

macro perspective  micro analysis

Affordable and Community Housing

Demand, Allocation and Implementation

Prepared for:
Queenstown Lakes District Council



Quality Assurance Statement

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Executive Summary

The purpose of the Housing Our People in our Environment (HOPE) strategy is to set out actions that the Council is proposing to undertake over the next 5 to 10 years to help address the growing problem of people and households experiencing affordable housing stress.

The purpose of this is to calculate the current and future demand for affordable housing within the Queenstown Lakes District.

The calculation of the demand was carried out at a household level and represents the number and type of dwellings the affordable housing scheme needs to provide. Both ownership schemes and rental schemes will be required to meet the demand.

The demand for affordable housing is based on the number of people in the district that do not own the house they live in and qualify for the affordable housing scheme. The income is measured using the household Average Median Income (AMI). Demand for affordable housing is limited by the qualification criteria namely:

- Income must be less than the income level required to purchase a 1st quartile house.
- Applicant must not hold significant assets elsewhere.
- A maximum of 30% of household income to be spent on housing – either rent or mortgage payments.
- Applicant must not own the house they reside in.

The 1st quartile house price in Queenstown Lakes District is \$375,000 and the average median income in QLDC is \$63,800. The 1st quartile (25th %) is considered the target price for the affordable housing scheme. The demand model is based on the current and future income level required to purchase a 1st quartile house. This takes into account appreciating house prices and inflated income levels. The income level required to purchase a 1st quartile house increases over time. This is due to the affordability gap widening as house prices increase faster than income inflation.

The demand was calculated for both permanent residents and itinerant workers. The catchment areas used were the Wakatipu and Wanaka wards. The total demand for affordable housing is as shown in the table below:

Ward		Total Number of Affordable Houses Required				
		2006	2011	2016	2021	2026
Wakatipu	Permanent residents	1,350	1,798	2,377	3,162	4,080
	Itinerant workers	122	139	154	170	193
	TOTAL	1,471	1,938	2,531	3,332	4,273
Wanaka	Permanent residents	496	729	1,024	1,311	1,643
	Itinerant workers	99	124	151	175	201
	TOTAL	594	852	1,174	1,486	1,844
District Wide		2,066	2,790	3,706	4,818	6,116

These demand figures can be further broken down into the matrix below. This matrix defines the type of affordable stress being experienced by different income groups and the actions proposed. It also defines the type of housing product required to meet demand.

Matrix of Affordable Housing Unit Type Requirements – 20 year Future Demand

Rental status	Low Income				Moderate Income				TOTAL
	Under rental stress and cannot afford to buy	Renting affordably via market and cannot afford to buy	Under rental stress and can afford to buy via shared ownership	Renting affordably via market and can afford to buy via shared ownership	Under rental stress and cannot afford to buy	Renting affordably via market and cannot afford to buy	Under rental stress and can afford to buy via shared ownership	Renting affordably via market and can afford to buy via shared ownership	
Type of assistance required from affordable and community housing	Assistance via an affordable rental scheme	Rental product at market rates	Assistance via an affordable shared ownership scheme or affordable rental scheme	Assistance via an affordable shared ownership scheme	Assistance via an affordable rental scheme	Rental product at market rates	Assistance via affordable shared ownership scheme Or affordable rental scheme	Assistance via an affordable shared ownership scheme	
Unit Mix									
Shared living / Dormitory	121	0	0	0	0	0	0	0	121
Studio	90	19	0	0	13	27	5	77	231
1 Bedroom	281	97	0	0	53	136	23	386	976
2 Bedroom	448	156	0	0	83	218	37	617	1,559
3 Bedroom	167	58	0	0	30	82	14	231	582
4 Bedroom	167	58	0	0	30	82	14	231	582
TOTAL	1,274	388	0	0	209	545	93	1,542	4,051

Note: At this point the shared ownership cut off is 60% (i.e. the owner must own at least 60% of the property).

Demand for affordable housing has two components, namely existing and future demand. Future demand is the focus of this process. Existing demand has been deemed unrecoverable through this plan change process.

It is anticipated that only a portion of the future demand will be recoverable. It is currently considered unfair and unreasonable for subdivisions and developments that meet existing land use rights, to have additional costs imposed on them where not previously contemplated. Plan changes and resource consents that breach site density, building coverage or unit uplifts shall be subject to an affordable/community housing assessment as outlined in this section. It is intended that future needs for affordable/community housing will be partially met by this process.

The aim in allocating the demand is to show a clear nexus between the demand for affordable housing and development. The approach taken here is to consider both direct and indirect demand for affordable housing created by a development. The key point to note is that the demand is not only about the jobs created (requiring affordable housing) within the development (direct demand), but also about the demand for jobs created at a community level, to service the development (indirect demand).

There are two recognised methodologies used for apportioning demand; Linkage Zoning and Inclusionary Zoning. Inclusionary Zoning requires a minimum percentage of residential development be provided at below-market rates to serve lower income households as part of new residential developments. Inclusionary zoning is a housing supply obligation based on the Community's need for affordable housing.

Linkage Zoning requires that a development provide housing for a specified percentage of new employees generated by the development. Linkage programs focus only on a development's impacts as related to employee generation and do not take into account secondary impacts.

Based on the particular characteristic of the District, Council have expressed a strong desire to use Linkage Zoning calculations to apportion the demand. Hence apportioning demand has been assessed with Linkage Zoning in mind.

To allocate affordable housing demand to single or mixed use subdivisions or developments a differential model was developed. The model defines the affordable housing demand generated per 1,000m² of development type. The differentials are displayed in the Table below:

Summary of Affordable Housing Required per 1,000m² of Gross Floor Area

	Differential
Visitor Accommodation	1.3
Commercial- Intensive	4.4
Commercial – Large format	3.4
Residential	0.4

By using the differentials and type of units for a given development the amount of affordable housing units required by each land use category can be calculated. The formula is shown below:

$$\frac{\text{Total GFA by Land Use Category}}{1,000\text{m}^2} \times \text{Land Use Differential} = \text{Total Number of Affordable Housing Units required}$$

1 Introduction

1.1 Background

The Housing Our People in our Environment (HOPE)¹ strategy sets out a range of actions that the Council and community should take to address issues of reducing housing affordability.

The purpose of this strategy is to set out actions that the Council is proposing to undertake over the next 5 to 10 years to help address the growing problem of people and households in the District not being able to rent or buy houses due to the growing gap between incomes and rental and mortgage costs.

Access to affordable housing is recognised as being very important to a range of community outcomes that have been identified in the Queenstown Lakes District community over the last two years. Access to affordable housing is closely linked to the following desired community outcomes from the Council Community Plan (2004):

- Growth management in a sustainable way
- A safe and healthy community that is strong, diverse and inclusive for people of all age groups and incomes
- High quality urban environments respectful of the character of individual communities
- A strong and diverse economy.

The affordable housing strategy needs to work in-line with all of these outcomes. For example affordable housing schemes that try to address the issue through new low cost urban settlements that destroy outstanding landscapes while offering poor quality living environments for residents are not an option. Equally, affordable housing schemes need to strengthen the local economy by helping to retain and attract skilled workers, not just low income households.

1.2 Objective

Queenstown Lakes District Council engaged Rationale Ltd to assess the current and future demand for affordable housing within the Queenstown Lakes District.

1.2.1 Aim

The scope of services to be provided by Rationale are described as follows:

1. District wide demand for affordable housing including existing and future demand.
2. Demand defined for long term workers and itinerant workers.
3. Demand defined on a rental and ownership basis.
4. Demand projections on a catchment basis. Catchment analysis will be completed in consultation with Council's team. It is recommended that Council's working party/committee are consulted, as they may have different options requiring testing.
5. Differentials for employment demand. These will define the employment demands created by different development types.
6. Affordable housing demand will be defined using Gross Floor Area (GFA) as the variable.

¹ Housing Our People in our Environment Report – QLDC Affordable Housing, June 2005

2 Method

2.1 Demand for Affordable Housing

The calculation of the demand for affordable housing was split into two categories:

- Permanent residents living in the Queenstown Lakes District for the long term.
- Itinerant workers in the Queenstown Lakes District for short term employment.

The total demand for affordable housing comprises of both permanent residents and itinerant workers. The total demand is also split into those that need assistance to own a house and those that need assistance to rent.

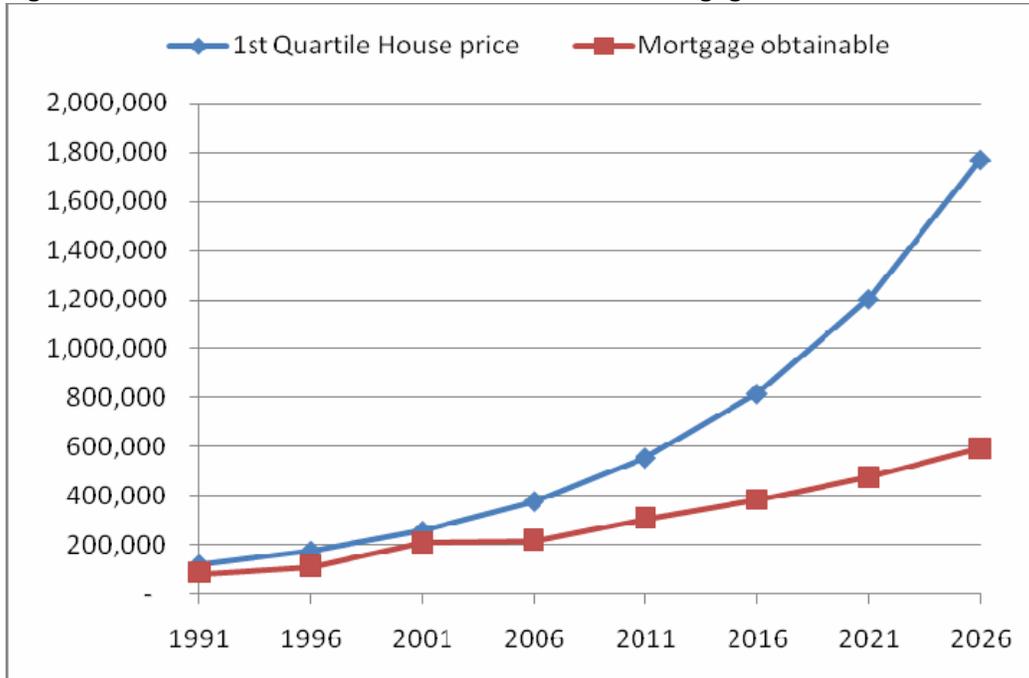
2.1.1 Permanent Resident Demand

2.1.1.1 House Affordability

The calculation of the demand was carried out at a household level and represents the number of dwellings that require some form of assistance to rent or buy affordable housing. A combination of market rates, shared ownership schemes and rental schemes will be required to meet the demand. At this stage of the project the findings are reported at a district level and ward level - Wakatipu and Wanaka.

Based on historic data the rate at which house prices are increasing is greater than income inflation. Figure 1 below shows that if current trends continue the gap between house prices and the obtainable mortgage will increase. Thus a larger portion of income will be required to purchase a house driving the demand for affordable housing up. The obtainable mortgage is based on 30% of the household income being used to service a mortgage.

