY



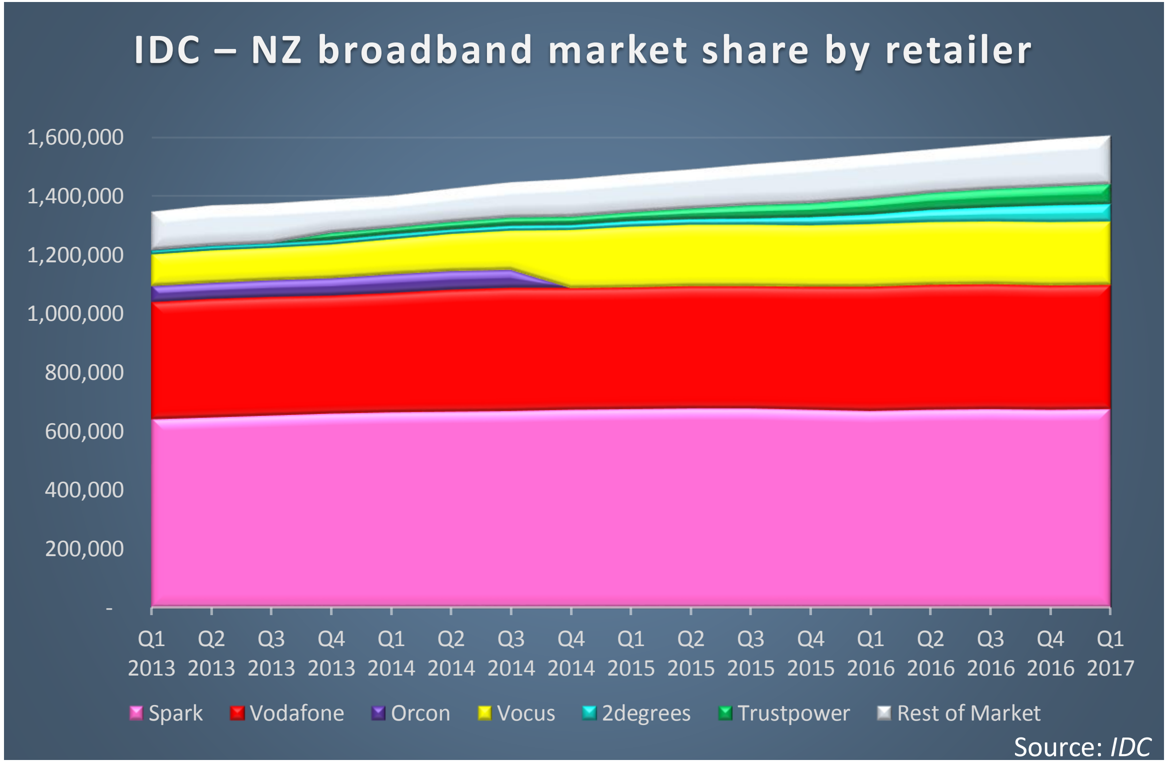
> **Demand for broadband continues to grow**

- broadband penetration still increasing
- continued premises growth as result of New Zealand's migration/population inflows

> **Network competition has increased**

- other local fibre companies expanding footprint to ~430k premises
- fixed (mobile) wireless operators expanding rural and urban footprint
- consolidation of legacy wireless/satellite market

NZ BROADBAND MARKET – BY RETAILER



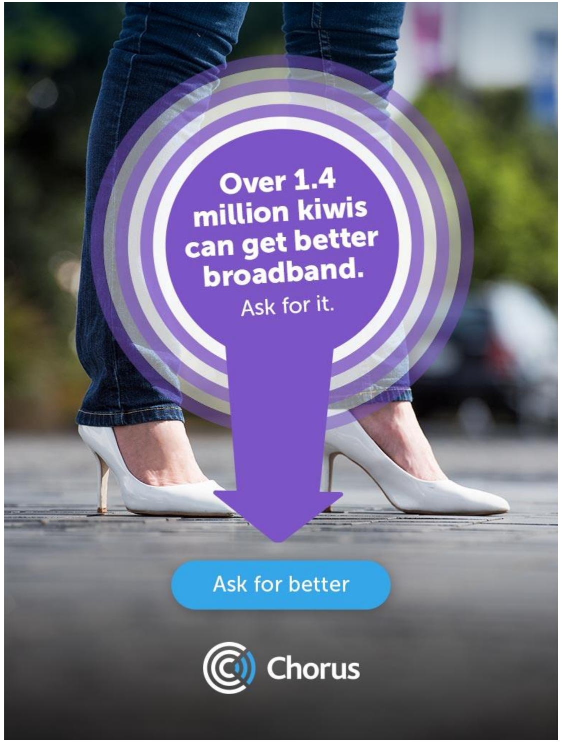
> **Fibre rollout is a churn event**

- smaller retailers have been growing their share of overall market
- intense retail competition focused on unlimited data and 100Mbps fibre as entry level plan
- retail plans increasingly bundle content (e.g. Netflix, Sky TV) and/or electricity (e.g. Trustpower, Vocus)

BETTER BROADBAND CAMPAIGN

- Campaign to upgrade customers to fibre, or VDSL as a stepping stone to fibre, commenced in May
  - strong response to above the line campaign
    - 80,000 unique visitors to *askforbetter.co.nz*
    - 29,000 address checks: 9k could upgrade to VDSL and 10k could upgrade to fibre

