Crown Fibre Holdings

Ultra-fast broadband for New Zealanders

Ultra Fast Broadband: When, Where & What It Can Offer SPADA Conference

10 November 2011

Topics for Today:



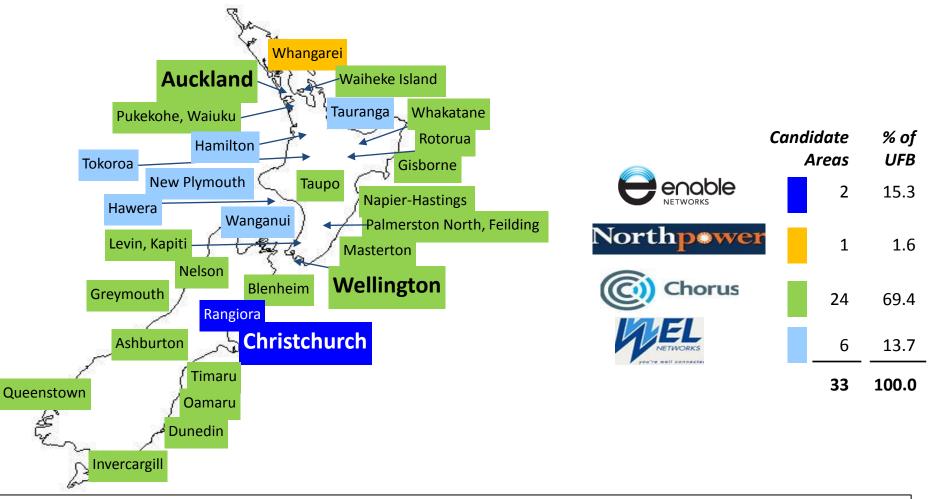
- UFB deployment update
- The productivity opportunity
- Delivering video over UFB

\circ Summary

Image: Computer Clubhouse



UFB Candidate Areas and Partners:



Fibre To The Premise for 75% of New Zealanders by 2019 via Public Private Partnerships



UFB Candidate Areas and Partners:

UFB deployment:

- On track to pass 50,000+ premises by June 2012
- Priority users (Businesses, Schools, Health) as well as some Residential by end 2015
- Residential build complete by end 2019
- Lifespan 40-50 years
- General purpose technology some uses obvious, others not yet developed

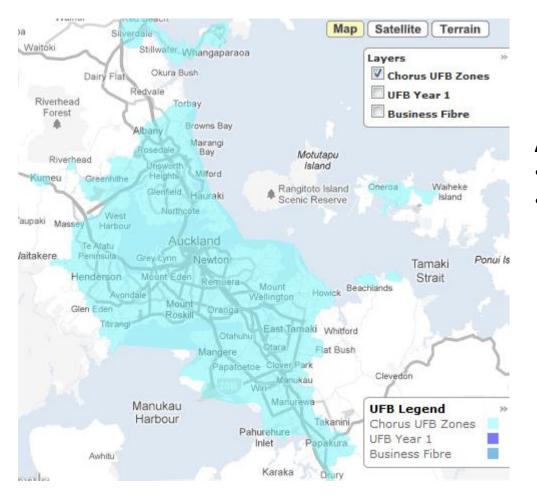
Deployment prioritisation:

- Supply side factors:
 - o Contiguous clusters
 - Extending existing fibre
 - Cost of deployment

- Demand side factors:
 - Priority users
 - High broadband demand



Auckland coverage area



Auckland:

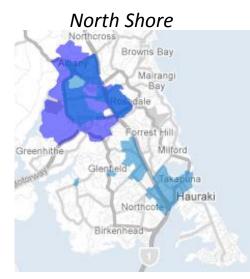
- ~420,000 premises, fully built by 2019
- 4 UFB candidate areas:
 - o Auckland
 - o Waiheke
 - Pukekohe
 - o Waiuku



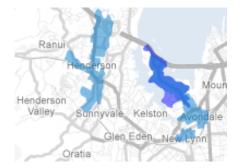
www.crownfibre.govt.nz

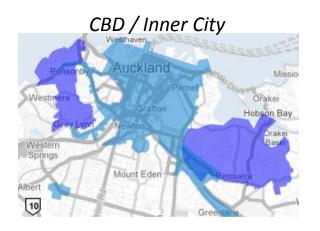
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Auckland: Business Fibre & Year 1 Areas