Figure 1 : 1st Quartile House Price Versus. Obtainable Mortgage at AMI - QLDC



2.1.1.2 Assessing the Demand for Permanent Resident Affordable Housing

The demand for affordable housing is based on the number of people in the district that do not own the house they live in and qualify for the affordable housing scheme. The detailed qualification criteria are outlined in the HOPE Strategy. The qualification criteria used are:

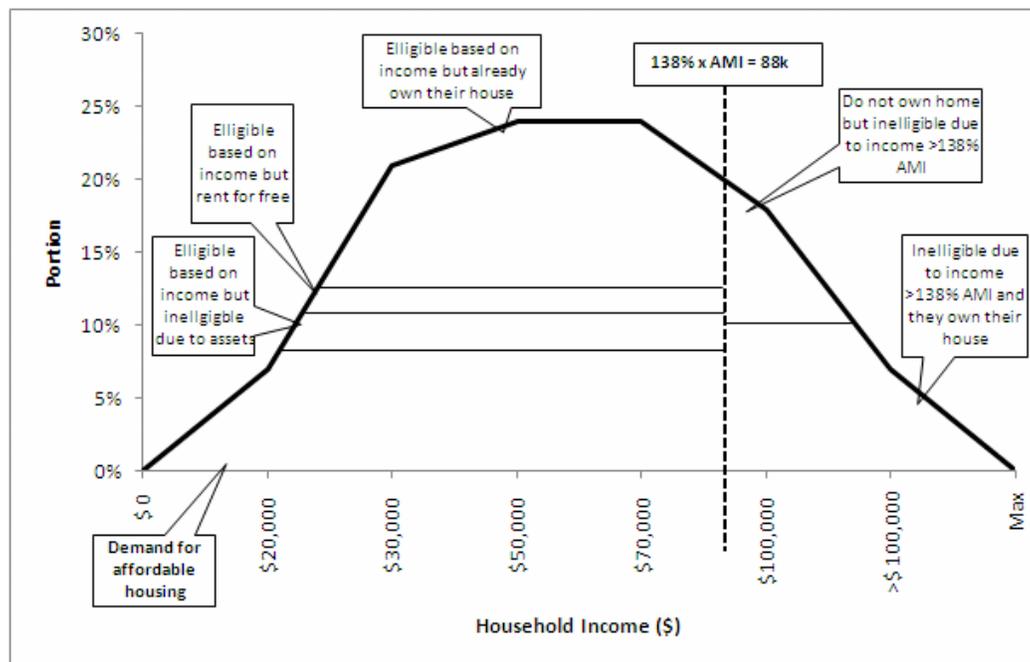
- Applicant must not hold significant assets elsewhere.
- A maximum of 30% of household income to be spent on housing – either rent or mortgage payments.
- Applicant must not own the house they reside in or own a house elsewhere.

It should be noted that the HOPE strategy refers to a figure of 120% x AMI as the qualification criteria for affordable housing. This figure was based on 2001 data. The current model is based on existing and future income levels and appreciating house prices. The %AMI has changed since 2001 and continues to at each future point in time.

Historic analysis of the ratio of 'owned' to 'non-owned' houses shows this has remained constant over the last 10 years. The portion of 'non-owned' homes in QLDC is approximately 40% compared to around 33% for the rest of New Zealand. This is another indication of the affordability issues facing QLDC. This portion is likely to increase over time due to the widening gap between income and house affordability. This increases the demand for affordable and community housing.

The number of households in each area unit that do not own the house they live in was provided from 2006 Census information². This information was also broken down into six different income brackets. The distinctive household groups within the income distribution curve are shown in Figure 2 below:

Figure 2 : Household Income Distribution in QLDC – Household Groups for Affordable Housing Project



The 2005 Growth Projection figures in the 10-year Council Community Plan³ provided the number of occupied houses in each area within QLDC. Unoccupied houses and visitor accommodation units were excluded from the affordable housing demand analysis as these dwellings were assumed to cater for the non-resident population.

The portion of house ownership within each income bracket was applied to the 2006 occupied house figures. This ensures the total housing figures in the Affordable Housing Model are consistent with the 2006 LTCCP 20 Year Growth Projections.

² Statistics New Zealand Census 2006 Data

³ Queenstown Lakes District Council - The 10 Year Plan – Council Community Plan 2006

There are a portion of households that do not own the house they live in and do not pay rent. These households have been removed from the demand calculations as these people do not need affordable housing assistance. The figures were obtained from Stats NZ Census 2006 data.

Specific information regarding the ownership of 'other' assets by household is not available so an estimate of 20% was used. i.e. 20% of those that qualify for affordable housing based on income and house ownership were assumed to hold significant assets elsewhere and hence do not qualify. Due to the lack of statistical evidence this figure was agreed during the project meeting held Tuesday 19th June 2007 with Edward Guy, Scott Figenshow, David Mead and Walter Clarke.

From the above figures and assumptions the demand for affordable housing based on income and house ownership was calculated for 2006.

The demand calculations for future years are based on a combination of the following:

- The same philosophies applied to the 2006 demand.
- The increase in occupied dwellings within the district over the five year periods based on the 2006 LTCCP 20 Year Growth Projections.
- The income distribution of people coming to the district is assumed to be the same as the 2006 SNZ QLDC figures, factoring in inflation.
- The adjusted income level criteria (%AMI) to qualify for affordable housing is based on inflated income and house price levels.
- The number of people moving to the district with sufficient capital to buy their own home was taken from the Stats NZ data for households by income bracket with no mortgage.

The above factors were used to calculate the number of additional affordable houses required over each five year time period. The new arrivals to the district who owned a house with no mortgage or who earned over the income level required to buy a 1st quartile house were assumed to not require affordable housing. The total from each five year growth period was then added to the previous periods total to provide a cumulative demand figure.

If current inflation and house appreciation trends continue the portion of AMI required to purchase a 1st quartile house will increase over time as house prices continue to increase at a greater rate than income inflation. Annual income inflation has been modelled at 4.5% and the annual house price inflation at 7.1%.

The house price rate of inflation was taken from data in the MAC Property - 2007 Queenstown Property Market Update – Review and Projections Report⁴. 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.

The income inflation figure was obtained from historic QLDC income data from Stats NZ. The average median income and the income brackets used in the analysis were inflated at 4.5% per annum.

2.1.2 Itinerant Workers

As the above demand figures are based on 2006 Census information they will not include the itinerant workers that live short term short term for employment purposes. It is assumed that 100% of itinerant workers will require and qualify for affordable housing.

Assessing the number of itinerant workers in the district proved difficult. A labour market survey is underway in a joint venture between QLDC, Department of Labour and the Ministry of Economic Development. This should provide some more insight into the number of itinerant workers in the District however this will not be available until later in 2007.

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

Due to the lack of information, the itinerant worker estimate is based on the number of visitors to QLDC over the winter season. Multiplying this by 2% assumes the number of workers required to service the increased number of visitors over this period. The winter peak was assumed to be 80% of the summer peak shown in the growth projections. This means for every 50 additional peak time visitors, one extra worker is required to service their needs. It has been assumed that on average three itinerant workers occupy a dwelling.

2.1.3 Type of Affordable Housing Required

2.1.3.1 Assessment of Affordability

The combination of permanent residents and itinerant workers provide the total demand for affordable housing. Those that qualify for affordable housing were split into two types of demand:

1. Those households that earn enough to buy via some form of shared ownership or lease hold scheme.
2. Those households that do not earn enough to purchase any type of house and therefore must rent.

At this stage it is assumed that the cut off point for any shared ownership scheme be 60% (i.e. the owner must own at least 60% of the property). It is also assumed that a 20% deposit of the purchasers shared portion is required to purchase a house. This is in line with the deposit most banks required for 1st time buyers or apartment/unit type houses likely to apply to those in the 1st quartile. The minimum income required to own a home was re-calculated at each 5 year interval taking into account the inflation of income and house prices.

The split will be dictated by household income. Based on their short term nature we have assumed that all itinerant workers will fall into the 'rental' category.

2.1.3.2 Current Income and Rental Profile of Demand

The households that make up the demand for affordable housing are currently renting and can be categorised into the following rental categories:

- Currently renting and spend less than 30% of their income on rent.
- Currently renting and spend more than 30% of their household income on rent, i.e. require affordable housing rental assistance.

The above split of households was calculated using Stats NZ 2006 Census data showing the rent paid and household income. The method used to categorise the demand for affordable rent was similar to the affordable housing demand model and assumed an even distribution of households across each income bracket and each weekly rent bracket. Those households that earn more than the income eligibility level (138%) for affordable housing were excluded from the rental analysis as they are not part of the demand for affordable housing.

By creating a matrix from the results of the two rental categories the demand for affordable housing can be split in four categories:

1. Currently renting with less than 30% of household income and can afford to buy via a shared ownership scheme. Households in this category are using a market rate rental product but require assistance via an affordable ownership scheme to enable household ownership.
2. Currently renting with less than 30% of household income and cannot afford to buy via a shared ownership scheme. Households in this category are currently served by the market as they are renting affordably.
3. Currently renting with more than 30% of household income and can afford to buy via a shared ownership scheme. Households in this category require assistance via an affordable ownership scheme to enable household ownership.
4. Currently renting with more than 30% of household income and cannot afford to buy via a shared ownership scheme. Households in this category require assistance via the affordable renting scheme.

The above categories were also split into low and moderate income categories to show the range of housing units required to cater for the all households. Using 2006 figures low income is deemed to be less than 78% of AMI (\$0 to \$50k) and moderate income is 78% to 138% of AMI (\$50k to \$88k). These AMI percentages change over the 20 years.

2.1.3.3 Affordable Housing Unit Type Required

Further to the matrix described above, the demand has been categorised by housing type. This is to ensure the affordable housing provided by development meets the needs of actual demand. These were provided by Council.

Table 1 : Portion of Affordable Housing Unit Type Required – Permanent Resident

House Unit type	Portion
Studio	5%
1 Bedroom	25%
2 Bedroom	40%
3 Bedroom	15%
4 Bedroom	15%
TOTALS	100%

Shared living / Dormitory is an additional category used for itinerant workers. The unit types and the desired portions were provided by Council and are shown below:

Table 2 : Portion of Affordable Housing Unit Type Required – Itinerant Workers

Unit Mix	Temporary Worker Households		Total
	Low Income	Moderate Income	
Shared living / Dormitory	70%	0%	70%
Studio	20%	2%	22%
1 Bedroom	2%	2%	4%
2 Bedroom	2%	2%	4%
3 Bedroom	0%	0%	0%
4 Bedroom	0%	0%	0%
TOTAL	94%	6%	100%

2.1.3.4 Total Demand

The total demand defined by the sections above generates a detailed matrix of demand including the types of affordable housing required and the action required to relieve affordable housing stress. This matrix is available in the results section, **3.1.3.3 – Affordable Housing Required**.

2.2 Allocation of the Demand

Demand for affordable housing has two components, namely existing and future demand. Future demand is the focus of this process. Existing demand has been deemed unrecoverable through this plan change process.

It is anticipated that only a portion of the future demand will be recoverable. It is currently considered unfair and unreasonable for subdivisions and developments that meet existing land use rights, to have additional costs imposed on them where not previously contemplated. Plan changes and resource consents that breach site density, building coverage or unit uplifts shall be subject to an affordable/community housing assessment as outlined in this section. It is intended that future needs for affordable/community housing will be partially met by this process.

The aim in allocating the demand is to show a clear nexus between the demand for affordable housing and development. The approach taken here is to consider both direct and indirect demand for affordable housing created by a development. The key point to note is that the demand is not only about the jobs created (requiring affordable housing) within the development (direct demand), but also about the demand for jobs created at a community level, to service the development (indirect demand).

Direct demand created by a given development is the demand for affordable housing contained within the development. An example of purely direct demand is visitor accommodation. Here jobs are created only to service the visitor sector and therefore these jobs are internalised to the visitor sector.

Indirect demand is the affordable housing generated by jobs required to service the development, beyond the development itself and at a community wide level. An example of indirect demand is food and beverage services (a commercial development). Here the demand for affordable housing is generated by the commercial sector, visitor sector and the residential sector as these land uses all have a need for this activity. Therefore a mix of both direct and indirect demand has been generated by this activity.

Land use categories were used to enable the total demand to be allocated to all types of developments. The land use categories used to apportion the demand are:

- Visitor Accommodation.
- Commercial (Intensive) - Main street retail, cafe, office
- Commercial (Large Format) - Wholesale, industrial, bulk retail
- Residential.

There are two recognised methodologies used for apportioning demand; Linkage Zoning and Inclusionary Zoning. Inclusionary Zoning requires a minimum percentage of residential development be provided at below-market rates to serve lower income households as part of new residential developments. Inclusionary zoning is a housing supply obligation based on the Community's need for affordable housing. This can relate to a number of factors including a scarcer supply of land, rising home values and insufficient provision of housing affordable to residents by the market. In addition to any direct employee generated impacts, Inclusionary Zoning is similar to the Stakeholder Agreements that are currently being initiated with Mount Cardrona Station and Jack's Point.

Linkage Zoning requires that a development provide housing for a specified percentage of new employees generated by the development. Linkage programs focus only on a development's impacts as related to employee generation and do not take into account secondary impacts.

Based on the particular characteristic of the District, Council have expressed a strong desire to use Linkage Zoning calculations to apportion the demand. Hence apportioning demand has been assessed with Linkage Zoning in mind.

