QUEENSTOWN LAKES DISTRICT COUNCIL

Housing Development Capacity Assessment 2017

Queenstown Lakes District

27th March 2018 – draft final

m.e consulting

Housing Development Capacity Assessment 2017

Queenstown Lakes District

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Executive Summary

Urban economies accommodate the vast majority of population and business activity and capture the majority of growth. Providing for that growth in an efficient manner is vital for the national economy. To this end central government has released the National Policy Statement – Urban Development Capacity (NPS-UDC) that requires high growth Councils (in the first instance) to assess their growth futures and the commercially feasible capacity enabled under their District Plans to ensure that future growth can be provided for.

Local authorities have an important role to play in the operation of their economy, primarily through planning for growth. Ensuring that there are sufficient opportunities for development means that businesses and households can be accommodated in appropriate locations without undue constraint. The NPS-UDC contains a number of objectives and policies that aim to achieve that outcome. This report helps fulfil Objective Group B; Evidence and monitoring to support planning decisions. Under Policy B1, Councils are required to, "*on at least a three-yearly basis, carry out a housing and business development capacity assessment that;*

a) Estimates the demand for dwellings, including the demand for different types of dwellings, locations and price points, and the supply of development capacity to meet that demand, in the short, medium and long-terms; and
b) ……
c) *Assess the interaction between housing and business activities, and their impacts on each other.*"

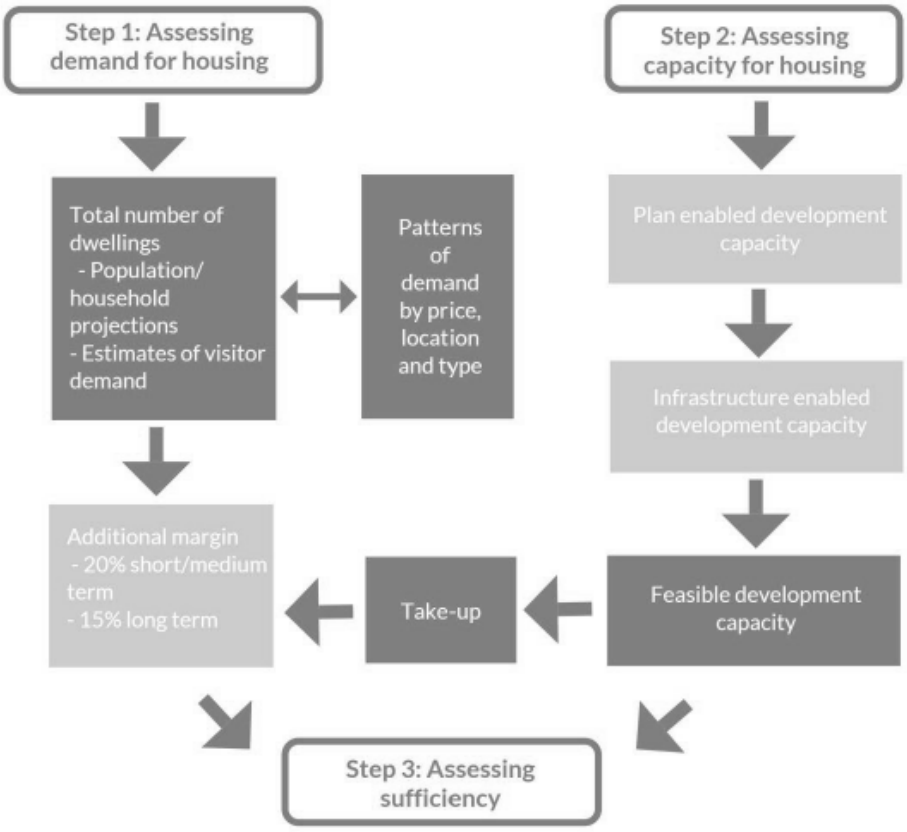
The housing development capacity assessment (HDCA) needs to contain information on; the current supply of housing and likely future housing demand growth by market sector, the amount of capacity enabled under the current planning provisions plus any other strategic planning documents by type and location, an assessment of the feasibility or developability of that capacity and finally an assessment of the sufficiency of capacity to meet the foreseeable demands arising in the urban area in the short, medium and long-terms. This is summarised in Figure 0.1 below.

Queenstown Lakes District Council (QLD) has been identified as a high growth Council, as a result the full suite of requirements of the NPS-UDC are relevant. This report is QLDCs first assessment under the NPS-UDC of urban housing demand in the short, medium and long-term and current and projected feasible housing capacity provided for in their proposed and operative District Plans.

The QLD Urban Environment

The NPS-UDC defines two concepts, "urban environment "and "urban area" which are different in meaning and application. The NPS-UDC applies to any "urban environment" that is expected to experience growth. The objectives and policies are structured around "urban environments", and therefore the need to assess demand and provide sufficient development capacity (under Policies A1 to A4) applies to land within that urban environment.

Figure 0.1 - Housing Development Capacity Approach Overview



The urban environment of QLD has been defined for the purpose of this HDCA. In the Wanaka Ward, it encompasses the area within the Wanaka urban growth boundary (UGB), as well as the Hawea and Luggate townships, and the Rural Industrial sub-zone in Luggate. In the south of the district (referred to here as the Wakatipu Ward, which combines both the Queenstown and Arrowtown Wards), the urban environment includes the area within the Queenstown and Arrowtown UGBs plus the small area of Low Density Residential zone adjacent to Lake Hayes. These UGBs are discussed further in the Proposed District Plan (PDP).

The rest of the district – the rural environment – therefore captures the rural zone, Wakatipu Basin, Gibbston Valley, Cardona, Hawea Flat and the more remote townships of Makarora, Glenorchy and Kingston. Several of the District's special zones sit within the rural environment. It is accepted that within the rural environment there are some development areas that are urban in nature and in future, those areas may be included in the defined urban environment.

Structure of the QLD Housing Market

The QLD housing market is complex, because significant shares of the estate are owned by absentee owners (other New Zealand residents and overseas investors) who utilise their dwellings for themselves as personal holiday homes or 'second' homes. Some of these holiday homes are also used to provide rental accommodation for the QLD resident population, and/or for short-term (mainly holiday) visitors (listed on

platforms such as Airbnb and BookaBach). It is important to understand this market structure, because different components of the market are subject to different growth drivers.

Demand for resident housing is driven by the resident population, and some of their demand for long-term rentals drives demand for the holiday homes of absentee owners. However, the demand for holiday homes is also driven by a range of factors which are external to QLD, including population and business growth rates elsewhere in New Zealand, and in other countries (where absentee owners reside). Many holiday homes are also investment properties, that have been acquired for capital gain and/or rental returns. Demand for holiday homes is affected by both demographic and economic conditions.

The main components of the QLD housing market are:

a. Resident QLD households which own their dwelling;

b. Resident QLD households which rent dwellings long-term (as distinct from short-stay holiday rental), owned by either QLD entities (investment dwellings) or absentee owners from other parts of New Zealand and overseas (holiday dwellings which are in effect investment dwellings);

c. Absentee owners from other parts of New Zealand, who own dwellings as holiday dwellings and/or as investment properties;

d. Absentee owners from overseas, also owning holiday and/or investment dwellings.

These components overlap, because demand from the resident population for rental accommodation influences demand for investment properties, for both QLD entities and those from outside the District[1]. The housing market is subject to ongoing change, especially as demand for long-term rental accommodation and short-term rental utilises the same housing stock in many instances. This blurs the distinction between holiday dwellings and investment dwellings, and there are no comprehensive statistics defining the structure of this housing market.

As at June 2016, the estimated total housing estate in the District was 17,600 dwellings. Total resident households were 13,600 as at June 2016, and assuming each resident household occupies one dwelling this suggests there were 4,000 dwellings usually not occupied. This figure of 4,000 is directly consistent in scale with the numbers from the 2013 Census (15,400 in total and 3,900 not usually occupied) and in percentage terms, is substantially higher than national figures.

It is normal for a small share of the dwelling estate of any urban centre to be unoccupied on a medium or long-term basis. Nationally, some 5.6% of the total dwelling estate is categorised as unoccupied[2] (SNZ 2018). However, unoccupied dwellings are a significant component of the QLD economy – the share is much higher than the national average, at 25.3% as at June 2013 (Census), and estimated to be still close to that level (23% in 2016, and higher in Wanaka).

[1] For this assessment, absentee owners are those owning residential property in QLD but who normally reside elsewhere in New Zealand or overseas. The dwellings of absentee owners are a combination of investment (for long and short-term rental) and genuine "holiday" dwellings where not occupied except by the owners and their friends/family.

[2] SNZ Dwelling and Household Estimates, June 2017 (Demography Dwelling and Household Estimates),

Holiday homes account for a significant share of "not usually occupied" dwellings. These are occupied for part of the year by owners and/or by visitors to the District on a short-term rental basis (including family and friends of owners who may occupy the dwellings on a rent-free basis), but not by persons who are usually resident in the District. QLD is not unique in this regard, as in many holiday destinations these make up an important share of the total estate. Nevertheless, the "holiday home" component is relatively large within the size of the housing estate and is also characterised by relatively high value dwellings.

Address for service listed in the Council's rating database provides insight on which QLD properties are owned by absentee owners, and where those owners are based, by district within New Zealand, and by nation overseas[3].

The figures for June 2016 indicated that some 6,070 properties are owned by entities based in other parts of New Zealand (34.5% of the total estate of 17,600 dwellings), and some 1,290 properties are owned by entities based overseas (7.3%). As discussed above, the dwellings with absentee ownership may be either used as personal holiday homes, short-term visitor accommodation, or as rental/investment properties. Given the role of QLD as an internationally prominent tourism destination, the attractive natural environment, and the relatively high housing values there, it is expected that the presence of international absentee owners will be considerably higher in percentage terms than the New Zealand average, although this is difficult to verify.

[3] This information is likely to be subject to some inaccuracy – for example, absentee owners may list their address for service through a local solicitor, which would act to over-state the numbers of dwellings owned by QLD entities, and under-state those owned by absentee owners. This requires further investigation.

Figure 0.2 – QLD Housing Market Structure 2016 – Ownership by Dwelling Category

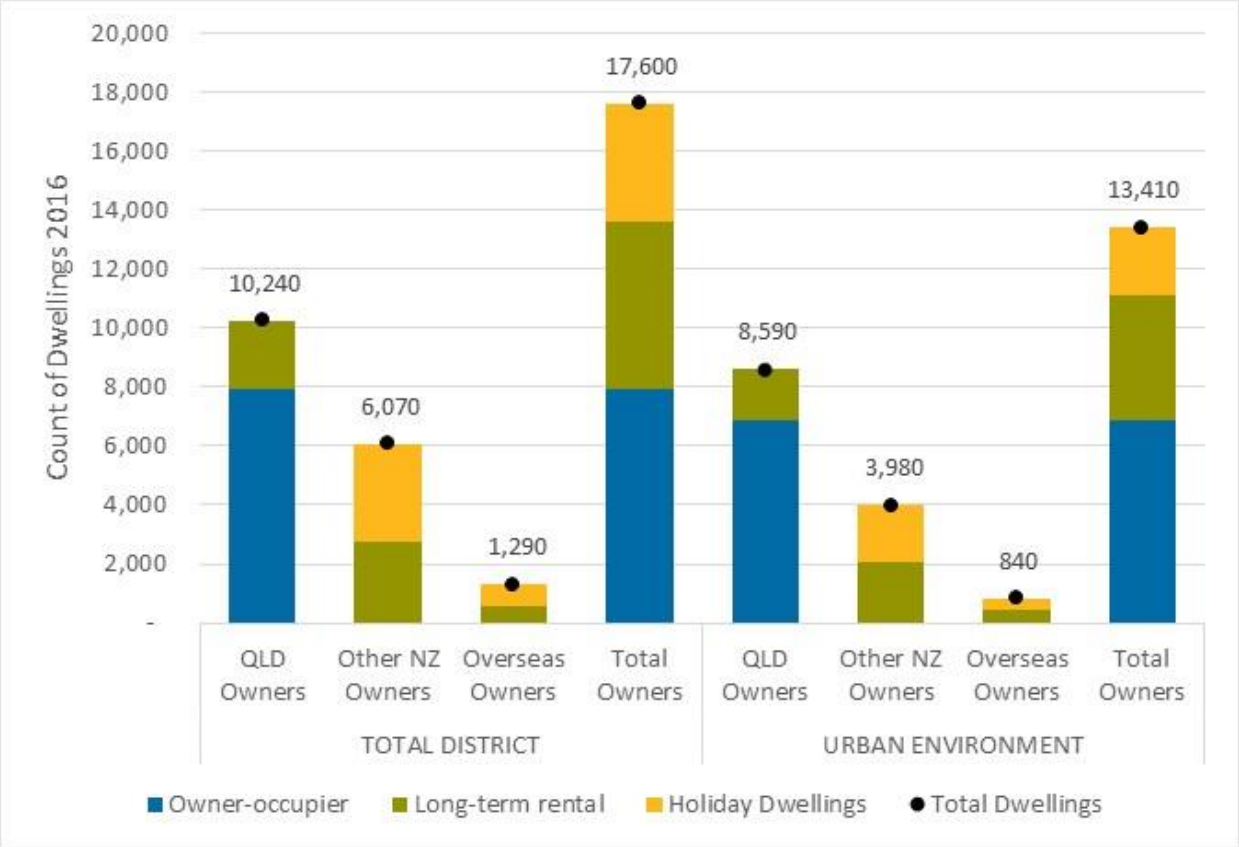


Figure 0.2 summarises the housing market structure for the total District (on the left) and the urban environment (on the right) for 2016. In total, 13,410 dwellings are estimated in the defined urban environment, 76% of the district total. The urban environment accounts for 87% of owner-occupier dwellings, 74% of long-term rental dwellings and 58% of holiday homes. This structure provided the basis for assessing future demand for housing, as follows:

a. Demand for usually occupied dwellings is driven by growth in the resident population. This is the standard approach for housing demand assessment. Based on the current market structure, this total estate would be a combination of dwellings owned by QLD entities (around 10,240 as at 2016) and those of absentee owners (around 3,360 currently). This indicates that for nearly half of the estate of absentee owners (currently investment properties), the main driver will be QLD population growth, so this would reflect that QLD growth;

b. Demand for the balance of the estate, those dwellings not usually occupied - currently around 4,000 - will be driven by exogenous factors.

Recent Population and Household Growth and Current Structure

The District's population has grown considerably in the past two decades, from 14,800 at the 1996 Census to 34,700 by 2016[4]. The annual growth rate of 4.4%pa over that period saw an average annual gain of 1,000

[4] SNZ 2017.

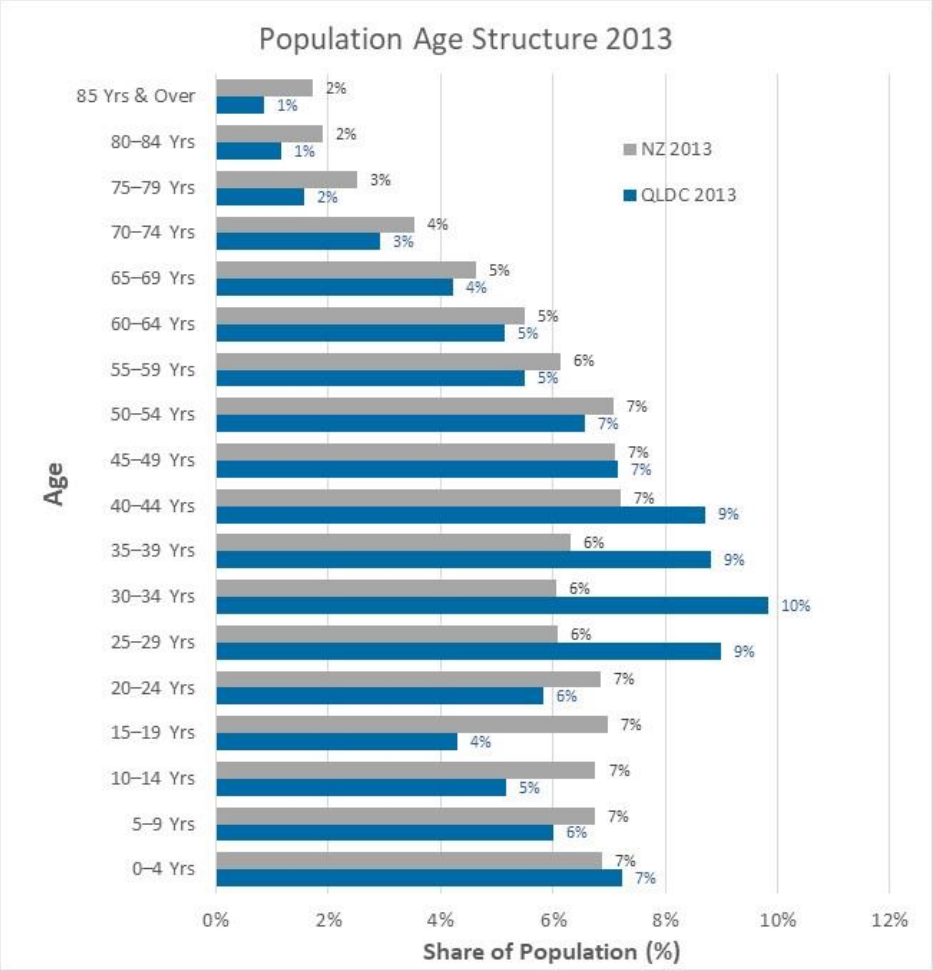
persons to the resident population. Since the 2013 Census, however, the growth rate has increased substantially, with an additional 5,000 persons in the 2013-2016 period and an average annual gain of nearly 1,700 persons.

There has been corresponding substantial growth in resident household numbers from 5,800 in 1996 to 11,700 by 2013, with the District total reaching an estimated 13,600 resident households by June 2016.

The District's major role as a tourism destination, together with its rapid growth, mean that QLD's population structure differs significantly from the national pattern (Figure 0.3). The District's population is characterised by relatively high shares in the 25 year to 44 year age cohorts, and lower than average shares in the children and young adult age groups, and in the mature and older age groups.

The high incidence of persons in the 25 to 44 year age bands is evident for both males and females, and to a considerable degree reflects the relatively high shares of employment in tourism-oriented businesses. The rapid growth in the population means that in-migration has been the major driver. This is typically reflected in relatively low numbers in the 65 and over age bands because the population base for those "ageing in place" is small in relation to the current population.

Figure 0.3 - QLD Population Age Structure 2013 by 5-year Increments



The differences in QLD's population structure are also evident in the types of households that are resident in the District. There are several important differences currently from the national pattern:

a. A relatively low incidence of single-person households, reflecting in part the low numbers of persons in the 65 and over age bands. This may also reflect the high cost of housing in QLD, encouraging sharing of dwellings;

b. A relatively high incidence of couple households, at 40% compared with 31% nationally. This reflects to a degree the presence of couples employed in the tourism-related sectors, who may be in the District as long-stay visitors, as distinct from long-term residents;

c. The incidence of two-parent households is close to the national pattern. However, there are relatively few one-parent households, which reflects in part the relatively high costs of housing in the District (for owners and renters);

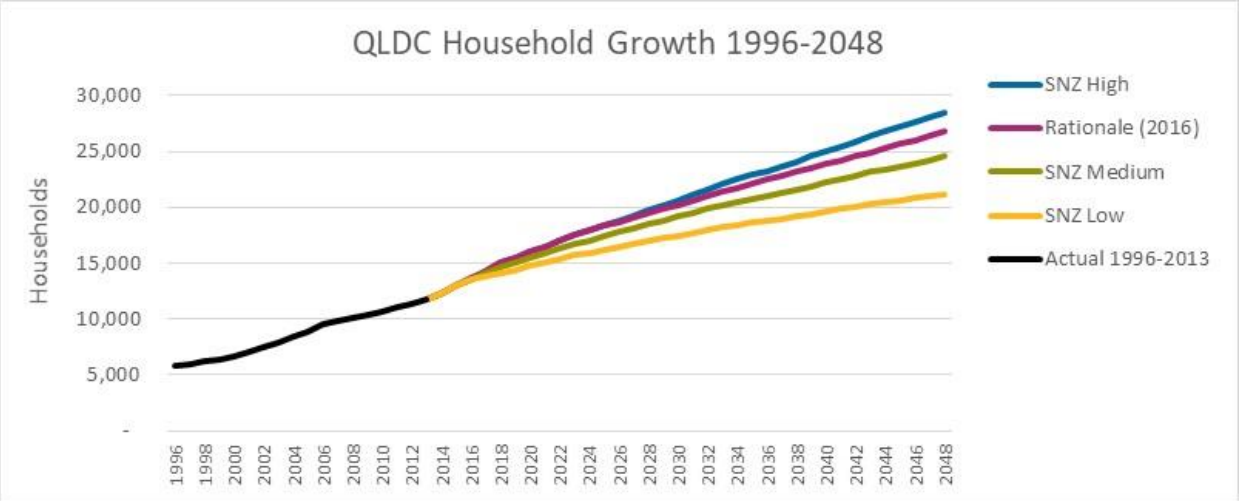
d. A relatively high incidence (nearly twice the national figure) of other multi-person households, which is predominantly flatting or non-family households. This reflects the strong presence of the tourism-related workforce, especially those in the 25-44 age groups, who as long-stay visitors rather than long-term residents form flatting (non-family) household structures.

e. It should be noted that large numbers of short-term workers come in and out of the district in the peaks of the winter and summer holiday seasons, and they may not be captured accurately by SNZ data which is in primarily derived from occupant reporting on Census night. QLDC have acknowledged that further investigation of migrant workers is required.

Household Projections 2016 to 2046

Further substantial household growth is expected, consistent with the population outlook. *A priori*, the increase in resident households is a sound indicator of the requirement for additional dwellings to accommodate the resident population. The most recent Statistics New Zealand (SNZ) projections indicate an additional 3,000 (low) to 5,200 (high) resident households over the decade to 2026 (22% to 38% increase), and an additional 7,300 (low) to 14,000 (high) households over the period 2016 to 2046 (54% to 103% increase). These are set out in Figure 0.4. Included is the Council's own medium-high growth projection (referred to as the Recommended growth outlook). This shows growth of 12,600 households in the long-term (93% growth between 2016 and 2046).

Figure 0.4 - QLD Household Trends and Future Growth Projections 1996-2046



A key feature of the projected growth in households across the district is the increase in couple households. Under the SNZ Medium projection for example, couple households account for some 60% of the long-term growth. Single-person households account for some 26% of the net change in household numbers, but the net change is much less for family households (around 12% of the total) and other household types show minimal change. Of the total increase of approximately 10,000 households, some 8,560 are either single-person or couple households. This differs substantially from the national growth outlook – which indicate a higher share of single-person households (32% of the net increase), but lower shares of couple households (38%), and higher shares of family households (30%).

This anticipated change in the structure of the housing market is important, because it means much of the net gain is smaller households, which are likely to have preferences for smaller dwellings, including terrace house and apartment style dwellings. That in turn will have implications for residential land requirements. It is also potentially indicative of a housing market which does not suitably provide affordable dwellings for family households with children.

There is no detailed information on the dwelling preferences of absentee owners of QLD properties, although it is expected that their demands are likely to reflect the national household structure, suggesting more family households among absentee owners, and possible preference for larger and detached dwellings.

The growth projections detailed above are for the whole District and include both the urban and the rural demand outlooks. It is important to differentiate between urban and rural growth[5], because the supply mechanism in urban areas is primarily through residential zoning, and business zoning where it applies to apartments, whereas outside the main urban boundaries rural land and lifestyle blocks are the main source of supply (including some small township, rural visitor and special zones). The economics of lifestyle block development are quite different from urban residential development, particularly because of their positioning toward the upper end – higher value end – of the housing market. QLD is notable for the fact that approximately 97% of the district is identified as an Outstanding Natural Landscape or Outstanding Natural Feature, which the RMA requires to be protected from inappropriate subdivision and development as a matter of national importance.

The projections for the urban and rural environment are based on the population growth projections for each CAU (SNZ 2017)[6] – aggregated, together with estimated capacity for lifestyle holdings in the areas beyond the UGB. The total urban projections are shown in Table 0.1.

Table 0.1 - QLD Projected Urban Households 2016-2046

Year	SNZ Low	SNZ Medium	SNZ High	Rationale (2016)
2013		9,400		
2016	11,100	11,100	11,100	11,100
2019	11,700	12,300	12,700	12,500
2026	13,400	14,600	15,500	15,100
2036	15,600	17,300	19,200	18,400
2046	17,400	19,800	23,100	21,800
2016-19	600	1,200	1,600	1,400
2016-26	2,300	3,500	4,400	4,000
2016-46	6,300	8,700	12,000	10,700
2016-19 %	5%	11%	14%	13%
2016-26 %	21%	32%	40%	36%
2016-46 %	57%	78%	108%	96%

Source: SNZ 2017; ME QLD Housing Model 2017

Key features include:

a. The Low projection would see an additional 2,300 households in urban locations by 2026 (out of the total QLD increase of 3,000, see Table 3.4 above) and 6,300 households by 2046 (out of the total 7,300). This represents an increase of 57% over the three decades;

[5] Refer Figure 2.2 for a map of the defined urban environment.

[6] The 2013 CAUs aggregate up the broad sub-areas in the spatial framework.

b. The Medium projection would see an additional 3,500 households in urban locations by 2026 (total QLD increase 4,200), and 8,700 households by 2046 (out of the total QLD 10,400). This represents an increase of 78% over the 2016-46 period;

c. The High projection would see an additional 4,400 households in urban locations by 2026 (total QLD 5,200), and 12,000 households by 2046 (total QLD 14,000), an increase of 108% over the period;

d. All three futures would see the urban share of total QLD households increase – from the current 81.5%, to accounting for 83-84% of growth in the period to 2016, and 85% to 87% of growth in the period 2016 to 2046.

Nevertheless, there would also be significant growth outside the urban environment, of between 1,000 households (Low) and 2,000 households (High) by 2046. This equates to average annual growth of between 30 (Low) and 70 (High) households each year, compared with 210 (Low) to 400 (High) in urban locations.

Housing Demand by Other Housing Markets

Absentee Owners: Projecting growth in demand for dwellings by absentee owners is somewhat more complex than for resident households (where one household generally equates to one dwelling).

Demand for absentee owners' holiday and investment dwellings has a range of drivers. Key factors include the relative attractiveness of Queenstown Lakes as a place for both holidays and investment, and the potential to rent dwellings on a short-term basis (visitors) or long-term basis (residents). Demand is also influenced by population growth and economic conditions in other areas of New Zealand and in overseas markets, and consumer sentiment.

Short-term Dwelling Accommodation: The short-term accommodation potential (primarily as dwelling rental) has been examined based on the QLDC recommended projections of visitor numbers in private residential properties[7]. These indicate some 41,800 visitors on the annual peak day, and 7,200 on the average day for 2016, increasing to 70,300 (+1.7%pa) and 11,700 (+1.7%pa) respectively by 2046[8].

Allowing for 20% of this demand to be as guests of residents (that is, on an average day between 4% and 6% of resident households have staying guests) then the balance of average day demand may be assumed to be in vacant or not usually occupied dwellings. Assuming a mean visitor group size of 2.5 to 2.7, this would mean that on the average day in the order of 45% to 55% of these dwellings would be occupied by short-term visitors. This does not mean that 45% to 55% of these dwellings are always occupied, and the balance always unoccupied. Applying this to the estimated 4,000 dwellings which are not usually occupied in 2016 indicates 1,800 to 2,200 are occupied by short-term tenants on the average day.

The peak day demand is considerably greater, over four times the average day. Even with a substantially higher share of visitors accommodated as residents' guests, and considerably larger mean group size in short-term rentals, very few of the not usually occupied dwellings would be vacant in the peak. However, the peak is very short-lived, and even allowing for both a summer and a winter peak (10 days in total), for

[7] This excludes visitors utilising commercial visitor accommodation (such as hotels, motels, camp grounds and back-packers).

[8] Based on the QLDC Recommended growth projection – total District.

the balance of the year (around 97% of all days) the demand for short-term rentals is less than the total capacity.

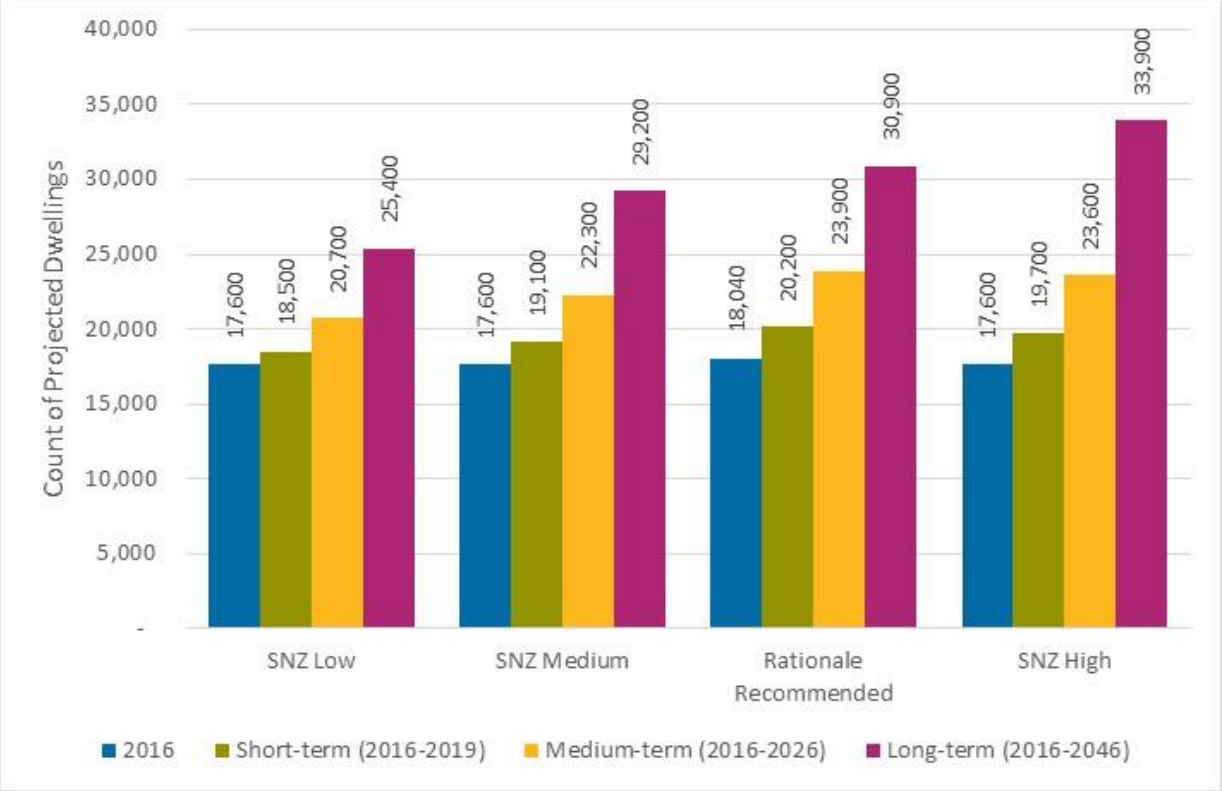
On that basis, the opportunity for the investment component of holiday dwellings is reflected much more accurately in the figures for the average day rather than the peak. This indicates that around half of the total estate of not usually occupied dwellings may be driven by demand for short-term visitor accommodation.

Total Housing Demand

Total dwelling demand is estimated from the household projections, and allowance for growth in each aspect of absentee owner demand, recognising also the overlaps among these aspects. These projections form the basis of assessing housing sufficiency discussed further below. Because of this wide range of influences, forecasting demand growth is complex, especially given the fundamental changes likely to impact on purchasing by overseas entities. Rather than attempt multi-variate forecasting, we have adopted a scenario approach for assessing low, medium and high growth ranges for both New Zealand based demand, and overseas based demand.

Based on these scenarios, total district projections have been prepared for low, medium and high futures as well as the QLDC Recommended growth projections. Figure 0.5 shows a high-level summary of the four growth futures - the QLDC Recommended projection sits between the medium and high in the long-term (i.e. in 2046, total dwellings under the Recommended growth scenario reach an estimated 30,900 dwellings).

Figure 0.5 – Total QLD Projected Housing Demand by Future 2016-2046 (Excl. Margin)



Based on the SNZ Medium future, key features include:

a. A total demand increase of 4,700 dwellings by 2026 (+27%) and 11,600 dwellings (+66%) by 2046. This growth is driven mainly by growth in the number of resident households of 4,200 by 2026 (+31%) and 10,370 by 2046 (+76%);

b. The projected growth includes demand for an additional 2,450 dwellings by 2026 from owner-occupier households and 6,080 dwellings (+77%) by 2046. There would also be demand for 1,750 dwellings for long-term rental by 2026 (+31%), and 4,290 dwellings by 2046 (+76%), of which an estimated 2,400 would be owned by absentee owners (primarily from elsewhere in New Zealand);

c. Additional demand for investment dwellings (270 by 2026, and 830 dwellings by 2046) and holiday dwellings not used for rental (160 by 2026 and 370 dwellings by 2046) is expected to arise primarily from demand from elsewhere in New Zealand.

d. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 13,300 dwellings, compared with 11,600 under the Medium future. This would take total dwellings to 30,900 by 2046, rather than 29,200, an additional 1,700.

Much of the demand growth would arise in urban QLD. The long-term outlook is summarised in Table 0.2. The urban projections allow for a progressively higher share of growth to accrue to urban QLD, including because of the substantial additional capacity within the urban boundary. Currently, the dwelling estimates show 76.1% are within urban QLD, the high projection indicates 81% of growth would be urban, the medium projection 83%, and the low projection 85%. Total growth in urban dwellings is estimated at 6,600 (Low), 9,600 (Medium), 11,400 (QLDC Recommended) and 13,300 (High) between 2016 and 2046.

Table 0.2 - QLD Urban Projected Housing Demand 2016-2046

Housing Demand	2016	Low 2046	Change 2016-46	Change %	Medium 2046	Change 2016-46	Change %	High 2046	Change 2016-46	Change %	Rationale 2046	Change 2016-46*	Change %
Owner-occupied	6,540	10,220	3,680	56%	11,750	5,210	80%	13,570	7,030	107%	12,660	6,120	94%
Long-term Rental	4,550	7,100	2,550	56%	8,170	3,620	80%	9,430	4,880	107%	8,800	4,250	93%
QLD owners	*1,860*	*3,000*	*1,140*	*61%*	*3,450*	*1,590*	*85%*	*3,990*	*2,130*	*115%*	*3,720*	*1,860*	*100%*
Other NZ Owners	*2,220*	*3,580*	*1,360*	*61%*	*4,120*	*1,900*	*86%*	*4,760*	*2,540*	*114%*	*4,440*	*2,220*	*100%*
International Owners	*470*	*530*	*60*	*13%*	*600*	*130*	*28%*	*680*	*210*	*45%*	*640*	*170*	*36%*
Other NZ-Investment	960	1,210	250	26%	1,440	480	50%	1,800	840	88%	1,620	660	69%
Other NZ-Holiday	960	1,020	60	6%	1,170	210	22%	1,390	430	45%	1,280	320	33%
Other NZ-Total	1,920	2,230	310	16%	2,610	690	36%	3,190	1,270	66%	2,900	980	51%
International-Investment	200	210	10	5%	230	30	15%	240	40	20%	240	40	20%
International-Holiday	200	200	-	0%	210	10	5%	220	20	10%	220	20	10%
International-Total	400	410	10	2%	440	40	10%	460	60	15%	460	60	15%
Total	13,400	20,000	6,600	49%	23,000	9,600	72%	26,700	13,300	99%	24,800	11,400	85%
Total with Margin	13,400	20,900	7,500	56%	24,400	11,000	82%	28,600	15,200	113%	26,500	13,100	98%

Source: ME QLD Housing Model 2017. Figures have been rounded.

NPS-UDC Growth Margins

Under Policy C1 of the NPS-UDC, councils must provide for an *"additional margin of feasible development capacity over and above projected demand"* of 20% in the short and medium-terms, and 15% in the long-

term. This means that the projected increases in demand need to be factored up by 20% and 15% respectively[9], to identify potential total future demand[10].

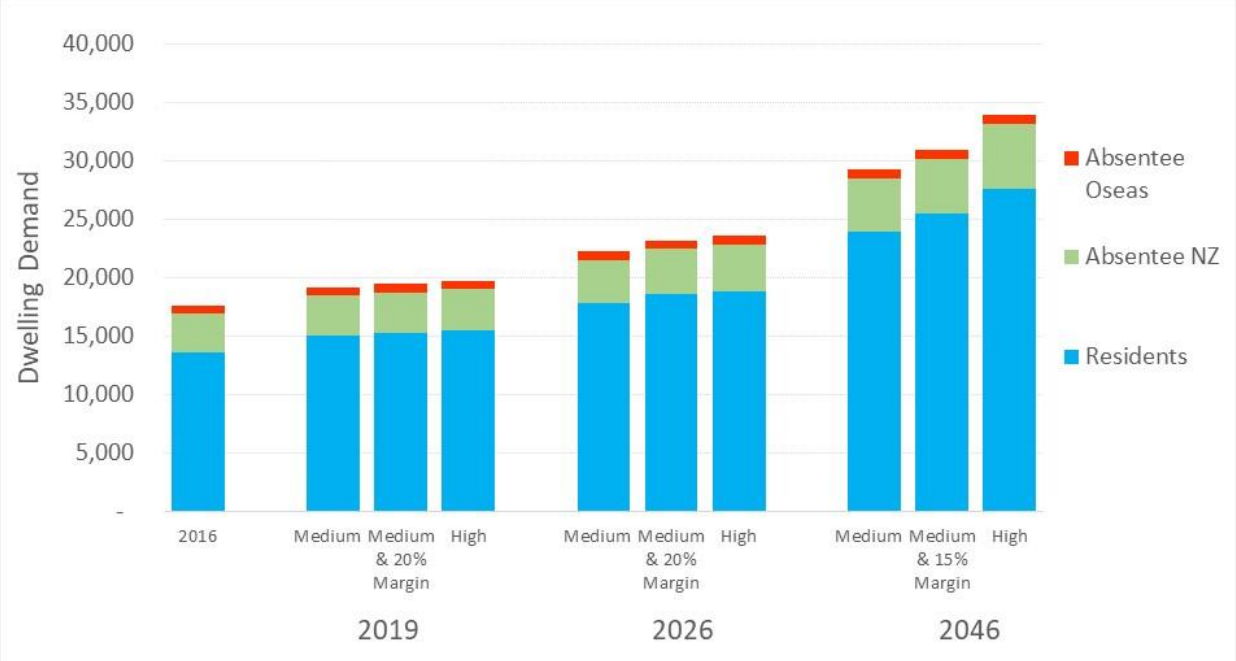
Adopting the NPS-UDC guidance to apply the SNZ medium projection for the base case future, it is also instructive to examine the future outcomes plus the margin. For QLD total:

a. the medium projection indicates an additional 1,400 resident households by 2019, with 4,200 more by 2026, and 10,400 by 2046, compared with 2016;

b. the medium projection plus 20% margin indicates an additional 1,680 resident households by 2019, with 5,040 by 2026, and 11,960 by 2046;

c. the SNZ high projection indicates an additional 1,900 resident households by 2019, with 5,200 more by 2026, and 14,000 by 2046.

Figure 0.6 - QLD Housing Projections with NPS-UDC Margin 2019-2046



This means that the SNZ high projection easily encompasses the medium plus 20% and 15% margin throughout the long-term. Figure 0.6 compares the total demand outcomes in 2019, 2026 and 2046, showing medium growth, medium growth plus 20% and 15% margin, and high projection.

[9] For this first HDCA, QLDC have adopted the margins recommended in the NPS-UDC guidance. This will be reviewed in future updates.

[10] This factoring applies to the demand growth, not to the total demand projected for each future time. If it were applied to total projected demand, then the resulting implied growth rates would be far in excess of the SNZ growth rates. For example, in QLD the SNZ medium growth for the 2016-2019 period indicates a 5% increase in household numbers, whereas factoring up the 2019 by a further 20% would indicate 25% growth. Similarly, for the 2026 medium-term the SNZ medium projection is for 15% growth, factoring up the 2026 total would imply 35% growth; and for 2046 long-term, the SNZ medium projection is for 42% growth, factoring up the 2046 total would imply 57% growth.

QLD Housing Demand 2016 – A Detailed Examination

The HDCA provides considerable analysis of the future housing demand of QLD resident households, taking into account the current patterns of dwelling ownership and occupancy of dwellings by households of each type, and in each income band. This assessment is based on the *Queenstown Lakes District Housing Model 2017*, developed by M.E to provide key information and analysis to meet NPS-UDC requirements.

This assessment covers QLD resident households, and the demand for dwellings of each type and value of those resident households. It does not include demand from absentee owners of investment and holiday dwellings other than those rented by resident QLD households. Initially it provides some key information from the 2013 Census for the district population as a whole, then it focuses on the 2016 estimated situation for population and households. The base assessment covers total QLD total and includes QLD urban. It does not examine urban QLD by itself, most notably because urban QLD accounts for a major share (82%) of the total QLD resident households, and there are quite limited demographic differences between urban QLD and total QLD. There are clearly close links between urban and rural areas.

Key findings of the 2013 analysis include:

- Separate houses (detached) are the dominant dwelling type (6,910 dwellings or 71.1%);
- Attached dwellings (town houses, terrace houses and apartments) account for 2,090 dwellings or 21.5% of the total estate;
- Of the attached dwellings, about one-third (700, 7.2% of the total) are single level, typically town house and home unit typology;
- Some 1,370 attached dwellings are in buildings of 2 or 3 levels (14.1%). The Census did not identify any dwellings in buildings of 4 levels or more (predominantly apartments), though there may be some of these in the 720 dwellings which were not defined.
- Single person households show a higher propensity than average (38.7%) to occupy attached dwellings, especially single level dwellings. Non-family households (usually flatting structures) show relatively high occupation of attached dwellings, with around half in attached dwellings. However, among other household types, the pattern is similar, with detached dwellings predominant. This is not unexpected for an economy the size of QLD's, although the recent strong growth rates, and the relatively high property values, mean the proportion of attached dwellings is somewhat above the national average.
- Lower income households show general greater propensity than average to reside in attached dwellings, while higher income households show much higher than average propensity to reside in detached dwellings;
- To a degree, these patterns reflect the household types, especially with older single and couple households on low to low-medium incomes showing some preference for attached dwellings. This "preference" may be based on choice of dwelling style, or affordability. The patterns in QLD are not as marked as in larger urban economies such as Auckland, where there is greater differentiation by income, and the range of dwelling types is more comprehensive.

The above results are unsurprising but are nevertheless important to demonstrate clearly how demand for housing varies within the community. The figures show that demand for housing is influenced clearly by household type and age – affecting household size and organization, stage in the life cycle and also indicating stage in dwelling ownership sequence – as well as by income – affecting ability to pay. These drivers of demand influence dwelling type needed, and able to be afforded, and dwelling tenure.

If clear demand patterns may be demonstrated for 2013, then these same drivers may be used to assess likely future demand. QLD is expected to have a considerably larger community in the future. The changes in the structure of that demand – household type and age, and income – will underpin the demand for housing. In parallel, there will also be changes in dwelling tenure – including possible increase in ownership rates among existing households – and in the demand for different types of dwellings, including an expected long-term increase in attached dwellings including apartments.

The following sections set out the estimated demand pattern for 2016, taking into account the patterns observed in 2013, and with allowance for the growth in household numbers and dwellings in the period to 2016. Key findings include:

- Overall, the estimates show 56% of households live in owned dwellings, with the other 44% in rented or other dwellings not owned by them.
- The ownership rate is substantially higher than average for the top income band (68% compared with 56% overall), and substantially lower for households in the lowest income category (48%).
- Ownership also varies among household types. Two-parent families with 1-2 children (67%) and couple households (62%) have relatively higher levels – reflecting in part their higher than average income levels, and the longer time in the property market for mature and older couples - while ownership is lower among single-person households (52%), one-parent families (41%) and very low among non-family households (9%).
- There is a higher incidence of detached dwellings (seven of eight) compared with attached for households owning their dwelling. The high focus on detached dwellings is also evident for two-parent families with children, and multi-family households, though with lower incidence for single-person households (four in every five).
- Single-person households show the highest propensity of all types to own attached dwellings, whether in lower or higher income bands, but generally opt for detached dwellings;
- The owner-occupier market does not show significant variation from the national pattern, nor from what would be expected in the housing market. The effects of both income on ownership, and age on dwelling type, are both consistent with a wide range of market assessments and commentary.
- There is a relatively high incidence of attached dwellings in the rental property estate. Overall, attached dwellings make up around one quarter of the total dwelling estate, but account for some 43% of the total rental dwelling estate;
- For single person households which are renting, attached dwellings account for more than half of the total dwellings, and nearly half for couples;

- For family households which are renting, attached dwellings account for less than one third of their total accommodation, compared with around one-tenth of dwellings for owner occupiers;
- For non-family renting households, attached dwellings account for half of their total accommodation.
- Dwelling ownership rates do improve markedly through the life-stages – from a low of 10% for households in the under 30 age band, to 40% for those in the 30-39 band, 61% for those in the 40-49 band, reaching 77% for those in the 50-64 band, and the high of 83% for those in the 65-74 band. However, it is important to not assume that the future population will automatically achieve those relatively high levels of dwelling ownership in the future, because the effects of high dwelling prices have already flowed through to ownership rates for those in the 30-39 age bands which are substantially lower than was the case for earlier generations.
- Dwelling ownership rates have generally declined nationally over the last two decades, including in QLD. This trend has been most clearly evident among the low and low-medium income households, and in the 25-39 age bands, which is the life-stage when traditionally households have entered the market as "first home buyers".

QLD is a fast-growing economy, and much of the dwelling estate has been developed in the past 25 years. It is likely that the range of dwelling options will continue to expand over the next two decades, especially in response to dwelling affordability issues and the increased residential densities being promoted in the Proposed District Plan (PDP).

The second major focus of the HDCA demand assessment is the relationship between households and the values of the dwellings which they occupy. A key output from the QLD Housing Model is the estimates of the dwellings by value which are occupied by households of each type. Although the mean and median dwelling values do have some relevance, the core matter for the market as a whole is the distribution of dwelling values, for households of each type in total, and also for households which own or rent their dwellings.

Figure 0.7 shows the estimated distribution of dwelling values for all household types and each main household type as at June 2016. The district-wide pattern shows that each household type occupies a substantial number of dwellings in every value band. There is limited difference among the main household types in terms of their mean dwelling value, and in the distribution of dwellings by value. The peak for every household type occurs in the $420,000 to $710,000 value bands. The distribution is consistent with the REINZ figures showing median dwelling values in the $790,000 to $800,000 band (August 2016), and mean values of $900,000[11].

[11] QN.co.nz 2018

Figure 0.7 – QLD Dwelling Value Distribution by Household Type 2016

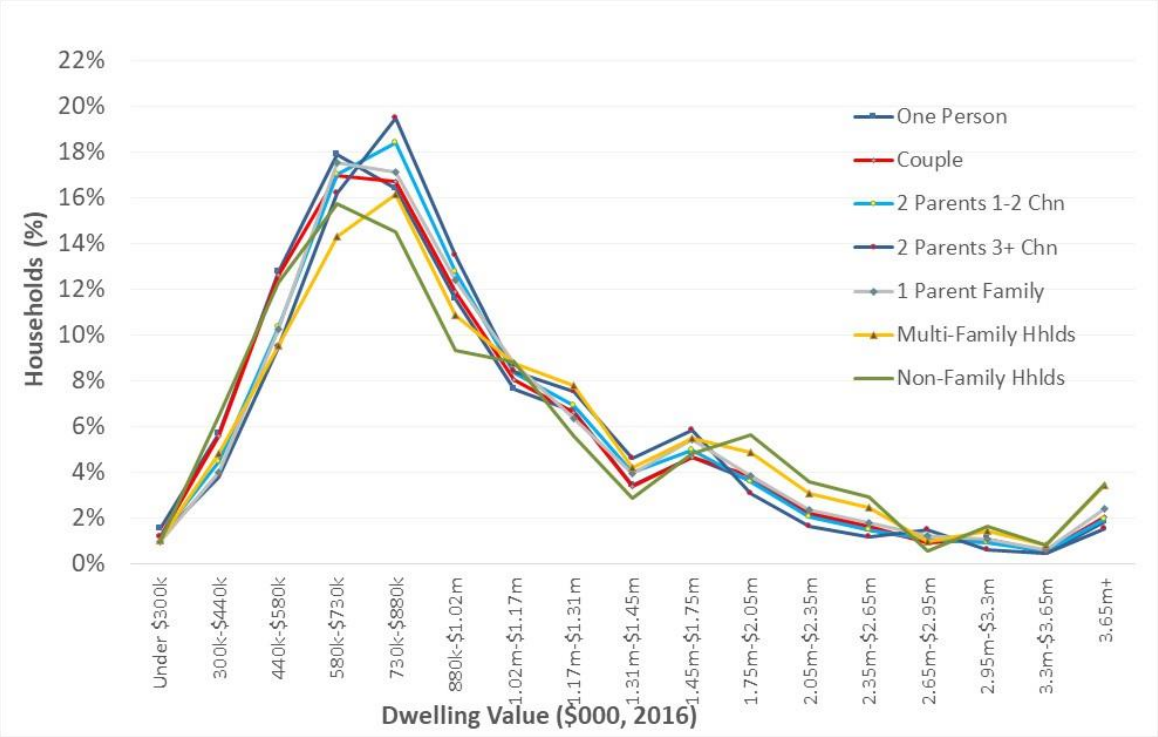


Figure 0.8 shows the distribution of households in total across the value bands, and the incidence of each household type within each value band.

Figure 0.8 - QLD Households' Dwelling Occupancy by Value 2016

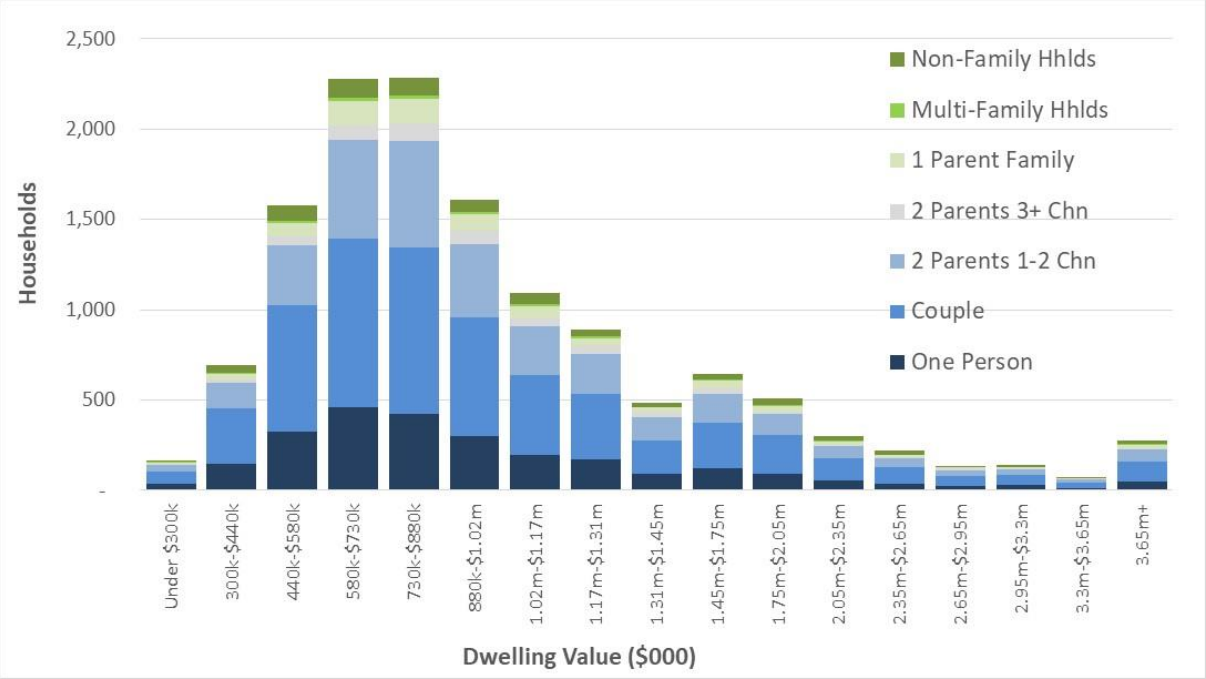
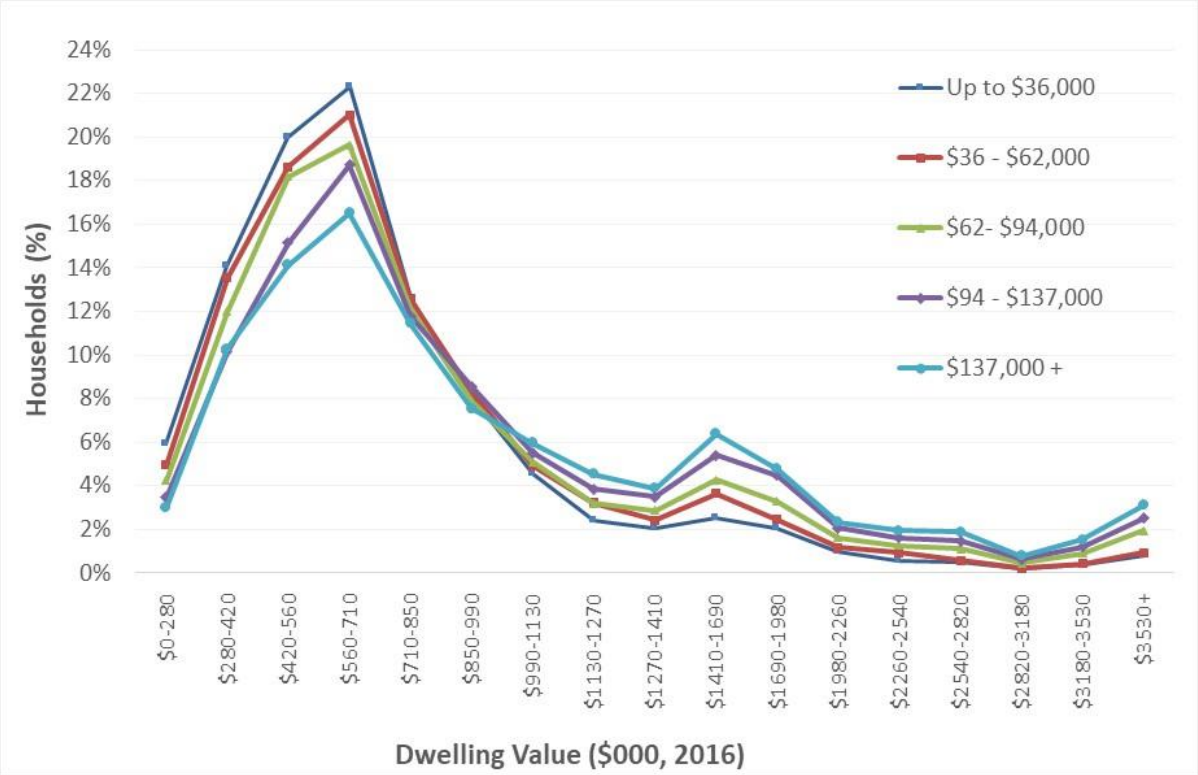


Figure 0.9 shows the overall relationship between household income, and the value of dwellings occupied in QLD in 2016 (for total households). The pattern is for lower income households to occupy dwellings toward the lower end of the value range, and for medium and higher income households to occupy progressively higher value dwellings. However, all income bands peak in the $560-710,000 value band, reflecting the relative concentration of dwellings in that band.

Figure 0.9 – QLD Dwellings Occupied by Value by Household Income 2016



Housing Demand by Dwelling Type and Value[12]

M.E has identified a suite of housing demand growth futures for QLD that take into account the medium and high growth futures (i.e. a range around the Council's own growth projection), and with particular reference to the changes expected in household demography, to test the implications of changes in dwelling preferences. These provide more detailed demand projections for the total district and urban environment than reported above (total dwelling demand). The figures below relate to the component of dwelling demand driven by resident households (the majority of total dwelling demand)[13].

As discussed, the emphasis on couple and single-person households and the associated gradual ageing of the population, together with increases in dwelling values and greater acceptance of attached dwelling options are all expected to see some general shift toward attached dwellings in the future. The analysis of current dwelling occupancy by different types of household indicates that household income is the main

[12] Note, figure presented in this section may differ slightly from total household projections due to disaggregation and reaggregation of figures together with rounding.

[13] For the analysis of sufficiency, equivalent detailed projections for non-resident dwellings is added to the resident household projections to provide detailed total dwelling projections (discussed further below).

differentiator of occupancy, rather than household age. This means that the shift toward a more intensive urban environment for QLD is likely to require a change in dwelling preferences. M.E has allowed for some shift in preferences away from detached dwellings, and toward attached dwellings in line with the strategic direction of the PDP. This is not a foregone conclusion, and the options tested include Nil change from the present demand structure, as well as medium, high and very high shifts in dwelling preferences by 2046. Note that the scenarios depict the total dwelling estate, which includes existing dwellings, and those outcomes imply more substantial changes in the mix of new dwellings developed over the period.

Table 0.3 shows the projected total district resident dwelling demand under medium growth and a Nil Preference Change scenario (the current patterns of dwelling occupancy persist), and the increase in dwelling numbers of each type is more or less *pro rata* from the current situation. For total QLD, the projected growth in resident demand is in the order of 3,900 households by 2026, and 10,100 in total to 2046. This future would see detached dwellings continue to account for the major share of dwelling growth - around 77% to 2026, and 75% thereafter.

Table 0.3 –QLD Resident Dwelling Growth – Medium Projection 2016-2046 – Nil Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	9,940	10,280	10,880	12,940	14,750	15,770	16,930	17,500	940	3,000	7,560
2+ Dwgs : 1 level	1,040	850	1,140	1,320	1,520	1,630	1,750	1,810	100	280	770
2+ Dwgs : 2-3 levels	1,940	2,040	2,100	2,440	2,780	2,970	3,180	3,320	160	500	1,380
2+ Dwgs : 4+ levels	10	20	10	10	10	20	20	20	-	-	10
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	50	60	60	10	10	30
Private Not Defined	490	510	550	630	730	780	830	860	60	140	370
TOTAL	**13,500**	**13,700**	**14,700**	**17,400**	**19,800**	**21,200**	**22,800**	**23,600**	**1,300**	**3,900**	**10,100**
Detached House	74%	75%	74%	74%	74%	74%	74%	74%	72%	77%	75%
2+ Dwgs : 1 level	8%	6%	8%	8%	8%	8%	8%	8%	8%	7%	8%
2+ Dwgs : 2-3 levels	14%	15%	14%	14%	14%	14%	14%	14%	12%	13%	14%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	4%	4%	4%	4%	4%	5%	4%	4%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

This outlook is likely to be associated with greenfield development rather than urban intensification, which would be more aligned with an increase in attached dwellings. We note that this outcome would run counter to both the demographic shift in the QLD population and the strong growth among older and smaller households - including their propensity to seek central rather than peripheral locations. Accordingly, it is included primarily as a base for comparison.

Table 0.4 shows the total district projected resident dwelling demand under medium growth and a Moderate Preference shift scenario – that is, where the current (2013) patterns of dwelling occupancy gradually but progressively change, and there is a shift away from detached dwellings toward attached dwellings including terrace houses and apartments.

This future would see detached dwellings continue to account for the major share of dwelling growth, but that share would drop from the current 74% to 71% of the increase by 2026, and 64% by 2046. The change reflects the existing dominance of detached dwellings, and even where less than half of the net increase in the future were in detached dwellings, the total estate by 2046 would still reflect much of the current housing stock.

Table 0.4 –QLD Resident Dwelling Growth – Medium 2016-2046 – Moderate Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	9,940	10,140	10,770	12,690	14,160	14,910	15,940	16,370	830	2,750	6,430
2+ Dwgs : 1 level	1,040	970	1,060	1,280	1,500	1,650	1,760	1,830	20	240	790
2+ Dwgs : 2-3 levels	1,940	2,080	2,240	2,700	3,300	3,750	4,080	4,360	300	760	2,420
2+ Dwgs : 4+ levels	10	40	50	60	70	80	80	90	40	50	80
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	50	60	60	10	10	30
Private Not Defined	490	500	540	620	740	780	810	830	50	130	340
TOTAL	**13,500**	**13,800**	**14,700**	**17,400**	**19,800**	**21,200**	**22,700**	**23,500**	**1,300**	**3,900**	**10,100**
Detached House	74%	73%	73%	73%	72%	70%	70%	70%	64%	71%	64%
2+ Dwgs : 1 level	8%	7%	7%	7%	8%	8%	8%	8%	2%	6%	8%
2+ Dwgs : 2-3 levels	14%	15%	15%	16%	17%	18%	18%	19%	23%	19%	24%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

The second core output from the scenarios is projections of numbers of dwellings in each value band, based on estimated demand for dwellings from each type of household, and taking into account preference shifts.

The starting point is that the current situation (2016) reflects existing demand for dwellings (owned and rented) by households of each type. Further, that the value profile for existing dwellings broadly reflects expressed demand (dwelling type and value) from QLD households. On this basis, the household projections have been used to estimate future demand for housing – owned and rented, by dwelling type – in each value band. Projected future demand is based in the first instance on existing demand patterns, projected forward *pro rata* with the growth in each segment of the market (household type).

This modelling relies on a number of assumptions – a more detailed discussion of limitations in contained in the main body of the report. There is no econometric component to this Model, to consider such matters as potential change in dwelling ownership levels if housing prices increase or decrease, or calculation of the price bands of future dwelling supply. That is covered separately with regards to housing development feasibility.

Table 0.5 shows the projected resident dwelling numbers by type for 2046 in a medium growth future, with nil preference change across segments of the market. The results shown are for the total district. The distribution shows low shares of dwellings in the lower value bands, with demand centred on the mid-range values – reflecting the current dwelling mix and value patterns.

The total increase in demand of some 10,000 dwellings represents substantial growth. However, the similarity in the distribution of values with the current pattern also reflects stability in the structure of demand. The point of note is that the household projections show incremental change from the current base, and do not indicate substantial shifts in the underlying pattern of housing demand. It follows that the projected demand reflects quite strongly this incremental shift, where the main change is the number of dwellings, rather than the mix of dwellings and values.

Table 0.5 – QLD Resident Demand by Type & Value – Medium, Nil Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	510	550	1,060	190	340	530	5.3%
$280-420	980	580	1,560	1,630	1,470	3,100	650	890	1,540	15.4%
$420-560	1,660	640	2,300	2,630	1,570	4,200	970	930	1,900	19.0%
$560-710	2,180	400	2,580	3,420	1,010	4,430	1,240	610	1,850	18.5%
$710-850	1,490	160	1,650	2,270	390	2,660	780	230	1,010	10.1%
$850-990	990	90	1,080	1,560	220	1,780	570	130	700	7.0%
$990-1130	650	50	700	1,050	100	1,150	400	50	450	4.5%
$1130-1270	400	60	460	670	150	820	270	90	360	3.6%
$1270-1410	380	20	400	640	30	670	260	10	270	2.7%
$1410-1690	570	40	610	970	80	1,050	400	40	440	4.4%
$1690-1980	330	130	460	560	330	890	230	200	430	4.3%
$1980-2260	210	10	220	330	10	340	120	-	120	1.2%
$2260-2540	170	-	170	260	10	270	90	10	100	1.0%
$2540-2820	160	-	160	260	-	260	100	-	100	1.0%
$2820-3180	70	-	70	90	-	90	20	-	20	0.2%
$3180-3530	130	-	130	190	-	190	60	-	60	0.6%
$3530+	270	-	270	410	-	410	140	-	140	1.4%
Total	**11,000**	**2,400**	**13,400**	**17,500**	**5,900**	**23,400**	**6,500**	**3,500**	**10,000**	**100.0%**
Share %	*82%*	*18%*	*100%*	*75%*	*25%*	*100%*	*65%*	*35%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 0.6 shows the projected dwelling numbers by type for 2046 in a medium growth future, with moderate preference shift. The results shown are for the total district. The distribution again reflects continuation of the overall pattern, but with some general transfer toward lower value dwellings (reflecting the shift toward attached dwellings – total growth of 4,700 attached dwellings over the long-term compared to 3,500 attached dwellings in the nil preference shift scenario above), but with demand centred on the mid-range values.

Table 0.6 – QLD Resident Demand by Type & Value – Medium, Moderate Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	490	670	1,160	170	460	630	6.3%
$280-420	980	580	1,560	1,540	1,720	3,260	560	1,140	1,700	17.0%
$420-560	1,660	640	2,300	2,460	1,830	4,290	800	1,190	1,990	19.9%
$560-710	2,180	400	2,580	3,200	1,200	4,400	1,020	800	1,820	18.2%
$710-850	1,490	160	1,650	2,130	470	2,600	640	310	950	9.5%
$850-990	990	90	1,080	1,470	260	1,730	480	170	650	6.5%
$990-1130	650	50	700	990	120	1,110	340	70	410	4.1%
$1130-1270	400	60	460	630	190	820	230	130	360	3.6%
$1270-1410	380	20	400	590	40	630	210	20	230	2.3%
$1410-1690	570	40	610	910	100	1,010	340	60	400	4.0%
$1690-1980	330	130	460	510	400	910	180	270	450	4.5%
$1980-2260	210	10	220	300	20	320	90	10	100	1.0%
$2260-2540	170	-	170	240	20	260	70	20	90	0.9%
$2540-2820	160	-	160	240	-	240	80	-	80	0.8%
$2820-3180	70	-	70	80	-	80	10	-	10	0.1%
$3180-3530	130	-	130	170	-	170	40	-	40	0.4%
$3530+	270	-	270	380	10	390	110	10	120	1.2%
Total	**11,000**	**2,400**	**13,400**	**16,300**	**7,100**	**23,400**	**5,400**	**4,700**	**10,000**	**100.0%**
Share %	*82%*	*18%*	*100%*	*70%*	*30%*	*100%*	*54%*	*47%*	*101%*	

Source: ME Queenstown Housing Model 2017

Refer to the main body of the report (and appendices for a full range of results by growth future and dwelling preference scenario).

Plan Enabled Capacity – Urban Environment

Having examined demand for housing in QLD, the NPS-UDC then requires that capacity for housing is identified. Different forms of capacity have been estimated using a multi-step process, which brings together spatial and non-spatial datasets. These forms include infill development (by standalone, duplex and apartment dwelling types – the latter collectively representing attached dwellings as discussed in the modelling of demand above) and greenfield development. The primary focus of this first HDCA is a detailed understanding of housing capacity in the urban environment. This therefore covers all operative and proposed District Plan zones that enable residential development as a permitted or controlled activity[14]:

- Low Density Residential (PDP)
- Medium Density Residential (PDP)
- High Density Residential (PDP)
- High Density Residential Sub-zones A and B (Operative District Plan (ODP))
- Arrowtown Residential Historic Management Zone (PDP)
- Large Lot Residential (including A and B in Wanaka) (PDP)
- Queenstown, Wanaka and Arrowtown Town Centres (PDP)
- Town Centre Sub-zone (applies to Queenstown only) (PDP)
- Town Centre Transition Zones (applies to Arrowtown and Wanaka) (PDP)
- Business Mixed Use Zones (PDP)
- Local Shopping Centres (PDP)
- Albert Town, Hawea and Luggate Townships (ODP)
- Rural Visitor (applies to Arthurs Point only), (ODP)
- Plan Change 50 (Queenstown) (ODP)
- Specific structure plan precincts[15] within Special Zones Jacks Point (PDP), Remarkables Park, Frankton Flats B, Northlake, Quail Rise, Penrith Park, Meadow Park, Arrowtown South (area within UGB), Quail Rise, Shotover Country, Three Parks (ODP).

[14] Urban environment zones excluded for the purpose of the HDCA include Visitor Accommodation Sub-Zones. It is acknowledged that some residential activities are enabled in these zones but they have been treated as capacity wholly for commercial visitor accommodation and therefore captured in the BDCA.

[15] Precincts within Special Zones that have been excluded for the purpose of the BCDA include those focussed on residential, landscape, open space, screening, protection and reserve activities and specified no-build areas.

The approach taken to calculate plan enabled capacity in the urban environment can be summarised as follows. GIS analysis undertaken by M.E first calculates the level of residential dwelling capacity provided for under the plans (in addition to the existing dwelling stock). It does this by applying the planning controls to the existing dwelling configuration to identify the area available for infill or greenfield development and the number of dwellings able to be accommodated within these areas (by type). The GIS assessment therefore identifies the area on each parcel that can potentially be subdivided under the plan, or that can accommodate an additional dwelling (or dwellings) through land use provisions.

The final outputs of this modelling identified the number of dwellings enabled on each property parcel under the District Plan (plan enabled capacity). It also identified the section size of each dwelling and the maximum size of the dwelling(s) by type (measured in square meters of gross floor area (GFA). To ensure there was no overlap or double counting of capacity with the BDCA, estimates of residential development in business zones were agreed with QLDC (that is, the number of (primarily) above ground floor storeys that were likely to be occupied by residential apartments).

In total, the District Plans[16] enables capacity for a little over 27,000 further dwellings within the three UGBs (Queenstown, Arrowtown and Wanaka) and a total of approximately 27,650 additional dwellings within the total defined urban environment (which includes Albert Town, Luggate and Hawea) (Figure 0.10). This excludes redevelopment capacity and refers to subdivision/land use capacity where additional dwellings are constructed around the existing dwelling stock without removing existing dwellings.

Approximately two-thirds (67%) of the capacity enabled under the District Plans occurs within the greenfield areas of urban expansion. The District Plans enable just over 18,200 dwellings within the UGB greenfield areas[17], approximately two-thirds (67%; 12,200 dwellings) of which are included within areas where structure plans or subdivision plans exist (i.e. within Special Zones)[18]. Nearly three-quarters (72%; 13,110 dwellings) of these greenfield dwellings are enabled within the Queenstown UGB, with a further 28% (5,080 dwellings) within the Wanaka UGB (and only a further 20 dwellings within the Arrowtown UGB, which is contained solely in the Arrowtown South Special Zone).

The District Plans enable roughly 9,000 additional dwellings (i.e. additional to the existing dwelling stock) through infill development (excluding redevelopment) within the existing urban areas within the UGBs and a further 240 in the rest of the urban environment (such as Albert Town, Luggate and Hawea). This is shown in pink column in Figure 0.10 and refers to an aggregation across all parcels of the maximum number of additional dwellings enabled under the District Plans as infill development[19]. Over half (59%; 5,230 dwellings) of these dwellings are enabled within the Queenstown UGB, with a further 40% (3,490 dwellings) within the Wanaka UGB, and the remaining 1% (110 dwellings) within the Arrowtown UGB. The capacity

[16] Reference to District Plans includes the relevant chapters in either the PDP or ODP.

[17] This also includes larger integrated developments within the existing urban edges where a structure plan exists.

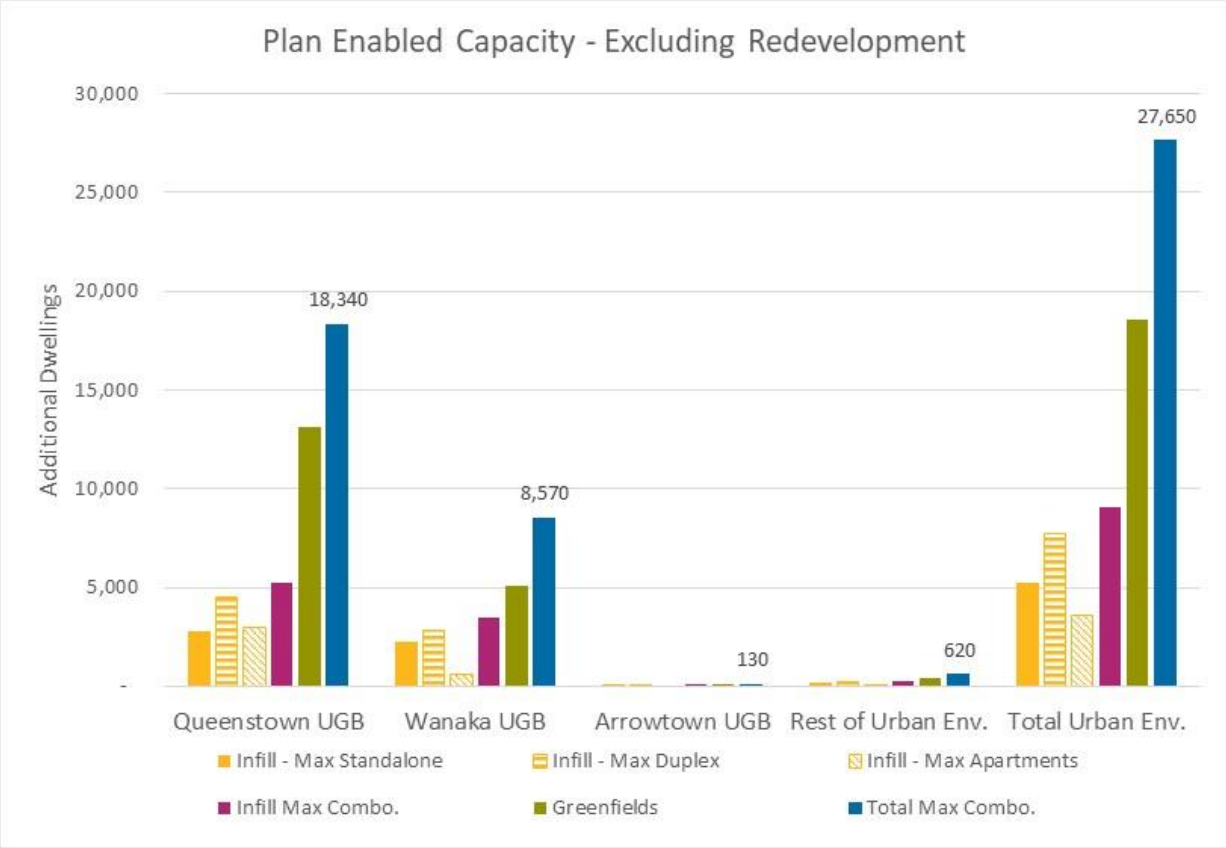
[18] These areas include Jacks Point, Remarkables Park, Hanley Downs, Homestead Bay, PC46, PC50 (which is included in the greenfields section of the model given the presence of a structure plan and developer estimates on a large piece of land), Frankton Flats, Quail Rise, Shotover Country, Penrith Park, Meadow Park, Arrowtown South, Three Parks, The Heights, Riverside Township and Northlake.

[19] Within the modelling, different numbers of dwellings are enabled on each site dependent upon the type of dwelling constructed. For example, a subdivided site may be able to accommodate four apartments, but only 2 standalone houses. The 'infill max combination' refers to the maximum combination of plan enabled dwellings that can occur through an aggregation of the maximum enabled dwellings on each site.

in Arrowtown is predominantly infill capacity from the increased densities promoted in the proposed Low Density Residential Zone.

Figure 0.10 also shows the total number of dwellings enabled under the District Plans within each dwelling typology (yellow bars). Importantly, these numbers are not additive as some sites have more than one dwelling typology enabled, with development of one type precluding development of another. In total, the District Plans potentially enable over 5,000 additional standalone houses, over half (54%) of which are within the Queenstown UGB. It potentially enables a further 7,500 duplex dwellings, and potentially a further 3,550 apartment dwellings. The Queenstown UGB contains higher shares of the enabled duplex (61%) and apartment dwellings (83%) than its share of standalone houses, reflecting the relatively higher density of development provided for within Queenstown.

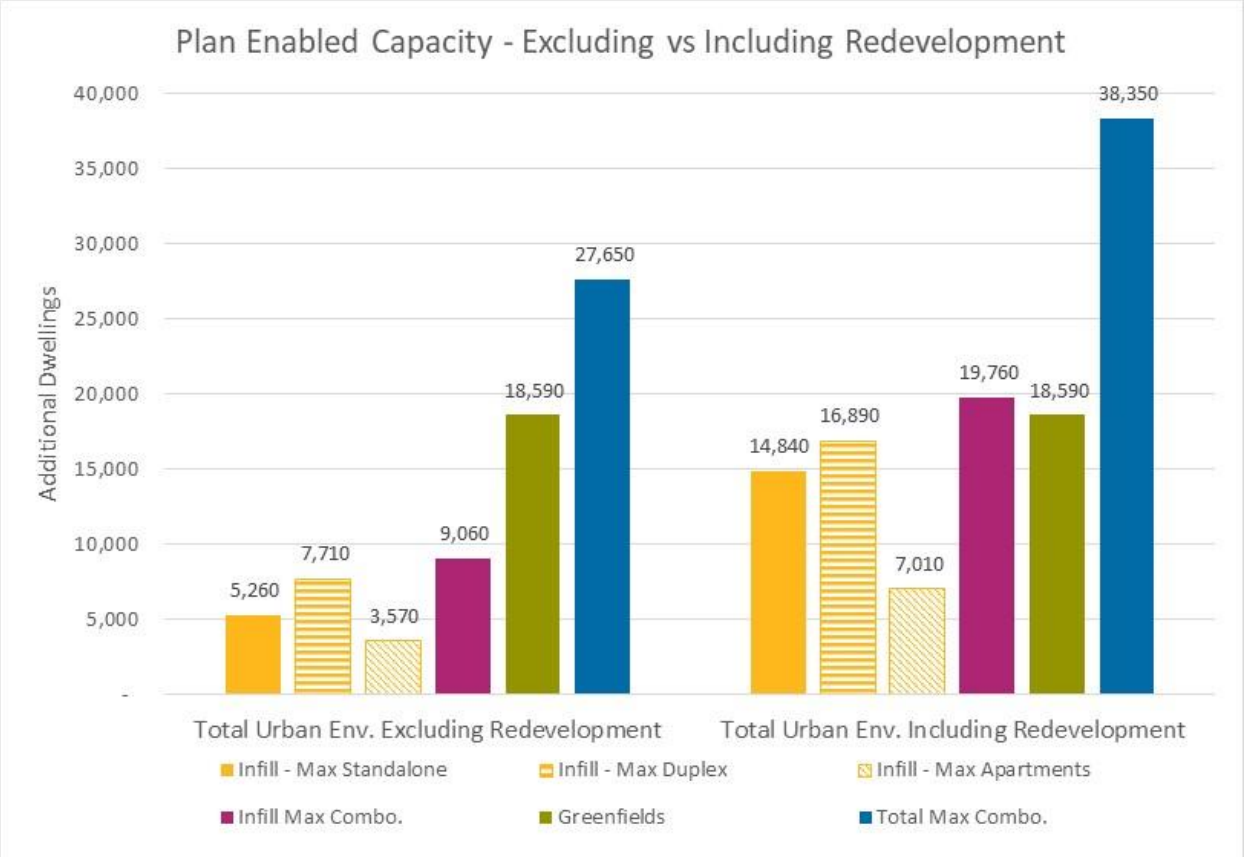
Figure 0.10 - Plan Enabled Capacity (Dwellings) - Excluding Redevelopment



When taking into account redevelopment (i.e. demolishing and rebuilding on sites where dwelling position does not favour infill or where more intensive development could occur than through infill), the number of plan enabled additional dwellings enabled under the District Plans increases to a maximum of nearly 37,600 dwellings within the UGBs or just under 38,400 dwellings across the total urban environment (where the highest combination of either subdivision/land use or redevelopment options on each site is included). This compares to 27,650 when redevelopment is excluded (Figure 0.11). When including redevelopment options, around half of the additional plan enabled capacity occurs as infill development within the existing urban area.

Queenstown UGB contains a slightly higher share of the redevelopment capacity (relative to subdivision/land use infill). In total, the District Plans enable potential for a further 14,800 net additional standalone dwellings, potential for 16,900 duplex dwellings and potential for 7,000 apartment dwellings through redevelopment across the QLD urban environment.

Figure 0.11 – Total Urban Plan Enabled Capacity (Dwellings) – Redevelopment Scenarios



The difference between subdivision/land use and redevelopment infill capacity is largest for standalone dwellings (an increase of 182%), relative to duplexes (119%) and apartments (96%) (Figure 0.11). This reflects the low density of existing development across much of the larger zones (e.g. low density residential) which cater for the greater share of standalone houses, and the higher density now enabled under the PDP. A lower ratio between redevelopment and subdivision/land use infill development for apartments suggests that existing densities within the main apartment zone areas (e.g. high density residential) are already higher on a relative basis where development patterns have been more intensive to date.

Plan Enabled Capacity – Rural Environment and SHAs

The residential capacity outside of the urban environment is complex. These areas are not presently modelled by M.E (as above) but have been modelled through the Council's investigations for the PDP. The rural environment is made up of rural and rural living and small townships and has varying levels of services, but for the majority servicing is at the cost of the developer. These areas have an important role in the

local economy as they complement the Queenstown and Wanaka Town Centres, support local communities and are areas where a high proportion of tourist activities are located.

Council estimates significant plan enabled residential capacity of at least 3,392 additional dwellings in the rural environment. This excludes capacities associated with the Wakatipu Basin variation as residential capacity in this area needs further investigation. The commercial feasibility of this plan enabled capacity has not been assessed.

SHAs in QLD provide an opportunity to get more medium/high density residential developments in appropriate locations at a much quicker rate than via the PDP or a conventional private plan change process. SHAs can potentially target specific markets and potentially addresses both speculation and affordability. The current Lead Policy in QLD requires an affordable housing contribution of at least 10% of the residential component of the development by developed market value or by area and does not involve rezoning before development.

In total eight special housing areas (SHAs) have been approved within the Wakatipu Basin. The majority of SHAs have been approved outside of the urban environment, and they have been serviced at the developers cost, with the exception of the following:

- Arthurs Point SHA is partly located in the Low Density Residential and Rural Zones of the PDP;
- Bridesdale SHA is partly zoned Low Density Residential, Rural Lifestyle and Rural in the PDP;
- Business Mixed Use Zone (Gorge Road) falls within the proposed Business Mixed Use Zone, but also includes the former Wakatipu High School site and 133 Hallenstein Street (entirely within the urban environment). This SHA is to be serviced via existing Council services and is in line with the densities that are being promoted as part of the PDP.

Net additional housing capacity provided by the approved SHAs in the Wakatipu Basin (i.e. capacity over and above any underlying plan enabled urban capacity to avoid double counting) is calculated at between 715 dwellings (PDP) and 848 (ODP).

Development and Other Infrastructure

Development infrastructure (or network infrastructure) capacity is a key factor in determining if development capacity is feasible under the NPS-UDC.

"Development infrastructure" as defined in the NPS-UDC refers to the water supply, wastewater, storm water, and land transport networks (as defined in the Land Transport Management Act 2003, to the extent that it is controlled by local authorities) that are 'critical' for urban development; and "other infrastructure" refers to other 'softer' or non-critical infrastructure such as open space, social infrastructure, telecommunications and energy. Local authorities are required to ensure (under Policy A1) that the development capacity identified in this report is, or can be, serviced by "development infrastructure". However, the "other infrastructure" necessary to support urban growth is also important for the creation of effective and efficient urban environments, and together supports the achievement of social, economic, and cultural wellbeing.

Infrastructure service levels for water and waste water are included as criteria for both Commercial Visitor Accommodation and Industrial development in the Multi Criteria Analysis (MCA) structure. The feasibility

of roading infrastructure is captured indirectly through criteria addressing traffic congestion and accessibility to major roads.

The high growth rates that QLD is experiencing require massive commitments to new development infrastructure and to the upgrading and consolidation of existing infrastructure. New or upgraded infrastructure can take a long time to plan, fund and implement. Intensification of existing urban areas has implications for the capacity, functioning and maintenance of existing networks; whereas areas of new greenfield growth require careful planning to ensure that infrastructure can be provided in an efficient manner and with regard to impacts on already planned infrastructure and long-term opportunities.

Infrastructure networks and growth need to be planned in an integrated manner to realise a range of long term benefits over a wider area than specific development sites. Integration of urban development and infrastructure is central to the objectives of the NPS-UDC, and importantly, is a requisite for the development capacity identified in this assessment under Policy A1.

Policy PA1 provides some scope for managing the risks associated with the oversupply of capacity by only requiring infrastructure to be in place in the short term, to have funding identified in the medium-term and to be included in the Infrastructure Strategy in the long-term.

