Attachment 4 to the Officers Report   **30 July 2008**

Plan Change 24: Affordable & Community Housing

Questions posed by Covec:
- **-in relation to the Demand, Allocation and Implementation report issued by Rationale, Ltd.;**
- **-other matters on the Plan Change**

(Note: Council's responses are in *italics)*

1. Could we please be supplied with a copy of the model for auditing purposes?

    An electronic copy is not available. Please raise more specific questions at the hearing.

2. What sensitivity analyses have been run on the model? Can you please send us any such results?

    A summary of the sensitivity analysis is shown in the table below. The four variables modelled are:
    - *Income inflation*
    - *House price inflation*
    - *Portion of income spend on housing*
    - *Mortgage interest rates*

    The blue figures at the top represent the variables used in the model. The red figures in each following sections highlight the variable changed. The change in Affordable Housing required can be seen over the next 20 years as can the 20 year demand (total change in demand 2006 to 2026). The change in the right hand column is the modified 20 year demand compared to the 20 year demand used in the report. These changes in affordable houses required would then flow through to the differential calculation. Only the results in blue have been through the differential calculations.

	2006	2011	2016	2021	2026				% change in 20 year demand
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	30%	
AH required	2,066	2,790	3,705	4,817	6,114		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			4,049	
Portion AH req'd	24%	25%	27%	29%	31%				
Future interest rate		9.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	30%	
AH required	2,066	2,948	4,039	5,368	6,831		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			4,765	18%
Portion AH req'd	24%	27%	29%	32%	34%				
Future interest rate		5.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	30%	
AH required	2,066	2,596	3,284	4,137	5,160		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			3,095	-24%
Portion AH req'd	24%	24%	24%	25%	26%				
Future interest rate		7.0%	Income inflation	6.0%	House price inflation	7.1%	Maximum income spend	30%	
AH required	2,066	2,742	3,542	4,468	5,504		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			3,438	-15%
Portion AH req'd	24%	25%	26%	27%	28%				
Future interest rate		7.0%	Income inflation	3.0%	House price inflation	7.1%	Maximum income spend	30%	
AH required	2,066	2,843	3,868	5,185	6,648		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			4,582	13%
Portion AH req'd	24%	26%	28%	31%	33%				
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	10.0%	Maximum income spend	30%	
AH required	2,066	2,886	4,014	5,391	6,853		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			4,788	18%
Portion AH req'd	24%	26%	29%	32%	34%				
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	4.0%	Maximum income spend	30%	
AH required	2,066	2,695	3,387	4,128	4,897		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			2,832	-30%
Portion AH req'd	24%	25%	25%	25%	25%				
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	40%	
AH required	1,647	2,184	2,878	3,738	4,771		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			3,125	-23%
Portion AH req'd	19%	20%	21%	22%	24%				
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	20%	
AH required	2,594	3,602	4,831	6,208	7,670		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			5,077	25%
Portion AH req'd	30%	33%	35%	37%	38%				
Future interest rate		9.0%	Income inflation	3.0%	House price inflation	10.0%	Maximum income spend	20%	
AH required	2,594	3,695	4,941	6,318	7,781		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			5,187	28%
Portion AH req'd	30%	34%	36%	38%	39%				
Future interest rate		5.0%	Income inflation	6.0%	House price inflation	4.0%	Maximum income spend	40%	
AH required	1,647	1,922	2,192	2,450	2,694		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			1,047	-74%
Portion AH req'd	19%	18%	16%	15%	13%				
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	50%	
AH required	1,302	1,697	2,222	2,903	3,732		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			2,430	-40%
Portion AH req'd	15%	15%	16%	17%	19%				
Future interest rate		7.0%	Income inflation	4.5%	House price inflation	7.1%	Maximum income spend	60%	
AH required	1,078	1,391	1,798	2,326	2,995		20 year DEMAND		
Total Usually Occ Houses	8,554	10,970	13,720	16,763	19,984			1,918	-53%
Portion AH req'd	13%	13%	13%	14%	15%				

3. What historic data is your house price growth rate based on? Can you please send it to us? Also, are you using real prices, or nominal ones? (page 9)

See page 11 of the report:

The house price rate of inflation was taken from data in the MAC Property - 2007 Queenstown Property Market Update – Review and Projections Report[4]. The report contains house price data back to 1991. A nominal amount of 1% was taken off the house price inflation to factor in the slower increase in unit and apartment type dwellings likely to be used for the affordable housing scheme.