2.2.1 Assessing Affordable Housing Demand for a Subdivision or Development

To apportion the future demand for affordable housing across the different land use categories a differential model was developed. The differential model enables the demand for affordable housing from mixed use subdivisions and developments to be assessed. Residential and non-residential activities can be described using a common unit of demand, being an affordable housing unit.

The steps taken to create the model are described below. The working tables for these steps can be found in Appendix D.

1. Employment and Income by Industry Sector

It is necessary to understand the number of employees in each industry sector and their relative income. From this the demand for affordable housing by business sector can be assessed. For this step Stats NZ Census 2006 data supplied the number of employees by industry sector and by income bracket.

Employees in this data are assigned to different land uses for both direct and indirect demand.

2. Land Use Category Weighted by Income and Employee Number

Step 1 provides the total number of employees by income bracket for each land use. This enables the total number of employees in the district to be assigned to a land use and income bracket. This also provides a weighted average income for each land use which will be used in step 6 below.

3. Assign Employees to Land Use

As described in section 2.2, direct and indirect demand is to be assessed. The approach taken is to assign direct and indirect demand to the residential land use only. This assigns more employees to the residential land use. Direct demand has been applied to for commercial and accommodation land uses initially. The direct employment assigned to the commercial land use is then reduced to reflect the increase in indirect employment assigned to the residential land use. The accommodation land use remains as direct demand as the residential land use has had little impact of the demand for accommodation related employment.

4. Housing Demand By Land Use

Once the number of employees have been assigned to each land use (including adjustments between residential and commercial – step 3) the total number of houses required for each land uses can be assessed. The number of occupied dwellings is apportioned over the land uses using the number of employees.

5. Ratio of Affordable Housing Demand to Total Housing Demand

The future change in demand for affordable housing over the next 20 years and the total increase in occupied households over the same period as described in section 2.1 were used to calculate this ratio. This identifies the number of affordable houses demanded by each land use.

6. Income Adjusted Demand

Affordable housing demand for each land use is adjusted to reflect the relative incomes for each land use as described in 2) above.

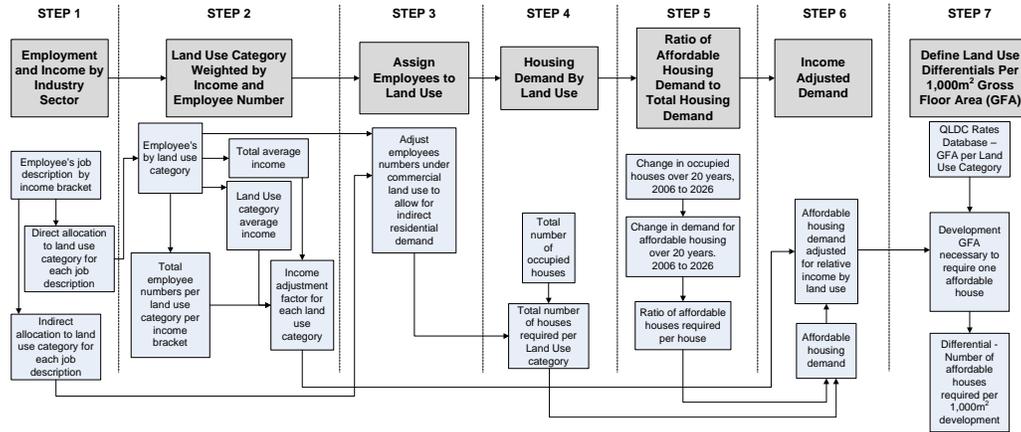
7. Define Land Use Differentials Per 1,000m² Gross Floor Area (GFA)

The total GFA for each land use was extracted from QLDC's rating database. Using this and the affordable housing demand by land use, the GFA required per affordable house can be

assessed. This is then converted into the number of affordable houses required per 1000m² for ease of application to different developments.

The process flow diagram below represents the steps described above:

Figure 3: Process Flow Diagram of Steps to Develop Differential Model



By using the differentials found in section 3.2.1 for a given development the amount of affordable housing units required by each land use category can be calculated. The formula is shown below:

$$\frac{\text{Total GFA by Land Use Category}}{1,000\text{m}^2} \times \text{Land Use Differential} = \text{Total Number of Affordable Housing Units required}$$

The exact mix of housing units can be calculated using the tables defined in section 2.1.3. A worked example in section 3.2.2 shows the entire process.

3 Results

3.1 Demand for Affordable Housing

The total demand including both itinerant workers and permanent residents is shown in the table below:

Table 3 : Total Number of Affordable Houses Required by Ward

Ward		Total Number of Affordable Houses Required				
		2006	2011	2016	2021	2026
Wakatipu	Permanent residents	1,350	1,798	2,377	3,162	4,080
	Itinerant workers	122	139	154	170	193
	TOTAL	1,471	1,938	2,531	3,332	4,273
Wanaka	Permanent residents	496	729	1,024	1,311	1,643
	Itinerant workers	99	124	151	175	201
	TOTAL	594	852	1,174	1,486	1,844
District wide		2,066	2,790	3,706	4,818	6,116

The current demand of over 2,000 houses increases to over 6,100 in 2026. The demand increases at a greater rate toward 2026 as the gap between income and house prices grows wider.

The increase in demand over the next twenty years is 4,051. The projected increase in occupied households over the same time period is 11,430. Thus 35% of new houses fall into the affordable housing category. The demand is made up of Permanent Residents and Itinerant Workers and the detailed results of these specific categories are shown in the sections below.

3.1.1 Permanent Resident Demand

The QLDC rates database - June 2007⁵ was used to estimate the average, median and 1st quartile (25th %) residential house price. The residential house price figures are shown below:

Table 4 : Houses Prices by Ward and District

	District	Wakatipu	Wanaka
Average	\$ 578,827	\$ 602,638	\$ 535,620
Median	\$ 480,000	\$ 495,000	\$ 455,000
1st quartile	\$ 375,000	\$ 390,000	\$ 355,000

Stats NZ Census 2006 data provided the current and historic Average Median Income by area within QLDC. The median household income for QLDC and by ward is shown below:

Table 5 : Median Household Income

Area	Median Household Income
QLDC	\$ 63,800
Wakatipu	\$ 68,847
Wanaka	\$ 56,462

The source data for the above calculations can be found in the Appendix A.

⁵ Queenstown Lakes District Council Rates Database – December 2005, Ian Stewart

3.1.1.1 House Affordability

The calculation used to assess the income level at which housing becomes affordable is shown below. The calculation assumes a deposit of 20% and that a maximum of 30% of income will be spent on servicing the mortgage.

	Wakatipu	Wanaka
Target house price	\$ 390,000	\$ 355,000
Assume 20% deposit of	\$ 78,000	\$ 71,000
Mortgage required	\$ 312,000	\$ 284,000
Interest rate	8%	8%
Principal payment	0.8%	0.8%
Annual mortgage payments required	\$ 27,362	\$ 24,907
Income assuming 30% spent on housing	\$ 91,208	\$ 83,023
AMI	\$ 68,847	\$ 56,462
Income required as a fraction of AMI	132%	147%

The figure at a district wide level is 138%.

The increase in AMI required to purchase a 1st quartile house over time is shown in Table 6. We have used a mortgage interest rate of 7% for future years however it is likely that this will change over time and any movement will alter the level of AMI required. However the effect is not likely to be significant unless the interest rates were to change by over 4%. It is likely any change will net off with a reversal during the 20 year time period. The income level dictates the qualification criteria for affordable housing.

Table 6 : Portion of AMI Required to Afford a 1st Quartile Home by Ward

WAKATIPU								
Year	AMI (\$)	1st Quartile House Price (\$)	Assume Deposit of (\$)	Actual Mortgage Required (\$)	Interest Rate	Annual Payment (interest + 0.80% principle)	Income Required if 30% used for House (\$)	Portion of AMI Required (%)
Inflation	4.5%	7.1%	20%					
2006	68,847	390,000	78,000	312,000	8.0%	27,456	91,520	133%
2011	85,813	548,605	109,721	438,884	7.0%	34,233	114,110	133%
2016	106,960	771,712	154,342	617,369	7.0%	48,155	160,516	150%
2021	133,318	1,085,551	217,110	868,441	7.0%	67,738	225,795	169%
2026	166,171	1,527,023	305,405	1,221,619	7.0%	95,286	317,621	191%
WANAKA								
2006	56,462	355,000	71,000	284,000	8.0%	24,992	83,307	148%
2011	70,376	499,371	99,874	399,497	7.0%	31,161	103,869	148%
2016	87,719	702,456	140,491	561,964	7.0%	43,833	146,111	167%
2021	109,335	988,130	197,626	790,504	7.0%	61,659	205,531	188%
2026	136,279	1,389,983	277,997	1,111,986	7.0%	86,735	289,116	212%

3.1.1.2 Assessing the Demand for Permanent Resident Affordable Housing

The Stats NZ figures for households with no mortgage and households that rent for free are shown below:

Table 7 : Stats NZ Figures for Houses that are Mortgage Free and Rent Free

	\$20,000 or Less	\$20,001 - \$30,000	\$30,001 - \$50,000	\$50,001 - \$70,000	\$70,001 - \$100,000	\$100,001 or More
No mortgage	65%	46%	46%	34%	30%	30%
No rent	20%	16%	13%	9%	6%	7%

The demand for affordable housing linked to permanent residents is shown below. The total number of 'owned' and 'non-owned' occupied houses is also shown for reference. Non-owned is split out by those that do not qualify for affordable housing for one of the following reasons:

- Household income is above qualification level.
- Household rents the house for free.
- Household own significant assets elsewhere and hence are ineligible.

Table 8 : Number of Houses in Each Category – District Wide

Category	2006	2011	2016	2021	2026
Total Owned Houses	5,015	5,964	7,043	8,235	9,496
Not owned but earn > income limit	909	1,414	1,856	2,210	2,430
Not owned but rent for free	322	434	569	727	905
Not owned but ineligible due to assets	461	632	850	1,118	1,431
Demand for affordable housing	1,845	2,527	3,401	4,473	5,723
Total Not Owned Houses	3,538	5,006	6,677	8,529	10,488
Total Occupied Houses	8,554	10,970	13,720	16,763	19,984

The demand for affordable housing from the permanent residents by ward is shown below:

Table 9 : Number of Affordable Houses Required by Ward - Permanent Residents

Ward	2006	2011	2016	2021	2026
Wakatipu	1,350	1,798	2,377	3,162	4,080
Wanaka	496	729	1,024	1,311	1,643
District wide	1,845	2,527	3,401	4,473	5,723

The above figures show the demand for affordable housing for permanent residents is approximately 22% of the total occupied residential dwellings. This ratio increases to 29% by 2026 as the gap between income and affordable housing increases.

The projected ratio of owned to non-owned houses changes over time as houses become more unaffordable. The historic ratio and the projected ratio are shown in the table below:

Table 10 : Projected Ratio of Owned to Non-owned houses – District Wide

Year	Owned	Non-owned
1991	62%	38%
1996	57%	43%
2001	58%	42%
2006	59%	41%
2011	54%	46%
2016	51%	49%
2021	49%	51%
2026	48%	52%

As the gap between income and house affordability increases the home ownership levels decrease. QLDC currently has a 60:40 split compared with a NZ wide average of 67% owned to 33% non-owned. Again this is an indication that QLDC houses are less affordable than elsewhere in NZ.

The source data and working tables can be found in Appendix B.

3.1.2 Itinerant Workers

The calculation methodology of the housing required for itinerant workers is shown below.

Table 11 : Number of Affordable Houses Required by Ward - Itinerant Workers

Wakatipu	2006	2011	2016	2021	2026
Increase in visitors - summer peak	22,798	26,130	28,898	31,826	36,146
Winter : summer peak ratio	80%	80%	80%	80%	80%
Increase in visitors over winter	18,239	20,904	23,118	25,461	28,916
Fraction of IW's per visitor	2.0%	2.0%	2.0%	2.0%	2.0%
Number of IW's needed over winter	365	418	462	509	578
Number of IW's to each dwelling	3	3	3	3	3
Dwellings needed for IW's in Wakatipu	122	139	154	170	193
Wanaka	2006	2011	2016	2021	2026
Increase in visitors over summer peak	18,542	23,234	28,219	32,851	37,656
Winter : summer peak ratio	80%	80%	80%	80%	80%
Increase in visitors over winter	14,834	18,587	22,576	26,280	30,125
Fraction of IW's per visitor	2.0%	2.0%	2.0%	2.0%	2.0%
Number of IW's needed over winter	297	372	452	526	602
Number of IW's to each dwelling	3	3	3	3	3
Dwellings needed for IW's in Wanaka	99	124	151	175	201
Dwellings needed for IW's in QLDC	220	263	305	345	394

As discussed in the method section, very little information is available on the number of itinerant workers in the district. In order to validate the assumptions and methodology used the following have been compared with the above figures:

- Anecdotal evidence from David Mead – 10-15% of the total demand; 185-277 dwellings in 2006 in QLDC.
- The increase in workers on the ski fields over the winter peak; 170 short term staff for Coronet Peak – assume a similar figure for the other three main ski fields; 226 dwellings in 2006 in QLDC.