QLDC planning and Infrastructure departments have worked closely together and are satisfied that all zoned land in the PDP can be serviced in the short, medium and long-term with development infrastructure. Relevant considerations include:

- Throughout the PDP stage 1 hearings process it has been confirmed that the water supply and wastewater network can accommodate the additional growth proposed through the notified PDP. More specifically, the effect of wastewater and water demand from the increased densities in the PDP has been assessed against the Council's wastewater modelling capacity for both current day and future growth, 2025 and 2055. This assessment included consideration to the currently available capacity to cater for the expected level of intensification, as well as any upgrades that may become necessary over time.

- The key areas identified for residential growth are all within the Queenstown and Wanaka 'urban environment', UGB, and the water supply and wastewater scheme boundaries; and are therefore serviced, or planned to be serviced, with development infrastructure in the context of Policy A1.

- A number of key growth areas are within 'Special Zones' of the District Plan, including Remarkables Park, Frankton Flats B, Northlake and Three Parks. These special zones have defined capacities and associated parameters relevant to the provision of servicing and transport infrastructure. Private infrastructure within these zones, such as internal road networks, provision of reserves, open space and service connections are the responsibility of the developers. The Jacks Point Special Zone is serviced by a combination of QLDC services and private schemes.

- The Queenstown and Wanaka Town Centres are currently projected to have capacity for growth in the water supply, storm water and wastewater networks. Both wastewater networks have a diminishing level of redundancy in some critical assets and a programme of capital projects to

improve the level of service in terms of redundancy is planned within the first five years of the proposed LTP.

- Council have imposed an area specific development contribution in Frankton Flats and Remarkables Park to fund the provision of stormwater. Frankton Flats area currently has marginal water supply capacity. A project to develop a new water source adjoining the Shotover River is underway and is planned to be supplying water to this growth area in 2019.
- South and East Wanaka have sufficient water supply and wastewater capacity in place for the current zoning and growth rate. It is expected that this will be further improved by the implementation of Master Plan projects that will come out of the Wanaka Masterplan process that commences this year.
- Council are proposing significant investment in water quality projects throughout the 2018-2028 LTP in addition to localised water supply capacity issues identified. These water quality projects also require significant network reconfiguration and in some cases these capacity and quality projects are inter-related.
- A number of servicing constraints exist within the Albert Town, Luggate and Hawea Township zones. Funding for all three locations has been allocated in the proposed 2018-2028 Long Term Plan and the work will take place in the next few years. As such, these issues should not be significant enough to delay development to the zoned capacity.
- In general, the QLDC is also satisfied that other infrastructure required to support urban development is likely to be available. However, QLDC is currently undertaking a number of projects to better understand the demand and use of some of these facilities.

Commercially Feasible Capacity – Urban Environment

The capacity modelling approach described above focuses on establishing plan enabled capacity. That is, the amount of theoretical capacity that arises by way of the District Plans zoning and other provisions. This volume of capacity may not translate to actual dwellings available to accommodate growth unless it is "feasible" to develop. Robust estimates of what capacity is feasible to develop in the short, medium and long-term are required under the NPS-UDC so that Council can more accurately understand whether the PDP and ODP (where relevant) provisions are appropriate to accommodate future dwelling demand within different locations across the District.

The NPS-UDC defines "feasible" as follows:

> *Feasible means that development is commercially viable, taking into account the current likely costs, revenue and yield of developing; and feasibility has a corresponding meaning.*

Feasible means commercially viable for a developer to develop given current costs, revenues and yield. A cost and revenue-based approach for residential development is relatively simple, in that the numbers of development options for a residential developer are usually relatively small – as are the ownership options. This means development feasibility can usually be determined with a simple residual value type development model. This type of model starts with the anticipated final sale price and deducts all the costs associated with development – including a developer's margin. The difference then between the final sale

price and all of the developer's costs is the amount the developer can pay for the land and remain viable. If the land is priced higher than that, then the development is not feasible and won't be developed – regardless of the zoning.

M.E has developed a Commercial Feasibility Model for QLDC that takes the results from the plan enabled capacity modelling and estimates which areas are likely to be commercially feasible to develop, as well as which areas of the existing dwelling stock are likely to be commercially feasible to redevelop to accommodate a greater number of dwellings (i.e. through demolition and rebuilding).

The Commercial Feasibility Model provides outputs at the parcel level which are then aggregated up to totals for each local area and zone. It identifies the number of dwellings of each typology that are commercially feasible to construct on each property parcel in the short, medium and long-term.

The model identifies the estimated sales price of each commercially feasible dwelling. As the model tests a range of different dwelling types and sizes, there are often multiple dwellings, at different prices, which are commercially feasible on each parcel. This price information is important in understanding the nature of dwellings that are commercially feasible and how they align with the demand. Price is a key aspect of the demand profile for dwellings and therefore forms an important part of the sufficiency assessment of feasible capacity (discussed further below).

The results below consider what portion of plan enabled capacity is profitable to develop, having already determined that it will be serviced with (and not constrained by) the provision of development and other infrastructure. Like plan enabled capacity, commercially feasible capacity does not imply that development will take place – that is, growth or up-take of this capacity cannot be inferred from these calculations.

It is estimated there is currently (in 2016) commercially feasible capacity for an additional 16,850 dwellings within the QLD UGBs (Table 0.8) and commercially feasible capacity for an additional 17,100 dwellings across the total urban environment when excluding the potential for redevelopment. Approximately half of this capacity (51%; 8,700 dwellings) is estimated to be within the greenfield areas, with the bulk of the greenfield capacity (6,000 dwellings) within the Queenstown UGB.

A further 8,100 dwelling options are estimated to be commercially feasible within the existing urban edge through subdivision/land use infill development. Within this, it is estimated there is currently capacity for 4,900 commercially feasible standalone houses, 6,000 duplex dwellings and 2,600 apartment dwellings.

Overall, approximately two-thirds (65%; 10,900 dwellings) of the commercially feasible capacity is estimated to occur within the Queenstown UGB[20]. The share is higher (79%) for infill apartment dwellings and lower for standalone houses (55%). A further 35% (5,800 dwellings) are estimated to be within the Wanaka UGB, with the remaining 1% within the Arrowtown UGB.

Overall, this equates to 62% of the plan enabled capacity being commercially feasible in 2016. The share within the existing infill areas is higher (92%), with greenfield areas estimated to be at 48%. The share of

[20] In the absence of timing information from developers, a conservative assumption was applied to the greenfield structure plan areas. It was estimated that 30% of capacity in these areas is feasible currently, 45% in the short-term (to 2019), 80% in the medium-term (to 2026) and 100% in the long-term (to 2046).

capacity estimated to be commercially feasible is similar across all three UGBs. High dwelling sales prices are the main driver of the high levels of commercial feasibility.

Table 0.7 - 2016 Commercially Feasible Capacity for Additional Dwellings (Excl. Redevelopment)

AREA	Commercially Feasible Capacity Infill Subdivision Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	2,670	3,820	2,030	4,900	5,990	10,890
Wanaka Urban Growth Boundary	2,130	2,040	540	3,110	2,730	5,840
Arrowtown Urban Growth Boundary	80	110	-	100	10	110
Total within Urban Growth Boundaries	**4,880**	**5,970**	**2,570**	**8,120**	**8,730**	**16,850**
Areas Outside Urban Growth Boundaries	180	190	20	230	-	230
TOTAL	**5,060**	**6,160**	**2,590**	**8,350**	**8,730**	**17,080**
AREA	Share of PEC feasible Infill Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	97%	84%	69%	94%	46%	59%
Wanaka Urban Growth Boundary	95%	72%	92%	89%	54%	68%
Arrowtown Urban Growth Boundary	100%	100%	-	91%	50%	85%
Total within Urban Growth Boundaries	**96%**	**80%**	**72%**	**92%**	**48%**	**62%**
Areas Outside Urban Growth Boundaries	95%	86%	100%	96%	0%	37%
TOTAL	**96%**	**80%**	**73%**	**92%**	**47%**	**62%**

Importantly, these figures identify the estimated total number of commercially feasible options, which is an important part of the basis for understanding the supply from the planning parameters. They are an aggregation of individual land parcels where dwellings are estimated to be commercially feasible to construct – i.e. the total number of commercially feasible options available to the market. They do not suggest that the market will, or is able to, deliver all of the dwellings that are estimated to be commercially feasible. Monitoring by QLDC, together with future estimates of rates of change, will provide an indication of the level of take-up of commercially feasible capacity by the market, which is likely to be much lower than the estimated commercially feasible capacity.

When redevelopment is taken into account the number of commercially feasible dwellings within the UGBs is estimated to be 24,200 dwellings. The number of dwellings within the infill area (15,500 dwellings) is approximately double the number of additional dwellings estimated under the subdivision/land use only infill development scenario.

While still high, the share of plan enabled redevelopment capacity is lower for redevelopment capacity than infill through subdivision/land use. It is estimated that approximately 60% of the plan enabled standalone houses are currently commercially feasible to construct. Slightly lower shares of the duplexes (58%) and apartments (55%) are estimated to be feasible, reflecting the lower demand and higher construction costs for higher density dwellings. Higher shares of the dwellings are commercially feasible within the Queenstown UGB than within the Wanaka UGB, demonstrating the higher prices within the Queenstown UGB.

When considering redevelopment, slightly higher shares of the capacity occur within the Queenstown UGB, reflecting the higher prices and greater potential for redevelopment within Queenstown relative to other areas of the district.

The Commercial Feasibility Model has a time component which enables it to estimate the commercial feasibility of capacity through time. Population and other demand growth will affect prices through time, which affects the feasibility of different developments through time. This enables the model to reflect typical trends within a growing urban economy where a greater range of locations and types of dwellings become commercially feasible through time.

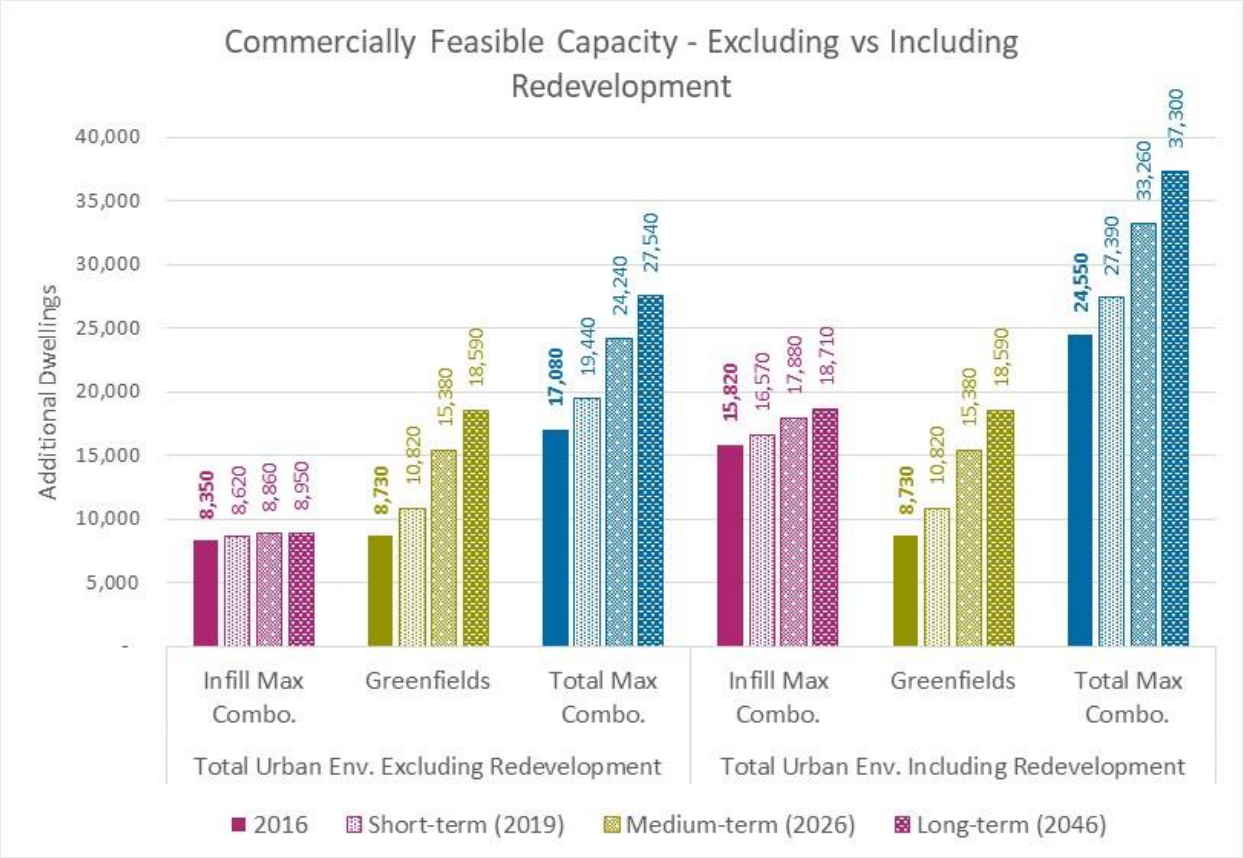
This next section provides a summary of the portion of total urban plan enabled capacity that would be feasible in the short-term (by 2019), medium-term (by 2026) and long-term (by 2046), based on projected costs and prices over each period as opposed to current (2016) costs and prices discussed above. 2016 commercial feasibility results are included as a comparator (Figure 0.11).

Again, these figures identify the estimated total number of commercially feasible options, which is an important part of the basis for understanding the supply from the planning parameters. They are an aggregation of individual land parcels where dwellings are estimated to be commercially feasible to construct – i.e. the total number of commercially feasible options available to the market. They do not suggest that the market will, or is able to, deliver all of the dwellings that are estimated to be commercially feasible.

Total commercially feasible infill and greenfield dwellings in the urban environment (excluding redevelopment) increases from 17,080 in 2016 to 19,440 in the short-term (an increase of 2,360 dwellings), 24,240 in the medium-term (an increase of 7,160 above 2016 estimates) and 27,540 in the long-term (an increase of 10,460 above 2016 estimates) (Figure 0.11). The main driver of the increase in feasibility is in greenfield development, with infill development showing little change in feasibility over time.

In terms of the share of plan enabled capacity that is feasible in each time period, this increases from 62% in 2016 to 70% in the short-term, 88% in the medium-term and 100% in the long-term, due primarily to the projected increase in sales prices relative to costs.

Figure 0.11 – Total Urban Commercially Feasible Capacity (Dwellings) – Redevelopment Scenarios



When redevelopment is included (the right-hand side of Figure 0.11), total commercially feasible infill and greenfield dwellings in the urban environment increases from 24,550 in 2016 to 27,390 in the short-term (an increase of 2,840 dwellings), 33,260 in the medium-term (an increase of 8,710 above 2016 estimates) and 37,300 in the long-term (an increase of 12,750 above 2016 estimates) (Figure 0.11). The main driver of the increase in feasibility is still in greenfield development, with infill development showing moderate increases in feasibility over time compared to the scenario excluding redevelopment.

In terms of the share of plan enabled capacity (including redevelopment) that is feasible in each time period, this increases from 64% in 2016 to 71% in the short-term, 87% in the medium-term and 97% in the long-term, due primarily to the projected increase in sales prices relative to costs.

Price Distribution of Commercially Feasible Capacity

The Commercial Feasibility Model calculates the dwelling sales price(s) at which a dwelling is estimated to be commercially feasible to construct on each parcel. It is important to understand the price distribution of the feasible dwelling capacity as price is an important consideration in the sufficiency of capacity in meeting demand under the NPS-UDC.

As the model tests a range of different dwelling typologies and sizes, there are often multiple dwellings, at different prices, which are commercially feasible on each parcel. Three scenarios have been developed where the model selects *one* commercially feasible option on each parcel to provide a total number of feasible dwellings within each price band without double counting the number of feasible dwellings.

The feasibility scenarios include:

i. The Maximum Profit Scenario where the market is assumed to be driven the largest profit margin. Here, the model selects, out of the commercially feasible options, the combination of dwelling size and typology on each parcel that delivers the greatest profit margin.

ii. The Maximum Dwelling Scenario where the market is assumed to be driven by providing the largest number of dwellings on each parcel. Here, the model selects, out of the commercially feasible options, the combination of dwelling size and typology on each parcel that delivers the greatest number of dwellings.

iii. The Cheapest Dwelling Scenario where the market is assumed to be driven by providing the cheapest commercially feasible dwellings. Here, the model selects, out of the commercially feasible options, the combination of dwelling size and typology on each parcel that has the cheapest estimated sales price.

The scenarios provide a range of results within which to assess the sufficiency of capacity. The results below relate to the combined UGB areas within the urban environment (results for each UGB are contained in the main body of the report). All sales prices are presented in $2016 values.

Figure 0.12 shows the price distribution of additional dwellings that are estimated to be currently (2016) commercially feasible within the district's UGBs for each of the three scenarios. Each scenario delivers different numbers of dwellings given the differences in the range of potential dwelling options on each property parcel. The maximum dwellings scenario has the largest number of additional dwellings (24,000 dwellings), followed by the cheapest dwellings scenario (23,500 dwellings) and the maximum profit scenario with the least dwellings (21,300 dwellings).

The price distribution under the cheapest dwelling scenario differs to the maximum profit and maximum number of dwellings scenarios where it has a higher share of feasible dwellings within the mid-price brackets. Nearly three-quarters (72%) of the feasible dwellings within the cheapest price scenario have an estimated sales price less than $880,000.

Greater similarity in the price distribution exists between the maximum dwellings and maximum profit scenarios. In each of these scenarios, only one-quarter (24%) of the feasible dwellings have an estimated sales price of less than $880,000. Around 60-65% of the dwellings within these scenarios have an estimated sales price within the mid to higher price brackets ($730,000 to $1.17m), and a cluster of dwellings (26-28%) within the higher price brackets of $1.31m to $1.75m. The maximum profit scenario has a slightly higher share of dwellings within the higher price brackets than the maximum dwellings scenario.

Figure 0.12 – 2016 Commercially Feasible Dwellings by Price Bracket within UGBs

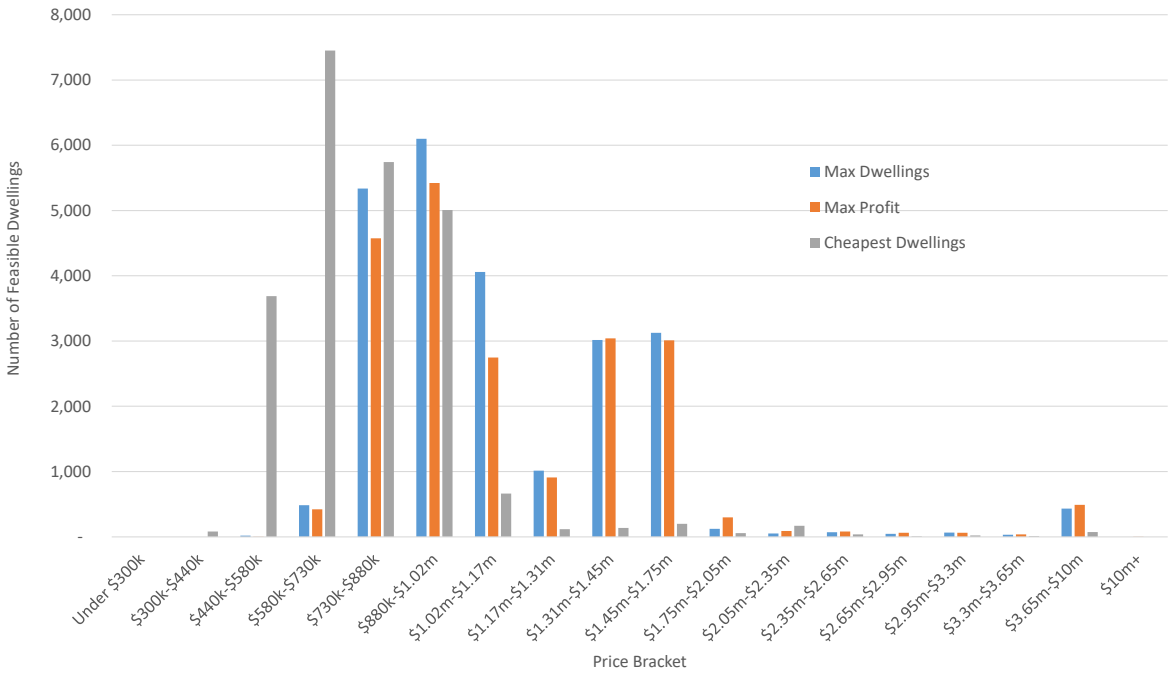
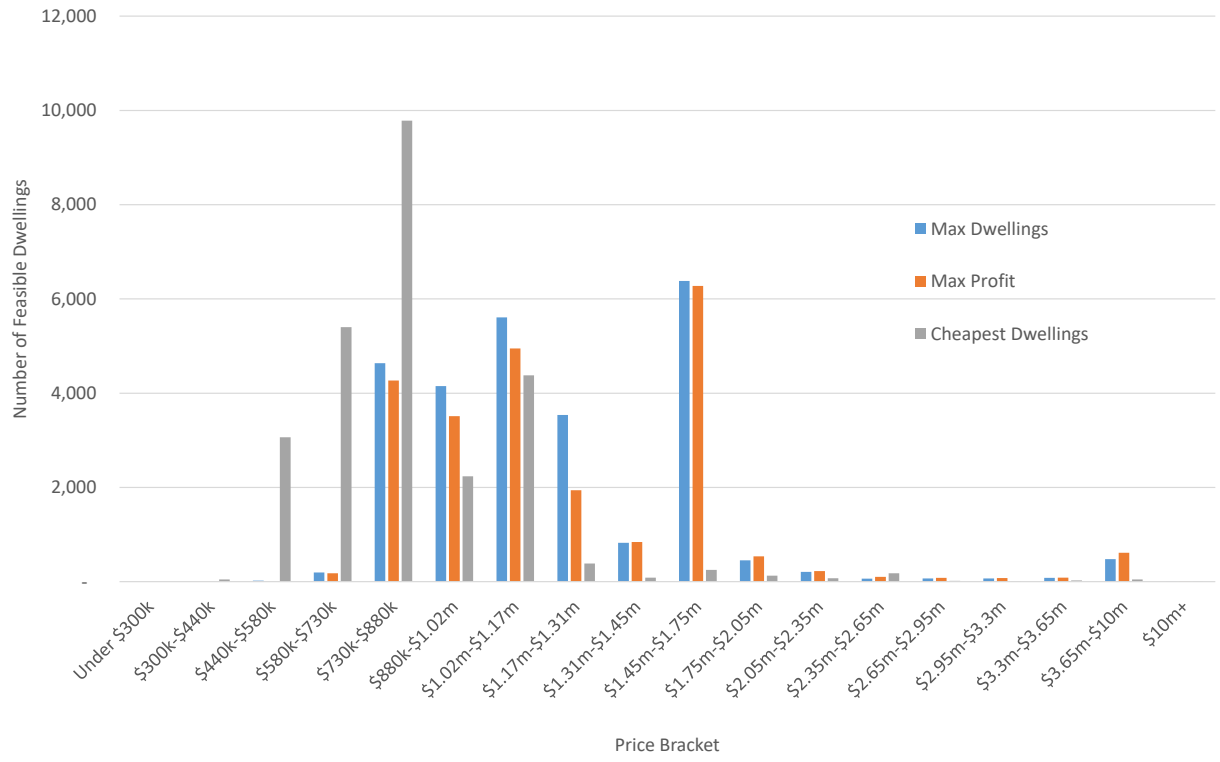


Figure 0.13 shows the price distribution of additional dwellings that are currently estimated to be commercially feasible within the short-term within the district's UGBs for each of the three scenarios (i.e. by 2019). Refer to the main body of the report for medium-term and long-term results. Each scenario delivers different numbers of dwellings given the differences in the range of potential dwelling options on each property parcel. The maximum dwellings scenario has the largest number of additional dwellings (26,800 dwellings), followed by the cheapest dwellings scenario (26,100 dwellings) and the maximum profit scenario with the least dwellings (23,700 dwellings). Overall the price distributions are estimated to shift to be more expensive than the current situation to reflect a real increase in house prices.

The price distribution under the cheapest dwelling scenario differs to the maximum profit and maximum number of dwellings scenarios where it has a higher share of feasible dwellings within the mid-price brackets. Approximately 70% of the feasible dwellings within the cheapest price scenario have an estimated sales price less than $880,000.

Greater similarity in the price distribution exists between the maximum dwellings and maximum profit scenarios. In each of these scenarios, less than one-fifth (18%-19%) of the feasible dwellings have an estimated sales price of less than $880,000. Around 62 to 67% of the dwellings within these scenarios have an estimated sales price within the mid to higher price brackets ($730,000 to $1.17m), and a cluster of dwellings (24%-26%) within the higher price brackets of $1.45m to $1.75m. The maximum profit scenario has a slightly higher share of dwellings within the higher price brackets than the maximum dwellings scenario in the short-term.

Figure 0.13 – Short-term Commercially Feasible Dwellings by Price Bracket within UGBs



The current and projected model results shown above are underpinned by growth rate assumptions around development costs and sales prices. Based on past trends, the model assumes that costs and sales prices will increase through time. Construction costs have been assumed to increase by 1.0% per annum and Appendix 11 contains the sales price growth rates within the model.

The short-term results contain the greatest reliability. Greater care is required over the medium to long-term as the property market is prone to price fluctuations through time. The overall results for the QLD urban area are less sensitive to future assumptions about price and cost changes given the high levels of feasibility estimated to currently exist.

Sufficiency of Capacity

The results of the demand and feasible capacity assessments are brought together to provide a quantitative comparison between them to determine the sufficiency of capacity provided for in the QLD residential enabled zones. The NPS-UDC Policy A1 requires local authorities to ensure that "*at any one time there is sufficient development capacity*". That means that the land is zoned and feasible for the next 10 years and has been identified in the various plans and strategic documents over the next 30 years.

It is not appropriate to consider just the net increase in demand against the net increase in housing capacity. This is because demand for new dwellings is not limited to new households in an economy. By comparing total dwelling demand (existing and net new households) by value band with total dwelling supply (existing estate plus new feasible capacity discussed in the sections above), the normal churn in the market is broadly incorporated.

The existing QLD dwelling estate will not remain unchanged into the future, and individual property values will shift over time, within the context of the wide whole-of-estate shift. The modelling has taken this into account.

The feasibility scenarios (discussed above) have provided a range of results, where the housing market is assumed to be driven variously by maximum profit potential on all dwellings, or by maximising the number of dwellings which may be feasibly built, or by providing for dwellings at the lowest feasible cost.

Each and all of these drivers are present in the residential construction sector, and it is not realistic to assume that one will be dominant in every residential development decision, particularly when there are many individual entities involved in residential construction, and their decision-making includes a range of influences, including profitability but also taking into account the degree of competition, and the opportunity to work profitably in specific market niches. This means that maximising profit at the district level or industry level may result from not just developing the dwelling with the greatest margin but building profitably in niches where there is demand but less competition from other providers, lower marketing and sale costs, shorter time lags between completion and sale, and so on.

The consequence of this mix of drivers for a well-informed supply sector is that the likely feasible supply outcome will be close to the average volume of supply across the three scenarios, rather than a single supply outcome being representative. This means that the average of the feasible capacity estimates is an appropriate indicator (and is represented in the analysis below).

Last, the sufficiency assessment is based on current values in real terms. This means that for the estimates of future feasible supply the dwelling value bands need to be deflated to reflect the value shifts in real terms, rather than nominal terms which progressively shifts the feasible dwelling estimates into higher value bands. To make this adjustment, the value bands for the future feasible dwellings have been deflated at a rate of 1.8% pa. This allows both for increases in real terms to bring progressively more dwellings into the "feasible" category, and not dis-locate that capacity from the existing housing market. Simply, this allows the estimates to be expressed in real $2016 terms.

Sufficiency is assessed for three time periods 2016-2019, 2016-2026, and 2016-2046 – and for Medium and High growth scenarios. For brevity, only long-term sufficiency is reported below. Importantly, the QLD total analysis of sufficiency draws on total district dwelling demand but compares this feasible capacity for the urban environment – as this is the limit of modelled capacity by value band at this stage. Additional capacity available in the rural environment, and net additional capacity created in approved SHAs (not included in the modelling) are identified in the context of total district capacity but are not quantified. The QLD urban environment analysis of sufficiency does compare like-for-like geographies for demand and supply but is not summarised here (refer the main body of the report).

Total District Sufficiency

At the high level, direct comparison of total district projected demand with total (urban) feasible supply indicates that, overall, there is plenty of capacity for the QLD market, into the long-term. This is because there is substantial capacity in existing urban greenfield areas, in the order of 12,200 dwellings. In addition, there is substantial feasible capacity through urban redevelopment and infill, in excess of 22,000 dwellings in the longer term. There is also capacity in the rural environment and within approved SHAs.

This capacity exceeds the projected growth in total district dwelling demand to 2046 in all demand futures (Low +7,800 dwellings, Medium +11,600 dwellings, High +16,300 dwellings, and QLDC Recommended +13,300 dwellings). For example, the urban greenfield capacity by itself is only 4,000 dwellings fewer than the total district High growth future.

Policy C1 of the NPS-UDC states that local authorities shall provide an additional margin of feasible development capacity over and above projected demand of at least 20% in the short and medium-term and 15% in the long-term. It is not considered that a higher margin is more appropriate, but these margins will be reviewed in future HDCA updates (Policy C2). Even taking account of the recommended margins on top of demand (Low +9,000 dwellings, Medium +13,400 dwellings, High +18,800 dwellings, and QLDC Recommended +15,300 dwellings), there is still plenty of capacity for the QLD market, into the long-term.

Total District Sufficiency by Value Band

Table 0.9 sets out the estimated demand and supply situation for total QLD by value band in the long-term (as at 2046) in the medium growth future. Refer to the main body of the report for short-term and medium-term results for this growth future. Total feasible capacity by then is estimated at 54,100 dwellings including the existing estate (17,600 dwellings), together with an estimated 12,200 greenfield (the long-term total) and 24,300 feasible through infill and redevelopment, another 36,500 in total.

Total dwelling demand for 2046 is projected at 29,300, comprising 24,000 resident households (up by 10,300 over the 30 years) and 5,300 dwellings for absentee owners (up by 1,400).

The overall capacity surplus would be 24,800 dwellings (+85% in total). However, this overall surplus contains net shortfalls in the five lowest dwelling value bands (shaded in the table), representing -2,460 dwellings in total mainly in the under $580,000 value bands, and 84% sufficiency in those bands.

Table 0.8 – Total QLD Long-term Housing Sufficiency – Medium Growth 2046

Total QLD : Medium Growth Future 2046											
	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
Dwelling Value Band $000)	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	280	-	-	280	350	-	350	- 70	80%	- 100	74%
$300k-$440k	850	110	270	1,230	1,500	120	1,620	- 390	76%	- 510	71%
$440k-$580k	1,790	210	320	2,320	3,170	260	3,430	- 1,110	68%	- 1,350	63%
$580k-$730k	2,330	700	1,550	4,580	4,260	930	5,190	- 610	88%	- 900	84%
$730k-$880k	2,210	710	1,740	4,660	3,970	970	4,940	- 280	94%	- 520	90%
$880k-$1.02m	1,560	490	2,120	4,170	2,800	690	3,490	680	119%	500	114%
$1.02m-$1.17m	1,050	320	2,760	4,130	1,830	460	2,290	1,840	180%	1,730	172%
$1.17m-$1.31m	850	80	2,180	3,110	1,550	100	1,650	1,460	188%	1,370	179%
$1.31m-$1.45m	520	210	3,500	4,230	820	260	1,080	3,150	392%	3,100	374%
$1.45m-$1.75m	620	250	6,320	7,190	1,140	340	1,480	5,710	486%	5,640	464%
$1.75m-$2.05m	500	170	4,790	5,460	840	230	1,070	4,390	510%	4,340	488%
$2.05m-$2.35m	280	160	1,910	2,350	480	220	700	1,650	336%	1,620	322%
$2.35m-$2.65m	190	110	2,640	2,940	340	140	480	2,460	613%	2,440	588%
$2.65m-$2.95m	140	80	3,090	3,310	230	100	330	2,980	1003%	2,960	946%
$2.95m-$3.3m	150	50	1,410	1,610	210	90	300	1,310	537%	1,300	519%
$3.3m-$3.65m	100	90	1,260	1,450	110	80	190	1,260	763%	1,250	725%
$3.65m+	250	200	650	1,100	420	300	720	380	153%	360	149%
Total	13,700	3,900	36,500	54,100	24,000	5,300	29,300	24,800	185%	23,200	175%
Shortfall Bands	7,460	1,730	3,880	13,070	13,250	2,280	15,530	- 2,460	84%	- 3,380	79%

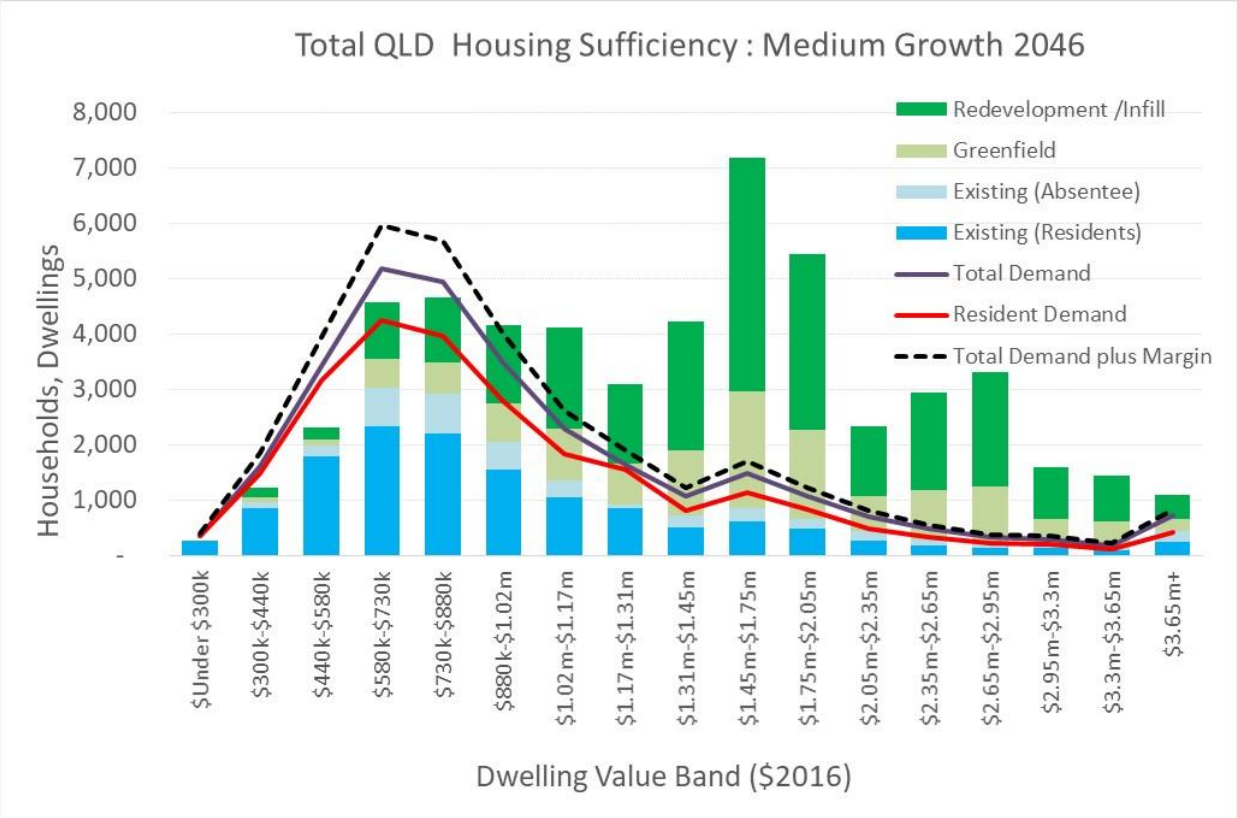
Source: ME Queenstown Housing Model 2017

Figure 0.14 shows the supply side and the demand side in each value band, as estimated for 2046. Overall demand still peaks in the $580-730,000 band, and the $730-880,000 band. The feasibility estimates indicate considerable further capacity in these bands, although the indicated shortfall is across five lower bands.

Capacity in SHAs and the rural environment is not included, and the base situation shows the average of the dwelling feasibility scenarios. The indicated capacity for lower value dwellings in the SHAs would reduce the indicated shortfall to a minor degree.

If allowance is made for long-term growth to be 15% higher than projected, for the NPS-UDC margin, the shortfall in the lower value bands would be larger, at -3,380 dwellings (79% sufficiency). Total sufficiency would still be substantial, with potential supply exceeding demand by 23,200 dwellings (rather than 24,800).

Figure 0.14 – Total QLD Long-term Housing Sufficiency – Medium Growth 2046



The estimated demand and supply situation for total QLD by value band in the long-term (as at 2046) in the high growth future is provided to show an upper range for sufficiency. Refer to the main body of the report for short-term and medium-term results for the high growth future. Again, this compares total district demand with urban housing capacity, with additional rural and SHA capacity considered (but not quantified) in that context.

The overall long-term capacity surplus under the high growth future would be 20,200 dwellings (+59 in total). However, as previously, this overall surplus contains net shortfalls in the five lowest dwelling value bands, representing -4,930 dwellings in total mainly in the under $580,000 value bands, and 73% sufficiency in those bands. As previously, capacity in SHA blocks and the rural environment are not included, and the

base situation shows the average of the dwelling feasibility scenarios. The indicated capacity for lower value dwellings in the SHAs would reduce the indicated shortfall to a minor degree.

If allowance is made for long-term growth to be 15% higher than projected, to accommodate the margin required by the NPS-UDC, the shortfall in the lower value bands would be larger, at -6,150 dwellings (68% sufficiency). Total sufficiency would still be very substantial, with potential supply exceeding demand by 18,000 dwellings (rather than 20,200).

Sufficiency Summary

The demand and capacity assessment in this HDCA shows a consistent pattern where QLD total housing capacity is well in excess of demand, for both urban QLD and the total District in the short, medium and long-term. This includes allowance for the margins required by the NPS-UDC and assessment under a medium and high growth outlook (which spans Council's Recommended growth projection). At a high-level, this satisfies Policy A1 of the NPS-UDC.

However, the base case analysis shows small and later medium scale shortfalls in the lowest dwelling value bands. This is relevant to Policy B1a. The reason is clear, that there is considerable demand growth expected for these lower value bands – generally under $580,000 – but limited supply currently and limited additional feasible supply into the long-term.

A number of caveats must be stated. First, the capacity assessment does not include net additional SHA capacity, which would be expected to focus at least some additional supply in the lower value bands. Nor does it include the capacity in the rural environment, some of which falls within urban development typologies as opposed to larger lifestyle properties (i.e. in the small township zones like Kinloch, Glenorchy, Kingston and Makarora). These are also expected to supply some capacity in the lower value bands.

Second, the base case supply assessment has been the average of the three supply scenarios - Max Profit, Maximum Dwellings, Cheapest dwellings. The Cheapest dwellings scenario identifies housing which it is feasible to build, so this scenario may be distinguished from supply options which include some subsidy or a specified share of low value dwellings (such as some SHA structures, or the Government's indicated KiwiBuild strategy to develop dwellings for $500,000 in areas outside Auckland).

To illustrate, Table 0.10 shows the difference in the Net Sufficiency estimates for the high growth future to 2046. The two columns on the left compare the outcomes for QLD urban, one showing the Average supply outcome, the second column the outcome under the Cheapest dwellings scenario. A focus on lower cost dwellings would reduce the net shortfall by nearly three-fifths from -5,190 to -2,210, a difference of some 2,980 dwellings. A similar outcome is shown for QLD Total, again in the high growth future to 2046. The focus on cheapest dwellings would reduce the shortfall by half, especially in the critical low value bands.

Given the solid demand for lower value dwellings, and that the estimates show lower value dwellings which are nevertheless feasible to build, there is scope for a substantial share of the potential shortfall in lower dwelling bands to be addressed by the commercial housing market.

Table 0.9 – Effects of Different Housing Supply Futures - High Growth 2046

Dwelling Value Band $000)	QLD Urban High		QLD Total High	
	Average	Cheapest Dwellings	Average	Cheapest Dwellings
$Under $300k	- 130	- 100	- 120	- 120
$300k-$440k	- 440	- 570	- 650	- 140
$440k-$580k	- 1,590	- 1,540	- 1,660	- 1,130
$580k-$730k	- 1,660	160	- 1,450	300
$730k-$880k	- 1,370	1,190	- 1,050	1,340
$880k-$1.02m	90	4,190	140	3,980
$1.02m-$1.17m	1,530	5,910	1,480	5,570
$1.17m-$1.31m	1,390	4,670	1,220	4,310
$1.31m-$1.45m	3,020	2,370	2,980	2,230
$1.45m-$1.75m	5,670	3,140	5,500	2,820
$1.75m-$2.05m	4,330	1,840	4,210	1,640
$2.05m-$2.35m	1,640	250	1,530	130
$2.35m-$2.65m	2,490	70	2,360	- 30
$2.65m-$2.95m	2,980	80	2,930	50
$2.95m-$3.3m	1,300	- 10	1,250	- 70
$3.3m-$3.65m	1,230	80	1,230	90
$3.65m+	500	- 90	260	- 350
Total	21,000	21,600	20,200	20,600
Shortfall Bands	- *5,190*	- *2,210*	- *4,930*	- *1,390*

Source: ME Queenstown Housing Model 2017

Two further aspects are important. First, the apparent shortfall is limited to the lower value bands, and even in those bands the shortfall is relatively small in the short and medium-terms. Second, the results are sensitive to the estimates of both feasibility and market positioning of new dwellings, and uncertainty levels increase with the length of time for any projection. Table 0.11 compares the outcomes for urban QLD for the short, medium and long-terms (medium growth future). The increase in the indicated shortfall over time, the variability according to assumed market position, and the substantial indicated capacity in total and across other dwelling value bands, all indicate considerable potential for market responses which to reduce or eliminate the shortfalls in those lower value bands.

Table 0.10 – Effects of Different Housing Supply Futures – Medium Growth 2046

Dwelling Value Band	Average of Feasible			Cheapest Dwellings		
	2019	2026	2046	2019	2026	2046
$Under $300k	-40	-50	-60	-40	-40	-60
$300k-$440k	-90	-180	-390	40	-130	-380
$440k-$580k	750	-150	-1,160	2,850	700	-1,090
$580k-$730k	1,780	1,160	-1,060	5,120	4,990	930
$730k-$880k	5,770	1,930	-630	8,750	6,400	1,960
$880k-$1.02m	3,210	2,990	780	2,150	6,520	4,710
$1.02m-$1.17m	4,570	3,410	2,040	3,900	3,320	6,240
$1.17m-$1.31m	1,760	3,760	1,740	340	1,660	4,880
$1.31m-$1.45m	750	4,150	3,110	100	2,910	2,500
$1.45m-$1.75m	3,790	3,580	5,970	210	510	3,290
$1.75m-$2.05m	340	2,720	4,490	120	220	1,960
$2.05m-$2.35m	140	2,310	1,610	60	140	320
$2.35m-$2.65m	90	260	2,520	140	20	120
$2.65m-$2.95m	50	160	3,070	10	-20	110
$2.95m-$3.3m	50	90	1,340	10	-10	30
$3.3m-$3.65m	70	190	1,210	10	-	90
$3.65m+	360	560	560	60	50	-40
Total	23,400	26,900	25,100	23,800	27,200	25,600
Shortfall Bands	-130	-380	-3,300	-40	-170	-1,530

Source: ME Queenstown Housing Model 2017

The third caveat is that no account has been taken of the potential for the KiwiBuild strategy to have some representation in QLD. KiwiBuild aims to build 100,000 affordable dwellings over 10 years, including 50,000 outside of Auckland. Assuming that some of the proposed dwellings would be directed to the South Island and given that QLD is expected to account for a substantial share of total South Island growth (approximately 1,000 to 2,500 new homes), and the widely reported affordability challenges in QLD, then there is potential for QLD to attract some share of the KiwiBuild programme. That would be expected to have a significant effect on the lower value end of the market.

This should be seen at this stage as a possibility, and no more. There is no detail yet on the structure or roll-out of KiwiBuild, and QLD may or may not be part of it.

Up-take of Feasible Capacity and Implications for Total Dwelling Sufficiency

It is important not to confuse feasible capacity with growth. The expected take-up of feasible development capacity is what determines actual development over a particular time period. Actual development is what really matters.

The number of issued code of compliance certificates in QLD has increased steadily in recent years. In 2015, the Council only issued 513 code of compliances certificates for residential units (noting that multiple residential units could be on one certificate), this increased to 686 in 2016 and 700 in 2017. This indicates a 36% increase in residential certificates issued over a three year period and this is likely to continue increasing throughout 2018.

Nonetheless, it is expected that rates of take-up in QLD form only a small portion of the identified feasible capacity, particularly within the infill areas, within any individual year. There is a large amount of feasible capacity available across most locations in the District. Almost all of projected urban housing demand could be met within the greenfield areas, which typically have higher rates of take-up as they are subject to less market constraints. As such, a rate of capacity take-up substantially below the level of feasible capacity within QLD's existing urban areas is unlikely to cause a constraint on growth.

Discussions with stakeholders have confirmed that the QLDC needs to be cautious on the weight given to infill capacity, noting there was a lot more certainty and less risk with the development of greenfield areas. However, only a small share of the feasible infill capacity identified would need to be up-taken within the infill areas, together with greenfield development, to meet the projected demand[21].

The presence of a level of feasible capacity substantially above the projected demand suggests that growth is not constrained by the Plan, but by other factors within the market that influence the rate of take-up of any feasible development opportunities. Further supply of land or density provisions, where already expansively available, are therefore unlikely in and of themselves to increase the rate of take-up.

Monitoring and Recommendations

In light of the pressures facing the QLD including increasing population and the competing demands on the residential units such as increased demand from residential visitor accommodation (Airbnb and BookaBach) and migrant workers, the QLDC will need to be vigilant in monitoring the up-take of vacant sites, due to the significant levels of capacity tied up in the Special Zones. Infill capacity and brownfield developments will also need to be monitored to understand the level of impact that this is having on overall capacities and the type and value of residential accommodation that is being built. This is particularly timely with the release of decisions for Stage 1 of the PDP in May 2018.

Further work with the CODC, New Zealand Transport Agency (NZTA) and Otago Regional Council (ORC) is also required to further understand the interaction of the Cromwell and QLD housing markets, and the impact that increasing house prices and demands of the QLD is having on the Cromwell market.

Similarly, to other High Growth Councils the QLDC need to work on the further integration of the HDCA (and BDCA) with the LTP and the Infrastructure Strategy. All these reports / strategies will need to be aligned so that the results inform each other. In particular, the HDCA has highlighted that further integration with transport, cycling/walking and public transport planning is required. The QLDC have worked with the various Council departments to agree on annual reporting periods and dates for the pulling of data. The NPS-UDC has been a catalyst to encourage the increased collaboration between different Council Departments.

The analysis of demand and feasible plan enabled capacity in this HDCA shows that the Operative and Proposed District Plans are able to meet all the requirements under the NPS-UDC in terms of total capacity for growth.

[21] This does not suggest that greenfield development is preferable to infill development. Rather, it is referred to as a source of capacity that has higher uptake rates reflecting the lesser constraint of other market factors affecting rates of uptake.

The UGBs effectively provide for growth in a range of locations and there is also capacity for growth in localities across the rural environment. The PDP increases the opportunities for intensification through infill development as well further green field capacity – all in the context of an outstanding natural environment. The provisions also provide for a range of dwelling types and locations.

The analysis shows that the existing and future dwelling estate is expected to meet the housing requirements of the majority of the future district population. The analysis does however indicate a shortfall in lower value/affordable dwellings. This shortage lies predominantly with properties of under $$_{2016}$600,000, which coincides with the Governments' KiwiBuild Strategy.

QLD has relatively high property values – a product of its popularity as a holiday and investment location and its relatively rapid growth and a range of physical constraints on development. This combination of features means that increasing the supply of dwellings in the lower value bands (e.g. under $600,000) will take specific effort and initiatives to make development of such dwellings feasible. Further supply of zoned land or enabling greater density to address this likely shortage, is unlikely to increase the rate of building within this lower part of the housing market on its own.

Price targeted housing could be provided through Special Housing Areas and potentially the Government's KiwiBuild Scheme. In addition, the Mayoral Housing Affordability Taskforce and the QLDC are investigating other mechanisms to increase the supply of affordable housing throughout the QLD, including Secure Home and Long Term Rental products. The proposed visitor accommodation provisions of the PDP also aim to enable short term letting of whole residential units and residential flats for visitor accommodation within particular residential zones, and to ensure sufficient capacity for permanent accommodation and long term renting is maintained in other residential areas. Development of an Affordable and Community Housing Chapter is being investigated as part of Stage 3 of the PDP process.

The results of this HDCA highlight that zoning large areas of land for residential development will not guarantee lower land and house prices. Complementing mechanisms like zoning and development controls in the District Plan with restrictions of residential visitor accommodation and other interventions will be important to help ensure a balanced future dwelling estate and an efficiently functioning development market.

1 Introduction

The National Policy Statement on Urban Capacity[22] (NPS-UDC) came into effect on 1 December 2016 and requires local authorities to ensure there is enough[23] housing and business land to meet expected demands over a 30-year period.

Under the Resource Management Act 1991 (RMA), Regional Policy Statements, Regional Plans and District Plans must give effect to the objectives and policies of the NPS-UDC. This means that the results of this assessment will inform the setting of targets for housing and business land to be included in the District Plan, and any zoning and provisions required to achieve them.

Queenstown Lakes District (QLD) is identified as a "high growth urban area"[24] under the NPS-UDC and is subject to the full suite of provisions of the NPS-UDC. Queenstown Lakes District Council (QLDC) must complete a comprehensive assessment of demand and capacity in the District Plan for both housing and business activities at least every three years, starting from 31 December 2017.

This report, prepared by Market Economics Limited (M.E) in collaboration with QLDC, delivers the first Housing Development Capacity Assessment (HDCA). A Business Development Capacity Assessment (BDCA) has also been undertaken and is detailed in a separate report[25]. This report briefly touches on the interaction between the two markets. The two (housing and business) assessments should help local authorities to quantify in broad terms how much development capacity is, or should be, provided in resource management plans and supported with development infrastructure, to enable the supply of housing (and business) space that meets demand.

The HDCA provides detailed analysis of the QLD housing market, including drivers and influences on demand and supply, and the sufficiency of capacity provided within the District Plans (both Proposed and Operative). The QLD housing market is complex and a significant source of housing demand is generated from migrant workers and visitors (who rent or purchase holiday homes). The demand generated by these sources has had to be built into QLDC population and dwelling projections. As a simple summary, the approach taken in the assessment, and detailed in this report, is:

- **Demand Assessment (Sections 3 and 4):** an assessment of demand for dwellings over the short-term 2016-2019, medium-term 2019-2026 and long-term 2026-2046.
- **Capacity Assessment (Section 5.3):** an assessment of plan enabled (zoned) capacity for housing over the short-term, medium-term and long-term.

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[22] http://www.mfe.govt.nz/sites/default/files/media/Towns%20and%20cities/National_Policy_Statement_on_Urban_Development_Capacity_2016-final.pdf

[23] Housing and business land capacity must be "sufficient" and "feasible" in accordance with the NPS-UDC

[24] "High-growth urban area" is defined in the NPS-UDC. Queenstown is defined as a high growth urban area due to having a combined resident population and visitor population of over 30,000 people, and the resident population is projected to grow by more than 10% between 2013 to 2023.

[25] Business Development Capacity Assessment 2017 – Queenstown Lakes District, xxx 2018

- **Feasibility assessment (Section 5.4):** the portion of housing capacity which is "feasible"
- **Sufficiency assessment (Section 6):** the results of the demand and capacity assessments are brought together to determine the sufficiency of capacity provided for in the QLD District Plan zones.

The HDCA results contained in this report will be a key part of Council's evidence base to inform future planning and infrastructure decisions, in particular the development of a Future Development Strategy (FDS) [26] which is also required under the NPS-UDC by December 2018. The results will also inform the setting of targets in the District Plan and the Proposed Regional Policy Statement for Otago to ensure that sufficient housing capacity is provided in the medium (to 2026) and long-term (to 2046). The HDCA will also allow the QLDC to better understand the key drivers of demand and capacity of housing so that they are better placed to adapt to future changes, such as the significant population growth that has taken place over the past 10 years.

This HDCA focuses on the development *capacity* of the Queenstown and Wanaka urban environments[27] which have each been defined and discussed further in section 1.2. Areas outside the urban environment have been included in the *demand* assessment, which includes the District as a whole, but these areas have not been modelled specifically in terms of capacity. It is acknowledged that the responsive planning policies of the NPS-UDC can be applied outside the boundaries of the urban environment, however this is the second phase of the NPS-UDC implementation that follows from the results of this assessment and will be considered in the FDS.

QLDC also recognise that there is anecdotal evidence that drivers of demand in Queenstown and Wanaka also affect the business and housing markets in other smaller nearby centres, particularly Cromwell, and in areas that are located outside the urban environment. This assessment briefly discusses the interrelationship of the Queenstown and Wanaka markets to Cromwell and the rural environment. QLDC acknowledge that more collaboration will be required with the Central Otago District Council (CODC), in particular investigating the demand and supply of housing land that services both Queenstown and Wanaka; and to what extent demand for particular price point's that cannot be met locally transfers to Cromwell. CODC is currently not defined as a medium or high growth urban area, and although the NPS-UDC still applies to the district, CODC is not currently required to prepare a BDCA or HDCA. Therefore, there was limited quantitative data that could be utilised for QLD's current assessment. This has been earmarked as an area that requires further work and collaboration.

The NPS-UDC seeks to achieve better integration across local and regional markets through collaboration across administrative boundaries. QLDC has been working alongside the Otago Regional Council (ORC) in the development of this assessment and has involved them in all workshops.

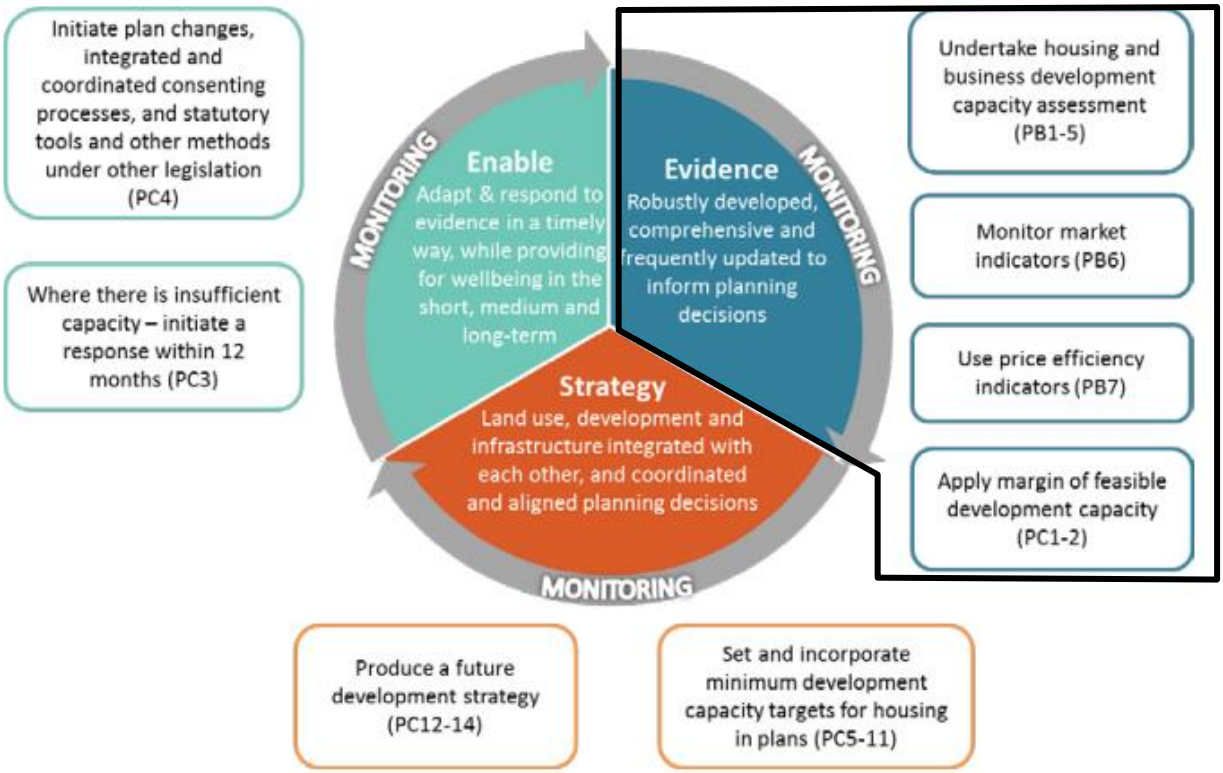
[26] The Future Development Strategy is detailed in Policies C12 to C14 of the NPS-UDC and is required to demonstrate that there will be sufficient, feasible development capacity in the medium and long-term and set out how the minimum targets under Policies C5 and C9 will be met.

[27] 'Urban Environment' is defined in the NPS-UDC

1.1 Purpose of the NPS-UDC

The NPS-UDC requires local authorities to ensure that there is sufficient housing and business land to meet expected demands over the short (3 years), medium (10 years) and long-term (30 years). To do so, it establishes a comprehensive staged assessment process to ensure local authorities gain a more fine-grained understanding of the economic influences on capacity and demand in order to better plan for growth. Figure 1.1 illustrates the various stages and deliverables of the NPS-UDC. The HDCA and BDCA fall within the Evidence portion of the NPS-UDC (as shown by the black box).

Figure 1.1 – Summary of NPS-UDC Polices, Stages and Deliverables[28]



The NPS-UDC identifies that urban environments are areas where population and economic activities are in close proximity, and that they are often growing at significantly higher rates than in rural or provincial settings. This dynamism leads to unique and challenging conditions that require particular policy responses to manage effects and ensure that growth is managed in a manner that is both efficient and ensures that communities continue to be able to provide for their social, cultural, environmental and economic wellbeing.

To effectively plan for, and manage growth, it is important to understand particular influences on growth within the urban environment, both population and economic. Local authorities can make well informed decisions if they have access to consistent and robust estimates of economic growth. Understanding the

[28] http://www.mfe.govt.nz/sites/default/files/media/Towns%20and%20cities/FINAL-NPS-UDC%20Evidence%20and%20Monitoring%20guide.pdf

key drivers or constraints on growth and the land use implications of change will assist authorities when assessing the effects of alternative policy options. In addition, greater understanding of the timeframe in which housing land capacity is either developing, or is required over time, can better enable forward infrastructure planning and financing and will also help inform decisions on resource consent applications. To achieve this the NPS-UDC requires regular monitoring of a range of relevant market indicators.

A key outcome of the NPS-UDC is the integration of land use and infrastructure planning. This recognises that development is dependent on the availability of infrastructure, so decisions about infrastructure must be made to align with the shape, form and scale of the urban area. There are obvious benefits from ensuring consistency between all of these processes, particularly in terms of efficiencies, more predictable outcomes and cost savings to the wider community. Accordingly, the NPS-UDC requires (under Policy A1) that development capacity considered in these assessments is either serviced with development infrastructure[29] or identified in a Long Term Plan (LTP) or Strategy. Local authorities must also be satisfied that 'other infrastructure' (such as parks, schools and community services) required to support urban development and place making is likely to be available. Development and other infrastructure are discussed in sections 5.2.4 and 5.2.5.

The Local Government Act (LGA) provides the framework and requirements for the operation and strategic planning of local governments. This includes the requirement for local governments to operate in democratic and cost-effective ways and to provide good quality local infrastructure, both now and in the future.

Under the LGA, local governments are required to prepare LTP, Annual Plans (AP) and 30 year Infrastructure Strategy. The LTP sets the strategic direction and budget for future development of infrastructure, services and assets, and also for the replacement and upgrade of existing infrastructure. The Proposed District Plan (PDP) sets the zoning in the QLD, but is limited by infrastructure constraints, which are programmed in the 30-year Infrastructure Strategy and LTP under the LGA. The 30-year Infrastructure Strategy relies on the capacities stipulated in the PDP to better understand the servicing needs of the community. Thus, highlighting the strong links that are required between planning and infrastructure to ensure the strategic and integrated management of urban growth.

1.2 Objectives and Policies

As a 'high growth' urban area, QLD is subject to the full suite of objectives and policies under the NPS-UDC. The objectives (detailed in Appendix 1) and policies are structured into four key themes, summarised below:

- *Outcomes for planning decisions* – these provisions establish the requirement to ensure sufficient housing and business capacity to meet demand, provide for choices, and urban environments that develop and change over time.

[29] 'Development infrastructure' and 'other infrastructure' are defined in the NPS-UDC

- *Evidence and monitoring to support planning decisions* - these provisions specify the reporting requirements, the need to monitor market indicators, and consider influences on capacity such as rate of take-up and feasibility.

- *Responsive planning* – requires a response to be initiated if the evidence base suggests there is insufficient development capacity, establishes the requirement for Councils to prepare a 'Future Development Strategy' and the setting of 'minimum targets' in Regional and District Plans.

- *Coordinated planning evidence and decision-making* – encourages collaboration between authorities that share jurisdiction over an urban area, and between regional and local councils.

1.3 The Housing Development Capacity Assessment (HDCA)

The NPS-UDC specifies the overall requirement for the HDCA, together with a range of requirements in the Policies[30]. Each Policy assessment needs a sound analytical/technical base and good supporting information, and most need quantification to demonstrate compliance. There are many inter-linkages and inter-dependencies among the policies, which make it important to understand the NPS-UDC both holistically, and as to the specific requirements for each Policy. The individual policies cannot be satisfied if treated in isolation.

Figure 1.2 sets out the overall policy structure of the NPC-UDS and shows the relationship of each policy to the overall requirement to produce Housing (and Business) Development Capacity Assessments (Policy B1). A key feature of the flow chart is that while there are significant cross-flows between Policies (these are not shown in the figure to maintain some clarity), the main focus of all policies from Policy A1 to C3 is on the capacity assessments.

Subsequent to the completion of the HDCA (and BDCA), Policies C4 to C11 are oriented to setting and achieving Minimum Targets for growth and capacity. These provide a statutory mechanism to require the necessary quantum of capacity to meet the estimated demand over the short, medium and long-term. Policies C12, C13a-c, and C14 are geared toward the third of the major reporting documents, the FDS. The remaining Policies D1 through D4 are to ensure co-ordination among councils and between councils and infrastructure providers.

Within this wide suite of policies, the major part of the technical analysis and monitoring is set out in Policies A1 through C3, which contribute most directly to the HDCA (and BDCA). These are addressed throughout this report.

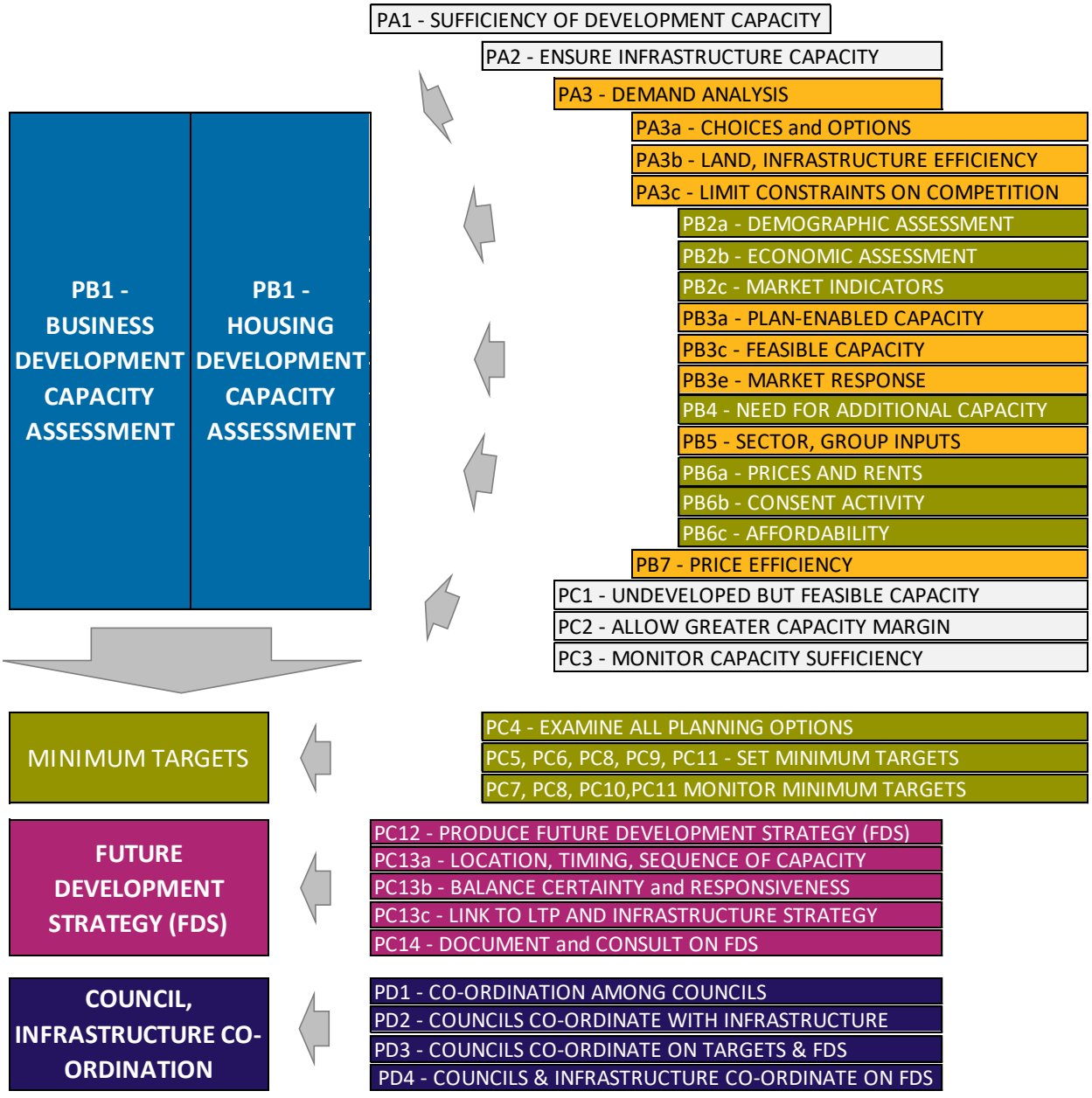
The two (housing and business) assessments will help local authorities to quantify in broad terms how much development capacity is, or should be, provided in resource management plans and supported with development infrastructure, to enable the supply of housing (and business) space that meets demand. Policy B3 requires that this assessment include how much capacity is "feasible" to develop in the current

30 http://www.mfe.govt.nz/publications/towns-and-cities/national-policy-statement-urban-development-capacity-guide-evidence

market and expected to be taken up over time. In addition, to account for a portion of feasible development capacity that may not be developed, the calculation of the required total feasible capacity to meet demand needs to include margins over and above projected demand, to inform Policies C1 and C2.

The assessments should also include information about the interactions between housing and business activities, such as how these drive demand for each other in particular locations or industries; and whether the location of activities provides for accessibility and the efficient use of land and infrastructure. Double counting of capacity is to be avoided.

Figure 1.2 – Relationship of NPS-UDC Policies with Capacity Assessments



1.4 Approach Overview

This HDCA presents information at a level of detail that is relevant for Council's planning decisions and the setting of minimum development capacity targets for housing, as required under Policies C5 – C11. It explores the composition of demand and feasibility of capacity at a level of detail that informs zoning and regulations (and infrastructure planning) affecting development typologies and location. It includes information about different groups in the community to demonstrate who might be affected by planning regulations that constrain development capacity, and to what extent. This includes analysis on key consumer groups such as renters, first home buyers, movers, investors and holiday home owners. This information will help inform analysis required under Section 32 of the Resource Management Act associated with any future changes to the District Plan.

This report does not attempt to predict demand in fine detail. The results should not be used as the basis for providing precise amounts of capacity at specific locations. Rather, the assessment provides broad brush information for planning that enables development of a range of dwelling types, price points and locations (organised according to a set of scenarios).

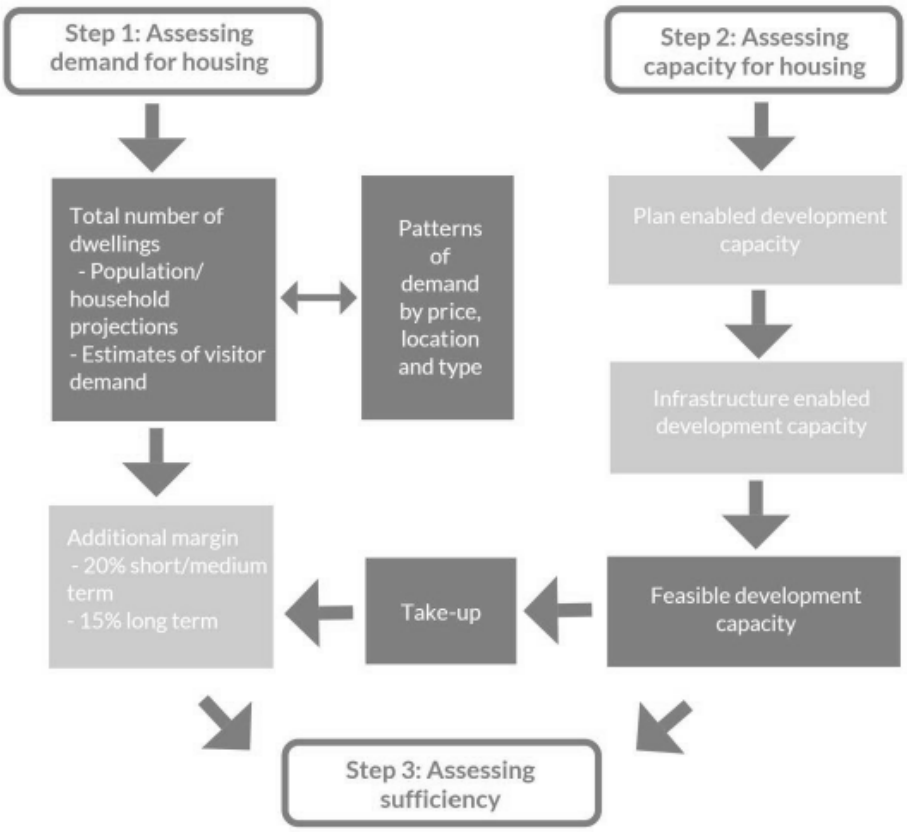
Household growth is a key driver of development markets and is important to understand in terms of absolute scale, composition and timing. The HDCA focuses on resident household growth and how it translates into dwelling requirements within the QLD urban environment. It also addresses growth in the visitor market (tourism) as a portion of this demand directly translates into dwelling requirements (for holiday homes and short stay accommodation in private dwellings). With this information, QLDC can make more informed decisions that:

- provide sufficient capacity and choices for district households;
- support thriving town centres, efficient transport, and management of the negative effects of business activities and reverse sensitivity;
- enable constant spatial change to support growth and change.

These outcomes would contribute to effective and efficient urban environments that enable people and communities and future generations to provide for their social, economic, cultural and environmental well-being. This information also supports informed investment and funding decisions.

The HDCA has three main stages or components of analysis for both demand and supply. The broad approach is presented in Figure 1.3. The following sections contain a narrative that addresses each stage in detail.

Figure 1.3 – Housing Development Capacity Approach Overview



1.4.1 Assessing Housing Demand (Policy A3a and B2)

Housing demand is defined here in terms of the housing requirements of the resident population and visitor populations of Queenstown (or any city, district or region).

The main dimensions of housing demand are the occupancy (owned or rented) of dwellings by households of each type, the numbers of dwellings required currently and at each point in time into the future, and the nature of those dwelling requirements in terms of dwelling type and dwelling value (taking into account the nature of households which require those dwellings).

Dwelling demand in turn directly affects demand for residential land, just as residential land supply and planning provisions in combination affect development capacity. The adequacy or sufficiency of dwelling capacity can be broadly defined at the highest level in terms of the numbers of dwellings able to be supplied, but also in terms of their type, value and location.

The requirement to consider housing demand in some detail is set out clearly in NPS-UDC Policies, most notably:

> *PA3: When making planning decisions that affect the way and the rate at which development capacity is provided, decision-makers shall provide for the social, economic, cultural and environmental wellbeing of people and communities and future generations, whilst having particular regard to:*

a. *Providing for choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations, working environments and places to locate businesses;*

PB1: Local authorities shall, on at least a three-yearly basis, carry out a housing and business development capacity assessment that:

a. *Estimates the demand for dwellings, including the demand for different types of dwellings, locations and price points, and the supply of development capacity to meet that demand, in the short, medium and long-terms; and…*

PB2: The assessment under policy PB1 shall use information about demand including:

a. *Demographic change using, as a starting point, the most recent Statistics New Zealand population projections;*

The demand-side assessment needs to consider housing requirements of the (current and projected) resident population, and the consequent numbers of households of each type, as well as the visitor population staying in private dwellings. These matters affect the numbers of dwellings required, the dwelling typology, and dwelling price points.

The assessment includes both resident population and visitor population including owners of "holiday" dwellings and takes into account options and choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations (Policy A3a). These matters are in the context of providing for the social, economic, cultural and environmental wellbeing of people and communities and future generations (Policy A3).

1.4.2 Assessing Housing Capacity (Policy B1 and B3)

Housing capacity is defined as the total stock of existing dwellings and the potential capacity for future dwellings to accommodate demand from residents, visitors (seeking accommodation in dwellings as opposed to commercial visitor accommodation) and workers. Future capacity is defined as dwellings that are enabled by the Operative and Proposed District Plans, serviced by infrastructure and are likely to be commercially feasible to construct[31].

[31] The NPS-UDC requires assessment of "*current feasibility*" (Policy PB3) but elsewhere defines feasibility in terms of the "*current likely*" returns and costs.
One interpretation is that capacity be assessed in terms of its feasibility at this moment in time, and so excludes from consideration any capacity that is likely to become feasible to develop in the future (the term "likely" being just acknowledgement that estimates of costs and returns inevitably carry a degree of uncertainty).
The other interpretation is that the NPS-UDC definition explicitly acknowledges that feasibility will change over time - as urban economies grow, the value of land increases because the scale and range of potential uses increase, while the value of improvements is tied to the time at which they were added when the economy was smaller. The progressive increase in land value as a share of total value of a property, together with the ageing of existing improvements, means that the feasibility of development or re-development also progressively increases – such that the term "*likely*" refers to an expected future circumstance.
If "*currently feasible*" is taken to mean that only capacity which is feasible at this moment in time may be considered, then it is necessary to justify the consequent assumptions – in brief, that today's economic conditions including prices, land and improvement values, the age and condition of improvements will remain unchanged throughout

The capacity assessment needs to consider the location of capacity, as well as the type and price points of different types of dwelling capacity. These are important characteristics of the dwelling capacity to meet demand for different dwelling types in different locations and at different price points. The need for a housing capacity assessment is set out in the NPS-UDC as above.

The level of commercially feasible capacity serviced by infrastructure is then compared to the level of demand to determine the sufficiency of capacity to accommodate demand from the current and future population.

Plan Enabled Capacity

Understanding the level of capacity that is enabled under the Operative and Proposed District Plans – "plan enabled capacity" – is an important first stage of any capacity assessment. Information on the development options on each site is brought together with the site characteristics (including any existing dwellings) to determine the options for the number and types of dwellings that can occur on each site under the Plans.

M.E have undertaken detailed Geographic Information System (GIS) analysis to identify the capacity for infill development, redevelopment and greenfield expansion across areas within the urban growth boundaries (UGBs) of QLD. The analysis identifies the number of additional residential dwellings that can theoretically be constructed under each development scenario under the PDP (for those areas considered as part of Stage 1 and 2 of the PDP review) and the Operative District Plan (ODP) (for all other areas, such as the majority of the Special Zones). The specific PDP and ODP provisions are discussed further in Section 2.3.2 below. A range of spatial parcel level data were brought together within the GIS system to calculate capacity.

Infill Development

GIS processes were used to identify whether sufficient land area exists within each property parcel to subdivide a site to accommodate a new dwelling or to accommodate an additional dwelling through the land use provisions of the PDP (or ODP where relevant). The process takes account of the number and position of any existing dwellings within each property parcel. It then applies any planning rules (such as setbacks) to exclude specific areas within each parcel from development. A series of geometric techniques were then applied to identify the largest and most appropriately shaped portion of each parcel that could potentially be subdivided or accommodate further dwellings through land use provisions, and whether driveway access is possible to the subdivided portion of the site. A final stage of the calculation adjusts the distribution of land area within each parcel between the subdivided and residual sections of the site to maintain adherence of existing dwellings to planning rules.

Redevelopment

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the next 30 years and longer, and be unchanged during a period when the district economy is expected to grow by between 80% and 105%.
The conceptual and practical difficulties of justifying such extreme assumptions suggest that it is prudent to allow for the term "*likely*" to denote forward-looking. Otherwise, an assessment limited to current feasibility can be expected to underestimate the capacity that will be feasible within the 30+ year time frame of the NPS-UDC.

M.E's model calculates the redevelopment capacity on each site through taking into consideration the total site area, the developable area and the planning rules for different zones and dwelling typologies. The model outputs the number of dwellings that can fit on each site, of each type, if any existing dwellings were removed and the site redeveloped.

Greenfield expansion

Structure plan, zoning, and developer plan information was brought together within the GIS system to calculate the number of dwellings of each type that were enabled to locate within each greenfield area under the PDP or ODP. A combination of yields established within the Plan/structure plans, yields from developer plans, and minimum site size requirements were applied to each greenfield area to identify their total capacity.

A further scenario was developed for the QLD model given the higher densities enabled by the PDP in some locations relative to the existing dwelling landscape. This more conservative scenario developed site sizes based on the local market conditions at each location to reflect more likely development outcomes in locations where new site sizes were considerably larger than those enabled under the PDP. These alternative sizes were applied to both the infill and greenfield areas.

Commercially Feasible Capacity

The second stage of the assessment – "commercially feasible capacity" - estimates the commercial feasibility of constructing each of the different development options on each site enabled under the Plan.

The *Residential Commercial Feasibility Capacity Model* calculates the number of plan-enabled dwellings that are commercially feasible to construct at each point in time. It calculates the total cost of each development option, then compares it to an estimated sales price. If the sales price exceeds the costs by a sufficient margin, then the development option is identified as commercially feasible. During this stage, information on development costs is combined with careful analysis of the local market and geographic conditions.

The model operates at a parcel level and tests the commercial feasibility of the range of different development configurations that are enabled on each site under the PDP. This includes infill development through subdivision or additional dwellings through the land use provisions of a component of the site, and the redevelopment of a site. Importantly, the model tests a range of different dwelling sizes within each possible dwelling configuration (rather than averages) to reflect differences in the development types that are suitable within each location.

The residential Commercial Feasibility Model shows the number of development options that are commercially feasible on each property parcel in 2016 and in the short, medium and long-term.

1.5 Data Sources

This assessment draws on data supplied by QLDC and obtained from a number of different sources. The key data sources are outlined in the following sub-sections.

1.5.1 Base Parcel Data and Planning Information

A range of data sources were spatially integrated to undertake the capacity assessment. Data supplied by Council from the Rating Database (based on a 30 June 2017 Rating Database and parcel boundary extract) on land use, building size, typology, value, and other Council datasets on building footprints, slope topography, parcel boundaries, development covenants (where known to QLDC[32]), aerial photography and building consents were combined within the Proposed and Operative District Plan GIS layers to produce a full spatial set of attributes tagged to each individual parcel. Planning information includes the parcel's base zone, along with any sub-zones or overlays or designations that may affect capacity calculations. These were correlated with the associated planning provisions, rules and site standards for development. Council also supplied information on structure plans, approved resource consent plans and developer plans for individual greenfield subdivisions which were incorporated within the analysis.

1.5.2 Population and Visitor Projections

Population and visitor projections are important for the assessment of housing demand and are used as a basis to estimate the likely demand for resident household dwellings and visitor accommodation required to service each.

This report relies predominantly on the SNZ Medium and High growth projections (based on the latest December 2017 release). However, in August 2016 QLDC contracted Rationale Limited to produce population and visitor growth projections for the next 40 years (to 2058) to use in its 10 Year LTP, 30 Year Infrastructure Strategy and other strategic planning work. For consistency, this assessment incorporates the results of these projections (discussed below) in the underlying demand modelling.

Rationale ultilise a revised growth projection derived from the published SNZ projections (at that time)[33], and have recommended a 'medium-high' growth scenario for planning purposes as being a reasonable projection of the likely rate of future growth which is not too conservative, nor too ambitious. The results of the Recommended scenario are presented in Table 1.1 below.

[32] It is noted that QLDC is not party to many of the covenants and does not collate records of theses that can be easily searched, other than through site by site investigation of certificates of title; and whether or not a covenant is complied with or breached is a civil matter, and the ability to amend or remove encumbrances may change over time outside of any Council process.

[33] QLDC's projections are based on SNZ sub-national projections released in December 2016 (2013 base to 2043). M.E note that the SNZ population projections relied on in this report (i.e. SNZ Medium and High) are more recent (December 2017).

Table 1.1 - Queenstown Lakes District Council Recommended Population and Visitor Projections

	Actuals			Projections								
	2001	2006	2013	2018	2023	2028	2033	2038	2043	2048	2053	2058
Usually Resident Population												
Wanaka Ward	4,850	7,350	9,500	12,491	15,007	16,650	18,236	19,736	21,085	22,509	23,933	25,357
Wakatipu Ward	12,990	16,770	20,230	25,557	29,651	32,627	35,551	38,330	41,082	43,846	46,610	49,374
District	17,840	24,120	29,730	38,048	44,658	49,277	53,787	58,066	62,167	66,355	70,543	74,731
Average Day Visitors												
Wanaka Ward	4,333	5,391	5,746	7,945	9,443	10,129	10,656	11,105	11,482	11,809	12,094	12,325
Wakatipu Ward	10,358	12,258	12,236	16,915	19,760	21,360	22,942	24,444	25,876	27,229	28,506	29,729
District	14,691	17,649	17,982	24,861	29,203	31,488	33,598	35,549	37,358	39,037	40,600	42,055
Peak Day Visitors												
Wanaka Ward	16,584	21,966	27,389	34,448	40,010	42,988	45,714	48,155	50,250	52,428	54,576	56,712
Wakatipu Ward	26,254	31,065	36,491	44,854	52,031	56,759	61,327	65,650	69,849	73,946	77,964	81,946
District	42,838	53,031	63,879	79,301	92,041	99,747	107,041	113,805	120,099	126,374	132,540	138,658

Source: Rationale Limited, QLDC (reproduced by M.E). Recommendd Growth Scenario. Wakatipu Ward incorporates Arrowtown Ward.

These population projections have been developed and enhanced by over the past 13 years and are a result of a detailed process, factoring in significant data inputs and trends and take account of the QLD's unique and ever-changing growth drivers. These projections are utilised QLDC wide[34].

The QLDC Recommended population projections show a district-wide usually resident population growth rate of 2.6% per annum to 2028 (representing a projected increase of 11,230 people from a base of 38,050 in 2018 to reach 49,280). By 2048, the population is projected to reach 66,360. By 2058, the district population will have doubled. The projections are anticipating that the Wanaka Ward will grow at a slightly higher annual average rate; 2.9% per annum increase to 2028, compared to the 2.5% increase across the Wakatipu Ward.

Tourism is critical to the economic success of QLD. The ratio of visitors to residents is 34 visitors to one resident, whereas the ratio in Auckland is one to one, and Christchurch is three to one. Visitor growth projections indicate that average day visitors across the district are projected to increase by 57% by 2048. This is an average increase of approximately 470 visitors per annum. As with projected population growth, average day visitors are expected to grow a slightly faster rate in the Wanaka Ward; 2.5% compared to 2.4% in the Wakatipu Ward over the next ten years.