[4]*MAC Property - 2007 Queenstown Property Market Update – Review and Projections Report*

MAC property	Unit	Annual %	House	Annual %	Section	Annual %
1991	$ 150,000		$ 150,000		$ 50,000	
1996	$ 190,000	4.8%	$ 240,000	9.9%	$ 115,000	18.1%
2001	$ 275,000	7.7%	$ 290,000	3.9%	$ 120,000	0.9%
2006	$ 480,000	11.8%	$ 630,000	16.8%	$ 325,000	22.1%
Annual increase		8.1%		10.0%		13.3%

Nominal prices have been used to reflect the actual affordability gap observed. The house price inflation used (7.1%) is conservative and as you can see from the sensitivity analysis using 10% house inflation has a significant impact on demand for affordable housing.

4. Has your analysis factored in changes in real incomes over time? i.e. the percentage that can be spent on housing should actually increase over time, because real wages are increasing. Has this been taken into account? (page 9)

Real incomes may rise, but the percentage of income spent on housing (at approximately 30% being an affordable benchmark) has remained the same for decades.

5. Why does the report use 2001 census incomes, rather than 2006 (given that the report was written in the last half of 2007)? What would be the effect of using the latest census data for incomes? Further, why is 2006 census data used elsewhere, but not for incomes??? (page 10)

The income data used is from the 2006 Census. The reference to 2001 Census data on page 10 refers to the 120% figure used in the Hope Strategy. The Hope Strategy was completed prior to the 2006 Census and hence used 2001 Census data. The paragraph explains that this % of AMI has been adjusted in the model and is based on the more recent 2006 Census data.

6. On what grounds are differences in tenure (between NZ and QLDC) translated to affordability problems (page 10)? Surely there are numerous other possible reasons for this observed trend. How did you control for those other factors when making this statement?

While many households may be able to afford rental accommodation, their aspirations are to purchase, and unless homeownership options are available it is likely they will decide not to stay in the district long term.

Anecdotal evidence suggests that many individuals and families leave the district due to the cost of living including home ownership. This can be observed in the unemployment rate, skilled worker shortage and that the length of tenure is declining as observed by SNZ Census. One of QLDC's community outcomes is to have a community that is strong, diverse and inclusive for people of all age groups and incomes.

7. Figure 2 – page 10. Can you please clearly explain what this is supposed to be showing? We do not understand it.

Figure 2 is a classic bell curve, demonstrating the household income distribution as it pertains to eligibility & demand for affordable housing (indicated by the bottom left segment of the chart)

It is an illustration of income, tenure and eligibility segmentation. Using 2006 census data was able to be completed. What maybe confusing you is the use of the eligibility criteria which is driven from a strategy.

8. Why was 2006 census data not used to infer the number of unoccupied dwellings? Moreover, what would happen to the final results if these were included in the analysis (one way or another)? (page 10)

See response to Q3.

9. What is the estimate of 20% (top of page 11) based on? How sensitive is the model to changes in this value?

The 20% of households which are eligible based on income but ineligible based on having assets significant enough to meet their housing needs should be considered in addition to the above two groups listed in Figure 2: those being the group who are eligible based on income but rent for free (a Stats NZ term), and those who already own a house. When accounting for the above three groups of 'eligible based on income but ineligible based on other factors', the result is approximately 35% of new homes fall into the affordable category (see page 17).

See sensitivity analysis.

10. What do you mean when you say that the same philosophies have been applied as the 2006 demand (page 11)?
The assumptions stated in the prior paragraphs are then applied to the model when run for 2011, 2016, 2021 and 2026 as per the chart in Appendix C1

11. What are the growth rates of 4.5% for income and 7.1% for house price based on? Are they in real or nominal terms? How sensitive is the model to changes in these?? (page 11)

See Q1 re Housing inflation. Income inflation is the annual increase in AMI from 1991 to 2006. See sensitivity analysis. Nominal increases have been used to reflect actual affordability gap.