West Auckland

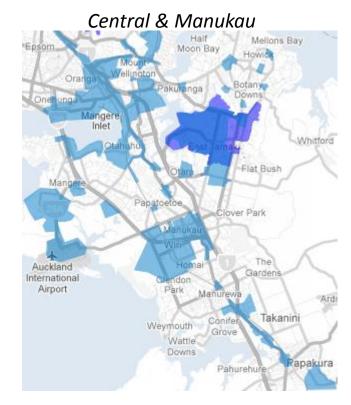




- Year 1 FTTP new build Albany, Unsworth Heights, Rosebank, Herne Bay, Grey Lynn, Ponsonby, Remuera, East Tamaki, Burswood and Dannemora
- 1330 kms existing Chorus fibre
- Chorus business fibre available today at reduced UFB price



Chorus



Passing 17,000 priority & residential premises in Auckland by end Year 1 (30 June 2012) plus thousands of premises passed by existing Chorus fibre

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Wellington coverage area





Wellington:

- ~150,000 premises, fully built by 2019
- 3 UFB candidate areas:
 - Wellington (including Porirua, Hutt Valley)
 - Kapiti
 - o Masterton

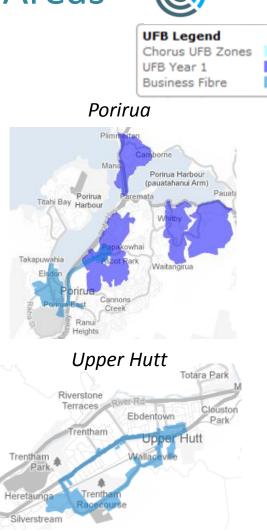
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Wellington: Business Fibre & Year 1 Areas





- Year 1 FTTP new build: Mana, Papakowhai, Whitby, Kelson, Churton Park, Camborne
- 1120km existing Chorus fibre
- Chorus business fibre available today at reduced UFB price

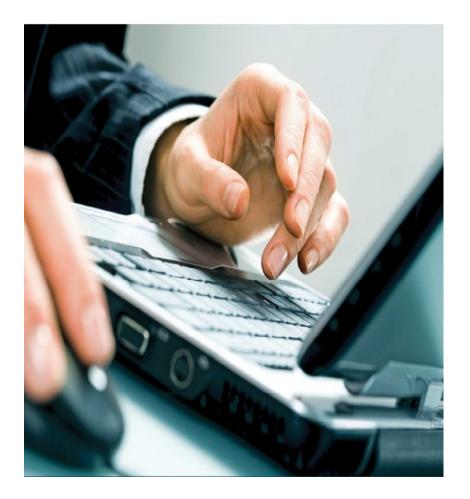


Passing 9,200 priority and residential premises in Wgtn by end Year 1 (30 June 2012) plus ~20,000 premises passed by existing Chorus fibre

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Business Benefits:



- Enabling new apps, improved processes
- Higher speed connectivity to suppliers and customers
- Cloud computing, reduced cost of ownership (e.g. servers), secure storage
- IP Video Conferencing, collaboration
- Business continuity / disaster recovery
- Extending Remote Working
- Coordination across multiple sites