The QLDC projections highlight that QLD faces unique challenges in providing for a sizeable visitor population that often (on peak days) exceeds the local resident population. In a business context, it also indicates the business and employment sectors that are likely to face even stronger demand in future years. In particular, the need for additional accommodation capacity, both commercial and residential forms, and tourism and recreation services to serve increasing visitor numbers. It also potentially highlights complexities in providing for housing capacity (and supporting infrastructure) which may serve average day visitors, but not meet the demands experienced on a peak day (which can be more than double average day visitors).

The QLDC projections have a 2013 base year and provide projections in five-year increments as shown in Table 1.1 above. The base year for this assessment is 2016, and the reason for this is discussed in Section 1.7 (Terminology). Therefore, for the purpose of the HDCA, M.E has interpolated a 2016 figure from the

[34] Due to long-term nature of growth projections and the broad range of influencing factors there is some uncertainty with the findings. For this reason, the QLDC updates these annually and the projections consider multiple scenarios to ensure the QLDC is adapting to any change.

QLDC projections to align with the adopted base year of the analysis (i.e. between 2013 and 2018). Similarly, a 2046 end year has been interpolated for the long-term horizon (between 2043 and 2048).

This allowed M.E to include the QLDC projection alongside the SNZ projections in the demand modelling. Some comparative analysis between the QLDC Recommended growth projections (pertaining to dwelling growth) is included in section 3.5.2. In order to provide a range of possible growth outcomes, this HDCA has focussed the reporting of demand results on the SNZ Medium and High growth projections, in the knowledge that the QLDC Projection sits generally within this range[35]. This differs from the BDCA which focusses on the QLDC Recommended growth projection, with SNZ Medium and High growth projections provided for context and a wider range of potential outcomes.

1.5.3 Visitor Accommodation Data

Together with SNZ spatial data on employment and businesses, a QLDC commissioned report[36] on Airbnb activity within the district was used to help estimate the share of visitor demand met through different segments of the visitor accommodation market. Information on employment growth rates by detailed industry sector (from M.E's Economic Futures Model), Council's Rating Database property ownership location, and MBIE and Tourism New Zealand core tourism datasets and projections (International Visitor Survey, Domestic Travel Survey, International Visitor Arrivals, Tourism Forecasts, Commercial Accommodation Monitor and Tourism Satellite Account) were used to estimate current and future demand for different types of visitor accommodation across the District.

1.5.4 Core Logic Data

Two customised datasets were obtained from Core Logic for use in the commercial feasibility calculations and demand assessment. The first contained approximately 11,000 individual parcel level sales records across the district from 2005 to 2017. Each property sale contained information on sale price, dwelling type, size, land area, age and location. The data were analysed to establish estimated sales prices for dwellings within the Commercial Feasibility Model. Current sales listings from New Zealand real estate websites were used to further check and calibrate model outputs.

The second Core Logic dataset contained information on the value bands of dwellings for the total dwelling stock in each location and for each dwelling type. The data was used within the QLD Housing Demand Model (2017) to identify the demand for different dwelling types within each value band from each household group. Understanding the demand for dwellings within different value bands is critical for the assessment of sufficiency of the current and future dwelling stock in meeting demand.

1.5.5 Other Data

A number of other data sources were used within different parts of the assessment:

- Within the Commercial Feasibility Model, base construction costs were established using the QV Cost Builder. This was combined with analysis of detailed parcel level

[35] Detailed results specific to the QLDC Projection will be made available to QLDC.

[36] Measuring the scale and scope of Airbnb in Queenstown-Lakes District, Infometrics. October 2017.

information on (approximately 11,000) building consents to establish the spatial relativities in construction costs by location, size and dwelling types. Stakeholder engagement with developers provided feedback and further refinement of these costs.

- Published reports and data on longer-term price growth rates were used within the time component of the Commercial Feasibility Model.
- Fine level spatial data on employment and businesses (SNZ Business Demographic dataset) was used together with Rating Database information to assess the intersecting areas of residential and non-residential demand within key zones that enabled both uses.

1.6 Stakeholder Engagement

The NPS-UDC requires local authorities to seek and use the input of particular local groups with relevant expertise. This helps develop a high-quality evidence base. QLDC coordinated a stakeholder workshop to inform the feasibility aspect of the HDCA. This workshop, facilitated by M.E, was well attended by a mix of Wanaka and Wakatipu stakeholders from a range of sectors (land owners/developers, real estate and group home builders). A representative from NZTA and the Property Council also attended. Appendix 2 contains a copy of the workshop agenda and attendee list. Outcomes of the workshop are discussed further in Appendix 11.

1.7 Terminology and Definitions

There are some key terms used in this report. Definitions are provided below:

- Base year: the base year of this assessment is the year ending June 2016. This is driven by the availability of demand side data, namely the SNZ population and household estimates and projections. It is acknowledged that capacity estimates are based on a year end June 2017 snap-shot. Back-casting capacity to 2016 was not considered appropriate due to the difficulty in validating this through site visits/ground truthing. The slight difference in time periods, considered preferable to using a projected base year for demand, will persist in future updates of the HDCA also.
- Short-term: up to three years (2016 to 2019, measured from the base year)
- Medium-term: 3-10 years (2019 to 2026, measured from the base year)
- Long-term: 10-30 years (2026 to 2046, measured from the base year).
- Residential Land: land that is zoned for residential uses in urban environments. Determined by the policies, rules and activity tables for each zone in the District Plan (PDP or ODP where relevant). Can include business zones where residential activities are permitted, controlled or restricted discretionary.
- Dwelling Estate: The current stock of (existing) dwellings in QLD. Includes dwellings in all locations, whether occupied or unoccupied.

- Housing Demand: the requirement for dwellings to accommodate resident households and non-resident households for holiday or investment purposes.
- Resident Demand: demand arising from usually resident households. Can include rental and owner-occupied dwellings.
- Owner Occupier: A dwelling that is occupied by someone who also owns the property (either with or without a mortgage).
- Rental Accommodation: An investment property that is leased to resident households (tenants) for an agreed weekly or fortnightly cost. Applies to long-term rental (i.e. 3 months or more).
- Absentee Owners: Households/Entities that own residential property in QLD but who normally reside elsewhere in New Zealand or overseas.
- Holiday Dwelling: A dwelling owned by an absentee owner(s) and utilised by that owner when visiting QLD. There is considerable overlap with Investment Dwellings, because QLD's strong tourism role means that many such dwellings are available for rental by short or medium stay visitors, and it Is common for owners to lease their "holiday dwelling" for at least part of the year.
- Investment Property: A dwelling owned by an owner from QLD or elsewhere in New Zealand or overseas who does not usually occupy the dwelling. Investment dwellings may be rented to long-term tenants (part of the usually resident population) and/or to short stay visitors, with the investment component deriving from rental as well as underlying capital gain (loss) from market trends.
- Not Usually Occupied Dwelling: A dwelling which is not "usually" occupied by a usually resident household, as either owner or tenant. These are predominantly "holiday" or "investment" dwellings, although many in those categories are "usually occupied" by tenants.
- Unoccupied Dwelling: Part of the Census night count which identifies dwellings which are not occupied at that time. This information is drawn on as part of the estimation of Not Usually Occupied dwellings.
- Greenfield Capacity: Includes capacity within the Special Zones, Structure Plan areas and any other capacity that falls within the study area but is outside of the existing urban edge but within the proposed UGBs. Some parcels within the existing urban edge are included where they are large blocks of undeveloped land that would require a portion of their area to be allocated to roads, reserves, etc.
- Infill Capacity: Infill development consists of both subdivision/land use consent development around the existing building stock and redevelopment of the existing building stock. The former includes the development of additional dwellings without any demolition of existing dwellings (e.g. an additional dwelling situated on a back yard area).

- Redevelopment: The redevelopment process occurs where existing dwellings are demolished and the site is redeveloped, typically to a greater intensity.
- Plan Enabled Capacity: Refers to the capacity that is enabled within each parcel through applying the provisions within the PDP or ODP. It includes the application of zoning and sub-zoning rules as well as any building standards (such as setbacks and access requirements), and any specific overlay rules.
- Attached Dwelling: Refers to all dwellings that are physically attached to at least one other dwelling. The range of attached dwelling types include lower density one-storey units, duplexes, townhouses, up to high-rise apartment buildings.
- Standalone Dwelling: Refers to dwellings that are not physically attached to another dwelling. They are typically standalone houses. Houses with a granny flat that forms part of the main house structure are included within this category.
- Feasible: As defined by the NPS-UDC. Development that is commercially viable to a developer, considering the current likely costs, revenues and yield of developing. Feasibility has a corresponding meaning. Note that feasibility assumes that the land is enabled for development by the plan and is, or is planned to be, supported by public infrastructure.

Other terms used throughout this report draw on commonly used zoning terminology. A list of acronyms used throughout this report is contained at the end of the document.

1.8 Report Outline

Section 2 describes the geographic context of QLD and defines the urban environment which sets the scope of detailed modelling of demand and capacity. The district is then discussed in terms of broad localities and the residential zones are identified (both urban and rural).

Section 3 of the report provides analysis of the QLD housing market – its market's structure, demand from resident households and from absentee owners, and supply to provide for demand from owner-occupiers, tenants, and short-term visitors. It covers estimates of total future dwelling demand to 2046.

Section 4 identifies a suite of detailed housing demand growth futures for QLD resident households. These take into account the medium and high growth futures, and with particular reference to the changes expected in household demography and potential changes in dwelling preferences.

This is followed by section 5 which works through the modelling steps applied to estimate plan enabled and commercially feasible dwelling capacity in the short, medium and long-term.

Section 6 presents the results of residential sufficiency. It also includes a discussion section, reviews market and price efficiency indicators and discusses future monitoring requirements. Section 7 reflects on key issues and learnings for future updates. A series of appendices are included which contain more detailed data and information described throughout the report.

An Evaluation Index is included at the end of the document. This provided a checklist to M.E and Council and may assist with MBIE's evaluation (Appendix 15). It identifies the report sections that relate to each evaluation criteria.

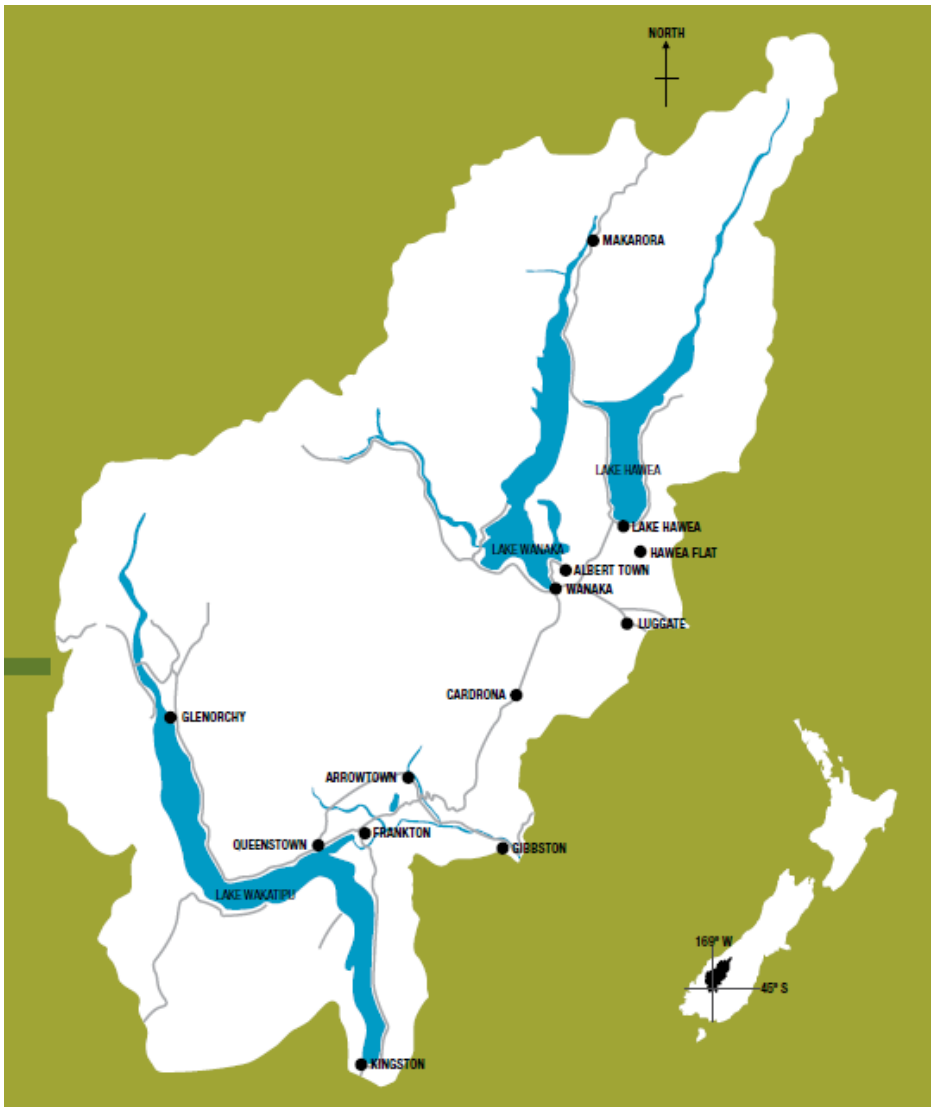
2 Study Area

This section discusses the approach taken to define the QLD urban environment and identifies the residential zones within the urban environment and in the rest of the district. It provides a description of key locations of residential zones (with zoning maps included).

2.1 Geographic context

The QLD has a land area of approximately 8,722km2 not counting the main inland lakes (Lake Hawea, Lake Wanaka, Lake Wakatipu). The total area including lakes is roughly 9,375km^2. Approximately 97% of this area is considered to be located within an Outstanding Natural Landscape (ONL) or Outstanding Natural Feature (ONF) – the protection of which is a matter of national importance under the RMA (Figure 2.1).

Figure 2.1 – Queenstown Lakes District Settlement Pattern



Queenstown is the largest centre in Central Otago and second behind Dunedin within the Otago region. The two key urban environments of the district are Queenstown and Wanaka. Wanaka is situated approximately 50km north of Queenstown, but is connected to Queenstown via a 1 hour drive via the Crown Range Road or an 1 ½ hour drive via Cromwell.

Other smaller townships in the District include Arrowtown, Kingston, Glenorchy, Hawea, Cardrona, Makarora and Luggate.

Cromwell is located approximately 60km east of Queenstown and approximately 54km to the south of Wanaka, and is a 30-45min commute to either Queenstown or Wanaka. At this distance Cromwell may present a convenient alternative for some businesses, being located centrally to the two centres, less constrained by mountainous terrain, and having comparatively cheaper land and rental prices. There is anecdotal evidence to suggest that Cromwell is currently experiencing the spill over of demand from Queenstown and Wanaka. Further work and collaboration is required to take place with the CODC, ORC and NZTA to further understand this relationship.

2.2 Urban Environments and the NPS-UDC

2.2.1 Context

The NPS-UDC defines two concepts, "urban environment "and "urban area" which are different in meaning and application. The NPS-UDC applies to any "urban environment" that is expected to experience growth. The objectives and policies are structured around "urban environments", and therefore the need to assess demand and provide sufficient development capacity (under Policy A1 to A4) applies to land within that urban environment.

A local authority must have part, or all, of either a medium or high-growth "urban area" (as defined under the NPS-UDC) within their district/region, before Policies B1 to B7 (*evidence and monitoring*), C1 to C4 (*responsive planning*), and D1 to D4 (*Coordinated planning evidence and decision-making*) apply; and a high-growth area in their district/region before Policies C5 to C14 (*minimum targets and future development strategy*) apply.

Once triggered as being a high or medium-growth "urban area" within a district, the application of these policies is not restricted to the boundaries of the urban area itself, and therefore can apply district-wide. This reflects for example, the scenario in which new greenfield land may be identified as a future growth area in order to provide additional development capacity outside the boundaries of the current "urban environment".

The QLD is considered a 'high growth urban area' under the NPS-UDC. The NPS-UDC therefore applies to the district as a whole.

2.2.2 Key Urban Environments in Queenstown Lakes District

"Urban environment" is defined in the NPS-UDC as:

> *"means an area of land containing, or intended to contain, a concentrated settlement of 10,000 people or more and any associated business land, irrespective of local authority or statistical boundaries".*

In Council's view, there are two 'urban environments' in the District that are made up of the following sub-areas:

> Queenstown Urban Environment: Sunshine Bay, Queenstown Bay, Queenstown Hill, Frankton, Frankton East, Arthurs Point, Kelvin Heights, Lake Hayes South, Arrowtown, and Jacks Point (includes Jacks Point, Hanley Downs and Homestead Bay); and
>
> Wanaka Urban Environment: Wanaka, Albert Town, Luggate and Hāwea.

In the Wakatipu Basin the pattern of urban settlement is dominated by large mountains, lakes and rivers with significant landscape values, making it complex to apply the NPS-UDC. Although not a 'concentrated settlement' in the phrase's ordinary dictionary meaning, the urban environment of Queenstown is grouped around and interrupted by these natural features. Council considers that the most practical approach to the anomaly presented by how Queenstown has developed in its particular physical geography and landscape, is to treat the collection of areas that together function as a single urban environment as a 'concentrated settlement' for the purposes of the NPS-UDC definition of 'urban environment'. This includes Arrowtown given its location within the Wakatipu Basin and that practically it functions as part of this same Queenstown 'urban environment'. This urban environment falls within the extent of the Queenstown-Wakatipu and Arrowtown Wards (SNZ), which are collectively referred to as the Wakatipu Ward for this report.

To a lesser extent compared to Queenstown, the pattern of urban settlement in the Upper Clutha Basin is also dominated by large mountains, lakes and rivers, again making the application of the NPS-UDC to the local geography, difficult. The urban area at the southern extent of Lake Hāwea and in Luggate function as part of Wanaka, and in the Council's view form part of the Wanaka urban environment. However, Makarora does not function as part of Wanaka and is excluded. Kingston and Glenorchy are similarly distant from the Queenstown urban environment and are excluded on the same basis.

The above approach helps define the urban environment for the purpose of the HDCA (and BDCA) (Figure 2.2). The first principal for defining the urban environment was the land within the UGB defined in the PDP. Zones outside these boundaries were then included on the basis of their economic and social relationships with the UGB areas; whether they contained urban-like densities; their proximity to existing urban areas; or levels of existing or planned servicing. These zones include the non-rural zones in Hawea (but excluding Hawea Flat), Luggate and also the Low Density Residential (LDR) zone adjacent to Lake Hayes.

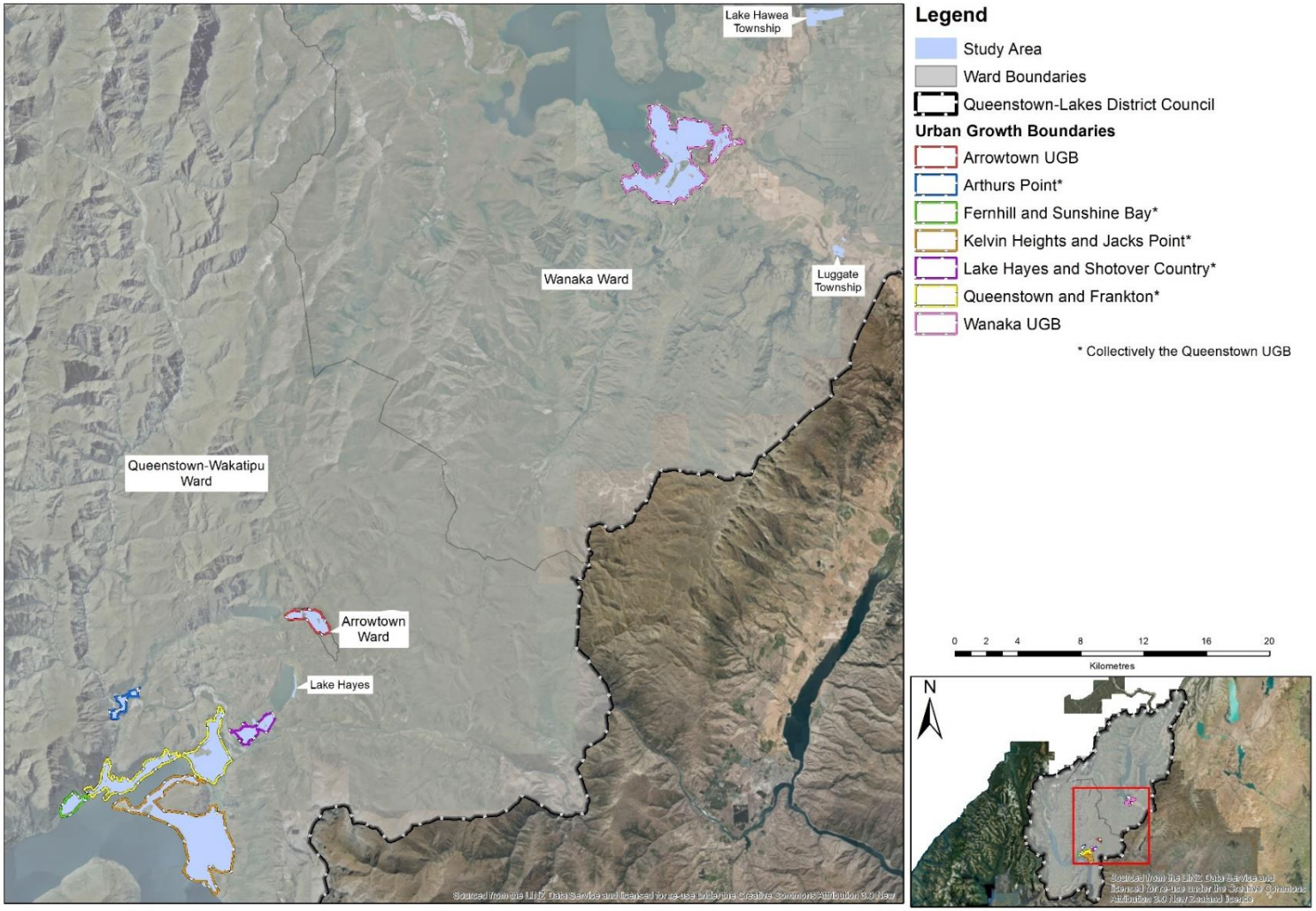
While demand modelling covers the total district and the urban environment, the geographic scope of the detailed modelling and analysis of residential capacity in QLD, identified in this report, is limited to this urban environment[37].

Other areas that are outside of the 'urban environment' do not contribute to the *modelled* capacity of this assessment, but are reported on at a high-level in section 2.4, include the following:

- Rural (including Wakatipu Basin Zone and Gibbston Character Zone) (PDP);
- Rural Living zones (Rural Lifestyle and Rural Residential Zones) (PDP);

[37] Capacity outside of the urban environment has not been modelled in any detail but is discussed at a high level.

Figure 2.2 – QLD NPS-UDC Urban Environment Study Area



- Rural Visitor Zones (Cardrona, Arcadia, Blanket Bay, Walter Peak, Cecil Peak and Windermere) (ODP);
- Kingston and Glenorchy Township Zones (ODP);
- Millbrook, Waterfall Park, Kingston Village and Mount Cardrona Special Zones (ODP);
- Housing capacities within the approved Special Housing Areas (SHAs): Bridesdale, Queenstown Country Club, Arrowtown Retirement Village, Shotover Country, Business Mixed Use Zone (Gorge Road) SHA.

These are discussed further in sections 2.4 and 2.5. Council acknowledge that although not technically falling within the definition of "urban environment" these areas have a zoning which is anticipated to result in development of housing capacity. QLDC also acknowledge that some of these areas in the future may form part of the urban environment.

2.3 Residential Areas in the Urban Environment

2.3.1 Regional Policy Statement for Otago and Proposed Regional Policy Statement for Otago

The Operative Regional Policy Statement for Otago 1998 (ORPS) focuses on the impact of developments on natural resources, promoting sustainable land use and minimising the effects of development on water and land. The promotion of sustainable management of the built environment and infrastructure, as well as avoiding or mitigating against adverse effects on the natural and physical resources is incorporated into Objectives 9.4.1, 9.4.2 and 9.4.3; as well as Policies 9.5.1 to 9.5.5. Whilst, Objectives 11.4.1 and 11.4.2 seek to manage risks from natural hazards identifying and then avoiding or mitigating the risks.

By comparison the Proposed Regional Policy Statement for Otago 2015 (PRPS) has a more directive approach regarding integrating urban development and infrastructure, and managing residential, commercial and industrial growth in line with the requirements of the NPS-UDC. The provisions of the PRPS direct plans to provide for sufficient urban land capacity and to address good urban design. The PRPS also seeks to avoid development beyond UGBs (Policy 4.5.2 of the Decision Version of the PRPS). The PRPS decision was released in October 2016 and is currently under appeal. Accordingly, limited weight can be provided to the Decisions Version of the PRPS.

What makes the Otago region somewhat unique among the regions is that its main centres are geographically dispersed. As a result, the management of urban growth has historically been reserved to the respective local authority, due to the limited amount of historical cross boundary issues. In this context, the provisions of both the PDP and ODP (where relevant) form the basis of the district's strategy for assessing and managing urban growth.

2.3.2 QLDC Proposed District Plan

The PDP review commenced in April 2014 and preceded the NPS-UDC, resulting in some misalignment and inaccuracy in the current assessment process. The review of the ODP is proceeding via a staged review process and this has added complications with the timings of the NPS-UDC. Stage 1 of the PDP was publicly

notified on 26 August 2015, and hearings were held from March 2016 to September 2017[38]. Decisions on Stage 1 are anticipated in the first quarter of 2018.

Stage 1 included the higher order strategic provisions of the plan and included most of the district's residential and town centre zones. These stage 1 chapters were based on the premise of promoting a compact urban form, based around UGBs and enabling increased intensification within the district's existing urban zones. New zones were created including the Medium Density Residential (MDR), Large Lot Residential and the Business Mixed Use (BMU) zones, with the latter providing for a mix of business and residential activities. Additionally, stage 1 included a significant 'mapping' component, and analysed significant numbers of rezoning requests throughout the district.

The new or amended provisions of stage 1 had the effect of increasing plan enabled capacity and are therefore relevant to this HDCA. Additional dwelling capacity within the UGB is enabled by the PDP through:

- High Density Residential Zone: Maximum building height increased from 2 to 3-4 storey's in Queenstown and recession line breaches have been relaxed;
- Medium Density Residential Zone: New residential zone proposed that increases residential densities. 3 of the zoned areas are brownfield and 2 are greenfield;
- Low Density Residential Zone: Significant areas in Wanaka have been proposed to be re-zoned from Rural and a "gentle density" approach allows infill housing development by enabling a second dwelling on sections less than 900m^2;
- Large Lot Residential: New zone that allows increased residential densities as a buffer zone between higher density residential areas and rural areas. This zone is located in Wanaka only; and
- Business Mixed Use Zone (Gorge Road, Queenstown & Anderson Heights, Wanaka): New zone that promotes residential development and building heights have increased from 3 to 6 storey's.

It is acknowledged that a number of changes were made to the chapter provisions by council officers following the completion of hearings which may further increase capacities. However, due to the uncertainty over the outcome of final decisions, this assessment uses the notified PDP zones and provisions only and cannot consider any capacity which may be added as a result of right of reply chapters or rezoning submissions. These will be captured in future updates of the HDCA and any differences reported on.

Stage 2 of the PDP was publicly notified on 23 November 2017, and hearings are anticipated to take place June to September 2018. Decisions on stage 2 are targeted to be released in the first quarter of 2019.

Stage 2 included the chapters on Transport, Earthworks, Signs, Visitor Accommodation, Wakatipu Basin Land-use and Open Space and Recreation. The new or amended provisions of stage 2 that are applicable to this assessment promote a generally a more restrictive approach to residential forms of short-term visitor accommodation within the Low and Medium Residential Zones, the Arrowtown Residential Historic

[38] Ski Area Sub Zones, Upper Clutha Area and the Queenstown Area (excluding the Wakatipu Basin)

Management Zone and the Large Lot Residential Zone. Specific attention has given in the draft visitor accommodation provisions to addressing the use of residential dwellings/units for short term visitor accommodation activities, particularly, adverse effects on residential housing supply and affordability. This type of activity involves the short term letting of residential dwellings or units to visitors primarily through the use of online rental platforms such as Airbnb and Bookabach. A less restrictive approach is proposed for the High Density Residential Zone and within the Visitor Accommodation Sub-Zones.

In terms of car parking, the proposed Transport Chapter promotes a reduction of onsite car parking in most of the High and Medium Density Residential and Business Mix Use Zones, and greater flexibility surrounding public transport and their associated facilities. Again, this assessment uses the *notified* PDP 2015 zones and provisions only of stage 2 as it relates to the visitor accommodation sub zones only, as these were easier to incorporate into the modelling at such a late stage. It was assumed for the purpose of the BDCA and HDCA that any vacant pieces of land in the visitor accommodation subzone would be utilised for visitor accommodation purposes. This assumption was based on a review of all existing development in the subzones, which were mainly visitor accommodation. The less restrictive commercial visitor accommodation in the High Density Residential Zone have not been able to be incorporated at such a late stage of the modelling, due to timings. This will need to be taken into consideration when interpreting the results and future iterations of the HDCA.

All other land is subject to the ODP provisions. This includes zones that have not yet been reviewed and notified (i.e. Township Zones, Rural Visitor Zones and Special Zones (excluding Jacks Point), land that has been withdrawn from the District Plan review (i.e. the land subject to Plan Changes 19 – Frankton Flats B, 34 – Remarkables Park, 41 – Shotover Country, 45 – Northlake, 46 - Ballantyne Road Mixed Use, 50 - Queenstown Town Centre extension, 51 – Peninsula Bay North and 52 – Mount Cardrona Station). These zones are subject to the ODP at this point in time, and therefore the HDCA has been based on the plan enabled capacity of the ODP provisions. Some of these zones are scheduled to be reviewed in 2019 and will be informed by the results of this assessment. In particular, the Community and Affordable Housing Chapter will be considered as part of Stage 3 of the PDP review.

2.3.3 Residential Enabled Zones

The residential areas in the district that have been considered in this HDCA include the following zones of both the PDP (Stage 1 and 2, as notified) and ODP (where not reviewed in stage 1 or 2, as discussed above)[39]. They are collectively referred to as "residential enabled zones" as they comprise a mix of residential and business zones where residential activity (including dwelling based visitor accommodation[40]) is a permitted or controlled activity[41]:

- Low Density Residential (PDP)

[39] Urban environment zones excluded for the purpose of the HDCA include Visitor Accommodation Sub-Zones. As discussed above, it is acknowledged that some residential activities are enabled in these zones but they have been treated as capacity wholly for commercial visitor accommodation and therefore captured in the BDCA.

[40] Commercial visitor accommodation (i.e. motels, hotels, back packers etc) is captured in the BDCA.

[41] For the purpose of the HDCA and BDCA, any capacity in the Visitor Accommodation Sub-Zones has been assumed to comprise wholly of commercial visitor accommodation (i.e. no residential dwellings growth is allowed for). This is captured in the BDCA and excluded from the HDCA to avoid any double counting.

- Medium Density Residential (PDP)
- High Density Residential (PDP)
- High Density Residential Sub-zones A and B (Gorge Road Area only) (ODP)
- Arrowtown Residential Historic Management Zone (PDP)
- Large Lot Residential (including A and B in Wanaka) (PDP)
- Queenstown, Wanaka and Arrowtown Town Centres (PDP)
- Town Centre Sub-zone (applies to Queenstown only) (PDP)
- Town Centre Transition Zones (applies to Arrowtown and Wanaka) (PDP)
- Business Mixed Use Zones (PDP)
- Local Shopping Centres (PDP)
- Albert Town, Hawea and Luggate Townships (ODP)
- Rural Visitor (applies to Arthurs Point only), (ODP)
- Plan Change 50 (Queenstown) (ODP)
- Specific structure plan precincts[42] within Special Zones Jacks Point (PDP), Remarkables Park, Frankton Flats B, Northlake, Penrith Park, Meadow Park, Arrowtown South (area within UGB), Quail Rise, Shotover Country, Three Parks (ODP)

The local context and extent of these zones within the specified areas are discussed in detail below. It is noted that although some of these zones applied in this assessment apply the ODP provisions, some of these zones remain up to date and are not intended to be significantly reviewed under the PDP. This includes for example, PC50 Town Centre Extension.

Queenstown and Surrounds

There are a number of residential areas within the Queenstown and surrounding locality. They can be broadly grouped into Queenstown Town Centre and surrounds; Frankton and Remarkables Park; Five Mile, Frankton Flats and Quail Rise; Shotover Country and Lake Hayes, Kelvin Heights and Jacks Point (including Jacks Point, Hanley Downs and Homestead Bay); and Arthurs Point. Each of these are broadly described below and are shown in Figure 2.3 with more detailed maps provided in Appendix 3.

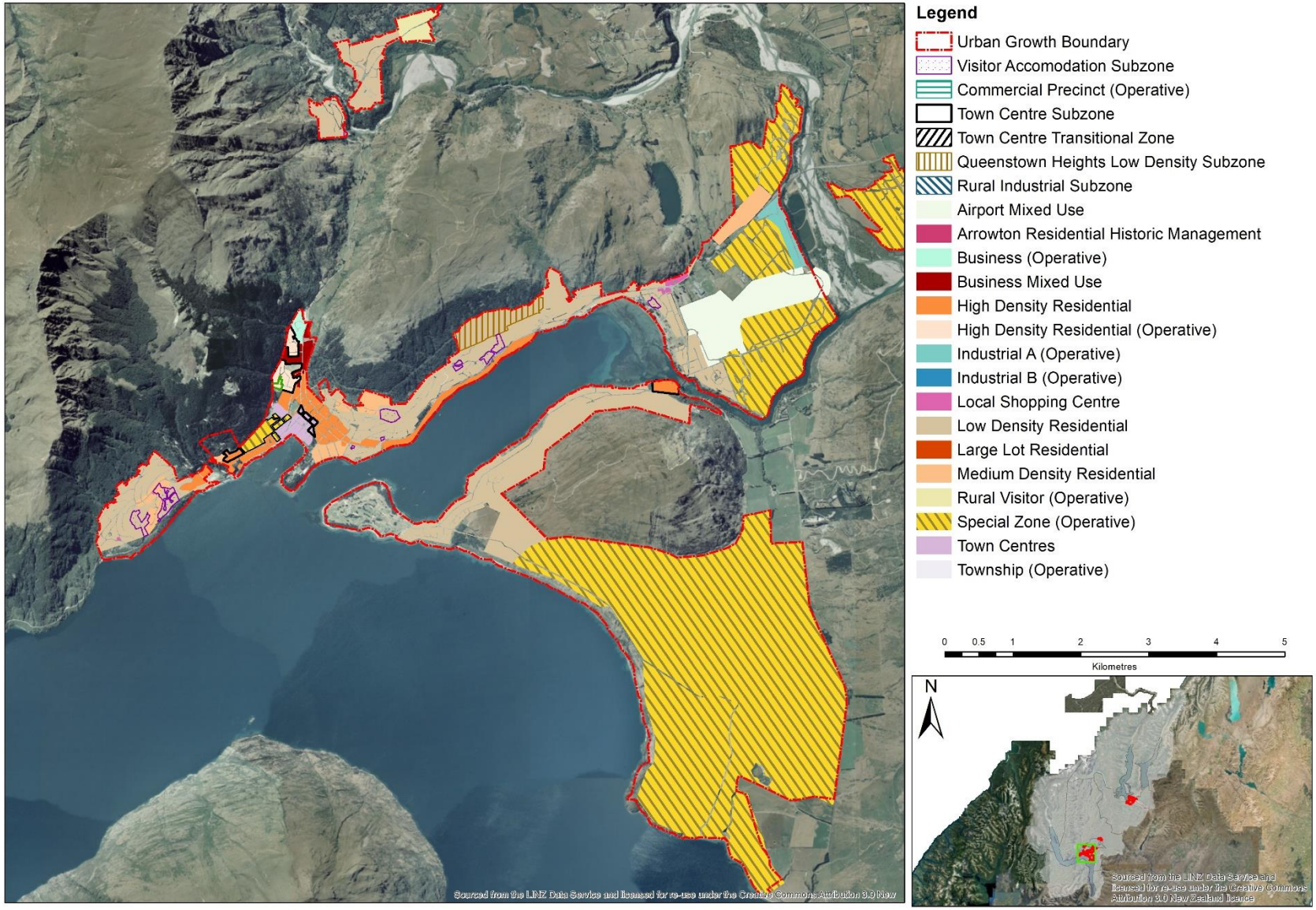
Queenstown Town Centre and Surrounds

The Queenstown Town Centre is the historical core of commercial and retail activities within the Wakatipu Basin. To date only limited amounts of residential activity are located in the town centre. Much of the CBD area is contained within the Queenstown Town Centre Zone and Sub-zone. High Density Residential zoned

[42] Precincts within Special Zones that have been excluded for the purpose of the BCDA include those focussed on residential, landscape, open space, screening, protection and reserve activities and specified no-build areas.

land boarders the town centre to the north, east and west. This area affords residents and visitors with a focus for community life, visitor accommodation, retail, entertainment, business and administrative services, and offers the greatest variety of activities. Recent high levels of economic growth and exponential increases in visitor arrivals to the district make the Queenstown Town Centre a dynamic and vibrant location.

Figure 2.3 – Land Use Zones in Queenstown and Surrounds



Plan Change 50 significantly expanded that area covered by the Queenstown Town Centre Zone. This land may potentially provide for a mix of residential, visitor accommodation and tourism facilities, including a possible convention centre and hot pools complex. Approximately 12.4 ha of land previously zoned High Density Residential located to the immediate north of the previous zone boundary was considered as part of Plan Change 50[43] and is now added to the Queenstown Town Centre Zone. The QLDC maintains ownership of the majority of the PC50 area.

Within walking distance from the Queenstown Town Centre is the proposed BMU zone of the PDP. This area is zoned as 'Business' under the ODP and currently accommodates a mix of light industrial and retail/office activities. However, this area is evident as being in transition as many uses over time have relocated to Glenda Drive or Frankton Flats. Given the proximity of this land to the Town Centre, it has been earmarked for urban regeneration through accommodating a mix of high density residential and business activities. This zone promotes heights up to 6 storey's in height, which is significant shift to those currently promoted in the ODP. The PDP BMU Zone encourages a mix of uses within this zone but requires retail/commercial spaces to be on the ground floor fronting Gorge Road. The Wakatipu High School was also located within this zone but has relocated to its new premises at Remarkables Park, leaving a large parcel in this zone with significant redevelopment potential. An SHA has also been established over this proposed zone.

Part of the Gorge Road area is located in the High Density Zone of the ODP. This area subject to natural hazards and geotechnical constraints; and these issues require further analysis and is being considered as part of Stage 3 of the District Plan review.

Fernhill is a substantial residential suburb located to the south west of the Queenstown Town Centre. It is predominately comprised of land zoned Low Density Residential but also contains smaller pockets of High Density Residential land located closer to the Queenstown Town Centre and Lake Wakatipu. Being within convenient location to the Town Centre, with high amenity lake views, Fernhill is a popular location for visitor accommodation, long term rental accommodation, as well as short term migrant worker accommodation. Two 'Visitor Accommodation Sub-Zones' are located within Fernhill, overlaying large land parcels of the Low Density Residential zone. These sub zones are primarily intended to support large scale commercial hotels on large sites, and in these areas visitor accommodation is proposed to be a restricted discretionary activity. There are large areas of vacant land that have been included as part of the BDCA.

Queenstown Hill is located immediately north and east of the Queenstown Town Centre. Much of this area is zoned High Density Residential. The Low Density Residential Zone occupies those remaining parts of Queenstown Hill at higher elevations. Two large Visitor Accommodation Sub-Zones are located within the Queenstown Hill area. Queenstown Hill also provides high amenity with many sites having lake views.

Goldfield Heights comprises much of the land located between Queenstown and Frankton. Properties located above Frankton Road are zoned Low Density Residential. A number of large scale residential subdivisions have taken place in this area since the early 2000's and a number of vacant sections remain at the time of writing this report. Two large Visitor Accommodation Sub-Zones are located within the Goldfield Heights Low Density Residential Zone, part of which remains vacant. Properties located below Frankton

[43] Decision No. [2016] NZEnvC99

Road (i.e. lakefront properties) are zoned High Density Residential and currently contain a mix of residential apartments and larger scale commercial visitor accommodation activities.

Frankton and Remarkables Park

Frankton and Remarkables Park are located approximately 14 km to the east of the Queenstown Town Centre. It is an area of significant land use diversity, containing commercial, retail and residential uses, all within close proximity to each other.

The Frankton area is located on the easternmost shore of Frankton Arm to the west of Kawarau Road. It is predominantly zoned Low Density Residential and contains a large number of dwellings. A number of designated parks and reserves area also present in the area. A small area zoned Local Shopping Centre with the purpose of serving surrounding residents with convenience goods stores[44] is sited at the BP roundabout where Frankton Road, the Frankton – Ladies Mile Highway and Kawarau Road converge. This particular road juncture is a major arterial route which has seen substantial road improvements in recent months.

The Remarkables Park Special Zone aims to provide a comprehensively managed and integrated high-density development containing opportunities for a range of supporting and complementary activities. These include open space, residential, conference facilities, visitor accommodation, transport, health, educational, recreational and commercial facilities[45]. Retail and commercial outlets within the zone range from smaller scale niche operators to big box type retailing. The main residential use of this area is concentrated to the south towards the Kawarau River and is also earmarked as a key area for the supply of high density type residential development for Queenstown.

Five Mile, Frankton Flats and Quail Rise

Five Mile and Frankton Flats are located approximately 7.8 km to the east of the Queenstown Town Centre. This wider area is highly accessible due to its proximity to the Frankton – Ladies Mile Highway and the recent construction of Hawthorne Drive, being a main diversion corridor for vehicle traffic moving between the Arrowtown/Lake Hayes/Shotover Country areas to Frankton and Jacks Point, and vice versa.

Hawthorne Drive has also enabled greater through movement between Five Mile/Frankton Flats to Remarkables Park and Frankton commercial areas; and has improved the accessibility of the surrounding road network. Together this wider 'Frankton' area is the first major commercial centre for visitors arriving by road and air, and for the majority of the district's permanent residents living in Frankton, Jacks Point, Shotover Country and Lake Hayes.

The Five Mile and Frankton Flats areas fall within the Frankton Flats and Frankton Flat B Special Zones under the ODP. The purpose of the Frankton Flats Zone is to enable development of a new shopping centre, which also incorporates opportunities for retailing, office, educational, visitor and residential accommodation and leisure activities[46]. The Frankton Flats B Zone has the potential to accommodate a broad range of activities including residential, education, industrial, commercial, and retail. High density

[44] Chapter 10, Town Centres, Queenstown Lakes District Council Operative District Plan 2016

[45] Chapter 12, Remarkables Park Zone Rules, Queenstown Lakes District Council Operative District Plan 2012

[46] Chapter 12, Frankton Flats Rules, Queenstown Lakes District Plan 2009

residential apartments 3-4 storeys in height (the Remarkables Residences) are currently under construction within this area and will integrate with the commercial area. This area has capacity for approximately 750 residential units.

Stage1 of the PDP as notified seeks to rezone a large area from Rural to Medium Density Residential zoning (known as Frankton Flats North or Quail Rise South)[47]. This site is located on the opposite side of the State Highway from the Frankton Flats Zone.

The Quail Rise Special Zone is located on the upper terrace of the Shotover River in close proximity to the Shotover Bridge. The purpose of the Quail Rise Zone was to provide low density residential with a high amenity area. This area has a maximum capacity of 218 residential units and has been largely developed.

Shotover Country and Lake Hayes

Much of the land located within the Shotover Country Special Zone and Lake Hayes Estate is zoned for residential purposes. A large portion of this land has already been developed for low to medium density residential living.

The purpose of the Shotover Country Special Zone is to establish a comprehensively designed and integrated residential living environment that provides opportunities for predominantly low density living accommodation with a smaller mixture of medium density living, community and educational activities. The Shotover Country Special Housing Area adjoins the existing residential area.

The Shotover Country Special Housing Area (SHA) is located to the west of the Shotover Country Special Zone and approved 101 residential allotments. This is currently under construction. This SHA does not form part of the urban environment and is discussed in more detail in Section 2.5 below.

Lake Hayes Estate is predominately comprised of low density residential zoned land. The peripheral allotments located within Lake Hayes Estate are proposed to be up-zoned from Rural Residential to Low Density Residential by way of the stage 1 PDP review process. A decision on this up-zoning is yet to be released. Some of this land is subject to private covenants which restrict intensification, and the capacity of this land has been removed in this assessment (where this is known).

The Bridesdale SHA is located at the eastern end of Lake Hayes, which approved the construction of 134 residential units. This development is more akin to a medium residential development. A review of Council records indicates that building consents have been issued for 91 of these residential dwellings. This SHA falls partly within the urban environment.

The Queenstown Country Club SHA is located on two tracts of land that fall between Shotover Country and Lake Hayes Estate. The northern site is located adjacent to Ladies Mile Highway (SH6) and the southern site is located at Jones Avenue, Queenstown. The total approved capacity for the site is for 346 residential units and an aged care bed facility (Retirement Village Complex), a number of ancillary commercial, community and educational activities were also approved. The Onslow Road SHA approved a 21 allotment

[47] In QLDC Right of Reply this was amended to be a mix of High Density Residential and Business Mixed Use Zoning

subdivision and is located at the southern end of Lake Hayes Estate. This is being developed in conjunction with the Queenstown Country Club SHA[48]. Both these SHAs fall outside the urban environment.

A small portion of Low Density Residential land that is located to the east of Lake Hayes also forms part of this urban area. This area historic has large established residential dwellings along the lake front. This area historic has large established residential dwellings along the lake front. Only a very small number of vacant residential sections remain in this area.

Kelvin Heights and Jacks Point

Kelvin Heights is a large residential suburb located on the southern shore of the Frankton Arm. The majority of land located in Kelvin Heights is zoned Low Density Residential and has significant existing capacity for additional residential development. However, much of this undeveloped capacity remains owned by a single landowner. Some of the already developed land is also subject to private covenants, which restricts further intensification, and the infill capacity has been removed in this assessment (where this is known). An area of land located at the eastern extent of Kelvin Heights adjacent to the Kawarau Bridge is zoned High Density Residential. This area has been extensively developed as large-scale commercial visitor accommodation (the Hilton Hotel) and for residential purposes. A number of sections within this development remain vacant.

The Jacks Point Special Zone is located approximately 15.8 km from the Queenstown Town Centre. The purpose of the Jacks Point Zone is to provide for residential and visitor accommodation in a high quality sustainable environment comprising of two villages, a variety of recreation opportunities and community benefits, including access to public open space and amenities. This area includes Hanley Downs, Jacks Point and Homestead Bay. It has capacity for approximately 3,700 residential dwellings and is one of the key residential growth areas in Queenstown. Further intensification of this zone was proposed within Stage 1 of the PDP rezoning hearings.

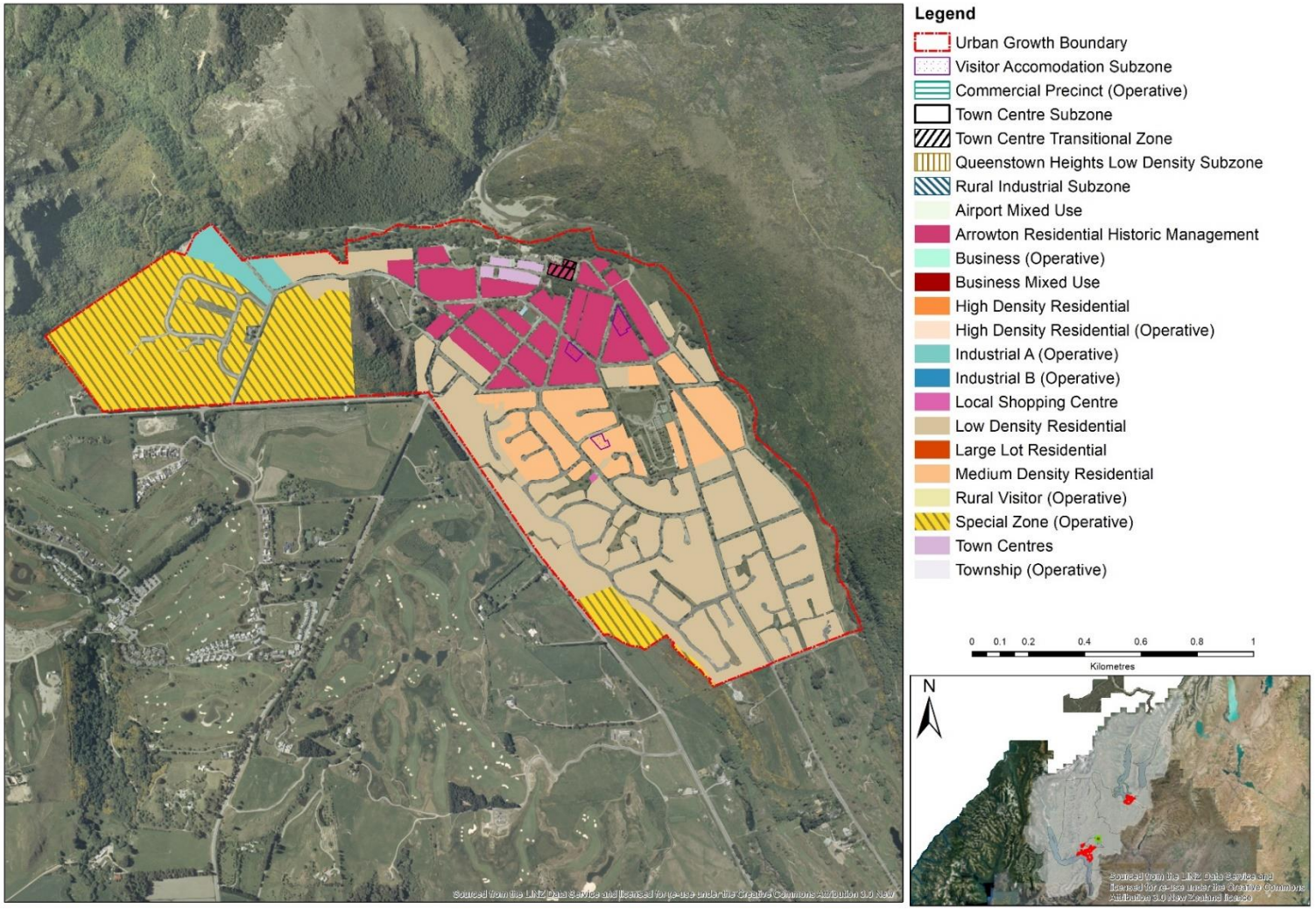
Arthurs Point

Arthurs Point is a village located approximately 5.5 km from the Queenstown Town Centre. It is predominantly zoned Low Density Residential and bounded by Rural zoned land. A small area of commercial/office/retail activity is currently situated on the lower banks of the Shotover River in the location of the Edith Cavell Bridge. An area of land in the northeast of Arthurs Point is a village is zoned Rural Visitor. The purpose of the Rural Visitor Zone is to complement the existing range of visitor accommodation opportunities in the District and provide for increased opportunity for people to experience the rural character, heritage and amenity of the rural area. The Zone provides for a range of accommodation, entertainment, cultural and recreational activities.

The rural visitor zone is at various stages of completion and accommodates the Shotover Lodge and the Swiss Bel Resort. The area is within convenient access of the town centre and also to Coronet Peak, making it also a popular location for holiday rentals. The area has seen recent revival of investment activity through the development of the Arthurs Point SHA, proposed re-development of the Swiss Bel Resort, and a number of town house developments.

[48] The capacities of these SHAs have been reported separately and discussed in detail at Section 2.5.

Figure 2.4 – Land Use Zones in Arrowtown and Surrounds



The Arthurs Point SHA is located to the west if the Rural Visitor Zone and partly on land zoned Low Density Residential in the in PDP. SH160143 approved the construction of 88 residential units on the site. These are currently under construction[49]. This SHA falls partly within the urban environment.

2.3.4 Arrowtown and Surrounds

Arrowtown is located approximately 20.5 km from the Queenstown Town Centre. It is a major commercial and retail precinct within the Wakatipu Ward driven largely by sustained increases in visitor numbers. It's Town Centre zoned area is located across a small stretch of Buckingham Street, which comprises the historic civic centre that emerged in the early 1860s following the Arrow gold rush. A small Industrial zoned area lies to the west of Arrowtown and contains a mix of light industrial and yard activities. The town centre is bounded by residentially zoned land to the south, east and west, while the Bush Creek and its associated reserve land, boarders the town to the north. There is limited amount of vacant residential land (Figure 2.4). Part of this land was identified by Council for intensification and was rezoned to Medium density residential under the notified PDP. This zoning is to be considered in Stage 2 of the PDP.

Meadow Park Special Zone is a mixed use zone located on the corner of Manse and Malaghan Roads, which is to west of the Arrowtown Town Centre and south of the existing industrial zone land. The dominant land use to date within this zone has been residential activity. The Arrowtown South Special Zone applies to 30 hectares of land that adjoins the established southern residential area of Arrowtown. This zone allowed for an additional 20 residential houses within the UGB.

The Arrowtown SHA is located to the south of Arrowtown and outside the urban growth boundary. It approved the construction of 195 residential units and an aged bed care facility as part of a Retirement Village Complex. Construction has commenced. This SHA is located outside the urban environment.

2.3.5 Wanaka and Surrounds

There are a number of residential areas within the Wanaka and surrounding locality. They can be broadly grouped into Wanaka Town Centre and surrounds and Luggate, Hawea and Albert Town Townships. Each of these are broadly described below and are shown in Figures 2.5 to 2.7.

Wanaka Town Centre and Surrounds

The Wanaka Town Centre is the principle focus of commercial and retail activities within the Wanaka Ward. It is sited on the south-eastern most shore of Lake Wanaka and is zoned Wanaka Town Centre under the PDP. A mix of zones bound the town centre, including high and low density residential land, as well as Open Space and Recreation and rural zoned land. The Wanaka Town Centre zone makes provision for a wide range of activities necessary to retain the importance of Wanaka's role as the dominant service centre for the wider Wanaka Ward[50] (Figure 2.5).

The town centre is supported by the Three Parks Special Zone, which is located to the south east of the town centre. This zone will promote a range of activities including commercial, residential, visitor

[49] The capacities of the SHAs are reported on separately.

[50] Chapter 10, Town Centres, Queenstown Lakes District Plan 2016

accommodation, community and recreational activities, as well as an open space network. Residential capacity of this area is for approximately 750 residential dwellings.

The proposed Business Mixed Use Zone in Anderson Heights is also within walking distance from the Wanaka Town Centre. This is an area that is earmarked in the PDP for urban regeneration by enabling higher intensity and compatible land uses, whilst enabling services that complement, enable and support the Wanaka Town Centre. There is limited existing vacant capacity in this zone.

The stage 1 PDP review seeks to up-zone two existing residential locations in Wanaka from Low Density Residential to Medium Density Residential zoning. One of these areas is located in close proximity to the Wanaka Town centre, being boarded by Brownston St, McDougall St, Russell St and Tenby St. The second area is located in the north of Wanaka off Aubrey Rd and is currently vacant. It is noted that resource consent RM161169 and RM161226 approved approximately 161 residential allotments on this portion of land. These figures have been incorporated into the modelling to avoid overstating capacity on the site. In addition, the PDP seeks to up-zone an area of land south of the Wanaka Town Centre from Rural Lifestyle to Low Density Residential.

There are two Local Shopping Centre Zones located along Cardrona Valley Road (new proposed area) and Albert Town which enable small scale commercial business activities in discrete pockets of land that are accessible to the surrounding residential areas. Existing businesses in the Albert Town Local Shopping Centre include a café and restaurant. A number of Visitor Accommodation Sub-Zones exist throughout Wanaka and are mainly located over existing hotels/motels.

The Northlake Special Zone is located between Wanaka and Albert Town, with its primary intention of enabling approximately 1,500 residential homes. The zone includes a small commercial and community facilities node that is located alongside Northlake Drive (the main street of the development). This zone is currently subject to a private plan change, which seeks to slightly increase residential densities on the flat portions of the site and increase the amount of retail floorspace in the village centre.

Luggate, Hawea and Albert Town Townships

The purpose of the Township Zones is to enable the continued function of Townships as rural service centres. Many of these zones are not serviced by reticulated infrastructure and therefore support low development densities on large allotments. Different activities occur within these zones and it is not unusual to find commercial or industrial activities, such as transport yards, hotels and small businesses to be interspersed with housing. Historically commercial and visitor accommodation precincts were an accepted method in the ODP of promoting and providing for commercial (including visitor accommodation) activities within these areas. Commercial and visitor accommodation activities are controlled activities within each of the precincts, incentivising commercial based activities within these precincts, rather than in the residential areas where such activities would otherwise be discretionary. This method will be reviewed in Stage 3 of the PDP process.

Albert Town (including Riverside Stage 6) is located to the east of Wanaka, where State Highway 6 crosses the Clutha River. Due to its proximity to the Wanaka Town Centre and established residential development it is considered to form part of the Wanaka urban environment. It is located within Wanaka UGB (Figure 2.5 below). It is predominantly a residential settlement with a small area zoned Local Shopping Centre,

which has some vacant capacity. A café/restaurant/bar and small shop currently service the existing community.

Hawea is located approximately 17.1 km from the Wanaka Town Centre (Figure 2.6). It is positioned on the southern shore of Lake Hawea. Much of Hawea is located within the Township Zone under the ODP. However, a large area of Rural Residential zoned land is sited immediately to the south of the primary Township Zone (excluded from the scope of the urban environment). Hawea contains 0.3 ha of vacant retail and commercially zoned land (Local Shopping Centre Zone) and some vacant capacity within the Visitor Accommodation Sub-zone. Large residential developments have been approved on the Rural Residential zoned areas that lie to the south of the Township Zone (discussed further at section 2.4).

Luggate is located approximately 14.4 km from the Wanaka Town Centre (Figure 2.7). Much of Luggate is located within the Township Zone under the District Plan. However, a large area of Rural Residential zoned land is sited immediately to the north and east of the primary Township Zone (outside the defined urban environment).

Figure 2.5 – Land Use Zones in Wanaka and Surrounds

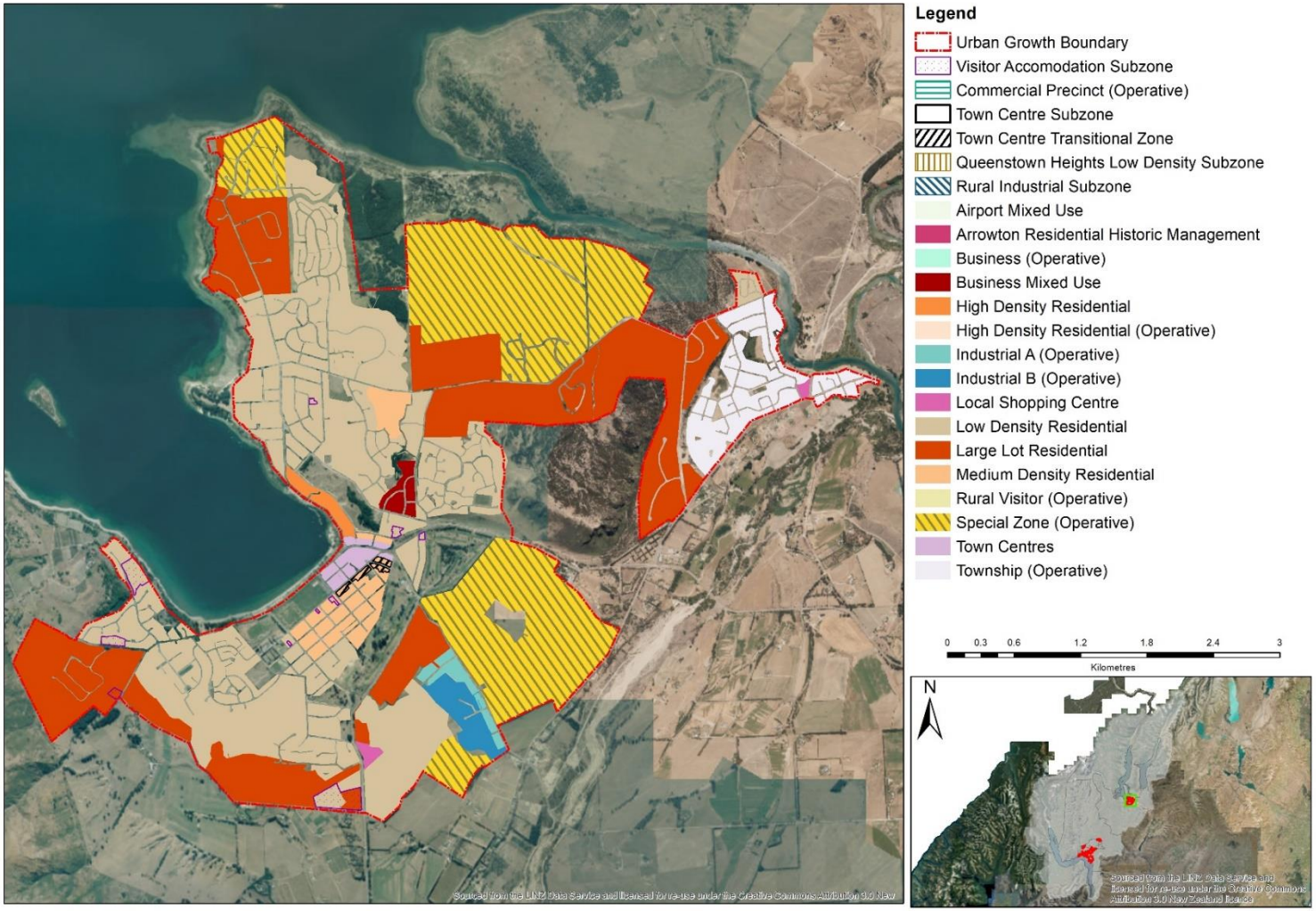


Figure 2.6 – Land Use Zones in Hawea

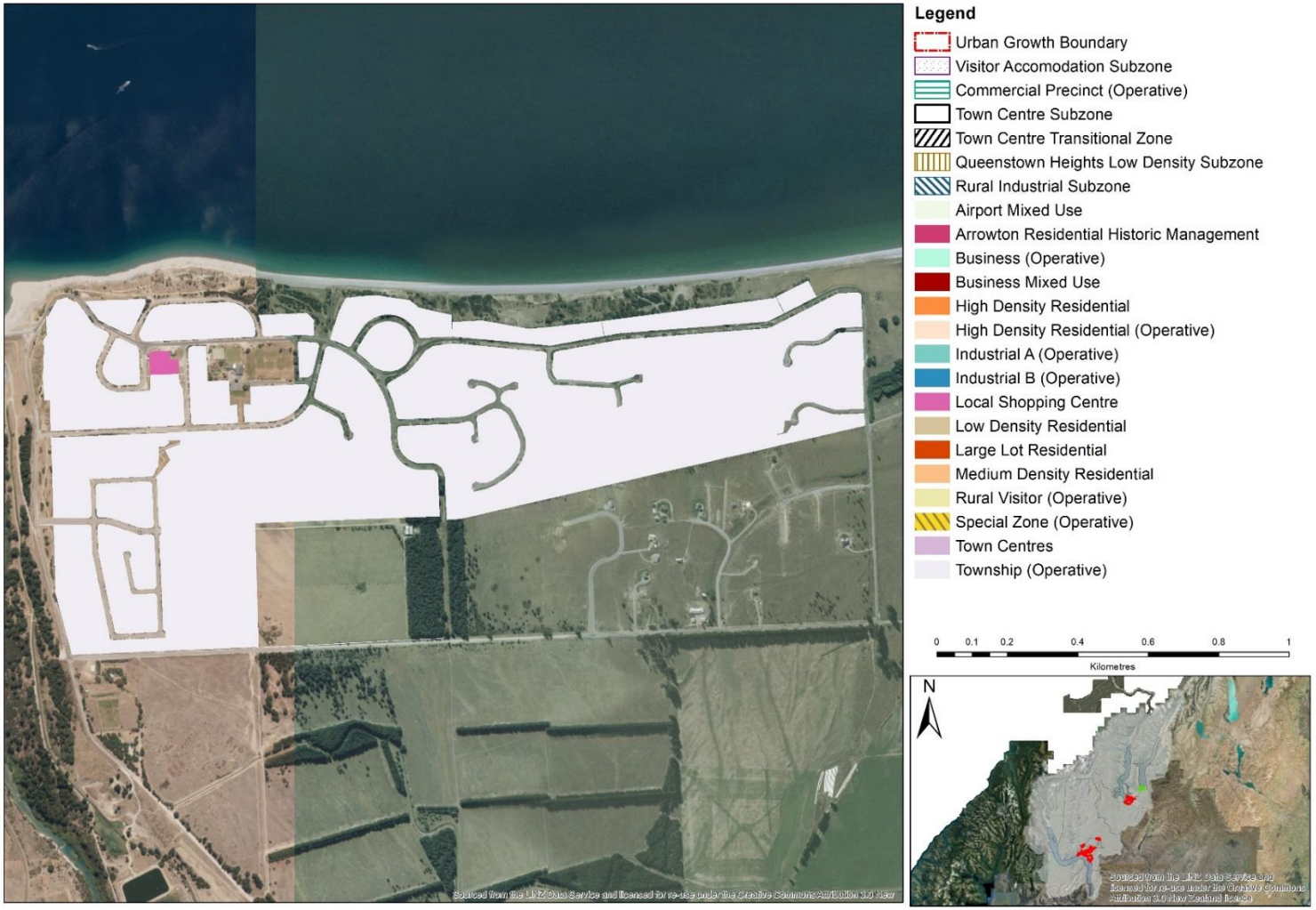
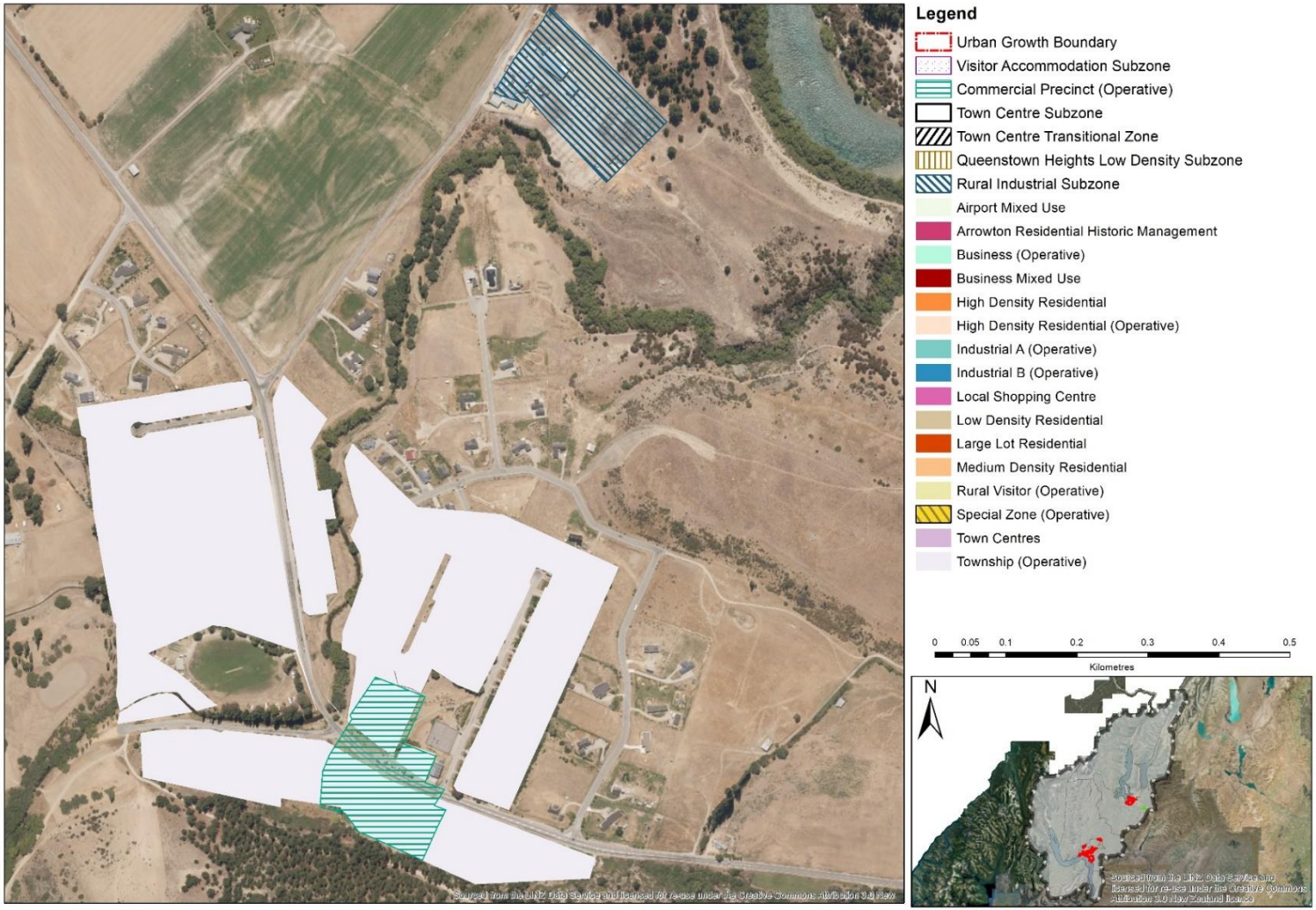


Figure 2.7 – Land Use Zones in Luggate



2.4 Residential Capacity in the Rural Environment

The residential capacity outside of the urban environment is complex. These areas are not presently modelled for feasibility because they are outside the defined 'urban environment' of this assessment but have been modelled through the Council's investigations for the PDP. The rural environment is made up of rural and rural living and small townships and has varying levels of services, but for the majority servicing is at the cost of the developer. These areas have an important role in the local economy as they complement the Queenstown and Wanaka Town Centres, support local communities and are areas where a high proportion of tourist activities are located.

The plan enabled capacities of the zones are highlighted in Table 2.1. This table indicates that there is significant plan enabled residential capacity (at least 3,392 additional dwellings) in the 'rural environment', noting that it has not been modelled for feasibility.

The capacities of the Wakatipu Basin variation have not been reported on, as further detailed analysis of the proposed restrictions including setbacks from roads/state highways and the retention of existing landscaping is required. A large number of the properties in this area have complicated layers of private covenants and consent conditions which affect their ability to develop and in the absence of a forensic site by site analysis, it is highly likely that reporting on plan enabled capacity in this zone will overestimate the potential residential capacity . It is anticipated that the PDP review process will explore this issue in suitable detail to enable future analysis. As a result, the plan enabled capacities of the Stage 1 PDP and the ODP chapters has been reported on above. These zones are further discussed below.

Table 2.1 – Plan Enabled Residential Dwelling Capacity in the QLD Rural Environment

Zone	Wakatipu Ward	Wanaka Ward	Total QLD
Rural (Wakatipu)	371		371
Rural (Gibbston)	160		160
Rural (Glenorchy)	37		37
Rural Lifestyle	360		360
Rural Residential	265		265
Rural Residential (Ferry Hill)	7		7
Rural Residential (Bobs Cove)	32		32
Townships (outside urban environment)	290		290
Bendemeer Special Zone	38		38
Millbrook Special Zone (PDP)	251		251
Waterfall Park Special Zone (PDP)	48		48
Kingston Village Special Zone (ODP	550		550
Rural (Wanaka)		167	167
Rural (Hawea)		127	127
Rural Residential		210	210
Rural Lifestyle		40	40
Rural Visitor (Cardrona only)		140	140
Mount Cardrona Special Zone		550	550
Total	2,409	1,234	3,643

Source: QLDC. Capacities as modelled for the PDP (March 2017).

Rural Zone

The purpose of the Rural zone is to enable farming activities while protecting, maintaining and enhancing landscape values, nature conservation values, the soil and water resource and rural amenity. A wide range of productive activities occur in the Rural Zone and because the majority of the District's distinctive landscapes comprising open spaces, lakes and rivers with high visual quality and cultural value are located in the Rural Zone, there also exists the desire for rural living, recreation, commercial (including commercial recreation) and tourism activities.

Residential densities in the Rural Zone are difficult to report on. Subdivisions and the establishment of residential building platforms (that are between 70m^2 and 1,000m^2) are Discretionary Activities, with no minimum site areas. As a result, the only capacities that are reported on in the table for the Rural Zone are the unbuilt residential building platforms. QLDC is currently in the process of updating this data as these figures were based on the capacity data from September 2016 [51]that was utilised for the PDP.

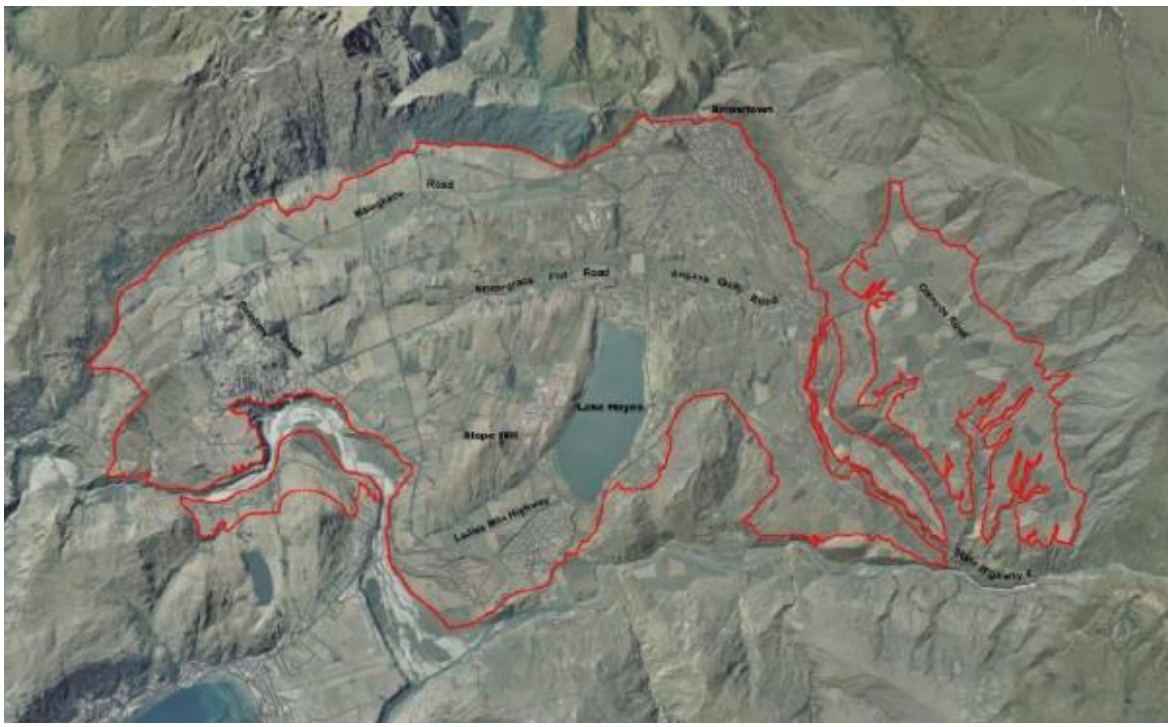
Wakatipu Basin Variation

As part of Stage 2 of the District Plan Review (in response to the Hearings Panels concerns over the cumulative effects of Discretionary subdivision in the Wakatipu Basin) a new zone has been proposed that better manages the special character of the Wakatipu Basin.

The new zone distinguishes the Wakatipu Basin from the rest of the District's rural and rural living areas and seeks to restrict rural subdivision and development in some areas and enabling some level of development in others. The Lifestyle Precinct comprises of land within the Wakatipu Basin Rural Amenity Zone that has been identified as having capacity to absorb higher levels of development, with a proposed density of one residential unit per 6,000m^2 and an average density of 10,000m^2.

[51] The review of the capacity in the Rural Zone was a separate process to the review of plan enabled capacities of the other zones for the PDP. QLDC is currently reviewing the processing for capturing this information.

Figure 2.8 – Extent of Wakatipu Basin Variation (Stage 2 Zoning)



Outside of these areas new allotments require a minimum site area of 80 hectares. Capacities are difficult to report in the Lifestyle Precinct as any resource consent application will be required to meet detailed landscape requirements including setbacks from roads/state highways and the retention of existing landscaping. It is not a case of simple allowing one new house per 6,000m^2.

The area affected by the Wakatipu Basin variation is indicated in Figure 2.8 (noting that Arrowtown and Ladies Mile are not being considered at this point in time).

Gibbston Character Zone

The purpose of the Gibbston Character Zone is to provide primarily for viticulture and commercial activities with an affiliation to viticulture. The zone is recognised as having a distinctive character and sense of place. It incorporates terraced areas above the Kawarau River. Similarly to the Rural Zone, all new residential building platforms need Discretionary Activity consent and the unbuilt residential building platforms are the only capacity that has been reported on in the table above. This zone was also proposed for residential intensification through the Stage 1 PDP hearings and is subject to the outcomes of commissioner's decisions.

Rural Residential and Rural Lifestyle Zones

The Rural Residential and Rural Lifestyle Zones provide residential living opportunities on the periphery of urban areas within specific locations amidst the Rural Zone. In both areas a minimum allotment size is necessary to maintain the character and qualities anticipated and, where applicable, a buffer edge between urban areas, or the open space, rural and natural landscape values of the surrounding Rural Zone.

Capacities at the Makarora Rural Lifestyle Zone and Rural Residential Zone at Reko's Point are not reported on within this assessment. The Makaroa Rural Lifestyle Zone has been excluded because of the uncertainty and reasonable doubt as to the viability of developing to the PDP standards. Large parts of this zone are affected by natural hazards and there has been a low level of take up in this zone over the last 15 years under the ODP zoning regime.

Similarly, the Rural Residential Zone at Reko's Point is considered unlikely to be developed because there is a private covenant in favour of neighbouring landowners preventing further subdivision of the site. Consent was issued for 52 allotments, this was overturned as a result of an appeal to the High Court.

To the south of the Hawea Township is a large area of Rural Residential land. This land is being developed at densities which are more similar to those anticipated in the Township zone. Approximately 360 sections have been approved, with some occurring in the Township Zone and some in the Rural Residential zoned portion.

Millbrook and Waterfall Park Special Zones

Millbrook is located approximately 18.8 km from the Queenstown Town Centre. The area is contained within a Special Zone. It provides a visitor resort over an area of approximately 200 ha which offers recreational, commercial, residential and visitor activities. The general amenity of the zone is one of higher density development enclaves within the context of an open rural countryside and well landscaped grounds. Golf courses and a range of other outdoor and indoor sporting and recreational activities are provided for as well as hotel and residential accommodation, together with associated support facilities and services. A maximum of 450 residential dwellings are able to be established in this Zone, with their being capacity for approximately 251 residential units[52]. All the servicing for this zone is provided privately.

The Waterfall Park Special Zone is located to the south of Millbrook Special Zone. It promotes similar activities to that of Millbrook but has a maximum residential density of only 100. This zone remains largely undeveloped. This zone is affected by natural hazards and it is considered unlikely that this capacity will be realised. For the purposes of the PDP Dwelling Capacity Modelling a capacity of 48 was reported on.

Kingston

The settlement of Kingston is the southern entry point to the District. The community is made up of both permanent and holiday residents. The settlement pattern is dominated by the lakeshore and the separation of the town from the highway. Kingston's character is further enhanced by narrow roads, low height buildings and surrounding vegetation. Existing commercial activities are limited in this zone and include a camping ground, retail shops and a tavern.

Due to geographic constraints, Kingston is effectively the next area available for development south of Jack's Point. Approximately 88 hectares of land has been rezoned to the Kingston Village Special Zone. This zone provides for predominantly residential zoning, but also includes provision for visitor accommodation, an area of employment and education and recreation. To enable this level of residential development three waters infrastructure is required, without this development is unlikely to proceed in the short to

[52] Based on capacity findings for the PDP, March 2017

medium-term. This is one of three growth areas that have been approved to the detailed business case phase as part of the Housing Infrastructure Fund (HIF). Due to its distance (approx. 30-45min drive) from Queenstown, Kingston may provide a supply of comparatively more affordable housing and may have a greater role in future as a commuter centre (similar to Cromwell which is a similar travel time Queenstown). The proposed new infrastructure will include new water supply and wastewater treatment plants along with the reticulation network infrastructure for three waters (discussed in section 2.4.1). The infrastructure requirements and investments represent a major obstacle to the development of both the Kingston Township and Kingston Village Special Zone.

Glenorchy & Kinloch

Glenorchy is situated at the northern end of Lake Wakatipu between the mouth of the Rees River and the mouth of Buckler Burn, and services both tourism and farming activities. The layout of the town is a reflection of the early subdivision pattern and is characterised by wide streets, few footpaths and large rectangular sections. Glenorchy is an important base for visitor activity.

Kinloch is situated at the northern end of Lake Wakatipu, on its western shore.

Makarora

Makarora is the District's northern most community and consists of three separate townships. It is an important local base for visitor activity. While development is anticipated in these areas, the zones are subject to natural hazards and it is anticipated that development will recognise and manage the risks of natural hazards at the time of subdivision or the identification of building platforms.

Rural Visitor Zones

The Rural Visitor Zone is a diverse zone that is located at Cardrona Village (near Mount Cardrona Station), Windermere (next to the Wanaka airport), Cecil Peak, Walter Peak, Blanket Bay and Arcadia Station near Paradise. It is noted that the Arthurs Point Rural Visitor Zone has been included within the urban environment and has been modelled.

Most of these areas (with the exception of Arthurs Point) have had little residential development, even though the zone is very enabling. A broad review of these areas indicates that the majority of the development in these zones (where they have been developed) has been visitor accommodation and small scale commercial activities (such as dairies and taverns) with a very small portion of residential activity.

The only Rural Visitor Zone capacity that is modelled within this assessment is the Rural Visitor Zone at Arthurs Point. The Cardrona Rural Visitor Zone has been reported on at high level but has not been modelled. The operative Rural Visitor Zone provisions make it difficult to anticipate the likely yield in terms of density because the provisions of the ODP Rural Visitor Zone, could allow as a controlled activity:

d. a visitor accommodation building of up to 12 metres in height at a minimum of 20 metres from the boundaries; or

e. commercial recreation and residential activities of up to 8 metres in height outside a 10-metre boundary setback.

The matters of control are coverage, location, external building appearance, earthworks, access and landscaping. While a larger amount of capacity could have been used, a conservative figure of 200 has been applied to this area, which was based on historical developments within the zone.

The Rural Visitor Zones (Arcadia, Blanket Bay, Windermere, Walter Peak and Cecil Peak) have not been reported on. This is because of their remote locations, use primarily relating to tourism and visitor accommodation and general low level of existing residential activity in the areas. In addition, residential activity in the Windermere Rural Visitor Zone is considered to be a Non Complying Activity (except for custodial residence) and over half the zone is located within the Wanaka Airport Outer Control Boundary.

Mount Cardrona Station (Plan Change 52)

The Mount Cardrona Station Special Zone is located mid-way between Queenstown and Wanaka, and near the base of the Mount Cardrona Ski Field. The zone covers approximately 130 hectares of land. The purpose of this zone is to create a village that accommodates permanent residents, visitor accommodation, seasonal & migrant workers, with supporting commercial, community and educational activities. The village is only partially developed. Recent changes to this plan change have promoted a golf course, a more centrally located 'village square', and to provide gondola access to the Cardrona Ski Area. The nearby Ski Area Subzone was also proposed for significant expansion of the commercial/tourism offering through the Stage 1 PDP process and is subject to the outcomes of commissioner's decisions. This area remains undeveloped, but similarly to Kingston is considered one of the growth areas moving forward. Cardrona is however situated at an elevation of approximately 600 masl and difficult to access by road from Queenstown in winter.

2.4.1 Infrastructure in the Rural Environment

The land contained in the Rural, Rural Lifestyle, Rural Residential Zones and the Wakatipu Basin are outside the Councils scheme boundaries and are not anticipated to connect to the Council network but be privately serviced onsite at the developer's cost.

Of particular note is that the Otago Regional Council (ORC) are currently in the very initial stages of considering a plan change addressing the septic tank permitted activity rule, potentially utilising a nitrogen-loading approach. An outcome of this could be that the QLDC may be required to reticulate wastewater in some currently unserviced communities in order to meet the rules of the potential plan change. The ORC are also in the process of establishing a water management regime for the Arrow Catchment and the Wakatipu Basin acquifers. The purpose is to set minimum flows and water limits. This is currently in the consultation phase of development. An update of this will be provided in future HDCAs.