- Chorus is supporting RSPs with contributions to modem costs for qualifying connections upgraded to fibre or VDSL:
  - $150 per connection for **ADSL to fibre (100Mbps+)** upgrades
  - or $100 per connection for **ADSL to VDSL** upgrades

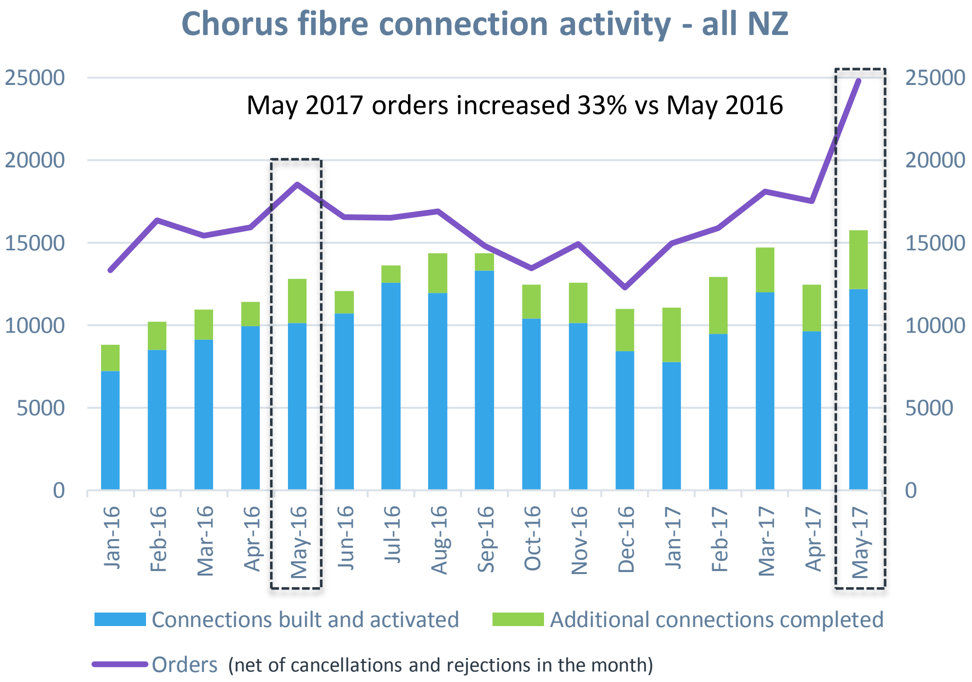


FOCUS ON FIBRE CONNECTIONS

What we achieved		Dec 2015	Jul 2016	April 2017
A better customer experience than ever before	Lead times	20 days	16 days	11 days
	Customer satisfaction	6.6	6.8	7.3
	Customer escalations	6%	8%	5%
Better performance in the field	Technician reschedules	14%	10%	4%
	Doing more jobs than ever	421/day	537/day	550/day
	Meeting customer commitments	85%	80%	90%
	Meeting business customer commitments	58%	65%	95%
MDU connection improvements	More apartments connected to fibre than ever	8400 completed in the first five years		5400 completed in the last six months

FIBRE ROLLOUT AND UPTAKE

- **Fibre orders increased significantly in May**
  - *Ask for better* campaign and retail incentives stimulating demand
  - release of new fibre ready addresses increases at end of build year:
    - **756,000** customers able to connect at 31 May (vs 708k at 31 March)
    - **264,000** customers connected within UFB footprint
  - weighted average lead time for fibre connection increased to **18 days**
  - **30k work in progress** connections (up from 23k in March), including orders requiring consent



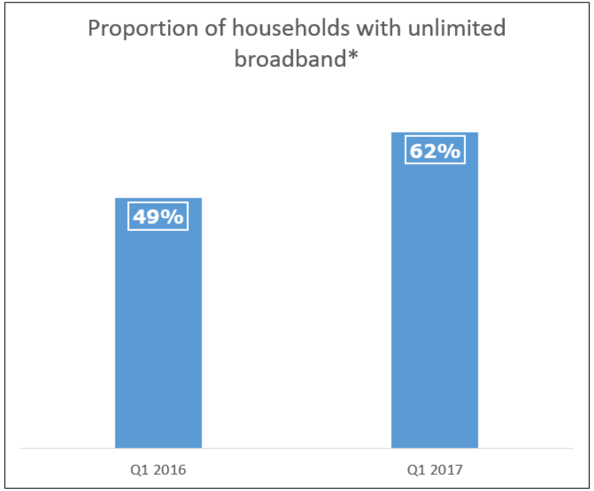
FIBRE DEMAND KEEPS GROWING

- **35% of potential customers have connected to fibre**
  - demand continues to accelerate in newly completed areas
  - fibre uptake spans all ages, incomes and family types
  - fibre has 100% awareness and highest satisfaction, loyalty and likelihood to recommend (source: *Colmar Brunton Broadband Market Monitor Survey, March 2017*)

- **UFB2 build underway**
  - Hokitika first UFB2 area: trialling "batch" approach to connections at time of build
  - build complete target of 5,000 premises in FY18, with build work also starting in FY18 for FY19 premises.