All three methods produce a similar estimate so we are satisfied the assumptions made provide a reasonable reflection of the demand caused by itinerant workers. Also the itinerant workers make up only a small portion of the total demand so the overall impact is reduced.

3.1.3 Type of Affordable Housing Required

3.1.3.1 Assessment of Affordability

The calculation below shows the level at which owning a house becomes impossible and renting is the only option. We have assumed that the cut off point for any share ownership scheme should be 60%.

	Wakatipu	Wanaka
AMI	\$ 68,847	\$ 56,462
Minimum ownership ratio	60%	60%
Target house price	\$ 390,000	\$ 355,000
Owner required to cover	\$ 234,000	\$ 213,000
Assume 20% deposit	\$ 46,800	\$ 42,600
Mortgage required	\$ 187,200	\$ 170,400
Interest rate	8%	8%
Principal payment	0.8%	1%
Annual interest payments	\$ 16,417	\$ 14,910
Assume 30% spent on housing - Income required	\$ 54,725	\$ 49,700
Minimum income as a fraction of AMI	79%	88%
Household Income level to be catered for via 'affordable rent'	\$ 54,725	\$ 49,700

The current and future minimum income that is required to purchase a house with at least 60% ownership and the percentage of AMI this represents is shown in the table below:

Table 12 : Minimum Income Required to Purchase a Shared Scheme House

	Wakatipu		Wanaka	
	Minimum Income	% of AMI	Minimum Income	% of AMI
2006	\$ 54,725	79%	\$ 49,700	88%
2011	\$ 68,203	79%	\$ 61,922	88%
2016	\$ 95,939	90%	\$ 87,104	99%
2021	\$ 134,956	101%	\$ 122,528	112%
2026	\$ 189,840	114%	\$ 172,358	126%

The required income level for ownership is relatively high and thus only a small portion of the households that qualify for affordable housing are able to purchase a home. Only households that earn above the minimum shared scheme income and below the AMI affordable housing level will be able to buy a home via the affordable housing scheme. The portion of those renting also increases over time as the gap between income and house prices increases.

3.1.3.2 Current Income and Rental Profile of Demand

The income profile of all renters was used to ascertain the portion of renters that are currently spending more than 30% of their household income on rent. In order to obtain the income profile of the households that make up the demand the data from Census 2006 – ‘Weekly Rent Paid by Household and Total Household Income, for Households in Rented Private Occupied Dwellings, 2006’ was used. The income of all renters in both categories was then used to calculate the portion that could afford to buy a house via an affordable housing scheme.

Table 13 below shows the split of each category. These percentages show the number of each type of affordable housing product required. A brief synopsis is as follows:

1. Affordable rent for those that cannot afford to buy:
 - Rental product currently being met by the market.
 - Rental product to be provided in the form of an affordable rental product.
 - Rental product to be provided for itinerant works.

2. The percentage that can afford to buy if assisted need to be provided in the form of an affordable ownership product.

Table 13 : Portion of each Affordable Housing Category

Portion	Spend Less than 30% on Rent – renting affordably		Spend More than 30% on Rent – under rental stress		Itinerant Workers	Total
	Cannot afford to buy	Can afford to buy	Cannot afford to buy	Can afford to buy		
Portion	23%	38%	32%	2%	4%	100%

It is important to note that the category ‘renting affordably’ is part of the demand for affordable housing that is currently being met by the market. They are currently renting with less than 30% of their income so they do not need any assistance. We have left this category in the demand analysis figures and this is accounted for in the allocation of the demand.

Over time the market may change and as they cannot afford to own, these households should still be considered as part of the demand for affordable housing. This figure should be reviewed every 5 years to ensure the market is still meeting the demand. Council should retain the ability to modify the requirements of the developer’s contribution if the market does not meet this demand for affordable rental.

3.1.3.3 Affordable Household Unit Type Required

Based on the income and rental profile above and the mix households detailed in section 2.1.3.3 – Affordable Housing Unit Type required, the exact type of affordable housing unit required to met the demand can be calculated. These are shown below for both itinerant workers and permanent residents. From 2006 figures low income is approximately \$0 to \$50k and moderate income is \$50k to \$88k.

Table 14 : Matrix of affordable housing requirements

Rental status	Low Income				Moderate Income				
	Under rental stress and cannot afford to buy	Renting affordably via market and cannot afford to buy	Under rental stress and can afford to buy via shared ownership	Renting affordably via market and can afford to buy via shared ownership	Under rental stress and cannot afford to buy	Renting affordably via market and cannot afford to buy	Under rental stress and can afford to buy via shared ownership	Renting affordably via market and can afford to buy via shared ownership	
Type of assistance required from affordable and community housing	Assistance via an affordable rental scheme	Rental product at market rates	Assistance via an affordable shared ownership scheme or affordable rental scheme	Assistance via an affordable shared ownership scheme	Assistance via an affordable rental scheme	Rental product at market rates	Assistance via affordable shared ownership scheme or affordable rental scheme	Assistance via an affordable shared ownership scheme	
Unit Mix									TOTAL
Shared living / Dormitory	121	0	0	0	0	0	0	0	121
Studio	90	19	0	0	13	27	5	77	231
1 Bedroom	281	97	0	0	53	136	23	386	976
2 Bedroom	448	156	0	0	83	218	37	617	1,559
3 Bedroom	167	58	0	0	30	82	14	231	582
4 Bedroom	167	58	0	0	30	82	14	231	582
TOTAL	1,274	388	0	0	209	545	93	1,542	4,051

The source data and calculation tables for the demand analysis can be found in Appendix C.

3.2 Allocation of the Demand

3.2.1 Apportioning Total Demand

The working tables for the apportioning the demand and the differential calculations are shown in Appendix D. The differentials are shown below in Table 15.

Table 15 : Summary of Affordable Housing Required per 1,000m² of Gross Floor Area

	Differential
Visitor Accommodation	1.3
Commercial- Intensive	4.4
Commercial – Large format	3.4
Residential	0.4

The type of affordable housing required is calculated using the income distribution and rental status of the households that qualify for affordable housing. These were calculated in Section 2.1.3 Type of Affordable Housing Required.

Two worked examples in the following section shows how the differentials are used to assess a specific subdivision or development.

3.2.2 Worked Example

To put the above figures into perspective a worked example for the Mount Cardrona Station development and the proposed Frankton Flats development are shown below. The gross floor area numbers used are estimates only and should be treated as examples only.

3.2.2.1 Mount Cardrona Station

The MCS development is a combination of existing development rights and a zone uplift plan change. Only the zone uplift portion of the development has been assessed.

The estimated gross floor area for each of the land use categories are converted to the Affordable Housing required.

Table 16 : Mount Cardrona Station (MCS)

Sector	Gross Floor Area (m ²)	GFA / 1,000m ²	Differential	Affordable House's required
Visitor Accommodation	2,450	2.5	1.3	3.1
Commercial- intensive	0	0	4.4	0
Commercial – large format	0	0	3.4	0
Residential	7,400	7.4	0.4	2.7
TOTAL				5.8

The matrix from Section 3.1.3.3 Affordable Household Unit Type Required can then be used to breakdown the 6 houses required.

3.2.2.2 Frankton Flats

The estimated gross floor area for each of the land use categories are converted to the Affordable Housing required. As the land is currently zoned rural general the plan change generates and uplift in density.

The estimated gross floor area for each of the land use categories are converted to the Affordable Housing required.

Table 17 : Frankton Flats

Type	Gross Floor Area (m ²)	GFA / 1000m ²	Differential	Affordable House's Required
Main street	26,464			
Café	24,345			
Office	76,377			
Business / workplaces	22,060			
COMM - Intensive	149,246	149	3.4	650
Wholesale	2,061			
Bulk	6,521			
Yard / Transport	21,121			
COMM – Large format	29,703	30	4.4	100
Visitor Accommodation	25,923	26	1.3	33
Residential	464,340	464	0.4	172
TOTAL				954

The matrix from Section 3.1.3.3 Affordable Household Unit Type Required can then be used to breakdown the 954 house units required.

4 References

- 1 Housing Our People in our Environment Report – QLDC Affordable Housing, June 2005
- 2 Statistics New Zealand Census 2006 Data
- 3 Queenstown Lakes District Council - The 10 Year Plan – Council Community Plan 2006
- 4 MAC Property - 2007 Queenstown Property Market Update – Review and Projections Report
- 5 Queenstown Lakes District Council Rates Database – December 2005, Ian Stewart

APPENDICES

Appendix A - Household Income and Tenure

Appendix B – Dwelling Projections

Appendix C – Demand Calculations

Appendix D – Allocation of the Demand

Appendix A - Household Income and Tenure

Table 18: Tenure of Household Income for Households in Private Dwellings in QLDC, 1991, 1996, 2001 and 2006

Tenure of Household by Grouped Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 1991

Tenure of Household	\$20,000 or Less	\$20,001 - \$30,000	\$30,001 - \$50,000	\$50,001 - \$70,000	\$70,001 or More	Not Stated	Total
Dwelling Owned with or without a mortgage	483	447	564	261	192	321	2,268
Provided Free	63	36	51	24	9	33	216
Rented or Leased	261	225	297	129	45	192	1,149
Not Specified	24	15	21	3	6	72	141
Total	831	723	933	417	252	618	3,774

Tenure of Household by Grouped Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 1996

Tenure of Household	\$20,000 or Less	\$20,001 - \$30,000	\$30,001 - \$50,000	\$50,001 - \$70,000	\$70,001 - \$100,000	\$100,001 or More	Not Stated	Total
Dwelling Owned with or without a mortgage	462	450	309	507	240	228	447	2,643
Owned, Mortgage Not Specified	18	12	0	3	0	6	6	45
Provided Rent Free	72	57	30	39	15	12	117	342
Rented	273	249	186	285	135	84	333	1,545
Not Owned, Rental Status Not Specified	15	12	6	6	9	6	15	69
Not Specified	27	15	6	6	3	3	201	261
Total	867	795	537	846	402	339	1119	4,905

Tenure of Household by Grouped Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 2001

Tenure of Household	\$20,000 or Less	\$20,001 - \$30,000	\$30,001 - \$50,000	\$50,001 - \$70,000	\$70,001 - \$100,000	\$100,001 or More	Not Stated	Total
Dwelling Owned with or without a mortgage	438	450	687	621	399	396	540	3,531
Dwelling Not Owned by Usual Resident(s)	348	333	528	390	264	165	465	2,493
Not Elsewhere Included	27	18	24	15	9	9	228	330
Total	813	801	1,239	1,026	672	570	1,233	6,354

Tenure of Household by Grouped Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 2006

Tenure of Households	\$20,000 or Less	\$20,001 - \$30,000	\$30,001 - \$50,000	\$50,001 - \$70,000	\$70,001 - \$100,000	\$100,001 or More	Not Stated	Total
Dwelling Owned or Partly Owned by Usual Resident(s)	222	234	498	513	543	672	339	3,195
Dwelling Not Owned by Usual Resident(s)	228	255	579	588	558	546	441	3,195
Dwelling Held in a Family Trust by Usual Resident(s)	120	144	255	231	249	555	180	1,734
Not Elsewhere Included	51	27	51	33	30	21	405	618
Total	621	660	1,383	1,365	1,380	1,794	1,365	8,568

The ratio of owned to non-owned houses is shown below. This ratio has remained relatively constant over the last 10. However it is possible that if the gap between income and house prices continues to increase the portion of not owned houses will increase as more people are forced to rent.