The lack of Council servicing or limited of servicing in areas such as Kingston, Glenorchy, Kinloch, Gibbston, Makarora, Cardrona and other Rural Visitor Zones (Cecil Peak, Walter Peak Cardona, Blanket Bay, Arcadia Station); in addition to some difficulties with the standard of road access, restricts the likely take up overall housing capacities outside of the urban environment. For example, in Glenorchy there is an existing Council water supply scheme, which is being placed under considerable pressure from increased levels of development and the aging infrastructure. A hydraulic model is currently being developed to confirm if any network constraints exist. In terms of wastewater there is no Council scheme and following initial community consultation plans to service Glenorchy this has been pushed out beyond the 10 year LTP.

While, the proximity to the Wanaka Airport restricts residential activity in the Windermere Rural Visitor Zone via a rule in the ODP.

Housing Infrastructure Fund (HIF)

The Housing Infrastructure Fund was established by the Government in 2017 to assist high growth councils to advance infrastructure projects important to increasing housing supply. The Council was successful in three growth areas applied for (Kingston, Quail Rise south and the Ladies Mile) and based on an indicative business case, has provisionally been allocated up to $50 million dollars as part of the HIF.

For Kingston, the proposed new infrastructure will include new water supply and wastewater treatment plants along with the reticulation network infrastructure for three waters and a connection to the state highway. As discussed above, the infrastructure requirements and investments represent a major obstacle to realising the scale of plan enabled development capacity of both the Kingston Township and Kingston Village Special Zone; and for this reason, Kingston is not currently identified as part of the Queenstown urban environment.

The Quail Rise south area potentially includes the provision of roading, water, wastewater and stormwater. It is the only area that falls within the Queenstown urban environment. This area was subject to rezoning proposals through stage 1 of the PDP, from the notified Medium Density Zone, to High Density, and BMU zones. Subject to the commissioner's recommendations, this land may therefore accommodate increased residential capacities to those anticipated through the notified PDP. It is noted that no major infrastructure issues were raised in the PDP hearings, as it was considered efficient to connect this land to nearby reticulated networks. However, it is considered the HIF will contribute to the construction of services and bringing forward this development.

The area referred to as 'Ladies Mile' area is a large corridor of flat land fronting SH6 located between the Shotover Bridge and Lake Hayes, and north of the Shotover Country and Lake Hayes residential areas. The land is currently zoned as Rural however has been included in Category 2 of the Council's Housing Accords and Special Housing Areas Act 2013 Implementation Policy, meaning it has been identified as a site that may be suitable for the establishment of SHAs. This area currently falls outside of the urban environment and is therefore not included in this capacity assessment. The proposed new infrastructure will include three waters and a new roundabout.

Overall, the infrastructure delivered through the HIF will provide for approximately 3,200 homes and some form of business capacity. All of these areas are the subject of detailed business cases and an update will be provided in the next HDCA.

2.5 Special Housing Areas

The purpose of the Housing Accords and Special Housing Areas Act 2013 (HASHAA) is:

> *To enhance housing affordability by facilitating an increase in land and housing supply in certain regions or districts [which includes Queenstown Lakes] identified as having housing supply and affordability issues.*

On 23 October 2014, the Queenstown Lakes District Housing Accord (the Accord) was signed between the Council and the Minister of Building and Housing (the Minister). This was subsequently updated and amended on 12 July 2017. The intention of the Accord is to increase land and housing supply and improve housing affordability in the Queenstown-Lakes district by facilitating development of quality housing that meets the needs of the growing population and the purpose of the HASHAA. The Accord required the Council to prepare the Housing Accord and Special Housing Areas Act Implementation Policy (the Lead policy), which is seen as an evolving document and was last updated on the 26 October 2017.

A SHA is an area of the District suitable for new housing where more permissive consenting powers of the HASHAA can be used to fast track predominantly residential developments. The updated Lead Policy provides guidance on what areas in the PDP are suitable for the establishment SHAs (Category 1) and areas that maybe suitable for SHAs (Category 2). Category 1 areas include Queenstown residentially zoned sites, and Category 2 areas include the Ladies Mile and Wanaka residentially zoned sites.

The SHA process provides an opportunity to get more medium/high density residential developments in appropriate locations at a much quicker rate than via the PDP. The other advantage to SHAs is that they can potentially target specific markets and presents developers/landowners with the opportunity to provide a mechanism that addresses both speculation and affordability.

The current Lead Policy requires an affordable housing contribution of at least 10% of the residential component of the development by developed market value or by area. This land (or money) is to be provided to the Queenstown Lakes District Community Housing Trust (Trust) (being the preferred organisation for the delivery of a range of affordable housing options) and retained for affordable housing in perpetuity, as a secure home, long-term rental or rent to own scheme (assisting the move from long-term rental to the Secure Home product)[53]. Long-term affordability would be retained, as the Trust would maintain the ownership of the land and lease it back to the land owner at a concessional rate. In addition, the value of the residential unit is capped at an annual CPI rate or equivalent and can only be sold back into the Trusts pool of buyers. Long-term rentals would be at an affordable rental rate that is well below market rates.

One of the goals of the Mayoral Housing Affordability Taskforce that was set up in April 2017 is:

> *"All of our workforce will be able to own or occupy a home in our District at a cost that allows them to live within their means by 2048, with an initial target of 1000 Community Affordable homes with secure tenure by 2028"*[54]

SHAs are one of the tools that are being utilised to achieve this goal and are seen as an alternative mechanism to combat housing affordability in QLD[55]. To date approximately $7 million of affordable housing contributions have been provided to the Trust and have included both land and cash contributions (noting that this provision was based on a 5% contribution to affordable housing).

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[53] Source: Housing Affordability Taskforce Report dated October 2017.

[54] Source: Housing Affordability Taskforce Report dated October 2017.

[55] Affordability means a home where the household is able to spend less than 35% of gross household income on rent or mortgage repayments.

In total eight special housing areas (SHAs) have been approved within the Wakatipu Basin (Figure 2.9). These have been identified separately and similarly to the rural environment form part of additional capacity. The majority of SHAs have been approved outside of the urban environment, which has been serviced at the developers cost with the exception of the following:

- Arthurs Point SHA is partly located in the Low Density Residential and Rural Zones of the PDP;
- Bridesdale SHA is partly zoned Low Density Residential, Rural Lifestyle and Rural in the PDP;
- Business Mixed Use Zone (Gorge Road) SHA falls over the proposed Business Mixed Use Zone, but also includes the former Wakatipu High School site and 133 Hallenstein Street. This SHA is to be serviced via existing Council services and is in line with the densities that are being promoted as part of the PDP.

It is important to note that residential units in SHAs cannot be used solely for visitor accommodation. A covenant or consent notice is placed on the title that restricts this. This forms part of one of the criteria of the Lead Policy.

Table 2.2 provides a summary of net additional capacity provided by the SHAs in the Wakatipu Basin (i.e. capacity over and above any underlying plan enabled urban capacity to avoid double counting). The SHAs have allowed increased levels of residential development to those permitted in the PDP and has included a contribution to affordable housing through land, land/housing packages or financial contributions.

Table 2.2 – Net Additional Dwelling Capacity in QLD SHAs

Special Housing Area	Approved Residential Densities	Net Additional Dwelling Capacity[56]	Stage of Development
Bridesdale	134 (excluding two existing dwellings)	124 (ODP) 91 (PDP)[57]	Currently being developed
Arthurs Point	88 residential units	61 (ODP & PDP)	Currently being developed
Onslow Road	21 residential units	21 (ODP & PDP)	Currently being developed
Queenstown Country Club	346 (+ an aged bed care facility)	346 (ODP & PDP) + aged bed care facility	Currently being developed
Arrowtown Retirement Village	195 (+ an aged bed care facility)	195 (ODP & PDP) + aged bed care facility	Units being pre-sold

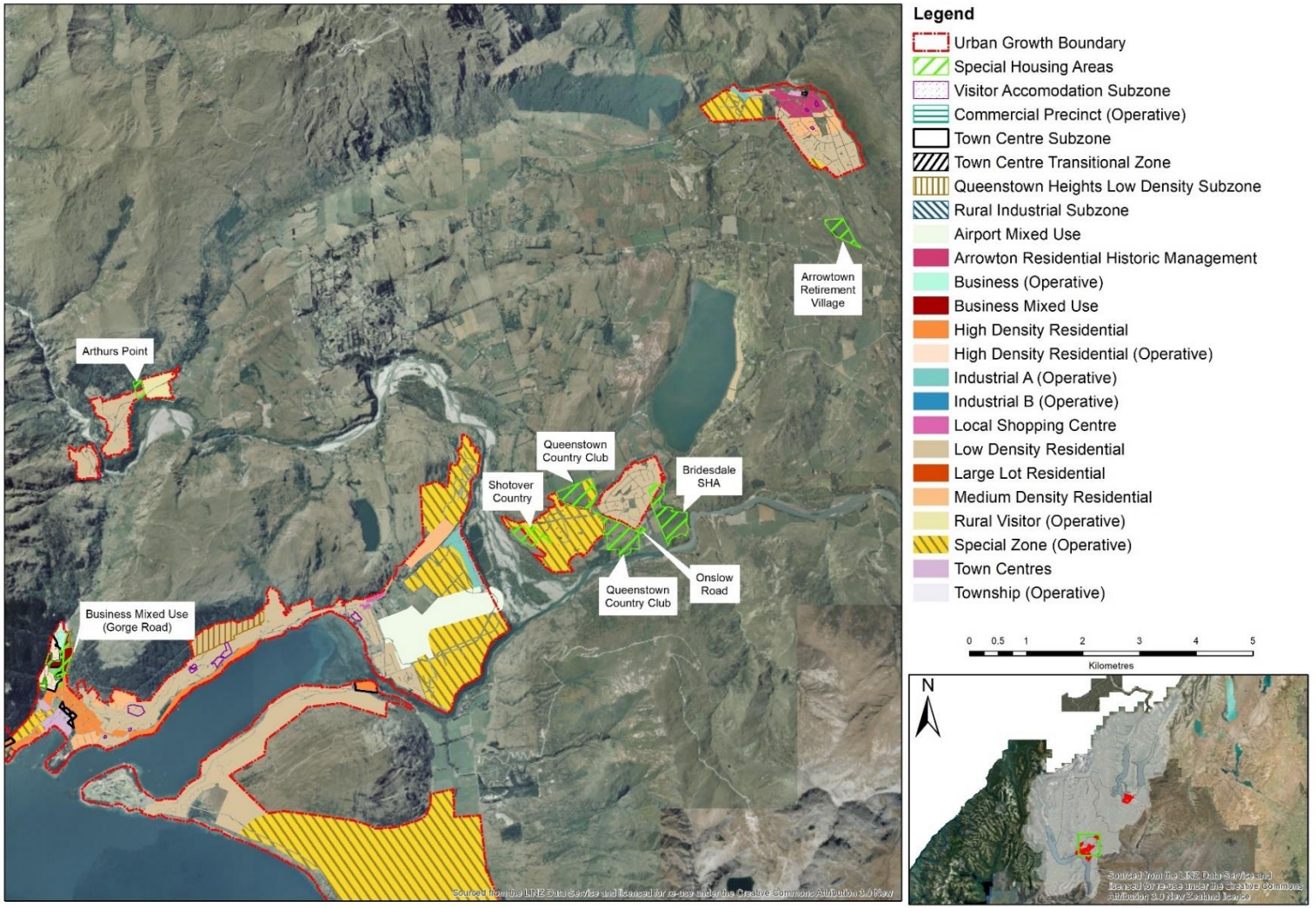
[56] Additional capacity was calculated by removing 32% of the residentially zoned portion of the site (if applicable) for road and reserves etc and then subdividing the remaining area via minimum lot area. This capacity was then subtracted from the numbers of residential units approved under the HASHAA.

[57] The PDP proposed to zone a larger portion of the site as Low Density Residential.

Business Mixed Use	143 residential units	Capacities have been modelled	This one is not progressing. However, Council has entered into pre-application discussions with various developers/land owners.
Shotover Country	101 residential units	101 (ODP & PDP)	Currently being developed
Total residential units	885 (excluding the approved qualifying development consent approved in the Business Mixed Use Zone)	848 (ODP) 715 (PDP)	

The Ladies Mile area was added to the Lead Policy as a Category 2 site. QLDC prepared an indicative masterplan, design statement, landscape strategy and development objectives that guide future development of the Ladies Mile, ensuring high level of amenity along the Ladies Mile. Expression of Interests for SHAs proposals would need to be consistent with the Lead Policy. Dwelling capacity for this area is anticipated to be approximately 2,200 residential units but has been capped at 1,100 residential units providing an opportunity to reassess the impact on the Shotover Bridge and the results of the $2 bus fare system and proposed park and ride. The QLDC has not received any Expression of Interest to date (or approved a SHA at this location) and therefore is not included in the table below. This area is also subject to the HIF fund that was discussed in Section 2.4 above.

Figure 2.9 – Map of QLD Approved Special Housing Areas



3 Housing Demand and Supply

This section provides analysis of the QLD housing market. It presents an assessment of the market's structure, including demand from resident households and from absentee owners (New Zealand-based and overseas-based) and supply to provide for demand from owner-occupiers, tenants, and short-term visitors. It provides estimates of future demand to 2046 and the requirements for housing to meet that demand.

The latter part of this section focuses on demand from the QLD resident population for owner-occupied and rental accommodation, drawing on outputs from the *M.E QLD Housing Model 2017.xlxs*, an Excel-based capability which draws together the core information, and enables testing of various combinations of future projections and allowances for varying mixes of outcomes (detailed in section 4).

This demand assessment provides the basis for the assessment of housing sufficiency (section 6), where demand is compared with potentially available housing capacity (section 5). The HDCA provides four projection scenarios – low, medium, medium-high (QLDC Recommended projection) and High to illustrate a range in possible scenarios. This is discussed in more detail below.

3.1 Structure of the QLD Housing Market

The QLD housing market is complex, because significant shares of the estate are owned by absentee owners (other New Zealand residents and overseas investors) who utilise their dwellings for themselves as personal holiday homes or 'second' homes. Some of these holiday homes are also used to provide rental accommodation for the QLD resident population, and/or for short-term (mainly holiday) visitors (listed on platforms such as Airbnb and BookaBach). It is important to understand this market structure, because different components of the market are subject to different growth drivers.

Demand for resident housing is driven by the resident population, and some of their demand for long-term rentals drives demand for the holiday homes of absentee owners. However, the demand for holiday homes is also driven by a range of factors which are external to QLD, including population and business growth rates elsewhere in New Zealand, and in other countries (where absentee owners reside). Many holiday homes are also investment properties, that have been acquired for capital gain and/or rental returns. Demand for holiday homes is affected by both demographic and economic conditions.

The NPS-UDC recognises the different components of demand and requires assessment of the sufficiency of housing capacity for the wider market, including both demand from resident households, and demand from absentee owners of holiday dwellings/investment properties.

3.1.1 Existing Market Structure

The main components of the QLD housing market are:

a. Resident QLD households which own their dwelling;

b. Resident QLD households which rent dwellings long-term (as distinct from short-stay holiday rental), owned by either QLD entities (investment dwellings) or absentee owners from other parts of New Zealand and overseas (holiday dwellings which are in effect investment dwellings);

c. Absentee owners from other parts of New Zealand, who own dwellings as holiday dwellings and/or as investment properties;

d. Absentee owners from overseas, also owning holiday and/or investment dwellings.

These components overlap, because demand from the resident population for rental accommodation influences demand for investment properties, for both QLD entities and those from outside the District[58]. The housing market is subject to ongoing change, especially as demand for long-term rental accommodation and short-term rental utilises the same housing stock in many instances. This blurs the distinction between holiday dwellings and investment dwellings, and there are no comprehensive statistics defining the structure of this housing market.

As at June 2016, the estimated total housing estate in the District was 17,600 dwellings. Total resident households were 13,600 as at June 2016, and assuming each resident household occupies one dwelling this suggests there were 4,000 dwellings usually not occupied. This figure of 4,000 is directly consistent in scale with the numbers from the 2013 Census (15,400 in total and 3,900 not usually occupied) and in percentage terms, is substantially higher than national figures (see below discussion).

3.1.2 QLD Unoccupied Dwellings

Unoccupied dwellings are a significant component of the QLD economy. Dwellings which are not occupied by a usually resident household represent a substantial share (23%) of the total dwelling estate.

Dwellings are identified as "not usually occupied[59]" by comparison with the usually resident household count. The District's role as a major holiday destination means it is popular as a location for holiday dwellings, typically owned by households who normally reside in other places (other New Zealand or overseas). Many of those holiday homes are "not usually occupied" dwellings, which are occupied for part of the year by owners and/or by visitors to the District on a short-term rental basis (including family and friends of owners who may occupy the dwellings on a rent-free basis), but not by persons who are usually resident in the District.

Queenstown is not unique in this regard, as in many holiday destinations these make up an important share of the total estate. Nevertheless, the "holiday home" component is relatively large within the size of the housing estate and is also characterised by relatively high value dwellings. It is normal for a small share of the dwelling estate of any urban centre to be unoccupied on a medium or long-term basis. Nationally, some 5.6% of the total dwelling estate is categorised as unoccupied[60] (SNZ 2018). In QLD the share is much higher, at 25.3% as at June 2013 (Census), and estimated to be still close to that level (23% in 2016, and higher in

[58] For this assessment, absentee owners are those owning residential property in QLD but who normally reside elsewhere in New Zealand or overseas. The dwellings of absentee owners are a combination of investment (for long and short-term rental) and genuine "holiday" dwellings where not occupied except by the owners and their friends/family.

[59] As defined by SNZ.

[60] SNZ Dwelling and Household Estimates, June 2017 (Demography Dwelling and Household Estimates),

Wanaka), as the number of dwelling consents has been slightly ahead of resident population growth between the 2013 Census and June 2016 (2,054 dwelling consents, and an additional 1,900 households).

Outside New Zealand's main holiday destinations, around 3.7% of the total dwelling estate is not usually occupied, according to Census data. Allowance for these other economies to have some holiday home component in their dwelling estate suggests the base level is around 2.0% not usually occupied, excluding holiday homes. However, the strong growth, high dwelling prices and high level of demand for short and long-term rental accommodation in QLD indicates that the proportion of not usually occupied dwellings which are not holiday homes would be substantially less than the national average, less than 1.0% rather than 2.0%. Applying this 1.0% to the QLD dwelling estate gives an "expected" level of un-occupancy of 170 to 180 dwellings not usually occupied. This suggests that at least 3,800 of the estimated 4,000 dwellings which are not usually occupied represents the QLD holiday and investment dwelling estate, around 22% of the total.

This is important, because the future rate of increase in the holiday dwelling estate may differ substantially from the growth rate of resident households - for example as visitor numbers increase, holiday home investments become more attractive.

3.1.3 Absentee Ownership

There is general information according to the address for service listed in the Council's rating database on which QLD properties are owned by absentee owners, and where those owners are based, by district within New Zealand, and by nation overseas[61].

The figures for June 2016 indicated that some 6,070 properties are owned by entities based in other parts of New Zealand (34.5% of the total estate of 17,600 dwellings), and some 1,290 properties are owned by entities based overseas (7.3%). As discussed above, the dwellings with absentee ownership may be either used as personal holiday homes, short-term visitor accommodation, or as rental/investment properties.

3.1.4 Summary

The overall market structure may be defined by reconciling these figures on resident population, occupied and unoccupied dwellings, and the structure of dwelling ownership as between QLD entities, owners from elsewhere in New Zealand, and those from overseas, as follows (Table 3.1):

a. The total dwelling estate in the District at 2016 is 17,600 dwellings, made up of 13,600 occupied and 4,000 not usually occupied;

b. Of the 13,600 dwellings occupied by residents, an estimated 7,920 dwellings are occupied by owner-occupier households, and the balance of 5,680 dwellings (41.8%) are rented (occupied by long-term tenants);

[61] This information is likely to be subject to some inaccuracy – for example, absentee owners may list their address for service through a local solicitor, which would act to over-state the numbers of dwellings owned by QLD entities, and under-state those owned by absentee owners. This requires further investigation.

c. The address data indicates that some 10,240 dwellings are owned by persons/entities based in QLD (58.2%). Assuming that 7,920 of these are owner occupied dwellings of QLD households, this suggests that the other 2,320 of these are rented to other residents of QLD. That is on the basis that QLD entities are generally unlikely to have a "holiday dwelling" in the same district, so that these dwellings will be primarily for investment purposes, and the returns from long-term rental over the course of a year are generally greater and more secure than returns from short-term holiday rental;

d. Based on total long-term rental demand of 5,680 dwellings, this suggests that the other 3,360 rented dwellings are owned by those based elsewhere in New Zealand, or overseas. *Pro rata,* this indicates that there would be 2,770 owned by those based elsewhere in New Zealand, and 590 based overseas (the split of absentee-owned dwellings is 82.5% elsewhere in New Zealand, 17.5% overseas[62]);

e. This would mean that of the total absentee owner estate (7,360 dwellings) some 46% (3,360 dwellings) are rented to QLD households – and therefore indicating they are currently acting as "investment" dwellings;

f. The balance is the 4,000 "not usually occupied" dwellings which represents the "holiday home" component. However, there is a considerable volume of short-term rental demand which means many of these dwellings also have an investment role[63].

Table 3.1 - QLD Housing Market Structure 2016

Dwelling Use	QLD owners	Other NZ Owners	International Owners	Total
Owner-occupied	7,920			7,920
Long-term Rental	2,320	2,770	590	5,680
QLD Resident Population	**10,240**	**2,770**	**590**	**13,600**
"Holiday dwellings"		3,300	700	4,000
Total Dwellings	**10,240**	**6,070**	**1,290**	**17,600**
Owner-occupied	45%			45%
Long-term Rental	13%	16%	3%	32%
QLD Resident Population	58%	16%	3%	77%
"Holiday dwellings"		19%	4%	23%
Total Dwellings	58%	34%	7%	100%

Source: ME QLD Housing Model 2017

[62] It is difficult to compare QLD with a national level of overseas ownership, because there are official statistics gathered, or released. Nevertheless, given the role of QLD as an internationally prominent tourism destination, the attractive natural environment, and the relatively high housing values there, we would expect the presence of international absentee owners to be considerably higher in percentage terms than the New Zealand average.

[63] Estimates of total visitor nights in private dwellings prepared by Rationale indicate that on average one third of these "not usually occupied" dwellings are occupied over the year.

The overall market structure for urban QLD is shown in the table below. The pattern is very close to that for total QLD, although the resident population is assumed to occupy a higher share of the total dwelling estate (83% of the urban area, compared with 77% for the total District (Table 3.2).

Table 3.2 - QLD Urban Housing Market Structure 2016

Dwelling Use	QLD owners	Other NZ Owners	International Owners	Total
Owner-occupied	6,870			6,870
Long-term Rental	1,720	2,060	440	4,220
QLD Resident Population	**8,590**	**2,060**	**440**	**11,090**
"Holiday dwellings"		1,920	400	2,320
Total Dwellings	**8,590**	**3,980**	**840**	**13,410**
Owner-occupied	51%			51%
Long-term Rental	13%	15%	3%	31%
QLD Resident Population	64%	15%	3%	83%
"Holiday dwellings"		14%	3%	17%
Total Dwellings	64%	30%	6%	100%

Source: ME QLD Housing Model 2017

3.1.5 Implications for Future Housing Demand

This assessment of the current housing market structure provides the basis for assessing future demand for housing, as follows:

a. Demand for usually occupied dwellings will be driven by growth in the resident population. This is the standard approach for housing demand assessment. Based on the current market structure, this total estate would be a combination of dwellings owned by QLD entities (around 10,240 as at 2016) and those of absentee owners (around 3,360 currently). This indicates that for nearly half of the estate of absentee owners (currently investment properties), the main driver will be QLD population growth, so this would reflect that QLD growth;

b. Demand for the balance of the estate, those dwellings not usually occupied - currently around 4,000 - will be driven by exogenous factors.

These are each examined below.

3.2 Recent and Future Household Growth

3.2.1 Population Growth

The District's population has grown considerably in the past two decades, from 14,800 at the 1996 Census to 34,700 by 2016[64] (Table 3.3). The annual growth rate of 4.4%pa over that period saw an average annual gain of 1,000 persons to the resident population. Since the 2013 Census, however, the growth rate has

[64] SNZ 2017.

increased substantially, with an additional 5,000 persons in the 2013-2016 period and an average annual gain of nearly 1,700 persons.

The SNZ outlook is for further substantial population growth, with an additional 8,500 (low) to 14,500 (high) persons over the decade to 2026 (24% to 42% increase), and an additional 16,100 (low) to 33,000 (high) persons over the period to 2046 (46% to 95% increase) as set out in Table 3.3 and Figure 3.1. We note that the latest SNZ projections allow for stronger growth than the previous series[65], though we also note that the growth estimated by SNZ for the 2013 to 2016 period averaged 1,700 per year.

Table 3.3 - QLD Population 1996-2046

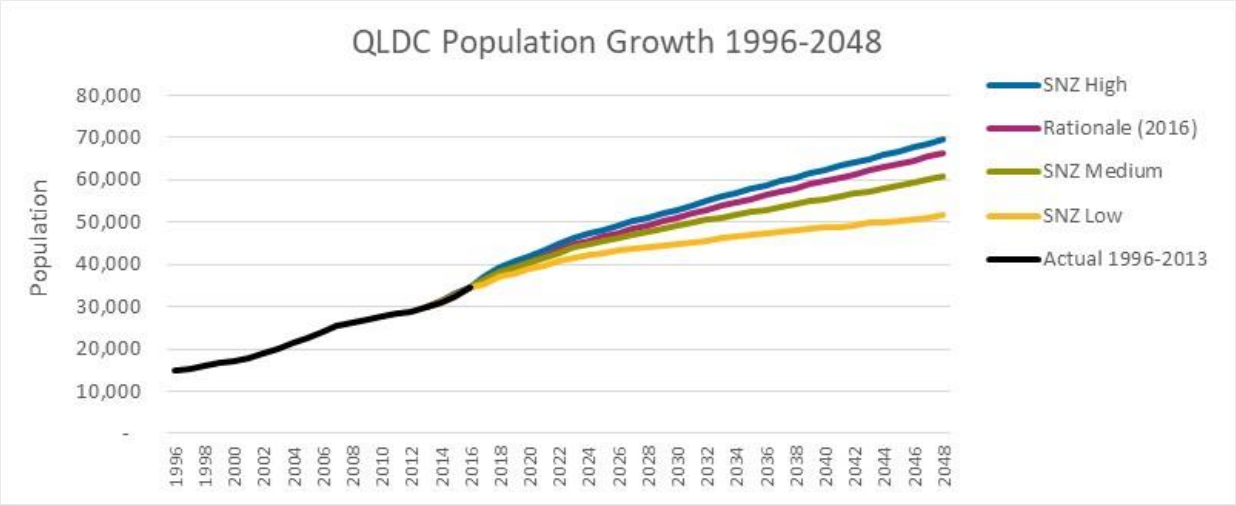
Year	SNZ Low	SNZ Medium	SNZ High	Rationale (2016)
1996		14,800		
2006		24,100		
2013		29,700		
2016	34,700	34,700	34,700	34,500
2019	38,000	39,400	40,700	39,300
2026	43,200	46,100	49,200	47,400
2036	47,400	52,900	58,700	56,300
2046	50,800	59,300	67,700	64,600
2016-19	3,300	4,700	6,000	4,800
2016-26	8,500	11,400	14,500	12,900
2016-46	16,100	24,600	33,000	30,100
2016-19 %	10%	14%	17%	14%
2016-26 %	24%	33%	42%	37%
2016-46 %	46%	71%	95%	87%

Source: Statistics NZ 2017; QLDC 2017

The 'QLDC Recommended' projection 2016 indicates growth between the SNZ medium and SNZ high projection, at 12,900 persons to 2026, and 30,100 by 2046.

[65] The growth outlook for the 2017 SNZ population series made allowance for very high ongoing in-migration gains. The new Government has signalled changes to in-migration levels, which may impact on total population and housing growth for QLD, especially in the shorter term to 2023.

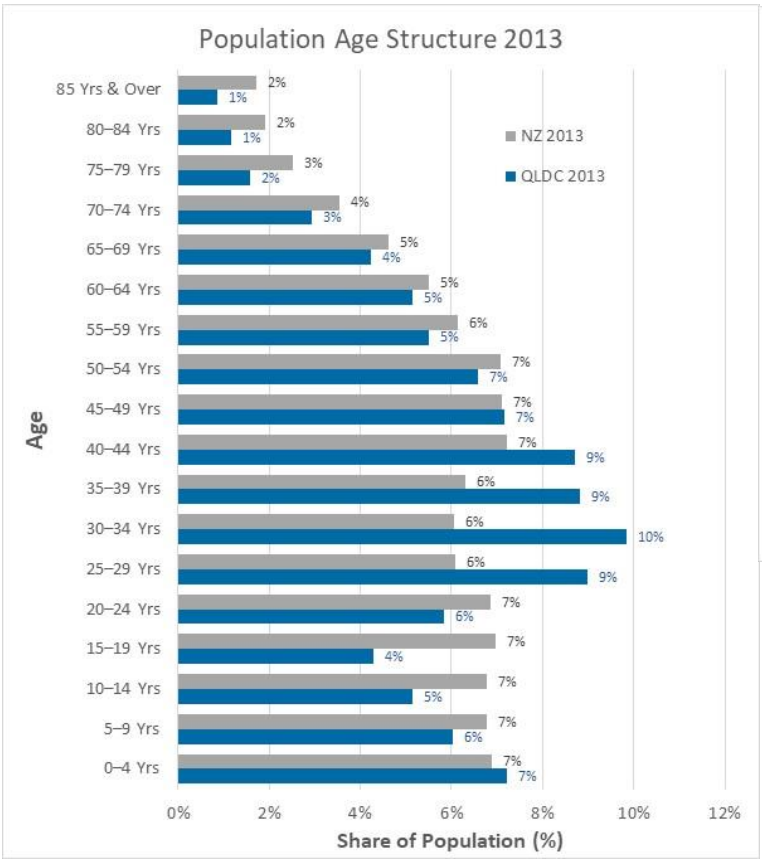
Figure 3.1 - QLD Population Trend 1996-2046

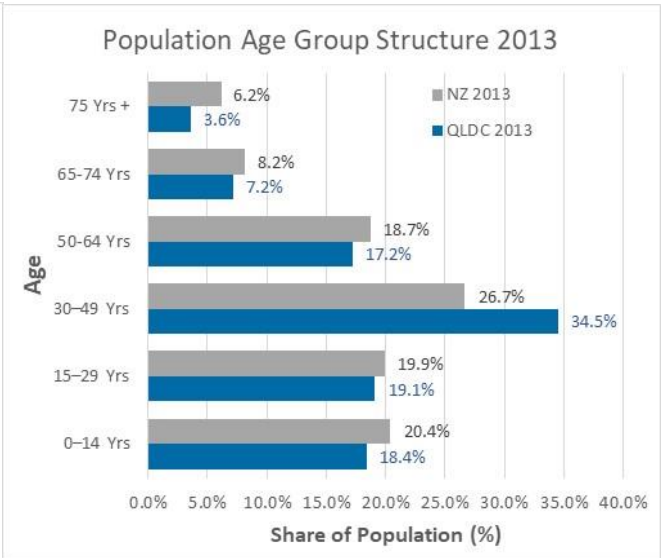


3.2.2 Population Demography 2013

The District's major role as a tourism destination, together with its rapid growth, mean that QLD's population structure differs significantly from the national pattern. Figure 3.2 shows the QLD population age structure as at the 2013 Census, compared with the national structure.

Figure 3.2 - QLD Population Age Structure 2013 – 5 Year Increments and Grouped





The District's population is characterised by relatively high shares in the 25 year to 44 year age cohorts, and lower than average shares in the children and young adult age groups, and in the mature and older age groups.

The high incidence of persons in the 25 to 44 year age bands is evident for both males and females, and to a considerable degree reflects the relatively high shares of employment in tourism-oriented businesses. The rapid growth in the population means that in-migration has been the major driver. This is typically reflected in relatively low numbers in the 65 and over age bands because the population base for those "ageing in place" is small in relation to the current population.

Anecdotally, the relatively high costs of housing in the District have limited opportunities for younger families with children to establish here; affecting the numbers of both those aged under 15, and 15-24 year olds. This is also true of the 65 and over age bands, with limited retirement home opportunities and high housing and living costs preventing in-migration of this age group.

The District's population has a relatively high share of males (50.1% compared with the national average of 48.7%) and correspondingly lower share of females. In part this is because of the low incidence of older age groups, with only 3.6% of the District population aged 75 years or over, compared with 6.2% nationally.

3.2.3 Household Growth

There has been corresponding substantial growth in resident household numbers from 5,800 in 1996 to 11,700 by 2013, with the District total reaching an estimated 13,600 resident households by June 2016.

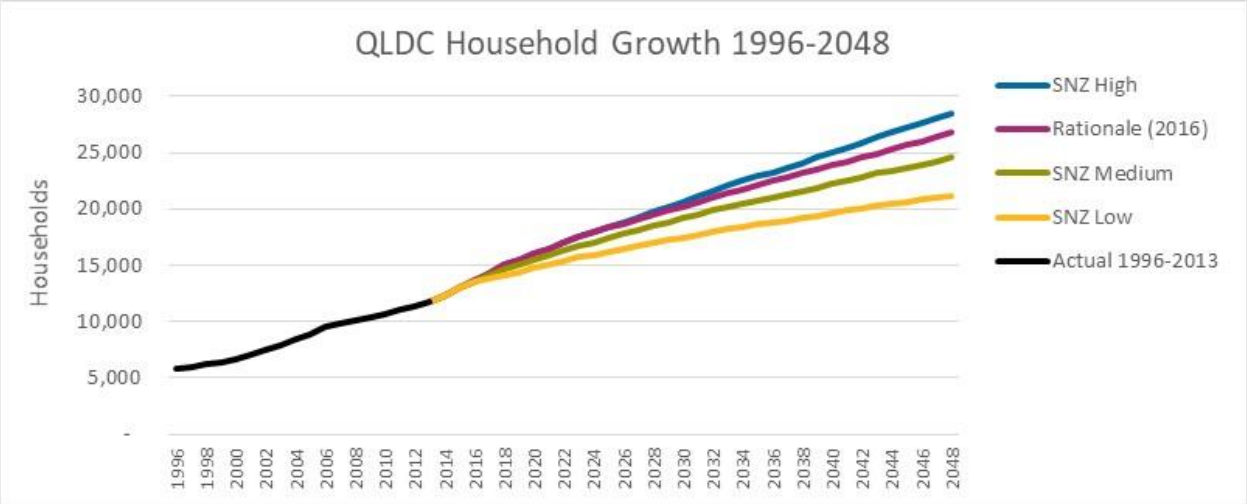
Further substantial household growth is expected, consistent with the population outlook. The most recent SNZ projections indicate an additional 3,000 (low) to 5,200 (high) resident households over the decade to 2026 (22% to 38% increase), and an additional 7,300 (low) to 14,000 (high) households over the period 2016 to 2046 (54% to 103% increase). The 'QLDC Recommended' projection 2016 indicates growth between the SNZ medium and SNZ high projection, at 5,200 persons to 2026, and 12,600 by 2046. These are set out in Table 3.4 and Figure 3.3.

Table 3.4 - QLD Households 1996-2046

Year	SNZ Low	SNZ Medium	SNZ High	Rationale (2016)
1996		5,800		
2006		9,500		
2013		11,700		
2016	13,600	13,600	13,600	13,500
2019	14,400	15,000	15,500	15,500
2026	16,600	17,800	18,800	18,700
2036	18,800	21,100	23,300	22,500
2046	20,900	24,000	27,600	26,100
2016-19	800	1,400	1,900	2,000
2016-26	3,000	4,200	5,200	5,200
2016-46	7,300	10,400	14,000	12,600
2016-19 %	6%	10%	14%	15%
2016-26 %	22%	31%	38%	39%
2016-46 %	54%	76%	103%	93%

Source: Statistics NZ 2017; QLDC 2017

Figure 3.3 - QLD Household trend 1996-2046



A priori, the increase in resident households is a sound indicator of the requirement for additional dwellings to accommodate the resident population.

3.2.4 Household Demography

The differences in QLD's population structure are also evident in the types of households that are resident in the District. Figure 3.4 shows the household structure in the District as at 2016, and the projected structure to 2046, according to the SNZ most recent estimates (December 2017). It should be noted that large numbers of short-term workers come in and out of the district in the peaks of the winter and summer holiday seasons, and they may not be captured accurately by SNZ data which is in primarily derived from

occupant reporting on Census night. QLDC have acknowledged that further investigation of migrant workers is required.

There are several important differences currently from the national pattern:

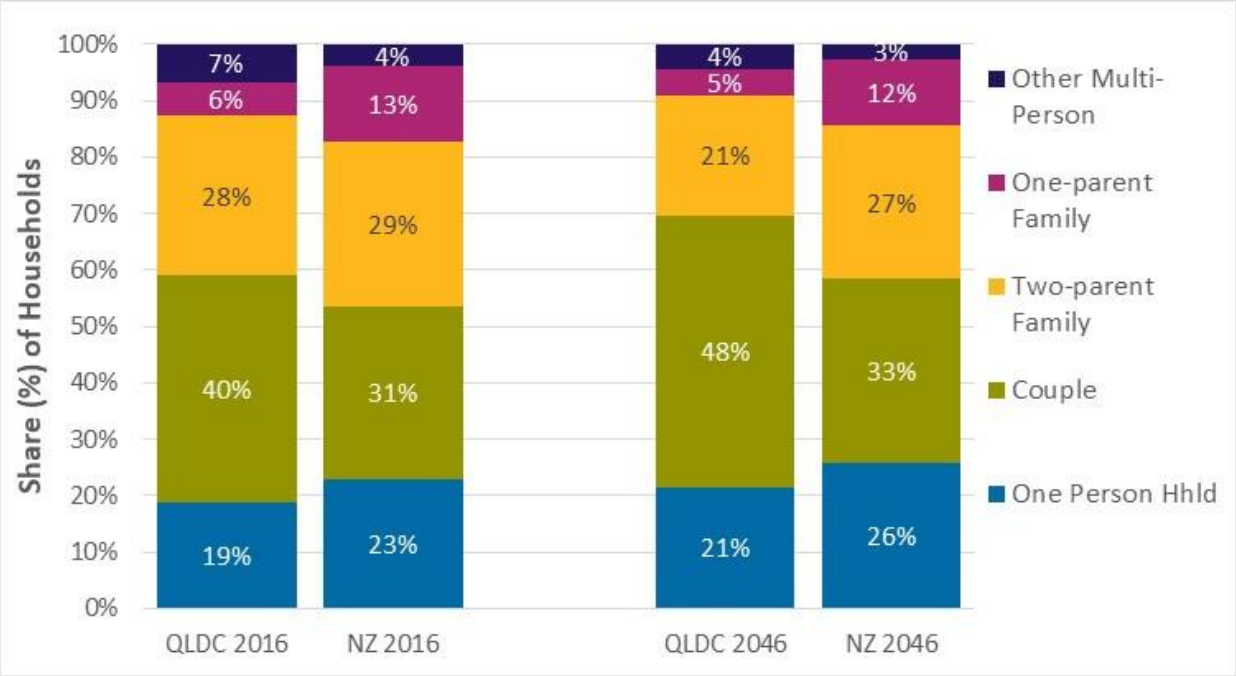
a. A relatively low incidence of single-person households, reflecting in part the low numbers of persons in the 65 and over age bands. This may also reflect the high cost of housing in QLD, encouraging sharing of dwellings;

b. A relatively high incidence of couple households, at 40% compared with 31% nationally. This reflects to a degree the presence of couples employed in the tourism-related sectors, who may be in the District as long-stay visitors, as distinct from long-term residents;

c. The incidence of two-parent households is close to the national pattern. However, there are relatively few one-parent households, which reflects in part the relatively high costs of housing in the District (for owners and renters);

d. A relatively high incidence (nearly twice the national figure) of other multi-person households, which is predominantly flatting or non-family households. This reflects the strong presence of the tourism-related workforce, especially those in the 25-44 age groups, who as long-stay visitors rather than long-term residents form flatting (non-family) household structures.

Figure 3.4 - QLD and NZ Household Structure 2016-2046



The right side of the graph shows the projected long-term future household structure under the medium growth projection (to 2046, extrapolated from the final year of the SNZ projections 2038). While in some respects the QLD structure is expected to be closer to the national pattern in the longer term, there are still important differences, and changes for the District itself:

a. There are still relatively low incidences of single-person households, and one-parent families;

b. The already relatively high incidence of couple households is projected to increase markedly, from 40% currently to 48% by 2046, and markedly above the national share by then (33%);

c. A relatively low share of family-with-children households (one- and two-parent), at 26% compared with 39% nationally by 2046, and substantially below the current 34%;

d. A substantial decrease in the share of households which are other multi-person, or the typical flatting / non-family households.

That said, the changes in structure come over a period when there is significant overall growth expected, with increases in all household types. The net projected increase of approximately 10,000 households (medium growth) is made up of couple households (58%), two-parent families (13%), one-person households (25%), one-parent families (3%), and other multi-person households (1%). The following sections provide more detailed projection of households by types for the medium and high growth outlook.

3.2.5 Medium Growth Outlook

Table 3.5 shows the Medium growth projection to 2046, for each household type. The focus is on the 3-year (2016-19), 10-year (2016-26) and 30-year period (2016-46), consistent with the NPS-UDC horizons.

A key feature of the growth is the increase in couple households, which account for some 58% of the long-term growth. Single-person households account for some 25% of the net change in household numbers, but the net change is much less for family households (around 13% of the total) and other household types show minimal change. Of the total increase of 10,300 households, some 8,590 are either single-person or couple households. This differs substantially from the national growth outlook – which indicates a higher share of single-person households (32% of the net increase), but lower shares of couple households (38%), and higher shares of family households (30%).

Table 3.5 - QLD Household Medium Growth Projection 2016-2046

	2016	2017	2019	2026	2033	2036	2043	2046	2016-19	2016-26	2016-46
One-Person Household	2,560	2,630	2,780	3,400	4,100	4,340	4,940	5,140	220	840	2,580
Couple Only	5,480	5,740	6,210	7,620	8,900	9,500	11,010	11,490	730	2,140	6,010
2 Parents with 1 to 2 Chn	3,200	3,310	3,510	3,970	4,230	4,240	4,240	4,290	310	770	1,090
2 Parents with 3+ Chn	630	650	700	800	860	870	860	870	70	170	240
One Parent Families	840	860	920	1,000	1,100	1,100	1,090	1,110	80	160	270
Multi-Family Households	150	150	150	160	170	170	170	180	-	10	30
Non-Family Households	750	750	760	800	830	830	820	860	10	50	110
Total Households	**13,600**	**14,100**	**15,000**	**17,800**	**20,200**	**21,100**	**23,100**	**23,900**	**1,400**	**4,100**	**10,300**
One-Person Household	19%	19%	19%	19%	20%	21%	21%	22%	16%	20%	25%
Couple Only	40%	41%	41%	43%	44%	45%	48%	48%	52%	52%	58%
2 Parents with 1 to 2 Chn	24%	23%	23%	22%	21%	20%	18%	18%	22%	19%	11%
2 Parents with 3+ Chn	5%	5%	5%	4%	4%	4%	4%	4%	5%	4%	2%
One Parent Families	6%	6%	6%	6%	5%	5%	5%	5%	6%	4%	3%
Multi-Family Households	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Non-Family Households	6%	5%	5%	4%	4%	4%	4%	4%	1%	1%	1%
Total Households	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

3.2.6 High Growth Outlook

Table 3.6 shows the High growth projection to 2046 by household type, with the focus on the period to 2046. Again, a key feature is the increase in couple households (53% of growth) and single-person

households (26%), with limited growth in family households with children (15% of the increase, or 2,000 more households). Of the total increase of 14,000 households, nearly 11,000 are either single-person or couple households.

Table 3.6 - QLD Household High Growth Projection 2016-2046

	2016	2017	2019	2026	2033	2036	2043	2046	2016-19	2016-26	2016-46
One-Person Household	2,600	2,690	2,890	3,640	4,610	4,950	5,880	6,220	290	1,040	3,620
Couple Only	5,520	5,860	6,450	8,080	9,700	10,400	12,250	12,890	930	2,560	7,370
2 Parents with 1 to 2 Chn	3,210	3,350	3,590	4,180	4,570	4,610	4,740	4,850	380	970	1,640
2 Parents with 3+ Chn	630	660	720	850	930	940	970	990	90	220	360
One Parent Families	810	850	920	1,060	1,190	1,190	1,200	1,260	110	250	450
Multi-Family Households	150	150	150	160	190	200	230	250	-	10	100
Non-Family Households	750	750	760	830	900	940	1,080	1,170	10	80	420
Total Households	**13,700**	**14,300**	**15,500**	**18,800**	**22,100**	**23,200**	**26,400**	**27,600**	**1,800**	**5,100**	**14,000**
One-Person Household	19%	19%	19%	19%	21%	21%	22%	23%	16%	20%	26%
Couple Only	40%	41%	42%	43%	44%	45%	46%	47%	52%	50%	53%
2 Parents with 1 to 2 Chn	23%	23%	23%	22%	21%	20%	18%	18%	21%	19%	12%
2 Parents with 3+ Chn	5%	5%	5%	5%	4%	4%	4%	4%	5%	4%	3%
One Parent Families	6%	6%	6%	6%	5%	5%	5%	5%	6%	5%	3%
Multi-Family Households	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	1%
Non-Family Households	5%	5%	5%	4%	4%	4%	4%	4%	1%	2%	3%
Total Households	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

This change in the structure of the housing market in both futures is important, because it means much of the net gain is smaller households, which are likely to have preferences for smaller dwellings, including terrace house and apartment style dwellings. That in turn will have implications for residential land requirements. It is also potentially indicative of a housing market which does not suitably provide affordable dwellings for family households with children. The SNZ projections are primarily based on population demographics, but also reflect the base year household (and therefore housing) structures, which may not capture latent demand.

There is no detailed information on the dwelling preferences of absentee owners of QLD properties, although it is expected that their demands are likely to reflect the national household structure, suggesting more family households among absentee owners, and possible preference for larger and detached dwellings.

3.3 Future Household Growth by Location

The focus of the NPS-UDC is on urban development capacity. However, a significant number of QLD households reside in rural locations, predominantly on rural lifestyle blocks, and on farms and other properties associated with rural activities.

The growth projections detailed above are for the whole District and include both the urban and the rural demand outlooks. It is important to differentiate between urban and rural growth[66], because the supply mechanism in urban areas is primarily through residential zoning, and business zoning where it applies to apartments, whereas outside the main urban boundaries rural land and lifestyle blocks are the main source of supply (including some small township, rural visitor and special zones). The economics of lifestyle block

[66] Refer Figure 2.2 for a map of the defined urban environment.

development are quite different from urban residential development, particularly because of their positioning toward the upper end – higher value end – of the housing market. QLD is notable for the fact that approximately 97% of the district is identified as an Outstanding Natural Landscape or Outstanding Natural Feature, which the RMA requires to be protected from inappropriate subdivision and development as a matter of national importance.

Several small townships in the District lie outside the main UGBs (and defined urban environment), but these settlements and the rural areas offer some capacity for housing and need to be considered in relation to the District's total growth outlook[67]. These have been discussed separately in section 2.4.

M.E has developed a spatial framework of 30 general locations for the purpose of this HDCA (and BDCA) using a combination of SNZ 2018 statistical boundaries that cover the total district. Maps showing the extent of the spatial framework areas are included in Appendix 4. The household projections have been developed for each location within QLD according the spatial framework, then further aggregated to 10 broader sub-areas for the purpose of this demand analysis. These broader aggregations (detailed in Appendix 4) are Queenstown (town), Arrowtown, Arthurs Point, Lake Hayes, Jacks Point and Other Wakatipu together making up the Wakatipu Ward; and Wanaka (town), Hawea Locality, Luggate Locality, and Other Wanaka together making up the Wanaka Ward.

Two of the sub-areas – Other Wanaka and Other Wakatipu are fully rural (non-urban), while the other eight sub-areas include urban (within the UGB or outside the boundary but within the urban environment) and rural areas.

The projections for each broad sub-area are based on the population growth projections for each CAU (SNZ 2017)[68], together with estimated capacity for lifestyle holdings in the areas beyond the UGB.

3.3.1 Total Urban Growth Projections

Total urban and total rural (non-urban) household growth projections have been developed, for each location and broader sub-area, and QLD in total. The urban total approximates the defined urban environment (Figure 2.2) albeit defined more coarsely. The total urban projections are shown in Table 3.7.

[67] Currently, there are approximately 1,180 rural lifestyle properties in the District, according to Corelogic. As at 2015, lifestyle properties accounted for 8.0% of total residential properties. In addition, there are approximately 330 farms or other rural properties, usually occupied by resident farmers or workers, or other tenants (SNZ Business Directory 2016). While it is reasonably straightforward to separate out the lifestyle properties and farm holdings within the dwelling estate, it is somewhat more difficult to accurately differentiate the households associated with these properties. It is useful to do this, because the mean value of lifestyle blocks is around double the value of other residential properties. If lifestyle block residents are included in the analysis of household types and residential property values, then the risk is that because they are generally higher income and net worth households, there may be some distortions in the assessment of the relationships between household types and dwelling values.

[68] The 2013 CAUs aggregate up the broad sub-areas in the spatial framework.

Table 3.7 - QLD Projected Urban Households 2016-2046

Year	SNZ Low	SNZ Medium	SNZ High	Rationale (2016)
2013		9,400		
2016	11,100	11,100	11,100	11,100
2019	11,700	12,300	12,700	12,500
2026	13,400	14,600	15,500	15,100
2036	15,600	17,300	19,200	18,400
2046	17,400	19,800	23,100	21,800
2016-19	600	1,200	1,600	1,400
2016-26	2,300	3,500	4,400	4,000
2016-46	6,300	8,700	12,000	10,700
2016-19 %	5%	11%	14%	13%
2016-26 %	21%	32%	40%	36%
2016-46 %	57%	78%	108%	96%

Source: SNZ 2017; ME QLD Housing Model 2017

Key features include:

a. The Low projection would see an additional 2,300 households in urban locations by 2026 (out of the total QLD increase of 3,000, see Table 3.4 above) and 6,300 households by 2046 (out of the total 7,300). This represents an increase of 57% over the three decades;

b. The Medium projection would see an additional 3,500 households in urban locations by 2026 (total QLD increase 4,200), and 8,700 households by 2046 (out of the total QLD 10,400). This represents an increase of 78% over the 2016-46 period;

c. The High projection would see an additional 4,400 households in urban locations by 2026 (total QLD 5,200), and 12,000 households by 2046 (total QLD 14,000), an increase of 108% over the period;

d. All three futures would see the urban share of total QLD households increase – from the current 81.5%, to accounting for 83-84% of growth in the period to 2016, and 85% to 87% of growth in the period 2016 to 2046.

e. Nevertheless, there would also be significant growth outside the urban environment, of between 1,000 households (Low) and 2,000 households (High) by 2046. This equates to average annual growth of between 30 (Low) and 70 (High) households each year, compared with 210 (Low) to 400 (High) in urban locations.

3.3.2 Growth Projections by Broad Area

As noted, the household growth projections have been developed by location (and broad sub-area) within QLD. One requirement of the NPS-UDC is to assess demand by location within an urban economy. We note that the projections are based on expected demand for each location, and at this point are assumed to be not constrained by capacity limits in any location or sub-area.

The basic division within QLD is between the wards of the District, with projections for Wakatipu Ward (including Arrowtown) and Wanaka Ward. The estimates are summarised in Table 3.8, for total households

by Ward and sub-area for the periods 2016-19 (short term), 2016-26 (medium term) and 2016-46 (long term).

Table 3.8 - QLD Projected Households by Sub-Area 2016-2046

Short Term

Sub-Area	2016	Low 2019			Medium 2019			High 2019			Rationale 2019		
		Hshlds	Change	Change %	Hshlds	Change	Change %	Hshlds	Change	Change %	Hshlds	Change	Change %
Queenstown	5,050	5,380	280	5%	5,330	280	6%	5,490	410	8%	5,410	340	7%
Arrowtown	1,110	1,230	40	3%	1,140	30	3%	1,180	70	6%	1,160	50	5%
Arthurs Point	300	400	40	11%	330	30	10%	340	30	10%	340	30	10%
Lake Hayes	1,040	830	160	24%	1,310	270	26%	1,350	300	29%	1,340	290	28%
Jacks Point	250	180	50	38%	360	110	44%	380	120	46%	370	110	42%
Other Wakatipu	1,110	1,410	170	14%	1,240	130	12%	1,280	160	14%	1,260	150	14%
Wakatipu Ward	8,890	9,330	760	9%	9,730	840	9%	10,040	1,110	12%	9,890	980	11%
Wanaka	3,740	3,620	430	13%	4,210	470	13%	4,350	590	16%	4,280	530	14%
Hawea	380	460	40	10%	410	30	8%	420	40	11%	410	30	8%
Luggate	100	160	10	7%	110	10	10%	110	10	10%	110	10	10%
Other Wanaka	480	720	60	9%	520	40	8%	540	50	10%	540	60	13%
Wanaka Ward	4,730	5,070	510	11%	5,260	530	11%	5,450	700	15%	5,350	610	13%
QLD	13,600	14,400	1,300	10%	15,000	1,400	10%	15,500	1,800	13%	15,300	1,700	13%

Medium Term

Sub-Area	2016	Low 2026			Medium 2026			High 2026			Rationale 2026		
		Hshlds	Change	Change %	Hshlds	Change	Change %	Hshlds	Change	Change %	Hshlds	Change	Change %
Queenstown	5,050	5,890	790	15%	6,060	1,010	20%	6,460	1,380	27%	6,260	1,190	23%
Arrowtown	1,110	1,280	90	8%	1,230	120	11%	1,330	220	20%	1,280	170	15%
Arthurs Point	300	480	120	33%	420	120	40%	450	140	45%	430	120	39%
Lake Hayes	1,040	1,010	340	51%	1,640	600	58%	1,720	670	64%	1,680	630	60%
Jacks Point	250	290	160	123%	590	340	136%	640	380	146%	610	350	135%
Other Wakatipu	1,110	1,660	420	34%	1,530	420	38%	1,640	520	46%	1,580	470	42%
Wakatipu Ward	8,890	10,540	1,970	23%	11,480	2,590	29%	12,230	3,300	37%	11,850	2,940	33%
Wanaka	3,740	4,260	1,070	34%	5,010	1,270	34%	5,260	1,500	40%	5,130	1,380	37%
Hawea	380	540	120	29%	490	110	29%	530	150	39%	510	130	34%
Luggate	100	200	50	33%	140	40	40%	140	40	40%	140	40	40%
Other Wanaka	480	840	180	27%	630	150	31%	670	180	37%	650	170	35%
Wanaka Ward	4,730	5,920	1,360	30%	6,280	1,550	33%	6,610	1,860	39%	6,440	1,700	36%
QLD	13,600	16,500	3,400	26%	17,800	4,200	31%	18,800	5,100	37%	18,300	4,700	35%

Long Term

Sub-Area	2016	Low 2046			Medium 2046			High 2046			Rationale 2046		
		Hshlds	Change	Change %	Hshlds	Change	Change %	Hshlds	Change	Change %	Hshlds	Change	Change %
Queenstown	5,050	7,090	1,990	39%	7,900	2,850	56%	9,280	4,200	83%	8,590	3,520	69%
Arrowtown	1,110	1,400	210	18%	1,500	390	35%	1,840	730	66%	1,670	560	50%
Arthurs Point	300	760	400	111%	710	410	137%	840	530	171%	780	470	152%
Lake Hayes	1,040	1,140	470	70%	1,990	950	91%	2,270	1,220	116%	2,130	1,080	103%
Jacks Point	250	640	510	392%	1,320	1,070	428%	1,460	1,200	462%	1,390	1,130	435%
Other Wakatipu	1,110	1,900	660	53%	1,900	790	71%	2,270	1,150	103%	2,090	980	88%
Wakatipu Ward	8,890	12,990	4,420	52%	15,320	6,430	72%	17,950	9,020	101%	16,630	7,720	87%
Wanaka	3,740	5,520	2,330	73%	6,660	2,920	78%	7,410	3,650	97%	7,040	3,290	88%
Hawea	380	820	400	95%	780	400	105%	890	510	134%	840	460	121%
Luggate	100	300	150	100%	220	120	120%	250	150	150%	230	130	130%
Other Wanaka	480	1,260	600	91%	980	500	104%	1,100	610	124%	1,040	560	117%
Wanaka Ward	4,730	7,840	3,280	72%	8,660	3,930	83%	9,680	4,930	104%	9,170	4,430	93%
QLD	13,600	20,800	7,700	59%	23,900	10,300	76%	27,600	13,900	101%	26,000	12,400	91%

Source: ME QLDC Household Projections Model

Key features include:

a. All three futures would see the quantum of household growth greater in Wakatipu Ward than in Wanaka Ward. However, in all futures the demand growth would be faster in percentage terms in Wanaka Ward, and this would see a slight alteration in the balance between the two from the current 67%:33% to around 65%:35% by 2046;

b. In all futures there would be a fairly wide spread of growth, across the main town areas and the newer outlying suburban areas. This quite broad spread, in combination with the modest size of

both Queenstown and Wanaka, and the limited differences in the attributes of many locations in Wanaka and Queenstown, suggests there will be considerable scope for substitution, if some areas are constrained for capacity relative to others.

3.4 Housing Demand by Absentee Owners

Projecting growth in demand for dwellings by absentee owners is somewhat more complex than for resident households (where one household generally equates to one dwelling).

Demand for absentee owners' holiday and investment dwellings has a range of drivers. Key factors include the relative attractiveness of Queenstown Lakes as a place for both holidays and investment, and the potential to rent dwellings on a short-term basis (visitors) or long-term basis (residents). Demand is also influenced by population growth and economic conditions in other areas of New Zealand and in overseas markets, and consumer sentiment.

Purchasing a dwelling for holiday and/or investment is attractive for the opportunity to generate returns through rental, and the potential for capital gain in the property market, as well as to holiday there. This is especially so in QLD because the holiday dwelling estate is characterised by relatively high values, and property prices there have consistently grown faster than the national average rate.

Strong economic times encourage investment in discretionary items like holiday homes, while poorer times encourage divestment. Relative property prices are also important - QLD property values have increased rapidly in the past few years (refer section 6.6.1 – market indicators), which means investment there is more expensive relative to other opportunities than it has been in the past, and options for actions like leveraging purchases off property owned in other locations where price increases have been slower.

Disparities in property values are commonly a key driver of investment in other regions or economies. This is believed to have been an important influence on investment in New Zealand residential property in the past decade, especially from outflows of investment funds from Asian economies. There are unfortunately no statistics on overseas investment in residential property. The QLD address data indicates that 7.3% of dwellings are overseas owned. More broadly, the circumstance where even a modest share of the higher wealth segments of a larger economy may be large relative to the total population of a smaller economy is not unusual globally. Those higher wealth segments are able to compete very effectively for residential property with all market segments of the smaller economy, with abundant anecdotal evidence in parts of Europe of substantial overseas investment impacting on residential ownership levels in "host" economies, particularly in strong tourism locations. At the same time, overseas investment may flow in or flow out in response to conditions in the investor economies, so that there is potential for considerable fluctuation in investment from offshore. The Government's new policies to limit overseas investment in the residential property sector are expected to influence this.

3.4.1 Demand for Short-Term Dwelling Accommodation

An important consideration is that "holiday" dwellings in QLD offer considerable potential as "investment" dwellings, supported by demand for long-term rental (3 months or greater, predominantly usually resident population and seasonal workforce) and also for short-term rental for both short stay workers and holiday makers.

We have examined the short-term accommodation potential (primarily as dwelling rental), based on the Recommended projections of visitor numbers in private residential properties[69], developed for QLDC by Rationale. These indicate some 41,800 visitors on the annual peak day, and 7,200 on the average day for 2016, increasing to 70,300 (+1.7%pa) and 11,700 (+1.7%pa) respectively by 2046[70].

Allowing for 20% of this demand to be as guests of residents (that is, on an average day between 4% and 6% of resident households have staying guests) then the balance of average day demand may be assumed to be in vacant or not usually occupied dwellings. Assuming a mean visitor group size of 2.5 to 2.7, this would mean that on the average day in the order of 45% to 55% of these dwellings would be occupied by short-term visitors. This does not mean that 45% to 55% of these dwellings are always occupied, and the balance always unoccupied. Applying this to the estimated 4,000 dwellings which are not usually occupied in 2016 indicates 1,800 to 2,200 are occupied by short-term tenants on the average day.

The peak day demand is considerably greater, over four times the average day. Even with a substantially higher share of visitors accommodated as residents' guests, and considerably larger mean group size in short-term rentals, very few of the not usually occupied dwellings would be vacant in the peak. However, the peak is very short-lived, and even allowing for both a summer and a winter peak (10 days in total), for the balance of the year (around 97% of all days) the demand for short-term rentals is less than the total capacity.

On that basis, the opportunity for the investment component of holiday dwellings is reflected much more accurately in the figures for the average day rather than the peak, and this indicates that around half of the total estate of not usually occupied dwellings may be driven by demand for short-term visitor accommodation.

3.4.2 Airbnb and Other Holiday Rental

The growth of short-term rental accommodation in residential and town centre zones is well established globally and in QLD. There are an estimated 4,226 Airbnb listings in QLD as at September 2017, up from 2,884 listings in October 2016[71]. These Airbnb units include both entire dwellings for rental (68% or 2,875 dwellings), and also space within not usually occupied or residents' dwellings (32%, or 1,350 listings). Infometrics estimates a total sector of 5,000 dwellings, with many listing with two or more rental mechanisms.

The overlap means it is not straightforward to apportion holiday rental capacity across the QLD dwelling estate. However, assuming other more traditional providers such as Bookabach have a slightly different structure from Airbnb (80:20) this indicates up to 3,500 (70%) available dwellings and up to 1,500 (30%) available rooms make up the total supply. The logistics of renting out entire dwellings suggests these 3,500 will be very predominantly from within the 4,000 or so not usually occupied dwellings, or 87.5% of that total estate. An unknown share will also be from within not usually occupied dwellings, though allowing for 15% of the total 1,500 suggests in total that 3,750 (3,500 + 250) would be in the not usually occupied estate.

[69] This excludes visitors utilising commercial visitor accommodation (such as hotels, motels, camp grounds and back-packers).

[70] Based on the QLDC Recommended growth projection – total District.

[71] Measuring the scale and scope of Airbnb in Queenstown-Lakes District, Infometrics. November 2017.

This would leave a balance of up to 1,250 dwellings to accommodate demand for single rooms or parts of dwellings. The potential is likely to be limited under the tenancy terms in rented dwellings, suggesting the bulk of these would be in owner-occupied dwellings. The split is not known, we have allowed for 1,150 (92%) to be in owner occupied dwellings, and 100 (8%) in rented dwellings. These numbers would suggest that 1,150 of the estimated 7,960 owner occupied dwellings (14.5%) and 100 of the 5,980 rented dwellings (1.7%) would be part of the short-term holiday market capacity.

A key matter for this assessment is whether the Airbnb/holiday rental market *per se* is likely to generate additional demand for dwellings, over and above that from household growth – owned and rented dwellings – and demand from absentee owners for investment / holiday dwellings. There is no doubt that holiday rental does provide opportunity to derive substantial income from private dwellings, which is likely to affect demand for dwellings. However, this is likely to be limited in the short-term, for several reasons.

Airbnb itself attracted an estimated 14.1% of total commercial accommodation demand, the total sector an estimated 15.8%. Growth is likely to derive from tourism growth per se, plus an increase in the sector share. Potential supply responses are to increase occupancy levels in the existing sector (the Airbnb average is 36%, well below the 63% recorded by commercial accommodation), for owners of rental accommodation to shift away from long-term rental for resident households to short-term holiday rental, and for owner-occupier households to increase their role within the holiday rental sector.

The first two responses indicate potential for existing dwellings to cater for additional demand in the shorter term, although any conversion from long-term rental to holiday rental would increase price and capacity pressure on the former. Currently, total demand for holiday rental is in the order of 380,000 unit nights (including 340,989 in Airbnb). This compares with an estimated 1,830,000 unit or dwelling nights in long-term rental accommodation[72], a split of 17%:83%. This indicates that a shift away from the long-term rental sector may mean little more than a *pro rata* shift in the holiday rental capacity, because of the much lower occupancy levels.

The opportunity for rental income from short-term letting may make dwelling ownership more feasible for private households, although the main effect may be on dwelling ownership rates as distinct from higher demand for dwellings. To the extent that holiday rental will deliver greater total demand for private dwellings – mainly as a shift away from commercial visitor accommodation – it also makes ownership of a holiday/investment dwelling more feasible for an absentee owner. Therefore, it would have some positive effect on demand for holiday/investment dwellings. However, it is expected that the number of additional dwellings that might be purchased solely on the basis for Airbnb returns (as opposed to other motivations) is anticipated to be marginal and arise as response to the underlying growth in tourism.

The potential for income can also be expected to encourage owners to modify their dwellings to accommodate holiday rental users, and such modifications may in turn become available for long-term (resident) rental as distinct from short-term stayers. Countervailing this is the portion of the available housing stock converting from long-term rental to short-term letting which, depending on its rate of growth, will reduce opportunities for long-term rental letting in QLD.

[72] 5,720 rented dwellings, assuming 87.5% average occupancy is 1,830,000 nights annually.

However, there is limited information on the extent to which there is potential for more Airbnb capacity to establish – is the Airbnb market already adequately served, especially because of the large number of dwellings which are not usually occupied? Also unknown is the extent to which Council's proposed regulations relating to visitor accommodation as part of Stage 2 of the PDP, may act to dampen the extent of short-term dwelling rental[73].

For these reasons, we would expect the Airbnb sector and similar sectors[74] to have some positive effect on demand for private housing and absentee owner housing in some parts of the District. While QLD already has a well-developed tourism sector, and the available statistics indicate a substantial share of usually unoccupied dwellings are used for short-term rental in any case, the main unknowns are the potential for further capture of market share from the commercial accommodation sector (which will be influenced by changes in supply of commercial accommodation), and any offsetting effects because of limited future demand from overseas owners. If there is a further shift of capacity away from long-term rental toward short-term holiday rental, then that will place pressure on the long-term rental sector. At issue then is the extent to which additional supply for that market can be feasibly supplied, and the extent to which such demand may be met through such initiatives as KiwiBuild. This expectation is taken into account in the demand estimates.

3.5 Total Housing Demand

Total dwelling demand is estimated from the household projections, and allowance for growth in each aspect of absentee owner demand, recognising also the overlaps among these aspects. These projections form the basis of assessing housing sufficiency later in section 6.

3.5.1 Scenario Approach

Because of this wide range of influences, forecasting demand growth is complex, especially given the fundamental changes likely to impact on purchasing by overseas entities. Rather than attempt multi-variate forecasting, we have adopted a scenario approach for assessing low, medium and high growth ranges for both New Zealand based demand, and overseas based demand. The key considerations are:

a. the established pattern is for absentee owners to rent their dwellings to QLD residents. Based on current numbers, this suggests that QLD household growth (growth in the usually resident population) can be expected to drive demand for absentee owners' investment dwellings;

b. the balance of demand is currently the 4,000 dwellings which are not usually occupied. For approximately half of those dwellings, short-term holiday demand is a key component of their value as investments. The demand growth for these holiday dwellings (currently 1,650 New Zealand owned and 350 overseas owned) is expected to follow the trend for tourism (visitor) growth, at a lower annual rate;

[73] The impact of these proposed provisions is outside the scope of this first HDCA.
[74] We note that while AirBNB is outside the norm in terms of renting out rooms as 'shared spaces' it is not unique in the holiday rental market - others include Holiday Homes.co.nz and Book'a Bach.

c. for the other dwellings, growth in demand is expected to reflect more the population and economic drivers in the rest of New Zealand, and overseas. This other New Zealand demand growth is expected to be slower than growth in QLD itself, because population growth elsewhere is on average considerably less than in QLD, while the relative increase in QLD property values will limit the ability of new investors to enter the market. This would apply to the current base of around 1,650 dwellings owned by purchasers from the rest of New Zealand.

d. demand growth from overseas absentee owners is expected to be substantially slower than the recent past, because of the restrictions on foreign ownership of housing. This is expected to result primarily in some transfer effect between overseas and New Zealand based absentee owners.

3.5.2 QLD Total District Housing Demand Projections

Based on these scenarios, total district projections have been prepared for low, medium and high futures as well as the QLDC Recommended household growth projections (refer section 1.5.2)[75].

These would see an increase in demand for dwellings over the 2016 to 2046 period of between 7,800 dwellings (44%, Low) and 16,300 dwellings (93%, High). The Medium projection would see an additional 11,600 dwellings (+66%), while the QLDC projection implies an additional 13,300 dwellings (+76%). These projections are summarised in Table 3.9 showing the projected changes over the 2016 to 2046 period. The more detailed projections are set out in Table 3.10, for the short, medium and long-term futures, and for the QLDC projections.

Table 3.9 - QLD Total District Projected Housing Demand 2016-2046

Housing Demand	2016	Low 2046	Change 2016-46	Change %	Medium 2046	Change 2016-46	Change %	High 2046	Change 2016-46	Change %	Rationale 2046	Change 2016-46*	Change %
Owner-occupied	7,920	12,120	4,200	53%	13,950	6,030	76%	16,080	8,160	103%	15,140	7,220	91%
Long-term Rental	5,680	8,710	3,030	53%	10,020	4,340	76%	11,550	5,870	103%	10,880	5,200	92%
QLD owners	*2,320*	*3,670*	*1,350*	*58%*	*4,230*	*1,910*	*82%*	*4,880*	*2,560*	*110%*	*4,550*	*2,230*	*96%*
Other NZ Owners	*2,770*	*4,390*	*1,620*	*58%*	*5,050*	*2,280*	*82%*	*5,830*	*3,060*	*110%*	*5,440*	*2,670*	*96%*
International Owners	*590*	*650*	*60*	*10%*	*730*	*140*	*24%*	*840*	*250*	*42%*	*790*	*200*	*34%*
Other NZ-Investment	1,650	2,090	440	27%	2,480	830	50%	3,090	1,440	87%	2,430	780	47%
Other NZ-Holiday	1,650	1,760	110	7%	2,020	370	22%	2,400	750	45%	1,740	90	5%
Other NZ-Total	3,300	3,850	550	17%	4,500	1,200	36%	5,490	2,190	66%	4,170	870	26%
International-Investment	350	370	20	6%	390	40	11%	430	80	23%	360	10	3%
International-Holiday	350	360	10	3%	370	20	6%	390	40	11%	350	-	0%
International-Total	700	730	30	4%	760	60	9%	820	120	17%	710	10	1%
Total	17,600	25,400	7,800	44%	29,200	11,600	66%	33,900	16,300	93%	30,900	13,300	76%
Total with Margin	17,600	26,600	9,000	51%	31,000	13,400	76%	36,400	18,800	107%	32,900	15,300	87%

Source: ME QLD Housing Model 2017. Figures have been rounded.

[75] Where equivalent detail is not provided in the QLDC projections, M.E has applied the same structure/approach as for the other SNZ projections.

Table 3.10 - QLD Total District Projected Housing Demand by Future 2016-2046

Housing Demand	2016	2019	2026	2046	2016-19	2016-19 %	2016-26	2016-26 %	2016-46	2016-46 %
High Projection										
Owner-occupied	7,920	9,020	10,950	16,130	1,100	14%	3,030	38%	8,210	104%
Long-term Rental	5,680	6,480	7,850	11,500	800	14%	2,170	38%	5,820	102%
QLD owners	*2,320*	*2,660*	*3,240*	*4,860*	*340*	*15%*	*920*	*40%*	*2,540*	*109%*
Other NZ Owners	*2,770*	*3,170*	*3,870*	*5,810*	*400*	*14%*	*1,100*	*40%*	*3,040*	*110%*
International Owners	*590*	*650*	*730*	*830*	*60*	*10%*	*140*	*24%*	*240*	*41%*
Other NZ-Investment	1,650	1,770	2,080	3,090	120	7%	430	26%	1,440	87%
Other NZ-Holiday	1,650	1,750	1,940	2,400	100	6%	290	18%	750	45%
Other NZ-Total	3,300	3,520	4,020	5,490	220	7%	720	22%	2,190	66%
International-Investment	350	360	370	430	10	3%	20	6%	80	23%
International-Holiday	350	360	370	390	10	3%	20	6%	40	11%
International-Total	700	720	740	820	20	3%	40	6%	120	17%
Total	17,600	19,700	23,600	33,900	2,100	12%	6,000	34%	16,300	93%
Total with Margin	17,600	20,100	24,800	36,300	2,500	14%	7,200	41%	18,700	106%
Medium Projection										
Owner-occupied	7,920	8,730	10,370	14,000	810	10%	2,450	31%	6,080	77%
Long-term Rental	5,680	6,270	7,430	9,970	590	10%	1,750	31%	4,290	76%
QLD owners	*2,320*	*2,570*	*3,070*	*4,210*	*250*	*11%*	*750*	*32%*	*1,890*	*81%*
Other NZ Owners	*2,770*	*3,070*	*3,670*	*5,030*	*300*	*11%*	*900*	*32%*	*2,260*	*82%*
International Owners	*590*	*630*	*700*	*730*	*40*	*7%*	*110*	*19%*	*140*	*24%*
Other NZ-Investment	1,650	1,730	1,920	2,480	80	5%	270	16%	830	50%
Other NZ-Holiday	1,650	1,700	1,810	2,020	50	3%	160	10%	370	22%
Other NZ-Total	3,300	3,430	3,730	4,500	130	4%	430	13%	1,200	36%
International-Investment	350	350	360	390	-	0%	10	3%	40	11%
International-Holiday	350	350	360	370	-	0%	10	3%	20	6%
International-Total	700	700	720	760	-	0%	20	3%	60	9%
Total	17,600	19,100	22,300	29,200	1,500	9%	4,700	27%	11,600	66%
Total with Margin	17,600	19,400	23,200	30,900	1,800	10%	5,600	32%	13,300	76%
Low Projection										
Owner-occupied	7,920	8,380	9,610	12,160	460	6%	1,690	21%	4,240	54%
Long-term Rental	5,680	6,020	6,890	8,670	340	6%	1,210	21%	2,990	53%
QLD owners	*2,320*	*2,470*	*2,840*	*3,660*	*150*	*6%*	*520*	*22%*	*1,340*	*58%*
Other NZ Owners	*2,770*	*2,950*	*3,400*	*4,370*	*180*	*6%*	*630*	*23%*	*1,600*	*58%*
International Owners	*590*	*610*	*650*	*640*	*20*	*3%*	*60*	*10%*	*50*	*8%*
Other NZ-Investment	1,650	1,690	1,800	2,090	40	2%	150	9%	440	27%
Other NZ-Holiday	1,650	1,680	1,730	1,760	30	2%	80	5%	110	7%
Other NZ-Total	3,300	3,370	3,530	3,850	70	2%	230	7%	550	17%
International-Investment	350	350	360	370	-	0%	10	3%	20	6%
International-Holiday	350	350	350	360	-	0%	-	0%	10	3%
International-Total	700	700	710	730	-	0%	10	1%	30	4%
Total	17,600	18,500	20,700	25,400	900	5%	3,100	18%	7,800	44%
Total with Margin	17,600	18,700	21,300	26,600	1,100	6%	3,700	21%	9,000	51%
Rationale Recommended Projection										
Owner-occupied	7,920	9,020	10,920	15,140	1,100	16%	3,000	38%	7,220	91%
Long-term Rental	5,680	6,480	7,830	10,880	800	14%	2,150	38%	5,200	92%
QLD owners	*2,320*	*2,660*	*3,230*	*4,550*	*340*	*15%*	*910*	*39%*	*2,230*	*96%*
Other NZ Owners	*2,770*	*3,170*	*3,860*	*5,440*	*400*	*14%*	*1,090*	*39%*	*2,670*	*96%*
International Owners	*590*	*650*	*730*	*790*	*60*	*10%*	*140*	*24%*	*200*	*34%*
Other NZ-Investment	1,850	1,970	2,220	2,250	120	6%	370	20%	400	22%
Other NZ-Holiday	1,850	1,960	2,100	1,890	110	6%	250	14%	40	2%
Other NZ-Total	3,700	3,930	4,320	4,140	230	6%	620	17%	440	12%
International-Investment	370	380	390	390	10	3%	20	5%	20	5%
International-Holiday	370	380	390	370	10	3%	20	5%	-	0%
International-Total	740	760	780	760	20	3%	40	5%	20	3%
Total	18,040	20,200	23,900	30,900	2,200	12%	5,800	32%	12,900	72%
Total with Margin		20,600	25,000	32,800	2,600	14%	7,000	39%	14,800	82%

Source: ME QLD Housing Model 2017. Figures have been rounded.

Key features are as follows:

Low Growth

a. The Low growth projection would see a total demand increase of 3,100 dwellings by 2026 (+18%), and 7,800 dwellings by 2046 (+44%), driven primarily by growth in the number of resident households (2,900 to 2026 (+21%) and 7,230 to 2046 (+53%);

b. The largest single component of demand growth is for owner-occupied dwellings at 1,690 by 2026 (+21%) and 4,240 dwellings by 2046 (+53%). In addition, there would be demand for an additional 1,210 dwellings for long-term rental by 2026 (+21%), and nearly 3,000 dwellings (+53%) by 2046. Of those, an estimated 1,650 would be owned by absentee owners (primarily from elsewhere in New Zealand);

c. Additional demand for investment dwellings (440 dwellings) and holiday dwellings not used for rental (110 dwellings) is also expected to arise primarily from demand from elsewhere in New Zealand.

d. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 9,000 dwellings, compared with 7,800 under the Low future. This would take total dwellings to 26,600 by 2046, rather than 25,400, an additional 1,200.

Medium Growth

e. The Medium growth projection would see a total demand increase of 4,700 dwellings by 2026 (+27%) and 11,600 dwellings (+66%) by 2046. This growth is driven mainly by growth in the number of resident households of 4,200 by 2026 (+31%) and 10,370 by 2046 (+76%);

f. The projected growth includes demand for an additional 2,450 dwellings by 2026 from owner-occupier households and 6,080 dwellings (+77%) by 2046. There would also be demand for 1,750 dwellings for long-term rental by 2026 (+31%), and 4,290 dwellings by 2046 (+76%), of which an estimated 2,400 would be owned by absentee owners (primarily from elsewhere in New Zealand);

g. Additional demand for investment dwellings (270 by 2026, and 830 dwellings by 2046) and holiday dwellings not used for rental (160 by 2026 and 370 dwellings by 2046) is expected to arise primarily from demand from elsewhere in New Zealand.

h. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 13,300 dwellings, compared with 11,600 under the Medium future. This would take total dwellings to 30,900 by 2046, rather than 29,200, an additional 1,700.

High Growth

a. The High growth projection would see a total demand increase of 6,000 dwellings by 2026 (+34%), and an additional 16,300 dwellings by 2046 (+93%).

b. The growth is driven primarily by demand from resident households with an additional 5,200 by 2026 (+38%), and 14,030 by 2046 (+103%);

c. The major share of demand growth would be from an additional 8,210 dwellings for owner-occupier households (+104%), and 5,820 dwellings for long-term rental, of which an estimated

3,280 would be owned by absentee owners (primarily from elsewhere in New Zealand). This scenario allows for a net gain in dwelling ownership rates, consistent with the high growth overall;

d. Additional demand for investment dwellings (430 by 2026, and 1,440 dwellings by 2046) and holiday dwellings not used for rental (290 by 2026 and 750 dwellings by 2046) is expected to arise primarily from demand from elsewhere in New Zealand.

e. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 18,700 dwellings, compared with 16,300 under the High future. This would take total dwellings to 36,300 by 2046, rather than 33,900, an additional 2,400.

QLDC Recommended Projection

a. The QLDC projection, between the SNZ Medium and High projections, would see a total demand increase of 12,900 dwellings (+72%), again driven by growth in the number of resident households (12,420 or +91%);

b. This includes demand for an additional 7,220 dwellings for owner-occupier households (+91%), and 5,200 dwellings for long-term rental.

c. The QLDC projection assumes a total of 4,880 vacant or not usually occupied dwellings as at 2046 (up from their estimated 4,420 interpolated for 2016), more than the Low projection (4,580) but below the Medium (5,800) and the High projection (6,840).

d. However, because the QLDC projection starts from a higher base for 2016, the net increase in not usually occupied dwellings is substantially lower, at 460 dwellings or +10% over the long-term. The number of dwellings for absentee owners would represent a substantially smaller share of the total estate (16% compared with the current 23%). Since the QLDC projection is from a different methodology, the division applied here is for illustrative purposes only.

e. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 14,800 dwellings, compared with 12,900 under the QLDC future. This would take total dwellings to 32,800 by 2046, rather than 30,900, an additional 1,900.

Comparison with QLDC Projection

The projections developed here are generally consistent with the QLDC projections for resident household growth (occupied dwellings), with the QLDC projections sitting just above the mid-point between the Medium and High projections.

However, the adopted figures are higher than the QLDC estimates for dwellings not usually occupied, for the medium and high projections.

The QLDC projections have substantially lower growth over the 2016-2046 period for unoccupied dwellings (0.7%pa) than for occupied dwellings (2.1%pa). The QLDC base figure for 2016 is 4,422 unoccupied dwellings, some 11% (422 dwellings) higher than M.E's estimates.

The QLDC projected growth rate also show a shift toward Wakatipu Ward, with growth there of +1.1%pa (net gain of 820 unoccupied dwellings) compared with a decrease in Wanaka Ward (-0.6% pa, net reduction

of 375 dwellings unoccupied). This implies a net transfer of some 16% of currently unoccupied dwellings to occupancy by resident households.

This indicates a shift in the structure of the dwelling estate, from the current 76%:24% split (occupied to unoccupied) to a future split of 84%:16%, with an associated decline in the relative importance of investment / holiday dwellings. This would reflect a gradual takeover of the investment/holiday estate by the resident population, and/or a decline in the relative popularity of QLD for holiday and investment dwellings.

3.5.3 QLD Urban Environment Housing Demand Projections

Much of the demand growth would arise in urban QLD. The outlook is summarised in Table 3.11 and shown for each time period and growth future in Table 3.12. The urban projections allow for a progressively higher share of growth to accrue to urban QLD, including because of the substantial additional capacity within the urban boundary. Currently, the dwelling estimates show 76.1% are within urban QLD, the high projection indicates 81% of growth would be urban, the medium projection 83%, and the low projection 85%.

Table 3.11 - QLD Urban Projected Housing Demand 2016-2046

Housing Demand	2016	Low 2046	Change 2016-46	Change %	Medium 2046	Change 2016-46	Change %	High 2046	Change 2016-46	Change %	Rationale 2046	Change 2016-46*	Change %
Owner-occupied	6,540	10,220	3,680	56%	11,750	5,210	80%	13,570	7,030	107%	12,660	6,120	94%
Long-term Rental	4,550	7,100	2,550	56%	8,170	3,620	80%	9,430	4,880	107%	8,800	4,250	93%
QLD owners	*1,860*	*3,000*	*1,140*	*61%*	*3,450*	*1,590*	*85%*	*3,990*	*2,130*	*115%*	*3,720*	*1,860*	*100%*
Other NZ Owners	*2,220*	*3,580*	*1,360*	*61%*	*4,120*	*1,900*	*86%*	*4,760*	*2,540*	*114%*	*4,440*	*2,220*	*100%*
International Owners	*470*	*530*	*60*	*13%*	*600*	*130*	*28%*	*680*	*210*	*45%*	*640*	*170*	*36%*
Other NZ-Investment	960	1,210	250	26%	1,440	480	50%	1,800	840	88%	1,620	660	69%
Other NZ-Holiday	960	1,020	60	6%	1,170	210	22%	1,390	430	45%	1,280	320	33%
Other NZ-Total	1,920	2,230	310	16%	2,610	690	36%	3,190	1,270	66%	2,900	980	51%
International-Investment	200	210	10	5%	230	30	15%	240	40	20%	240	40	20%
International-Holiday	200	200	-	0%	210	10	5%	220	20	10%	220	20	10%
International-Total	400	410	10	2%	440	40	10%	460	60	15%	460	60	15%
Total	13,400	20,000	6,600	49%	23,000	9,600	72%	26,700	13,300	99%	24,800	11,400	85%
Total with Margin	13,400	20,900	7,500	56%	24,400	11,000	82%	28,600	15,200	113%	26,500	13,100	98%

Source: ME QLD Housing Model 2017. Figures have been rounded.