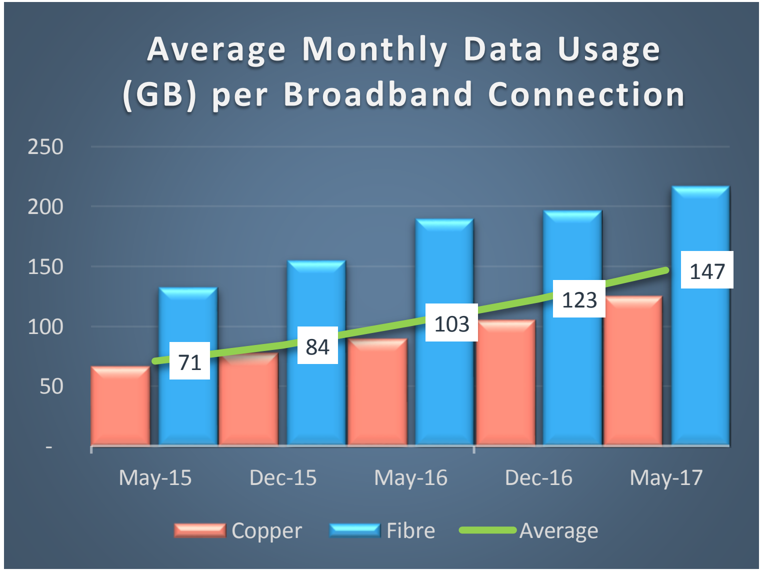
DATA DEMAND KEEPS GROWING

> **Online viewing is driving data demand**
- Our network traffic peaks between 8:30pm and 9:30pm each day and has grown almost 50% in the last year
- TVNZ has begun livestreaming all channels online
- 6 out of 10 households now on unlimited data plans

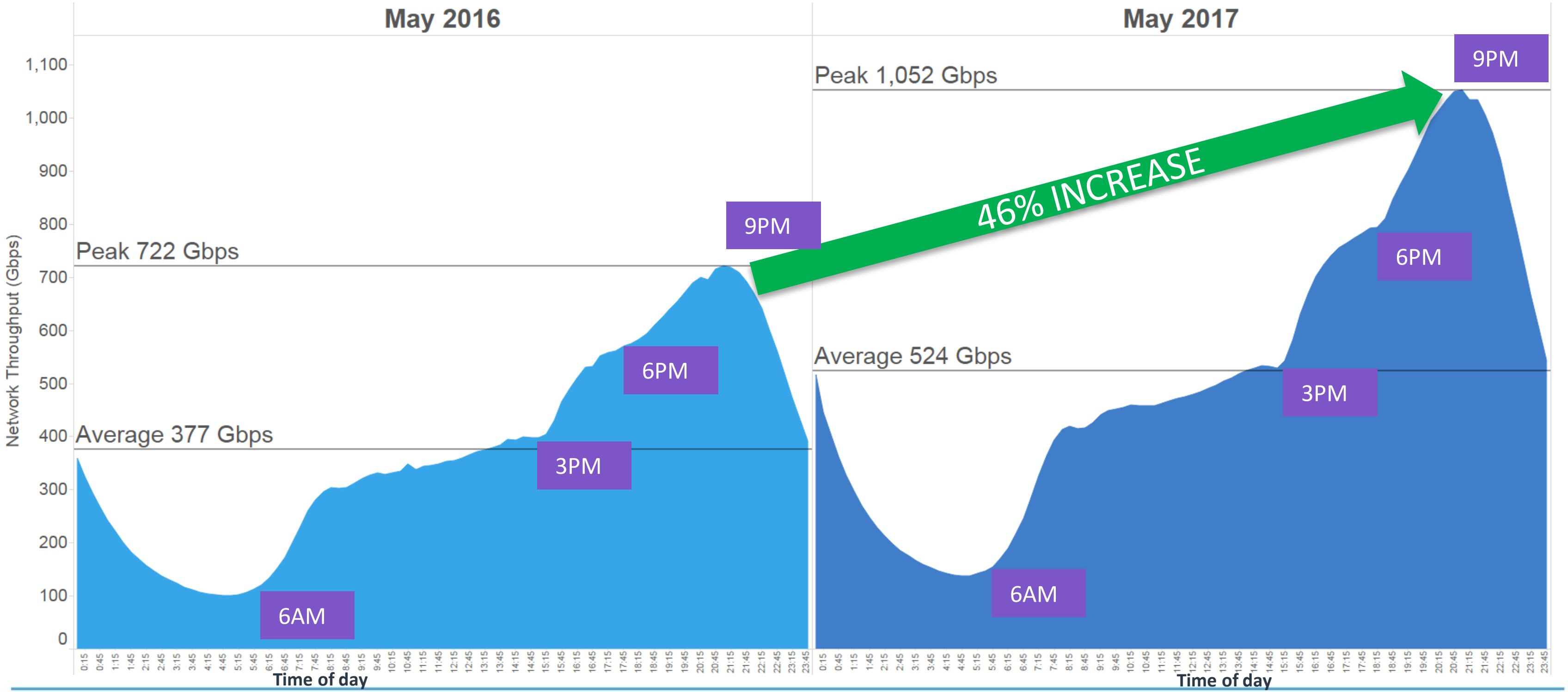


*Source: Nielsen CMI – Household Shopper, use internet at home and know their data plan

> **147GB** average monthly household data usage on our network in May 2017 (103GB in May 2016)
- **125GB** average on copper
- **217GB** on fibre



PEAK HOUR – AN EVER GROWING MOUNTAIN OF DATA



Note: data represents average of traffic across all days in May, excluding corporate traffic.

