

NELSON TASMAN GABITES PORTER MODEL UPDATE

May 2009

Data provided below from Nelson City Council to support 2009 model update.
Data provided to MWH as consultant on the modelling upgrade project.
MWH to obtain corresponding data from TDC. It would be helpful in TDC's data on future land use was copied to us so that we can be sure we have alignment.

Section 1 – Population growth

Refer to RAD 642102 and page 5 of Volume 2 of 2009-19 Community Plan. Note in the spreadsheet that the strategic planning column is applicable (this column differs slightly from Stats NZ figures due to timing dates and adjustments for items identified in spreadsheet.) In summary

2006 – 44,300

2016 – 47,185

2026 – 50,302

2036 – 51,937

Third sheet of spreadsheet provides no. of additional households anticipated (additional 1,150hh every 5yrs – 230hh/yr)

Please check that TDC's growth projections are also considered in detail.

Section 2 – Freight

The transport of freight will be a significant tissue in the upcoming arterial routes study. It is important that our projections are based on sound data.

The latest 2009 Port Nelson freight actuals (up to 2008) and projections are:-

2005 2.623 million tonnes

2007 2.644 million tonnes

2008 2.677 million tonnes

2009 2.631 million tonnes

2012 2.704 million tonnes

2014 2.758 million tonnes

2016 2.775 million tonnes

2018 2.781 million tonnes

Please also refer to the MOT/NZTA National Freight Demands Study, Sept 2008 and the MAF Nelson/Marlborough forest industry and wood availability forecasts 2006 (pages 2 and 36 appear to be of particular relevance)

Section 3 – Car Parking

You should have received the latest car parking survey data undertaken in Dec 2008 by Traffic Design Group. There is no intention on changing Councils parking policy in terms of pricing and availability dramatically. Currently the upgraded Passenger Transport services are scheduled to commence in 2012/13. At this time, or shortly after, it is envisaged that parking policy will become more restrictive, with a view to increased costs and a gradual reduction in supply. It is hoped that TDC will align its parking policies better to Nelson City Council's at this time.

Section 4 – Central City Strategy

The Central City Strategy proposes some Roading infrastructure improvements, an extension of the CBD and a consequent change in the parking plan rules in the CBD and inner fringe. Ross Rutherford has been commissioned to study the parking issue and propose recommendations to be incorporated into a plan change. This change is likely to revolve around the CBD differential rate, Nelson RM Plan parking requirements, and the effects on nearby residential parking. Stg 1 of his report is due end of may and the final report due end of June.

Section 5 – Future land use

The Nelson Urban Growth Strategy Dec 2006 and the Nelson RM Plan are the guiding documents for land use. Councils reference document for NUGS 2006 (RU1802-01, 10/08/06) provides a revised yield following consultation on NUGS and further assessments. This data has been used in the absence of any other data.

Plan changes are currently being considered for Nelson South and Marsden/Enner Glynn and the Upper Brook valleys.

Nelson City Council Planning staff have prepared a map showing residentially zoned land in the region (refer RAD 782372). This map is referenced to the table below to estimate future lot yield potential. Yields are based on estimates from current plan changes, actual plans, dwelling densities of similar nearby subdivisions, or the NUGS revised yields. Timings are based on my own estimates of likely construction after relating potential to population growth data in section 1.

It is important to note that some of the subdivisions below are staged and have in part been constructed. It is important to identify a base date and ensure there is no blurring around this date. Please advise if further consideration is required to ensure there is no double counting of dwellings.

Table 1 – Estimated future residential yields

Plan ref	Description	Area (m ²)	Estimated density (m ² /lot)	No. of dwellings constructed by			
				2016	2026	2036	2046
1	Retirement village	79,515		161			
2		8,954	817	11			
3	Existing glasshouses	13,458	817		16		
4	Retirement/medical village	48,637		100			
5		26,027	754	34			
6		45,538	1269		36		
7		54,395	1500		36		
8		63,000	754		83		
9	Solitaire				175	175	
	Stoke Valley			175	175		

10	McLaughlin			120			
11	Subject to plan change				380		
12	Summerset Tce extension – just completed			140			
13	Solitaire Stg 1				100	200	
13A	Misc smaller sections				43		
14	Ridgeway link			30			
15	Subject to plan change				100	100	
15A	Subject to plan change				50		50
16	From draft plans				58		
17	Tasman Heights & Greenhill (most already completed)			51			
18	Bishopdale				119		
19		149,242	1166		128		
19A		441,335	1166			378	
20	Grampion Oaks			45			
21		82,735	948				87
22	Built now	24,446	751	32			
23		11,029	835		13		
24		40,477	865		47		
25		24,956	811	31			
26	Draft plans			14	14		
27	Farr Developments			50			
28	Plans approved			11			
29	Estimate, steep terrain				3		
30	Estimate, steep terrain				4		
31	Estimate, steep terrain			4			
32	NUGS revised yield (D)					80	
33	Walters Bluff & along			12	20		
34	Estimate				20		
35	Bayview & along ridge			60	80	50	100
36	Potential zoning change				27		
37	Consent given			56			
37A	Estimate, steep land			10	10	10	
38	Avonbank/Tressillian (Stg 1 completed)			10	10		
39/40	NUGS revised yield				100		