Key features are as follows:

Low Growth

a. The Low growth projection would see a total demand increase of 2,500 dwellings in urban QLD by 2026 (+19%), and 6,600 dwellings (+49%) by 2046. As with the total District, the expected growth would be driven primarily by the increase in resident households, with 2,400 to 2026 (+22%) and 6,230 to 2046 (+56%);

b. The main component of demand growth is for owner-occupied dwellings at 1,410 by 2026 (+22%), and 3,680 dwellings by 2046 (+56%).

c. As well, there would be demand for another 990 dwellings for long-term rental dwellings by 2026 (+22%), and 2,550 (+56%) by 2046. Of those, an estimated 1,420 would be owned by absentee owners, in most instances from elsewhere in New Zealand;

d. Additional demand for investment dwellings in urban QLD is estimated at 250 dwellings, and 60-70 holiday dwellings not used for rental, again primarily through demand from elsewhere in New Zealand.

e. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 7,500 dwellings, compared with 6,600 under the Low future. This would take total urban dwellings to 20,900 by 2046, rather than 20,000, an additional 900.

Medium Growth

a. The Medium growth projection would see a total demand increase of 3,700 dwellings in urban QLD by 2026 (+28%) and 9,600 dwellings (+72%) by 2046. This would be driven mainly by the increase in resident households of 3,470 by 2026 (+31%) and 8,830 by 2046 (+80%);

b. The projected growth includes demand for an additional 2,040 dwellings by 2026 from owner-occupier households and 5,210 dwellings (+80%) by 2046, with rented dwellings assumed to increase at the same rate. There would also be demand for 1,430 dwellings for long-term rental by 2026 (+31%), and 3,620 dwellings by 2046, of which an estimated 2,030 would be owned by absentee owners;

c. Additional demand for investment dwellings (170 by 2026, and 510 dwellings by 2046) and holiday dwellings not used for rental (90 by 2026 and 220 dwellings by 2046) is expected to arise mainly from absentee owners in other parts of New Zealand.

d. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 11,000 dwellings, compared with 9,600 under the Medium future. This would take total urban dwellings to 24,400 by 2046, rather than 23,000, an additional 1,400.

High Growth

a. The High growth projection would see total growth in urban QLD of 4,800 dwellings by 2026 (+36%) and 13,200 by 2046 (+98%).

b. The growth is driven mainly by demand from resident households, with an estimated 4,380 by 2026 (+40%), and 11,910 by 2046 (+107%);

c. The major share of demand growth would be from an additional 7,030 dwellings for owner-occupier households (+107%), and 4,880 dwellings for long-term rental, of which an estimated 2,750 would be owned by absentee owners;

d. Additional demand for investment dwellings is estimated at 880 by 2046, and 450 holiday dwellings not used for rental.

e. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 15,200 dwellings, compared with 13,200 under the High future. This would take total urban dwellings to 28,600 by 2046, rather than 26,700, an additional 1,900.

Table 3.12 - QLD Urban Projected Housing Demand by Future 2016-2046

Housing Demand	2016	2019	2026	2046	2016-19	2016-19 %	2016-26	2016-26 %	2016-46	2016-46 %
High Projection										
Owner-occupied	6,540	7,500	9,120	13,570	960	15%	2,580	39%	7,030	107%
Long-term Rental	4,550	5,230	6,350	9,430	680	15%	1,800	40%	4,880	107%
QLD owners	*1,860*	*2,140*	*2,620*	*3,990*	*280*	*15%*	*760*	*41%*	*2,130*	*115%*
Other NZ Owners	*2,220*	*2,560*	*3,130*	*4,760*	*340*	*15%*	*910*	*41%*	*2,540*	*114%*
International Owners	*470*	*530*	*590*	*680*	*60*	*13%*	*120*	*26%*	*210*	*45%*
Other NZ-Investment	960	1,030	1,210	1,800	70	7%	250	26%	840	88%
Other NZ-Holiday	960	1,020	1,130	1,390	60	6%	170	18%	430	45%
Other NZ-Total	1,920	2,050	2,340	3,190	130	7%	420	22%	1,270	66%
International-Investment	200	200	210	240	-	0%	10	5%	40	20%
International-Holiday	200	200	210	220	-	0%	10	5%	20	10%
International-Total	400	400	420	460	-	0%	20	5%	60	15%
Total	13,410	15,200	18,200	26,700	1,800	13%	4,800	36%	13,200	98%
Total with Margin		15,500	19,200	28,600	2,100	16%	5,800	43%	15,200	113%
Medium Projection										
Owner-occupied	6,540	7,250	8,580	11,750	710	11%	2,040	31%	5,210	80%
Long-term Rental	4,550	5,050	5,980	8,170	500	11%	1,430	31%	3,620	80%
QLD owners	*1,860*	*2,070*	*2,470*	*3,450*	*210*	*11%*	*610*	*33%*	*1,590*	*85%*
Other NZ Owners	*2,220*	*2,470*	*2,950*	*4,120*	*250*	*11%*	*730*	*33%*	*1,900*	*86%*
International Owners	*470*	*510*	*560*	*600*	*40*	*9%*	*90*	*19%*	*130*	*28%*
Other NZ-Investment	960	1,000	1,120	1,440	40	4%	160	17%	480	50%
Other NZ-Holiday	960	990	1,050	1,170	30	3%	90	9%	210	22%
Other NZ-Total	1,920	1,990	2,170	2,610	70	4%	250	13%	690	36%
International-Investment	200	200	210	230	-	0%	10	5%	30	15%
International-Holiday	200	200	200	210	-	0%	-	0%	10	5%
International-Total	400	400	410	440	-	0%	10	3%	40	10%
Total	13,400	14,700	17,100	23,000	1,300	10%	3,700	28%	9,600	72%
Total with Margin		14,900	17,900	24,400	1,500	11%	4,500	34%	11,000	82%
Low Projection										
Owner-occupied	6,540	6,950	7,950	10,220	410	6%	1,410	22%	3,680	56%
Long-term Rental	4,550	4,840	5,540	7,100	290	6%	990	22%	2,550	56%
QLD owners	*1,860*	*1,980*	*2,290*	*3,000*	*120*	*6%*	*430*	*23%*	*1,140*	*61%*
Other NZ Owners	*2,220*	*2,370*	*2,730*	*3,580*	*150*	*7%*	*510*	*23%*	*1,360*	*61%*
International Owners	*470*	*490*	*520*	*530*	*20*	*4%*	*50*	*11%*	*60*	*13%*
Other NZ-Investment	960	990	1,050	1,210	30	3%	90	9%	250	26%
Other NZ-Holiday	960	980	1,010	1,020	20	2%	50	5%	60	6%
Other NZ-Total	1,920	1,970	2,060	2,230	50	3%	140	7%	310	16%
International-Investment	200	200	200	210	-	0%	-	0%	10	5%
International-Holiday	200	200	200	200	-	0%	-	0%	-	0%
International-Total	400	400	400	410	-	0%	-	0%	10	3%
Total	13,400	14,200	16,000	20,000	800	6%	2,500	19%	6,600	49%
Total with Margin		14,300	16,400	20,900	900	7%	3,000	22%	7,500	56%
Rationale Recommended Projection										
Owner-occupied	6,540	7,390	8,880	12,660	850	13%	2,340	36%	6,120	94%
Long-term Rental	4,550	5,150	6,180	8,800	600	13%	1,630	36%	4,250	93%
QLD owners	*1,860*	*2,110*	*2,550*	*3,720*	*250*	*13%*	*690*	*37%*	*1,860*	*100%*
Other NZ Owners	*2,220*	*2,520*	*3,050*	*4,440*	*300*	*14%*	*830*	*37%*	*2,220*	*100%*
International Owners	*470*	*520*	*580*	*640*	*50*	*11%*	*110*	*23%*	*170*	*36%*
Other NZ-Investment	960	1,020	1,170	1,620	60	6%	210	22%	660	69%
Other NZ-Holiday	960	1,010	1,090	1,280	50	5%	130	14%	320	33%
Other NZ-Total	1,920	2,030	2,260	2,900	110	6%	340	18%	980	51%
International-Investment	200	200	210	240	-	0%	10	5%	40	20%
International-Holiday	200	200	210	220	-	0%	10	5%	20	10%
International-Total	400	400	420	460	-	0%	20	5%	60	15%
Total	13,400	15,000	17,700	24,800	1,600	12%	4,300	32%	11,400	85%
Total with Margin		15,300	18,600	26,500	1,900	14%	5,200	39%	13,100	98%

Source: ME QLD Housing Model 2017. Figures have been rounded.

a. The QLDC growth projection would see total growth in urban QLD of 4,300 dwellings by 2026 (+32%) and 11,400 by 2046 (+85%).

b. The growth is driven mainly by demand from resident households, with an estimated 3,970 by 2026 (+36%), and 10,370 by 2046 (+94%);

c. The major share of demand growth would be from an additional 6,120 dwellings for owner-occupier households (+94%), and 4,250 dwellings for long-term rental, of which an estimated 2,390 would be owned by absentee owners;

d. Additional demand for investment dwellings is estimated at 700 by 2046, and 340 holiday dwellings not used for rental.

e. Allowing for a 15% margin on top of projected long-term demand growth, the total projected increase in demand would be 13,100 dwellings, compared with 11,400 under the QLDC future. This would take total urban dwellings to 26,500 by 2046, rather than 24,800, an additional 1,700.

3.5.4 NPS-UDC Growth Margins

Under Policy C1 of the NPS-UDC, councils must provide for an *"additional margin of feasible development capacity over and above projected demand"* of 20% in the short and medium-terms, and 15% in the long-term. This means that the projected increases in demand need to be factored up by 20% and 15% respectively[76], to identify potential total future demand[77].

Adopting the NPS-UDC guidance to apply the SNZ medium projection for the base case future, it is also instructive to examine the future outcomes plus the margin. For QLD total:

a. the medium projection indicates an additional 1,400 resident households by 2019, with 4,200 more by 2026, and 10,400 by 2046, compared with 2016;

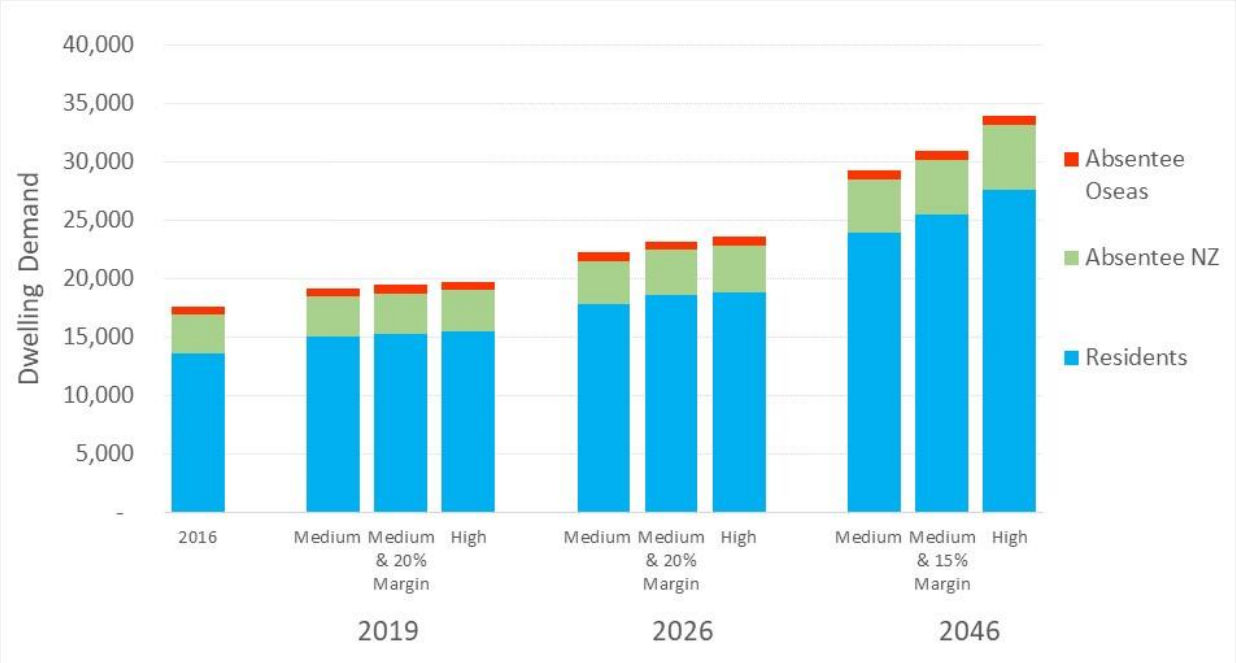
b. the medium projection plus 20% margin indicates an additional 1,680 resident households by 2019, with 5,040 by 2026, and 11,960 by 2046;

c. the SNZ high projection indicates an additional 1,900 resident households by 2019, with 5,200 more by 2026, and 14,000 by 2046.

[76] For this first HDCA, QLDC have adopted the margins recommended in the NPS-UDC guidance. This will be reviewed in future updates.

[77] This factoring applies to the demand growth, not to the total demand projected for each future time. If it were applied to total projected demand, then the resulting implied growth rates would be far in excess of the SNZ growth rates. For example, in QLD the SNZ medium growth for the 2016-2019 period indicates a 5% increase in household numbers, whereas factoring up the 2019 by a further 20% would indicate 25% growth. Similarly, for the 2026 medium-term the SNZ medium projection is for 15% growth, factoring up the 2026 total would imply 35% growth; and for 2046 long-term, the SNZ medium projection is for 42% growth, factoring up the 2046 total would imply 57% growth.

Figure 3.5 - QLD Household Projections with NPS-UDC Margin 2019-2046



This means that the SNZ high projection easily encompasses the medium plus 20% margin throughout the long-term. Figure 3.5 compares the total demand outcomes in 2019, 2026 and 2046, showing medium growth, medium growth plus 20% and 15% margin, and high projection.

3.6 Detailed Resident Household Housing Demand - Approach

The NPS-UDC requires that there is sufficient capacity for total housing demand. In the case of QLD, demand for investment/holiday dwellings from those residing outside the district is a substantial component – 22.7% currently and expected to be in excess of 18% into the longer term.

This is a substantially higher share of the total estate than all other urban economies in New Zealand with a population of greater than 30,000 persons (the SNZ 2016 estimate is 34,700). It is important to recognise this in relation to a number of the key NPS-UDC requirements, particularly in relation to housing affordability, the efficient operation of the housing market, and the provision for feasible housing development.

The requirements for affordability apply predominantly to the QLD resident population. As a matter of logic, for purchasers of investment/holiday dwellings in QLD, affordability is not a matter for concern because those households/entities are purchasing a second dwelling, and such purchases may be seen as discretionary rather than essential. In effect, the purchasers from elsewhere in New Zealand or overseas are in the higher income and resource echelons, and are generally better able to afford second dwellings for holiday / investment purposes. This is especially so where rental levels are comparatively high, as in QLD. The same effect arises in regard to the feasibility of residential development, where higher priced dwellings may be out of the reach of middle income resident households, but within reach of investors. This means fewer demand constraints on residential developments in the higher value bands – especially for overseas absentee owners, whose dwelling values are on average some 20-25% above those owned by QLD entities.

A priori, we may expect that the distribution of dwelling values for additional absentee owners from elsewhere in New Zealand, or overseas, would be close to the current pattern – that is, in dwelling value terms, we may broadly expect a *pro rata* increase in absentee-owned dwellings in each value band.

There is some indication that housing supply in QLD has lagged behind demand, especially in terms of affordable dwellings for lower and middle-income households. However, there is no indication of a net housing shortfall of equivalent scale or nature to that of Auckland for example. An important reason is that the total dwelling estate (17,600) is considerably larger than the requirements of the usually resident population (13,600 households), which means there is potential for resident households to be tenants if they cannot afford to be owners.

In the remaining parts of section 3 of the HDCA, the focus is on the future housing demand of QLD resident households, taking into account the current patterns of dwelling ownership and occupancy of dwellings by households of each type, and in each income band. This assessment is based on the *Queenstown Lakes District Housing Model 2017*, developed by M.E to provide key information and analysis to meet NPS-UDC requirements. Refer to Appendix 5 for a full description of the Model and the way in which it has been applied for this HDCA.

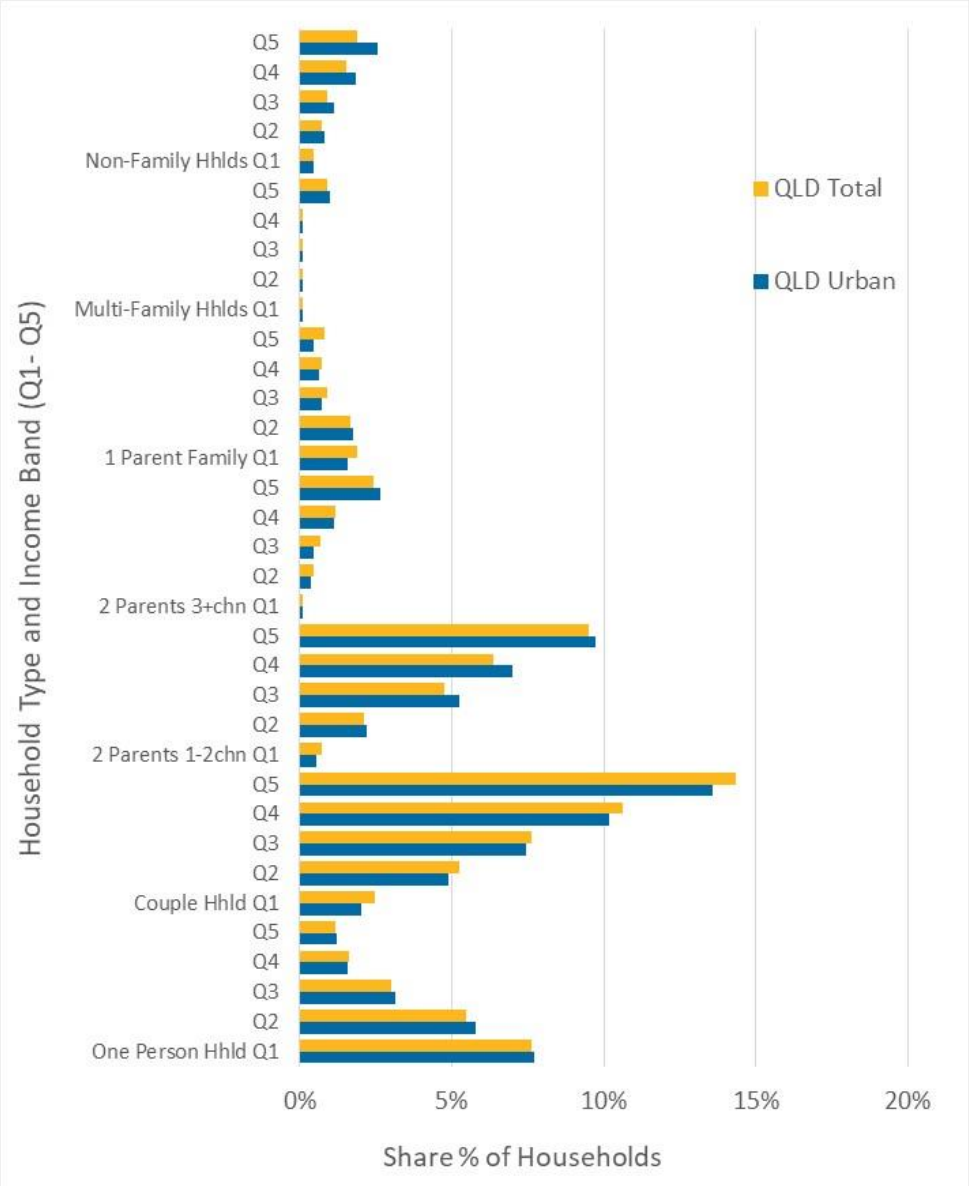
We note that this assessment covers QLD resident households, and the demand for dwellings of each type and value of those resident households. It does not include demand from absentee owners of investment and holiday dwellings other than those rented by resident QLD households.

3.7 QLD Housing Demand 2016

This section details the estimated housing demand and supply side situation as at June YE 2016 based on the approach outlined above and in Appendix 5. This is for the estimated 13,600 resident households estimated for total QLD, from the resident population of 34,700[78]. Initially it provides some key information from the 2013 Census for the district population as a whole, then it focuses on the 2016 estimated situation for population and households. The base assessment covers total QLD total and includes QLD urban. It does not examine urban QLD by itself, most notably because urban QLD accounts for a major share (82%) of the total QLD resident households, and there are quite limited demographic differences between urban QLD and total QLD. There are clearly close links between urban and rural areas. Figure 3.6 shows the similarities between QLD total and urban QLD, in terms of types of resident households. Consequently, the patterns examined in the following sections for QLD total are also closely representative of the pattern for urban QLD.

[78] SNZ, 2017.

Figure 3.6 - QLD Total and Urban QLD Household Types 2016



3.7.1 Household Type and Dwelling Type 2013

The first key indicator is the pattern of housing demand in terms of dwellings occupied by each household type, as at Census 2013. Table 3.13 and Figure 3.7 show the overall pattern for QLD at that time, for urban and rural households. This is not differentiated by dwelling value.

The 2013 Census data provides detail for 9,720 households out of 11,700 identified on Census night in QLD. The analysis achieves reasonably good coverage of households as at Census night (86%), and 83% of the estimated 11,700 resident private households as at June 2013. The post-Census enumeration process does not estimate the dwellings which were occupied by households absent on Census night.

Nevertheless, the available data does provide a solid base for estimating the household type to dwelling type and dwelling value patterns for QLD and is the most comprehensive available.

Table 3.13 - QLD Dwelling Occupancy by Household Type (Total District) 2013

Dwelling Type	One Person Hhld	Couple Hhld	2 Parents 1-2chn	2 Parents 3+chn	1 Parent Family	Multi-Family Hhlds	Non-Family Hhlds	Hhld Type NEI	Total Hhlds
Separate house	1,110	2,720	2,010	350	350	70	300	-	6,910
2+ dwellings in 1-storey	230	250	130	10	30	-	50	-	700
2+ dwellings in 2- to 3-storey	270	560	230	10	50	20	230	-	1,370
2+ dwellings in 4+ storey	-	-	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-	-	-
Other private dwellings	10	10	-	-	-	-	-	-	20
Private dwelling nfd	190	110	60	10	20	-	30	300	720
Total Private Dwellings	1,810	3,650	2,430	380	450	90	610	300	9,720
Structure % by Household type									
Separate house	61.3%	74.5%	82.7%	92.1%	77.8%	77.8%	49.2%	0.0%	71.1%
2+ dwellings in 1-storey	12.7%	6.8%	5.3%	2.6%	6.7%	0.0%	8.2%	0.0%	7.2%
2+ dwellings in 2- to 3-storey	14.9%	15.3%	9.5%	2.6%	11.1%	22.2%	37.7%	0.0%	14.1%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Private dwelling nfd	10.5%	3.0%	2.5%	2.6%	4.4%	0.0%	4.9%	100.0%	7.4%
Total Private Dwellings	100%	100%	100%	100%	100%	100%	100%	100%	100%
Overall Structure									
Separate house	11.4%	28.0%	20.7%	3.6%	3.6%	0.7%	3.1%	0.0%	71.1%
2+ dwellings in 1-storey	2.4%	2.6%	1.3%	0.1%	0.3%	0.0%	0.5%	0.0%	7.2%
2+ dwellings in 2- to 3-storey	2.8%	5.8%	2.4%	0.1%	0.5%	0.2%	2.4%	0.0%	14.1%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Private dwelling nfd	2.0%	1.1%	0.6%	0.1%	0.2%	0.0%	0.3%	3.1%	7.4%
Total Private Dwellings	18.6%	37.6%	25.0%	3.9%	4.6%	0.9%	6.3%	3.1%	100%

Source: Census 2013

The key parameters of current (2013) housing demand are:

a. Separate houses (detached) are the dominant dwelling type (6,910 dwellings or 71.1%);

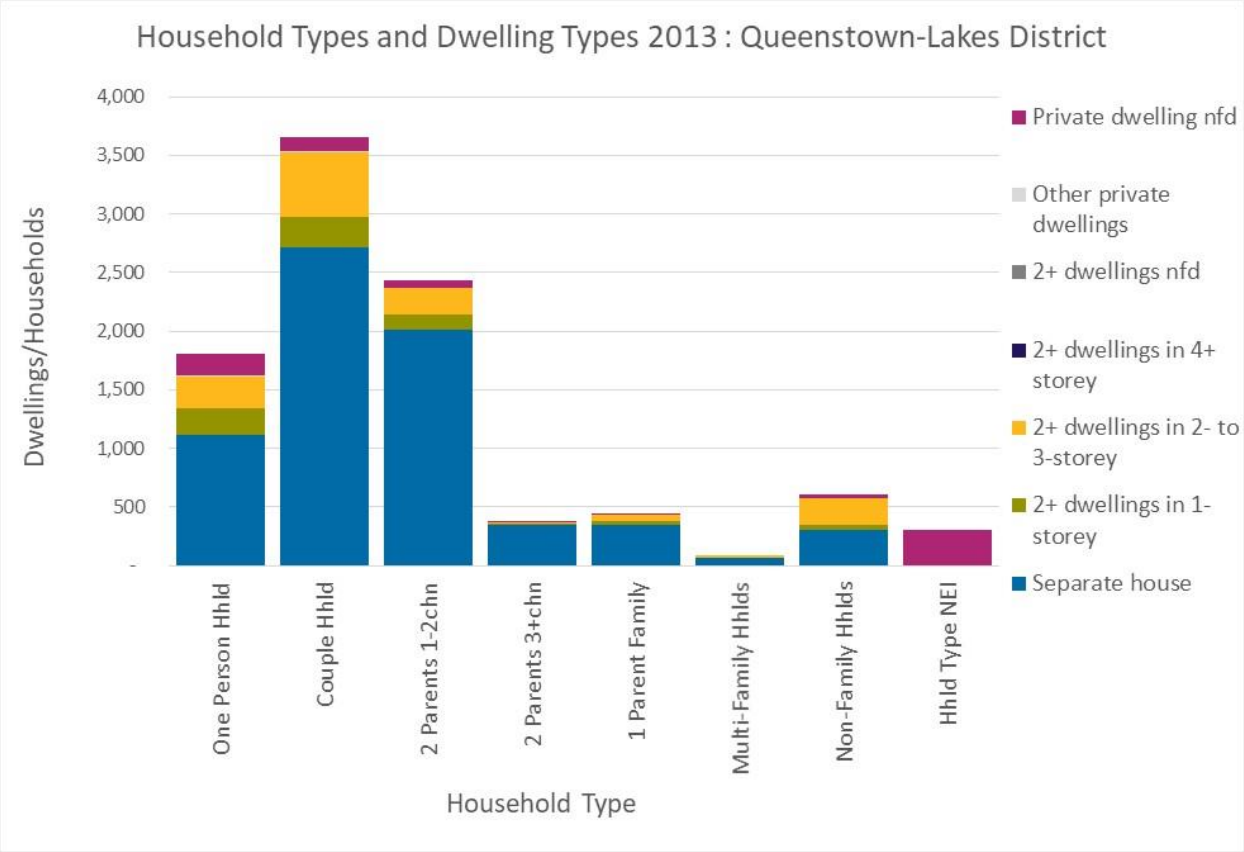
b. Attached dwellings (town houses, terrace houses and apartments) account for 2,090 dwellings or 21.5% of the total estate;

c. Some 6.4% of all private dwellings (720) were identified as dwellings at the Census but were not further defined as being detached or attached. This means that the share of dwellings which are detached or standalone may be as high as 78.5% (if all the "nfd" dwellings were detached, or the attached share may be as high as 28.5% (if all "nfd" dwellings were attached). The likely situation was between the two extremes, with detached dwellings accounting for 71% to 75%, and attached dwellings between 25% and 29%;

d. Of the attached dwellings, about one-third (700, 7.2% of the total) are single level, typically town house and home unit typology;

e. Some 1,370 attached dwellings are in buildings of 2 or 3 levels (14.1%). The Census did not identify any dwellings in buildings of 4 levels or more (predominantly apartments), though there may be some of these in the 720 dwellings which were not defined.

Figure 3.7 - QLD Dwelling Occupancy by Household Type 2013



There are some differences among household types in the dwellings occupied as at 2013. Single person households show a higher propensity than average (38.7%) to occupy attached dwellings, especially single level dwellings. Non-family households (usually flatting structures) show relatively high occupation of attached dwellings, with around half in attached dwellings. However, among other household types, the pattern is similar, with detached dwellings predominant. This is not unexpected for an economy the size of QLD's, although the recent strong growth rates, and the relatively high property values, mean the proportion of attached dwellings is somewhat above the national average.

3.7.2 Dwelling Type and Household Income 2013

Broad patterns are also evident in dwelling occupancy among household income groups. These are shown in Table 3.14. The key features are:

a. Lower income households show general greater propensity than average to reside in attached dwellings, while higher income households show much higher than average propensity to reside in detached dwellings;

b. To a degree, these patterns reflect the household types, especially with older single and couple households on low to low-medium incomes showing some preference for attached dwellings. This "preference" may be based on choice of dwelling style, or affordability. The patterns in QLD are not as marked as in larger urban economies such as Auckland, where there is greater differentiation by income, and the range of dwelling types is more comprehensive.

M.E notes that for consistency with the Census data, the household income bands used in 2013 are retained in the table. The Census income bands broadly indicate five dwelling quintiles.

Table 3.14 - QLD Dwelling Occupancy by Household Income 2013

Household Income ($000) Dwelling Type	Income < $30K	Income $30-50K	Income $50-70K	Income $70-100K	Income $100K +	Income Not Stated	Total
Separate house	730	910	1,060	1,330	2,130	760	6,920
2+ dwellings in 1-storey	130	140	130	140	90	80	710
2+ dwellings in 2- to 3-storey	160	200	190	280	330	220	1,380
2+ dwellings in 4+ storey	-	-	-	-	-	-	-
2+ dwellings nfd	-	-	-	-	-	-	-
Other private dwellings	10	-	10	-	-	-	20
Private dwelling nfd	70	60	70	60	50	420	730
Total private dwellings	1,100	1,310	1,460	1,810	2,600	1,480	9,760
Structure by Income Band							
Separate house	66.4%	69.5%	72.6%	73.5%	81.9%	51.4%	70.9%
2+ dwellings in 1-storey	11.8%	10.7%	8.9%	7.7%	3.5%	5.4%	7.3%
2+ dwellings in 2- to 3-storey	14.5%	15.3%	13.0%	15.5%	12.7%	14.9%	14.1%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.2%
Private dwelling nfd	6.4%	4.6%	4.8%	3.3%	1.9%	28.4%	7.5%
Total private dwellings	100%	100%	100%	100%	100%	100%	100%
Overall Demand Structure							
Separate house	7.5%	9.3%	10.9%	13.6%	21.8%	7.8%	70.9%
2+ dwellings in 1-storey	1.3%	1.4%	1.3%	1.4%	0.9%	0.8%	7.3%
2+ dwellings in 2- to 3-storey	1.6%	2.0%	1.9%	2.9%	3.4%	2.3%	14.1%
2+ dwellings in 4+ storey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2+ dwellings nfd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other private dwellings	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%
Private dwelling nfd	0.7%	0.6%	0.7%	0.6%	0.5%	4.3%	7.5%
Total private dwellings	11.3%	13.4%	15.0%	18.5%	26.6%	15.2%	100%

Source: Census 2013

The above results are unsurprising but are nevertheless important to demonstrate clearly how demand for housing varies within the community, and to show how the characteristics of households influence their demand for dwellings (as indicated by occupancy).

The figures show that demand for housing is influenced clearly by household type and age – affecting household size and organisation, stage in the life cycle and also indicating stage in dwelling ownership sequence – as well as by income – affecting ability to pay. These drivers of demand influence dwelling type needed, and able to be afforded, and dwelling tenure.

If clear demand patterns may be demonstrated for 2013, then these same drivers may be used to assess likely future demand. QLD is expected to have a considerably larger community in the future. The changes in the structure of that demand – household type and age, and income – will underpin the demand for housing. In parallel, there will also be changes in dwelling tenure – including possible increase in ownership rates among existing households – and in the demand for different types of dwellings, including an expected long-term increase in attached dwellings including apartments.

3.8 Current QLD Demand Assessment 2016

The following sections set out the estimated demand pattern for 2016, taking into account the patterns observed in 2013, and with allowance for the growth in household numbers and dwellings in the period to 2016.

Existing dwelling occupancy and ownership patterns are important, and the revealed preferences can be seen as a strong indicator of the dwelling and ownership arrangements which households currently prefer. This is not to imply that all households are able to choose the dwelling type, location and tenure which best meets their needs and preferences. Rather, it shows the patterns of occupancy which reflect the preferences and abilities – especially ability to pay – of households of each type. As such, the current patterns are a very important indicator of likely future patterns of demand, if other factors are held constant.

QLD is a fast-growing economy, and much of the dwelling estate has been developed in the past 25 years. It is likely that the range of dwelling options will continue to expand over the next two decades, especially in response to dwelling affordability issues and the increased residential densities being promoted in the PDP.

3.8.1 Household Type and Dwelling Tenure 2016

Table 3.15 sets out the tenure patterns by broad dwelling type (detached and attached) for households of each type and income band[79]. An important feature is the higher incidence of dwelling ownership for households in the higher income bands. This is evident for all household types.

Overall, the estimates show 56% of households live in owned dwellings, with the other 44% in rented or other dwellings not owned by them. However, the ownership rate is substantially higher than average for the top income band (68% compared with 56% overall), and substantially lower for households in the lowest income category (48%). Ownership also varies among household types. Two-parent families with 1-2 children (67%) and couple households (62%) have relatively higher levels – reflecting in part their higher than average income levels, and the longer time in the property market for mature and older couples - while ownership is lower among single-person households (52%), one-parent families (41%) and very low among non-family households (9%).

The table also shows the higher incidence of detached dwellings (seven of eight) compared with attached for households owning their dwelling. The high focus on detached dwellings is also evident for two-parent families with children, and multi-family households, though with lower incidence for single-person households (four in every five).

[79] Income bands approximate household income quintiles, and have been updated to $2016 terms

Table 3.15 - QLD Household Tenure by Type and Income 2016

Household Type	Income	Owned Dwellings		Not-Owned Dwellings		Total	Owned Dwellings		Not-Owned Dwellings		Total
		Detached	Attached	Detached	Attached		Detached	Attached	Detached	Attached	
One Person Hhld	Up to $36,000	400	90	260	290	1,040	38%	9%	25%	28%	100%
	$36 - $62,000	260	80	180	230	750	35%	11%	24%	31%	100%
	$62- $94,000	180	40	110	80	410	44%	10%	27%	20%	100%
	$94 - $137,000	110	30	40	40	220	50%	14%	18%	18%	100%
	$137,000 +	110	20	20	10	160	69%	13%	13%	6%	100%
	Total	1,060	260	610	650	2,580	41%	10%	24%	25%	100%
Couple Hhld	Up to $36,000	190	40	60	50	340	56%	12%	18%	15%	100%
	$36 - $62,000	430	40	130	120	720	60%	6%	18%	17%	100%
	$62- $94,000	550	50	210	230	1,040	53%	5%	20%	22%	100%
	$94 - $137,000	690	110	320	330	1,450	48%	8%	22%	23%	100%
	$137,000 +	1,180	180	340	260	1,960	60%	9%	17%	13%	100%
	Total	3,040	420	1,060	990	5,510	55%	8%	19%	18%	100%
2 Parents 1-2chn	Up to $36,000	50	-	30	20	100	50%	0%	30%	20%	100%
	$36 - $62,000	100	20	100	70	290	34%	7%	34%	24%	100%
	$62- $94,000	330	60	160	100	650	51%	9%	25%	15%	100%
	$94 - $137,000	520	60	200	90	870	60%	7%	23%	10%	100%
	$137,000 +	930	80	240	50	1,300	72%	6%	18%	4%	100%
	Total	1,930	220	730	330	3,210	60%	7%	23%	10%	100%
2 Parents 3+chn	Up to $36,000	10	-	-	-	10	100%	0%	0%	0%	100%
	$36 - $62,000	20	-	30	10	60	33%	0%	50%	17%	100%
	$62- $94,000	40	-	40	10	90	44%	0%	44%	11%	100%
	$94 - $137,000	80	10	60	10	160	50%	6%	38%	6%	100%
	$137,000 +	240	10	70	10	330	73%	3%	21%	3%	100%
	Total	390	20	200	40	650	60%	3%	31%	6%	100%
1 Parent Family	Up to $36,000	80	10	110	60	260	31%	4%	42%	23%	100%
	$36 - $62,000	80	-	120	30	230	35%	0%	52%	13%	100%
	$62- $94,000	30	10	60	20	120	25%	8%	50%	17%	100%
	$94 - $137,000	40	10	40	10	100	40%	10%	40%	10%	100%
	$137,000 +	70	10	20	10	110	64%	9%	18%	9%	100%
	Total	300	40	350	130	820	37%	5%	43%	16%	100%
Multi-Family Hhlds	Up to $36,000	-	-	-	-	-	0%	0%	0%	0%	0%
	$36 - $62,000	-	-	-	-	-	0%	0%	0%	0%	0%
	$62- $94,000	-	-	-	-	-	0%	0%	0%	0%	0%
	$94 - $137,000	-	-	10	-	10	0%	0%	100%	0%	100%
	$137,000 +	40	-	50	30	120	33%	0%	42%	25%	100%
	Total	40	-	60	30	130	31%	0%	46%	23%	100%
Non-Family Hhlds	Up to $36,000	-	-	20	40	60	0%	0%	33%	67%	100%
	$36 - $62,000	-	-	50	50	100	0%	0%	50%	50%	100%
	$62- $94,000	-	-	60	60	120	0%	0%	50%	50%	100%
	$94 - $137,000	10	-	100	100	210	5%	0%	48%	48%	100%
	$137,000 +	30	20	110	100	260	12%	8%	42%	38%	100%
	Total	40	20	340	350	750	5%	3%	45%	47%	100%
Total Households	Up to $36,000	730	150	480	460	1,820	40%	8%	26%	25%	100%
	$36 - $62,000	880	140	610	500	2,130	41%	7%	29%	23%	100%
	$62- $94,000	1,120	160	650	500	2,430	46%	7%	27%	21%	100%
	$94 - $137,000	1,440	210	760	590	3,000	48%	7%	25%	20%	100%
	$137,000 +	2,600	310	850	470	4,230	61%	7%	20%	11%	100%
	Total	6,770	970	3,350	2,520	13,610	50%	7%	25%	19%	100%

Source: ME Queenstown Housing Model 2017

Table 3.16 sets out the tenure patterns by broad dwelling type (detached and attached) for households of each type and age group. An important feature is the higher incidence of dwelling ownership for households in the over 40s age bands than in the under-40s bands, but nevertheless lower rates of ownership in the older age bands (75+ years).

Table 3.16 - QLD Households' Tenure by Type and Age 2016

Household Type	Age	Owned Dwellings		Not-Owned Dwellings		Total	Owned Dwellings		Not-Owned Dwellings		Total
		Detached	Attached	Detached	Attached		Detached	Attached	Detached	Attached	
One Person Hhld	15-29	20	-	80	160	270	7%	0%	30%	59%	100%
	30-39	50	20	120	170	360	14%	6%	33%	47%	100%
	40-49	140	40	150	110	440	32%	9%	34%	25%	100%
	50-64	380	100	140	130	750	51%	13%	19%	17%	100%
	65-74	240	40	40	20	330	73%	12%	12%	6%	100%
	75+	240	50	80	60	430	56%	12%	19%	14%	100%
	Total	1,070	250	610	650	2,580	41%	10%	24%	25%	100%
Couple Hhld	15-29	60	20	290	440	810	7%	2%	36%	54%	100%
	30-39	260	110	240	340	940	28%	12%	26%	36%	100%
	40-49	300	70	120	90	580	52%	12%	21%	16%	100%
	50-64	1,280	150	250	60	1,730	74%	9%	14%	3%	100%
	65-74	850	60	140	40	1,080	79%	6%	13%	4%	100%
	75+	280	20	40	10	350	80%	6%	11%	3%	100%
	Total	3,030	430	1,080	980	5,490	55%	8%	20%	18%	100%
2 Parents 1-2chn	15-29	50	10	90	60	200	25%	5%	45%	30%	100%
	30-39	530	110	280	160	1,080	49%	10%	26%	15%	100%
	40-49	850	60	240	90	1,240	69%	5%	19%	7%	100%
	50-64	440	40	110	20	600	73%	7%	18%	3%	100%
	65-74	50	-	20	10	70	71%	0%	29%	14%	100%
	75+	10	-	-	-	10	100%	0%	0%	0%	100%
	Total	1,930	220	740	340	3,200	60%	7%	23%	11%	100%
2 Parents 3+chn	15-29	10	-	10	-	10	100%	0%	100%	0%	100%
	30-39	120	10	90	20	230	52%	4%	39%	9%	100%
	40-49	220	-	90	10	330	67%	0%	27%	3%	100%
	50-64	50	-	10	-	50	100%	0%	20%	0%	100%
	65-74	-	-	-	-	-	0%	0%	0%	0%	0%
	75+	-	-	-	-	-	0%	0%	0%	0%	0%
	Total	400	10	200	30	620	65%	2%	32%	5%	100%
1 Parent Family	15-29	10	-	30	20	60	17%	0%	50%	33%	100%
	30-39	10	-	120	50	180	6%	0%	67%	28%	100%
	40-49	140	10	150	60	370	38%	3%	41%	16%	100%
	50-64	130	20	40	-	190	68%	11%	21%	0%	100%
	65-74	10	-	10	-	20	50%	0%	50%	0%	100%
	75+	10	-	10	-	20	50%	0%	50%	0%	100%
	Total	310	30	360	130	840	37%	4%	43%	15%	100%
Multi-Family Hhlds	15-29	-	-	20	20	40	0%	0%	50%	50%	100%
	30-39	10	-	20	10	50	20%	0%	40%	20%	100%
	40-49	-	-	20	-	20	0%	0%	100%	0%	100%
	50-64	30	-	-	-	30	100%	0%	0%	0%	100%
	65-74	-	-	-	-	10	0%	0%	0%	0%	100%
	75+	-	-	-	-	-	0%	0%	0%	0%	0%
	Total	40	-	60	30	150	27%	0%	40%	20%	100%
Non-Family Hhlds	15-29	20	10	140	180	350	6%	3%	40%	51%	100%
	30-39	20	10	100	110	240	8%	4%	42%	46%	100%
	40-49	10	-	50	30	90	11%	0%	56%	33%	100%
	50-64	-	-	30	20	50	0%	0%	60%	40%	100%
	65-74	-	-	10	10	20	0%	0%	50%	50%	100%
	75+	-	-	-	-	10	0%	0%	0%	0%	100%
	Total	50	20	330	350	760	7%	3%	43%	46%	100%
Total Households	15-29	160	30	660	880	1,730	9%	2%	38%	51%	100%
	30-39	990	260	970	860	3,080	32%	8%	31%	28%	100%
	40-49	1,650	190	820	390	3,050	54%	6%	27%	13%	100%
	50-64	2,300	310	570	230	3,420	67%	9%	17%	7%	100%
	65-74	1,140	100	210	80	1,530	75%	7%	14%	5%	100%
	75+	540	70	130	80	810	67%	9%	16%	10%	100%
	TOTAL	6,780	960	3,360	2,520	13,620	50%	7%	25%	19%	100%

Source: ME Queenstown Housing Model 2017

This to a considerable degree reflects the common move in later life stages to attached dwellings, and retirement village accommodation, especially among single person households. Among other household types, the levels of ownership are generally high through the later life stages.

3.8.2 Owner-Occupier Market Structure

Table 3.17 sets out the structure of the QLD market for dwelling ownership, estimated for 2016, by household income group.

Table 3.17 - QLD Owner-Occupier Households Income and Dwelling Type 2016

Household Type	Income	Dwelling Type			Dwelling Type %			Ownership Incidence			
		Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Rented%
One Person Hhld	Up to $36,000	400	90	490	5.2%	1.2%	6.3%	38%	9%	47%	53%
	$36 - $62,000	260	80	340	3.4%	1.0%	4.4%	35%	11%	45%	55%
	$62- $94,000	180	40	220	2.3%	0.5%	2.8%	44%	10%	54%	46%
	$94 - $137,000	110	30	140	1.4%	0.4%	1.8%	50%	14%	64%	36%
	$137,000 +	110	20	130	1.4%	0.3%	1.7%	69%	13%	81%	19%
	Total	1,060	260	1,320	13.7%	3.4%	17.1%	41%	10%	51%	49%
Couple Hhld	Up to $36,000	190	40	230	2.5%	0.5%	3.0%	56%	12%	68%	32%
	$36 - $62,000	430	40	470	5.6%	0.5%	6.1%	60%	6%	65%	35%
	$62- $94,000	550	50	600	7.1%	0.6%	7.8%	53%	5%	58%	42%
	$94 - $137,000	690	110	800	8.9%	1.4%	10.3%	48%	8%	55%	45%
	$137,000 +	1,180	180	1,360	15.2%	2.3%	17.6%	60%	9%	69%	31%
	Total	3,040	420	3,460	39.3%	5.4%	44.7%	55%	8%	63%	37%
2 Parents 1-2chn	Up to $36,000	50	-	50	0.6%	0.0%	0.6%	50%	0%	50%	50%
	$36 - $62,000	100	20	120	1.3%	0.3%	1.6%	34%	7%	41%	59%
	$62- $94,000	330	60	390	4.3%	0.8%	5.0%	51%	9%	60%	40%
	$94 - $137,000	520	60	580	6.7%	0.8%	7.5%	60%	7%	67%	33%
	$137,000 +	930	80	1,010	12.0%	1.0%	13.0%	72%	6%	78%	22%
	Total	1,930	220	2,150	24.9%	2.8%	27.8%	60%	7%	67%	33%
2 Parents 3+chn	Up to $36,000	10	-	10	0.1%	0.0%	0.1%	100%	0%	100%	0%
	$36 - $62,000	20	-	20	0.3%	0.0%	0.3%	33%	0%	33%	67%
	$62- $94,000	40	-	40	0.5%	0.0%	0.5%	44%	0%	44%	56%
	$94 - $137,000	80	10	90	1.0%	0.1%	1.2%	50%	6%	56%	44%
	$137,000 +	240	10	250	3.1%	0.1%	3.2%	73%	3%	76%	24%
	Total	390	20	410	5.0%	0.3%	5.3%	60%	3%	63%	37%
1 Parent Family	Up to $36,000	80	10	90	1.0%	0.1%	1.2%	31%	4%	35%	65%
	$36 - $62,000	80	-	80	1.0%	0.0%	1.0%	35%	0%	35%	65%
	$62- $94,000	30	10	40	0.4%	0.1%	0.5%	25%	8%	33%	67%
	$94 - $137,000	40	10	50	0.5%	0.1%	0.6%	40%	10%	50%	50%
	$137,000 +	70	10	80	0.9%	0.1%	1.0%	64%	9%	73%	27%
	Total	300	40	340	3.9%	0.5%	4.4%	37%	5%	41%	59%
Multi-Family Hhlds	Up to $36,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$36 - $62,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$62- $94,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$94 - $137,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$137,000 +	40	-	40	0.5%	0.0%	0.5%	33%	0%	33%	67%
	Total	40	-	40	0.5%	0.0%	0.5%	31%	0%	31%	69%
Non-Family Hhlds	Up to $36,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$36 - $62,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$62- $94,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$94 - $137,000	10	-	10	0.1%	0.0%	0.1%	5%	0%	5%	95%
	$137,000 +	30	20	50	0.4%	0.3%	0.6%	12%	8%	19%	81%
	Total	40	20	60	0.5%	0.3%	0.8%	5%	3%	8%	92%
Total Households	Up to $36,000	730	150	880	9.4%	1.9%	11.4%	40%	8%	48%	52%
	$36 - $62,000	880	140	1,020	11.4%	1.8%	13.2%	41%	7%	48%	52%
	$62- $94,000	1,120	160	1,280	14.5%	2.1%	16.5%	46%	7%	53%	47%
	$94 - $137,000	1,440	210	1,650	18.6%	2.7%	21.3%	48%	7%	55%	45%
	$137,000 +	2,600	310	2,910	33.6%	4.0%	37.6%	61%	7%	69%	31%
	Total	**6,770**	**970**	**7,740**	**87.5%**	**12.5%**	**100.0%**	**50%**	**7%**	**57%**	**43%**

Source: ME Queenstown Housing Model 2017

Key features include:

a. The clear positive relationship between dwelling ownership and income, with higher income households showing higher ownership rates across all household types;

b. The low preferences for ownership of attached dwellings by all family household types across all income bands. The low share of attached owned dwellings is evident for two-parent and one-parent households in all income bands, even though the overall ownership levels increase significantly as income increases. This suggests that for family households (i.e. with children) there is low preference for attached dwellings, even if they may be less costly than detached dwellings. This is likely to be influenced by the generally greater space requirements for family households and the limited space provided in attached dwellings to date by the QLD market (which are typically one bedroom);

c. The pattern for single-person and couple households is somewhat different, with the split between detached and attached dwellings fairly consistent across all income bands. Single-person households show the highest propensity of all types to own attached dwellings, whether in lower or higher income bands, but generally opt for detached dwellings;

d. Single-person households (17%) and couple households (45%) account for well over half of total dwelling ownership. Two-parent families account for 32%, and one-parent families just 4%;

e. High income and high-medium income households account for some 59% of total dwelling ownership, while representing some 53% of all households. In contrast, low and low-medium income households account for just under 25% of all dwelling ownership, while representing 36% of all households.

These patterns are consistent with those evident in Table 3.18, which shows the structure of dwelling ownership by type and age of household.

The preferences for detached dwellings by family households are evident across all age groups, although both single-person and couple households show increasing propensity, with increasing age, to own attached dwellings. This is generally consistent with a shift in later life, especially in retirement, into smaller dwellings, often in more central locations.

The owner-occupier market does not show significant variation from the national pattern, nor from what would be expected in the housing market. The effects of both income on ownership, and age on dwelling type, are both consistent with a wide range of market assessments and commentary.

Table 3.18 - QLD Owner-Occupier Households Age and Dwelling Type 2016

Household Type	Age	Dwelling Type			Dwelling Type %			Ownership Incidence			
		Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Rented%
One Person Hhld	15-29	20	-	20	0.3%	0.0%	0.3%	7%	0%	7%	93%
	30-39	50	20	70	0.6%	0.3%	0.9%	14%	6%	19%	81%
	40-49	140	40	180	1.8%	0.5%	2.3%	32%	9%	41%	59%
	50-64	380	100	480	4.9%	1.3%	6.2%	51%	13%	64%	36%
	65-74	240	40	280	3.1%	0.5%	3.6%	73%	12%	85%	15%
	75+	240	50	290	3.1%	0.6%	3.7%	56%	12%	67%	33%
	Total	1,070	250	1,320	13.7%	3.2%	16.9%	41%	10%	51%	49%
Couple Hhld	15-29	60	20	80	0.8%	0.3%	1.0%	7%	2%	10%	90%
	30-39	260	110	370	3.3%	1.4%	4.7%	28%	12%	39%	61%
	40-49	300	70	370	3.9%	0.9%	4.7%	52%	12%	64%	36%
	50-64	1,280	150	1,430	16.4%	1.9%	18.4%	74%	9%	83%	17%
	65-74	850	60	910	10.9%	0.8%	11.7%	79%	6%	84%	16%
	75+	280	20	300	3.6%	0.3%	3.9%	80%	6%	86%	14%
	Total	3,030	430	3,460	38.9%	5.5%	44.4%	55%	8%	63%	37%
2 Parents 1-2chn	15-29	50	10	60	0.6%	0.1%	0.8%	25%	5%	30%	70%
	30-39	530	110	640	6.8%	1.4%	8.2%	49%	10%	59%	41%
	40-49	850	60	910	10.9%	0.8%	11.7%	69%	5%	73%	27%
	50-64	440	40	480	5.6%	0.5%	6.2%	73%	7%	80%	20%
	65-74	50	-	50	0.6%	0.0%	0.6%	71%	0%	71%	29%
	75+	10	-	10	0.1%	0.0%	0.1%	100%	0%	100%	0%
	Total	1,930	220	2,150	24.8%	2.8%	27.6%	60%	7%	67%	33%
2 Parents 3+chn	15-29	10	-	10	0.1%	0.0%	0.1%	100%	0%	100%	0%
	30-39	120	10	130	1.5%	0.1%	1.7%	52%	4%	57%	43%
	40-49	220	-	220	2.8%	0.0%	2.8%	67%	0%	67%	33%
	50-64	50	-	50	0.6%	0.0%	0.6%	100%	0%	100%	0%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	Total	400	10	410	5.1%	0.1%	5.3%	65%	2%	66%	34%
1 Parent Family	15-29	10	-	10	0.1%	0.0%	0.1%	17%	0%	17%	83%
	30-39	10	-	10	0.1%	0.0%	0.1%	6%	0%	6%	94%
	40-49	140	10	150	1.8%	0.1%	1.9%	38%	3%	41%	59%
	50-64	130	20	150	1.7%	0.3%	1.9%	68%	11%	79%	21%
	65-74	10	-	10	0.1%	0.0%	0.1%	50%	0%	50%	50%
	75+	10	-	10	0.1%	0.0%	0.1%	50%	0%	50%	50%
	Total	310	30	340	4.0%	0.4%	4.4%	37%	4%	40%	60%
Multi-Family Hhlds	15-29	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	30-39	10	-	10	0.1%	0.0%	0.1%	20%	0%	20%	80%
	40-49	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	50-64	30	-	30	0.4%	0.0%	0.4%	100%	0%	100%	0%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	Total	40	-	40	0.5%	0.0%	0.5%	27%	0%	27%	73%
Non-Family Hhlds	15-29	20	10	30	0.3%	0.1%	0.4%	6%	3%	9%	91%
	30-39	20	10	30	0.3%	0.1%	0.4%	8%	4%	13%	88%
	40-49	10	-	10	0.1%	0.0%	0.1%	11%	0%	11%	89%
	50-64	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	Total	50	20	70	0.6%	0.3%	0.9%	7%	3%	9%	91%
Total Households	15-29	170	40	210	2.2%	0.5%	2.7%	9%	2%	11%	89%
	30-39	1,000	260	1,260	12.8%	3.3%	16.2%	32%	8%	41%	59%
	40-49	1,660	180	1,840	21.3%	2.3%	23.6%	54%	6%	60%	40%
	50-64	2,310	310	2,620	29.7%	4.0%	33.6%	67%	9%	76%	24%
	65-74	1,150	100	1,250	14.8%	1.3%	16.0%	75%	7%	81%	19%
	75+	540	70	610	6.9%	0.9%	7.8%	67%	9%	75%	25%
	Total	**6,830**	**960**	**7,790**	**87.7%**	**12.3%**	**100.0%**	**50%**	**7%**	**57%**	**43%**

Source: ME Queenstown Housing Model 2017

3.8.1 Renter Market Structure

Table 3.19 sets out the structure of the QLD market for rented dwellings, estimated for 2016, by household income group.

Table 3.19 - QLD Renter Households Income and Dwelling Type 2016

		Dwelling Type			Dwelling Type %			Rental Incidence			
Household Type	Income	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Owned%
One Person Hhld	Up to $36,000	260	290	550	4.4%	4.9%	9.4%	25%	28%	53%	47%
	$36 - $62,000	180	230	410	3.1%	3.9%	7.0%	24%	31%	55%	45%
	$62- $94,000	110	80	190	1.9%	1.4%	3.2%	27%	20%	46%	54%
	$94 - $137,000	40	40	80	0.7%	0.7%	1.4%	18%	18%	36%	64%
	$137,000 +	20	10	30	0.3%	0.2%	0.5%	13%	6%	19%	81%
	Total	610	650	1,260	10.4%	11.1%	21.5%	24%	25%	49%	51%
Couple Hhld	Up to $36,000	60	50	110	1.0%	0.9%	1.9%	18%	15%	32%	68%
	$36 - $62,000	130	120	250	2.2%	2.0%	4.3%	18%	17%	35%	65%
	$62- $94,000	210	230	440	3.6%	3.9%	7.5%	20%	22%	42%	58%
	$94 - $137,000	320	330	650	5.5%	5.6%	11.1%	22%	23%	45%	55%
	$137,000 +	340	260	600	5.8%	4.4%	10.2%	17%	13%	31%	69%
	Total	1,060	990	2,050	18.1%	16.9%	34.9%	19%	18%	37%	63%
2 Parents 1-2chn	Up to $36,000	30	20	50	0.5%	0.3%	0.9%	30%	20%	50%	50%
	$36 - $62,000	100	70	170	1.7%	1.2%	2.9%	34%	24%	59%	41%
	$62- $94,000	160	100	260	2.7%	1.7%	4.4%	25%	15%	40%	60%
	$94 - $137,000	200	90	290	3.4%	1.5%	4.9%	23%	10%	33%	67%
	$137,000 +	240	50	290	4.1%	0.9%	4.9%	18%	4%	22%	78%
	Total	730	330	1,060	12.4%	5.6%	18.1%	23%	10%	33%	67%
2 Parents 3+chn	Up to $36,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$36 - $62,000	30	10	40	0.5%	0.2%	0.7%	50%	17%	67%	33%
	$62- $94,000	40	10	50	0.7%	0.2%	0.9%	44%	11%	56%	44%
	$94 - $137,000	60	10	70	1.0%	0.2%	1.2%	38%	6%	44%	56%
	$137,000 +	70	10	80	1.2%	0.2%	1.4%	21%	3%	24%	76%
	Total	200	40	240	3.4%	0.7%	4.1%	31%	6%	37%	63%
1 Parent Family	Up to $36,000	110	60	170	1.9%	1.0%	2.9%	42%	23%	65%	35%
	$36 - $62,000	120	30	150	2.0%	0.5%	2.6%	52%	13%	65%	35%
	$62- $94,000	60	20	80	1.0%	0.3%	1.4%	50%	17%	67%	33%
	$94 - $137,000	40	10	50	0.7%	0.2%	0.9%	40%	10%	50%	50%
	$137,000 +	20	10	30	0.3%	0.2%	0.5%	18%	9%	27%	73%
	Total	350	130	480	6.0%	2.2%	8.2%	43%	16%	59%	41%
Multi-Family Hhlds	Up to $36,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$36 - $62,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$62- $94,000	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	$94 - $137,000	10	-	10	0.2%	0.0%	0.2%	100%	0%	100%	0%
	$137,000 +	50	30	80	0.9%	0.5%	1.4%	42%	25%	67%	33%
	Total	60	30	90	1.0%	0.5%	1.5%	46%	23%	69%	31%
Non-Family Hhlds	Up to $36,000	20	40	60	0.3%	0.7%	1.0%	33%	67%	100%	0%
	$36 - $62,000	50	50	100	0.9%	0.9%	1.7%	50%	50%	100%	0%
	$62- $94,000	60	60	120	1.0%	1.0%	2.0%	50%	50%	100%	0%
	$94 - $137,000	100	100	200	1.7%	1.7%	3.4%	48%	48%	95%	5%
	$137,000 +	110	100	210	1.9%	1.7%	3.6%	42%	38%	81%	19%
	Total	340	350	690	5.8%	6.0%	11.8%	45%	47%	92%	8%
Total Households	Up to $36,000	480	460	940	8.2%	7.8%	16.0%	26%	25%	52%	48%
	$36 - $62,000	610	500	1,110	10.4%	8.5%	18.9%	29%	23%	52%	48%
	$62- $94,000	650	500	1,150	11.1%	8.5%	19.6%	27%	21%	47%	53%
	$94 - $137,000	760	590	1,350	12.9%	10.1%	23.0%	25%	20%	45%	55%
	$137,000 +	850	470	1,320	14.5%	8.0%	22.5%	20%	11%	31%	69%
	Total	**3,350**	**2,520**	**5,870**	**57.1%**	**42.9%**	**100.0%**	**25%**	**19%**	**43%**	**57%**

Source: ME Queenstown Housing Model 2017

Key features include:

a. The relatively high incidence of attached dwellings in the rental property estate. Overall, attached dwellings make up around one quarter of the total dwelling estate, but account for some 43% of the total rental dwelling estate;

b. For single person households which are renting, attached dwellings account for more than half of the total dwellings, and nearly half for couples;

c. for family households which are renting, attached dwellings account for less than one third of their total accommodation, compared with around one-tenth of dwellings for owner occupiers;

d. For non-family renting households, attached dwellings account for half of their total accommodation.

Similar patterns are evident when the renter market is examined on the basis of household age (Table 3.20). Although the share of households which are renters rather than owner-occupiers does generally decrease with age, this trend is less in the older age groups. Overall some 25% of households in the 75 years and over category are renters, and 17% in the 65-74 age bands.

Dwelling ownership rates do improve markedly through the life-stages – from a low of 10% for households in the under 30 age band, to 40% for those in the 30-39 band, 61% for those in the 40-49 band, reaching 77% for those in the 50-64 band, and the high of 83% for those in the 65-74 band. However, it is important to not assume that the future population will automatically achieve those relatively high levels of dwelling ownership in the future, because the effects of high dwelling prices have already flowed through to ownership rates for those in the 30-39 age bands which are substantially lower than was the case for earlier generations.

Dwelling ownership rates have generally declined nationally over the last two decades, including in QLD. This trend has been most clearly evident among the low and low-medium income households, and in the 25-39 age bands, which is the life-stage when traditionally households have entered the market as “first home buyers”.

Table 3.20 - QLD Renter Households Age and Dwelling Type 2016

Household Type	Age	Dwelling Type			Dwelling Type %			Rental Incidence			
		Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Owned%
One Person Hhld	15-29	90	170	260	1.5%	2.9%	4.4%	33%	63%	96%	7%
	30-39	120	180	300	2.1%	3.1%	5.1%	32%	49%	81%	19%
	40-49	150	110	260	2.6%	1.9%	4.4%	34%	25%	59%	41%
	50-64	140	130	270	2.4%	2.2%	4.6%	18%	17%	36%	64%
	65-74	40	20	60	0.7%	0.3%	1.0%	12%	6%	18%	82%
	75+	80	60	140	1.4%	1.0%	2.4%	19%	14%	33%	67%
	Total	620	670	1,290	10.6%	11.5%	22.1%	24%	26%	50%	51%
Couple Hhld	15-29	290	450	740	5.0%	7.7%	12.6%	35%	55%	90%	10%
	30-39	250	360	610	4.3%	6.2%	10.4%	26%	37%	62%	39%
	40-49	120	100	220	2.1%	1.7%	3.8%	20%	16%	36%	64%
	50-64	250	60	310	4.3%	1.0%	5.3%	14%	3%	18%	82%
	65-74	130	40	170	2.2%	0.7%	2.9%	13%	4%	16%	84%
	75+	40	10	50	0.7%	0.2%	0.9%	11%	3%	14%	86%
	Total	1,080	1,020	2,100	18.5%	17.4%	35.9%	20%	18%	38%	62%
2 Parents 1-2chn	15-29	100	60	160	1.7%	1.0%	2.7%	48%	29%	76%	24%
	30-39	290	170	460	5.0%	2.9%	7.9%	26%	15%	41%	59%
	40-49	250	90	340	4.3%	1.5%	5.8%	20%	7%	27%	73%
	50-64	100	20	120	1.7%	0.3%	2.1%	17%	3%	21%	79%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	Total	740	340	1,080	12.6%	5.8%	18.5%	23%	11%	34%	66%
2 Parents 3+chn	15-29	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	30-39	90	20	110	1.5%	0.3%	1.9%	43%	10%	52%	48%
	40-49	80	20	100	1.4%	0.3%	1.7%	28%	7%	34%	66%
	50-64	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	Total	170	40	210	2.9%	0.7%	3.6%	31%	7%	39%	61%
1 Parent Family	15-29	20	20	40	0.3%	0.3%	0.7%	50%	50%	100%	0%
	30-39	120	50	170	2.1%	0.9%	2.9%	67%	28%	94%	6%
	40-49	140	60	200	2.4%	1.0%	3.4%	41%	18%	59%	44%
	50-64	50	-	50	0.9%	0.0%	0.9%	25%	0%	25%	75%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	Total	330	130	460	5.6%	2.2%	7.9%	43%	17%	61%	41%
Multi-Family Hhlds	15-29	20	20	40	0.3%	0.3%	0.7%	67%	67%	133%	0%
	30-39	20	10	30	0.3%	0.2%	0.5%	50%	25%	75%	25%
	40-49	20	10	30	0.3%	0.2%	0.5%	100%	50%	150%	0%
	50-64	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	100%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	Total	60	40	100	1.0%	0.7%	1.7%	50%	33%	83%	33%
Non-Family Hhlds	15-29	150	180	330	2.6%	3.1%	5.6%	44%	53%	97%	6%
	30-39	100	110	210	1.7%	1.9%	3.6%	42%	46%	88%	13%
	40-49	40	20	60	0.7%	0.3%	1.0%	57%	29%	86%	14%
	50-64	10	-	10	0.2%	0.0%	0.2%	50%	0%	50%	0%
	65-74	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	75+	-	-	-	0.0%	0.0%	0.0%	0%	0%	0%	0%
	Total	300	310	610	5.1%	5.3%	10.4%	45%	46%	91%	9%
Total Households	15-29	670	900	1,570	11.5%	15.4%	26.8%	38%	52%	90%	10%
	30-39	990	900	1,890	16.9%	15.4%	32.3%	32%	28%	60%	40%
	40-49	800	410	1,210	13.7%	7.0%	20.7%	26%	13%	39%	61%
	50-64	550	210	760	9.4%	3.6%	13.0%	16%	7%	23%	77%
	65-74	170	60	230	2.9%	1.0%	3.9%	12%	4%	17%	83%
	75+	120	70	190	2.1%	1.2%	3.2%	16%	9%	25%	75%
	Total	**3,300**	**2,550**	**5,850**	**56.4%**	**43.6%**	**100.0%**	**25%**	**19%**	**43%**	**57%**

Source: ME Queenstown Housing Model 2017

3.9 Household Type and Dwelling Value Band 2016

The second major focus of this demand assessment is the relationship between households and the values of the dwellings which they occupy. A key output from the QLD Housing Model is the estimates of the dwellings by value which are occupied by households of each type. Although the mean and median dwelling values do have some relevance, the core matter for the market as a whole is the distribution of dwelling values, for households of each type in total, and also for households which own or rent their dwellings.

Note that the tables in the section below are based on the $2014 dwelling values[80], which have been broadly updated to 2016 values based on the QLD-wide average increase recorded between 2014 and 2016[81]. The estimates are based on the 2013 dwelling occupancy patterns (household type by locality), factored up for estimated household numbers as at June 2016, and assuming the relationships between household type and dwelling type observed in 2013 have persisted to 2016.

Within that proviso that the value ranges to $2016 terms are indicative, the following tables and figures show important patterns of dwelling occupancy by the total QLD community.

3.9.1 Dwelling Values by All Households 2016

Table 3.21 - QLD Households by Type and Dwelling Value 2016

Dwellings by Value and Household Type 2016 QLD								
Dwelling Value ($000)	One Person	Couple	2 Parents 1-2 Chn	2 Parents 3+ Chn	1 Parent Family	Multi-Family Hhlds	Non-Family Hhlds	Total Households
$Under $300k	40	70	40	10	10	-	10	180
$300k-$440k	150	310	150	20	30	10	40	710
$440k-$580k	330	710	340	50	80	10	80	1,600
$580k-$730k	470	950	550	90	140	20	110	2,330
$730k-$880k	430	940	600	100	130	20	100	2,320
$880k-$1.02m	300	670	420	70	100	10	60	1,630
$1.02m-$1.17m	200	450	270	40	70	10	60	1,100
$1.17m-$1.31m	170	370	220	40	50	10	40	900
$1.31m-$1.45m	90	190	130	20	30	10	20	490
$1.45m-$1.75m	120	260	160	30	40	10	30	650
$1.75m-$2.05m	100	220	120	20	30	10	40	540
$2.05m-$2.35m	60	130	70	10	20	-	20	310
$2.35m-$2.65m	40	90	50	10	10	-	20	220
$2.65m-$2.95m	30	50	40	10	10	-	-	140
$2.95m-$3.3m	30	60	30	-	10	-	10	140
$3.3m-$3.65m	10	30	20	-	-	-	10	70
$3.65m+	50	120	60	10	20	-	20	280
TOTAL	2,620	5,620	3,270	530	780	120	670	13,610
$Under $300k	1.5%	1.2%	1.2%	1.9%	1.3%	0.0%	1.5%	1.3%
$300k-$440k	5.7%	5.5%	4.6%	3.8%	3.8%	8.3%	6.0%	5.2%
$440k-$580k	12.6%	12.6%	10.4%	9.4%	10.3%	8.3%	11.9%	11.8%
$580k-$730k	17.9%	16.9%	16.8%	17.0%	17.9%	16.7%	16.4%	17.1%
$730k-$880k	16.4%	16.7%	18.3%	18.9%	16.7%	16.7%	14.9%	17.0%
$880k-$1.02m	11.5%	11.9%	12.8%	13.2%	12.8%	8.3%	9.0%	12.0%
$1.02m-$1.17m	7.6%	8.0%	8.3%	7.5%	9.0%	8.3%	9.0%	8.1%
$1.17m-$1.31m	6.5%	6.6%	6.7%	7.5%	6.4%	8.3%	6.0%	6.6%
$1.31m-$1.45m	3.4%	3.4%	4.0%	3.8%	3.8%	8.3%	3.0%	3.6%
$1.45m-$1.75m	4.6%	4.6%	4.9%	5.7%	5.1%	8.3%	4.5%	4.8%
$1.75m-$2.05m	3.8%	3.9%	3.7%	3.8%	3.8%	8.3%	6.0%	4.0%
$2.05m-$2.35m	2.3%	2.3%	2.1%	1.9%	2.6%	0.0%	3.0%	2.3%
$2.35m-$2.65m	1.5%	1.6%	1.5%	1.9%	1.3%	0.0%	3.0%	1.6%
$2.65m-$2.95m	1.1%	0.9%	1.2%	1.9%	1.3%	0.0%	0.0%	1.0%
$2.95m-$3.3m	1.1%	1.1%	0.9%	0.0%	1.3%	0.0%	1.5%	1.0%
$3.3m-$3.65m	0.4%	0.5%	0.6%	0.0%	0.0%	0.0%	1.5%	0.5%
$3.65m+	1.9%	2.1%	1.8%	1.9%	2.6%	0.0%	3.0%	2.1%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Source: ME Queenstown Housing Model 2017

[80] The Corelogic valuation statistics indicate an average increase of 35.4% for QLD residential properties over the 2014-2016 period, and an average increase of 61.3% over the 2014-2017 period.

[81] Based on Corelogic dwelling values indexed to June years.

Table 3.21 shows the estimated distribution of dwelling values for all household types and each main household type as at June 2016. The district-wide pattern shows that each household type occupies a substantial number of dwellings in every value band. There is limited difference among the main household types in terms of their mean dwelling value, and in the distribution of dwellings by value.

This is clear also in Figure 3.8, which shows a peak for every household type occurring in the $420,000 to $710,000 value bands. The distribution is consistent with the REINZ figures showing median dwelling values in the $790,000 to $800,000 band (August 2016), and mean values of $900,000[82].

Figure 3.8 – QLD Dwelling Value Distribution by Household Type 2016

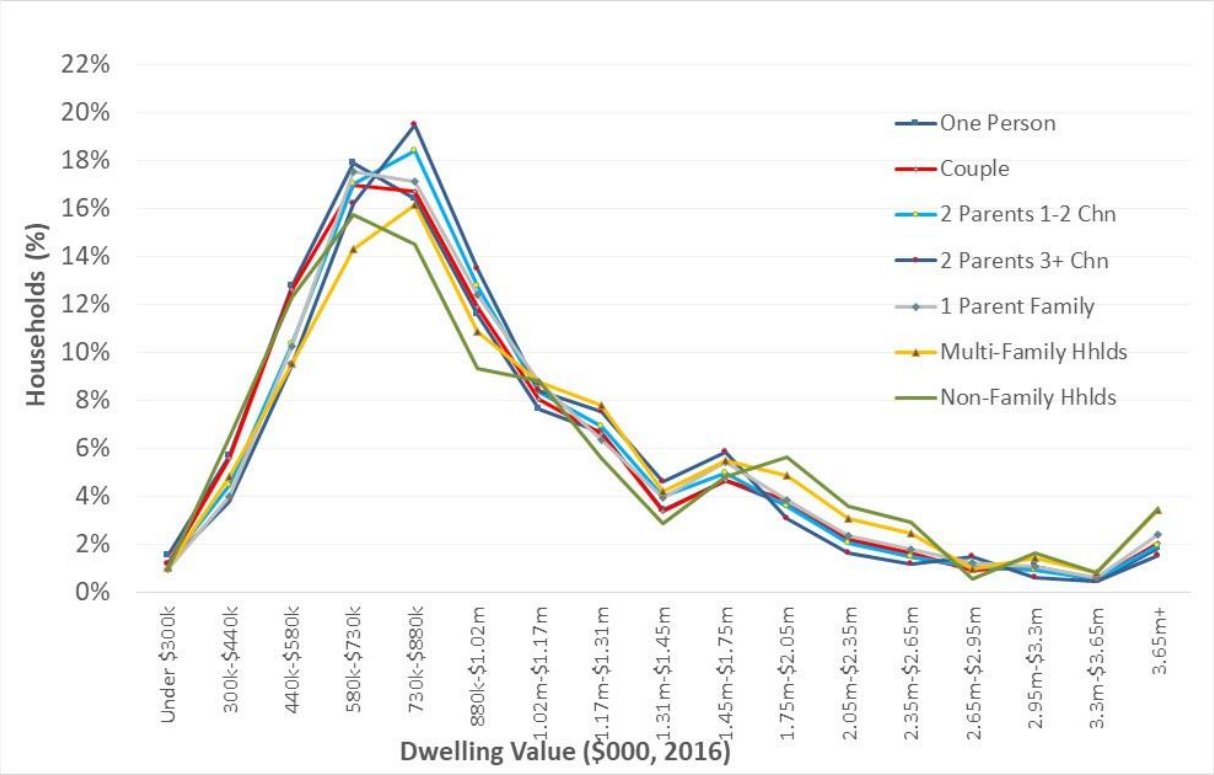
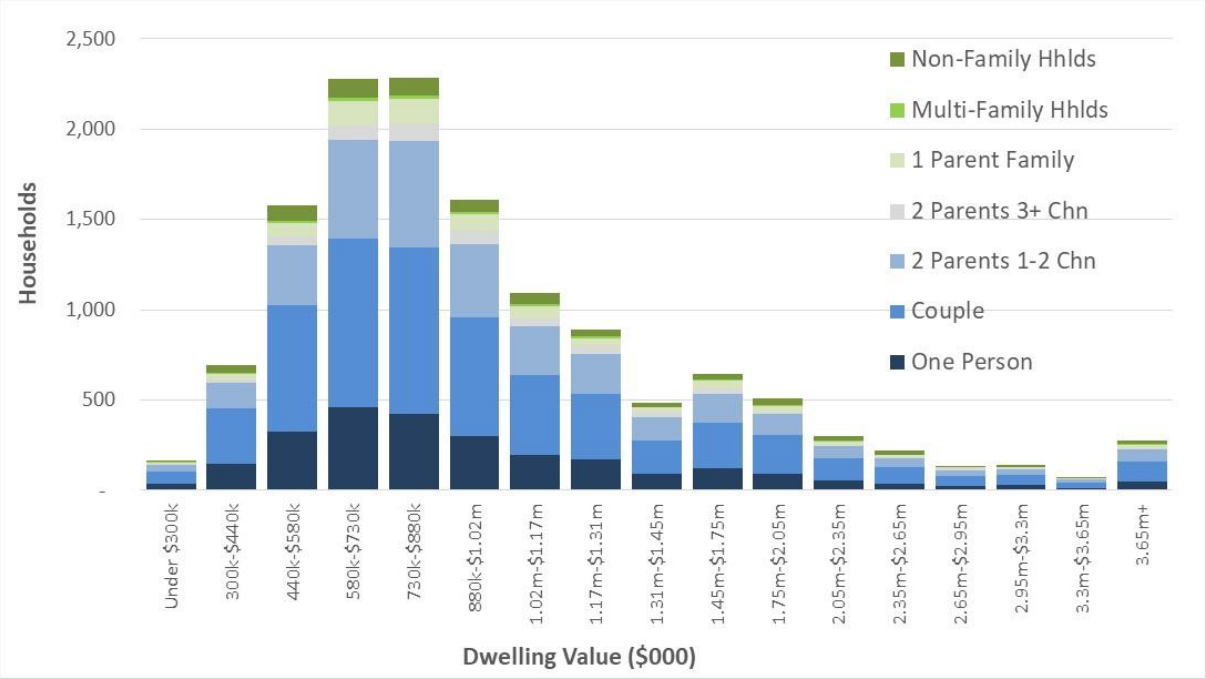


Figure 3.9 shows the distribution of households in total across the value bands, and the incidence of each household type within each value band.

[82] QN.co.nz 2018

Figure 3.9 - QLD Households' Dwelling Occupancy by Value 2016



3.9.2 Tenure and Dwelling Values 2016

Table 3.22 summarises the structure of the housing market in terms of tenure and main dwelling type for 2016. The most important segments of the total market are highlighted.

Table 3.22 – QLD Total Households: Dwellings by Value and Tenure 2016

Total Households Dwellings by Value and Tenure : 2016 QLD										
Dwelling Value ($000)	Detached, Owned	Attached, Owned	Detached, Not Owned	Attached, Not Owned	TOTAL	Detached, Owned	Attached, Owned	Detached, Not Owned	Attached, Not Owned	TOTAL
$Under $300k	50	30	30	60	170	0.4%	0.2%	0.2%	0.4%	1.3%
$300k-$440k	230	130	90	260	710	1.7%	1.0%	0.7%	1.9%	5.2%
$440k-$580k	710	180	310	410	1,610	5.2%	1.3%	2.3%	3.0%	11.8%
$580k-$730k	1,140	210	580	390	2,320	8.4%	1.5%	4.3%	2.9%	17.1%
$730k-$880k	1,310	100	740	160	2,310	9.6%	0.7%	5.4%	1.2%	17.0%
$880k-$1.02m	940	80	490	110	1,620	6.9%	0.6%	3.6%	0.8%	11.9%
$1.02m-$1.17m	620	30	410	50	1,110	4.6%	0.2%	3.0%	0.4%	8.2%
$1.17m-$1.31m	490	50	300	60	900	3.6%	0.4%	2.2%	0.4%	6.6%
$1.31m-$1.45m	280	20	170	20	490	2.1%	0.1%	1.3%	0.1%	3.6%
$1.45m-$1.75m	350	40	220	60	670	2.6%	0.3%	1.6%	0.4%	4.9%
$1.75m-$2.05m	280	20	190	40	530	2.1%	0.1%	1.4%	0.3%	3.9%
$2.05m-$2.35m	160	10	120	20	310	1.2%	0.1%	0.9%	0.1%	2.3%
$2.35m-$2.65m	110	10	90	10	220	0.8%	0.1%	0.7%	0.1%	1.6%
$2.65m-$2.95m	90	-	50	-	140	0.7%	0.0%	0.4%	0.0%	1.0%
$2.95m-$3.3m	80	-	60	-	140	0.6%	0.0%	0.4%	0.0%	1.0%
$3.3m-$3.65m	40	-	30	-	70	0.3%	0.0%	0.2%	0.0%	0.5%
$3.65m+	150	-	130	-	280	1.1%	0.0%	1.0%	0.0%	2.1%
TOTAL	**7,030**	**910**	**4,010**	**1,650**	**13,600**	**51.7%**	**6.7%**	**29.5%**	**12.1%**	**100%**

Source: ME Queenstown Housing Model 2017

Figure 3.10 – QLD Households' Dwelling Tenure and Value 2016

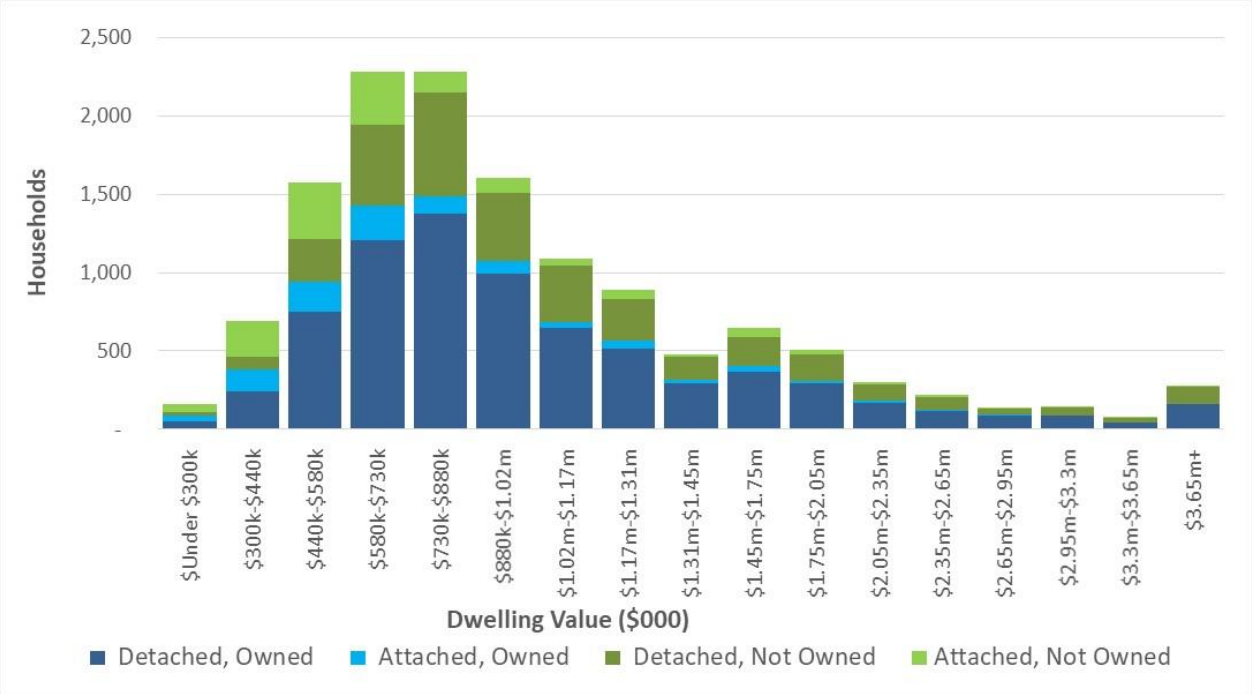


Figure 3.10 shows the distribution of dwelling main type and tenure across the value bands. Attached and rented dwellings are focused toward the lower end of the value range, while detached and rented dwellings are more evident in the middle value ranges. Detached and owned dwellings become increasingly dominant for dwellings valued at $710,000 and over.

3.9.3 Owned Dwellings by Value Band 2016

Table 3.23 and Figure 3.11 show the structure of the dwelling owner market by value of dwelling. An obvious feature is the general similarity of the dwelling value distribution for all household types, with limited variations in value between household types.

Table 3.24 and Figure 3.12 show the structure of the dwelling rental market, again by value of dwelling. As is the case for owned dwellings, the obvious feature is the similarity of the dwelling value distribution for all household types. The table shows limited variations in value between household types.