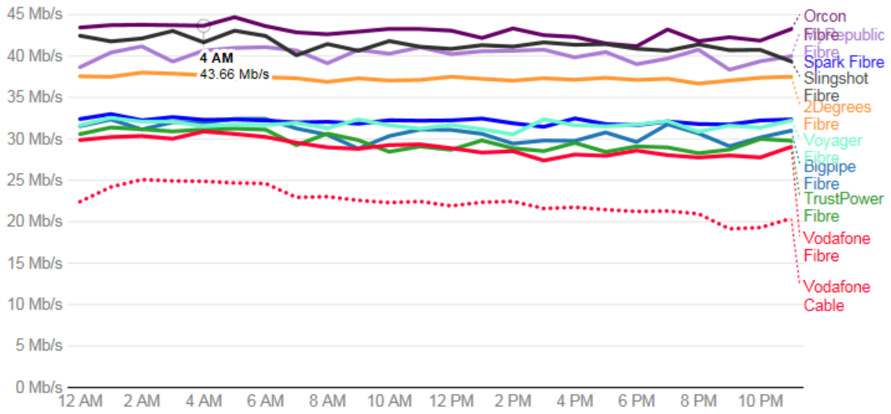
FIXED LINE DELIVERS CONSISTENT PERFORMANCE

> **Customers value reliability and consistency of service**

- our network is designed to support peak demand: ADSL, VDSL and fibre perform within ~97% peak speed band
- fluctuations in fixed line performance typically reflect retailer network constraints
- wireless and cable networks share capacity and are more prone to congestion at peak times

May 2017: Fibre & Cable NZ

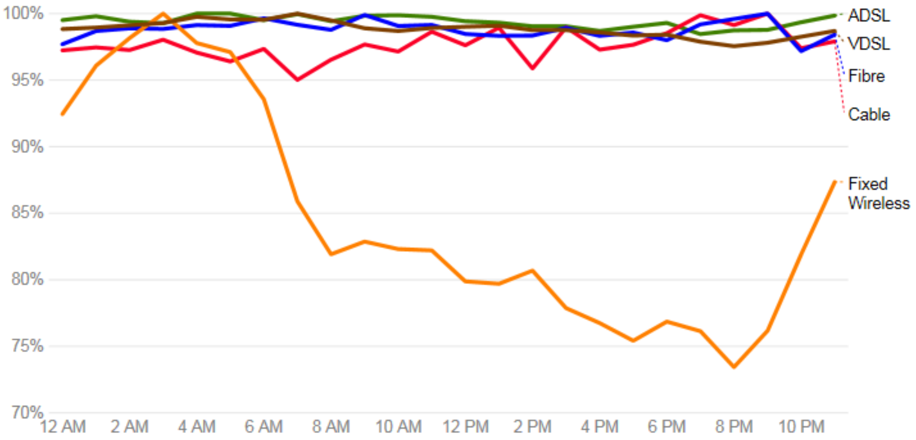
Webpage Average Speed by Time of Day



Source: *TrueNet*

May 2017: Peak Speed by each Technology

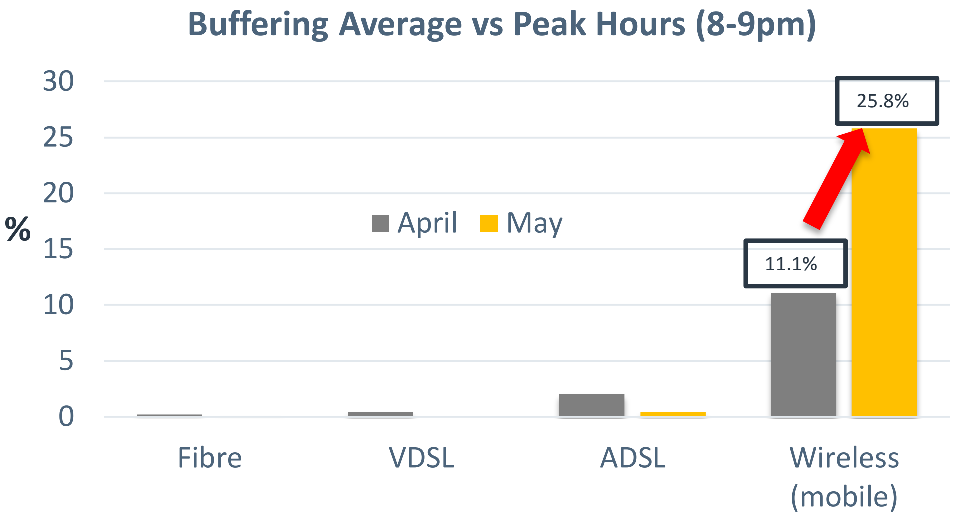
Median Best Speed of File Downloads by Time of Day