Table 19 : Ratio of Owned to Non-owned homes in QLDC

Year	Owned	Non owned
1991	62%	38%
1996	57%	43%
2001	58%	42%
2006	59%	41%

Table 20 : Tenure of by Median and Mean Income for Households in Private Occupied Dwellings in QLDC, 1991, 1996, 2001 and 2006

Tenure of Household by Median and Mean Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 1991

Tenure of Household	Mean Household Income (\$)	Median Household Income (\$)
Owned with Mortgage - Owned without Mortgage	36,327	33,840
Provided Free	30,140	29,583
Rented or Leased	33,012	32,035
Not Specified	30,634	30,417
Total	34,955	32,947

Tenure of Household by Median and Mean Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 1996

Tenure of Household	Mean Household Income (\$)	Median Household Income (\$)
Owned with Mortgage - Owned without Mortgage	47,618	39,704
Owned, Mortgage Not Specified	38,197	23,750
Provided Rent Free	38,784	29,773
Rented	44,595	38,654
Not Owned, Rental Status Not Specified	41,077	33,334
Not Specified	33,063	26,667
Total	45,731	38,442

Tenure of Household by Median and Mean Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 2001

Tenure of Household	Mean Household Income (\$)	Median Household Income (\$)
Dwelling Owned or Partly Owned by Usual Resident(s), Mortgage Arrangements Not Further Defined	55,383	47,699
Dwelling Not Owned by Usual Resident(s), Rental Arrangements Not Further Defined	49,125	42,968
Not Elsewhere Included	43,134	31,001
Total	52,724	45,339

Tenure of Household by Median and Mean Household Income for Households in Private Occupied Dwellings in Queenstown-Lakes District - 2006

Tenure of Household	Mean Household Income (\$)	Median Household Income (\$)
Dwelling Owned or Partly Owned by Usual Resident(s)	64,200	65,000
Dwelling Not Owned by Usual Resident(s)	61,400	60,700
Dwelling Held in a Family Trust by Usual Resident(s)	67,900	73,300
Not Elsewhere Included	46,300	39,800
Total	63,400	63,800

Appendix B – Dwelling Projections

Table 21 : Tenure of Household by Grouped Household Income for Household in Private Occupied Dwellings in QLDC, Stats NZ Census 2006 Data

Area	Tenure of Households	\$20,000 or Less	\$20,001 - \$30,000	\$30,001 - \$50,000	\$50,001 - \$70,000	\$70,001 - \$100,000	\$100,001 or More	Not Stated	Total	Median Income	Mean Income
Kelvin Heights	Dwelling Owned or Partly Owned by Usual Resident(s)	6	12	27	24	24	39	21	153	\$ 69,200	\$ 67,400
	Dwelling Not Owned by Usual Resident(s)	15	12	12	18	18	27	6	108	\$ 63,500	\$ 61,400
	Dwelling Held in a Family Trust by Usual Resident(s)	3	3	24	9	12	36	12	99	\$ 81,500	\$ 72,200
	Not Elsewhere Included	3	0	0	6	0	3	18	30	\$ 57,500	\$ 55,600
Kelvin Heights Total	27	27	63	57	54	105	57	390	\$ 68,200	\$ 66,400	
Hawea	Dwelling Owned or Partly Owned by Usual Resident(s)	33	24	66	54	42	27	30	276	\$ 50,400	\$ 53,300
	Dwelling Not Owned by Usual Resident(s)	21	18	39	33	18	12	12	153	\$ 45,300	\$ 49,500
	Dwelling Held in a Family Trust by Usual Resident(s)	21	15	24	27	21	27	27	162	\$ 54,800	\$ 56,100
	Not Elsewhere Included	3	0	3	0	0	0	21	27	\$ 31,300	\$ 27,200
Hawea Total	78	57	132	114	81	66	90	618	\$ 49,200	\$ 52,600	
Frankton	Dwelling Owned or Partly Owned by Usual Resident(s)	21	21	33	36	48	48	24	231	\$ 66,100	\$ 64,000
	Dwelling Not Owned by Usual Resident(s)	15	27	60	51	48	51	42	294	\$ 58,600	\$ 60,800
	Dwelling Held in a Family Trust by Usual Resident(s)	12	12	24	15	15	36	9	123	\$ 60,000	\$ 62,300
	Not Elsewhere Included	6	6	6	6	6	6	30	48	\$ 32,500	\$ 44,500
Frankton Total	54	66	117	102	117	135	105	696	\$ 60,900	\$ 61,600	
Wanaka	Dwelling Owned or Partly Owned by Usual Resident(s)	60	69	105	114	123	114	69	654	\$ 60,500	\$ 60,700
	Dwelling Not Owned by Usual Resident(s)	57	63	120	129	102	81	96	648	\$ 55,500	\$ 57,000
	Dwelling Held in a Family Trust by Usual Resident(s)	45	60	84	78	81	150	54	552	\$ 65,100	\$ 63,700
	Not Elsewhere Included	12	6	12	6	6	6	60	108	\$ 36,300	\$ 45,700
Wanaka Total	174	198	321	327	312	351	279	1,962	\$ 59,100	\$ 60,000	
Glenorchy	Dwelling Owned or Partly Owned by Usual Resident(s)	12	9	27	12	12	3	12	87	\$ 40,900	\$ 46,900
	Dwelling Not Owned by Usual Resident(s)	9	9	18	16	15	9	6	84	\$ 55,000	\$ 56,100
	Dwelling Held in a Family Trust by Usual Resident(s)	0	3	6	3	0	0	3	15	\$ 46,700	\$ 52,800
	Not Elsewhere Included	3	0	3	0	0	0	12	18	\$ 32,500	\$ 32,500
Glenorchy Total	24	21	54	33	27	12	33	204	\$ 46,700	\$ 51,200	
Sunshine Bay	Dwelling Owned or Partly Owned by Usual Resident(s)	6	6	45	51	51	63	30	252	\$ 70,300	\$ 69,800
	Dwelling Not Owned by Usual Resident(s)	12	21	57	75	87	96	54	402	\$ 73,100	\$ 70,000
	Dwelling Held in a Family Trust by Usual Resident(s)	6	6	15	12	15	27	12	93	\$ 71,000	\$ 67,100
	Not Elsewhere Included	3	0	6	0	6	0	45	60	\$ 42,500	\$ 49,900
Sunshine Bay Total	27	33	123	138	159	186	141	807	\$ 71,300	\$ 69,000	
Wakatipu	Dwelling Owned or Partly Owned by Usual Resident(s)	18	21	45	66	69	135	54	408	\$ 82,400	\$ 73,200
	Dwelling Not Owned by Usual Resident(s)	9	15	24	30	27	33	21	159	\$ 62,500	\$ 63,000
	Dwelling Held in a Family Trust by Usual Resident(s)	9	9	27	33	45	141	27	291	\$ 100,000	\$ 80,800
	Not Elsewhere Included	3	3	3	3	3	3	21	39	\$ 32,500	\$ 47,600
Wakatipu Total	39	48	99	132	144	312	123	897	\$ 84,100	\$ 73,400	
Lake Hayes	Dwelling Owned or Partly Owned by Usual Resident(s)	0	0	0	0	3	9	6	18	\$ 97,000	\$ 77,100
	Dwelling Not Owned by Usual Resident(s)	3	3	3	6	3	9	0	27	\$ 85,000	\$ 73,800
	Dwelling Held in a Family Trust by Usual Resident(s)	3	3	6	6	3	18	3	42	\$ 88,800	\$ 72,800
	Not Elsewhere Included	0	0	0	0	0	0	6	6	\$ 27,500	\$ 23,800
Lake Hayes Total	6	6	9	12	9	36	15	93	\$ 89,100	\$ 72,900	
Matukituki	Dwelling Owned or Partly Owned by Usual Resident(s)	9	3	15	6	6	12	3	54	\$ 46,300	\$ 55,300
	Dwelling Not Owned by Usual Resident(s)	3	6	15	9	6	3	3	45	\$ 47,800	\$ 52,800
	Dwelling Held in a Family Trust by Usual Resident(s)	0	0	6	9	6	9	9	39	\$ 67,800	\$ 69,500
	Not Elsewhere Included	0	0	3	0	0	0	0	3	\$ 22,500	\$ 22,500
Matukituki Total	12	9	39	24	18	24	15	141	\$ 52,600	\$ 57,400	
Arrowtown	Dwelling Owned or Partly Owned by Usual Resident(s)	30	36	54	72	87	78	27	384	\$ 66,800	\$ 64,400
	Dwelling Not Owned by Usual Resident(s)	18	21	60	45	69	33	30	276	\$ 59,600	\$ 60,300
	Dwelling Held in a Family Trust by Usual Resident(s)	6	24	24	15	27	51	9	156	\$ 72,800	\$ 66,500
	Not Elsewhere Included	3	0	6	3	0	0	21	33	\$ 41,300	\$ 41,900
Arrowtown Total	57	81	144	135	183	162	87	849	\$ 64,200	\$ 62,900	
Queenstown Bay	Dwelling Owned or Partly Owned by Usual Resident(s)	15	15	36	36	21	42	21	186	\$ 59,500	\$ 61,800
	Dwelling Not Owned by Usual Resident(s)	45	36	87	78	66	54	78	444	\$ 54,400	\$ 56,700
	Dwelling Held in a Family Trust by Usual Resident(s)	3	0	3	3	9	21	12	51	\$ 100,000	\$ 78,400
	Not Elsewhere Included	3	3	6	3	0	3	84	102	\$ 41,700	\$ 50,500
Queenstown Bay Total	66	54	132	120	96	120	195	783	\$ 57,300	\$ 59,400	
Queenstown Hill	Dwelling Owned or Partly Owned by Usual Resident(s)	15	18	45	42	54	96	36	306	\$ 78,200	\$ 70,700
	Dwelling Not Owned by Usual Resident(s)	24	24	84	87	102	141	87	549	\$ 73,400	\$ 69,500
	Dwelling Held in a Family Trust by Usual Resident(s)	6	6	15	15	12	45	12	111	\$ 85,000	\$ 72,200
	Not Elsewhere Included	9	3	3	9	6	3	78	111	\$ 55,000	\$ 52,400
Queenstown Hill Total	54	51	147	153	174	285	213	1,077	\$ 74,300	\$ 69,500	
QLDC	Dwelling Owned or Partly Owned by Usual Resident(s)	222	234	498	513	543	672	339	3,021	\$ 65,000	\$ 64,200
	Dwelling Not Owned by Usual Resident(s)	228	255	579	588	558	546	441	3,195	\$ 60,700	\$ 61,400
	Dwelling Held in a Family Trust by Usual Resident(s)	120	144	255	231	249	555	180	1,734	\$ 73,300	\$ 67,900
	Not Elsewhere Included	51	27	51	33	30	21	405	618	\$ 39,800	\$ 46,300
QLDC Total	621	660	1,383	1,365	1,380	1,794	1,365	8,568	\$ 63,800	\$ 63,400	

Note: Dwellings that were categorised 'Not Elsewhere Included' or 'Not Stated' were distributed evenly over the remaining categories.