Table 3.23 – QLD Owning Households by Type and Dwelling Value Band 2016

Owned Dwellings by Value and Household Type 2016 QLD								
Dwelling Value ($000)	One Person	Couple	2 Parents 1-2 Chn	2 Parents 3+ Chn	1 Parent Family	Multi-Family Hhlds	Non-Family Hhlds	Total Households
$Under $300k	20	40	30	-	-	-	-	90
$300k-$440k	70	180	100	10	10	-	-	370
$440k-$580k	180	460	240	30	40	-	10	960
$580k-$730k	270	640	400	60	60	10	10	1,450
$730k-$880k	260	670	430	70	60	10	10	1,510
$880k-$1.02m	190	480	310	50	50	10	10	1,100
$1.02m-$1.17m	120	310	190	30	30	-	10	690
$1.17m-$1.31m	100	260	160	20	20	-	10	570
$1.31m-$1.45m	60	140	90	20	10	-	-	320
$1.45m-$1.75m	70	180	120	20	20	-	-	410
$1.75m-$2.05m	60	140	80	10	10	-	10	310
$2.05m-$2.35m	30	80	50	10	10	-	-	180
$2.35m-$2.65m	20	60	30	-	10	-	-	120
$2.65m-$2.95m	20	40	30	10	-	-	-	100
$2.95m-$3.3m	20	40	20	-	-	-	-	80
$3.3m-$3.65m	10	20	10	-	-	-	-	40
$3.65m+	30	70	40	-	10	-	-	150
TOTAL	1,530	3,810	2,330	340	340	30	70	8,450
$Under $300k	1%	1%	1%	0%	0%	0%	0%	1%
$300k-$440k	5%	5%	4%	3%	3%	0%	0%	4%
$440k-$580k	12%	12%	10%	9%	12%	0%	14%	11%
$580k-$730k	18%	17%	17%	18%	18%	33%	14%	17%
$730k-$880k	17%	18%	18%	21%	18%	33%	14%	18%
$880k-$1.02m	12%	13%	13%	15%	15%	33%	14%	13%
$1.02m-$1.17m	8%	8%	8%	9%	9%	0%	14%	8%
$1.17m-$1.31m	7%	7%	7%	6%	6%	0%	14%	7%
$1.31m-$1.45m	4%	4%	4%	6%	3%	0%	0%	4%
$1.45m-$1.75m	5%	5%	5%	6%	6%	0%	0%	5%
$1.75m-$2.05m	4%	4%	3%	3%	3%	0%	14%	4%
$2.05m-$2.35m	2%	2%	2%	3%	3%	0%	0%	2%
$2.35m-$2.65m	1%	2%	1%	0%	3%	0%	0%	1%
$2.65m-$2.95m	1%	1%	1%	3%	0%	0%	0%	1%
$2.95m-$3.3m	1%	1%	1%	0%	0%	0%	0%	1%
$3.3m-$3.65m	1%	1%	0%	0%	0%	0%	0%	0%
$3.65m+	2%	2%	2%	0%	3%	0%	0%	2%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Source: ME Queenstown Housing Model 2017

Table 3.24 – QLD Renting Households by Type and Dwelling Value Band 2016

Rented/Not Owned Dwellings by Value and Household Type 2016 QLD								
Dwelling Value ($000)	One Person	Couple	2 Parents 1-2 Chn	2 Parents 3+ Chn	1 Parent Family	Multi-Family Hhlds	Non-Family Hhlds	Total Households
$Under $300k	20	30	10	-	10	-	10	80
$300k-$440k	70	130	50	10	20	-	40	320
$440k-$580k	150	250	100	20	40	10	80	650
$580k-$730k	190	310	160	30	70	10	90	860
$730k-$880k	160	270	170	40	70	10	80	800
$880k-$1.02m	110	180	110	20	50	10	50	530
$1.02m-$1.17m	80	140	80	20	40	10	50	420
$1.17m-$1.31m	70	110	60	20	30	10	30	330
$1.31m-$1.45m	30	50	40	10	20	-	20	170
$1.45m-$1.75m	50	80	50	10	20	-	30	240
$1.75m-$2.05m	40	80	30	10	20	-	30	210
$2.05m-$2.35m	20	40	20	-	10	-	20	110
$2.35m-$2.65m	20	40	10	-	10	-	20	100
$2.65m-$2.95m	10	10	10	-	10	-	-	40
$2.95m-$3.3m	10	20	10	-	-	-	10	50
$3.3m-$3.65m	-	10	-	-	-	-	-	10
$3.65m+	20	40	20	-	10	-	20	110
TOTAL	1,050	1,790	930	190	430	60	580	5,030
$Under $300k	2%	2%	1%	0%	2%	0%	2%	2%
$300k-$440k	7%	7%	5%	5%	5%	0%	7%	6%
$440k-$580k	14%	14%	11%	11%	9%	17%	14%	13%
$580k-$730k	18%	17%	17%	16%	16%	17%	16%	17%
$730k-$880k	15%	15%	18%	21%	16%	17%	14%	16%
$880k-$1.02m	10%	10%	12%	11%	12%	17%	9%	11%
$1.02m-$1.17m	8%	8%	9%	11%	9%	17%	9%	8%
$1.17m-$1.31m	7%	6%	6%	11%	7%	17%	5%	7%
$1.31m-$1.45m	3%	3%	4%	5%	5%	0%	3%	3%
$1.45m-$1.75m	5%	4%	5%	5%	5%	0%	5%	5%
$1.75m-$2.05m	4%	4%	3%	5%	5%	0%	5%	4%
$2.05m-$2.35m	2%	2%	2%	0%	2%	0%	3%	2%
$2.35m-$2.65m	2%	2%	1%	0%	2%	0%	3%	2%
$2.65m-$2.95m	1%	1%	1%	0%	2%	0%	0%	1%
$2.95m-$3.3m	1%	1%	1%	0%	0%	0%	2%	1%
$3.3m-$3.65m	0%	1%	0%	0%	0%	0%	0%	0%
$3.65m+	2%	2%	2%	0%	2%	0%	3%	2%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

To a degree, the similarity among household types may reflect the method used to estimate the incidence of households in each value band. Equally, however, there is a wide spread of households of each type across QLD, such that the similarity in property values reflects the relatively even location patterns.

However, the difference in values between owned and rented dwellings becomes somewhat clearer when Figure 3.11 and Figure 3.12 are compared. The value range for owned dwellings has a generally similar shape to that for rented dwellings, but the values for owned dwellings are generally higher than those for rented dwellings. The peak in Figure 3.11 is to the right (higher value range) than the peak for Figure 3.12. Having said that, the relatively high mean and median values in QLD will see tenancies across the value range.

Figure 3.11 - QLD Owned Dwelling Value Distribution by Household Type 2016

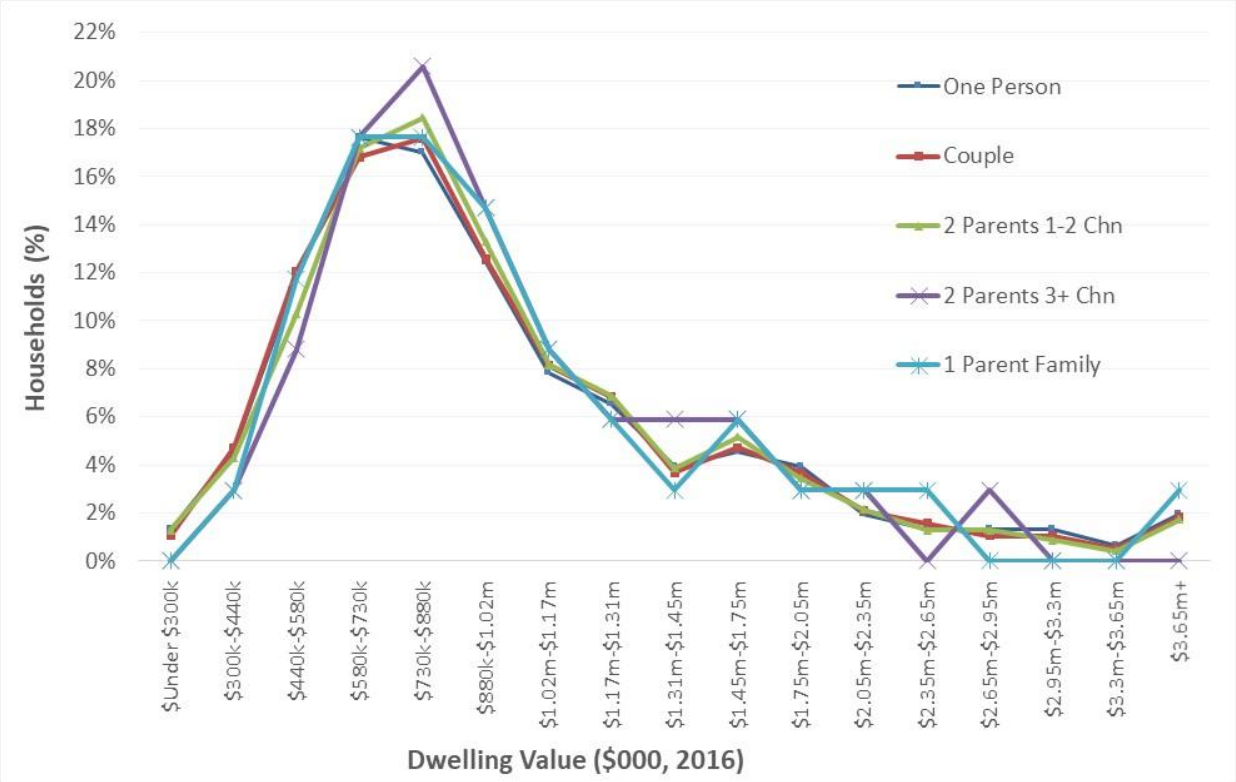
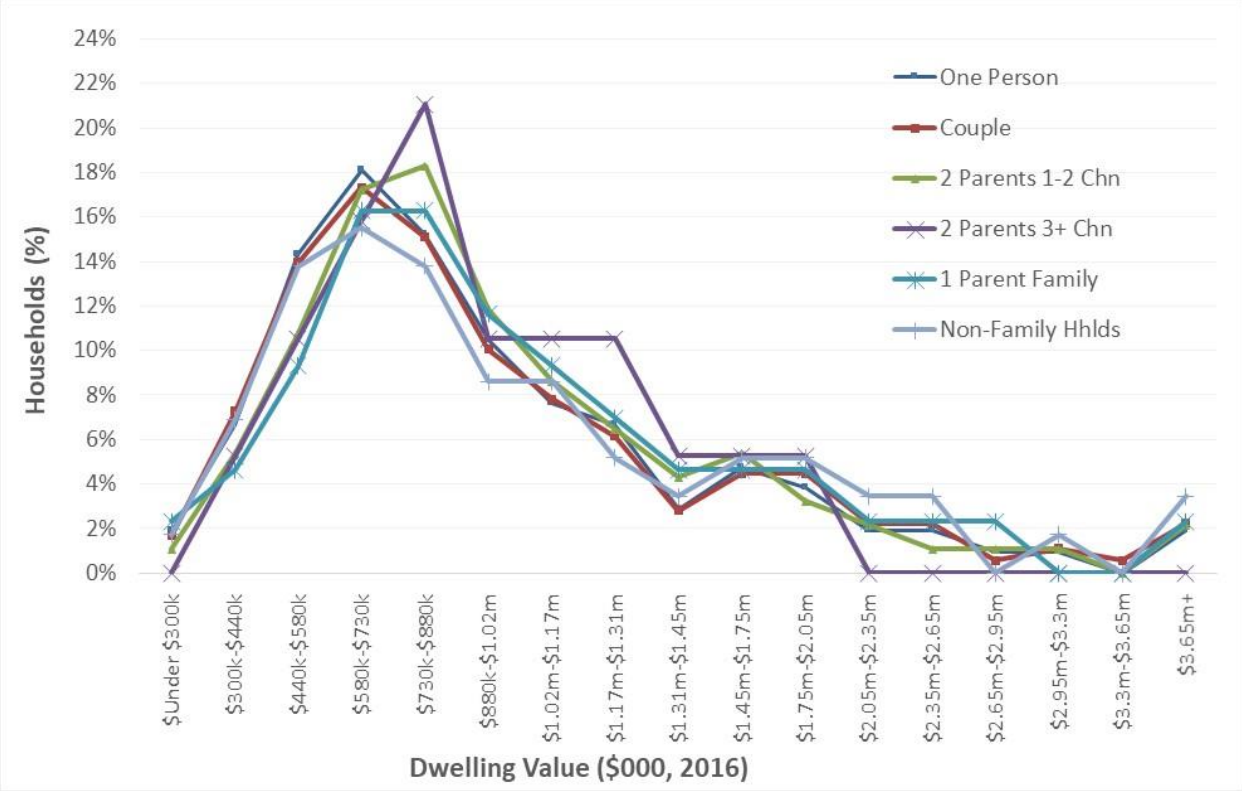


Figure 3.12 – QLD Rented Dwelling Value Distribution by Household Type 2016



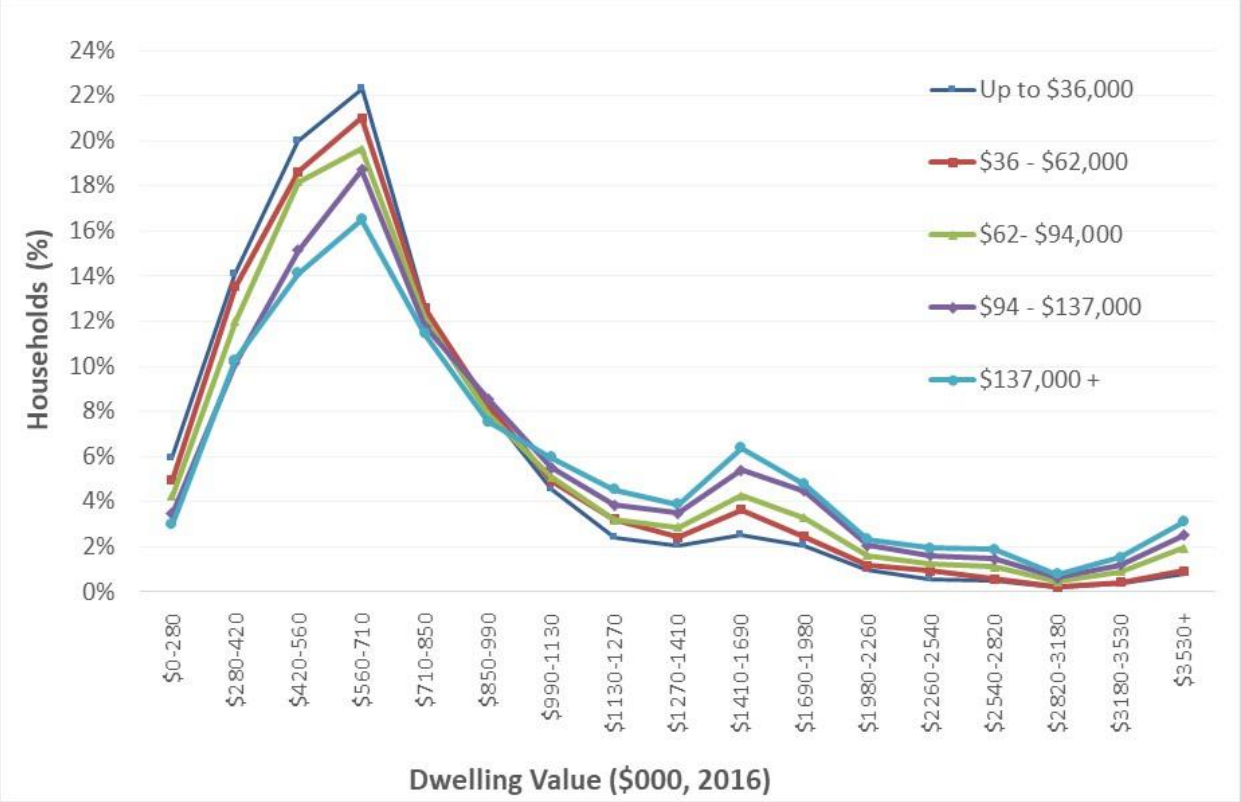
This is further illustrated in Figure 3.13, which compares the distribution across value bands of owned dwellings and rented dwellings, for each main household type.

Figure 3.13 – QLD Distribution of Dwelling Values : Owned v Rented 2016

3.10 Dwelling Values and Household Income 2016

Figures 3.14 to 3.16 show the overall relationship between household income[83], and the value of dwellings occupied in QLD in 2016. The pattern is for lower income households to occupy dwellings toward the lower end of the value range, and for medium and higher income households to occupy progressively higher value dwellings. However, all income bands peak in the $560-710,000 value band, reflecting the relative concentration of dwellings in that band. This is evident for total households (Figure 3.14), as well as households owning their dwellings (Figure 3.15) and renting or otherwise not owning (Figure 3.16).

Figure 3.14 – QLD Dwellings Occupied by Value by Household Income 2016



However, the differences are much less marked in QLD than in other larger urban economies such as Auckland, where the greater range of dwelling values, and the greater variation among geographic areas in both property values and household incomes results in stronger patterns.

Among owners, there is some differentiation between households on low, medium and higher income levels. This difference is not as apparent with renting households, apart from those in the highest income band (Figure 3.16).

The patterns are generally as expected, given the known influence of household income on ability to pay and housing affordability. Nevertheless, the capability to extend the understanding available from Census

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data – which establishes the links between household income and tenure, and type of dwelling occupied – to now incorporate dwelling values is important for the NPS-UDC requirements.

Figure 3.15 – QLD Owned Dwellings Occupied by Value by Household Income 2016

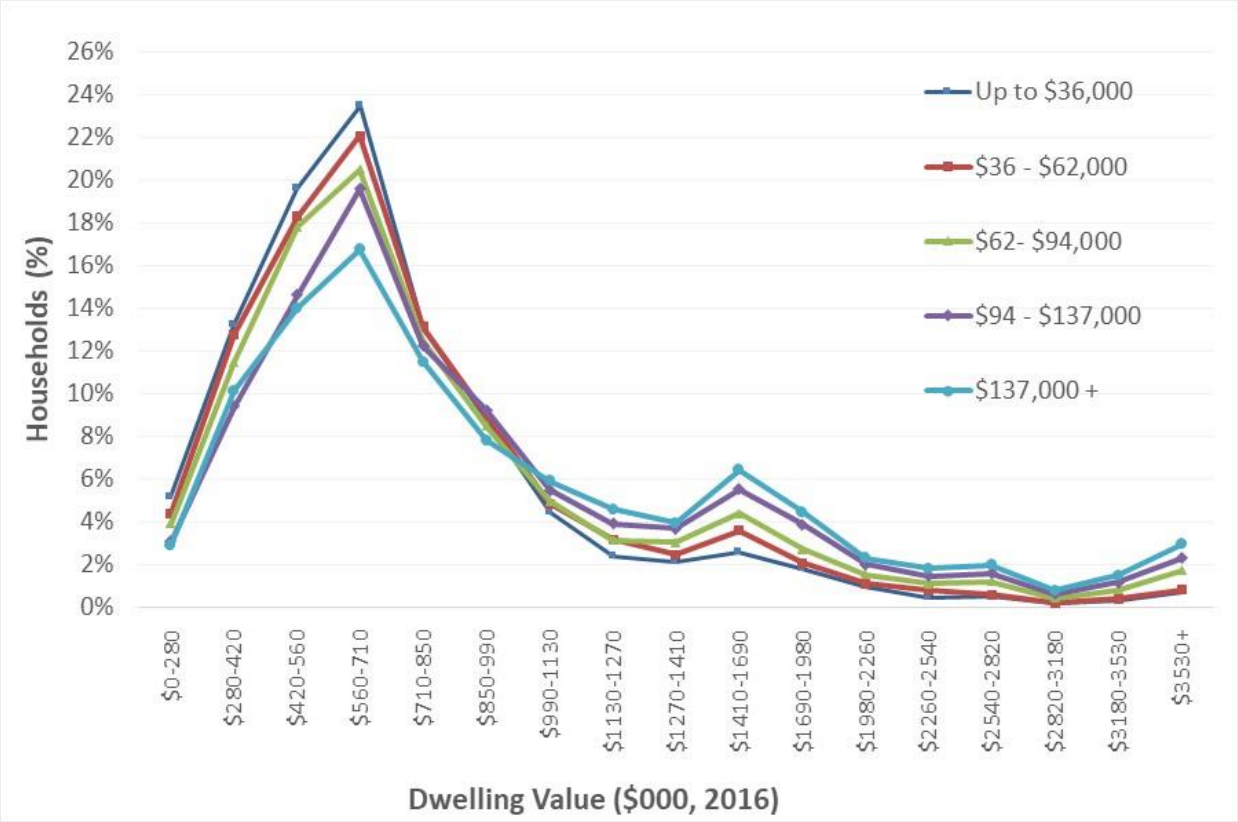
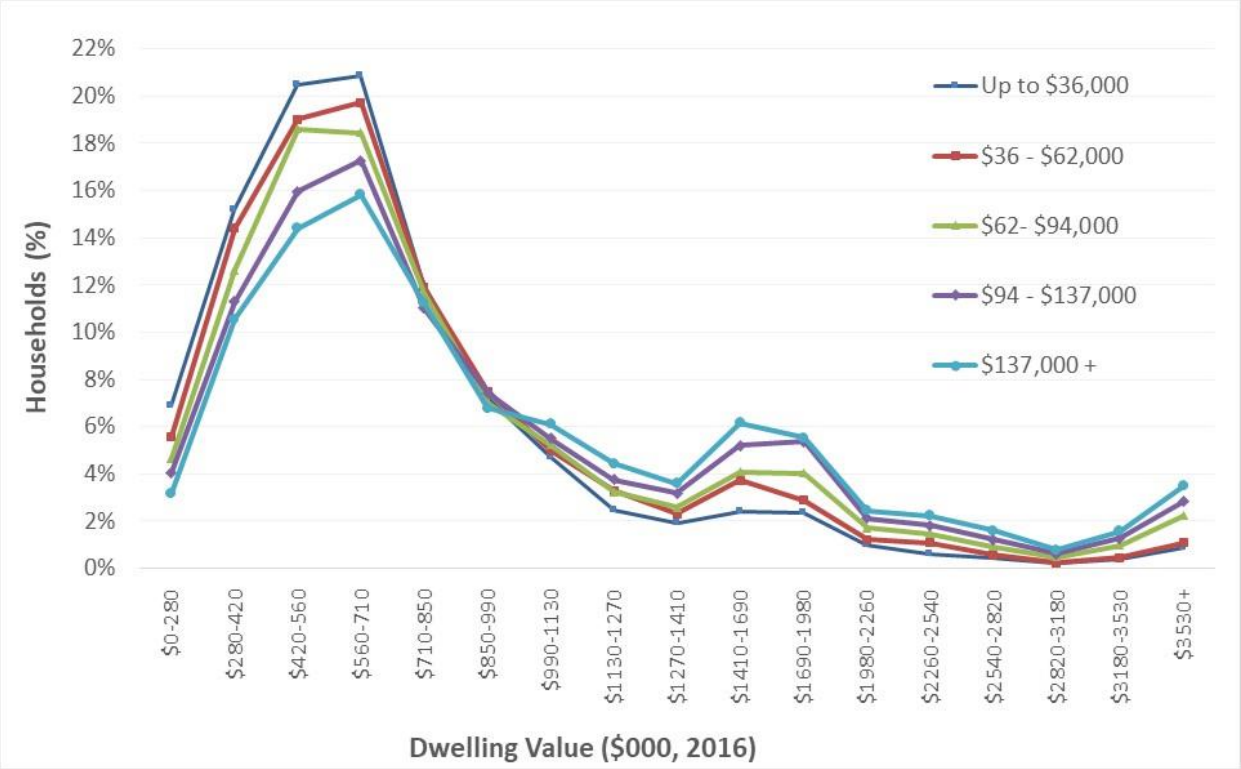


Figure 3.16 – QLD Rented/Not Owned Dwellings Occupied by Value by Household Income 2016



3.11 Summary

The analysis of the current 2016 housing demand situation detailed the main patterns of housing demand. The consistency of these patterns with both the research and conceptual bases in housing demand indicates:

a. The QLD housing market is limited in scale (some 17,600 dwellings), with Queenstown and Wanaka as distinct geographical areas. The economy is fast growing, with population size more than doubling in just 20 years to 2016, and similar rates of growth in the dwelling estate;

b. Moreover, the housing market has distinctive features, notably the high share of the estate which is owned by absentee owners, who have purchased for both investment and "holiday dwelling" reasons, and the relatively high property values. In addition, the tourism-focussed economy and the high shares of couple households within the population, both indicate relative volatility in housing demand, especially from the medium stay and seasonal workforce;

c. These factors together suggest that while the parameters of the existing QLD housing market do offer a reasonably stable base for projecting future outcomes, there is scope for change, including those driven by exogenous factors (such as the relative attractiveness of QLD for investing in holiday dwellings);

d. Nevertheless, the existing population base and the increasing mass both suggest that the outlook is for incremental upward change (as distinct from fluctuation), which indicates that the housing

demand outlook is also for relatively stable, incremental change, driven by household growth (primarily) and some demographic change (notably gradual ageing).

The discussion above covers total QLD. Our analysis of the household structure in urban QLD shows very close similarities between urban and total QLD, and the urban areas account for 76% of total households. Separate analysis of housing demand for urban QLD would be predominantly a close replication of the results for total QLD, albeit with lower household numbers.

4 Future Housing Demand 2016-2046

As the final step in the demand assessment, M.E has identified a suite of housing demand growth futures for QLD. These take into account the medium and high growth futures, and with particular reference to the changes expected in household demography, test the implications of changes in dwelling preferences.

4.1 QLD Housing Futures by Dwelling Type

The core outputs required by the NPS-UDC are projected dwelling numbers to meet demands, allowing for different growth futures, visitor accommodation and for different dwelling preferences. The focus on the feasibility and sufficiency of housing capacity requires assessment by dwelling typologies and value bands.

As noted, the emphasis on couple and single-person households and the associated gradual ageing of the population, together with increases in dwelling values and greater acceptance of attached dwelling options are all expected to see some general shift toward attached dwellings in the future. This shift may also be encouraged by the PDP planning provisions, which are encouraging greater densities of residential development and in some zones increased height limits.

The analysis of current dwelling occupancy by different types of household indicates that household income is the main differentiator of occupancy, rather than household age. This means that the shift toward a more intensive urban environment for QLD is likely to require a change in dwelling preferences. It may also require the realisation of a greater variety of attached dwelling types which can better cater for couples with children. M.E has allowed for some shift in preferences away from detached dwellings, and toward attached dwellings in line with the strategic direction of the PDP. This is not a foregone conclusion, and the options tested include Nil change from the present demand structure, as well as medium, high and very high shifts in dwelling preferences by 2046. Monitoring of future development will reveal any changes in the types of dwellings being supplied by the market, and the effectiveness of zones such as the Medium Density Residential, BMU, PC 50 and Frankton Flats B to make material changes to the overall dwelling estate structure.

4.1.1 Scenarios

A scenario approach has been applied, which allows for different growth rates and different shifts in dwelling preferences, reducing the share of detached dwellings and increasing the share of attached dwellings. The scenarios applied are:

a. ***Nil Preference Shift (Base Case)***, where there are no significant shifts in dwelling preferences for each household type. This scenario would see future demand increase *pro rata* with the existing dwelling preference shown by each household type. Shifts in the total demand pattern would arise only from the changes in the demography of the population, notably the expected increase in single person and couple households, who show some greater propensity to occupy attached dwellings. There would be limited change from the base situation, in which detached dwellings account for some 74% of specified demand (excluding dwellings not defined), single storey attached dwellings at 8%, and attached dwellings in 2-3 storey buildings 14%;

b. ***Moderate Shift*** in dwelling preference. This scenario would see the detached dwelling share decrease slowly, from 74% in 2016 to 70% by 2046, with attached single storey dwellings reducing also to 7%, attached 2-3 storey dwellings up to 19% and a slight increase for dwellings in 4 or more storeys;

c. ***High Shift*** in dwelling preference. This scenario would see the detached share decrease more quickly, to 67% by 2046, with attached single storey dwellings reducing to 7%, attached 2-3 storey dwellings up to 22%. High Shift is allowed for projections to 2026 and 2046, but not to 2019;

d. ***Very High Shift*** in dwelling preference. This scenario would see the detached share decrease to 63% by 2046, with attached single storey dwellings also lower at 6%, attached 2-3 storey dwellings up to 25%.

Note that the scenarios depict the total dwelling estate, which includes existing dwellings, and those outcomes imply more substantial changes in the mix of new dwellings developed over the period. The following sections include results for the nil shift and moderate shift scenario. Appendix 6 contains equivalent results for the High/Very High scenario. Note, figures reported in the following section may differ slightly from total household projections reported in section 3 due to disaggregation and reaggregation of figures together with rounding.

4.1.2 Resident Housing Demand by Dwelling Type – Medium Growth

One core output from the scenarios is projections of numbers of dwellings by type. These projections take into account the current observed preferences by household type, and the scenario preferences.

Nil Preference Shift

Table 4.1 shows the projected dwelling demand under medium growth and a Nil Preference Change scenario (the current patterns of dwelling occupancy persist), and the increase in dwelling numbers of each type is more or less *pro rata* from the current situation. For total QLD, the projected growth in resident demand is in the order of 3,900 households by 2026, and 10,000 in total to 2046.

This future would see detached dwellings continue to account for the major share of dwelling growth - around 77% to 2026, and 75% thereafter.

This outlook is likely to be associated with greenfield development rather than urban intensification, which would be more aligned with an increase in attached dwellings. We note that this outcome would run counter to both the demographic shift in the QLD population and the strong growth among older and smaller households - including their propensity to seek central rather than peripheral locations. Accordingly, it is included primarily as a base for comparison.

Table 4.1 – QLD Resident Dwelling Growth – Medium Projection 2016-2046 – Nil Pref. Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	9,940	10,280	10,880	12,940	14,750	15,770	16,930	17,500	940	3,000	7,560
2+ Dwgs : 1 level	1,040	850	1,140	1,320	1,520	1,630	1,750	1,810	100	280	770
2+ Dwgs : 2-3 levels	1,940	2,040	2,100	2,440	2,780	2,970	3,180	3,320	160	500	1,380
2+ Dwgs : 4+ levels	10	20	10	10	10	20	20	20	-	-	10
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	50	60	60	10	10	30
Private Not Defined	490	510	550	630	730	780	830	860	60	140	370
TOTAL	**13,500**	**13,700**	**14,700**	**17,400**	**19,800**	**21,200**	**22,800**	**23,600**	**1,300**	**3,900**	**10,100**
Detached House	74%	75%	74%	74%	74%	74%	74%	74%	72%	77%	75%
2+ Dwgs : 1 level	8%	6%	8%	8%	8%	8%	8%	8%	8%	7%	8%
2+ Dwgs : 2-3 levels	14%	15%	14%	14%	14%	14%	14%	14%	12%	13%	14%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	4%	4%	4%	4%	4%	5%	4%	4%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

Moderate Preference Shift

Table 4.2 shows the projected dwelling demand under a *Moderate Preference shift* scenario – that is, where the current (2013) patterns of dwelling occupancy gradually but progressively change, and there is a shift away from detached dwellings toward attached dwellings including terrace houses and apartments.

This future would see detached dwellings continue to account for the major share of dwelling growth, but that share would drop from the current 74% to 71% of the increase by 2026, and 64% by 2046. The change reflects the existing dominance of detached dwellings, and even where less than half of the net increase in the future were in detached dwellings, the total estate by 2046 would still reflect much of the current housing stock.

Table 4.2 – QLD Resident Dwelling Growth – Medium 2016-2046 – Moderate Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	9,940	10,140	10,770	12,690	14,160	14,910	15,940	16,370	830	2,750	6,430
2+ Dwgs : 1 level	1,040	970	1,060	1,280	1,500	1,650	1,760	1,830	20	240	790
2+ Dwgs : 2-3 levels	1,940	2,080	2,240	2,700	3,300	3,750	4,080	4,360	300	760	2,420
2+ Dwgs : 4+ levels	10	40	50	60	70	80	80	90	40	50	80
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	50	60	60	10	10	30
Private Not Defined	490	500	540	620	740	780	810	830	50	130	340
TOTAL	**13,500**	**13,800**	**14,700**	**17,400**	**19,800**	**21,200**	**22,700**	**23,500**	**1,300**	**3,900**	**10,100**
Detached House	74%	73%	73%	73%	72%	70%	70%	70%	64%	71%	64%
2+ Dwgs : 1 level	8%	7%	7%	7%	8%	8%	8%	8%	2%	6%	8%
2+ Dwgs : 2-3 levels	14%	15%	15%	16%	17%	18%	18%	19%	23%	19%	24%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

4.1.3 Resident Housing Demand by Dwelling Type – High Growth

Nil Preference Shift

Table 4.3 shows the projected dwelling demand under high growth and a Nil Preference Change scenario (the current patterns of dwelling occupancy persist), and the increase in dwelling numbers of each type is more or less *pro rata* from the current situation. For total QLD, the projected growth in resident demand is in the order of 4,900 dwellings by 2026, and 13,600 in total to 2046.

This future would see detached dwellings continue to account for the major share of dwelling growth - around 77% to 2026, and 74% thereafter.

Table 4.3 – QLD Resident Dwelling Growth – High Projection 2016-2046 – Nil Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	10,000	10,360	11,230	13,750	16,110	17,570	19,160	20,050	1,230	3,750	10,050
2+ Dwgs : 1 level	1,040	1,030	1,170	1,400	1,670	1,820	2,020	2,120	130	360	1,080
2+ Dwgs : 2-3 levels	1,960	2,050	2,170	2,580	3,050	3,330	3,670	3,890	210	620	1,930
2+ Dwgs : 4+ levels	10	20	10	10	20	20	20	20	-	-	10
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	60	60	70	10	10	40
Private Not Defined	510	520	570	660	790	860	950	1,000	60	150	490
TOTAL	**13,600**	**14,000**	**15,200**	**18,400**	**21,700**	**23,700**	**25,900**	**27,200**	**1,600**	**4,900**	**13,600**
Detached House	74%	74%	74%	75%	74%	74%	74%	74%	77%	77%	74%
2+ Dwgs : 1 level	8%	7%	8%	8%	8%	8%	8%	8%	8%	7%	8%
2+ Dwgs : 2-3 levels	14%	15%	14%	14%	14%	14%	14%	14%	13%	13%	14%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	4%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

As noted, this outlook is likely to be associated with greenfield development rather than urban intensification, which would be more aligned with an increase in attached dwellings, and it is included primarily as a base for comparison.

Moderate Preference Shift

Table 4.4 shows the projected dwelling demand under a *Moderate Preference shift* scenario – that is, where the current (2013) patterns of dwelling occupancy gradually but progressively change, and there is a shift away from detached dwellings toward attached dwellings including terrace houses and apartments.

This future would see detached dwellings continue to account for the major share of dwelling growth, but that share would drop from the current 74% to 71% of the increase by 2026, and 64% by 2046. The change reflects the existing dominance of detached dwellings, and even where less than half of the net increase in the future were in detached dwellings, the total estate by 2046 would still reflect much of the current housing stock.

Table 4.4 – QLD Resident Dwelling Growth – High 2016-2046 – Moderate Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	10,000	10,310	11,120	13,460	15,500	16,620	18,050	18,760	1,120	3,460	8,760
2+ Dwgs : 1 level	1,040	990	1,100	1,370	1,640	1,850	2,010	2,130	60	330	1,090
2+ Dwgs : 2-3 levels	1,960	2,120	2,310	2,870	3,630	4,210	4,700	5,080	350	910	3,120
2+ Dwgs : 4+ levels	10	40	50	60	70	80	90	100	40	50	90
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	60	60	60	10	10	30
Private Not Defined	510	510	550	640	790	860	920	970	40	130	460
TOTAL	**13,600**	**14,000**	**15,200**	**18,400**	**21,700**	**23,700**	**25,800**	**27,100**	**1,600**	**4,900**	**13,600**
Detached House	74%	74%	73%	73%	71%	70%	70%	69%	70%	71%	64%
2+ Dwgs : 1 level	8%	7%	7%	7%	8%	8%	8%	8%	4%	7%	8%
2+ Dwgs : 2-3 levels	14%	15%	15%	16%	17%	18%	18%	19%	22%	19%	23%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	3%	4%	4%	4%	4%	3%	3%	3%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

4.2 QLD Housing Futures by Dwelling Value

The second core output from the scenarios is projections of numbers of dwellings in each value band, based on estimated demand for dwellings from each type of household, and taking into account preference shifts.

The starting point is that the current situation (2016) reflects existing demand for dwellings (owned and rented) by households of each type. Further, that the value profile for existing dwellings broadly reflects expressed demand (dwelling type and value) from QLD households. On this basis, the household projections have been used to estimate future demand for housing – owned and rented, by dwelling type – in each value band.

Projected future demand is based in the first instance on existing demand patterns, projected forward *pro rata* with the growth in each segment of the market (household type).

We note that there has been considerable and on-going assessment of issues in the New Zealand housing market, especially the effects of high dwelling prices on housing affordability, and household numbers. Three main effects relevant to this assessment are:

a. The potential for the current base year patterns to reflect a situation where dwelling ownership levels are artificially low, because dwelling prices are high relative to household incomes. *Pro rating* forward the base year pattern may understate likely ownership levels (numbers of owned dwellings), and overstate likely rental levels (numbers of rented dwellings);

b. Second, the current high price levels may overstate the price levels in a future situation where changes in market conditions would see a reduction in prices relative to household incomes, with consequent positive effects on affordability;

c. The potential for household numbers to have been lower than the "normal" for the population, because formation of new households has been suppressed or deferred by lack of dwelling supply and poor housing affordability.

These are matters which need to be taken into account in any consideration or evaluation of the demand assessment presented here.

However, in developing the demand outlook there has been no attempt to make adjustments for these matters. That is because dwelling ownership rates may increase or decrease in the future or remain unchanged, and while higher levels of ownership are generally seen as a positive for individuals and the community, there is no optimal level of ownership; while the medium-term outlook is for slow or slower growth in housing prices, there is no certainty that affordability will improve in the medium-term, and there is no ideal or optimum number of households for a given population size.

For those reasons, the assessment used here is the simple *pro rating* forward of the current demand pattern, though taking into account future changes in the demography of the QLD population, and consequent shifts in the mix of households of each type.

Having stated that, the projection scenarios do allow for changes in the mix of dwellings for QLD, most notably a decrease in the share of detached dwellings in the housing estate, and an increase in attached dwellings. This will have some impact on the projected value distribution of dwellings, because the value of attached dwellings is generally lower than the value of detached dwellings. Accordingly, a change in the dwelling mix can be expected to have some flow-on effect for the distribution of dwelling values for the market in total, and segments within the market.

Hence, the distribution of dwelling values has been estimated first by allowing for change in the dwelling mix as between detached and attached dwellings for each household type, then by applying the current value distribution by dwelling type to the future projected numbers. The core output is estimated demand for dwellings by type and value band, and the indicated change in demand.

As noted, there is no econometric component to this Model, to consider such matters as potential change in dwelling ownership levels if housing prices increase or decrease, or calculation of the price bands of future dwelling supply. That is covered separately in section 5.

The following sections include results for the nil shift and moderate shift scenario. Appendix 7 contains equivalent results for the High/Very High scenario.

4.2.1 Resident Housing Demand by Dwelling Value - Medium Growth

The projection results are set out in Tables 4.5 to 4.10 (Medium growth) and 4.11 to 4.16 (High growth). Each table shows the distribution of dwellings by value for 2016 for owned and rented/not owned dwellings, and the future outcome for the projected year. It also shows the net increase in demand for dwellings in each value band over the period 2026 and 2046.

The tables also show the implied ownership and rental balance in the future. The indicated changes toward a higher share of owned dwellings reflect the demographic shift, and the current mix of owned and rented dwellings for each segment. Note that this is a *pro rata* shift from the current situation and assumes that the current ownership levels for each segment will apply to the same market segments as at 2046.

However, this indicator needs to be treated with caution, because the relatively high ownership levels recorded for middle and older age groups as at 2013 may not accurately represent the ownership levels in those cohorts in 30 years' time. The ownership levels as at 2013 in the younger age cohorts were lower

than recorded for those same cohorts at earlier Census points, and if those lower levels persist through the life stages, then the dwelling ownership levels as at 2046 would be lower than those indicated in the tables. With that caveat, the ownership indicator is nevertheless included to indicate how future patterns may pan out.

Nil Preference Shift

Table 4.5 shows the projected dwelling numbers for 2046 in a medium growth future, with nil preference change across segments of the market. The distribution shows low shares of dwellings in the lower value bands, with demand centred on the mid-range values – reflecting the current dwelling mix and value patterns. Table 4.6 shows the equivalent outcome by dwelling type.

The total increase in demand of some 10,000 dwellings represents substantial growth. However, the similarity in the distribution of values with the current pattern also reflects stability in the structure of demand.

The point of note is that the household projections show incremental change from the current base, and do not indicate substantial shifts in the underlying pattern of housing demand. It follows that the projected demand reflects quite strongly this incremental shift, where the main change is the number of dwellings, rather than the mix of dwellings and values.

This relative stability in the population structure means there is also relative stability in the future structure of housing demand. This applies to all of the scenarios, which means that the key differences arise from changes in household preferences rather than shifts in household numbers.

Table 4.5 – QLD Resident Demand by Tenure & Value – Medium, Nil Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	510	550	1,060	210	320	530	5.3%
$280-420	940	620	1,560	1,600	1,500	3,100	660	880	1,540	15.4%
$420-560	1,410	890	2,300	2,290	1,910	4,200	880	1,020	1,900	19.0%
$560-710	1,670	910	2,580	2,690	1,740	4,430	1,020	830	1,850	18.5%
$710-850	1,060	590	1,650	1,660	1,000	2,660	600	410	1,010	10.1%
$850-990	720	360	1,080	1,160	620	1,780	440	260	700	7.0%
$990-1130	430	270	700	720	430	1,150	290	160	450	4.5%
$1130-1270	290	170	460	510	310	820	220	140	360	3.6%
$1270-1410	260	140	400	450	220	670	190	80	270	2.7%
$1410-1690	390	220	610	690	360	1,050	300	140	440	4.4%
$1690-1980	260	200	460	470	420	890	210	220	430	4.3%
$1980-2260	130	90	220	220	120	340	90	30	120	1.2%
$2260-2540	100	70	170	160	110	270	60	40	100	1.0%
$2540-2820	110	50	160	190	70	260	80	20	100	1.0%
$2820-3180	40	30	70	70	20	90	30	- 10	20	0.2%
$3180-3530	80	50	130	130	60	190	50	10	60	0.6%
$3530+	160	110	270	260	150	410	100	40	140	1.4%
Total	**8,400**	**5,000**	**13,400**	**13,800**	**9,600**	**23,400**	**5,400**	**4,600**	**10,000**	**100.0%**
Share %	*63%*	*37%*	*100%*	*59%*	*41%*	*100%*	*54%*	*46%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 4.6 – QLD Resident Demand by Type & Value – Medium, Nil Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	510	550	1,060	190	340	530	5.3%
$280-420	980	580	1,560	1,630	1,470	3,100	650	890	1,540	15.4%
$420-560	1,660	640	2,300	2,630	1,570	4,200	970	930	1,900	19.0%
$560-710	2,180	400	2,580	3,420	1,010	4,430	1,240	610	1,850	18.5%
$710-850	1,490	160	1,650	2,270	390	2,660	780	230	1,010	10.1%
$850-990	990	90	1,080	1,560	220	1,780	570	130	700	7.0%
$990-1130	650	50	700	1,050	100	1,150	400	50	450	4.5%
$1130-1270	400	60	460	670	150	820	270	90	360	3.6%
$1270-1410	380	20	400	640	30	670	260	10	270	2.7%
$1410-1690	570	40	610	970	80	1,050	400	40	440	4.4%
$1690-1980	330	130	460	560	330	890	230	200	430	4.3%
$1980-2260	210	10	220	330	10	340	120	-	120	1.2%
$2260-2540	170	-	170	260	10	270	90	10	100	1.0%
$2540-2820	160	-	160	260	-	260	100	-	100	1.0%
$2820-3180	70	-	70	90	-	90	20	-	20	0.2%
$3180-3530	130	-	130	190	-	190	60	-	60	0.6%
$3530+	270	-	270	410	-	410	140	-	140	1.4%
Total	**11,000**	**2,400**	**13,400**	**17,500**	**5,900**	**23,400**	**6,500**	**3,500**	**10,000**	**100.0%**
Share %	*82%*	*18%*	*100%*	*75%*	*25%*	*100%*	*65%*	*35%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 4.7 summarises the implied changes in demand in terms of main dwelling type (detached, attached) and tenure (owned, not owned) over the period, carrying forward the existing patterns for each household type in QLD. In this future, the shares of attached dwellings increases and the number of not-owned (rented) dwellings increases faster than the number of owned dwellings.

Table 4.7 – QLD Resident Structural Change – Medium, Nil Preference Shift 2016-46

Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	12,060	1,720	13,780	5,390	4,200	9,590	17,450	5,920	23,370
2016-46	4,640	790	5,430	1,850	2,740	4,590	6,490	3,530	10,020
Change 2016-46	63%	85%	65%	52%	188%	92%	59%	148%	75%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	52%	7%	59%	23%	18%	41%	75%	25%	100%
2016-46 %	46%	8%	54%	18%	27%	46%	65%	35%	100%

Source: ME Queenstown Housing Model 2017

Moderate Preference Shift

Table 4.8 shows the projected dwelling numbers for 2046 in a medium growth future, with moderate preference shift. The distribution again reflects continuation of the overall pattern, but with some general transfer toward lower value dwellings (reflecting the shift toward attached dwellings), but with demand centred on the mid-range values. Table 4.9 shows the equivalent outcome by dwelling type.

Table 4.8 – QLD Resident Demand by Tenure & Value – Medium, Moderate Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	580	580	1,160	280	350	630	6.3%
$280-420	940	620	1,560	1,710	1,550	3,260	770	930	1,700	17.0%
$420-560	1,410	890	2,300	2,350	1,940	4,290	940	1,050	1,990	19.9%
$560-710	1,670	910	2,580	2,680	1,720	4,400	1,010	810	1,820	18.2%
$710-850	1,060	590	1,650	1,630	970	2,600	570	380	950	9.5%
$850-990	720	360	1,080	1,140	590	1,730	420	230	650	6.5%
$990-1130	430	270	700	700	410	1,110	270	140	410	4.1%
$1130-1270	290	170	460	520	300	820	230	130	360	3.6%
$1270-1410	260	140	400	430	200	630	170	60	230	2.3%
$1410-1690	390	220	610	660	350	1,010	270	130	400	4.0%
$1690-1980	260	200	460	490	420	910	230	220	450	4.5%
$1980-2260	130	90	220	210	110	320	80	20	100	1.0%
$2260-2540	100	70	170	160	100	260	60	30	90	0.9%
$2540-2820	110	50	160	180	60	240	70	10	80	0.8%
$2820-3180	40	30	70	60	20	80	20	- 10	10	0.1%
$3180-3530	80	50	130	120	50	170	40	-	40	0.4%
$3530+	160	110	270	260	130	390	100	20	120	1.2%
Total	**8,400**	**5,000**	**13,400**	**13,900**	**9,500**	**23,400**	**5,500**	**4,500**	**10,000**	**100.0%**
Share %	*63%*	*37%*	*100%*	*59%*	*41%*	*100%*	*55%*	*45%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 4.9 – QLD Resident Demand by Type & Value – Medium, Moderate Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	490	670	1,160	170	460	630	6.3%
$280-420	980	580	1,560	1,540	1,720	3,260	560	1,140	1,700	17.0%
$420-560	1,660	640	2,300	2,460	1,830	4,290	800	1,190	1,990	19.9%
$560-710	2,180	400	2,580	3,200	1,200	4,400	1,020	800	1,820	18.2%
$710-850	1,490	160	1,650	2,130	470	2,600	640	310	950	9.5%
$850-990	990	90	1,080	1,470	260	1,730	480	170	650	6.5%
$990-1130	650	50	700	990	120	1,110	340	70	410	4.1%
$1130-1270	400	60	460	630	190	820	230	130	360	3.6%
$1270-1410	380	20	400	590	40	630	210	20	230	2.3%
$1410-1690	570	40	610	910	100	1,010	340	60	400	4.0%
$1690-1980	330	130	460	510	400	910	180	270	450	4.5%
$1980-2260	210	10	220	300	20	320	90	10	100	1.0%
$2260-2540	170	-	170	240	20	260	70	20	90	0.9%
$2540-2820	160	-	160	240	-	240	80	-	80	0.8%
$2820-3180	70	-	70	80	-	80	10	-	10	0.1%
$3180-3530	130	-	130	170	-	170	40	-	40	0.4%
$3530+	270	-	270	380	10	390	110	10	120	1.2%
Total	**11,000**	**2,400**	**13,400**	**16,300**	**7,100**	**23,400**	**5,400**	**4,700**	**10,000**	**100.0%**
Share %	*82%*	*18%*	*100%*	*70%*	*30%*	*100%*	*54%*	*47%*	*101%*	

Source: ME Queenstown Housing Model 2017

Table 4.10 summarises the implied changes in demand in terms of main dwelling type (detached, attached) and tenure (owned, not owned) over the period, carrying forward the existing patterns for each household type in QLD. In this future, the shares of attached dwellings increases significantly (to 30% from 18%), and the number of not-owned (rented) dwellings increases to 41% from 37%.

Table 4.10 – QLD Resident Structural Change – Medium, Moderate Preference Shift 2016-46

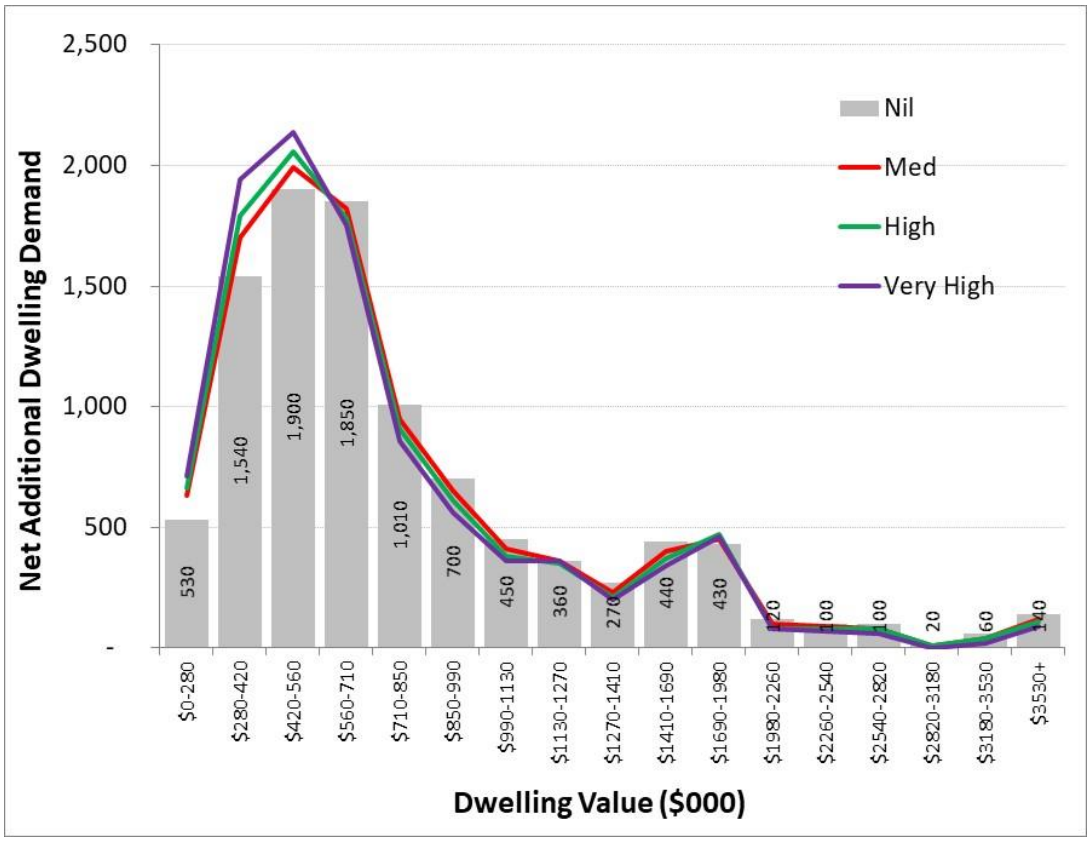
Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	11,380	2,500	13,880	4,950	4,550	9,500	16,330	7,050	23,380
2016-46	3,960	1,570	5,530	1,410	3,090	4,500	5,370	4,660	10,030
Change 2016-46	53%	169%	66%	40%	212%	90%	49%	195%	75%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	49%	11%	59%	21%	19%	41%	70%	30%	100%
2016-46 %	39%	16%	55%	14%	31%	45%	54%	46%	100%

Source: ME Queenstown Housing Model 2017

Comparison

Figure 4.1 compares the net additional dwelling demand for the four scenarios. The value distribution of the net increase is similar for all scenarios, and close to the current QLD structure. However, it is clear that the increase in attached dwellings in each of the scenarios is associated with higher shares of dwellings in the lower and middle value bands, and smaller shares in the higher value bands. This shift reflects the current value distributions for detached and attached dwellings and does not reflect any modelling of future supply.

Figure 4.1 – QLD Resident Dwelling Demand by Value, Medium Growth 2016-2046



4.2.2 Resident Housing Demand by Dwelling Value - High Growth

Nil Preference Shift

The high growth future reflects similar changes, albeit affecting a larger volume of growth in dwelling demand. Table 4.11 shows the projected dwelling numbers for 2046 in the high growth future, with nil preference shift across segments of the market. The distribution reflects the current pattern, with relatively few dwellings in the lower value bands, and demand centred on the mid-range values.

The total increase in demand of 13,700 dwellings is substantial growth, the *pro rata* projection indicating growth shared in similar distribution to the 2016 pattern across all value bands.

Table 4.11 – QLD Resident Demand by Tenure & Value – High, Nil Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	590	660	1,250	290	430	720	5.3%
$280-420	940	620	1,560	1,830	1,750	3,580	890	1,130	2,020	14.7%
$420-560	1,410	890	2,300	2,600	2,230	4,830	1,190	1,340	2,530	18.5%
$560-710	1,670	910	2,580	3,070	2,030	5,100	1,400	1,120	2,520	18.4%
$710-850	1,060	590	1,650	1,900	1,170	3,070	840	580	1,420	10.4%
$850-990	720	360	1,080	1,330	730	2,060	610	370	980	7.2%
$990-1130	430	270	700	820	520	1,340	390	250	640	4.7%
$1130-1270	290	170	460	590	370	960	300	200	500	3.6%
$1270-1410	260	140	400	510	270	780	250	130	380	2.8%
$1410-1690	390	220	610	780	420	1,200	390	200	590	4.3%
$1690-1980	260	200	460	540	480	1,020	280	280	560	4.1%
$1980-2260	130	90	220	250	150	400	120	60	180	1.3%
$2260-2540	100	70	170	190	120	310	90	50	140	1.0%
$2540-2820	110	50	160	210	80	290	100	30	130	0.9%
$2820-3180	40	30	70	80	30	110	40	-	40	0.3%
$3180-3530	80	50	130	150	70	220	70	20	90	0.7%
$3530+	160	110	270	310	180	490	150	70	220	1.6%
Total	**8,400**	**5,000**	**13,400**	**15,800**	**11,300**	**27,000**	**7,400**	**6,300**	**13,700**	**100.0%**
Share %	*63%*	*37%*	*100%*	*59%*	*42%*	*100%*	*54%*	*46%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 4.12 – QLD Resident Demand by Type & Value – High, Nil Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	590	660	1,250	270	450	720	5.3%
$280-420	980	580	1,560	1,860	1,720	3,580	880	1,140	2,020	14.7%
$420-560	1,660	640	2,300	3,000	1,830	4,830	1,340	1,190	2,530	18.5%
$560-710	2,180	400	2,580	3,920	1,180	5,100	1,740	780	2,520	18.4%
$710-850	1,490	160	1,650	2,600	470	3,070	1,110	310	1,420	10.4%
$850-990	990	90	1,080	1,800	260	2,060	810	170	980	7.2%
$990-1130	650	50	700	1,220	120	1,340	570	70	640	4.7%
$1130-1270	400	60	460	780	180	960	380	120	500	3.6%
$1270-1410	380	20	400	740	40	780	360	20	380	2.8%
$1410-1690	570	40	610	1,110	90	1,200	540	50	590	4.3%
$1690-1980	330	130	460	630	390	1,020	300	260	560	4.1%
$1980-2260	210	10	220	390	10	400	180	-	180	1.3%
$2260-2540	170	-	170	300	10	310	130	10	140	1.0%
$2540-2820	160	-	160	290	-	290	130	-	130	0.9%
$2820-3180	70	-	70	110	-	110	40	-	40	0.3%
$3180-3530	130	-	130	220	-	220	90	-	90	0.7%
$3530+	270	-	270	480	10	490	210	10	220	1.6%
Total	**11,000**	**2,400**	**13,400**	**20,000**	**7,000**	**27,000**	**9,100**	**4,600**	**13,700**	**100.0%**
Share %	*82%*	*18%*	*100%*	*74%*	*26%*	*100%*	*66%*	*34%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 4.13 summarises the implied changes in demand in terms of main dwelling type and tenure over the period, as previously carrying forward the existing patterns for each household type in QLD. In this future, the shares of attached dwellings increase markedly (to 37% from 18%), while the number of not-owned (rented) dwellings increases to 40% from 37%.

Table 4.13 – QLD Resident Structural Change – High, Nil Preference Shift 2016-46

Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	10,330	3,590	13,920	4,340	5,080	9,420	14,670	8,670	23,340
2016-46	2,910	2,660	5,570	800	3,620	4,420	3,710	6,280	9,990
Change 2016-46	39%	286%	67%	23%	248%	88%	34%	263%	75%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	44%	15%	60%	19%	22%	40%	63%	37%	100%
2016-46 %	29%	27%	56%	8%	36%	44%	37%	63%	100%

Source: ME Queenstown Housing Model 2017

Moderate Preference Shift

Table 4.14 shows the projected dwelling numbers for 2046 in a high growth future, with moderate preference shift. The distribution again reflects continuation of the overall pattern, but with some general transfer toward lower value dwellings (reflecting the shift toward attached dwellings), although demand remains centred on the mid-range values. Table 4.15 shows the equivalent outcome by dwelling type.

Table 4.14 – QLD Resident Demand by Tenure & Value – High, Moderate Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	650	680	1,330	350	450	800	5.9%
$280-420	940	620	1,560	1,950	1,820	3,770	1,010	1,200	2,210	16.3%
$420-560	1,410	890	2,300	2,690	2,280	4,970	1,280	1,390	2,670	19.6%
$560-710	1,670	910	2,580	3,050	2,000	5,050	1,380	1,090	2,470	18.2%
$710-850	1,060	590	1,650	1,870	1,120	2,990	810	530	1,340	9.9%
$850-990	720	360	1,080	1,290	690	1,980	570	330	900	6.6%
$990-1130	430	270	700	790	490	1,280	360	220	580	4.3%
$1130-1270	290	170	460	600	350	950	310	180	490	3.6%
$1270-1410	260	140	400	490	240	730	230	100	330	2.4%
$1410-1690	390	220	610	760	400	1,160	370	180	550	4.0%
$1690-1980	260	200	460	560	490	1,050	300	290	590	4.3%
$1980-2260	130	90	220	250	130	380	120	40	160	1.2%
$2260-2540	100	70	170	190	110	300	90	40	130	1.0%
$2540-2820	110	50	160	210	70	280	100	20	120	0.9%
$2820-3180	40	30	70	80	20	100	40	- 10	30	0.2%
$3180-3530	80	50	130	140	70	210	60	20	80	0.6%
$3530+	160	110	270	290	170	460	130	60	190	1.4%
Total	**8,400**	**5,000**	**13,400**	**15,900**	**11,100**	**27,000**	**7,500**	**6,100**	**13,600**	**100.0%**
Share %	*63%*	*37%*	*100%*	*59%*	*41%*	*100%*	*55%*	*45%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 4.15 – QLD Resident Demand by Type & Value – High, Moderate Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	550	780	1,330	230	570	800	5.9%
$280-420	980	580	1,560	1,750	2,020	3,770	770	1,440	2,210	16.3%
$420-560	1,660	640	2,300	2,820	2,150	4,970	1,160	1,510	2,670	19.6%
$560-710	2,180	400	2,580	3,660	1,390	5,050	1,480	990	2,470	18.2%
$710-850	1,490	160	1,650	2,440	550	2,990	950	390	1,340	9.9%
$850-990	990	90	1,080	1,680	300	1,980	690	210	900	6.6%
$990-1130	650	50	700	1,130	150	1,280	480	100	580	4.3%
$1130-1270	400	60	460	720	230	950	320	170	490	3.6%
$1270-1410	380	20	400	680	50	730	300	30	330	2.4%
$1410-1690	570	40	610	1,040	120	1,160	470	80	550	4.0%
$1690-1980	330	130	460	580	470	1,050	250	340	590	4.3%
$1980-2260	210	10	220	360	20	380	150	10	160	1.2%
$2260-2540	170	-	170	280	20	300	110	20	130	1.0%
$2540-2820	160	-	160	270	10	280	110	10	120	0.9%
$2820-3180	70	-	70	100	-	100	30	-	30	0.2%
$3180-3530	130	-	130	210	-	210	80	-	80	0.6%
$3530+	270	-	270	440	20	460	170	20	190	1.4%
Total	**11,000**	**2,400**	**13,400**	**18,700**	**8,300**	**27,000**	**7,800**	**5,900**	**13,600**	**100.0%**
Share %	*82%*	*18%*	*100%*	*69%*	*31%*	*100%*	*57%*	*43%*	*101%*	

Source: ME Queenstown Housing Model 2017

Table 4.16 summarises the implied changes in demand in terms of main dwelling type and tenure over the period, as previously carrying forward the existing patterns for each household type in QLD. In this future, the shares of attached dwellings increase to 31% from 18%, while the number of not-owned (rented) dwellings increases to 41% from 37%.

Table 4.16 – QLD Resident Structural Change – High, Moderate Preference Shift 2016-46

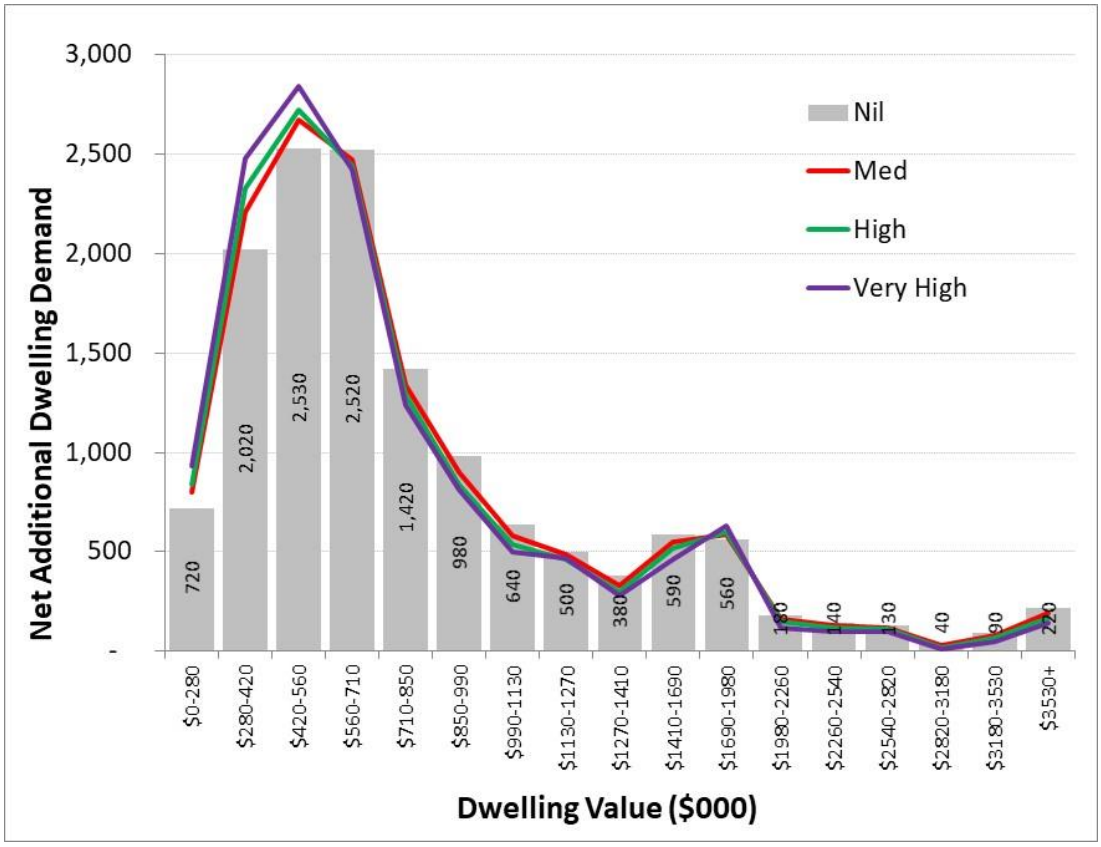
Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	12,980	2,880	15,860	5,730	5,400	11,130	18,710	8,280	26,990
2016-46	5,560	1,950	7,510	2,190	3,940	6,130	7,750	5,890	13,640
Change 2016-46	75%	210%	90%	62%	270%	123%	71%	246%	102%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	48%	11%	59%	21%	20%	41%	69%	31%	100%
2016-46 %	41%	14%	55%	16%	29%	45%	57%	43%	100%

Source: ME Queenstown Housing Model 2017

Comparison

Figure 4.2 compares the net additional dwelling demand for the four scenarios in the High future. The value distribution of the net increase is again similar for all scenarios, and reasonably close to the current QLD structure.

Figure 4.2 – QLD Resident Dwelling Demand by Value, High Growth 2016-2046



4.3 Retirement Dwellings

There is substantial demand for retirement dwellings, particularly with an ageing population. The economics and space requirements of the sector differ significantly from most private sector housing,

which means retirement villages do not conform especially well to dwelling feasibility assessment based on standard commercial development and sale or development for rental model. Further, the density of retirement villages (dwellings per hectare) is typically considerably higher than for private dwellings, so that land requirement for this sub-sector cannot be directly equated with that for standard private dwellings. That said, retirement villages compete for land with private dwellings, and a substantial share of future capacity is expected to be provided for through retirement apartments, for which the economics of development may not differ markedly from other apartment projects.

Retirement housing is included in both demand and supply statistics (and the modelling above). SNZ identifies retirement village residents in care as being in non-private households, but otherwise identifies individual dwellings in retirement villages (commonly standalone or attached villas or units) as separate dwellings. This is consistent with their treatment in the dwelling consent statistics. Residents of retirement villages are identified as individual households, predominantly one-person or couples, and are not included as part of a non-private household or residential arrangement.

Projected demand for retirement dwellings is in the range of 500 (Low), 600 (Medium) to 750 (High) over the period to 2046, predominantly for one-person households (about 87% of units), and couples (the other 13% of units), and is almost entirely in the older age groups. This equates to 6% to 7% of total demand growth. While it is a distinct sub-sector, retirement demand is not further differentiated for this assessment, and is included in the private sector owned component of the market.

It is also noted that the Queenstown Country Club and Arrowtown SHAs resource consents have approved approximately 527 residential units (combination of apartments and dwellings) and two aged bed care facilities with associated ancillary activities to be utilised as retirement village complex. The Queenstown Country Club SHA also included accommodation for staff. At the time both SHAs were being considered by the QLDC it was acknowledged there was an acute need to provide for this type of housing in Queenstown, as there were limited existing facilities.

4.4 Summary

The results above provide base projections of housing demand from resident households in QLD into the medium and long-terms, for medium and high growth futures, consistent with the requirements of the NPS-UDC.

The key outputs from the analysis are projected dwelling demand by main dwelling type, and dwelling value band. The combination of an incremental demand projection - based on demographic shift and established patterns of dwelling tenure and occupancy of different dwelling value bands – and scenarios which reflect the most likely drivers of change, together provide a suitable basis for the assessment to meet NPS-UDC requirements.

The variations in demand numbers - which are driven by the scenarios – are considered to provide a sufficiently diverse range of outcomes for assessment. As a result, it is considered that the PDP (and ODP) provisions supported by the Council provide a variety of choices to meet the needs of people and communities and a range of dwelling types (in line with Policy PA3). In particular, the following proposed zones promote a range of densities and housing choice:

- Low Density Residential provides for 450m² lots with the ability for infill housing to develop at a density of 300m² providing opportunities for smaller housing choices. Substantial portions of the Queenstown and Wanaka Urban Environment is zoned Low Density Residential;
- Medium Density Residential is a new zone in the PDP and provides for increased densities within specific locations up to one residential unit per 250m^2;
- High Density Residential has no density limit and provides for buildings at increased heights up to 15m on flat sites. Some locations of this zone remain undeveloped and could be used for residential or visitor accommodation. Some areas have also been recommended to be upzoned to HDR through this hearing stream;
- Arrowtown Residential Historic Management Zone;
- Large Lot Residential (New Zone in Wanaka only), Rural Residential and Rural Lifestyle Zones that provide opportunities for rural living;
- Queenstown, Wanaka and Arrowtown Town Centre which providesome opportunities for residential and visitor accommodation alongside commercial and business uses;
- Local Shopping Centres which provide for residential activity above ground floor level;
- Business Mixed Use which in both Queenstown and Wanaka accommodates brownfield land and can provide for buildings between 12 to 20m in height with residential activity above ground floor;
- Rural and Gibbston Character which provides for residential activity located within an building platforms approved by resource consent;
- Wakatipu Basin Zone that restricts rural subdivision in some areas and enabling some level of rural living development in other areas;
- Township Zones provide for low density residential density interspersed with non-residential activities; and
- Special Zones that provide for a range of residential densities, often in a rural setting.

SHAs have also contributed to housing choice, including the construction of retirement village complex and smaller compact dwellings.

The estimates of total dwelling demand, including both resident households (owner-occupied and rented holiday/investment dwellings), and absentee owners are set out in Section 6. The dwelling demand from absentee owners is assumed to have a value profile similar to that currently in QLD, with slightly higher mean values than for the resident households.

5 Housing Capacity

This section begins with a description of the methodology used to determine the plan enabled residential capacity within QLD. Different forms of capacity have been estimated using a multi-step process, which brings together spatial and non-spatial datasets. Development of the Commercial Feasibility Model is then discussed, along with commercially feasible capacity results in the short, medium and long-term, including by price bracket.

The approach taken to calculate plan enabled capacity in QLD can be summarised as follows. GIS analysis undertaken by M.E first calculates the level of residential dwellings capacity provided for under the plan (in addition to the existing dwelling stock). It does this by applying the planning controls to the existing dwelling configuration to identify the area available for infill or greenfield development and the number of dwellings able to be accommodated within these areas. The GIS assessment identifies the area on each parcel that can potentially be subdivided under the plan, or that can accommodate an additional dwelling (or dwellings) through land use provisions. Section 5.1 provides further explanation of the methodology applied in the key steps of this approach.

5.1 Plan Enabled Capacity Approach

Detailed GIS modelling was undertaken to identify the areas of residential capacity enabled under the PDP within the urban environment. The four key components of the GIS process included:

i. The collation of multiple large datasets and their spatial integration at a property parcel level to provide the fundamental drivers of capacity calculations on individual parcels.

ii. Establishing the spatial parameters for infill and greenfield capacity.

iii. The identification of physical space on each parcel that can accommodate further residential dwellings as set out under the PDP. Importantly, this process takes account of the placement of the existing dwelling stock within each parcel and identifies the remaining spaces for further development which meet the site level access and shape factor requirements of the PDP.

iv. Mapping of greenfield and other structure plan areas and their integration with other datasets to identify remaining capacity.

The following sub-sections outline each component of the GIS process.

5.1.1 Spatial Integration of Large Datasets

A series of large datasets were brought together and spatially integrated using GIS. These datasets included information from the rating database, the zones, sub-zones and other planning provisions set out in the PDP, building footprint data giving the location of buildings within each parcel, building consent data, parcel level sales records, slope topography, and the M.E spatial framework (defined using a combination of SNZ

2018 statistical boundaries) that allows parcels to be aggregated and reported by meaningful localities (in additional to zones) (refer Appendix 4 for maps showing the QLD spatial framework).

This process enabled each property (LINZ) parcel to be tagged with the appropriate attributes for calculations of plan enabled capacity and commercial feasibility. Associating these attributes and then analysing them spatially was a core component in identifying and capturing the important spatial relationships within the model that drive processes within the urban economy.

5.1.2 Establishing the Spatial Parameters for Infill and Greenfield Capacity

Analysis was then undertaken to determine whether parcels should be included within the infill (existing urban area) or greenfield (area of urban expansion) modelling process.

Infill development consists of both subdivision/land use consent development around the existing building stock and redevelopment of the existing building stock. The former includes the development of additional dwellings without any demolition of existing dwellings (e.g. an additional dwelling situated on a backyard area). The redevelopment process occurs where existing dwellings are demolished, and the site is redeveloped, typically to a greater intensity[84]. These two options for infill development are reported on separately within the result sections, forming a range of capacity.

Parcels within the existing urban boundaries, or those on the edge of urban areas that were subdivided into (or close to) their final suburban residential size, were classified as infill development. Greenfield parcels included all parcels within DP Special Zones and areas outside the existing urban edge that were still within the UGBs and study area.

There were some exceptions. Some larger parcels within existing urban areas were also included in the greenfield classification on the basis they would require significant conversions of land yield between the bulk (gross) area and final saleable parcel area at the same rate as greenfield land in areas of outward urban expansion[85]. In some cases, larger, un-subdivided parcels adjacent to or within the urban edge were classified as infill development on the basis of their size (smaller than large bulk areas of greenfield expansion) and proximity to existing infrastructure, because it was considered more appropriate to apply smaller rates of conversion (such as those within the infill model) to achieve final saleable areas.

Appendix 8 contains maps illustrating the final classification of urban parcels into greenfield or infill development within each of the UGBs. Parcels within structure plan areas or Special Zones containing information on development yields (supplied by QLDC based on landowner feedback) were included separately with individualised assessment of capacity for each area. In some cases, these included areas within the existing urban extent that were covered by structure plans.

The key stages in the GIS modelling to identify areas on each parcel to accommodate further infill dwellings within the existing urban areas is described in detail in Appendix 9. Parcels that were identified as greenfield

[84] Demolition costs and improvement values of existing dwellings form additional costs within the subsequent calculations of development feasibility with the redevelopment option.

[85] A large share of the bulk land used for subdivision is taken up by roads, reserves, road edges, etc, meaning the final saleable parcel area is substantially less than the geographical extent of the subdivision. In effect, these parcels represent areas of urban expansion within the existing bounded urban area.

(as described above and shown in Appendix 8) were not subject to such stringent GIS modelling as those which were identified as infill. This is due to the fact that the greenfield parcels identified were fully or mostly vacant. Identifying vacant areas on those parcels or applying site shape factors and accessibility tests was not required. Vacant greenfield parcels took a more direct route to the final stages of the plan enabled capacity modelling.

Parcels that fell within the boundaries of structure plan areas were also not assessed based on the GIS modelling process adopted for infill parcels. Structure plan parcels were identified as either vacant or not based on ratings data and building consents data. The total number of dwellings existing within the structure plan area was calculated and compared to Council-supplied estimates of total dwelling capacity in each zone. This information also took a direct route to the final stages of the plan enabled capacity modelling, as described below.

5.1.3 Final Stages of Plan Enabled Capacity Modelling

The GIS modelling identified the physical spaces able to accommodate additional dwellings within each parcel (whether infill or greenfield). Calculations were then applied to these spaces to determine the *number* of additional dwellings able to be accommodated.

Infill development in QLD can occur under the District Plan[86] either through:

- a subdivision process, whereby a section is subdivided and then a dwelling is constructed on the newly formed parcel, or
- a land use consent process whereby further dwellings are constructed prior to any subdivision (where the land may or may not then be subdivided).

The latter enables a greater density of dwellings through smaller minimum site size requirements[87].

Assumptions were agreed with QLDC on whether land was likely to be developed through a subdivision or land use consent process. Overall a more conservative approach has been adopted. These depended on the number of potential dwellings, the zone and whether the parcel was in an infill or greenfield location. All greenfield development was assumed to occur through a subdivision process reflecting the lower densities (relative to the land use provisions) typically experienced in the outer parts of the urban area. Infill development within existing urban areas was assumed to occur through a land use consent process, unless the threshold number of potential dwellings was reached, reverting the parcel instead to a subdivision process.

Parameters were applied within the model to determine the type of dwellings able to be constructed on each parcel. Depending upon the zone, parcels were either allocated standalone houses, duplexes/attached dwellings, apartments, or a multiple of these choices (i.e. where more than one dwelling type was tested for feasibility on the parcel).

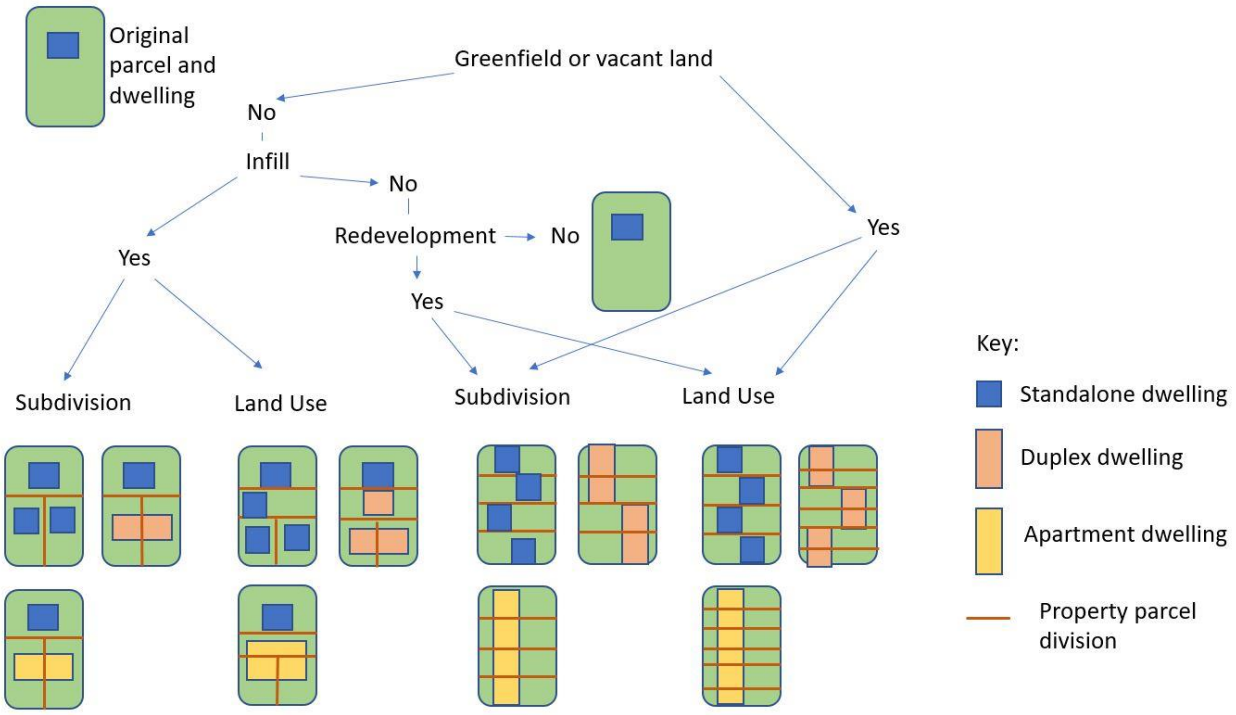
[86] This includes both the PDP and ODP. ODP zones have been used for non-stage 1 zones.

[87] This provision has been included within the QLDC PDP with a view to achieving more integrated developments that have better urban design outcomes, particularly within the higher density zones.

Additional parameters were applied to the assessment of capacity for standalone houses. A minimum site size, at or above the District Plan minimum provisions, was applied to reflect the additional space required to feasibly construct a detached dwelling. Minimum site size parameters were applied by spatial framework location to reflect the differences between the existing lower-end lot size delivered in each local market and the minimum PDP provisions[88].

The final outputs of this modelling identified the number of dwellings enabled on each property parcel under the District Plan (plan enabled capacity). It also identified the section size of each dwelling and the maximum size of the dwelling(s) by type (measured in square meters of gross floor area (GFA). Figure 5.1 summaries the decision framework applied to each parcel in the Model. It shows the potential development possibilities within each property parcel which are subsequently tested within the Commercial Feasibility Model.

Figure 5.1 – Development Possibilities for Capacity on Each Property Parcel



The capacity modelling takes account of existing residential flats, which occur primarily within standalone dwellings. These are treated as part of the existing dwelling as the planning provisions enable these to be

[88] In some cases, the minimum site sizes enabled under the PDP were substantially above the smallest section sizes the market has been delivering. GIS analysis was undertaken to identify, within each local area, the smallest section sizes the market was delivering. Where these were substantially greater than the minimum PDP provisions, they were instead used as a lower section size limit within the model. This had a conservative effect on the model's capacity outputs.

included within the same site parameters (i.e. additional site areas are not required for a residential flat as part of the existing dwelling)[89].

Plan enabled capacity for multiple dwellings on one site has been included in the modelling based on the development potential provided for within the District Plans. Capacity for new residential flats has not been included, despite the fact they are a permitted activity in the PDP (where residential activity is permitted (e.g. Residential Zones) or authorised by way of resource consent (e.g. Rural Zones)). While residential flats do provide some additional capacity, and are considered an important housing choice, they have not been included in the plan enabled modelling because, whilst every residential lot can be assumed to contain at least a single residential unit, the development of residential flats is less common, and subject to many variables including the layout and position of the dwelling on the property. Also, residential flats cannot be sold separately from the principal dwelling, and in many instances, they are used on an intermittent basis for visitor accommodation, home offices, for family members or private guests (or a combination of these).

For these reasons, it is considered inappropriate to rely on this type of accommodation for additional capacity but acknowledging that it does form an important and alternative residential accommodation.

Further investigation from the QLDC is required to understand the total numbers and the predominant use for residential flats. The development of flats is more common in an economic environment in which home ownership (or return on residential investments) is difficult, and additional income sources are desired. This appears to be relevant to the QLD market. Anecdotally, the construction of residential flats is increasing. However, a review of Council's rates database for the PDP review shows that there are approximately 63 registered residential flats in the Wanaka Ward and approximately 231 registered residential flats in the Wakatipu Ward, which equates to a district wide number of approximately 294. These numbers show that registered residential flats are a low-level supplier of overall housing capacity (or are under-recorded through current Council processes) and demonstrate why it is not appropriate to rely on residential flats to meet capacity requirements. It could also suggest that not all residential flats are being captured.

5.1.4 Cross Over with Business Capacity

Many of the district's business enabled zones also allow residential activity as a permitted or controlled activity. Generally, this is limited to above ground floors, with some exceptions (i.e. Frankton Flats B – Precinct C2). Council and M.E have agreed on estimates (Appendix 10) for the share of total enabled building envelopes in business zones that are likely to be taken up by residential apartments[90]. This was necessary to avoid over estimating residential or business capacity. The model then calculated the average number of floors within each area to be allocate to residential uses. This was converted into a multiplication factor (either below or above 1.0) to apply to the originally estimated residential capacity within each

[89] Analysis of building consent data shows that a large proportion of these have occurred through the conversion or extension of part of an existing dwelling thus requiring no changes to the building envelope or site shape factor requirements to accommodate any additional floorspace.

[90] An analysis of existing residential shares of floorspace in business zones was carried out. These were adjusted to reflect anticipated outcomes under the PDP provisions (whereby changes were made to some zones to encourage more residential development in business zones).

relevant zone within each area in total. It then reduced the number of storeys available for business capacity by subtracting the estimated residential floor take-up.

This process was used to ensure that residential capacity in the HDCA was not over stated in business zones (i.e., the share of total enabled building envelopes that was likely to be occupied by business activity (including visitor accommodation) was removed) or that business capacity was not over-stated by removing the residential allocation from the total business capacity estimates. Through this process, double counting of capacity between the BDCA and HDCA is avoided. The take up of different uses will need to be monitored and in built into the next HDCA.

Section 2.3.2 notes that commercial visitor accommodation capacity has not been removed from the High Density Residential Zone due to the timing of the release of Stage 2 of the PDP. The uptake of visitor accommodation in the High Density Residential Zone needs to be monitored and reported in the next HDCA.