	(F1) – includes out to Gentle Annie Saddle (drg incorrect)						
41	Wahanga (Moturoa) / Malcolm			84			
	Sutton			117			
	Wahanga (Waimeha)			84			
	Additional land subject to plan change in NCC	(note: additional 200 lots in TDC)			500		
42		42,811	811		53		
43	Central City Intensification - NUGS revised yield (G)			300	700	1,500	
HIRA	NUGS revised yield (F2)					650	1000
	TOTAL estimated future yield			1,742	3,120	3,143	1,237
Notes regarding densities							
re. 1	Urbis RC traffic assessment advises 550 trips/day, with 30 in peak						
re. 2 , 3	adjacent Monaco View S/D – 20,431m ² /25 lots						
re. 4	Pro-rate traffic assessment from 1 - advises 336 trips/day, with 18 in peak						
re. 5, 8	adjacent Ashdonleigh S/D – 20,369m ² /27 lots						
re. 6	adjacent Clairemont S/D – 40,607m ² /32 lots						
re. 7	Estimated density as steeper than 6						
re. 19A	adjacent No. 19 S/D plans show– 149,242m ² /128 lots						
re.21	Cummins S/D (incl espl res)– 28,465m ² /30 lots						
re. 22	adjacent Olivine Tce S/D – 13,553/18 lots						
re. 22	adjacent Robinson Rd S/D –9,187/11 lots						
re. 24	adjacent Laval Hts S/D –26,684/32 lots						
re. 25	End of St. Lawrence S/D –25,149/31 lots						
re. 42	Exeter St S/D –32,053/40 lots						

Analysis check - based on 230hh/yr (refer 1 above)

2009-2016 = 1,610 hh required. Potential yield = 1,742, therefore 132 oversupply
2016-2026 = 2,300 hh required. Potential yield = 3,120, therefore 820 oversupply
2026-2036 = 2,300 hh required. Potential yield = 3,143, therefore 843 oversupply

Section 6 – Future Roding Infrastructure

Currently the LTCCP identifies proposed PT projects assuming Council invests in a substantially improved PT service from 2012/13. Council has flagged that it is proposing an arterial routes study the outcomes of which are currently unknown. This modelling project is to analysis two future traffic flows scenarios –

- (i) without any improved specific corridor improvements (i.e. only projects identified in Table 2 below)
- (ii) with improved PT services and infrastructure as identified in 2009-19 LTCCP (i.e. projects in Table 2 and 3 below)

Table 2 - Proposed Roding network projects (irrespective of PT or arterial routes study)

Projects	Remark	Include in model year
Waimea / Van Diemen lights	Subject to modelling & design	2026 (2016/17 in LTCCP)
Hampden Street Pedestrian Facility	Overbridge – subject to modelling & design	2026
SH6 Atawhai Drive Improvements	Closing Bayview, Brooklands etc. – refer Opus drg's	2016
SH6 Cable Bay		2016
SH6 The Glen		2016
SH6 Quarantine Intersection		2016
SH6 Whakatu Drive 4 laning		2026
SH6 Whakatu / Annesbrook Grade Sep		2026
Twin Roundabouts Interim Improvements & Salisbury Rd 4-laning	Subject to modelling & design	2016 (15/16 in LTCCP)
SH6 Twin Roundabouts Grade Sep		2036
Ridgeway South link to The Ridgeway	Due for completion 2009	2016
SH6 Atahwai Drive	speed limit reduction to 80kph	2016
Vanguard/Hardy/Rutherford lights & Haven Rd & Bridge St link to Vanguard only	Central City Strategy	2016(11/12 in CCS)
Haven/Halifax lights	Central City Strategy	2016(12/13 in CCS)
Gloucester/Vanguard lights	Central City Strategy	2026 (investigation 12/13)
Gloucester/St Vincent St lights	Central City Strategy	2026 (investigation 12/13)
Waimea Rd/Ridgeway intersection		2016(11/12 in LTCCP)
Waimea / Market lights and Boundary LI/LO only	Subject to modelling & design	2016(14/15 in LTCCP)
Waimea / Motueka lights	Subject to modelling & design	2016(11/12 in LTCCP)
Extension of Princess drive to	RC submitted 2009	2016

Waimea Road		
Brook/York Valley link	Plan change consideration	2036
Enner Glynn/Panorama Dr/Marsden Valley link	Plan change consideration	2036
Hill St North /Suffolk Rd link	for cycle/walkers	2016
Hill St North /Suffolk Rd link	For vehicles	2036
SH(?)Waimea / Whakaut/Beatson Rd upgrade		2036

Table 3 - Proposed Roading network projects assuming 2012/13 scheduled PT improvements remain after arterial routes study

Project	Remark	Include in model year
Waimea Road Bus Lanes, incl at intersections	4/6 laning	2016(11/12 in LTCCP)
Beatson Rd AM bus priority		2016(11/12 in LTCCP)
Nelson/Stoke PT interchange		2016(11/12 in LTCCP)
New bus stops		2016(11/12 in LTCCP)

Section 7 – Model trip data

Modelling trip data – please check 2006 Christchurch trip data acceptable for use by NZTA. Please also explain how this trip data is modified for the future models to account for fuel price changes, increased PT patronage , TDM implementation, walking and cycling use, and parking controls etc.