

Where the revenue to capital ratio looks positive for a build, the sales person must then get the network group to do a feasibility assessment, which may involve a site visit.

TelstraClear used this process to assess the economic feasibility of connecting all buildings in a street in the Auckland CBD.

High Street, Auckland CBD

To demonstrate the economics of building, TelstraClear chose a location where on the surface; it would appear that there should be vigorous competition because of the number of networks present in the street.

High Street is a busy street running parallel to Queen Street in the centre of Auckland CBD. There is a concentration of networks in High Street: TelstraClear has two fibre cables from competing builds by its predecessor companies CLEAR and TelstraSaturn; [] [TelstraClear designated Restricted Information] each have networks as well as Telecom's network. These 6 networks (5 counting the two TelstraClear networks) run the length of the street. High Street probably has as much competing network as any CBD street in Auckland (or, for that matter, any street in New Zealand). Refer to map – Appendix 1

Figure 2: Picture - North of High Street



Figure 3: Picture - South of High Street



As part of the case study, a TelstraClear outside plant (OSP) engineer visited High Street and surveyed each street address. Using network records, he recorded where TelstraClear already had customer builds and he audited the capital connection cost of those builds. In addition, he costed builds to the other businesses in the street that TelstraClear does not currently serve so that it could be estimated whether a connection to deliver TelstraClear's own products is viable. The estimate includes:

- cost to obtain council permits;
- road traffic arrangements;
- digging the trench from feeder cable to building and laying a duct;
- breaking through the wall;
- laying cable through the duct;
- reinstating road and footpath;
- running cable to a comms. room / converting broom cupboard as required;
and
- installing an optical fibre distribution frame.

The bulk of the cost is in the ducting and thus the cost varies mainly according to distance from the feeder cable. As the odd numbers of the street are nearest the feeder cable, the estimate to connect them is lower than the even numbers.

Finally, TelstraClear also investigated network build by other entrants in the street and identified those buildings connected by them (see map - Appendix 1). TelstraClear confirmed this information with the other operators¹.

¹ On request of those operators, the map does not identify the individual operators

Results of Audit

The following businesses are located along High St:

Figure 4: High Street Businesses [contains TelstraClear designated Restricted Information]

High St - Auckland CBD Data Source atlantis as at October 03

Company	No	Street	Service Type	Staff	OSP Built	OSP Estimate	Other network provider-excl Telecom
The CD Store Ltd	3	High Street	Retailing nec	1			
De Bretts Bar & Café & 1 other	4	High Street	Pubs	26			
Cube	5	High Street	Dance Club	5			
Stampede Promotions Ltd & 5 others	6	High Street	Newspaper Printing or Publishing	8			
U Emporio & 8 others	9	High Street	Antique and Used Good Retailing	16			
STA Travel & 2 others	10	High Street	Travel Agency Services	10			
The Vault	13	High Street	Retailing nec	3			
Auckland City Stamps Ltd & 7 others	16	High Street	Retailing nec	17			
Deschlers Bar	17	High Street	Pubs	6			
Glaister Ennor & 5 others	18	High Street	Legal Services	65			
Unity Books (Auckland)	19	High Street	Newspaper	5			
Rosinis	20	High Street	Cafes and Restaurants	11			
Hi Baby	21	High Street	Hairdressing and Beauty Salons	2			
M Deco Florist & 1 other	22	High Street	Flower Retailing	3			
Harlem Vintage Ltd	23	High Street	Clothing Retailing	3			
Starbucks Coffee	25	High Street	Cafes and Restaurants	9			
Day & Associates Ltd & 3 others	26	High Street	Business Management Services	9			
Pernik Investments Limited	27	High Street	Money Market Dealers	1			
Holiday Shoppe	28	High Street	Travel Agency Services	3			
Herb Merkle Design Ltd	30	High Street	Jewellery and Silverware Manufacturing	3			
Paris Texas	33	High Street	Clothing Retailing	16			
Bill McKay Architects & 21 others	35	High Street	Architectural Services	53			
Agmardt & 23 others	43	High Street	Services to Finance and Investment nec	81			
Amnesty International & 12 others	47	High Street	Residential Care Services nec	38			
Ginger Cafe & Bar	48	High Street	Cafes and Restaurants	10			
Vivace & 3 others	50	High Street	Cafes and Restaurants	29			
Mountain Designs NZ	51	High Street	Sport and Camping Equipment Retailing	20			
A & V Holdings & 1 other	52	High Street	Electronic Equipment Manufacturing nec	4			
Keith Matheson Ltd	53	High Street	Clothing Retailing	8			
The Buchan Group & 9 others	55/57	High Street	Architectural Services	55			
Cima Cafe Bar & Restaurant	56	High Street	Cafes and Restaurants	5			
Bryers S P & 31others	59	High Street	Legal Services	78			
Paneton Cafe & Bakery	60	High Street	Cafes and Restaurants	3			
Bendall & Cant Ltd & 18 others	61	High Street	Accounting Services	74			
Foodoo	62	High Street	Cafes and Restaurants	1			

[TelstraClear designated Restricted Information]

The High Street customer base has a similar profile to the New Zealand average:

Figure 5: High Street Business Profile by number of employees

Number of FTE's	0-5	6-9	10-49	50-99	100+
NZ average	86%	6%	6%	1%	0.5%
High Street, Akld	84%	10%	5%	1%	0

Figure 4 sets out TelstraClear's actual audited costs of connecting customer premises if they are already connected to the TelstraClear network. The table also sets out the estimated costs of connecting the other buildings.

TelstraClear has connected [] [TelstraClear designated Restricted Information] premises in High Street to its network. These customers are generally the ones with the most employees (which is a strong indicator of telecommunications spend).