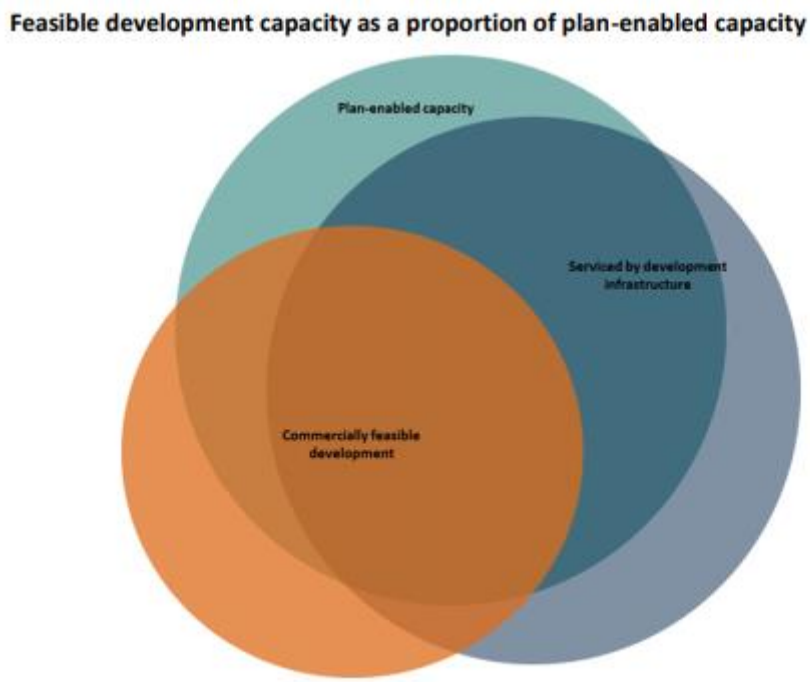
5.2 The Commercial Feasibility Model

5.2.1 Model Overview

The District Plan (ODP and PDP) provides capacity for dwellings through planning controls (referred to as 'plan enabled capacity'). The method used to quantify that plan enabled capacity has been summarised above. A large share, but not all, of this plan enabled capacity is currently commercially feasible or potentially feasible in the future. This is represented in the following diagram (Figure 5.2)[91].

[91] http://www.mfe.govt.nz/sites/default/files/media/Towns%20and%20cities/introductory-guide-on-the-nps-udc-nov-2016.pdf

Figure 5.2 – Plan Enabled, Serviced and Commercially Feasible Development Relationship[92]



Robust estimates of what capacity is feasible to develop in the short, medium and long-term are required under the NPS-UDC so that Council can more accurately understand whether the PDP and ODP (where relevant) provisions are appropriate to accommodate future dwelling demand within different locations across the District.

M.E's Commercial Feasibility Model takes the results from the plan enabled capacity modelling and estimates which areas are likely to be commercially feasible to develop, as well as which areas of the existing dwelling stock are likely to be commercially feasible to redevelop to accommodate a greater number of dwellings (i.e. through demolition and rebuilding).

In estimating commercial feasibility, the model considers:

- the costs of development,
- the likely sale price of the constructed dwelling, and
- the required profit margins.

It applies this framework to dwellings of a range of different sizes and typologies on each property parcel (based on what possibilities were identified for each parcel as a result of the developable area and the associated planning provisions). A dwelling enabled under the Plan is considered commercially feasible if the projected sales price outweighs the costs by a sufficient margin.

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92 http://www.mfe.govt.nz/publications/towns-and-cities/national-policy-statement-urban-development-capacity-guide-evidence

Importantly, commercial feasibility is likely to change through time. A growing urban economy, such as QLD, typically experiences growth in demand for dwellings as the population increases, flowing through to an increase in dwelling sales prices[93]. Increasing prices through time mean that greater numbers of dwellings become commercially feasible through time[94]. As such, the model estimates the number of dwellings of each type that are commercially feasible in different locations across QLD and at different points in time.

The model provides outputs at a parcel level to enable Council planners the flexibility to conduct planning assessment at the appropriate aggregations. For each parcel, it estimates the number of dwellings of each typology that are commercially feasible at each point in time[95]. This approach does not suggest that all parcels will be developed but estimates which are commercially feasible to develop.

5.2.2 Model Structure

Figure 5.3 provides a visual summary of the model structure. At a high level, the model receives a range of base parcel information from which it calculates the dwelling and section size parameters. It then estimates the costs associated with each potential dwelling development option (outlined in the previous section) and size, as well as the estimated sales price. These are compared within the model relative to a set required profit margin. A development option on a parcel is considered commercially feasible if the sale price exceeds the costs by at least the set profit margin of 20%.

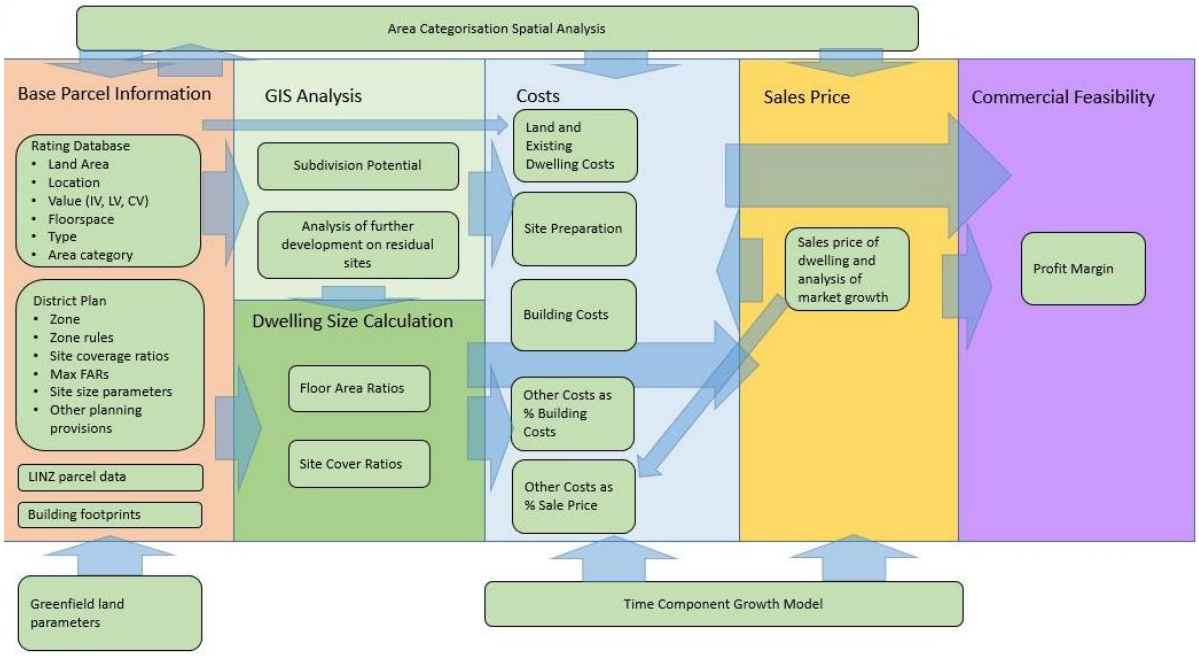
Further information on each of the components of the model is contained within Appendix 11.

[93] Growth in population demand increases the prices for dwellings as a function of location. Land in the same relative locations cannot be manufactured in response to demand, meaning that the relative position, and therefore price, of that location increases through time as the population grows. This process is a core driver of city intensification where demand growth in central areas of greater accessibility result in more intensive dwelling typologies (e.g. apartments) becoming feasible through time. Other factors such as income growth also drive growth in prices.

[94] This is observed empirically through city growth where cities expand incrementally through time in line with population growth. A key component is the increase in density that generally occurs in more accessible and higher value locations particularly within the inner urban areas, manifest in the uptake of different, higher density dwelling typologies.

[95] It is important to note that the model tests a range of different dwelling options on each site and presents results for each type tested. As such, estimates of dwellings of different typologies are not generally additive as the development on the site to one typology (e.g. full site developed into apartments) will preclude the development of the site to another typology (e.g. full site developed to single houses). In some cases, two dwelling types can fit on one site (e.g. duplexes on a subdivided portion and a single house on the residual site). The model produces an overall maximum dwelling count as well as individual dwelling typology options.

Figure 5.3 – QLD Residential Commercial Feasibility Model Structure



5.2.3 Model Outputs

The Commercial Feasibility Model provides outputs at the parcel level which are then aggregated up to totals for each local area and zone. It identifies the number of dwellings of each typology that are commercially feasible to construct on each property parcel in the short, medium and long-term.

The model identifies the estimated sales price of each commercially feasible dwelling. As the model tests a range of different dwelling types and sizes, there are often multiple dwellings, at different prices, which are commercially feasible on each parcel. This price information is important in understanding the nature of dwellings that are commercially feasible and how they align with the demand. Price is a key aspect of the demand profile for dwellings and therefore forms an important part of the sufficiency assessment of feasible capacity.

The results for residential dwelling capacity within QLD are discussed in the following sections. It begins by presenting the number of dwellings enabled within each area under the Plan (plan enabled capacity), then identifies the proportion of these dwellings that are commercially feasible to construct (commercially feasible capacity) in the short, medium and long-term. Importantly, the outputs show the potential range of options available to the market and should not be confused with estimates of growth. Monitoring by QLDC, together with future estimates of rates of change, will provide an indication of the level of take-up[96]

[96] Take up refers to the level of feasible capacity that is actually constructed by the market (or in some cases capacity that is constructed that is not commercially feasible, but is constructed based on other drivers, e.g. co-location with family). The commercially feasible capacity identifies all of the options for development within the area that are estimated to be commercially feasible to construct. The level of take-up will almost always be lower as it is a function of the level of demand (i.e. demand does not occur all at once, but gradually through time) and decisions by individual actors within the marketplace. In the latter, for example, it may be commercially feasible for a landowner to construct an additional dwelling on their property but they may choose not to as they prefer the use of their back yard.

of commercially feasible capacity by the market. Understanding the full range of options that are commercially feasible is an important part of understanding the role of the level of space provided in future growth outcomes.

5.2.4 Development Infrastructure

This section provides further detail on infrastructure needed to enable urban development. Development infrastructure (or network infrastructure) capacity is a key factor in determining if development capacity is feasible under the NPS (Figure 5.2).

"Development infrastructure" as defined in the NPS refers to the water supply, wastewater, storm water, and land transport networks (as defined in the Land Transport Management Act 2003, to the extent that it is controlled by local authorities) that are 'critical' for urban development; and "other infrastructure" refers to other 'softer' or non-critical infrastructure such as open space, social infrastructure, telecommunications and energy. Local authorities are required to ensure (under Policy A1) that the development capacity identified in this report is, or can be, serviced by "development infrastructure". However, the "other infrastructure" necessary to support urban growth is also important for the creation of effective and efficient urban environments, and together supports the achievement of social, economic, and cultural wellbeing.

Infrastructure service levels for water and waste water are included as criteria for both commercial visitor accommodation and Industrial development in the MCA structure. The feasibility of roading infrastructure is partially captured indirectly through criteria addressing traffic congestion and accessibility to major roads.

The high growth rates that QLD is experiencing require significant commitments to new development infrastructure and upgrades and consolidation of existing infrastructure. New or upgraded infrastructure can take a long time to plan, fund and implement. Intensification of existing urban areas has implications for the capacity, functioning and maintenance of existing networks, whereas areas of new greenfield growth require careful planning to ensure that infrastructure can be provided in an efficient manner and with regard to impacts on already planned infrastructure and long-term opportunities.

Infrastructure networks and growth need to be planned in an integrated manner to realise a range of long-term benefits over a wider area than specific development sites. Integration of urban development and infrastructure is central to the objectives of the NPS-UDC, and importantly, is a requisite for the development capacity identified in this assessment under Policy A1.

Policy A1 provides some scope for managing the risks associated with the oversupply of capacity by only requiring infrastructure to be in place in the short-term, to have funding identified in the medium-term and to be included in the Infrastructure Strategy in the long-term. QLDC planning and Infrastructure departments have worked closely together and are satisfied that all proposed zoned land can be serviced in the short, medium and long-term. This is further discussed below.

Servicing the PDP

As discussed in section 1.4.2, the HDCA has been based on the District Plan (PDP and ODP) zonings and provisions. The Strategic Direction Chapter of the PDP sets the overall direction for the management of growth, land use and development in a manner that ensures sustainable management of the District's

special qualities. The Urban Development Chapter sets out the objectives and policies for managing the spatial location and layout of urban development within the District. It builds on Goal 2 of the Strategic Directions and associated policy framework, being: *The strategic and integrated management of growth.* It also discourages ad hoc urban development in the Rural Zone. The critical part of QLDC's ongoing commitment to delivering on its obligations under the LGA is its ability to manage projected growth through integrated RMA planning that is aligned with infrastructure planning processes.

The development of the PDP, including the approach to zoning and the re-development opportunities within those zones, has been based on a strategy of achieving a compact urban development. UGBs have been applied to Queenstown, Wanaka and Arrowtown as a tool for promoting consolidation of urban development capacity and enabling increased intensification within the districts existing urban zones.

The development of the PDP zoning approach involved assessing the ability of QLDC reticulated networks to cater for the level of growth and intensification anticipated by the PDP. There are scheme boundaries for the water and wastewater networks, which define the limit of the schemes at present. These scheme boundaries are aligned with the defined UGBs of the PDP and are designed to service all the properties within, or partially within, the boundary lines, taking into account the zonings defined in the District Plans. The scheme boundaries define the geographic limit of council's planning and financing of reticulated development infrastructure. Therefore, there is a strong link between the PDP and Councils financial and infrastructure planning frameworks under the Long-Term Plan, Annual Plan, 30 year Infrastructure Strategy, and also the subsequent setting of the Development Contributions Policy in each financial year.

Throughout the PDP stage 1 hearings process it has been confirmed that the water supply and wastewater network can accommodate the additional growth proposed through the notified PDP and that significant unplanned expansions to these networks outside of the areas zoned for urban development of the PDP can be inefficient and problematic. The effect of wastewater and water demand from the increased densities in the PDP has been assessed against the Council's wastewater modelling capacity for both current day and future growth, 2025 and 2055[97]. This assessment included consideration to the currently available capacity to cater for the expected levels of intensification, as well as any upgrades that may become necessary over time.

Servicing key growth areas

Key growth areas identified in this assessment as having a significant portion of the available housing capacity are as follows:

- Queenstown Town Centre (including PC50);
- Frankton Flats;
- Remarkables Park;
- Jacks Point;
- Shotover Country;

[97] This modelling will be updated with the dwelling capacity scenarios contained in the HDCA in the near future.

- Kelvin Heights;
- Three Parks and Northlake; and
- Gorge Road Business Mixed Use Zone.

These areas are all within the Queenstown and Wanaka 'urban environment', UGB, and the water supply and wastewater scheme boundaries; and are therefore serviced, or planned to be serviced, with development infrastructure in the context of Policy A1. A number of these areas are within 'Special Zones' of the PDP, including Remarkables Park, Jacks Point, Frankton Flats and Three Parks. These special zones have defined capacities and associated parameters for the provision of servicing and transport infrastructure. Private infrastructure within these zones, such as internal road networks, provision of reserves and open space (if deemed necessary) and service connections are the responsibility of the developers.

The Jacks Point Special Zone is serviced by a combination of QLDC services and private schemes. In terms of waste water QLDC reticulated services are being brought as far south as the Jacks Point village area and has been designed to cater for approximately 1,800 residential units at Hanley Downs and 1,000 residential units at Jacks Point Village. In addition, Councils water scheme only extends as far south as Hanley Downs and will not service Jacks Point or Homestead Bay.

The Queenstown and Wanaka Town Centres are currently projected to have capacity for growth in the water supply and wastewater networks. Both wastewater networks have a diminishing level of redundancy in some critical assets and a programme of capital projects to improve the level of service in terms of redundancy is planned within the first five years of the proposed LTP.

Frankton Flats and Remarkables Park have targeted development contributions for Frankton Flats for stormwater. Frankton Flats area currently has marginal capacity in the water supply. A project to develop a new water source adjoining the Shotover River is underway and is planned to be supplying water to this growth area in 2019.

South and East Wanaka have sufficient water supply and wastewater capacity in place for the current zoning and growth rate. It is expected that this will be further improved by the implementation of Master Plan projects that will come out of the Wanaka Masterplan process, which is proposed for 2018.

Council are proposing significant investment in water quality projects throughout the 2018-2028 LTP in addition to localised water supply capacity issues that are discussed in this document. These water quality projects also require significant network reconfiguration and in some cases these capacity and quality projects are inter-related.

A number of servicing constraints exist within the Township zones. Some of these township zones are within the 'urban environment' as defined for the purpose of this assessment. These are discussed in detail below:

Albert Town

Albert Town is amalgamated with the Wanaka Water Supply and wastewater services. The Council is currently undertaking a detailed investigation of its water supply over the peak demand period as current modelling is indicating some shortfall of firefighting supply for commercial zoned areas. This shortfall is

thought to be due to faulty flow metering and demand prediction in this area. Testing is underway, and results will be understood in the near future. It is expected that this issue should not be significant enough to delay development to the current plan enabled capacity, which under the ODP provisions is limited, primarily as a result of servicing constraints. This zone provisions are to be reviewed under the PDP in 2019, and the outcomes of this water supply investigation will inform this process.

Minor issues with both the wastewater and stormwater are known to exist that will be formally investigated and remodelled during 2018. A recent wastewater network reconfiguration and drive to improve subdivision and building practices to protect the wastewater network, are hoped to have improved the situation.

Luggate

A new long-term proposal is planned to future proof provision of safe drinking water for Luggate and the neighbouring Wanaka airport supply scheme. Several options are being considered with the preferred solution involving the connecting up of these two separate schemes. The plans for water supply include:

- A new bore pump station to be constructed to service both Luggate and Wanaka Airport. Raw water from this source will be treated through UV disinfection and chlorine dosing to ensure full compliance with DWSNZ. Field tests are currently being undertaken to identify a suitable aquifer yielding site for the new production bores;
- A new reservoir to be located at Wanaka Airport whilst the original reservoirs in Luggate will also be retained;
- A new 4km pipeline to be constructed between Wanaka airport and Luggate; and
- The existing bore pump station to be decommissioned.[98]

The current water supply network only services the Luggate Holdings subdivision, and the water treatment plant remains in private ownership. The treatment plant has limited capacity. A Memorandum of Understanding with the developer is being drawn up in regards to vesting the treatment plant and also developing a long-term solution. The preferred option at this point is to pump to Project Pure as is done in Hawea.

The water and waste water schemes are programmed for the first three years of the 2018 LTP. Detailed design is already underway for the Luggate – Project Pure WWTP pumping system that will serve to convey wastewater from Luggate and allow the existing treatment plant to be decommissioned. Construction is planned to commence in the 2018/19 financial year.

The new water supply scheme is planned for construction over two years from 2019/20 – 2020/21.

[98] QLDC 2015-2045 Infrastructure Strategy

Hawea

A new Hawea bore pump station and treatment plant was installed and commissioned in 2015 that supplies Hawea with safe drinking water. The Council continues to invest further in this supply scheme in order to meet its strategic objectives relating to public drinking water supplies.

The Hawea wastewater plant currently does not have capacity to adequately treat effluent. The proposed solution is to construct a sewer pump station and pipeline to convey sewage from Hawea to the QLDC Project Pure wastewater treatment plant located adjacent to Wanaka airport. The pipeline would be approximately 12km in length and routed via Hawea flat before crossing the Clutha River and discharging into the existing Project Pure Waste Water Treatment Plant. This is forecast to take place by 2021. Planning works for this project are already underway.

Long Term Plan, Annual Plan and 30-year Infrastructure Strategy

The LTP 2015-2025, and Annual Plan 2016/2017, already cover major upgrades and renewals to cater for increased densities. QLDC is also currently consulting on the Annual Plan for 2017/2018, the 10 Year LTP (2018-2028) and the review of the 30-year Infrastructure Strategy (2015-2045), but due to timings have not been able to be incorporated into this HDCA. Future iterations of the HDCA will have better alignment with these processes.

Depending on the locations and scale of growth over a given period it is anticipated that upgrades to reticulated networks may become necessary to meet the plan enabled capacity of the PDP. The cyclical LTP and Annual Plan processes enables the reprioritising of works as necessary to meet demands. As decisions on Stage 1 of the PDP are now anticipated in the 2nd quarter of 2018, this process may allow additional capacity, not considered in this assessment (such as decisions on rezoning submissions) to be brought into the LTP process via submissions.

Transport

QLDC owns and operates transportation corridors (and associated support infrastructure, i.e. streetlights, signage etc.) to provide the community with safe and efficient access to their homes, schools, places of work, recreational areas and public services. These corridors also support the national, regional and local economy by enabling the efficient movement of goods and services and tourism.

QLDC is in a state of transition in how it operates its transportation network. This has been led by Local Government reforms, adoption, implementation and embedding of the One Network Road Classification as well as ensuring the continual upskilling of in-house resources to ensure capability, capacity and continuity. QLDC is moving from a legacy business model of 'operating transport infrastructure assets' to a proactive, evidence/ risk based, and outcome focused 'integrated transportation solution'[99].

Key transport related issues facing the district are increasing road congestion, reduced liveability, roads that do not cater well for all modes of travel, land use patterns and parking requirements that affect the affordability of housing and enable the dispersal of activities. The transport system has not been able to

[99] Source: Land Transport Activity Management Plan 2017

keep up with the exponential growth and only limited improvements have taken place since 2006[100]. Cars remain the dominant transport mode throughout the region. Installation of roads and connection to existing roads are undertaken at the expense of the developer, primarily at the subdivision stage.

QLDC is highly dependent on NZTA funding assistance for roads and the servicing and maintenance of state highways. The NZTA funds approximately 50% of all transport projects (with the exception of parking) and their support is critical to enabling the transport network growth needed to support growth.

The Council has also partnered with NZTA and ORC to offer a flat fare of $2 for all bus transport which commenced in early 2018. Monitoring of bus services has seen a doubling of its use since the introduction of the reduced fares, and this may increase over time as the routes and timetables are refined. The increasing uptake and feasibility for commuters using a bus service can affect decisions over locations of housing demand.

The strategic approach of the PDP is based on demand management and more enabling of public transport and its associated facilities, promoting choice in modes of transportation and integrated transport management. The PDP also seeks to enable mixed use and increased levels of development within areas that are deemed appropriate, the proposed Transport Chapter reduces parking requirements in areas that are deemed to be appropriate (i.e. areas that are within walking distance to town centres or services) and increasing the density of land use in the urban environment (this has included new zones such as the Medium Density Residential and the Business Mixed Use Zones).

Town Centre Projects

QLDC is leading a multi-disciplinary team to identify and address the challenges facing the Queenstown Town Centre via a masterplan, which is a significant body of work for 2019. Access to the Queenstown Town Centre is a major challenge with significant congestion on the arterial routes, very low use of public transport, inefficient parking and an ad hoc approach to passenger transport contributing to a very constrained and dysfunctional transport network. QLDC is undertaking a wide programme of projects that all form part of the Masterplan programme for the Queenstown Town Centre. This programme will bring together the following work programmes:

- Masterplan (spatial framework including public realm);
- Town Centre Arterial Routes;
- Public and Passenger Transport;
- Parking; and
- Community and Civic Facilities.

A large element of these projects is to recognise that transport is about the movement of people and freight, and the associated behavioural issues, such as mode choice. It is less about hard infrastructure and accommodating ever increasing levels of vehicles, as with historic approaches. Optimising growth areas for a variety of uses, requires more liveable residential subdivisions, working and community spaces that

[100] Queenstown Integrated Transport Programme Business Case

are served by integrated networks, whilst anticipating improvements in technology. These are central to the objectives of the NPS-UDC. It is noted that a similar project is proposed for Wanaka.

Of particular note is that the proposed arterial route improvements will play a crucial role in improving the town centre access while supporting integrated initiatives (such as the $2 bus fare) around parking reform, public realm upgrades and public and passenger transport. Access to and from the Queenstown Town Centre is heavily reliant on the state highway networks being the primary access in and out of the town.

The FDS (required by December 2018) will provide a vital next step in the integration between planning for future capacity, and the timing and sequencing of associated development and other infrastructure. This process will provide the opportunity to consider any implications of the PDP Stage 1 decisions as well as the outcomes of the LTP process, to achieve better ongoing alignment between land use planning and future infrastructure plans and strategies. This includes further integration with the Ministry of Education, Ministry of Health and the NZTA.

5.2.5 Other Infrastructure

Policy A2 of the NPS-UDC requires that local authorities, "shall satisfy themselves that other infrastructure required to support urban development are likely to be available". Key aspects of other infrastructure that are relevant to housing land include open space, community infrastructure, land transport, social infrastructure, telecommunications and energy. Land transport has been addressed above.

QLDC plays an important role in facilitating community development. QLDC is responsible for building and managing key public assets (e.g. roads, parks, community facilities) and delivering essential services (e.g. building and resource consents, community event facilitation). Integral to good Local Government and strong governance is an essential and vested interest in the social wellbeing of our community.

Council's response to the challenges and opportunities presented by rapid community and visitor growth, is set out in the Ten Year Plan 2018-28. This Ten Year Plan has a vision of: *Vibrant Communities, Enduring Landscapes, Bold Leadership*[101]. There are a range of community outcomes QLDC have identified to achieve this Ten Year Plan vision. In particular, the Community Services and Facilities outcomes:

- Efficient and effective community facilities
- Communities have a good standard of living and wellbeing
- Communities are inclusive for all
- Strong cultural landscape that inspires, preserves and celebrates our heritage, arts and culture
- Appropriate public access.

The QLDC manage over 2.084ha of parks and reserves from sports fields and neighbourhood playgrounds to natural areas, forests and lakefronts. The Parks and Open Space Strategy 2017 sets the direction of the

[101] Due to the timings of the release of the draft Ten Year Plan and the reporting of the NPS-UDC this was not able to be incorporated into this report and will form part of subsequent HDCA's.

types of open spaces and experience that the community should be able to access, the provision of open space in greenfield developments, development and use of existing open spaces, spending of development contributions, ecological and biodiversity protection and enhancement and acquisition aspirations. In addition, QLDC regularly undertakes satisfaction surveys on the Council's services and facilities. The most frequently used services in recent surveys are Trails, walkways and cycle ways, parks, reserves and gardens. Since 2010, over 80% of respondents have consistently been satisfied with these community services and facilities. The Target of the Council's LTP 2015-2025 is to have 85% of residents satisfied with the quality of parks and 95% satisfied with the quality of the trails[102].

The total provision of parks, reserves and open space needs to be balanced against the disproportionately higher number of visitors, the majority of whom come to participate in some form of outdoor recreation, and the high resident population growth. Much of the existing reserve land is under pressure from this growth. The steep topography of the region means that flat usable accessible land is also under pressure. Due to the proposed intensification that is being promoted within the PDP and the HASHAA, several existing urban areas are being targeted for increased levels of development. These areas are in walking distance from both the Queenstown and Wanaka Town Centres (including the proposed BMU zone and increased densities promoted in the High Density Residential Zone (including Gorge Road, Fernhill and Queenstown Hill).

The QLDC acknowledge that existing reserves in these areas will be subject to increased use, particularly along the BMU Zone (Gorge Road) where up to six storeys in height and the PC50 area in the Queenstown Town Centre (up to 26m in height permitted in some areas). Apartment style living relies heavily on good quality public space to provide the amenity and high-quality living standards for these residents. To promote housing affordability on brown field land the QLDC does not take reserve land contributions. However, reserve improvement development contributions are required to enhance the quality and the provision and quality of facilities in the nearby reserves.

In terms of greenfield developments, the provision of parks in these areas needs to be in accordance with the guidance contained within the Parks and Open Space Strategy 2017. This is to ensure that any proposed reserves are adequate and that the open space values and amenity of the local residents are enhanced or protected. The provision guidance also seeks to better integrate new reserves to existing trails and reserves and to the transport networks. It also sets a programme of a significant body of work in terms of parks and reserves. Overall, QLDC is considered to be well placed in terms of its provision for parks and reserves.

QLDC is committed to delivering high quality services that satisfy the growing expectations and needs of its community. At present there is no comprehensive data source or reporting mechanism that reflects the impact of growth on our community in relation to community facilities. As a result, QLDC is currently undertaking and is participating in various projects aimed at community facilities; including a Review of Community Groups and Community Facilities, Cultural Strategy and the Regional Sport & Recreational Strategy (working alongside the CODC and Sport Otago). These are all due to be released in the third quarter of 2018.

[102] Source: Parks and Open Space Strategy 2017.

It is considered that the provision of 'other infrastructure' that is outside of the control of QLDC is largely aligned with the PDP. No capacity or future supply issues were raised by these infrastructure providers (including telecommunications and energy infrastructure suppliers) throughout Stage 1 of the PDP process.

In terms of the provision of new schools, a new primary school is planned for Wanaka and the Wakatipu High School was opened at the start of 2018. QLDC work closely with the Ministry of Education regarding the future growth of the district and what this means for the provision of new schools and facilities associated with these. The QLDC often provide funding for the development of shared facilities such as new gyms, on the basis that these can be utilised by community groups after school hours. A recent example of this is the Shotover Country School gymnasium where QLDC provided additional funding for the construction of a full court, as opposed to a three quarter one. The courts are rented out to community groups at reduced rates. The Ministry of Education is also building in additional capacity in some schools throughout the district to cater for the increased roles, including new classrooms at the Arrowtown Primary School and the Mount Aspiring College. The Ministry of Education in collaboration with the QLDC is currently investigating future new school sites in Queenstown.

The Lakes District Hospital was established onsite in Frankton since 1989 and is the only hospital servicing the district. Various medical centres exist throughout Queenstown and Wanaka, with a new medical centre proposed as part of the Queenstown Country Club. In addition, Pacific Radiology has recently installed the districts first MRI scanner at Remarkables Park.

Overall, QLDC are satisfied that the 'other infrastructure' required to support urban development are likely to be available. Noting that QLDC is currently undertaking a number of projects to better understand the demand and use of some of these facilities.

5.3 Plan Enabled Capacity Results

In total, the PDP enables capacity for a further 27,000 dwellings within the District's three UGBs (Queenstown, Arrowtown and Wanaka) and a total of approximately 27,650 additional dwellings within the total defined urban environment (which includes Albert Town, Luggate and Hawea) (Table 5.1). This excludes redevelopment capacity and refers to subdivision/land use capacity where additional dwellings are constructed around the existing dwelling stock without removing existing dwellings.

Approximately two-thirds (67%) of the capacity enabled under the District Plans occurs within the greenfield areas of urban expansion. The plans enable 18,200 dwellings within the UGB greenfield areas[103], approximately two-thirds (67%; 12,200 dwellings) of which are included within areas where structure plans or subdivision plans exist (i.e. within Special Zones)[104]. Nearly three-quarters (72%; 13,100 dwellings) of these greenfield dwellings are enabled within the Queenstown UGB, with a further 28% (5,100 dwellings)

[103] This also includes larger integrated developments within the existing urban edges where a structure plan exists.

[104] These Special Zones include Jacks Point, Remarkables Park, Hanley Downs, Homestead Bay, PC46, PC50 (which is included in the greenfield section of the model given the presence of a structure plan and developer estimates on a large piece of land), Frankton Flats, Quail Rise, Shotover Country, Penrith Park, Meadow Park, Arrowtown South, Three Parks, The Heights, Riverside Township and Northlake.

within the Wanaka UGB (and only a further 20 dwellings within the Arrowtown UGB, which is contained solely in the Arrowtown South Special Zone).

The PDP enables just under 9,000 additional dwellings (i.e. additional to the existing dwelling stock, primarily from increased densities promoted in the PDP) through infill development (excluding redevelopment) within the existing urban areas within the UGBs and a further 240 in the rest of the urban environment (such as Albert Town, Luggate and Hawea). This is shown in column four of Table 5.1**Error! Reference source not found.** and refers to an aggregation across all parcels of the maximum number of additional dwellings enabled under the PDP as infill development[105]. Over half (59%; 5,200 dwellings) of these dwellings are enabled within the Queenstown UGB, with a further 40% (3,500 dwellings) within the Wanaka UGB, and the remaining 1% (110 dwellings) within the Arrowtown UGB. The capacity in Arrowtown is predominantly infill capacity from the increased densities promoted in the proposed Low Density Residential Zone.

Table 5.1 also shows the total number of dwellings enabled under the PDP within each dwelling typology (columns 1 to 3). Importantly, these numbers are not additive as some sites have more than one dwelling typology enabled, with development of one type precluding development of another. In total, the PDP potentially enables over 5,000 additional standalone houses, over half (54%) of which are within the Queenstown UGB. It potentially enables a further 7,500 duplex dwellings, and potentially a further 3,550 apartment dwellings. The Queenstown UGB contains higher shares of the enabled duplex (61%) and apartment dwellings (83%) than its share of standalone houses, reflecting the relatively higher density of development provided for within Queenstown.

Table 5.1 - Plan Enabled Capacity (dwellings) (Excluding Redevelopment)

AREA	Plan Enabled Capacity Infill			Infill Max Combination	Greenfields	Total Max Combination
	Standalone	Duplex	Apartments			
Queenstown Urban Growth Boundary	2,760	4,540	2,960	5,230	13,110	18,340
Wanaka Urban Growth Boundary	2,240	2,840	590	3,490	5,080	8,570
Arrowtown Urban Growth Boundary	80	110	-	110	20	130
Total within Urban Growth Boundaries	**5,070**	**7,490**	**3,550**	**8,820**	**18,210**	**27,030**
Areas Outside Urban Growth Boundaries	190	220	20	240	380	620
TOTAL	**5,260**	**7,710**	**3,570**	**9,060**	**18,590**	**27,650**

When taking into account redevelopment (i.e. demolishing and rebuilding on sites where dwelling position does not favour infill or where more intensive development could occur than through infill), the number of plan enabled additional dwellings enabled under the District Plans increases to a maximum of 37,600 dwellings within the UGBs or 38,400 dwellings across the total urban environment (where the highest combination of either subdivision/land use or redevelopment options on each site is included) (Table 5.2).

[105] Within the modelling, different numbers of dwellings are enabled on each site dependent upon the type of dwelling constructed. For example, a subdivided site may be able to accommodate four apartments, but only 2 standalone houses. The 'infill max combination' refers to the maximum combination of plan enabled dwellings that can occur through an aggregation of the maximum enabled dwellings on each site.

When including redevelopment options, around half of the additional plan enabled capacity occurs as infill development within the existing urban area.

The first three data columns of Table 5.2 show the redevelopment capacity (excluding subdivision/land use infill development) across each area. Queenstown UGB contains a slightly higher share of the redevelopment capacity (relative to subdivision/land use infill). In total, the PDP enables potential for a further 14,800 net additional standalone dwellings, potential for 16,900 duplex dwellings and potential for 7,000 apartment dwellings through redevelopment across the QLD urban environment.

The difference between subdivision/land use and redevelopment infill capacity is largest for standalone dwellings, relative to duplexes and apartments. This reflects the low density of existing development across much of the larger zones (e.g. low density residential) which cater for the greater share of standalone houses, and the higher density now enabled under the PDP. A lower ratio between redevelopment and subdivision/land use infill development for apartments suggests that existing densities within the main apartment zone areas (e.g. high density residential) are already higher on a relative basis where development patterns have been more intensive to date.

Table 5.2 - Plan Enabled Capacity (dwellings) (Including Redevelopment)

AREA	Plan Enabled Capacity Redevelopment			Infill Max Combination	Greenfields	Total Max Combination
	Standalone	Duplex	Apartments			
Queenstown Urban Growth Boundary	8,730	10,780	6,070	12,580	13,110	25,690
Wanaka Urban Growth Boundary	5,570	5,570	900	6,580	5,080	11,660
Arrowtown Urban Growth Boundary	190	190	-	190	20	210
Total within Urban Growth Boundaries	**14,480**	**16,530**	**6,970**	**19,360**	**18,210**	**37,570**
Areas Outside Urban Growth Boundaries	360	360	40	400	380	780
TOTAL	**14,840**	**16,890**	**7,010**	**19,760**	**18,590**	**38,350**

Table 5.3 (excluding redevelopment) and Table 5.4 (including redevelopment) provide a breakdown of the plan enabled capacity by zone within each of the UGBs and the areas in the rest of the urban environment[106].

When excluding redevelopment, nearly half (45%) of the maximum plan enabled capacity (Table 5.3, column 6) occurs within the Special Zones/Structure Plan areas. This is due to the large share of capacity occurring within greenfield areas - these zones and structure plan areas account for two-thirds of the greenfield capacity.

A high share of total capacity (37%; 9,900 dwellings) is also contained within the Low Density Residential Zone, reflecting the geographical extent of the zone. When excluding greenfield development, this zone accounts for nearly half (49%; 4,350 dwellings) of the infill subdivision/land use plan enabled capacity. Over one-quarter (28%; 2,500 dwellings) of the infill capacity occurs within the High Density Residential Zone, almost all of which is within the Queenstown UGB. This zone provides the largest source of capacity for apartment dwellings. Competing for this land is visitor accommodation both commercial and residential.

[106] Note, this summary does not provide detail of sub-zones and overlays (although provisions for those locations have been taken account of in the generation of these results in the model).

Residential visitor accommodation (i.e. visitor accommodation within residential dwellings) is appropriately captured within these capacity estimates as this share of visitor demand is correspondingly included within the demand assessment. Commercial visitor accommodation (i.e. motels, hotels, etc) is removed from the Low Density Residential zone capacity estimates through the exclusion of capacity within the Visitor Accommodation sub-zones. The impact of commercial visitor accommodation on the High Density Residential Zone needs to be explored further in the monitoring reports and the future HDCA.

Table 5.3 - Plan Enabled Capacity (dwellings) by PDP Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Plan Enabled Capacity Infill			Infill Max Combination	Greenfields	Total Max Combination
		Standalone	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	290	180	-	180
	Local Shopping Centre	-	-	50	50	-	50
	High Density Residential	980	2,130	2,130	2,130	110	2,240
	High Density Residential (Operative)	30	150	150	150	-	150
	Low Density Residential	1,630	2,100	-	2,100	3,260	5,360
	Medium Density Residential	130	160	-	170	330	500
	Rural Visitor	-	-	300	370	-	370
	Special Zone/Structure Plan Area	-	-	-	-	9,400	9,400
	Town Centre	-	-	40	90	-	90
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	130	160	-	160
	Local Shopping Centre	-	-	260	400	-	400
	High Density Residential	150	190	190	190	-	190
	Large Lot Residential	180	190	-	190	10	200
	Low Density Residential	1,660	2,160	-	2,160	2,280	4,440
	Medium Density Residential	150	210	-	210	-	210
	Special Zone/Structure Plan Area	-	-	-	-	2,790	2,790
	Town Centre	-	-	20	80	-	80
	Township (Operative)	90	100	-	90	10	100
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20
	Local Shopping Centre	-	-	-	-	-	-
	Low Density Residential	60	90	-	90	-	90
	Medium Density Residential	-	10	-	10	-	10
	Special Zone/Structure Plan Area	-	-	-	-	20	20
TOTAL UGB	**TOTAL UGB**	**5,070**	**7,510**	**3,560**	**8,840**	**18,210**	**27,050**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	20	20	-	20
	Low Density Residential	30	40	-	40	-	40
	Township (Operative)	160	180	-	180	380	560
TOTAL		**5,260**	**7,730**	**3,580**	**9,080**	**18,590**	**27,670**

When taking into account redevelopment, 80% (6,800 dwellings) of the plan enabled capacity occurs within the Low and High Density Residential Zones. The largest portion of this occurs within the Queenstown UGB, with relatively even numbers across the Low and High Density residential zones. Standalone houses and duplexes are the main focus of the Low Density Residential Zone, with the High Density Residential Zone providing for higher density development (apartments and duplexes) and a lower, albeit still substantial, number of standalone houses.

Approximately 12% of the infill capacity (including redevelopment) occurs within the zones where commercial activity is enabled, similar to the share of infill capacity excluding redevelopment. These zones contain about 22% of the capacity for apartment dwellings, with the bulk of apartments (69%) being enabled within the High Density Residential Zone.

Table 5.4 - Plan Enabled Capacity (dwellings) by PDP Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Plan Enabled Capacity Infill			Infill Max Combination	Greenfields	Maximum Combination
		Standalone	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	770	480	-	480
	Local Shopping Centre	-	-	200	200	-	200
	High Density Residential	2,290	4,080	4,080	4,080	110	4,190
	High Density Residential (Operative)	70	330	330	330	-	330
	Low Density Residential	6,000	6,000	-	6,050	3,260	9,310
	Medium Density Residential	360	360	-	370	330	700
	Rural Visitor	-	-	520	650	-	650
	Special Zone/Structure Plan Area	-	-	-	-	9,400	9,400
	Town Centre	-	-	170	430	-	430
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	240	300	-	300
	Local Shopping Centre	-	-	330	540	-	540
	High Density Residential	270	270	270	270	-	270
	Large Lot Residential	270	270	-	270	10	280
	Low Density Residential	4,590	4,590	-	4,600	2,280	6,880
	Medium Density Residential	310	310	-	310	-	310
	Special Zone/Structure Plan Area	-	-	-	-	2,790	2,790
	Town Centre	-	-	50	170	-	170
	Township (Operative)	130	130	-	120	10	130
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30
	Local Shopping Centre	-	-	-	-	-	-
	Low Density Residential	150	150	-	150	-	150
	Medium Density Residential	10	10	-	10	-	10
	Special Zone/Structure Plan Area	-	-	-	-	20	20
TOTAL UGB	**TOTAL UGB**	**14,480**	**16,530**	**6,960**	**19,360**	**18,210**	**37,570**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	40	40	-	40
	Low Density Residential	50	50	-	50	-	50
	Township (Operative)	310	310	-	310	380	690
TOTAL		**14,840**	**16,890**	**7,000**	**19,760**	**18,590**	**38,350**

5.4 Commercially Feasible Capacity Results

The plan enabled capacity results discussed above identify additional dwelling capacity, irrespective of whether development is commercially feasible to carry out. This section, considers what portion of plan enabled capacity is profitable to develop, having already determined that it will be serviced with (and not constrained by) the provision of development and other infrastructure. Like plan enabled capacity, commercially feasible capacity does not imply that development will take place – that is, growth or uptake of this capacity cannot be inferred from these calculations. Take-up may be influenced by such things as landowner preference, topography, and the ability to borrow at levels necessary to enable significant intensification. Further detail on the approach used in the feasibility modelling is addressed in Appendix 11 (refer also section 5.2 earlier).

5.4.1 Current (2016) Commercially Feasible Capacity

It is estimated there is currently (in 2016) commercially feasible capacity for an additional 16,850 dwellings within the QLD UGBs (Table 5.5) and commercially feasible capacity for an additional 17,100 dwellings across the total urban environment when excluding the potential for redevelopment. Approximately half of this capacity (51%; 8,700 dwellings) is estimated to be within the greenfield areas, with the bulk of the greenfield capacity (6,000 dwellings) within the Queenstown UGB. A key assumption is that only 30% of the special zone greenfield capacity is feasible in 2016, gradually rising to 100% by 2046. This is a deliberately conservative approach.

A further 8,100 dwelling options are estimated to be commercially feasible within the existing urban edge through subdivision/land use infill development (and without the need for any demolition and redevelopment). Within this, it is estimated there is currently capacity for 4,900 commercially feasible standalone houses, 6,000 duplex dwellings and 2,600 apartment dwellings (these are not additive).

Overall, approximately two-thirds (65%; 10,900 dwellings) of the commercially feasible capacity is estimated to occur within the Queenstown UGB[107]. The share is higher (79%) for infill apartment dwellings and lower for standalone houses (55%). A further 35% (5,800 dwellings) are estimated to be within the Wanaka UGB, with the remaining 1% within the Arrowtown UGB.

Overall, this equates to 62% of the plan enabled capacity being commercially feasible in 2016 (excluding redevelopment). The share within the existing infill areas is higher (92%), with greenfield areas within the urban environment estimated to be at 48% (being a weighted average outcome of the 30% assumption in 2016 for special zones and modelled outcomes for other greenfield areas). The share of capacity estimated to be commercially feasible is similar across all three UGBs. High dwelling sales prices are the main driver of the high levels of commercial feasibility.

Importantly, these figures identify the estimated total number of commercially feasible options, which is an important part of the basis for understanding the supply from the planning parameters. They are an aggregation of individual land parcels where dwellings are estimated to be commercially feasible to construct – i.e. the total number of commercially feasible options available to the market. They do not suggest that the market will, or is able to, deliver all of the dwellings that are estimated to be commercially feasible. For example, this assessment does not take account the effects of concentrated land ownership and land-banking. Monitoring by QLDC, together with future estimates of rates of change, will provide an indication of the level of 'take-up' of commercially feasible capacity by the market, which is likely to be much lower than the estimated commercially feasible capacity. If such a scenario becomes evident, and housing targets are compromised, a response must be initiated by Council under the NPS-UDC. The recommended scope of monitoring is discussed in section 6.7.

[107] In the absence of timing information from developers, a conservative assumption was applied to the greenfield structure plan areas. It was estimated that 30% of capacity in these areas is feasible currently, 45% in the short-term (to 2019), 80% in the medium-term (to 2026) and 100% in the long-term (to 2046).

Table 5.5 - 2016 Commercially Feasible Capacity for Additional Dwellings (Excl. Redevelopment)

AREA	Commercially Feasible Capacity Infill Subdivision Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	2,670	3,820	2,030	4,900	5,990	10,890
Wanaka Urban Growth Boundary	2,130	2,040	540	3,110	2,730	5,840
Arrowtown Urban Growth Boundary	80	110	-	100	10	110
Total within Urban Growth Boundaries	**4,880**	**5,970**	**2,570**	**8,120**	**8,730**	**16,850**
Areas Outside Urban Growth Boundaries	180	190	20	230	-	230
TOTAL	**5,060**	**6,160**	**2,590**	**8,350**	**8,730**	**17,080**
AREA	Share of PEC feasible Infill Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	97%	84%	69%	94%	46%	59%
Wanaka Urban Growth Boundary	95%	72%	92%	89%	54%	68%
Arrowtown Urban Growth Boundary	100%	100%	-	91%	50%	85%
Total within Urban Growth Boundaries	**96%**	**80%**	**72%**	**92%**	**48%**	**62%**
Areas Outside Urban Growth Boundaries	95%	86%	100%	96%	0%	37%
TOTAL	**96%**	**80%**	**73%**	**92%**	**47%**	**62%**

When redevelopment is taken into account the number of commercially feasible dwellings within the UGBs is estimated to be 24,200 dwellings (Table 5.6). The number of dwellings within the infill area (15,500 dwellings) is approximately double the number of additional dwellings estimated under the subdivision/land use only infill development scenario.

While still high, the share of plan enabled redevelopment capacity (data columns 1 to 3 in the lower half of Table 5.6) are lower for redevelopment capacity than infill through subdivision/land use (Table 5.5). It is estimated that approximately 60% of the plan enabled standalone houses are currently commercially feasible to construct. Slightly lower shares of the duplexes (58%) and apartments (55%) are estimated to be feasible, reflecting the lower demand and higher construction costs for higher density dwellings. Higher shares of the dwellings are commercially feasible within the Queenstown UGB than within the Wanaka UGB, demonstrating the higher prices within the Queenstown UGB.

When considering redevelopment, slightly higher shares of the capacity occur within the Queenstown UGB, reflecting the higher prices and greater potential for redevelopment within Queenstown relative to other areas of the district.

Table 5.6 - 2016 Commercially Feasible Capacity for Additional Dwellings (Incl. Redevelopment)

AREA	Commercially Feasible Capacity Infill Redevelopment Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	5,280	7,230	3,140	10,560	5,990	16,550
Wanaka Urban Growth Boundary	3,300	2,230	700	4,760	2,730	7,490
Arrowtown Urban Growth Boundary	160	160	-	160	10	170
Total within Urban Growth Boundaries	**8,750**	**9,620**	**3,840**	**15,480**	**8,730**	**24,210**
Areas Outside Urban Growth Boundaries	300	230	-	340	-	340
TOTAL	**9,050**	**9,850**	**3,840**	**15,820**	**8,730**	**24,550**
AREA	Share of PEC feasible Infill Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	60%	67%	52%	84%	46%	64%
Wanaka Urban Growth Boundary	59%	40%	78%	72%	54%	64%
Arrowtown Urban Growth Boundary	84%	84%	-	84%	50%	81%
Total within Urban Growth Boundaries	**60%**	**58%**	**55%**	**80%**	**48%**	**64%**
Areas Outside Urban Growth Boundaries	83%	64%	0%	85%	0%	44%
TOTAL	**61%**	**58%**	**55%**	**80%**	**47%**	**64%**

Table 5.7 and Table 5.8 show the distribution of currently commercially feasible dwellings by zone within the district's urban environment. High levels of commercial feasibility for infill subdivision/land use development are estimated across most zones (as a share of plan enabled capacity), with the highest levels for standalone houses.

Nearly half (47%; 3,900 dwellings) of the commercially feasible subdivision/land use infill capacity is estimated to occur within the Low Density Residential Zone, with similar numbers in both Queenstown and Wanaka UGBs. A further 29% of the capacity is estimated to be in the High Density Residential Zone, mostly within the Queenstown UGB.

When taking redevelopment into account, a higher share (56%; 8,600 dwellings) of the commercially feasible infill capacity is located within the Low Density Residential Zone, this time with higher numbers within the Queenstown UGB. This reflects the greater feasibility of redevelopment within Queenstown relative to Wanaka. A further quarter (25%; 3,850 dwellings) of the capacity occurs within the High Density Residential Zone, predominantly within the Queenstown UGB. Noting that further investigation of the uptake of sites for commercial visitor accommodation will need to be reported in monitoring reports and future HDCA's.

Table 5.7 - 2016 Feasible Capacity for New Dwellings by Zone (Excl. Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity			Max Infill	Greenfields	Total Max	Share of PEC feasible			Max Infill	Greenfields	Total Max
		Infill Subdivision						Infill					
		Standalone H	Duplex	Apartments				Standalone H	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	290	180	-	180	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	50	50	-	50	-	-	100%	100%	-	100%
	High Density Residential	960	2,020	1,260	2,060	110	2,170	98%	95%	59%	97%	100%	97%
	High Density Residential (Operative)	30	140	120	140	-	140	100%	93%	80%	93%	-	93%
	Low Density Residential	1,570	1,600	-	1,910	2,730	4,640	96%	76%	-	91%	84%	87%
	Medium Density Residential	120	70	-	140	330	470	92%	44%	-	82%	100%	94%
	Rural Visitor	-	-	280	350	-	350	-	-	93%	95%	-	95%
	Special Zone/Structure Plan Area	-	-	-	-	2,820	2,820	-	-	-	-	30%	30%
	Town Centre	-	-	30	80	-	80	-	-	75%	89%	-	89%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	120	150	-	150	-	-	92%	94%	-	94%
	Local Shopping Centre	-	-	220	340	-	340	-	-	85%	85%	-	85%
	High Density Residential	150	150	170	180	-	180	100%	79%	89%	95%	-	95%
	Large Lot Residential	170	40	-	180	10	190	94%	21%	-	95%	100%	95%
	Low Density Residential	1,590	1,640	-	1,940	1,890	3,830	96%	76%	-	90%	83%	86%
	Medium Density Residential	120	120	-	160	-	160	80%	57%	-	76%	-	76%
	Special Zone/Structure Plan Area	-	-	-	-	840	840	-	-	-	-	30%	30%
	Town Centre	-	-	20	70	-	70	-	-	100%	88%	-	88%
	Township (Operative)	90	100	-	100	-	100	100%	100%	-	111%	0%	100%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	60	80	-	80	-	80	100%	89%	-	89%	-	89%
	Medium Density Residential	-	10	-	10	-	10	-	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**4,870**	**5,990**	**2,560**	**8,140**	**8,730**	**16,870**	**96%**	**80%**	**72%**	**92%**	**48%**	**62%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	20	20	-	20	-	-	100%	100%	-	100%
	Low Density Residential	30	30	-	30	-	30	100%	75%	-	75%	-	75%
	Township (Operative)	150	160	-	170	-	170	94%	89%	-	94%	0%	30%
TOTAL		**5,050**	**6,180**	**2,580**	**8,360**	**8,730**	**17,090**	**96%**	**80%**	**72%**	**92%**	**47%**	**62%**

Table 5.8 - 2016 Feasible Capacity for New Dwellings by Zone (Incl. Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Redevelopment			Max Infill	Greenfields	Total Max	Share of PEC feasible Infill			Max Infill	Greenfields	Total Max
		Standalone H	Duplex	Apartments				Standalone H	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	710	440	-	440	-	-	92%	92%	-	92%
	Local Shopping Centre	-	-	150	160	-	160	-	-	75%	80%	-	80%
	High Density Residential	-	3,120	1,500	3,340	110	3,450	0%	76%	37%	82%	100%	82%
	High Density Residential (Operative)	-	250	220	280	-	280	0%	76%	67%	85%	-	85%
	Low Density Residential	5,070	3,790	-	5,290	2,730	8,020	85%	63%	-	87%	84%	86%
	Medium Density Residential	210	70	-	230	330	560	58%	19%	-	62%	100%	80%
	Rural Visitor	-	-	480	620	-	620	-	-	92%	95%	-	95%
	Special Zone/Structure Plan Area	-	-	-	-	2,820	2,820	-	-	-	-	30%	30%
	Town Centre	-	-	80	200	-	200	-	-	47%	47%	-	47%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	230	290	-	290	-	-	96%	97%	-	97%
	Local Shopping Centre	-	-	270	410	-	410	-	-	82%	76%	-	76%
	High Density Residential	-	110	180	230	-	230	0%	41%	67%	85%	-	85%
	Large Lot Residential	150	30	-	230	10	240	56%	11%	-	85%	100%	86%
	Low Density Residential	2,890	1,860	-	3,190	1,890	5,080	63%	41%	-	69%	83%	74%
	Medium Density Residential	140	120	-	200	-	200	45%	39%	-	65%	-	65%
	Special Zone/Structure Plan Area	-	-	-	-	840	840	-	-	-	-	30%	30%
	Town Centre	-	-	20	90	-	90	-	-	40%	53%	-	53%
	Township (Operative)	120	120	-	120	-	120	92%	92%	-	100%	0%	92%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	30	20	-	30	-	30	100%	67%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	130	120	-	130	-	130	87%	80%	-	87%	-	87%
	Medium Density Residential	10	10	-	10	-	10	100%	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**8,750**	**9,620**	**3,840**	**15,490**	**8,730**	**24,220**	**60%**	**58%**	**55%**	**80%**	**48%**	**64%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	-	20	-	20	-	-	0%	50%	-	50%
	Low Density Residential	50	40	-	50	-	50	100%	80%	-	100%	-	100%
	Township (Operative)	250	190	-	270	-	270	81%	61%	-	87%	0%	39%
TOTAL		**9,050**	**9,850**	**3,840**	**15,830**	**8,730**	**24,560**	**61%**	**58%**	**55%**	**80%**	**47%**	**64%**

5.4.2 Short-term (to 2019) Commercially Feasible Capacity

This section looks at what portion of plan enabled capacity would be feasible by 2019, based on projected cost and prices (2016-2019) as opposed to current (2016) costs and prices discussed above.

It is projected that QLD will have commercially feasible capacity for an additional 19,200 dwellings within its UGBs and 19,400 dwellings within the total urban environment in the short-term (to 2019) (Table 5.9), excluding the potential for redevelopment. It is estimated that over half (56%; 10,800 dwellings) will be within the greenfield areas, with 8,400 commercially feasible dwellings within existing urban areas.

Nearly two-thirds (65%; 12,400 dwellings) of this capacity is projected to occur within the Queenstown UGB. The share of capacity within the Queenstown UGB is slightly higher for greenfield development (68%; 7,400 dwellings), and lower for infill subdivision/land use development (60%; 5,000 dwellings). Within infill development, approximately 80% of the feasible apartment dwellings are projected to be within the Queenstown UGB.

Over one-third (35%; 6,700 dwellings) of the short-term feasible capacity is projected to occur within the Wanaka UGB. This share is higher for infill standalone houses, where 44% (2,200 dwellings) are projected to be within the Wanaka UGB. Arrowtown UGB accounts for the remaining 1% of commercially feasible capacity.

Overall, this equates to 71% of the plan enabled capacity being commercially feasible by 2019. The share within the existing infill areas is higher (95%), with greenfield areas estimated at 59%[108]. The share of capacity estimated to be commercially feasible is similar across all three UGBs (with higher shares of commercially feasible greenfield capacity within Wanaka UGB). High dwelling sales prices are the main driver of the high levels of commercial feasibility.

Again, these figures identify the estimated total number of commercially feasible options, which is an important part of the basis for understanding the supply from the planning parameters. They are an aggregation of individual land parcels where dwellings are estimated to be commercially feasible to construct – i.e. the total number of commercially feasible options available to the market. They do not suggest that the market will, or is able to, deliver all of the dwellings that are estimated to be commercially feasible (as there are a range of supply factors influencing take-up rates). Monitoring by QLDC, together with future estimates of rates of change, will provide an indication of the level of take-up of commercially feasible capacity by the market, which is likely to be much lower than the estimated commercially feasible capacity. This caveat applies to the following results also.

When taking redevelopment into account, it is projected there will be 27,000 dwellings that are commercially feasible to construct within QLD's UGBs (Table 5.10) in the short-term. It is estimated that infill development, including redevelopment, will account for 60% of the feasible capacity.

[108] A conservative approach has been adopted that only 45% of the capacity in the Special Zones are feasible in the short term, up from 30% in 2016.

Slightly higher shares of the feasible capacity are projected to occur in the Queenstown UGB (68%; 18,300 dwellings) compared to when redevelopment potential is excluded. This is due to the greater feasibility of redevelopment within Queenstown UGB.

Overall, it is projected that by 2019 65% of the standalone houses enabled under the plan will be commercially feasible (9,400 dwellings); 63% of the duplexes (10,500 dwellings); and 63% of the apartments (4,400 dwellings).

Table 5.9 - Short-term Feasible Capacity for New Dwellings (Excl. Redevelopment)

AREA	Commercially Feasible Capacity Infill Subdivision Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	2,700	4,080	2,230	5,010	7,400	12,410
Wanaka Urban Growth Boundary	2,180	2,430	560	3,270	3,410	6,680
Arrowtown Urban Growth Boundary	80	110	-	110	10	120
Total within Urban Growth Boundaries	**4,950**	**6,620**	**2,790**	**8,390**	**10,820**	**19,210**
Areas Outside Urban Growth Boundaries	180	200	20	230	-	230
TOTAL	**5,130**	**6,820**	**2,810**	**8,620**	**10,820**	**19,440**
AREA	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	98%	90%	75%	96%	56%	68%
Wanaka Urban Growth Boundary	97%	86%	95%	94%	67%	78%
Arrowtown Urban Growth Boundary	100%	100%	-	100%	50%	92%
Total within Urban Growth Boundaries	**98%**	**88%**	**79%**	**95%**	**59%**	**71%**
Areas Outside Urban Growth Boundaries	95%	91%	100%	96%	0%	37%
TOTAL	**98%**	**88%**	**79%**	**95%**	**58%**	**70%**

Table 5.10 - Short-term Feasible Capacity for New Dwellings (Including Redevelopment)

AREA	Commercially Feasible Capacity Infill Redevelopment Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	5,540	7,640	3,630	10,900	7,400	18,300
Wanaka Urban Growth Boundary	3,730	2,700	760	5,150	3,410	8,560
Arrowtown Urban Growth Boundary	170	160	-	170	10	180
Total within Urban Growth Boundaries	**9,440**	**10,490**	**4,380**	**16,220**	**10,820**	**27,040**
Areas Outside Urban Growth Boundaries	310	260	20	350	-	350
TOTAL	**9,750**	**10,750**	**4,400**	**16,570**	**10,820**	**27,390**
AREA	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	63%	71%	60%	87%	56%	71%
Wanaka Urban Growth Boundary	67%	48%	84%	78%	67%	73%
Arrowtown Urban Growth Boundary	89%	84%	-	89%	50%	86%
Total within Urban Growth Boundaries	**65%**	**63%**	**63%**	**84%**	**59%**	**72%**
Areas Outside Urban Growth Boundaries	86%	72%	50%	88%	0%	45%
TOTAL	**66%**	**64%**	**63%**	**84%**	**58%**	**71%**

Appendix 12 shows the distribution of currently commercially feasible dwellings by zone within the district's UGBs and in the rest of the urban environment at as 2019. High levels of commercial feasibility for infill subdivision/land use development are estimated across most zones (as a share of plan enabled capacity), with the highest levels for standalone houses.

Similar patterns by zone exist in the short-term, where nearly half (49%; 4,100 dwellings) of the commercially feasible subdivision/land use infill capacity is estimated to occur within the Low Density Residential Zone, with similar numbers in both Queenstown and Wanaka UGBs. A further 28% of the capacity is estimated to be in the High Density Residential Zone, mostly within the Queenstown UGB.

When taking redevelopment into account[109], a higher share (56%; 9,100 dwellings) of the commercially feasible infill capacity in 2019 is located within the Low Density Residential Zone, this time with higher numbers within the Queenstown UGB. This reflects the greater feasibility of redevelopment within Queenstown relative to Wanaka[110]. A further quarter (24%; 3,950 dwellings) of the capacity occurs within the High Density Residential Zone, predominantly within the Queenstown UGB.

5.4.3 Medium-term (to 2026) Commercially Feasible Capacity

This section looks at what portion of plan enabled capacity would be feasible by 2026, based on projected cost and prices (2016-2026) as opposed to current (2016) or short-term costs and prices discussed above.

It is projected that QLD will have commercially feasible capacity for an additional 23,900 dwellings within its UGBs and 24,200 dwellings within the total urban environment in the medium-term (to 2026) (Table 5.11), excluding the potential for redevelopment. It is estimated that nearly two-thirds (64%; 15,200 dwellings) will be within the greenfield areas, with 8,600 commercially feasible dwellings within existing urban areas. This represents a net increase of only 200 additional feasible dwellings within the existing urban area between the short and medium-term. This is due to the high shares of capacity within the short-term that are already projected to be commercially feasible within the short-term. Consequently, it is projected that the main increases in feasible capacity between the short and medium-term will occur within the greenfield areas.

Approximately two-thirds (66%; 15,800 dwellings) of this capacity is projected to occur within the Queenstown UGB. The share of capacity within the Queenstown UGB is slightly higher for greenfields development (70%; 10,700 dwellings), and lower for infill subdivision/land use development (59%; 5,100 dwellings). Within infill development, approximately 82% of the feasible apartment dwellings are projected to be within the Queenstown UGB, compared with 54% of standalone houses.

One-third (33%; 7,900 dwellings) of the medium-term feasible capacity is projected to occur within the Wanaka UGB. This share is higher for infill standalone houses, where 44% (2,200 dwellings) are projected to be within the Wanaka UGB. Arrowtown UGB accounts for the remaining 1% of commercially feasible capacity.

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[109] The redevelopment scenario captures dwelling age through the Improvement Value (IV) required to be purchased (and then demolished) as one of the construction costs. The model is conservative in that it does not depreciate the IV through time.

[110] This is detailed in Appendix 11.

Overall, this equates to 88% of the plan enabled capacity being commercially feasible by 2026. The share within the existing infill areas is higher (98%), with greenfield areas estimated at 84%. The share of capacity estimated to be commercially feasible is similar across all three UGBs (with higher shares of commercially feasible greenfield capacity within Wanaka UGB). High dwelling sales prices are the main driver of the high levels of commercial feasibility.

When taking redevelopment into account, QLD is projected to have 32,700 additional dwellings that are commercially feasible to construct within the medium-term (33,300 additional dwellings across the total urban environment, Table 5.12). Under the redevelopment scenario, over half (53%; 17,500 dwellings) of these are projected to occur within the existing urban area.

Overall, when considering redevelopment, it is estimated that 68% of the feasible capacity will occur within Queenstown UGB, 32% in Wanaka UGB, and the remaining 1% within Arrowtown UGB. Similar to the current situation and short-term, a higher share (84%; 4,500 dwellings) of the apartment dwellings are estimated to occur within the Queenstown UGB.

Table 5.11 - Medium-term Feasible Capacity for New Dwellings (Excl. Redevelopment)

AREA	Commercially Feasible Capacity Infill Subdivision Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	2,710	4,320	2,730	5,100	10,700	15,800
Wanaka Urban Growth Boundary	2,210	2,730	590	3,430	4,510	7,940
Arrowtown Urban Growth Boundary	80	110	-	100	20	120
Total within Urban Growth Boundaries	**5,000**	**7,160**	**3,320**	**8,630**	**15,230**	**23,860**
Areas Outside Urban Growth Boundaries	190	210	20	230	150	380
TOTAL	**5,190**	**7,370**	**3,340**	**8,860**	**15,380**	**24,240**
AREA	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	98%	95%	92%	98%	82%	86%
Wanaka Urban Growth Boundary	99%	96%	100%	98%	89%	93%
Arrowtown Urban Growth Boundary	100%	100%	-	91%	100%	92%
Total within Urban Growth Boundaries	**99%**	**96%**	**94%**	**98%**	**84%**	**88%**
Areas Outside Urban Growth Boundaries	100%	95%	100%	96%	39%	61%
TOTAL	**99%**	**96%**	**94%**	**98%**	**83%**	**88%**

Table 5.12 - Medium-term Feasible Capacity for New Dwellings (Including Redevelopment)

AREA	Commercially Feasible Capacity Infill Redevelopment Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	5,810	8,530	4,510	11,440	10,700	22,140
Wanaka Urban Growth Boundary	4,530	3,590	840	5,890	4,510	10,400
Arrowtown Urban Growth Boundary	170	160	-	170	20	190
Total within Urban Growth Boundaries	**10,510**	**12,270**	**5,340**	**17,510**	**15,230**	**32,740**
Areas Outside Urban Growth Boundaries	340	330	40	370	150	520
TOTAL	**10,850**	**12,600**	**5,380**	**17,880**	**15,380**	**33,260**
AREA	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	67%	79%	74%	91%	82%	86%
Wanaka Urban Growth Boundary	81%	64%	93%	90%	89%	89%
Arrowtown Urban Growth Boundary	89%	84%	-	89%	100%	90%
Total within Urban Growth Boundaries	**73%**	**74%**	**77%**	**90%**	**84%**	**87%**
Areas Outside Urban Growth Boundaries	94%	92%	100%	93%	39%	67%
TOTAL	**73%**	**75%**	**77%**	**90%**	**83%**	**87%**

Appendix 13 shows the distribution of medium-term commercially feasible dwellings by zone within the district's urban environment. High levels of commercial feasibility for infill subdivision/land use development are estimated across most zones (as a share of plan enabled capacity), with the highest levels for standalone houses. Over the medium-term, higher shares of the plan enabled capacity for higher density dwelling typologies (duplexes and apartments) are projected to become commercially feasible as demand for different types of dwellings grows.

Similar patterns by zone exist to the short-term, where nearly half (49%; 4,300 dwellings) of the commercially feasible subdivision/land use infill capacity is estimated to occur within the Low Density Residential Zone, with similar numbers in both Queenstown and Wanaka UGBs. A further 28% of the capacity is estimated to be in the High Density Residential Zone, mostly within the Queenstown UGB.

When taking redevelopment into account, a higher share (57%; 9,900 dwellings) of the commercially feasible infill capacity is located within the Low Density Residential Zone in the medium-term. The largest net increase in commercially feasible dwellings within this zone between the short and medium-term is projected to occur within the Wanaka UGB. A further quarter (24%; 4,200 dwellings) of the capacity occurs within the High Density Residential Zone, predominantly within the Queenstown UGB.

5.4.4 Long-term (to 2046) Commercially Feasible Capacity

This section looks at what portion of plan enabled capacity would be feasible by 2046, based on projected cost and prices (2016-2046) as opposed to current (2016) or short and medium-term costs and prices discussed above.

It is projected that QLD will have commercially feasible capacity for an additional 26,900 dwellings within its UGBs and 27,500 dwellings within the urban environment overall in the long-term (to 2046) (Table 5.13), excluding the potential for redevelopment. It is estimated that over two-thirds (68%; 18,200 dwellings) will be within the greenfield areas, with 8,700 commercially feasible dwellings within existing urban areas.

Similar to the medium-term, this suggests the largest increases in feasible capacity between the medium and long-term are projected to occur in the district's greenfield areas. This is due to the high shares of capacity within the short and medium-term that are already projected to be commercially feasible.

Approximately two-thirds (68%; 18,250 dwellings) of this long-term capacity is projected to occur within the Queenstown UGB. The share of capacity within the Queenstown UGB is slightly higher for greenfields development (72%; 13,100 dwellings), and lower for infill subdivision/land use development (59%; 5,100 dwellings). Within infill development, approximately 83% of the feasible apartment dwellings are projected to be within the Queenstown UGB, compared with 54% of standalone houses.

Around one-third (32%; 8,550 dwellings) of the long-term feasible capacity is projected to occur within the Wanaka UGB. This share is higher for infill standalone houses, where 44% (2,200 dwellings) are projected to be within the Wanaka UGB. Arrowtown UGB accounts for the remaining 0.5% of commercially feasible capacity.

Overall, almost 100% of the plan enabled capacity is projected to be commercially feasible in the long-term. The share of capacity estimated to be commercially feasible is similar across all three UGBs. High dwelling sales prices (relative to costs) are the main driver of the high levels of commercial feasibility.

When taking redevelopment into account (Table 5.14), it is projected there will be 36,500 dwellings that are commercially feasible to construct within QLD's UGBs and 37,300 dwellings in the total urban environment in the long-term – a net increase of 3,800 dwellings from the medium-term. It is estimated that infill development, including redevelopment, will account for half (50%) of the feasible capacity.

Table 5.13 - Long-term Feasible Capacity for New Dwellings (Excl. Redevelopment)

AREA	**Commercially Feasible Capacity** Infill Subdivision Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	2,740	4,410	2,840	5,140	13,110	18,250
Wanaka Urban Growth Boundary	2,220	2,820	590	3,470	5,080	8,550
Arrowtown Urban Growth Boundary	80	110	-	110	20	130
Total within Urban Growth Boundaries	**5,040**	**7,330**	**3,430**	**8,710**	**18,210**	**26,920**
Areas Outside Urban Growth Boundaries	190	220	20	240	380	620
TOTAL	**5,230**	**7,550**	**3,450**	**8,950**	**18,590**	**27,540**
AREA	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	99%	97%	96%	98%	100%	100%
Wanaka Urban Growth Boundary	99%	99%	100%	99%	100%	100%
Arrowtown Urban Growth Boundary	100%	100%	-	100%	100%	100%
Total within Urban Growth Boundaries	**99%**	**98%**	**97%**	**99%**	**100%**	**100%**
Areas Outside Urban Growth Boundaries	100%	100%	100%	100%	100%	100%
TOTAL	**99%**	**98%**	**97%**	**99%**	**100%**	**100%**

Table 5.14 - Long-term Feasible Capacity for New Dwellings (Incl. Redevelopment)

AREA	Commercially Feasible Capacity Infill Redevelopment Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	5,950	9,320	5,060	11,780	13,110	24,890
Wanaka Urban Growth Boundary	5,060	4,450	880	6,370	5,080	11,450
Arrowtown Urban Growth Boundary	170	170	-	180	20	200
Total within Urban Growth Boundaries	**11,180**	**13,930**	**5,930**	**18,320**	**18,210**	**36,530**
Areas Outside Urban Growth Boundaries	350	340	40	390	380	770
TOTAL	**11,530**	**14,270**	**5,970**	**18,710**	**18,590**	**37,300**
AREA	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	68%	86%	83%	94%	100%	97%
Wanaka Urban Growth Boundary	91%	80%	98%	97%	100%	98%
Arrowtown Urban Growth Boundary	89%	89%	-	95%	100%	95%
Total within Urban Growth Boundaries	**77%**	**84%**	**85%**	**95%**	**100%**	**97%**
Areas Outside Urban Growth Boundaries	97%	94%	100%	98%	100%	99%
TOTAL	**78%**	**84%**	**85%**	**95%**	**100%**	**97%**

Overall, it is projected that 97% of the plan enabled capacity, including redevelopment, will be commercially feasible in the long-term. Within the redevelopment capacity the projected shares are lower[111].

It is projected that by 2046 77% of the standalone houses enabled under the plan will be commercially feasible (11,200 dwellings); 84% of the duplexes (13,900 dwellings); and 85% of the apartments (5,900 dwellings). In the long-term, higher shares of the higher density dwelling typologies are projected to be commercially feasible as demand for these types of dwellings grows. The share of commercially feasible standalone houses is limited in the medium to long-term by the higher cost of land which can be spread across fewer dwellings.

Appendix 14 shows the distribution of currently commercially feasible dwellings by zone within the district's UGBs. High levels of commercial feasibility for infill subdivision/land use development are estimated across most zones (as a share of plan enabled capacity), with the highest levels for standalone houses for infill subdivision/land use development, and for the higher density dwelling typologies for redevelopment infill. Over the long-term, higher shares of the plan enabled capacity for higher density dwelling typologies (duplexes and apartments) are projected to become commercially feasible as demand for different types of dwellings grows.

Similar patterns by zone exist to the short and medium-term, where nearly half (49%; 4,300 dwellings) of the commercially feasible subdivision/land use infill capacity is estimated to occur within the Low Density Residential Zone, with similar numbers in both Queenstown and Wanaka UGBs. A further 28% of the capacity is estimated to be in the High Density Residential Zone, mostly within the Queenstown UGB.

[111] The overall 'max infill' share (column 4 in the table) of capacity as commercially feasible is higher than the shares for individual dwelling typologies. This is because the max infill share represents the maximum density of commercially feasible dwellings on each site and therefore includes both redevelopment and subdivision/land use development options.

When taking redevelopment into account, a higher share (57%; 10,400 dwellings) of the commercially feasible infill capacity is located within the Low Density Residential Zone in the long-term. Similar to the medium-term, the largest net increase in commercially feasible dwellings within this zone between the medium and long-term is projected to occur within the Wanaka UGB. A further quarter (24%; 4,400 dwellings) of the capacity occurs within the High Density Residential Zone, predominantly within the Queenstown UGB.

5.5 Price Distribution of Commercially Feasible Capacity

The Commercial Feasibility Model calculates the dwelling sales price(s) at which a dwelling is estimated to be commercially feasible to construct on each parcel. It is important to understand the price distribution of the feasible dwelling capacity as price is an important consideration in the sufficiency of capacity in meeting demand under the NPS-UDC.

As the model tests a range of different dwelling typologies and sizes, there are often multiple dwellings, at different prices, which are commercially feasible on each parcel. Three scenarios have been developed where the model selects *one* commercially feasible option on each parcel to provide a total number of feasible dwellings within each price band without double counting the number of feasible dwellings.

The feasibility scenarios include:

i. The Maximum Profit Scenario where the market is assumed to be driven the largest profit margin. Here, the model selects, out of the commercially feasible options, the combination of dwelling size and typology on each parcel that delivers the greatest profit margin.

ii. The Maximum Dwelling Scenario where the market is assumed to be driven by providing the largest number of dwellings on each parcel. Here, the model selects, out of the commercially feasible options, the combination of dwelling size and typology on each parcel that delivers the greatest number of dwellings.

iii. The Cheapest Dwelling Scenario where the market is assumed to be driven by providing the cheapest commercially feasible dwellings. Here, the model selects, out of the commercially feasible options, the combination of dwelling size and typology on each parcel that has the cheapest estimated sales price.

The scenarios provide a range of results within which to assess the sufficiency of capacity. These are presented within the following tables for each of the UGBs within the district. The results presented in this section are based on the outputs of additional future feasible capacity from the Commercial Feasibility Model and thus represent the net addition to the dwelling stock. These are combined with the total existing dwelling stock within the assessment of sufficiency as it is important to consider the gross supply and demand when assessing sufficiency given the large amount of movement of people within the dwelling stock. All sales prices are presented in $2016 values.

5.5.1 Current (2016) Commercial Feasibility by Price Bracket

Figure 5.4 shows the price distribution of additional dwellings that are estimated to be currently commercially feasible within the district's UGBs for each of the three scenarios[112]. Each scenario delivers different numbers of dwellings given the differences in the range of potential dwelling options on each property parcel. The maximum dwellings scenario has the largest number of additional dwellings (24,000 dwellings), followed by the cheapest dwellings scenario (23,500 dwellings) and the maximum profit scenario with the least dwellings (21,300 dwellings).

The price distribution under the cheapest dwelling scenario differs to the maximum profit and maximum number of dwellings scenarios where it has a higher share of feasible dwellings within the mid-price brackets. Nearly three-quarters (72%) of the feasible dwellings within the cheapest price scenario have an estimated sales price less than $880,000.

Greater similarity in the price distribution exists between the maximum dwellings and maximum profit scenarios. In each of these scenarios, only one-quarter (24%) of the feasible dwellings have an estimated sales price of less than $880,000. Around 60 to 65% of the dwellings within these scenarios have an estimated sales price within the mid to higher price brackets ($730,000 to $1.17m), and a cluster of dwellings (26%-28%) within the higher price brackets of $1.31m to $1.75m. The maximum profit scenario has a slightly higher share of dwellings within the higher price brackets than the maximum dwellings scenario.

[112] For brevity, the price distribution of additional dwellings that are estimated to be commercial feasible in 2016 and in the short, medium and long-term in the areas outside the UGBs but inside the urban environment (i.e. Hawea, Luggate and the Low Density Residential Zone in Lake Hayes) have been excluded. These results have however been provided to Council separately from this report.

Figure 5.4 – 2016 Commercially Feasible Dwellings by Price Bracket within UGBs

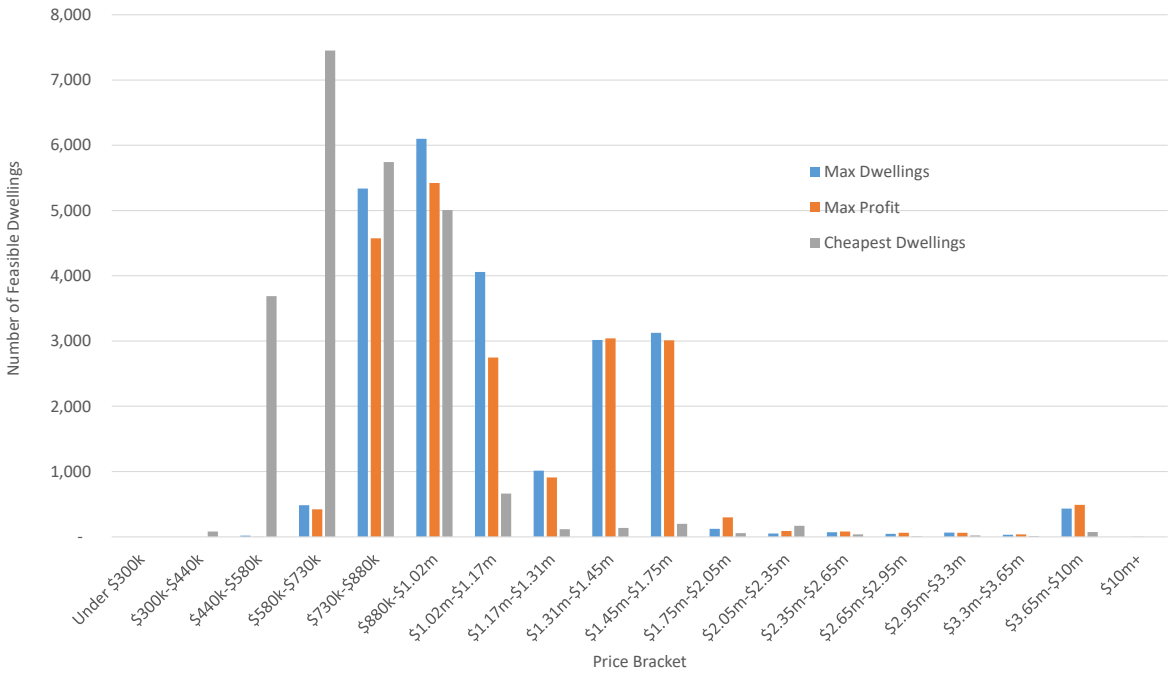
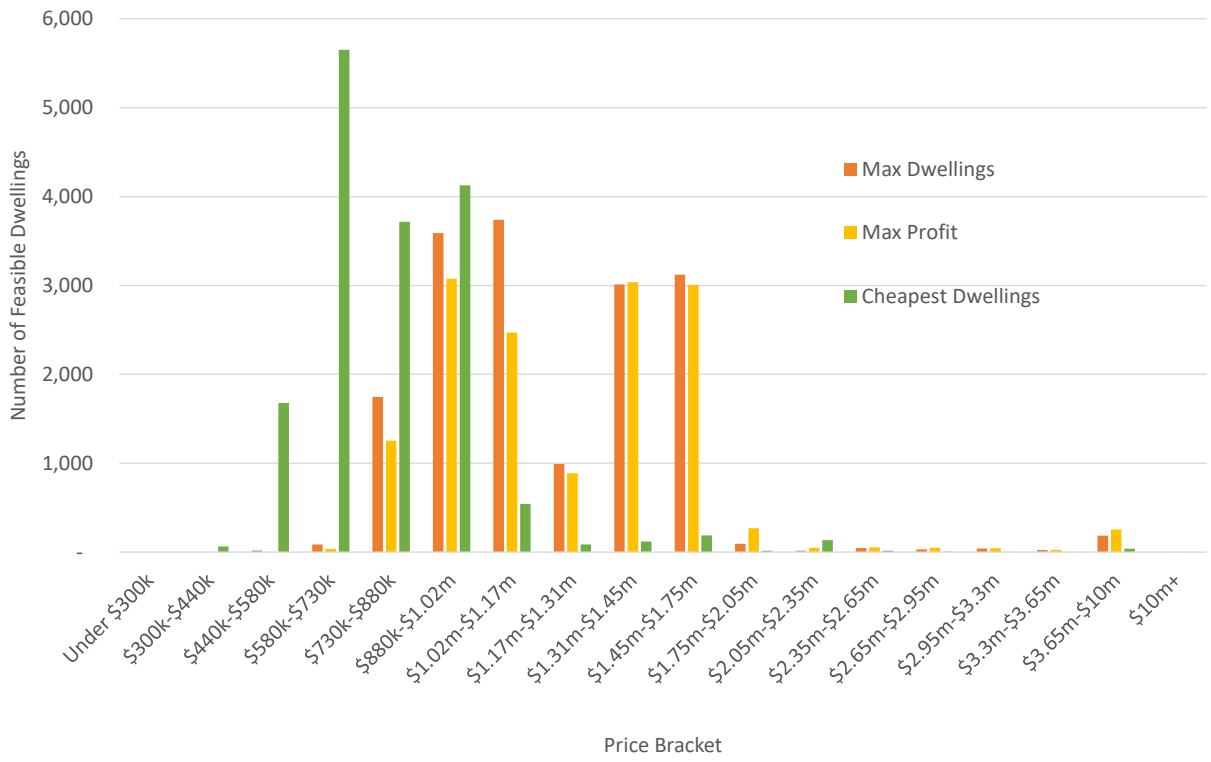


Figure 5.5 shows the price distribution of feasible dwellings for each of the scenarios within the Queenstown and Arrowtown UGBs combined (i.e. Wakatipu UGBs). Approximately two-thirds (67%) of the dwellings within the cheapest price scenario, are within the mid to mid-higher price brackets ($440,000 to $880,000), with a further quarter of the dwellings in the $880,000 to $1.02m price bracket.

Contrastingly, under the maximum profit scenario, only 9% of feasible dwellings are within the mid to mid-higher price brackets. Under this scenario, 38% of dwellings are within the higher price brackets of $880,000 to $1.17m, and 42% within the $1.31m to $1.75m price bracket. Overall, 70% of the dwellings within this scenario are estimated to be over $1.02m.

The maximum dwellings scenario has a slightly lower price distribution than the maximum profit scenario, but with a distribution considerably closer to the maximum profit scenario than the cheapest dwelling scenario. Under this scenario, only 11% of the dwellings are estimated to be within the mid to mid-higher price brackets ($440,000 to $880,000). Approximately two-thirds (67%) of the dwellings are estimated to be above $1.02m.