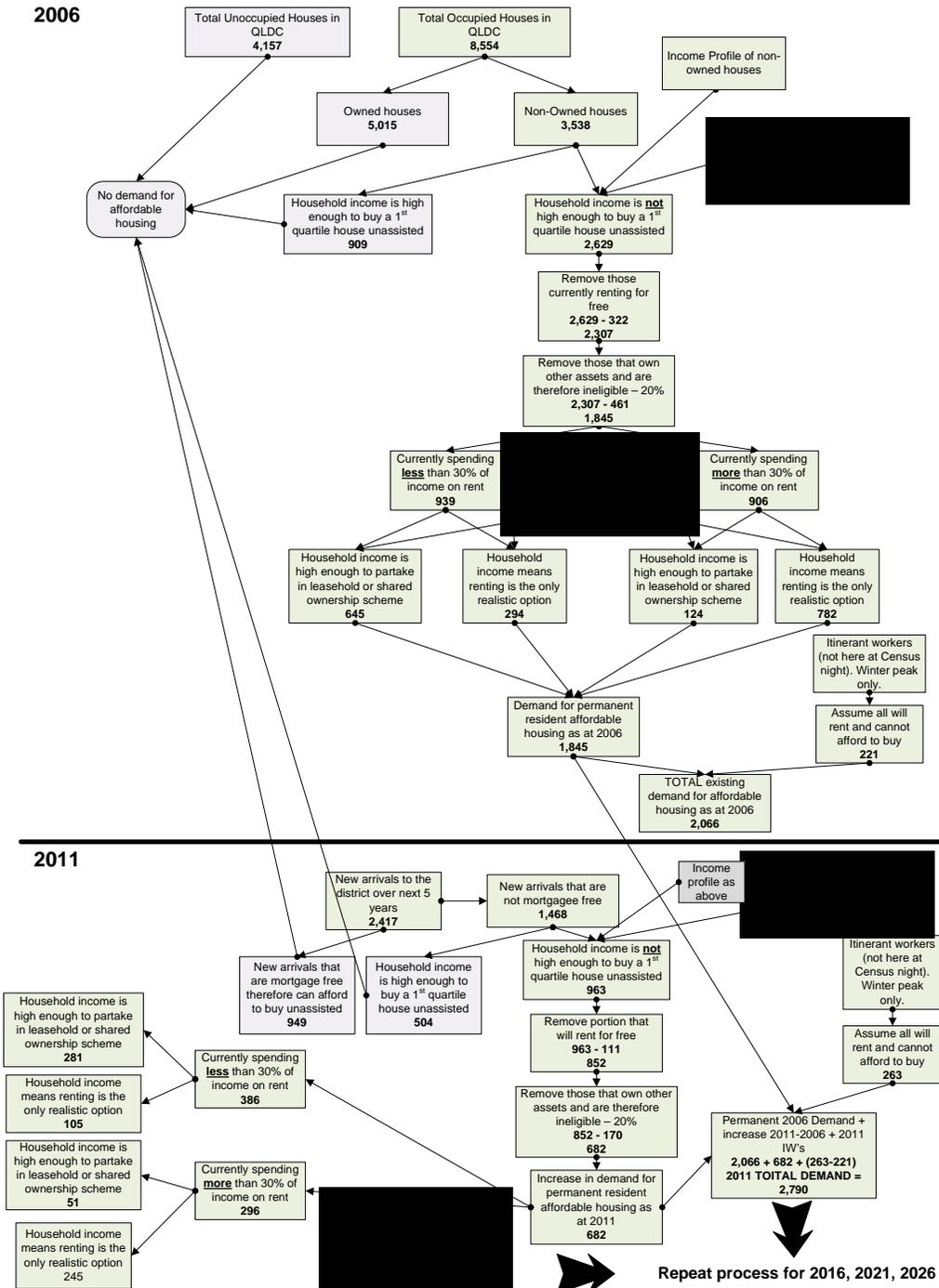
Table 22 : QLDC 2006LTCCP 20 Year Growth Projections – Occupied Dwellings

Dwellings	2001	2006	2011	2016	2021	2026
Sunshine Bay	610	828	984	1,022	1,063	1,063
Queenstown Bay	1,167	1,330	1,362	1,448	1,568	1,671
Frankton Rd	583	684	853	1,047	1,171	1,171
Frankton Flats	599	689	1,286	2,060	3,109	4,450
Quail Rise	61	75	136	165	171	171
Kelvin Heights	371	455	561	735	993	1,336
Arrowtown	755	906	1,017	1,056	1,098	1,098
Arthurs Point	67	84	117	156	206	261
Lake Hayes	86	180	284	402	544	556
Millbrook	57	105	190	283	355	355
Wakatipu	233	273	366	546	811	1,243
Central	202	281	360	375	387	400
Wanaka West	331	440	540	662	766	795
Wanaka South	20	73	147	286	416	885
Beacon Point	717	1,014	1,321	1,697	2,017	2,139
Albert Town	177	251	329	423	491	507
Cardrona	15	21	28	34	40	47
Makarora	47	65	84	104	123	147
Luggate	119	165	213	262	313	373
Hawea	310	429	555	683	814	972
Glenorchy	118	140	163	188	210	236
Kingston	54	64	75	86	97	108
QLDC	6,695	8,554	10,970	13,720	16,763	19,984

Appendix C – Demand Calculations

A process flow diagram of the demand analysis for 2006 and 2011 is shown below in Figure 4. The process shown for 2011 is repeated for 2016, 2021 and 2026. All figures shown in the process boxes represent the number of households.

Figure 4 : Process Flow Diagram of the Demand Analysis



**Table 23 : Calculation of 2006 Demand – Permanent Residents
2006**

Income bracket		\$ \$ 20,000	\$ 20,000 \$ 30,000	\$ 30,000 \$ 50,000	\$ 50,000 \$ 70,000	\$ 70,000 \$ 100,000	\$ 100,000 \$ 150,000	TOTAL
Owned houses	Wakatipu	285	314	567	539	604	923	3,232
	Wanaka	206	219	329	321	323	387	1,784
QLDC		491	533	895	860	927	1,309	5,015
Non-owned houses	Wakatipu	251	289	512	506	530	536	2,604
	Wanaka	116	117	202	204	162	133	935
QLDC		367	386	714	710	692	669	3,538
Income level to qualify for affordable housing 2006	Wakatipu							\$ 91,520
	Wanaka							\$ 83,307
Those households that can afford to buy unassisted	Wakatipu	-	-	-	-	150	536	686
	Wanaka	-	-	-	-	90	133	224
QLDC		-	-	-	-	240	669	909
Total new households that qualify for affordable housing based on income	Wakatipu	251	289	512	506	380	-	1,918
	Wanaka	116	117	202	204	72	-	711
QLDC		367	386	714	710	452	-	2,629
Portion that rent for free		20%	16%	13%	9%	6%	7%	
Remove those that rent for free	Wakatipu	201	226	445	460	355	-	1,687
	Wanaka	93	98	176	185	67	-	619
QLDC		295	323	621	645	423	-	2,307
Assume 'other' asset ownership => ineligible 20%								
Total Demand for affordable housing	Wakatipu	161	180	356	368	284	-	1,350
	Wanaka	75	78	141	148	54	-	496
QLDC		236	259	497	516	338	-	1,845
Income level to enable shared scheme ownership	Wakatipu							\$ 54,725
	Wanaka							\$ 49,700
Those households that must rent	Wakatipu	161	180	356	87	-	-	785
	Wanaka	75	78	139	-	-	-	291
QLDC		236	259	495	87	-	-	1,076
Those households that can afford to own or part own a home	Wakatipu	-	-	-	281	284	-	565
	Wanaka	-	-	2	148	54	-	204
QLDC		-	-	2	429	338	-	769

**Table 24 : Calculation of 2011 Demand – Permanent Residents
2011**

Inflated income bracket		\$ \$ 24,929	\$ 24,929 \$ 37,393	\$ 37,393 \$ 62,322	\$ 62,322 \$ 87,250	\$ 87,250 \$ 124,643	\$ 124,643 \$ 186,965	TOTAL
New dwellings based on 10-year CCP projections	Wakatipu							1,578
	Wanaka							838
QLDC								2,417
Income distribution of new arrivals	Wakatipu	9%	10%	18%	18%	19%	25%	100%
	Wanaka	12%	12%	20%	19%	18%	19%	100%
New dwellings by household income bracket	Wakatipu	145	158	292	283	307	395	1,578
	Wanaka	99	103	164	162	150	160	838
QLDC		244	261	455	445	456	555	2,417
Remove those with no mortgage	Wakatipu	65%	46%	46%	34%	30%	30%	
Portion of new arrivals able to buy on their own	Wakatipu	94	73	135	96	93	120	611
	Wanaka	64	48	76	55	45	49	337
QLDC		158	121	211	151	139	169	949
Those remaining that may rent or buy	Wakatipu	51	85	156	187	214	275	967
	Wanaka	35	55	88	107	104	112	501
QLDC		86	140	244	294	318	387	1,468
Income level to qualify for affordable housing 2011	Wakatipu							\$ 114,110
	Wanaka							\$ 103,869
Those households that can afford to buy unassisted	Wakatipu	-	-	-	-	60	275	335
	Wanaka	-	-	-	-	58	112	170
QLDC		-	-	-	-	118	387	505
Total new households that qualify for affordable housing based on income	Wakatipu	51	85	156	187	153	-	632
	Wanaka	35	55	88	107	46	-	331
QLDC		86	140	244	294	200	-	963
Portion that rent for free	Wakatipu	20%	16%	13%	9%	6%	7%	
Remove those that rent for free	Wakatipu	41	71	136	170	143	-	561
	Wanaka	28	46	76	97	43	-	291
QLDC		69	117	212	267	187	-	852
Assume 'other' asset ownership => ineligible	20%							
Total Demand for affordable housing from new arrivals	Wakatipu	33	57	109	136	115	-	449
	Wanaka	22	37	61	78	35	-	233
QLDC		55	94	170	213	149	-	682
Add to 2006 demand to give TOTAL 2011 demand	Wakatipu	194	237	465	503	399	-	1,798
	Wanaka	97	115	202	226	88	-	728
QLDC		291	352	667	729	487	-	2,527
Income level to enable shared scheme ownership	Wakatipu							\$ 68,203
	Wanaka							\$ 61,922
Those households that must rent	Wakatipu	194	237	465	119	-	-	1,015
	Wanaka	97	115	199	-	-	-	411
QLDC		291	352	664	119	-	-	1,426
Those households that can afford to own or part own a home	Wakatipu	-	-	-	385	399	-	784
	Wanaka	-	-	3	226	88	-	318
QLDC		-	-	3	610	487	-	1,101

**Table 25 : Calculation of 2016 Demand – Permanent Residents
2016**

Inflated income bracket		\$ \$ 31,072	\$ 31,072 \$ 46,608	\$ 46,608 \$ 77,680	\$ 77,680 \$ 108,751	\$ 108,751 \$ 155,359	\$ 155,359 \$ 233,039	
New dwellings based on 10-year CCP projections	Wakatipu							1,801
	Wanaka							949
QLDC								2,750
Income distribution of new arrivals	Wakatipu	9%	10%	18%	18%	19%	25%	100%
	Wanaka	12%	12%	20%	19%	18%	19%	100%
New dwellings by household income bracket	Wakatipu	165	180	333	322	350	450	1,801
	Wanaka	112	117	185	183	169	182	949
QLDC		278	297	518	506	519	632	2,750
Remove those with no mortgage	Wakatipu	65%	46%	46%	34%	30%	30%	
	Wanaka	107	83	154	109	106	137	697
Portion of new arrivals able to buy on their own	Wakatipu	73	54	86	62	51	55	382
QLDC		180	138	240	172	158	192	1,079
Those remaining that may rent or buy	Wakatipu	58	96	178	213	244	314	1,103
	Wanaka	39	63	99	121	118	126	567
QLDC		98	159	278	334	361	440	1,670
Income level to qualify for affordable housing 2016	Wakatipu							\$ 160,516
	Wanaka							\$ 146,111
Those households that can afford to buy unassisted	Wakatipu	-	-	-	-	-	293	293
	Wanaka	-	-	-	-	23	126	150
QLDC		-	-	-	-	23	419	443
Total new households that qualify for affordable housing based on income	Wakatipu	58	96	178	213	244	21	811
	Wanaka	39	63	99	121	94	-	417
QLDC		98	159	278	334	338	21	1,228
Portion that rent for free	Wakatipu	20%	16%	13%	9%	6%	7%	
	Wanaka	47	81	155	193	228	19	723
Remove those that rent for free	Wakatipu	32	53	86	110	88	-	369
QLDC		78	133	242	303	316	19	1,092
Assume 'other' asset ownership => ineligible		20%						
Total Demand for affordable housing from new arrivals	Wakatipu	37	65	124	155	182	16	579
	Wanaka	25	42	69	88	71	-	295
QLDC		63	107	193	243	253	16	874
Add to 2011 demand to give TOTAL 2016 demand	Wakatipu	231	302	589	658	581	16	2,377
	Wanaka	122	157	271	314	159	-	1,024
QLDC		353	459	860	972	741	16	3,401
Income level to enable shared scheme ownership	Wakatipu							\$ 95,939
	Wanaka							\$ 87,104
Those households that must rent	Wakatipu	231	302	589	387	-	-	1,509
	Wanaka	122	157	271	95	-	-	646
QLDC		353	459	860	482	-	-	2,155
Those households that can afford to own or part own a home	Wakatipu	-	-	-	271	581	16	868
	Wanaka	-	-	-	219	159	-	378
QLDC		-	-	-	490	741	16	1,246