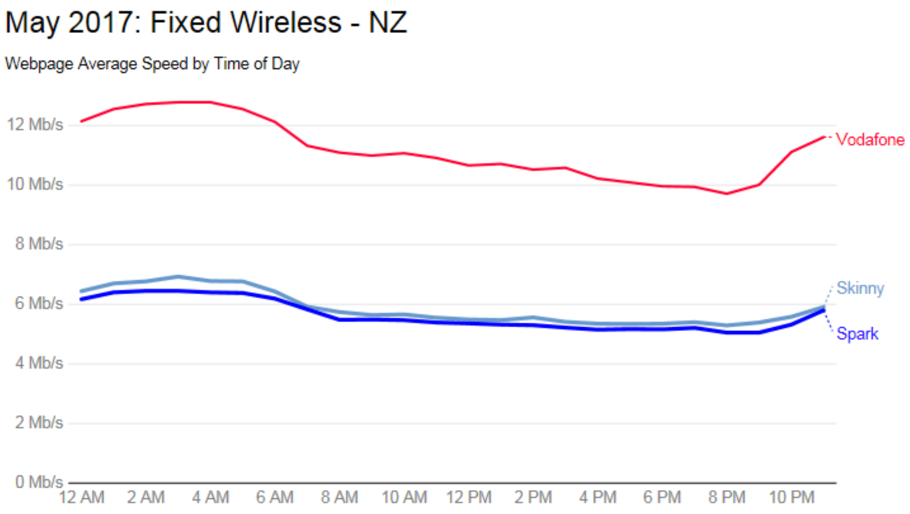


Source: *TrueNet*

WIRELESS PERFORMANCE HIGHLY VARIABLE

> **Buffering has increased significantly on wireless in the last month**
  - *Truenet* data shows buffering events as a percentage of all measurements increased to 25% in May





Source data: *TrueNet Urban Broadband Report – April, May 2017*

Source: *TrueNet*

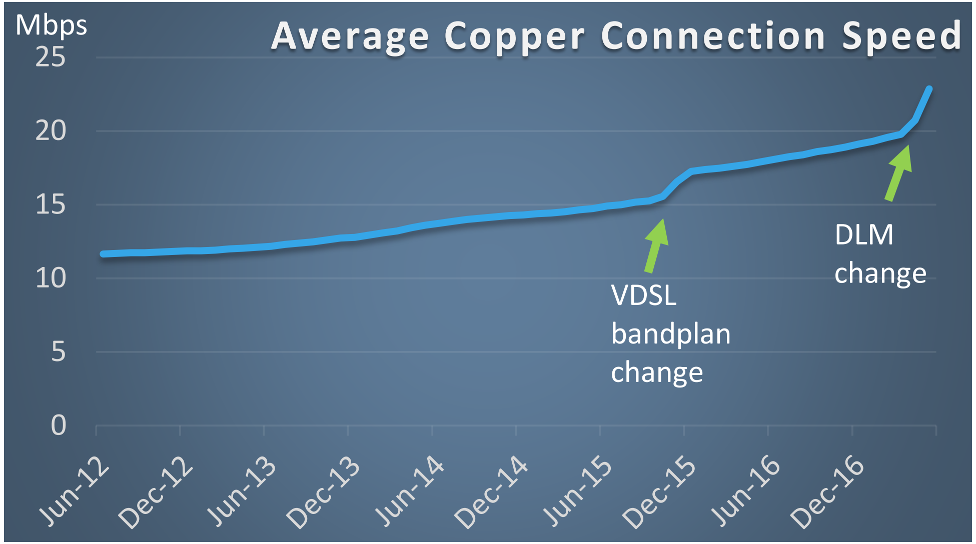
COPPER NETWORK PERFORMANCE

> **Copper broadband performance increasing steadily**

- new *Dynamic Line Management (DLM)* technology deployed in April resulted in increase in average download speeds of:
  - **18%** on ADSL connections
  - **8%** on VDSL connections
- now looking at options for vectoring deployment in selected areas

> **Focus on copper fault performance**

- our fault restoration time is averaging ~24 hours despite very challenging weather in April-May
- on average, a copper broadband fault on our network occurs just once every five years
- we've identified ~20k customers in higher fault areas who could benefit from shift to fibre



DLM automatically optimises ethernet-based ADSL and VDSL line settings for speed and stability

WHAT WE'RE FOCUSED ON

Better broadband

- Driving broadband uptake and retention
- Providing customers with a network that is fast, reliable and congestion free

Transforming customer experience and cost

- Optimising the fibre/VDSL connection experience for customers
- Implementing new models for fibre connection