12. How was the 1% reduction in house price inflation (for changes in dwelling type) calculated? Does it reflect actual difference in prices, or their growth rates?? If not, what is the factual basis? How sensitive are the results to this? Why do subsequent tables still appear to use 7.1% (rather than 6.1%)? (page 11)

The 1% reduction was to take a more conservative approach to housing inflation and lowered the inflation rate from 8.1% to 7.1%. The inflation of units was considered to be most applicable to the likely affordable housing units required. See sensitivity analysis.

13. On what basis do you assume that 100% of itinerant workers will require - and qualify for - affordable housing? Surely, these people made a conscious effort to work in the area, and should not be subsidised at the expense of locals?? (page 11)

Note that itinerant workers form approximately 10% of the demand, so not a significant portion of the total affordable housing to warrant the level of concern the question implies.

14. Is the labour report (mentioned at the bottom of page 11) available now? If so, could you please forward a copy?

It has been provided as requested.

15. What is the 2% scalar at the top of page 12 based on? How sensitive is the model to changes in this?

This was an estimate agreed with the Affordable Housing working group after discussion with the four main ski fields, the main employees of itinerant workers. See response to Q11.

16. What are the differences between categories one and two at the bottom of page 12? Aren't both sets of households "*currently served by the market as they are renting affordably*"? On what basis do they differ with respect to their abilities to live in the district (ignoring tenure)?

There is a significant difference – please re-read the categories. Tenure aspirations are important for skilled workers who want to make the district a permanent home.

17. On page 7, you note that linkage zoning ignores secondary impacts, yet this appears to be directly contradicted on page 14. Are secondary effects included in your assessment or not? Why??

Secondary effects refers to effects 'offsite' of the proposed development. Direct effects are those of the workers employed at the development site, and indirect effects are those of other workers needed to service the development site, which may not be employed at the site.

18. Beyond the initial construction employment effects (which everybody agrees with), how does development itself generate any long-term employment effects? Aren't the eventual occupants (new residents and businesses) the source of this longer-term demand?? (page 14)

The employment demand is created at the time of development and is retained.

19. To what extent have you taken account of the positive spin-offs of development? For instance, what about the benefits of high-income employment associated with it? Surely this should help offset any detriments? What about the increases in GDP associated with development? Surely these should be counted (as a benefit) too? (page 14)

An increase in GDP does nothing to ensure that a safe, decent, affordable housing unit is available for the entry level worker. General increases in the economy are not often matched to the needs of workers generating those economic benefits. Wages have not kept up with housing costs.

20. Can you please clearly explain the steps on page 15? We could not follow them. For instance:

    a. How are employees in step 1 attributed to land use? What is the basis of this allocation??

See Appendix D for apportionment process.

    b. Do steps 1 and 2 assume that all employment in QLDC only serves demand in QLDC? i.e. What assumptions are made about inter-regional trade flows, and the implied impacts on local employment of increasing demand from other regions?

No assumptions have been made about interregional trade as we don't believe there is any evidence to suggest this will make houses more affordable. Anecdotally we'd suggest QLDC is a net importer of employment.

c. What is the effect of your assumption in step 3 about all indirect demand being attributed to residential? Why do this? Also, why even look at indirect demand when you earlier stated that this is irrelevant for linkage zoning??

See Appendix D for employment demand allocation. Not sure where we said indirect employment demand is irrelevant for linkage zoning. The process is simply an employment allocation based on the source of demand, described by land use.

d. How was step 4 done?

See appendix D.

21. How do the calculations on page 18 take account of increasing real incomes (and hence the proportion of income that can be spent on housing while remaining affordable)?

See the response to Question 4

22. Are you able to translate the contributions calculated on page 25 to % of development value to place these in context?
See issue 4.2 in the Officers Report

Thanks very much for your help with this. Greatly appreciated.

Cheers,
Fraser

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[by email]