**Table 26 : Calculation of 2021 Demand – Permanent Residents
2021**

Inflated income bracket		\$ \$ 38,729	\$ 38,729 \$ 58,093	\$ 58,093 \$ 96,822	\$ 96,822 \$ 135,551	\$ 135,551 \$ 193,644	\$ 193,644 \$ 290,467	
New dwellings based on 10-year CCP projections	Wakatipu							2,203
	Wanaka							840
QLDC								3,043
Income distribution of new arrivals	Wakatipu	9%	10%	18%	18%	19%	25%	100%
	Wanaka	12%	12%	20%	19%	18%	19%	100%
New dwellings by household income bracket	Wakatipu	202	220	407	394	428	551	2,203
	Wanaka	99	104	164	162	150	161	840
QLDC		302	324	571	557	578	712	3,043
Remove those with no mortgage	Wakatipu	65%	46%	46%	34%	30%	30%	
Portion of new arrivals able to buy on their own	Wakatipu	131	102	189	134	130	167	853
	Wanaka	65	48	76	55	46	49	338
QLDC		196	150	265	189	176	216	1,191
Those remaining that may rent or buy	Wakatipu	71	118	218	261	298	384	1,350
	Wanaka	35	56	88	107	104	112	502
QLDC		106	174	306	368	402	496	1,852
Income level to qualify for affordable housing 2021	Wakatipu							\$ 225,795
	Wanaka							\$ 205,531
Those households that can afford to buy unassisted	Wakatipu	-	-	-	-	-	256	256
	Wanaka	-	-	-	-	-	98	98
QLDC		-	-	-	-	-	355	355
Total new households that qualify for affordable housing based on income	Wakatipu	71	118	218	261	298	127	1,093
	Wanaka	35	56	88	107	104	14	404
QLDC		106	174	306	368	402	141	1,497
Portion that rent for free	Wakatipu	20%	16%	13%	9%	6%	7%	
Remove those that rent for free	Wakatipu	57	99	190	237	279	119	980
	Wanaka	28	47	77	97	98	13	359
QLDC		85	145	267	334	376	132	1,339
Assume 'other' asset ownership => ineligible	20%							
Total Demand for affordable housing from new arrivals	Wakatipu	46	79	152	189	223	95	784
	Wanaka	22	37	61	78	78	10	287
QLDC		68	116	213	267	301	106	1,071
Add to 2016 demand to give TOTAL 2021 demand	Wakatipu	277	381	741	847	804	111	3,161
	Wanaka	145	194	332	392	237	10	1,311
QLDC		421	575	1,074	1,239	1,042	121	4,472
Income level to enable shared scheme ownership	Wakatipu							\$ 134,956
	Wanaka							\$ 122,528
Those households that must rent	Wakatipu	277	381	741	834	-	-	2,233
	Wanaka	145	194	332	260	-	-	932
QLDC		421	575	1,074	1,094	-	-	3,165
Those households that can afford to own or part own a home	Wakatipu	-	-	-	13	804	111	928
	Wanaka	-	-	-	132	237	10	379
QLDC		-	-	-	145	1,042	121	1,308

**Table 27 : Calculation of 2026 Demand – Permanent Residents
2026**

		\$ \$ 48,273	\$ 48,273 \$ 72,409	\$ 72,409 \$ 120,682	\$ 120,682 \$ 168,955	\$ 168,955 \$ 241,364	\$ 241,364 \$ 362,046	
Inflated income bracket								
New dwellings based on 10-year CCP projections	Wakatipu							2,322
	Wanaka							898
QLDC								3,220
Income distribution of new arrivals	Wakatipu	9%	10%	18%	18%	19%	25%	100%
	Wanaka	12%	12%	20%	19%	18%	19%	100%
New dwellings by household income bracket	Wakatipu	213	232	429	416	451	581	2,322
	Wanaka	106	111	175	174	160	172	898
QLDC		319	343	605	589	612	753	3,220
Remove those with no mortgage	Wakatipu	65%	46%	46%	34%	30%	30%	
	Wanaka	138	108	199	141	137	176	899
Portion of new arrivals able to buy on their own	Wakatipu	69	51	81	59	49	52	361
	Wanaka	207	159	280	200	186	229	1,261
QLDC		207	159	280	200	186	229	1,261
Those remaining that may rent or buy	Wakatipu	75	124	230	275	314	405	1,423
	Wanaka	37	59	94	115	112	120	537
QLDC		112	184	324	389	426	524	1,960
Income level to qualify for affordable housing 2026	Wakatipu							\$ 317,621
	Wanaka							\$ 289,116
Those households that can afford to buy unassisted	Wakatipu	-	-	-	-	-	149	149
	Wanaka	-	-	-	-	-	72	72
QLDC		-	-	-	-	-	221	221
Total new households that qualify for affordable housing based on income	Wakatipu	75	124	230	275	314	256	1,274
	Wanaka	37	59	94	115	112	47	464
QLDC		112	184	324	389	426	303	1,738
Portion that rent for free	Wakatipu	20%	16%	13%	9%	6%	7%	
	Wanaka	60	104	200	249	294	239	1,147
Remove those that rent for free	Wakatipu	30	50	82	104	104	44	414
	Wanaka	90	154	282	353	398	283	1,561
QLDC		90	154	282	353	398	283	1,561
Assume 'other' asset ownership => ineligible		20%						
Total Demand for affordable housing from new arrivals	Wakatipu	48	83	160	200	235	191	917
	Wanaka	24	40	65	83	83	35	331
QLDC		72	123	226	283	319	226	1,249
Add to 2021 demand to give TOTAL 2026 demand	Wakatipu	325	464	902	1,047	1,040	302	4,079
	Wanaka	169	234	398	475	321	46	1,642
QLDC		493	698	1,299	1,522	1,360	347	5,721
Income level to enable shared scheme ownership	Wakatipu							\$ 189,840
	Wanaka							\$ 172,358
Those households that must rent	Wakatipu	325	464	902	1,047	300	-	3,037
	Wanaka	169	234	398	475	15	-	1,291
QLDC		493	698	1,299	1,522	315	-	4,328
Those households that can afford to own or part own a home	Wakatipu	-	-	-	-	740	302	1,042
	Wanaka	-	-	-	-	306	46	351
QLDC		-	-	-	-	1,045	347	1,393

Table 28 : Affordable renting data and calculation tables – 2006

		Wakatipu	98%	86%	67%	32%	0%		
		Wanaka	98%	73%	54%	23%	0%		
			\$	\$ 20,000	\$ 30,000	\$ 50,000	\$ 70,000	\$ 100,000	TOTAL
			\$ 20,000	\$ 30,000	\$ 50,000	\$ 70,000	\$ 100,000		\$ 54,725
2006	Portion spending more than 30% on rent	Wakatipu	161	180	356	368	284	1,350	
		Wanaka	75	78	141	148	54	496	
			236	259	497	516	338	1,845	
	TOTAL HOUSEHOLDS once free rent and 20% asset has been removed	Wakatipu	158	155	237	116	-	666	
		Wanaka	73	57	76	34	-	240	
			25%	23%	35%	17%	0%	906	49%
	Households spending more than 30% on rent	Wakatipu	4	26	119	251	284	684	
		Wanaka	1	21	65	114	54	256	
			1%	5%	20%	39%	36%	939	51%
Wakatipu	Households spending more than 30% on rent	Buy?	-	-	-	89	-	89	
Wanaka	Households spending more than 30% on rent	Buy?	-	-	1	34	-	35	124
Wakatipu	Households spending less than 30% on rent	Buy?	-	-	-	192	284	476	
Wanaka	Households spending less than 30% on rent	Buy?	-	-	1	114	54	169	645
Wakatipu	Households spending more than 30% on rent	rent only	158	155	237	28	-	577	
Wanaka	Households spending more than 30% on rent	rent only	73	57	74	-	-	205	782
Wakatipu	Households spending less than 30% on rent	rent only	4	26	119	59	-	207	
Wanaka	Households spending less than 30% on rent	rent only	1	21	64	-	-	87	294
									1,845

Table 29: Affordable renting data and calculation tables – 2011

		Wakatipu	98%	86%	67%	32%	0%	0%		
		Wanaka	98%	73%	54%	23%	0%	0%		
			\$	\$ 24,924	\$ 37,385	\$ 62,309	\$ 87,233	\$ 124,618	\$ 124,618	\$ 114,110
			\$ 24,924	\$ 37,385	\$ 62,309	\$ 87,233	\$ 124,618	\$ 186,927		\$ 103,869
	TOTAL new HOUSEHOLDS once free rent and 20% asset has been removed	Wakatipu	33	57	109	136	115	-	-	
		Wanaka	22	37	61	78	35	-	-	
			55	94	170	213	150	-	-	682
	Spending more than 30% on rent	Wakatipu	32	49	73	43	-	196		
		Wanaka	22	27	33	18	-	100		
			18%	26%	36%	21%	0%	296		43%
	Households spending more than 30% on rent	Buy?	1	8	36	93	115	253		
		Buy?	0	10	28	60	35	133		
			0%	2%	7%	16%	16%	386		57%
	Households spending less than 30% on rent	rent for free	43%	42%	41%	46%	49%			
Wakatipu	Households spending more than 30% on rent	Buy?	-	-	-	33	-	33		
Wanaka	Households spending more than 30% on rent	Buy?	-	-	1	18	-	18		51
Wakatipu	Households spending less than 30% on rent	Buy?	-	-	-	71	115	186		
Wanaka	Households spending less than 30% on rent	Buy?	-	-	0	60	35	95		281
Wakatipu	Households spending more than 30% on rent	rent only	32	49	73	10	-	163		
Wanaka	Households spending more than 30% on rent	rent only	22	27	32	-	-	81		245
Wakatipu	Households spending less than 30% on rent	rent only	1	8	36	22	-	67		
Wanaka	Households spending less than 30% on rent	rent only	0	10	28	-	-	38		105
										682

Table 30 : Affordable renting data and calculation tables – 2016

			\$	\$ 31,059	\$ 46,589	\$ 77,648	\$ 108,708	\$ 155,297	\$ 160,516
			\$ 31,059	\$ 46,589	\$ 77,648	\$ 108,708	\$ 155,297	\$ 232,945	\$ 146,111
TOTAL new HOUSEHOLDS once free rent and 20% asset has been removed	Wakatipu		37	65	124	155	182	16	
	Wanaka		25	42	69	88	71	-	
			63	107	193	243	253	16	874
Households spending less than 30% on rent	Wakatipu		98%	86%	67%	32%	0%	0%	
	Wanaka		98%	73%	54%	23%	0%	0%	
Households spending more than 30% on rent	Wakatipu		36	55	83	49	-	-	224
	Wanaka		25	31	37	20	-	-	113
			18%	26%	36%	21%	0%	0%	337
Households spending less than 30% on rent	Buy?		1	9	42	106	182	16	355
		0	0	11	32	68	71	-	182
			0%	2%	8%	18%	27%	2%	538
	rent for free		0%	0%	0%	0%	0%		62%
Wakatipu Households spending more than 30% on rent	Buy?		-	-	-	20	-	-	20
Wanaka Households spending more than 30% on rent	Buy?		-	-	-	14	-	-	14
Wakatipu Households spending less than 30% on rent	Buy?		-	-	-	43	182	16	242
Wanaka Households spending less than 30% on rent	Buy?		-	-	-	47	71	-	118
Wakatipu Households spending more than 30% on rent	rent only		36	55	83	29	-	-	204
Wanaka Households spending more than 30% on rent	rent only		25	31	37	6	-	-	99
Wakatipu Households spending less than 30% on rent	rent only		1	9	42	62	-	-	114
Wanaka Households spending less than 30% on rent	rent only		0	11	32	21	-	-	64
									874