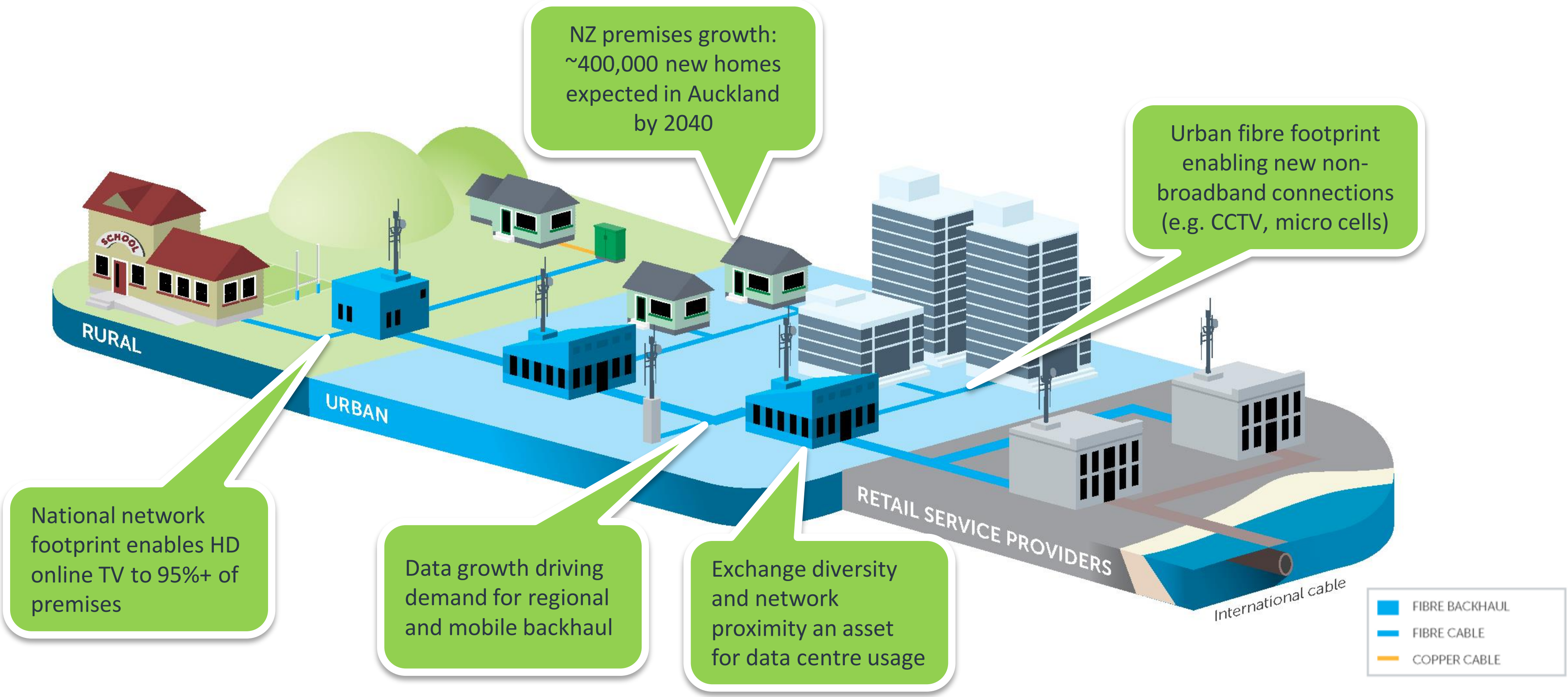
Delivering the future broadband network

- Delivering our UFB rollout on time and on budget
- Underpinned by a regulatory framework that supports ongoing investment

Creating opportunities to grow

- Identifying new open access business opportunities, including the role of fibre in future uses cases such as non-broadband access points and the Internet of Things

LEVERAGING THE UTILITY OF OUR NETWORK



Appendices

UNDERSTANDING OUR BUSINESS

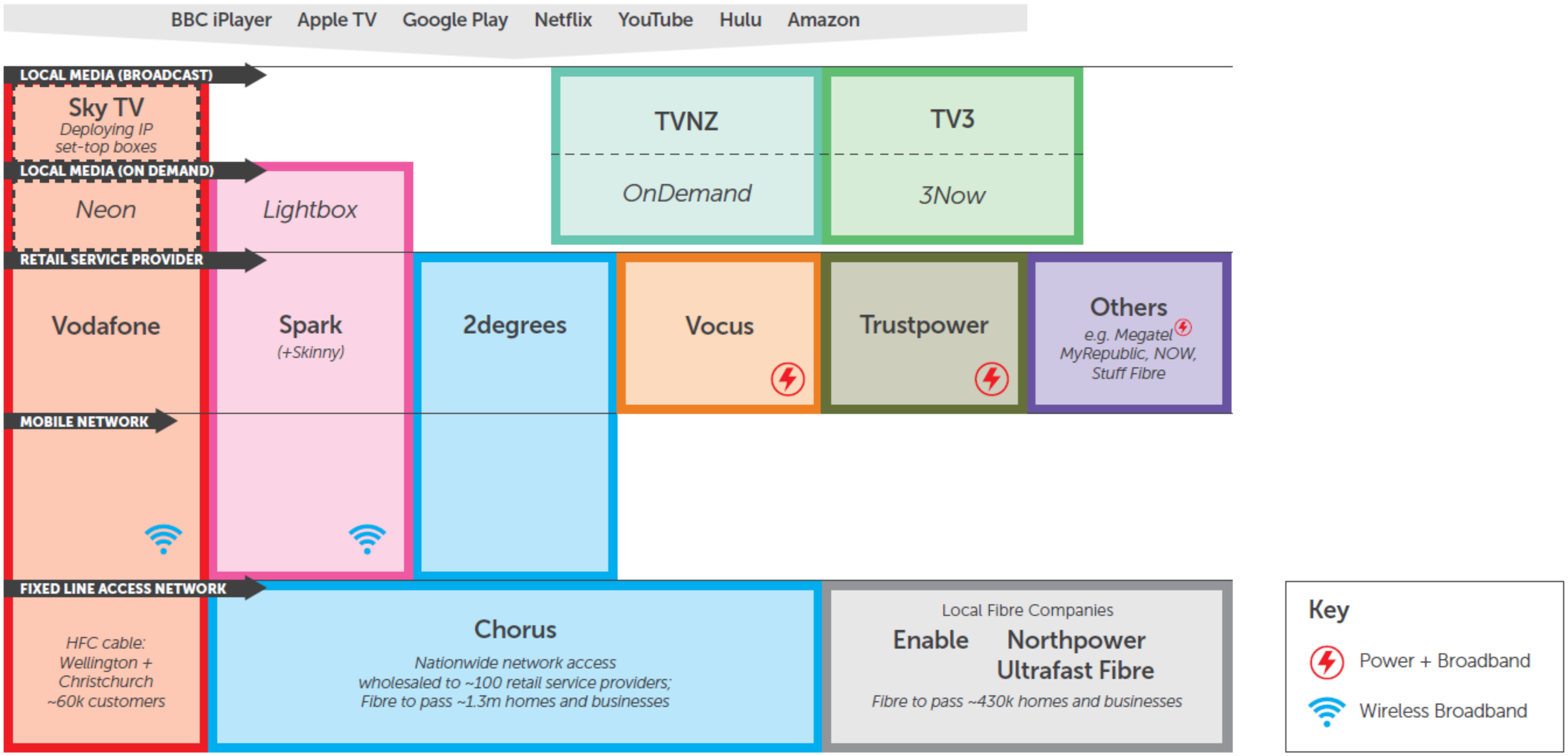
> Our revenues are largely from copper (mostly regulated) and fibre (largely contracted) connections