There are a couple of low employee/ single tenant businesses, which have been connected by TelstraClear as their businesses [] [TelstraClear

designated Restricted Information] indicate higher than average telecommunication spends. [[TelstraClear designated Restricted Information].

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] [TelstraClear designated Restricted Information].

A revenue analysis was conducted of the sites that TelstraClear has connected:

Figure 6: Revenue of TelstraClear connected buildings [contains TelstraClear designated Restricted Information]

TCL Connected Buildings	Tenants in building	Tenants who have been TCL customers at one time	Customers in Sep 03	Revenue per Building Sep -03	Contribution at 60%	Employees in Building	Actual OSP (Outside Plant) Cost to Connect	Payback of OSP based on Sep 03 Contribution (months)
	1			\$	\$	5	\$	
	6					65		
	1					1		
	18					45		
	23					85		
	5					48		
	31					91		

[[TelstraClear designated Restricted Information] of the buildings (the ones with most employees in them) continue to make good contribution.

[[TelstraClear designated Restricted Information] sites are not profitable and, if the current revenues were forecast today with equivalent build costs, the sale would not be approved. There is more risk for TelstraClear to connect up single business sites versus multi tenant sites because if the customer churns there is no contribution towards the access cost. In multi-tenant situations there is a much greater chance of always having some contribution. This is borne out by the situation in High St.

Other Customer Prospects

An analysis of the [] [TelstraClear designated Restricted Information] buildings that TelstraClear has not built to, based on connection trenching and inside plant costs is as follows:

Figure 7: Revenue analysis of non-connected buildings [contains TelstraClear designated Restricted Information]

Street Number	Employees in Building	TCL Customers in Sep 03	Estimate of Revenue per Building per mnth	Tenants in building	% of tenants won	Tenants Served	Estimate of TCL revenue	Contribution at 60%	Employees	Estimate OSP (Outside Plant) Cost to Connect	Inside Plant & Wiring Capex	Total Capex	Payback of OSP based on Sep 03 Contribution (months)	Other network provided - excl Telecom
[]	1	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	26	N/A	[]	2	50%	1	[]	[]	[]	[]	[]	[]	[]	[]
	8	N/A	[]	5	40%	2	[]	[]	[]	[]	[]	[]	[]	[]
	16	N/A	[]	9	44%	4	[]	[]	[]	[]	[]	[]	[]	[]
	10	N/A	[]	3	67%	2	[]	[]	[]	[]	[]	[]	[]	[]
	3	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	17	N/A	[]	8	38%	3	[]	[]	[]	[]	[]	[]	[]	[]
	6	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	5	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	11	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	1	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	3	N/A	[]	2	50%	1	[]	[]	[]	[]	[]	[]	[]	[]
	3	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	9	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	9	N/A	[]	4	50%	2	[]	[]	[]	[]	[]	[]	[]	[]
	3	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	3	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	16	N/A	[]	2	50%	1	[]	[]	[]	[]	[]	[]	[]	[]
	38	N/A	[]	14	50%	7	[]	[]	[]	[]	[]	[]	[]	[]
	10	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	29	N/A	[]	4	50%	2	[]	[]	[]	[]	[]	[]	[]	[]
	20	N/A	[]	2	50%	1	[]	[]	[]	[]	[]	[]	[]	[]
	4	N/A	[]	2	50%	1	[]	[]	[]	[]	[]	[]	[]	[]
	8	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	5	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	78	N/A	[]	33	40%	13	[]	[]	[]	[]	[]	[]	[]	[]
	3	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]
	1	N/A	[]	1	100%	1	[]	[]	[]	[]	[]	[]	[]	[]

TelstraClear made assumptions about the number of tenants it would likely win in a building and estimated typical monthly revenues for the building and for TelstraClear's likely share of tenants.

The connection (outside plant) costings vary from [] [TelstraClear designated Restricted Information] depending on proximity to the feeder cables (Odd number buildings are closer).

TelstraClear assumed that inside plant costs are [] [TelstraClear designated Restricted Information] per building depending on the quantity of customers and lines served. These costs include customer premises equipment, internal wiring, line cards at the cabinet and racking/fitout of communications room.

Based on these assumptions TelstraClear would definitely not approve builds to [] [TelstraClear designated Restricted Information] of the buildings because they have paybacks greater than [] [TelstraClear designated Restricted Information] years (with [] [TelstraClear designated Restricted Information] years). Those with paybacks [] [TelstraClear designated Restricted Information] years have either low employee numbers (less than [] [TelstraClear designated Restricted Information]) or low tenants ([] [TelstraClear designated Restricted Information]) or are in industries that generate low telecommunications spends eg retail shops.

The other [] [TelstraClear designated Restricted Information] buildings look to be good prospects and TelstraClear notes that other network providers (excluding Telecom) have connected to [] [TelstraClear designated Restricted Information] of the buildings

Conclusion

Although there are five fibre networks running past customer premises in High Street, many customer premises are uneconomic to connect, principally because it costs around \$[] [TelstraClear designated Restricted Information] to dig up the street. Telecom is the only operator that can service these small customers because it already has copper network running into the buildings. The modelling in Annexure 1 shows that the SME customers who are not economic to connect in High Street would be economic to connect using bitstream or LLU. On this modelling, the bitstream margins are higher than LLU. Bitstream, accordingly, may be the more appropriate unbundled service to use given the upfront capital expenditure involved and the associated risk. However, whichever unbundled service is used, the outcome would be that SMEs who currently have no choice of alternative direct connect provider, although located within the vicinity of 4 networks, now would have a choice between providers of differentiated voice and data services.

Appendix 1

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[TelstraClear designated Restricted Information]

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