Table 31: Affordable renting data and calculation tables – 2021

			\$	\$ 38,706	\$ 58,058	\$ 96,764	\$ 135,470	\$ 193,528	\$ 225,795
			\$ 38,706	\$ 58,058	\$ 96,764	\$ 135,470	\$ 193,528	\$ 290,292	\$ 205,531
TOTAL new HOUSEHOLDS once free rent and 20% asset has been removed	Wakatipu		46	79	152	189	223	96	
	Wanaka		22	37	61	78	78	10	
			68	116	213	267	301	106	1,072
Households spending less than 30% on rent	Wakatipu		98%	86%	67%	32%	0%	0%	
	Wanaka		98%	73%	54%	23%	0%	0%	
Households spending more than 30% on rent	Wakatipu		45	68	101	60	-	-	274
	Wanaka		22	27	33	18	-	-	100
			18%	25%	36%	21%	0%	0%	374
Households spending less than 30% on rent	Buy?		1	11	51	129	223	96	511
		0	0	10	28	60	78	10	187
			0%	2%	8%	20%	32%	11%	698
	rent for free		0%	0%	0%	0%	0%		65%
Wakatipu Households spending more than 30% on rent	Buy?		-	-	-	1	-	-	1
Wanaka Households spending more than 30% on rent	Buy?		-	-	-	6	-	-	6
Wakatipu Households spending less than 30% on rent	Buy?		-	-	-	2	223	96	320
Wanaka Households spending less than 30% on rent	Buy?		-	-	-	20	78	10	109
Wakatipu Households spending more than 30% on rent	rent only		45	68	101	59	-	-	273
Wanaka Households spending more than 30% on rent	rent only		22	27	33	12	-	-	94
Wakatipu Households spending less than 30% on rent	rent only		1	11	51	128	-	-	191
Wanaka Households spending less than 30% on rent	rent only		0	10	28	40	-	-	79
									269
									1,072

Table 32 : Affordable renting data and calculation tables – 2026

2026			\$	\$ 48,234	\$ 72,351	\$ 120,586	\$ 168,820	\$ 241,171	\$ 317,621
			\$ 48,234	\$ 72,351	\$ 120,586	\$ 168,820	\$ 241,171	\$ 361,757	\$ 289,116
TOTAL new HOUSEHOLDS since free rent and 20% asset has been removed	Wakatipu		48	83	160	200	235	192	
	Wanaka		24	40	65	83	83	36	
			72	123	226	283	319	227	1,249
Households spending more than 30% on rent	Wakatipu	0	98%	86%	67%	32%	0%	0%	288
	Wanaka		98%	73%	54%	23%	0%	0%	107
			47	72	107	63	-	-	395
			18%	25%	36%	21%	0%	0%	32%
Households spending less than 30% on rent	Buy?		1	12	54	136	235	192	630
	rent for free	0	0	11	30	64	83	36	225
			0%	2%	9%	21%	34%	24%	68%
			0%	0%	0%	0%	0%		
Wakatipu	Households spending more than 30% on rent	Buy?	-	-	-	-	-	-	-
Wanaka	Households spending more than 30% on rent	Buy?	-	-	-	-	-	-	-
Wakatipu	Households spending less than 30% on rent	Buy?	-	-	-	-	167	192	358
Wanaka	Households spending less than 30% on rent	Buy?	-	-	-	-	79	36	115
Wakatipu	Households spending more than 30% on rent	rent only	47	72	107	63	-	-	288
Wanaka	Households spending more than 30% on rent	rent only	24	29	35	19	-	-	107
Wakatipu	Households spending less than 30% on rent	rent only	1	12	54	136	68	-	271
Wanaka	Households spending less than 30% on rent	rent only	0	11	30	64	4	-	110
									381
									1,249

A matrix of the above categories is shown in Table 33 below. It shows the number of affordable houses required in each of the categories. The projected figures for future years are the increase over five years only. The figures shown for future years represent the increase and not the cumulative total. Those households that earn more than the income eligibility level for affordable housing were excluded from the analysis.

Table 33 : Income and rental profile of the affordable housing demand

Wakatipu	Spend less than 30% on rent		Spend more than 30% on rent		Itinerant Worker's	Increase in Affordable Housing
	Rent only	Could part own	Rent only	Could part own		
2006	207	476	577	89	122	1,471
2011	67	186	163	33	18	466
2016	114	242	204	20	15	594
2021	191	320	273	1	16	800
2026	271	358	288	0	23	941
TOTAL	850	1,582	1,505	143	193	4,273
Wanaka						
2006	87	169	205	35	99	594
2011	38	95	81	18	25	258
2016	64	118	99	14	27	322
2021	79	109	94	6	25	312
2026	110	115	107	0	26	357
TOTAL	378	606	586	73	201	1,844
QLDC						
2006	294	645	782	124	220	2,066
2011	105	281	245	51	43	724
2016	178	360	302	34	41	916
2021	269	429	367	7	40	1,112
2026	381	473	395	0	49	1,298
TOTAL	1,228	2,188	2,091	216	394	6,116

The income profile of the four categories is shown below over time. As the income brackets are inflated over time they have been classified as low (low, low-mid) or moderate (mod, mod-high). For the 2006 figures those that earn over approximately \$50,000 can afford to take part in a shared ownership scheme, most of these households are in the moderate category. Due to the lack of census data the itinerant workers are assumed to fall in the low to low-mid category. Those that earn under \$50,000 are in the low category.

Table 34 : Income profile of the four categories over time

Year	Rent or buy?	Rental status	Low		Moderate		TOTAL Increase	Total	
			Low	Low-mid	Low-mid	Mod			Mod-High
2006	Could own	More 30%	0%	0%	1%	99%	0%	124	
	Could own	Less 30%	0%	0%	0%	47%	52%	645	
	Rent only	More 30%	30%	27%	40%	4%	0%	782	
	Rent only	Less 30%	2%	16%	62%	20%	0%	294	
	IW's		50%	50%	0%	0%	0%	220	2,066
2011	Could own	More 30%	0%	0%	1%	99%	0%	51	
	Could own	Less 30%	0%	0%	0%	47%	53%	281	
	Rent only	More 30%	22%	31%	43%	4%	0%	245	
	Rent only	Less 30%	1%	17%	61%	21%	0%	105	
	IW's		50%	50%	0%	0%	0%	43	724
2016	Could own	More 30%	0%	0%	0%	100%	0%	34	
	Could own	Less 30%	0%	0%	0%	25%	70%	360	
	Rent only	More 30%	20%	28%	40%	12%	0%	302	
	Rent only	Less 30%	1%	12%	41%	47%	0%	178	
	IW's		50%	50%	0%	0%	0%	41	916
2021	Could own	More 30%	0%	0%	0%	100%	0%	7	
	Could own	Less 30%	0%	0%	0%	5%	95%	429	
	Rent only	More 30%	18%	26%	37%	19%	0%	367	
	Rent only	Less 30%	1%	8%	29%	62%	0%	269	
	IW's		50%	50%	0%	0%	0%	40	1,112
2026	Could own	More 30%	0%	0%	0%	0%	0%	-	
	Could own	Less 30%	0%	0%	0%	0%	100%	473	
	Rent only	More 30%	18%	25%	36%	21%	0%	395	
	Rent only	Less 30%	0%	6%	22%	53%	19%	381	
	IW's		50%	50%	0%	0%	0%	49	1,298
								<u>6,116</u>	

Appendix D – Allocation of the Demand

The working tables and results from the apportioning of the demand process are shown below in the steps detail in Section 2.2.

1. Employment and Income by Industry Sector

Table 35 below shows the top 20 industry sectors and the ratio driver used to attributed the direct and indirect demand. The portions used for the direct and indirect demand are shown. A is Visitor Accommodation, C is Commercial, PI is Primary Industry (agriculture) and R is residential. 'COMM s' is Commercial – Intensive and 'COMM I' is Commercial – large format.

Table 35: Ratio Driver and Portions for Distribution of Employees by Category

Industry	Direct Demand	Direct and Indirect Demand	Direct and Indirect Demand			
			VIS ACCOM	COMM s	COMM I	RES
Accommodation	ACCOM	ACCOM	100%	0%	0%	0%
Food and Beverage Services	COMM s	People numbers A,C,R	39%	23%	17%	21%
Other Store-Based Retailing	COMM s	People numbers A,C,R	39%	23%	17%	21%
Professional, Scientific and Technical Services	COMM s	COMMs	0%	100%	0%	0%
Not Elsewhere Included	split x3	split x3	33%	17%	17%	33%
House Construction	RES	RES	0%	0%	0%	100%
Administrative Services	COMM s	COMMs	0%	100%	0%	0%
Sport and Recreation Activities	COMM I	People numbers A,R	39%	0%	0%	61%
Property Operators and Real Estate Services	COMM s	Property numbers A,C,R	5%	3%	2%	91%
Agriculture	PI	Primary Industry	0%	0%	0%	0%
Food Retailing	COMM s	People numbers A,C,R	39%	23%	17%	21%
Preschool and School Education	RES	RES	0%	0%	0%	100%
Medical and Other Health Care Services	COMM s	People numbers A,C,R	39%	23%	17%	21%
Personal and Other Services	COMM s	People numbers A,C,R	39%	23%	17%	21%
Other Transport	COMM I	People numbers A,C,R	39%	23%	17%	21%
Road Transport	COMM I	People numbers A,C,R	39%	23%	17%	21%
Finance	COMM s	People numbers A,C,R	39%	23%	17%	21%
Building Cleaning, Pest Control and Other Support Services	COMM I	Property size A,C,R	4%	9%	7%	80%

2. Land Use Category Weighted by Income and Employee Number

The total number of employees weighted by income for each land use are shown in Table 36 below. The Weighted Average Income is also shown.

Table 36 : Employee Income Distribution by Land Use Category

Land Use Category	\$5k or Less	\$5k - \$10k	\$10k - \$20k	\$20k - \$30k	\$30k - \$50k	\$50k or More	Total Jobs	Weighted Average Income
Visitor Accommodation	141	91	291	418	526	199	1,666	30,504
Commercial (Intensive)	315	246	686	1,074	1,754	1,365	5,440	37,774
Commercial (Large format)	187	169	541	893	1,893	1,114	4,798	38,742
Residential	83	69	193	297	597	532	1,771	40,763
	726	575	1,711	2,682	4,770	3,210	13,674	36,946

3. Assign Employees to Land Use

The adjusted employee numbers to allow for indirect and direct demand are shown in Table 37 below. Residential employee numbers have increased due to indirect demand. Commercial employee numbers have decreased as a result.

Table 37 : Adjusted Employee numbers

	TOTAL GFA	Employee by Land Use	GFA Per Employee	Total Employees Per 1000m2	ADJUSTED Employee Numbers	ADJUSTED Employee per 1000m2
Visitor Accommodation	337,294	1,666	202	4.9	1,666	4.9
Commercial (Intensive)	189,656	5,440	35	28.7	4,005	21.1
Commercial (Large format)	211,330	4,798	44	22.7	3,532	16.7
Residential	2,313,023	1,771			4,471	1.9
		13,674			13,674	

4. Housing Demand By Land Use

The occupied houses are distributed across the land use categories. These are shown below in Table 38.

Table 38 : Employee to house ratio – overall and residential

Number of Occupied Houses	Less Agriculture Houses	Houses for Employees	Land Use Category	Total Households Required
8,554	453	8,101	Visitor Accommodation	987
			Commercial (Intensive)	2,373
			Commercial (Large format)	2,093
			Residential	2,649
				8,101

5. Ratio of Affordable Housing Demand to Total Housing Demand

The future change in demand for affordable housing over the next 20 years and the total increase in occupied households over the same period are shown below with the above ratio.

Table 39 : Ratio of Affordable Housing Demand to Total Housing Demand

	Future Change in Demand for Affordable Housing	Total Increase in Occupied Houses	Ratio of Affordable Housing Demand to Total Housing Demand
Wakatipu	2,801	7,905	35%
Wanaka	1,249	3,525	35%

6. Income Adjusted Demand

The Income Adjustment Factors derived in Step 3) are then factored in.

Table 40 : Income Adjustment Factor

	Weighted Average Income	Weighted Land Use Income %
Visitor Accommodation	30,504	89%
Commercial (intensive)	37,774	110%
Commercial (Large format)	38,742	113%
Residential	40,763	118%
Total	36,946	

7. Define Land Use Differentials Per 1,000m² Gross Floor Area (GFA)

Based on the above figures a differential is calculated for each land use category. The differential represents the number of affordable housing units required per 1,000m² GFA for each land use category. The above steps are shown in the below working table.

Table 41 : Working Table to Calculated the Affordable Housing Required

Land Use Category	Total Households Required	Affordable Houses Required @ 35%	Weighted Land Use Income %	Income Weighted Affordable Housing By Land Use	GFA (m ²) per Affordable Home	Differential - Affordable Homes/ 1000m ²
Visitor Accommodation	987	350	89%	434	778	1.3
Commercial (intensive)	2,373	841	110%	842	225	4.4
Commercial (Large format)	2,093	742	113%	724	292	3.4
Residential	2,649	939	118%	871	2,655	0.4
	8,101	2,871		2,871		