	Fixed line connections	31 March 2017	31 Dec 2016	30 Sept 2016	30 June 2016	31 March 2016	31 Dec 2015
Voice	Unbundled Copper (including SLU/SLES)	90,000	99,000	105,000	110,000	114,000	119,000
Voice	Baseband copper (no broadband)	328,000	343,000	354,000	368,000	381,000	395,000
Broadband	Fibre broadband (GPON)	259,000	231,000	203,000	167,000	136,000	112,000
Broadband	VDSL (includes naked)	224,000	199,000	179,000	159,000	148,000	139,000
Broadband	Copper ADSL (includes naked)	716,000	784,000	847,000	900,000	944,000	972,000
	Data services (copper)	9,000	9,000	10,000	10,000	11,000	11,000
	Fibre premium (P2P)	13,000	13,000	13,000	13,000	13,000	13,000
	Total fixed line connections	**1,639,000**	**1,678,000**	**1,711,000**	**1,727,000**	**1,747,000**	**1,761,000**

> We now think of connections across three 'zones'

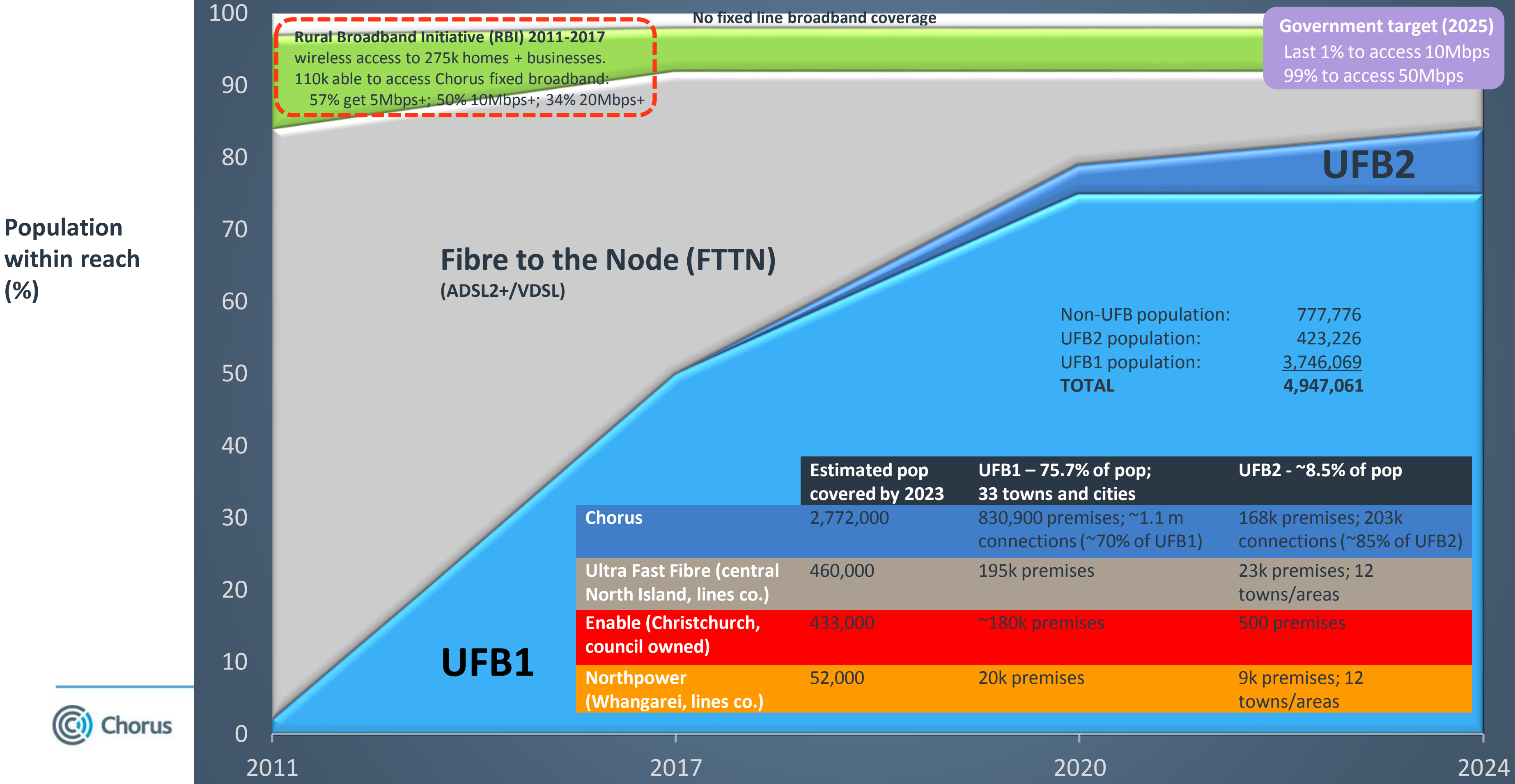
	Non-UFB areas (~15% population)	Chorus UFB areas	Local Fibre Company UFB areas	TOTAL
Indicative No. of Chorus connections by zone at 31 March	67,000 voice only 174,000 broadband	267,000 voice only 854,000 broadband	84,000 voice only 171,000 broadband	418,000 1,199,000
TOTAL (N.B. excludes data services and fibre premium connections)	**241,000**	**1,121,000**	**255,000**	**1,617,000**