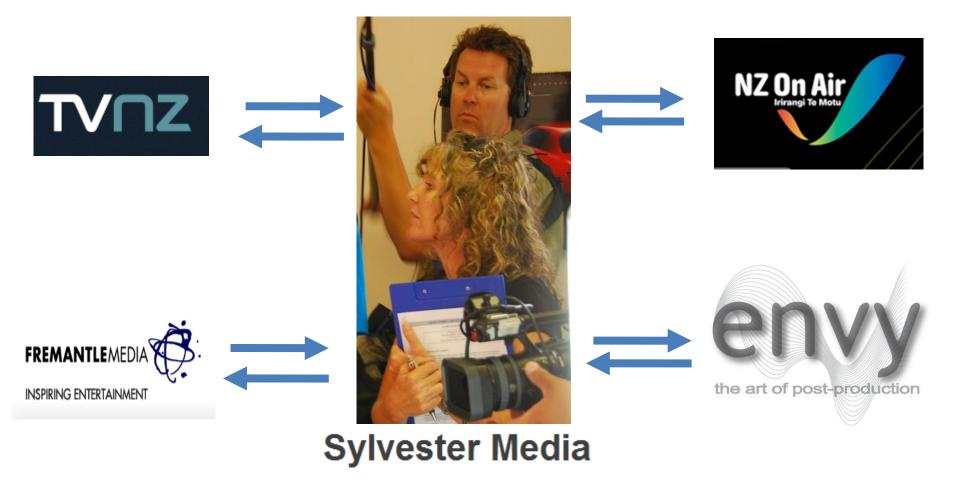


Content Business: Case Study





Improved Workflow = Improved Productivity





UFB Pricing for Residential & Small Businesses:

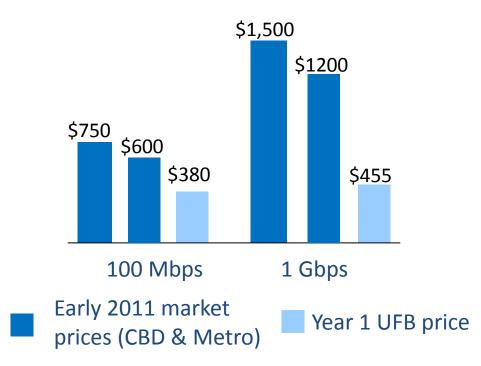
	Copper	Fibre	Improvement
POTS	(voice) + ADSL2+	UFB 100/ 50	
Telephony	1 line	2 lines	+100%
Committed Data (CIR)	45 Kbps	2,500 Kbps	>60 times
Upstream Data	850 Kbps	50,000 Kbps	>60 times
Downstream Data	10-13 Mbps	100 Mbps	10-7 times
Wholesale Price	~\$60	\$55	

UFB offers vastly superior product for lower wholesale price. Retail prices set by Retail Service Providers but will reflect wholesale input costs

Note: GPON services; wholesale prices per month ex GST.



UFB Pricing for Larger Businesses:



Lower prices for fibre will help larger businesses collaborate & innovate

Note: Symmetric Point 2 Point services; wholesale prices per month ex GST.



Video over UFB: rapidly changing landscape

















Video distribution over UFB in NZ:



Image: Sylvester Media



- Video services will drive residential UFB uptake:
 - Triple play likely to have solid uptake and low churn
- Three means by which video can be delivered over UFB:
 - Wavelength (RF Overlay)
 - Multicast (IPTV)
 - Over The Top
- Broadcasters & RSPs will determine best technical & commercial model(s)
- Interested parties encouraged to contact CFH / Chorus / LFCs to develop

Possible UFB / video offerings:

Jule Kiko Kiko Kiko Kiko Kiko Kiko Kiko Kiko
Stadows grovee: You to Szimbra Looksmut Build it Smugmug o 🔥 newsgator
ZAZZLE Tailrank @TagWorld nu/vo Dogear to vakalike Couper ODDPOST COOP
Neds Lulu R B blish flogr @ WFireAnt simply hired tech
gather former ovogi cafépress Kenkoo
Jotapot Frappel Sietere dabble witheboard SHOUTWIRE (Karma Visasseonter Saisse
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- RSPs offer Freeview &/ or redistribution of Sky (including Freeview) as a triple play bundle
- Niche RSPs offer non-Sky options, e.g. 10-15 channel Asian TV offering by Asiancentric RSP
- RSPs use IP for on-demand & interactive services to same Set Top Box
- Open access OTT platform can provide local programming (schools, city etc.)
- Broadcasters embrace OTT and deliver into households on top of Sky offering
- As scale is reached, Netflix, Quickflix, FetchTV etc. may enter the market

A variety of video / UFB product configurations are possible



Summary:

- UFB deployment well underway
- Retail Service Providers looking to innovate to take advantage
- Sectoral use of UFB to improve productivity will be key
- Video delivery over UFB will be developed by broadcasters and RSPs
- Over time this will change NZ content
- Greater interactivity & higher data usage likely