NZ FIXED LINE MARKET



Note: UFB fibre network will cover ~85% of NZ population

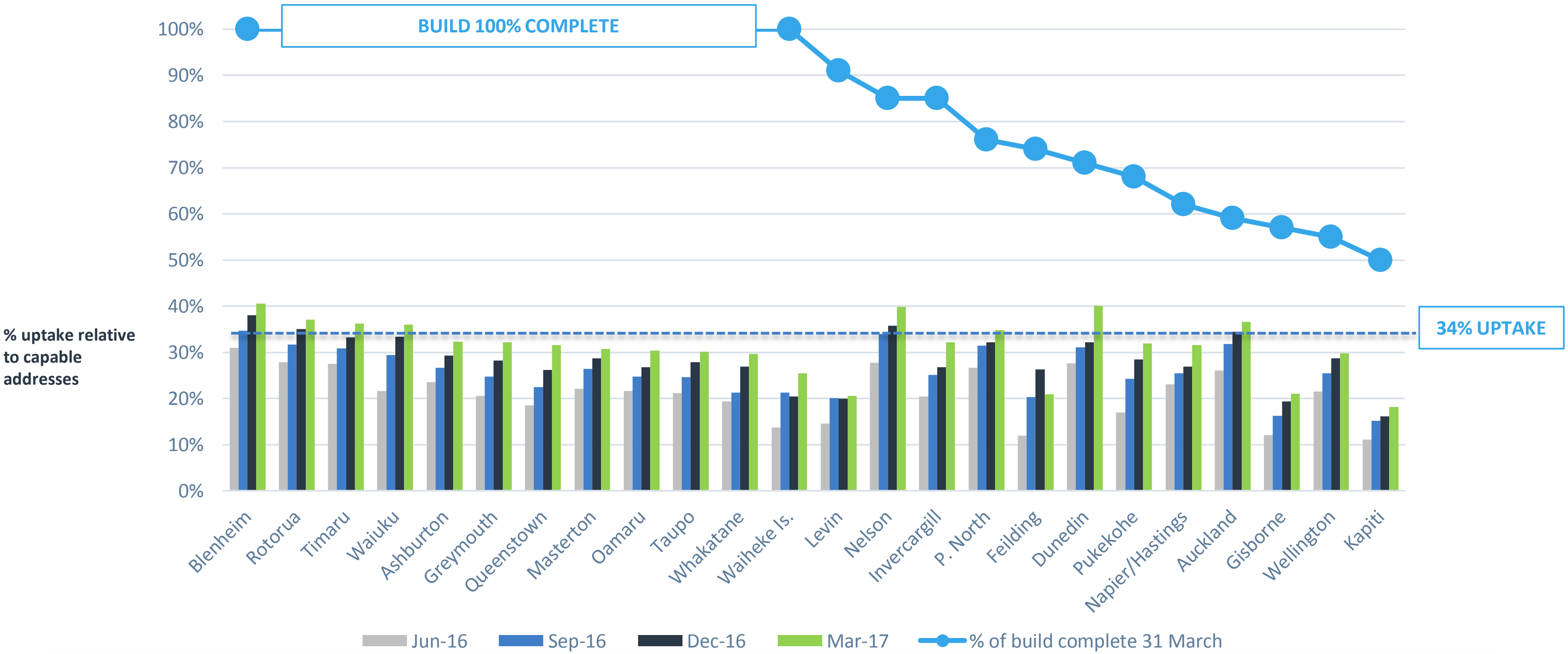
Indicative NZ broadband coverage



	Estimated pop covered by 2023	UFB1 – 75.7% of pop; 33 towns and cities	UFB2 - ~8.5% of pop
Chorus	2,772,000	830,900 premises; ~1.1 m connections (~70% of UFB1)	168k premises; 203k connections (~85% of UFB2)
Ultra Fast Fibre (central North Island, lines co.)	460,000	195k premises	23k premises; 12 towns/areas
Enable (Christchurch, council owned)	433,000	~180k premises	500 premises
Northpower (Whangarei, lines co.)	52,000	20k premises	9k premises; 12 towns/areas

Chorus

UFB UPTAKE BY REGION – March 2017



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