Figure 5.5 - 2016 Commercially Feasible Dwellings by Price Bracket within Wakatipu UGBs

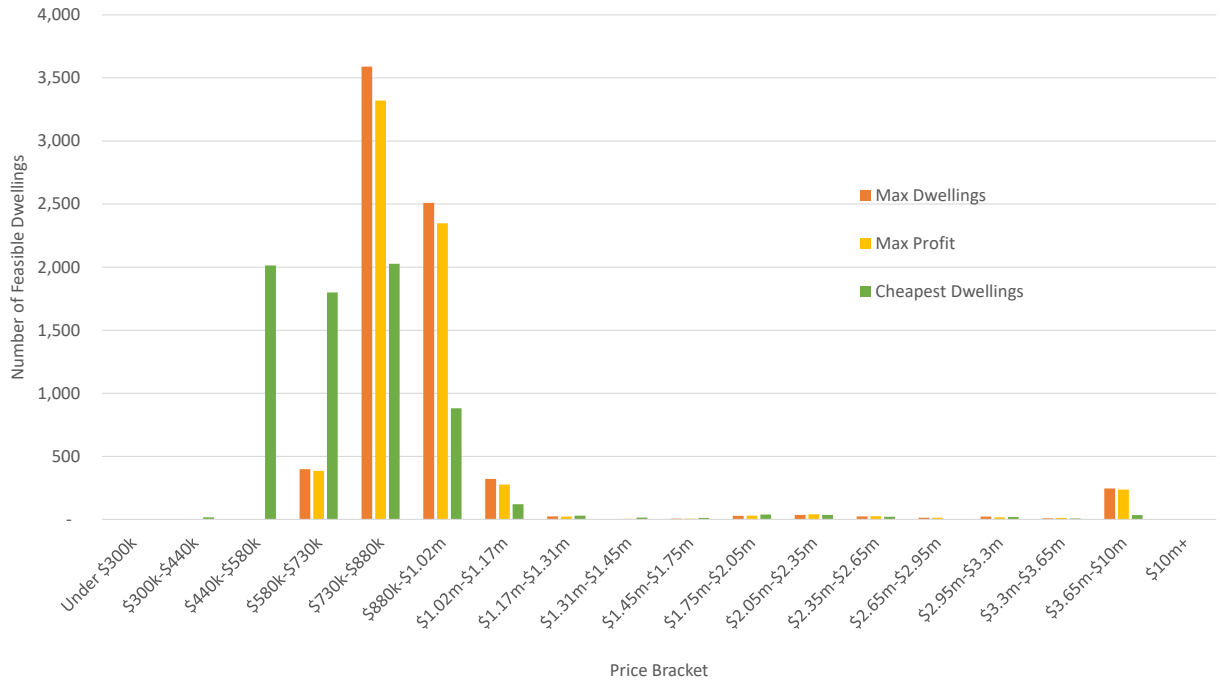


The price distribution under each of the scenarios for the additional dwellings estimated to be currently commercially feasible within the Wanaka UGB is shown in Figure 5.6. While a substantial difference in distribution exists between the scenarios, the difference between them is less within the Wanaka UGB than within the Wakatipu UGBs.

The price distribution of feasible dwellings is cheaper in Wanaka than Wakatipu UGBs. Under the cheapest dwelling scenario, some 83% of dwellings are estimated to be within the mid to mid-higher price brackets ($440,000 to $880,000), compared to 67% in Wakatipu UGBs. Almost all of the dwellings (95%) under this scenario are estimated to be less than $1.02m, which reflects the differences in sales prices between the two areas.

The price distributions of the maximum profit and maximum dwellings scenarios are more expensive than the cheapest dwelling scenario, where feasible dwellings are concentrated around the mid-higher to higher price brackets ($730,000 to $1.02m). The price distribution of these scenarios is also considerably cheaper than in the Wakatipu UGBs where 90% of the dwellings are estimated to be less than $1.02m (compared to only 30%-33% within the Wakatipu UGBs).

Figure 5.6 - 2016 Commercially Feasible Dwellings by Price Bracket within the Wanaka UGB



5.5.2 Short-term (to 2019) Commercial Feasibility by Price Bracket

Figure 5.7 shows the price distribution of additional dwellings that are currently estimated to be commercially feasible within the short-term within the district's UGBs for each of the three scenarios (i.e. by 2019). Each scenario delivers different numbers of dwellings given the differences in the range of potential dwelling options on each property parcel. The maximum dwellings scenario has the largest number of additional dwellings (26,800 dwellings), followed by the cheapest dwellings scenario (26,100 dwellings) and the maximum profit scenario with the least dwellings (23,700 dwellings). Overall the price distributions are estimated to shift to be more expensive than the current situation to reflect a real increase in house prices.

The price distribution under the cheapest dwelling scenario differs to the maximum profit and maximum number of dwellings scenarios where it has a higher share of feasible dwellings within the mid-price brackets. Approximately 70% of the feasible dwellings within the cheapest price scenario have an estimated sales price less than $880,000.

Greater similarity in the price distribution exists between the maximum dwellings and maximum profit scenarios. In each of these scenarios, less than one-fifth (18%-19%) of the feasible dwellings have an estimated sales price of less than $880,000. Around 62 to 67% of the dwellings within these scenarios have an estimated sales price within the mid to higher price brackets ($730,000 to $1.17m), and a cluster of dwellings (24%-26%) within the higher price brackets of $1.45m to $1.75m. The maximum profit scenario has a slightly higher share of dwellings within the higher price brackets than the maximum dwellings scenario in the short-term.

Figure 5.7 – Short-term Commercially Feasible Dwellings by Price Bracket within UGBs

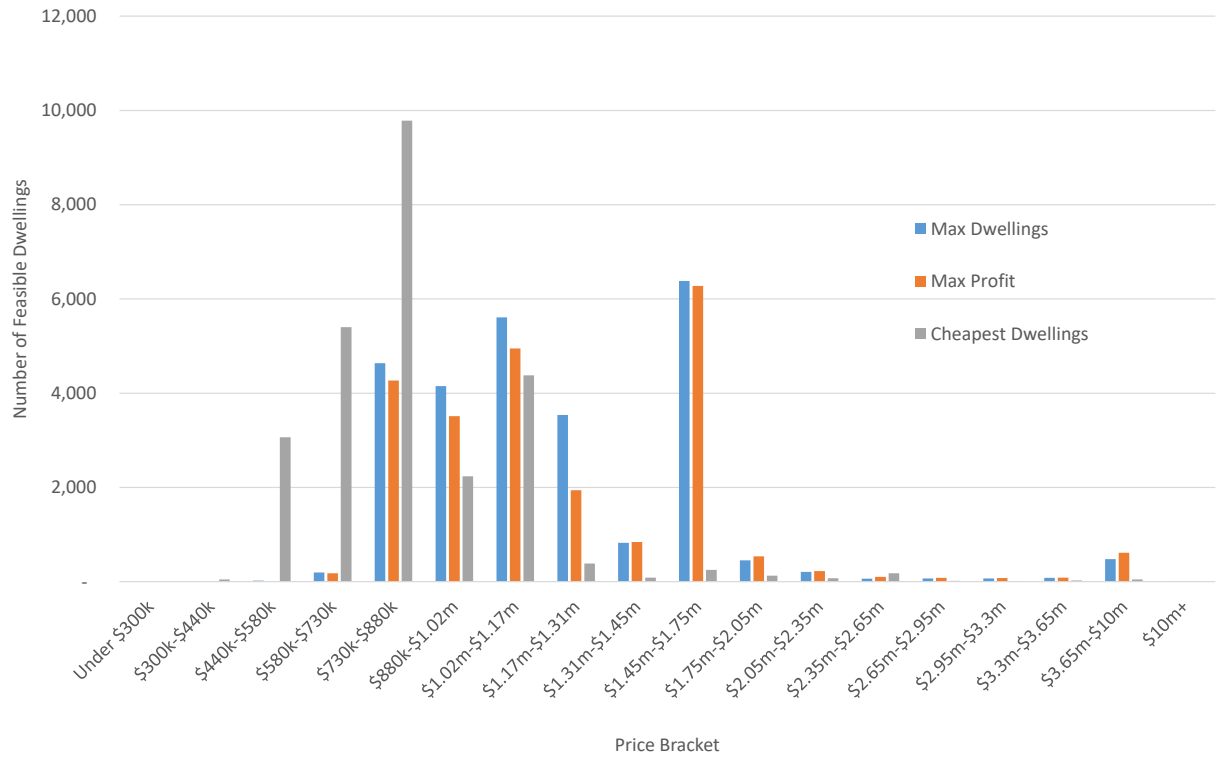
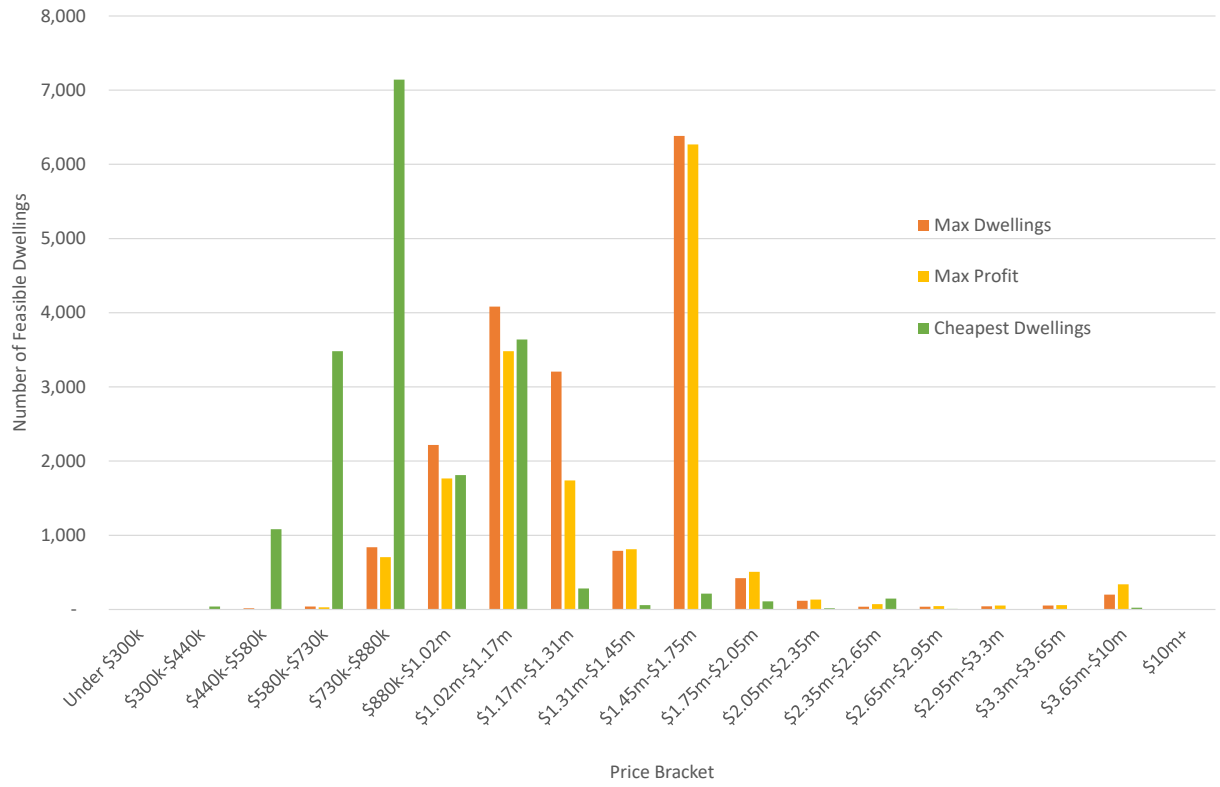


Figure 5.8 shows the price distribution of feasible dwellings for each of the scenarios within the combined Wakatipu UGBs. Approximately two-thirds (65%) of the dwellings within the cheapest price scenario are within the mid to mid-higher price brackets ($440,000 to $880,000), with a further 30% of the dwellings in the $880,000 to $1.17m price brackets – up from the current (2016) distribution.

Contrastingly, under the maximum profit scenario, only 5% of feasible dwellings are within the mid to mid-higher price brackets. Under this scenario, 44% of dwellings are within the higher price brackets of $880,000 to $1.31m, and 39% within the $1.45m to $1.75m price bracket. Overall, 84% of the dwellings within this scenario are estimated to be over $1.02m (compared to 70% currently).

The maximum dwellings scenario has a similar price distribution to the maximum profit scenario. Under this scenario, only 5% of the dwellings are estimated to be within the mid to mid-higher price brackets ($440,000 to $880,000). Approximately 83% of the dwellings are estimated to be above $1.02m in the short-term.

Figure 5.8 – Short-term Commercially Feasible Dwellings by Price Bracket Wakatipu UGBs

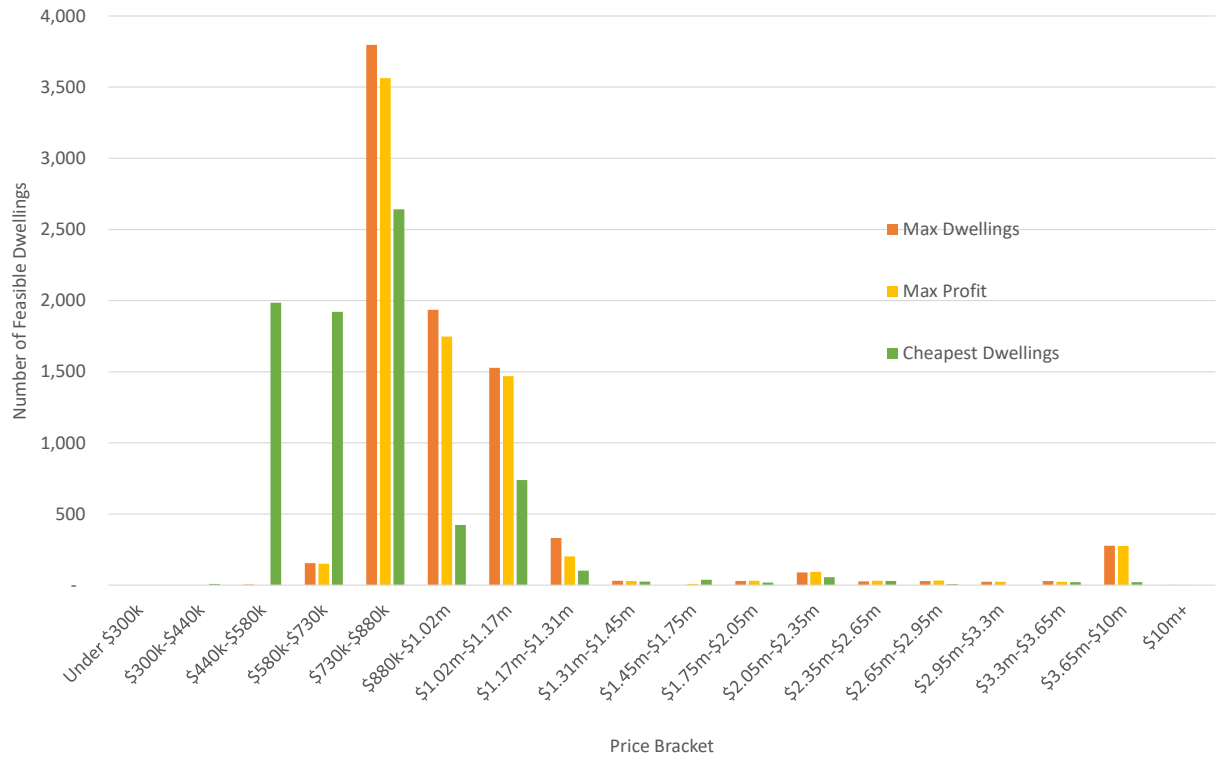


The price distribution under each of the scenarios for the additional dwellings currently estimated to be commercially feasible in the short-term within the Wanaka UGB is shown in Figure 5.9. While a substantial difference in distribution exists between the scenarios, the difference between them is less within the Wanaka UGB than within the Wakatipu UGBs.

The price distribution of feasible dwellings is cheaper in Wanaka than Wakatipu UGBs. Under the cheapest dwelling scenario, some 81% of dwellings are estimated to be within the mid to mid-higher price brackets ($440,000 to $880,000) (a slight decrease from the current 2016 estimate), compared to 65% in Wakatipu UGBs. A large share (87%) of the dwellings under this scenario are estimated to be less than $1.02m.

The price distributions of the maximum profit and maximum dwellings scenarios are more expensive than the cheapest dwelling scenario, where feasible dwellings are concentrated around the mid-higher to higher price brackets ($730,000 to $1.17m). The price distribution of these scenarios is also considerably cheaper than in the Wakatipu UGBs where 71% of the dwellings are estimated to be less than $1.02m (compared to only 16%-17% within the Wakatipu UGBs). Under these scenarios, there is projected to be an increase in the number of dwellings (+1,200 dwellings) in the $1.02m-$1.17m price bracket, in part due to real increases in prices in the dwellings in the $880,000 to $1.02m price bracket over the short-term.

Figure 5.9 – Short-term Commercially Feasible Dwellings by Price Bracket Wanaka UGB



5.5.3 Medium-term (to 2026) Commercial Feasibility by Price Bracket

Figure 5.10 shows the price distribution of additional dwellings that are currently estimated to be commercially feasible within the medium-term within the district's UGBs for each of the three scenarios. Each scenario delivers different numbers of dwellings given the differences in the range of potential dwelling options on each property parcel. The maximum dwellings scenario has the largest number of additional dwellings (32,400 dwellings), followed by the cheapest dwellings scenario (31,300 dwellings) and the maximum profit scenario with the least dwellings (28,600 dwellings). Overall, the price distributions are estimated to shift to be more expensive than the current and short-term situations to reflect a real increase in house prices.

The price distribution under the cheapest dwelling scenario differs to the maximum profit and maximum number of dwellings scenarios where it has a higher share of feasible dwellings within the mid to mid-higher price brackets. Approximately 65% of the feasible dwellings within the cheapest price scenario have an estimated sales price less than $1.02m in the medium-term.

Greater similarity in the price distribution exists between the maximum dwellings and maximum profit scenarios. In each of these scenarios, it is estimated that only 5% of the feasible dwellings have a sale price of less than $1.02m. The sales prices of the bulk of the dwellings under these scenarios are estimated to be spread over the higher price brackets. Between 87 and 89% of the dwellings within these scenarios are estimated to have sales prices of between $1.02m and $2.35m in the medium-term (to 2026).

Figure 5.10 - Medium-term Commercially Feasible Dwellings by Price Bracket within UGBs

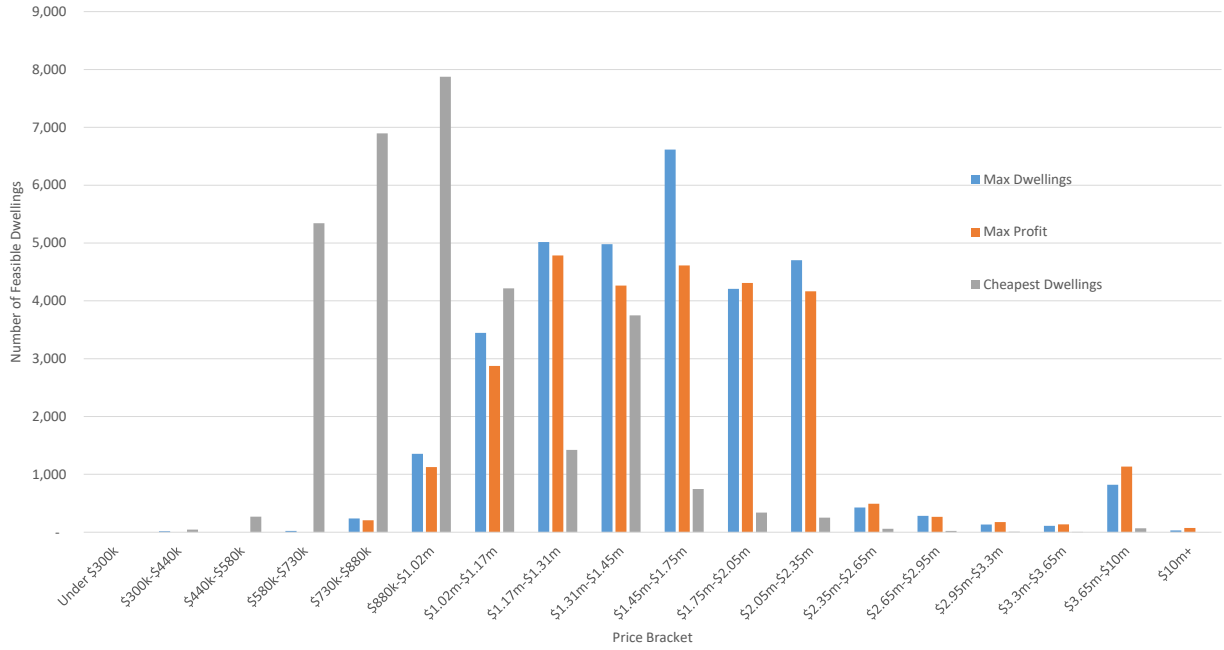
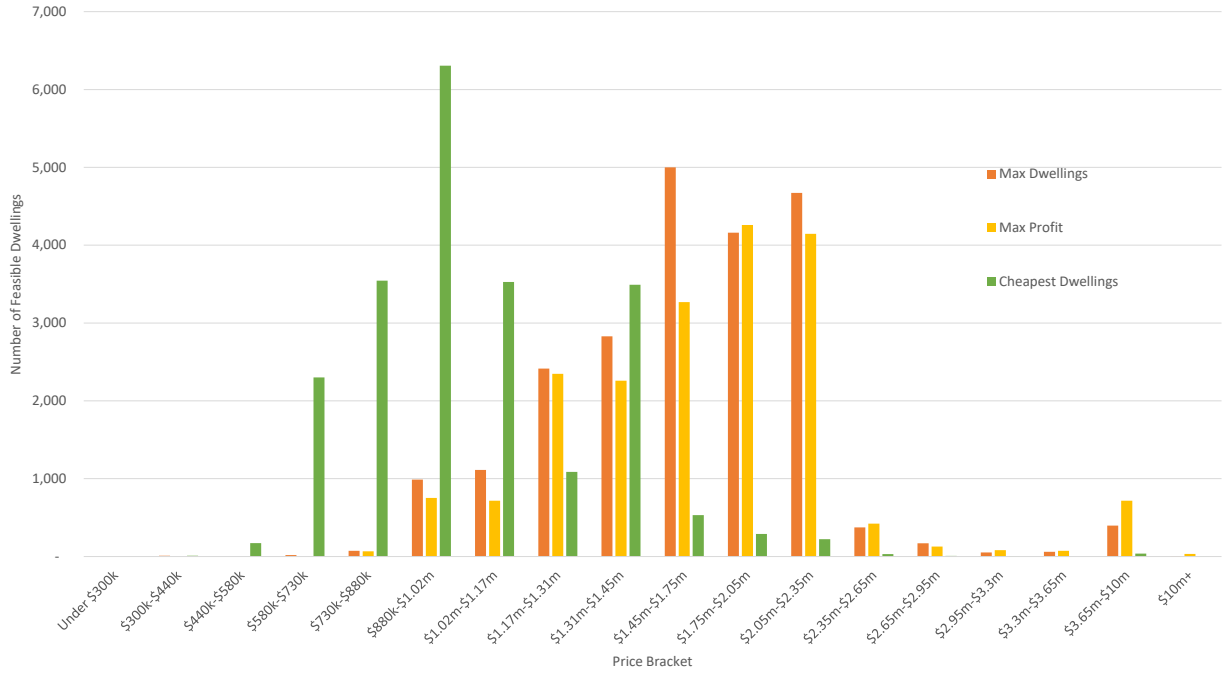


Figure 5.11 shows the price distribution of feasible dwellings for each of the scenarios within the combined Wakatipu UGBs. Just over one-quarter (28%) of the dwellings within the cheapest price scenario are within the mid to mid-higher price brackets ($440,000 to $880,000) – down from 65% in the short-term. Nearly half (46%) of the dwellings are estimated to be within the higher price brackets of $880,000 to $1.17m in the medium-term.

Under the maximum profit and maximum dwellings scenarios, no dwellings are projected to be within the mid to lower price brackets in the medium-term. Under these scenarios, the dwellings are projected to be within the higher price brackets. Between 88 and 90% of the dwellings are projected to be within the higher price brackets of $1.02m to $2.35m.

Figure 5.11 - Medium-term Commercially Feasible Dwellings by Price Bracket Wakatipu UGBs

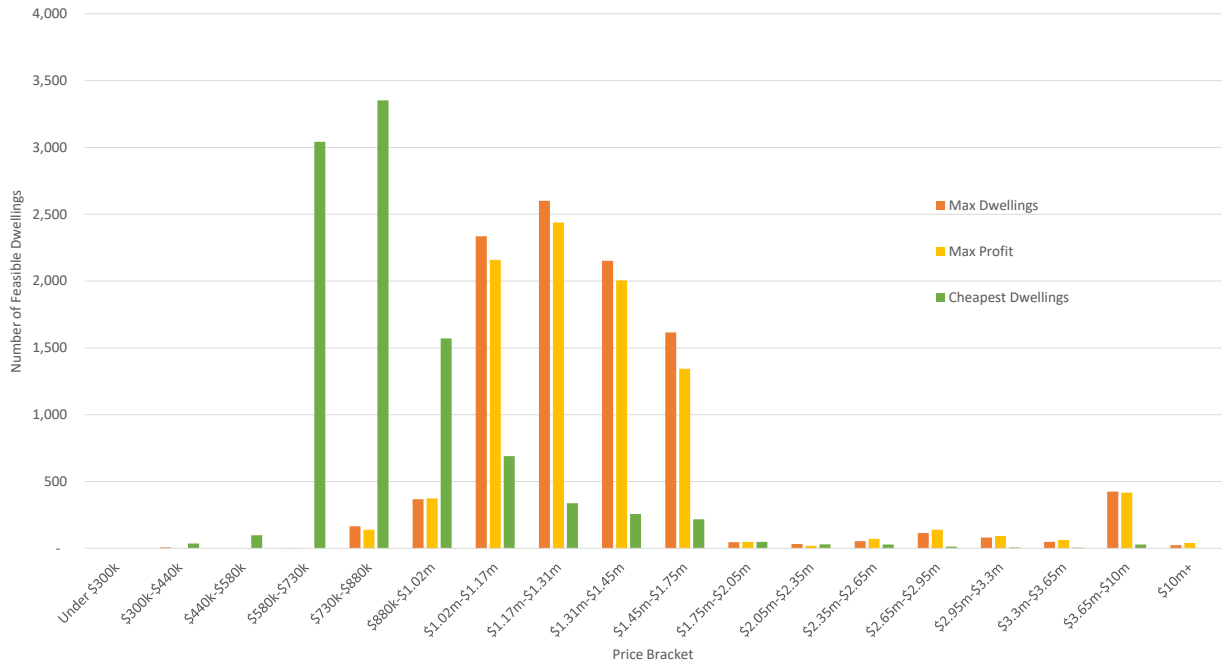


The price distribution under each of the scenarios for the additional dwellings currently estimated to be commercially feasible in the medium-term within the Wanaka UGB is shown in Figure 5.12. The difference in price distribution between the three scenarios is becoming less within the Wanaka UGB (relative to the current situation and short-term) through time, although a substantial difference remains.

The price distribution of feasible dwellings is cheaper in Wanaka than Wakatipu UGBs. Under the cheapest dwelling scenario, some 67% of dwellings are estimated to be within the mid to mid-higher price brackets ($440,000 to $880,000) (a decrease from the short-term estimate). This is over double the share of dwellings within these price brackets of Wakatipu UGBs (28%). A large share (83%) of the dwellings under this scenario are estimated to be less than $1.02m.

The price distributions of the maximum profit and maximum dwellings scenarios are more expensive than the cheapest dwelling scenario, where feasible dwellings are concentrated around the mid-higher to higher price brackets ($1.02M to $2.35m). The price distribution of these scenarios is also cheaper than in the Wakatipu UGBs. Within the Wanaka UGB, approximately 85 to 86% of the dwellings under these scenarios are projected to be within the $1.02m to $1.75m price bracket. Dwellings under these scenarios within the Wakatipu UGBs are spread over a greater range of the higher price brackets with a comparatively lesser 45 to 51% of dwellings estimated to be within the $1.02m to $1.75m price bracket.

Figure 5.12 - Medium-term Commercially Feasible Dwellings by Price Bracket Wanaka UGB



5.5.4 Long-term (to 2046) Commercial Feasibility by Price Bracket

Figure 5.13 shows the price distribution of additional dwellings that are currently estimated to be commercially feasible within the long-term within the district's UGBs for each of the three scenarios. Each scenario delivers different numbers of dwellings given the differences in the range of potential dwelling options on each property parcel. The maximum dwellings scenario has the largest number of additional dwellings (36,200 dwellings), followed by the cheapest dwellings scenario (35,000 dwellings) and the maximum profit scenario with the least dwellings (31,900 dwellings). Overall, the price distributions are estimated to shift to be more expensive over time to reflect a real increase in house prices.

The price distribution under the cheapest dwelling scenario differs to the maximum profit and maximum number of dwellings scenarios. Approximately three-quarters (75%) of the feasible dwellings within the cheapest price scenario have an estimated sales price of between $730,000 and $1.45m in the long-term.

Greater similarity in the price distribution exists between the maximum dwellings and maximum profit scenarios. In each of these scenarios, it is estimated that only 5% of the feasible dwellings have a sale price within the price range of $730,000 to $1.45m. The sales prices of the bulk of the dwellings under these scenarios are estimated to be spread over the higher price brackets. Nearly all (95%) of the dwellings are estimated to have a sale price of over $1.45m in these scenarios.

Figure 5.13 - Long-term Commercially Feasible Dwellings by Price Bracket within UGBs

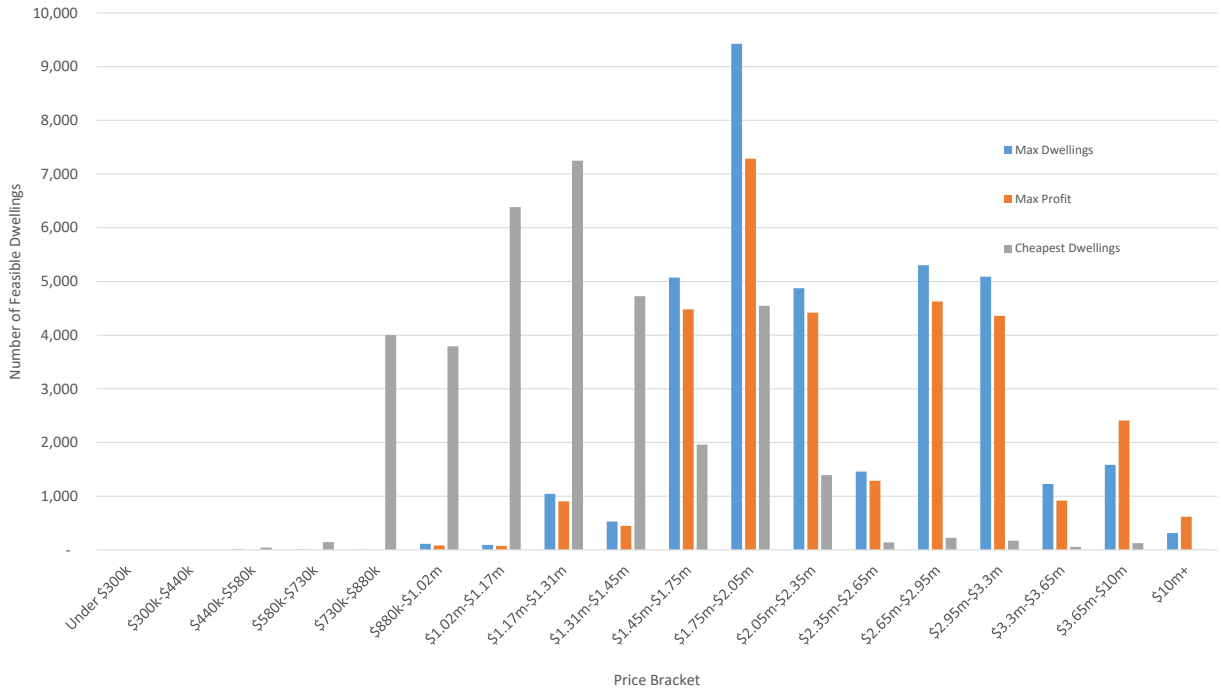
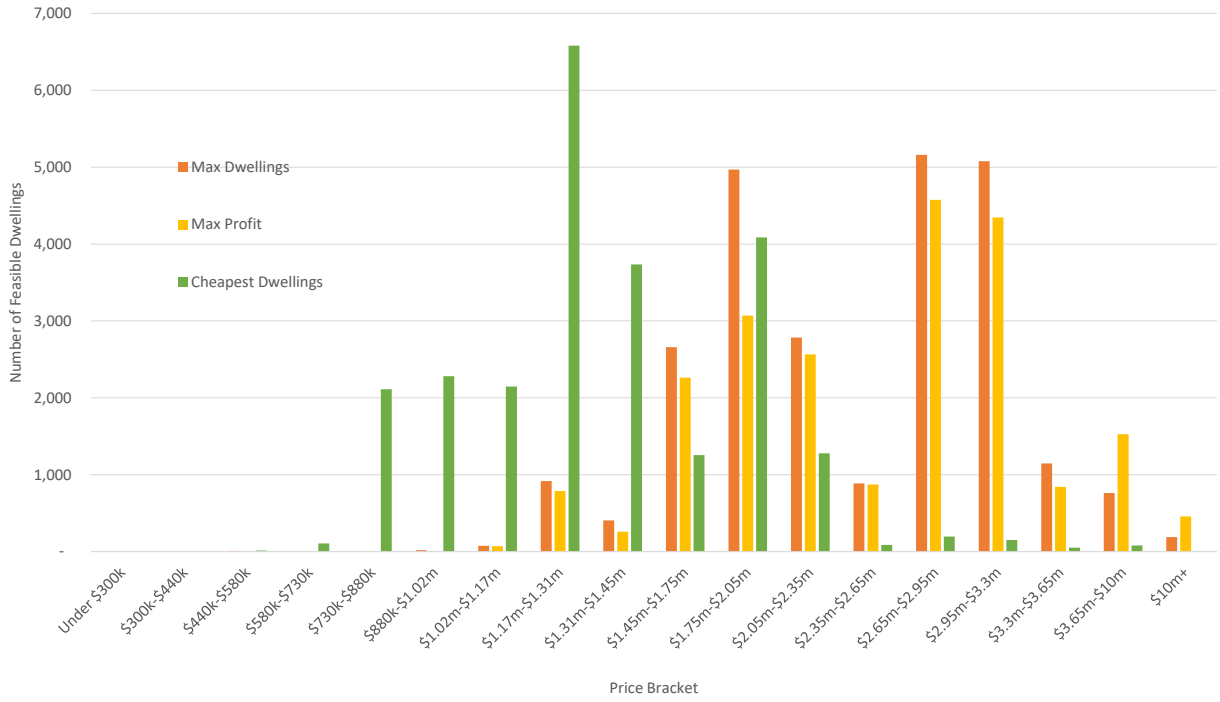


Figure 5.14 shows the price distribution of feasible dwellings for each of the scenarios within the combined Wakatipu UGBs. Approximately 70% of the dwellings within the cheapest price scenario have an estimated price bracket of less than $1.45m. In the long-term, no dwellings are projected to be within the mid-price brackets, and only 9% within the mid-upper price bracket of $730,000 to $880,000.

The bulk of the dwellings under the maximum profit and maximum dwellings scenarios are projected to be within the upper price brackets of greater than $1.45m in the long-term. Around half (49% to 54%) of these are projected to have prices of greater than $2.65m.

Figure 5.14 - Long-term Commercially Feasible Dwellings by Price Bracket Wakatipu UGBs



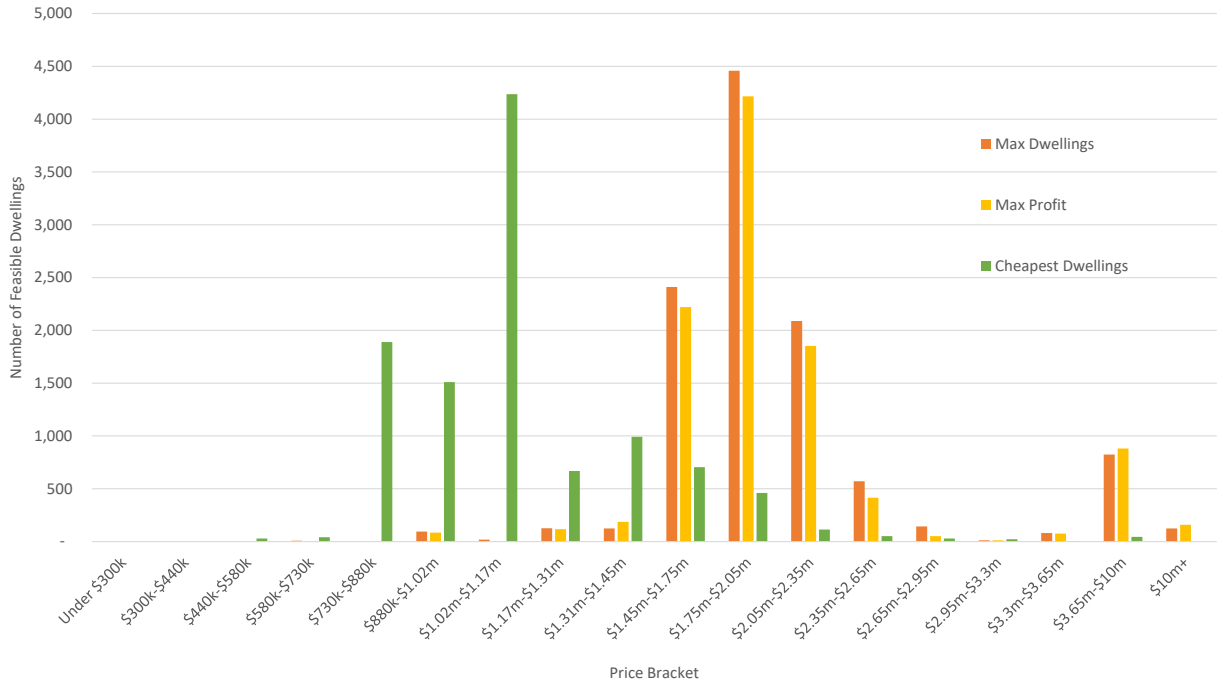
The price distribution under each of the scenarios for the additional dwellings estimated to be currently commercially feasible within the Wanaka UGB is shown in Figure 5.15. Similar to the short and medium-term, the price distribution of the cheapest dwelling scenario is substantially lesser than that of the maximum profit and maximum dwellings scenarios.

The price distribution of feasible dwellings is cheaper in Wanaka than Wakatipu UGBs. Under the cheapest dwelling scenario, some 71% of dwellings are estimated to be within the $730,000 to $1.17m price brackets. This is over two and half times the share of dwellings within these price brackets of Wakatipu UGBs (27%).

The price distributions of the maximum profit and maximum dwellings scenarios are more expensive than the cheapest dwelling scenario, where feasible dwellings are concentrated around the mid-higher to higher price brackets ($1.45M to $2.35m), representing a significant upward movement in the price distribution of these scenarios since the medium-term.

The price distribution of these scenarios (maximum profit and maximum dwellings) is also cheaper than in the Wakatipu UGBs. The Wakatipu UGB has a greater share of its dwellings within the higher price brackets than in the Wanaka UGB. Within the Wanaka UGB, it is projected that 11% of the dwellings within these scenarios will be over $2.65m in the long-term, compared with around half (49% to 54%) of the dwellings within the Wakatipu UGBs.

Figure 5.15 - Long-term Commercially Feasible Dwellings by Price Bracket Wanaka UGB



5.5.5 Limitations to Price Bracket Results

The modelled results are underpinned by growth rate assumptions around development costs and sales prices. Based on past trends, the model assumes that costs and sales prices will increase through time. Construction costs have been assumed to increase by 1.0% per annum and Appendix 11 contains the sales price growth rates within the model.

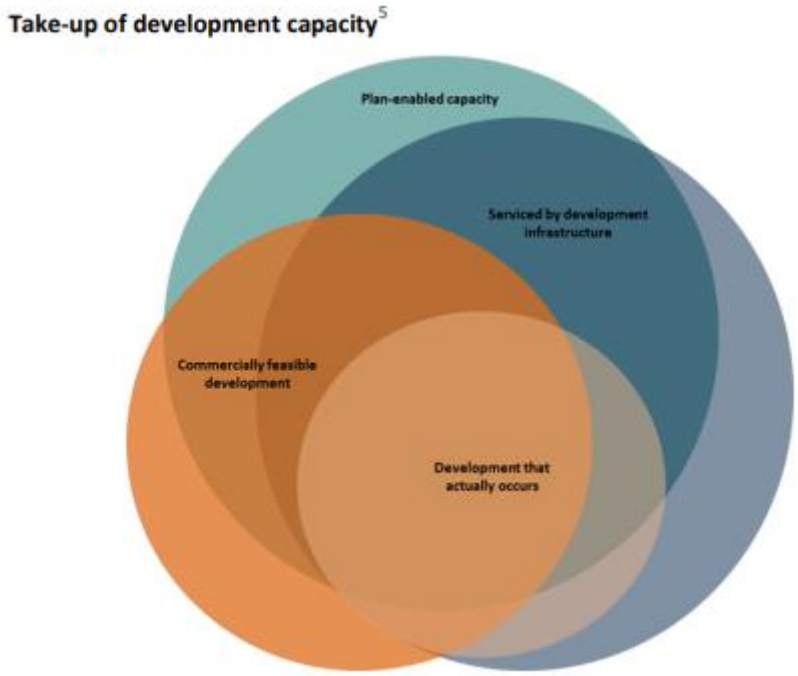
The short-term results contain the greatest reliability. Greater care is required over the medium to long-term as the property market is prone to price fluctuations through time.

The overall results for QLD are less sensitive to future assumptions about price and cost changes given the high levels of feasibility estimated to currently exist.

5.6 Take-up of Feasible Capacity

It is important not to confuse feasible capacity with growth. The expected take-up of feasible development capacity is what determines actual development over a particular time period. Actual development is what really matters. This is represented in Figure 5.16.

Figure 5.16 – Development as a Share of Commercial Feasible and Plan Enabled Capacity



Generally, it is expected that only a proportion of both plan-enabled and feasible development capacity will be taken up in the short, medium and long-term. Reasons for this include[113]:

1. A proportion of feasible capacity will not be developed at all – owners of land with feasible development capacity may not bring this land to market or develop it themselves. Owner-occupiers (including iwi, farmers, households with backyards, or businesses) often have an attachment to the current use of the land even though it is zoned for residential development. Owners may also wish to hold land in expectation of future capital growth.

2. Some feasible capacity will be developed but at a lower intensity – land may be developed for residential purposes but not at the intensity expected in the feasibility assessment. This may be because of the scale and capabilities of development companies, access to finance, or the uncertainties and risks involved in going through consenting processes. This shortfall is development capacity that is lost for the life of the development (likely to be greater than 50 years).

3. Some feasible capacity is exceeded – some development occurs as a result of private plan changes or as the result of resource consents that produce more development than was envisaged in a plan and reflected in feasible assessments. Generally, however, undeveloped and under-utilised capacity usually outweighs the proportion of capacity that is exceeded.

[113] Source: http://www.mfe.govt.nz/publications/towns-and-cities/national-policy-statement-urban-development-capacity-guide-evidence

It is expected that rates of take-up in QLD form only a small portion of the identified feasible capacity, particularly within the infill areas, within any individual year. There is a large amount of feasible capacity available across most locations in the District. Almost all of the demand (Tables 3.9 and 3.10) could be met within the greenfield areas, which typically have higher rates of take-up as they are subject to less of the other market constraints outlined above (refer section 6 for a detailed analysis of sufficiency). As such, a rate of capacity take-up substantially below the level of feasible capacity within QLD's existing urban areas is unlikely to cause a constraint on growth.

Discussions with stakeholders have confirmed that the QLDC needs to be cautious on the weight given to infill capacity, noting there was a lot more certainty and less risk with the development of greenfield areas. However, only a small share of the feasible infill capacity identified would need to be up-taken within the infill areas, together with greenfield development, to meet the projected demand[114] (discussed in section 6). QLDC will need to monitor the level of infill development.

In terms of the issue of land banking, the PDP cannot solve this issue, and it is not certain that rezoning more land will prevent the potential for this phenomenon to occur. The results of the HDCA indicate that if land banking were to continue there is sufficient zoned and feasible capacity to meet the demands (inclusive of the 20%-15% margin on top of demand). The release of large portions of land needs to be monitored.

Understanding the level of feasible capacity in Queenstown is important in identifying the range of opportunities available to the market. It is a core requirement of the NPS-UDC as it is central to assessing the sufficiency of the Plan in providing opportunities for growth. The presence of a level of feasible capacity substantially above the projected demand suggests that growth is not constrained by the Plan, but by other factors within the market that influence the rate of take-up of any feasible development opportunities. Further supply of land or density provisions, where already expansively available, are therefore unlikely in and of themselves to increase the rate of take-up.

Available data indicates the following take-up trends in QLD:

- A significant proportion of the available greenfield capacity is tied up in Special Zones, being Remarkables Park, Jacks Point, Frankton Flats B and Shotover Country in Queenstown (noting that Shotover Country is significantly developed now); and Three Parks and Northlake in Wanaka. This means that a significant portion of the capacity is tied up with a small number of land owners;
- Greenfield developments generally have 100% take-up (and sections (prior to received title) sell rapidly when released). Quail Rise has nearly been developed to its full residential capacity with only 14 sections left out of the 218. In Penrith Park 81% of the sections have been developed (only 30 sections remain).
- In some instances, greenfield developments have greater than 100% of initially approved take-up (where the District Plan has allowed). For example, the number of residential sections has increased in Shotover Country due to the approval of the SHA.

[114] This does not suggest that greenfield development is preferable to infill development. Rather, it is referred to as a source of capacity that has higher uptake rates reflecting the lesser constraint of other market factors affecting rates of uptake.

This allowed for increased densities in part of the existing residential area and approved an additional 101 sections. Northlake Investments Limited recently applied for a plan change to increase residential densities on a portion of the Special Zone.

- There are significant areas of zoned or proposed zoned residential areas in the PDP. Again, a significant portion of the large greenfield sites are held by a limited number of land owners being Kelvin Heights in Queenstown and south/south west Wanaka;
- The level of residential activity across the QLD has significantly increased with 1,236 new dwellings consented in 2017, with only Auckland, Tauranga, Christchurch and Selwyn having issued a higher number of consents[115];
- The number of issued code of compliance certificates has also increased. In 2015, the Council only issued 513 code of compliances certificates for residential units (noting that multiple residential units could be on one certificate), this increased to 686 in 2016 and 700 in 2017. This indicates a 36% increase in residential certificates issued over a three year period and this is likely to continue increasing throughout 2018. Noting that multiple residential units can be approved per code of compliance certificate.

Importantly, the QLDC is setting up internal processes to monitor take-up and understand where this is happening geographically, including further investigation of the demands of migrant workers (this is identified in section 6.7).

Being a high-growth Council, changes in plan enabled capacity will be noticeable year on year. The approach used in this HDCA has been to include dwellings under construction as vacant (plan enabled) capacity. Only once a code of compliance certificate is issued does a dwelling become part of the existing housing estate (supply). With approximately 700 residential code compliance certificates now issued per year (and growing), this means that feasible capacity would be a minimum[116] of 4% less (excluding redevelopment) or 3% less (including redevelopment) than estimated at the time of reporting in just 12 months (and assuming no other changes in zoned land or development rules occurs). As future feasibility is driven by the base year estimates of plan enabled capacity (2016), they too would be less in a years' time. Regular monitoring will help keep track of changes in plan enabled (and therefore feasible) capacity between HDCA updates[117].

Setting up monitoring processes is also timely with Decisions on Stage 1 of the District Plan due to be released in the first quarter in 2018. This will give QLDC the opportunity to monitor the provisions of the PDP that are promoting increased levels of development and infill, and the level of take-up of commercial visitor accommodation in the Town Centres, Local Shopping Centre, Business Mixed Use and High Density Residential Zone. These results will be fed back into the next HDCA.

[115] Source: https://www.stats.govt.nz/information-releases/building-consents-issued-december-2017

[116] These percentages are minimums because each certificate can cover multiple dwellings and so the number of completed dwellings is likely to be higher than the number of certificates issued.

[117] QLDC has carried out regular updates of dwelling capacity in the past (Dwelling Capacity Model).

6 Sufficiency of Capacity

This section draws together the analyses of housing demand (section 4) and potential dwelling supply (section 5), to assess the sufficiency of QLD housing capacity. The mechanics are straightforward, sufficiency is examined through a direct comparison of projected demand as against potential capacity, to identify whether or not any shortfall is likely.

At the highest level, consideration of sufficiency starts with total District sufficiency in terms of total housing needs and total housing capacity, for the short (2016-2019), medium (2019-26) and long-terms (2026-2046). Sufficiency is also assessed in terms of housing costs/values, comparing housing demand with potentially available supply at various price points, as well as the potential availability of different dwelling types, and capacity across different locations.

The consideration of future sufficiency is inevitably subject to key assumptions about the future circumstances in QLD, including the projected population and households, but also core questions about the urban-rural split, the implications of economic growth on housing market parameters, and the importance of the current housing estate.

In QLD's case, the question of sufficiency is also directly affected by the competition for housing from absentee property owners, who account for a substantial share of demand, and who are generally not as impacted by housing prices. This means that QLD may have sufficient capacity in gross terms to meet the housing requirements of the resident population but accessing all of that capacity is another matter.

6.1 Assessing Sufficiency

6.1.1 Total Demand and Total Dwelling Estate

It is not appropriate to consider just the net increase in demand against the net increase in housing capacity. This is because demand for new dwellings in QLD is not limited to new households in an economy. There is considerable "churn" in any housing market in New Zealand (and overseas) as households are mobile within the housing estate. On average, some 6% to 7% of all dwellings change hands in any year, and over a 30-year or even a 10-year period a large proportion of households will move between dwellings.

Typically, this movement is upward during peoples' lifecycle in terms of dwelling value as the pattern for many is gradual accumulation of assets/wealth which makes a more valuable dwelling relatively more affordable over time. This is a key reason why households which are new to the market tend to enter at lower value points and may move up over time - as reflected in the relationships between household age and property value, and household income and property value.

By comparing total dwelling demand (existing and net new households) by value band with total dwelling supply (existing estate plus new feasible capacity), these changes are at least broadly incorporated, and the longer-term comparisons better reflect the demand and supply contexts at the future points of 2019, 2026 and 2046.

6.1.2 Values of the Existing Estate

The existing QLD dwelling estate will not remain unchanged into the future, and individual property values will shift over time, within the context of the wide whole-of-estate shift. It is important to take this into account, because such changes will have direct effects on the values of the future property estate.

A core issue is that as economies grow, the value of the existing dwelling estate can also be expected to increase in real terms. One key driver of this is the general increase in the potential uses for any land parcel as the economy grows, which means the value of the land parcel also increases.

At the same time, however, the value of the existing dwelling estate can be expected to grow more slowly than the total dwelling estate. This is because an important component of the increase in value is the progressive addition of new dwellings which both incorporate technology gains and reflect the viable development intensity at the time of construction. Total property value has just two components, land value and improvement value. Land values tend to increase commensurate with the growth in an economy - predominantly district growth but with some benefit also from regional and national growth trends – driving its underlying potential. In contrast, the improvements on any parcel are to a considerable degree anchored to the point in time at which those improvements were added. Even where improvements represented maximum feasible development potential at that point in time, ongoing growth in an economy means that potential continues to grow. At the same time, built structures such as dwellings are subject to direct depreciation – in terms of the construction materials – and relative depreciation from ongoing technological improvements which are incorporated in new dwellings.

A dwelling which is at the 85th percentile for value (for example) in 2016 (with 2016 construction norms) cannot expect to hold that position over the next 30 years, because new dwellings with the latest construction norms will progressively overtake that position, and the dwelling will be subject to depreciation. This means that even though the value of improvements tends to increase over time with the general uplift in property values – whether or not material improvements are made to existing dwellings – the general pattern is for the value of improvements on residential properties tends to increase more slowly than the value of residential land[118]. This is commonly evident in the three-yearly cycle of property revaluation (usually by QVNZ) where individual valuations often show a greater increase in land value than improvement value. It is more evident in faster growing economies such as Queenstown, Hamilton, and Auckland, where the improving potential of the land in an expanding economy is more readily apparent.

This economic process affects two key aspects of any assessment for the NPS-UDC. One effect is on the feasibility of development and redevelopment of residential (and business) property, as the progressively increasing disparity between current use – anchored by existing improvements – and current potential makes redevelopment progressively more viable over time.

The second effect is on the value of the existing property estate in real terms. Over time, the existing estate gradually drops in value in real terms relative to new housing. This is a very important consideration given the 30-year long-term time frame of the NPS-UDC. The assessment of sufficiency has to take account of

[118] There was detailed analysis of residential value patterns in the Auckland economy over the 1995 to 2015 period, undertaken for the Auckland Unitary Plan hearings. This showed a long-term trend of land values increasing at 1.5 to 2.0 times the value of improvements, even without adjustment for the addition of new dwellings to the total estate acting to lift average values.

the existing housing capacity together with future feasible capacity, in relation to the total housing demand from the resident population, and visitors.

One implication is that when examining total future demand against total dwelling capacity in each value band, it is important to specifically allow for some reduction of the existing property estate in real terms, to reflect (at least) direct and relative depreciation. This does not mean a reduction in property values in nominal $ terms, however it does imply some relative shift in the overall distribution of values of the existing estate, especially in the longer term. M.E notes that all the feasibility assessment is in current $2016 terms. Allowance is made for longer term decrease in relative values for the existing estate, as the total housing estate grows, and new dwellings become progressively more important within the total structure.

The effect for the assessment of sufficiency is that the total dwelling estate is made up of the feasible new capacity in each value band, together the existing estate with some downward adjustment.

6.1.3 Feasibility Scenarios

The feasibility scenarios have provided a range of results, where the housing market is assumed to be driven variously by maximum profit potential on all dwellings, or by maximising the number of dwellings which may be feasibly built, or by providing for dwellings at the lowest feasible cost.

Each and all of these drivers are present in the residential construction sector, and it is not realistic to assume that one will be dominant in every residential development decision, particularly when there are many individual entities involved in residential construction, and their decision-making includes a range of influences, including profitability but also taking into account the degree of competition, and the opportunity to work profitably in specific market niches. This means in particular that maximising profit at the district level or industry level may result from not just developing the dwelling with the greatest margin but building profitably in niches where there is demand but less competition from other providers, lower marketing and sale costs, shorter time lags between completion and sale, and so on.

The consequence of this mix of drivers for a well-informed supply sector is that the likely feasible supply outcome will be close to the average volume of supply across the three scenarios, rather than a single supply outcome being representative. This means that the average of the feasible capacity estimates is an appropriate indicator (and is represented in the analysis below).

The feasibility assessment has examined the total situation across all urban land parcels at points in the future. The implicit assumption is that at each time, there has been no housing development in the interim, and all parcels are available for development, at prices and costs which are expected at the time. Thus, plan-enabled capacity has been examined as at (for example) 2046, based on projected prices and values at that time.

However, the sufficiency assessment is based on current values in real terms. This means that for the estimates of future feasible supply the dwelling value bands need to be deflated to reflect the value shifts in real terms, rather than nominal terms which progressively shifts the feasible dwelling estimates into higher value bands. To make this adjustment, the value bands for the future feasible dwellings have been deflated at a rate of 1.8% pa. This allows both for increases in real terms to bring progressively more dwellings into the “feasible” category, and not dis-locate that capacity from the existing housing market. Simply, this allows the estimates to be expressed in real $2016 terms.

6.2 Housing Sufficiency Measures

Two indicators of housing sufficiency are used here. One is direct comparison of expected capacity (number of dwellings) with projected demand, in any dwelling value band. Sufficiency is indicated as a net figure – positive where feasible supply exceeds demand, and negative where feasible supply is less than demand. This shows housing sufficiency in terms of numbers of dwellings, in each value band.

The other is the total level of feasible supply as a percentage share of demand – simply, a figure of less than 100% indicates a shortfall, a figure of 100% or more indicates sufficiency and the margin.

The percentage measure is important also because this type of assessment is based on modelling and projection, and estimates, all of which are subject to uncertainties. To illustrate, a shortfall in supply of 50 dwellings may represent 5% of expected demand, or 50%. This is directly relevant not just to any margins of error in the assessment, but also to the potential for changes in market conditions to offset or exacerbate a shortfall. A 5% shortfall may disappear – or double – within a fairly short time frame, a 50% shortfall is more likely to be fairly entrenched.

Sufficiency is assessed here for two geographic areas – QLD total and QLD urban environment – and for three time periods 2016-2019, 2016-2026, and 2016-2046 – and for Medium and High growth scenarios. Importantly, the QLD total analysis of sufficiency (section 6.3) draws on total district dwelling demand but compares this feasible capacity for the urban environment – as this is the limit of modelled capacity by value band at this stage. Additional capacity available in the rural environment, and net additional capacity created in approved SHAs (not included in the modelling) are identified in the context of total district capacity but are not quantified. Refer section 2.4 and 2.5 for information of the scale of this additional capacity over and above feasible urban capacity. This caveat should be considered throughout section 6.3. The QLD urban environment analysis of sufficiency (section 6.4) does compare like-for-like geographies for demand and supply.

The standard outputs for results are a table for each geography and year and growth future, together with a graph which shows the demand and supply situations at each point in time, for each dwelling value band[119].

The base approach is to consider demand and supply for both resident households and the holiday dwelling/absentee owner sector, at the same time. This is considered to be the most relevant representation of the future demand and supply situation, since both main components of housing demand will continue to compete for housing.

6.3 Total District Housing Sufficiency

At the high level, direct comparison of total district projected demand with total (urban) feasible supply indicates that, overall, there is plenty of capacity for the QLD market, into the long-term. This is because there is substantial capacity in existing urban greenfield areas, in the order of 12,200 dwellings. In addition,

[119] There is considerably more detail available if required, by more specific locations and timing, and with different assumptions about the dwelling supply (feasibility scenarios) and demand (dwelling preference scenarios).

there is substantial feasible capacity through urban redevelopment and infill, in excess of 22,000 dwellings in the longer term. And there is capacity in the rural environment and within approved SHAs[120].

This capacity exceeds the projected growth in total district dwelling demand to 2046 in all demand futures (Low +7,800 dwellings, Medium +11,600 dwellings, High +16,300 dwellings, and QLDC Recommended +12,900 dwellings) (Table 3.9). For example, the urban greenfield capacity by itself is only 4,000 dwellings fewer than the increase in the total district High growth future.

Policy C1 of the NPS-UDC states that local authorities shall provide an additional margin of feasible development capacity over and above projected demand of at least 20% in the short and medium-term and 15% in the long-term. It is not considered that a higher margin is more appropriate, but these margins will be reviewed in future HDCA updates (Policy C2). Even taking account of the recommended margins on top of demand (Low +9,000 dwellings, Medium +13,400 dwellings, High +18,800 dwellings, and QLDC Recommended +15,300 dwellings) (Table 3.9), there is still plenty of capacity for the QLD market, into the long-term.

These results also highlight the importance of delivering houses in the lower price bracket through SHAs and other potential mechanisms such as the KiwiBuild scheme that is being promoted by the Government or worker accommodation. The QLDC is also reviewing the Affordable and Community Housing Chapter as part of Stage 3 of the PDP.

However, within that wider picture, there are important variations in potential capacity in each of the dwelling value bands. The sufficiency estimates are set out below for each time period.

6.3.1 Short-term – Medium Growth 2016-2019

Table 6.1 summarises the estimated demand and supply situation for total QLD by value band as at 2019 in the medium growth future. Total feasible capacity by then is estimated at 42,200 dwellings including the existing estate (17,600 dwellings), together with an estimated 4,300 greenfield (35% of the long-term total) and 20,300 feasible through infill and redevelopment, another 24,600 in total.

Total dwelling demand for 2019 is projected at 19,100, comprising 15,000 resident households (up by 1,400 over the 3 years) and 4,100 dwellings for absentee owners (up by 100).

The overall surplus of 23,100 dwellings (+121% in total), however, contains net shortfalls in the two lowest dwelling value bands (shaded in the table), amounting to -190 dwellings in total and representing 81% sufficiency in those two bands.

Figure 6.1 shows the supply-side (bars) and the demand-side (lines) in each dwelling value band and sets out the gap between demand and supply across the dwelling estate. Existing dwelling supply is indicated by the blue (resident) and light blue (absentee) segments on each bar, with the greenfield and the redevelopment/infill the green segments. Total demand is shown by the purple line, with resident demand the red line. The black dotted line shows the demand with the 20% NPS-UDC margin.

[120] If in future updates capacity in the rural environment is modelled for feasibility, then this would be captured directly in the sufficiency calculations. In the meantime, it is necessary to take this additional capacity into consideration when interpreting the sufficiency findings.

Table 6.1 – Total QLD Short-term Housing Sufficiency – Medium Growth 2019

Total QLD : Medium Growth Future 2019											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	180	-	-	180	220	-	220	- 40	82%	- 50	78%
$300k-$440k	720	90	70	880	940	90	1,030	- 150	85%	- 200	81%
$440k-$580k	1,630	190	1,060	2,880	1,980	200	2,180	700	132%	620	127%
$580k-$730k	2,320	700	2,090	5,110	2,660	730	3,390	1,720	151%	1,650	148%
$730k-$880k	2,310	740	5,970	9,020	2,450	760	3,210	5,810	281%	5,790	279%
$880k-$1.02m	1,630	520	3,290	5,440	1,750	540	2,290	3,150	238%	3,130	235%
$1.02m-$1.17m	1,100	340	4,600	6,040	1,140	360	1,500	4,540	403%	4,530	400%
$1.17m-$1.31m	900	80	1,770	2,750	960	80	1,040	1,710	264%	1,700	262%
$1.31m-$1.45m	500	200	750	1,450	510	200	710	740	204%	740	204%
$1.45m-$1.75m	640	260	3,810	4,710	700	260	960	3,750	491%	3,740	486%
$1.75m-$2.05m	530	180	340	1,050	530	180	710	340	148%	340	148%
$2.05m-$2.35m	290	170	160	620	310	170	480	140	129%	140	129%
$2.35m-$2.65m	200	110	110	420	220	110	330	90	127%	90	127%
$2.65m-$2.95m	140	80	50	270	130	80	210	60	129%	60	129%
$2.95m-$3.3m	160	60	50	270	130	70	200	70	135%	70	135%
$3.3m-$3.65m	80	60	80	220	70	60	130	90	169%	90	169%
$3.65m+	290	230	350	870	260	240	500	370	174%	370	174%
Total	13,600	4,000	24,600	42,200	15,000	4,100	19,100	23,100	221%	22,800	218%
Shortfall Bands	900	90	70	1,060	1,160	90	1,250	- 190	85%	- 250	81%

Source: ME Queenstown Housing Model 2017

Overall, demand peaks in the $580-730,000 band, and the $730-880,000 band. The feasibility estimates indicate considerable capacity in these bands, with the indicated shortfall confined to the two lowest.

It is important to note that rural environment capacity and the net additional capacity generated in SHAs or the potential re-zonings supported in the PDP are not included in the overall estimate at this stage. Inclusion of SHA capacity would be expected to indicate a higher level of feasible capacity in the lowest two or three price bands, and less of an apparent deficit. It is necessary to also recognise that while a share of total demand in the lower value bands is driven by absentee owners (investment / holiday dwellings) it is not valid to examine total capacity in these bands against only demand from QLD residents. That would likely understate any shortfall, and both components of the demand side need to be considered in combination for assessing sufficiency.

While the SHA capacity is not finalised, for this evaluation a base figure of 150 dwellings has been used, within the three lowest value bands. This is not shown in the tables, since the final distribution is not known, but it is taken into account in the final interpretation[121].

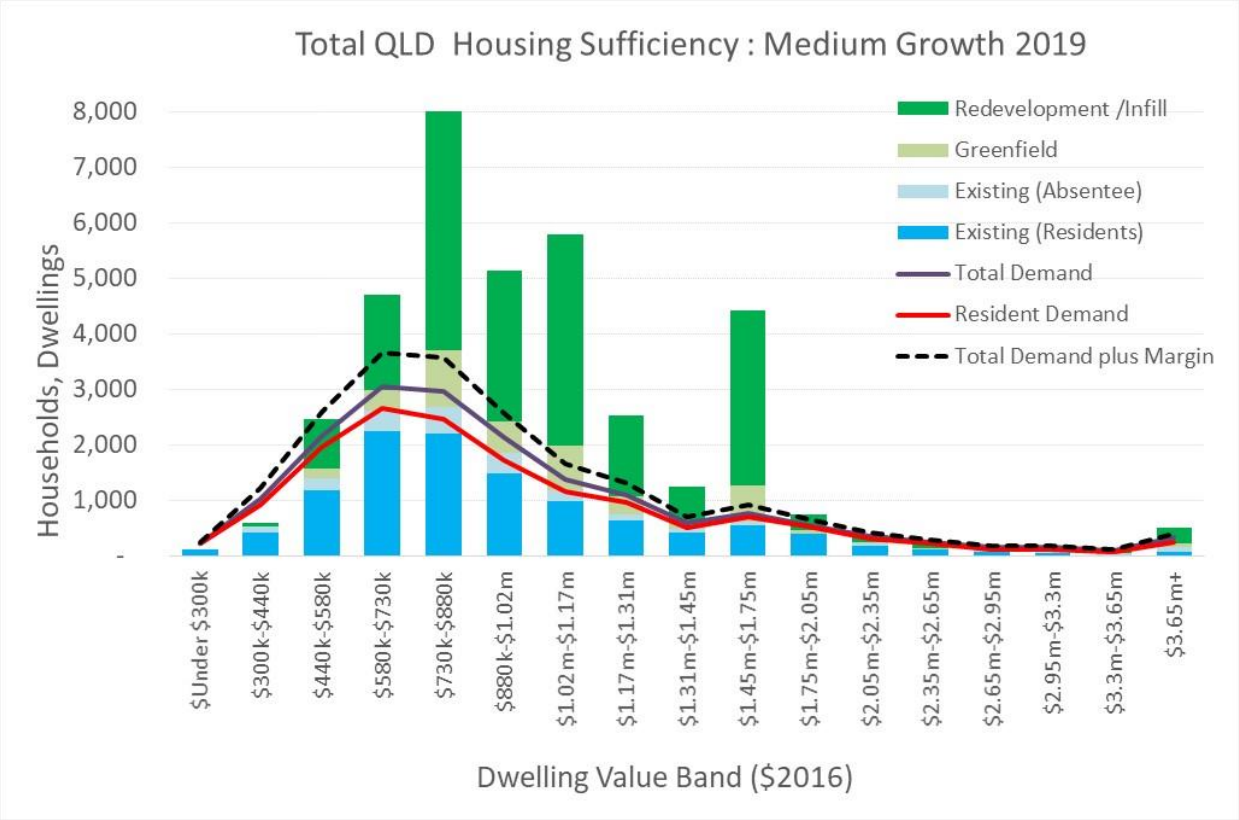
Further, the estimates of feasible capacity are based on the average dwelling value profile. The cheapest dwelling supply option would indicate lesser shortfall in the lower value bands, while the Max Profit scenario would indicate generally larger shortfall in those bands. The base case (nil preference shift scenario) does not include allowance for shifts in dwelling preferences, toward attached and away from detached dwellings.

If allowance is made for short-term growth to be 20% higher than projected, to accommodate the margin required by the NPS, the shortfall in the lower value bands would be larger, at -250 dwellings (81%

[121] This is based on the existing SHAs and numbers anticipated by the QLDC.

sufficiency). However, total sufficiency would still be very substantial, with potential supply exceeding demand by 22,800 dwellings (rather than 23,100) (Table 6.1).

Figure 6.1 – Total QLD Short-term Housing Sufficiency – Medium Growth 2019



6.3.2 Medium-term - Medium Growth 2016-2026

Table 6.2 summarises the estimated demand and supply situation for total QLD by value band as at 2026 in the medium growth future. Total feasible capacity by then is estimated at 48,300 dwellings including the existing estate (17,600 dwellings), together with an estimated 9,200 greenfield (75% of the long-term total of 12,200) and 21,500 feasible through infill and redevelopment, another 30,700 in total.

Total dwelling demand for 2026 is projected at 22,200, comprising 17,700 resident households (up by 4,100 over the 10 years) and 4,500 dwellings for absentee owners (up by 500).

The overall capacity surplus would be 26,100 dwellings (+118% in total). However, as previously, this overall surplus contains net shortfalls in the three lowest dwelling value bands (shaded in the table), amounting to -600 dwellings in total in the under $580,000 value bands, with 80% sufficiency in those bands. The estimated capacity of 150 lower value dwellings in the SHAs would reduce the indicated shortfall by about a quarter.

Figure 6.2 shows the supply side (bars) and the demand side (lines) in each value band and sets out the proximity of the demand and supply situations. Overall demand still peaks in the $580-730,000 band, and the $730-880,000 band. The feasibility estimates indicate considerable capacity in these bands, with the indicated shortfall confined to the three lower bands.

As previously, net capacity in SHAs and rural environment is not included (or re-zonings supported by Council Officers in the PDP), and the base situation shows the average of the dwelling feasibility scenarios.

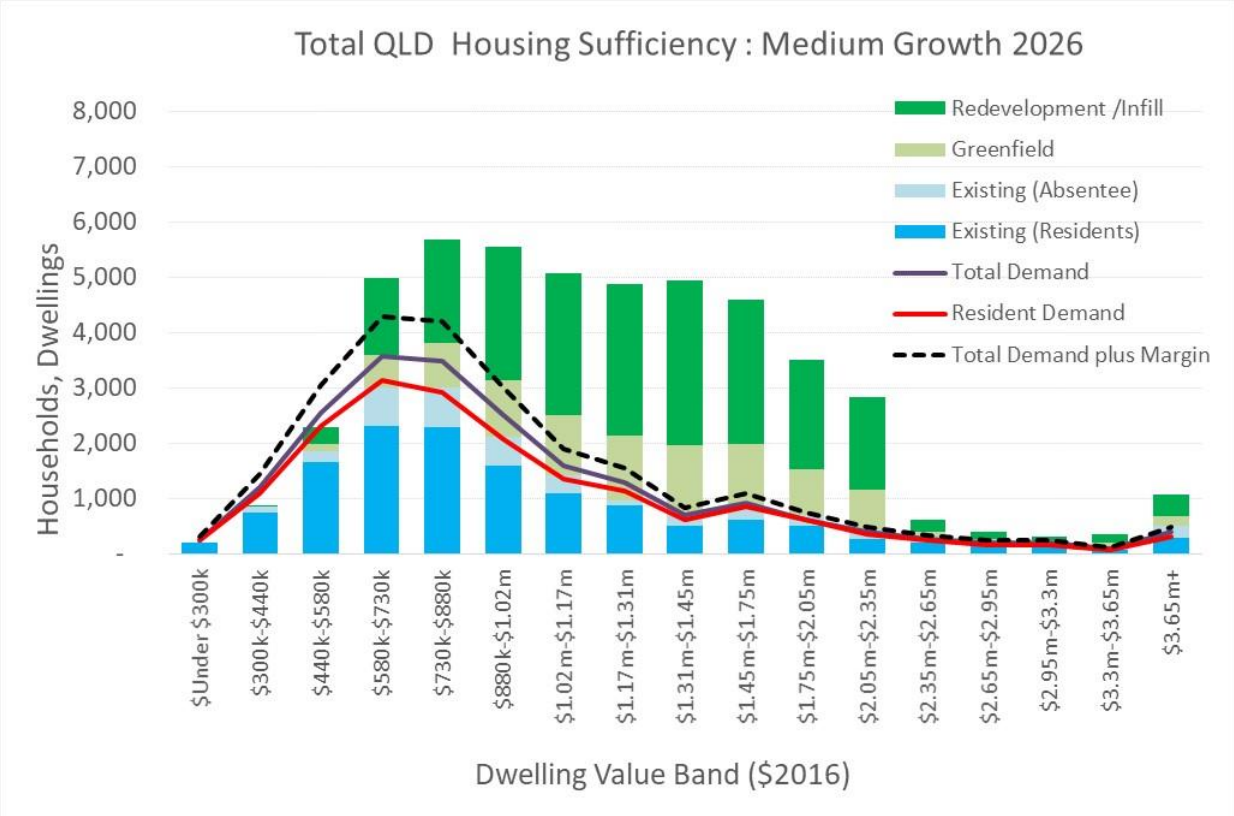
Table 6.2 – Total QLD Medium-term Housing Sufficiency – Medium Growth 2026

Total QLD : Medium Growth Future 2026											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	200	-	-	200	260	-	260	- 60	77%	- 80	71%
$300k-$440k	750	100	40	890	1,090	100	1,190	- 300	75%	- 380	70%
$440k-$580k	1,660	200	440	2,300	2,320	220	2,540	- 240	91%	- 380	86%
$580k-$730k	2,320	700	1,980	5,000	3,140	790	3,930	1,070	127%	910	122%
$730k-$880k	2,290	730	2,680	5,700	2,930	830	3,760	1,940	152%	1,820	147%
$880k-$1.02m	1,610	510	3,430	5,550	2,070	580	2,650	2,900	209%	2,810	203%
$1.02m-$1.17m	1,090	340	3,650	5,080	1,350	380	1,730	3,350	294%	3,300	285%
$1.17m-$1.31m	890	80	3,920	4,890	1,150	90	1,240	3,650	394%	3,600	379%
$1.31m-$1.45m	510	200	4,250	4,960	610	220	830	4,130	598%	4,110	584%
$1.45m-$1.75m	630	260	3,720	4,610	850	290	1,140	3,470	404%	3,430	391%
$1.75m-$2.05m	520	180	2,810	3,510	620	200	820	2,690	428%	2,670	418%
$2.05m-$2.35m	280	170	2,380	2,830	360	190	550	2,280	515%	2,270	505%
$2.35m-$2.65m	200	110	300	610	260	120	380	230	161%	220	156%
$2.65m-$2.95m	140	80	190	410	160	90	250	160	164%	150	158%
$2.95m-$3.3m	150	60	110	320	160	80	240	80	133%	80	133%
$3.3m-$3.65m	80	70	200	350	80	70	150	200	233%	200	233%
$3.65m+	290	220	570	1,080	320	250	570	510	189%	500	186%
Total	13,600	4,000	30,700	48,300	17,700	4,500	22,200	26,100	218%	25,200	209%
Shortfall Bands	2,610	300	480	3,390	3,670	320	3,990	- 600	85%	- 840	80%

Source: ME Queenstown Housing Model 2017

If allowance is made for medium-term growth to be 20% higher than projected, to accommodate the margin required by the NPS, the shortfall in the lower value bands would be larger, at -860 dwellings (80% sufficiency). However, total sufficiency would still be very substantial, with potential supply exceeding demand by 27,100 dwellings (rather than 28,000) (Table 6.2).

Figure 6.2 – Total QLD Medium-term Housing Sufficiency – Medium Growth 2026



6.3.3 Long-term - Medium Growth 2016-2046

Table 6.3 sets out the estimated demand and supply situation for total QLD by value band as at 2046 in the medium growth future. Total feasible capacity by then is estimated at 54,100 dwellings including the existing estate (17,600 dwellings), together with an estimated 12,200 greenfield (the long-term total) and 24,300 feasible through infill and redevelopment, another 36,500 in total.

Total dwelling demand for 2046 is projected at 29,300, comprising 24,000 resident households (up by 10,400 over the 30 years) and 5,300 dwellings for absentee owners (up by 1,300). The overall capacity surplus would be 24,800 dwellings (+85% in total). However, as previously, this overall surplus contains net shortfalls in the five lowest dwelling value bands (shaded in the table), representing -2,460 dwellings in total mainly in the under $580,000 value bands, and 84% sufficiency in those bands.

Figure 6.3 shows the supply side and the demand side in each value band, as estimated for 2046. Overall demand still peaks in the $580-730,000 band, and the $730-880,000 band. The feasibility estimates indicate considerable further capacity in these bands, although the indicated shortfall is across five lower bands. As previously, capacity in SHAs and the rural environment is not included, and the base situation shows the average of the dwelling feasibility scenarios.

The indicated capacity for lower value dwellings in the SHAs would reduce the indicated shortfall to a minor degree.

If allowance is made for long-term growth to be 15% higher than projected, for the NPS margin, the shortfall in the lower value bands would be larger, at -3,380 dwellings (79% sufficiency). Total sufficiency would still

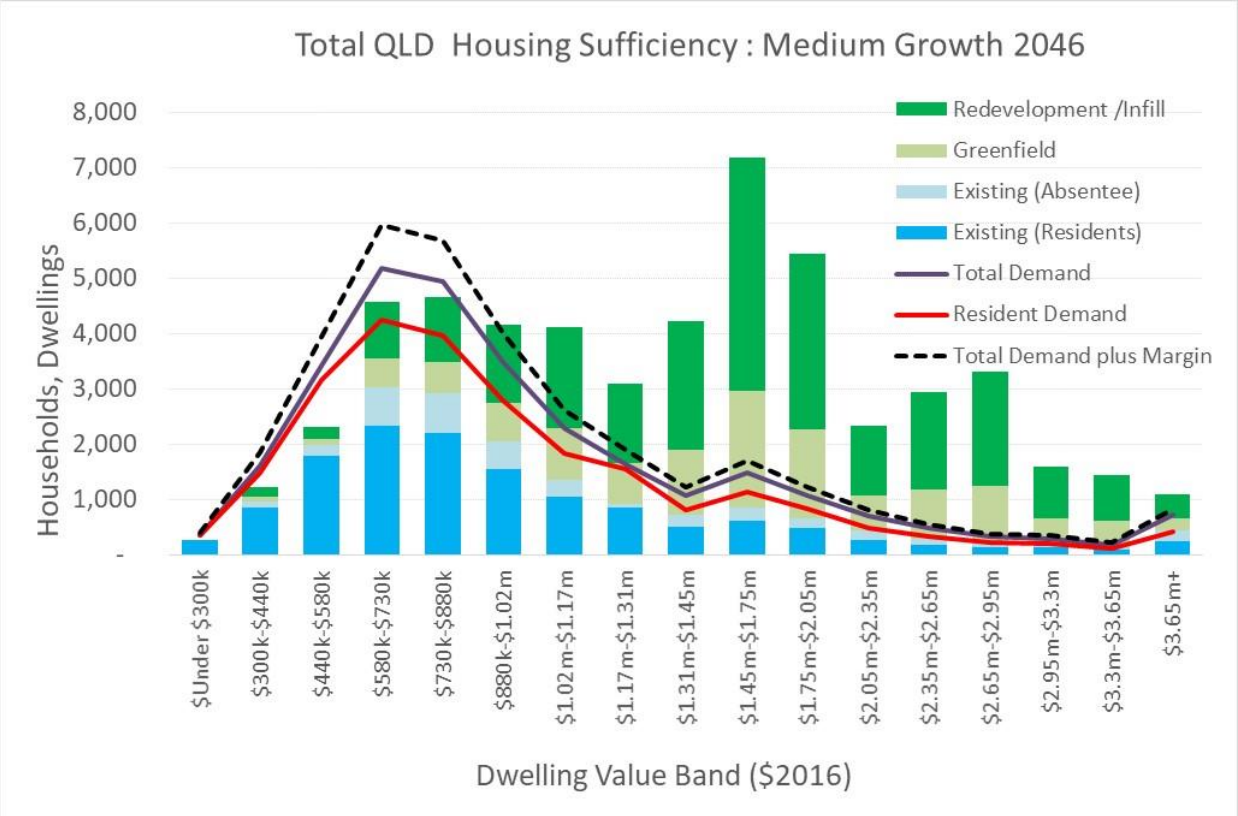
be substantial, with potential supply exceeding demand by 23,200 dwellings (rather than 24,800) (Table 6.3).

Table 6.3 – Total QLD Long-term Housing Sufficiency – Medium Growth 2046

Total QLD : Medium Growth Future 2046											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	280	-	-	280	350	-	350	- 70	80%	- 100	74%
$300k-$440k	850	110	270	1,230	1,500	120	1,620	- 390	76%	- 510	71%
$440k-$580k	1,790	210	320	2,320	3,170	260	3,430	- 1,110	68%	- 1,350	63%
$580k-$730k	2,330	700	1,550	4,580	4,260	930	5,190	- 610	88%	- 900	84%
$730k-$880k	2,210	710	1,740	4,660	3,970	970	4,940	- 280	94%	- 520	90%
$880k-$1.02m	1,560	490	2,120	4,170	2,800	690	3,490	680	119%	500	114%
$1.02m-$1.17m	1,050	320	2,760	4,130	1,830	460	2,290	1,840	180%	1,730	172%
$1.17m-$1.31m	850	80	2,180	3,110	1,550	100	1,650	1,460	188%	1,370	179%
$1.31m-$1.45m	520	210	3,500	4,230	820	260	1,080	3,150	392%	3,100	374%
$1.45m-$1.75m	620	250	6,320	7,190	1,140	340	1,480	5,710	486%	5,640	464%
$1.75m-$2.05m	500	170	4,790	5,460	840	230	1,070	4,390	510%	4,340	488%
$2.05m-$2.35m	280	160	1,910	2,350	480	220	700	1,650	336%	1,620	322%
$2.35m-$2.65m	190	110	2,640	2,940	340	140	480	2,460	613%	2,440	588%
$2.65m-$2.95m	140	80	3,090	3,310	230	100	330	2,980	1003%	2,960	946%
$2.95m-$3.3m	150	50	1,410	1,610	210	90	300	1,310	537%	1,300	519%
$3.3m-$3.65m	100	90	1,260	1,450	110	80	190	1,260	763%	1,250	725%
$3.65m+	250	200	650	1,100	420	300	720	380	153%	360	149%
Total	13,700	3,900	36,500	54,100	24,000	5,300	29,300	24,800	185%	23,200	175%
Shortfall Bands	7,460	1,730	3,880	13,070	13,250	2,280	15,530	- 2,460	84%	- 3,380	79%

Source: ME Queenstown Housing Model 2017

Figure 6.3 – Total QLD Long-term Housing Sufficiency – Medium Growth 2046



6.3.4 Short-term – High Growth 2016-2019

Table 6.4 summarises the estimated demand and supply situation for total QLD by value band as at 2019 in the high growth future.

Total feasible capacity by then is estimated at 42,800 dwellings including the existing estate (17,600 dwellings), together with an estimated 4,300 greenfield (35% of the long-term total of 12,200) and 20,900 feasible through infill and redevelopment, another 25,200 in total.

Total dwelling demand for 2019 is projected at 19,600, comprising 15,400 resident households (up by 1,800 over the 3 years) and 4,200 dwellings for absentee owners (up by 200).

The overall capacity surplus would be 23,200 dwellings (+118% in total). However, as previously, this overall surplus contains net shortfalls in the two lowest dwelling value bands, amounting to -180 dwellings in total in the under $440,000 value bands, with 86% sufficiency in those bands.

Table 6.4 – Total QLD Short-term Housing Sufficiency – High Growth 2019

Total QLD : High Growth Future 2019											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	180	-	-	180	220	-	220	- 40	82%	- 50	78%
$300k-$440k	720	90	110	920	970	90	1,060	- 140	87%	- 190	83%
$440k-$580k	1,630	190	1,120	2,940	2,020	210	2,230	710	132%	630	127%
$580k-$730k	2,320	700	2,250	5,270	2,750	740	3,490	1,780	151%	1,690	147%
$730k-$880k	2,310	740	6,100	9,150	2,550	770	3,320	5,830	276%	5,790	272%
$880k-$1.02m	1,630	520	3,290	5,440	1,800	550	2,350	3,090	231%	3,060	229%
$1.02m-$1.17m	1,100	340	4,590	6,030	1,190	360	1,550	4,480	389%	4,460	384%
$1.17m-$1.31m	900	80	1,940	2,920	990	80	1,070	1,850	273%	1,840	270%
$1.31m-$1.45m	500	200	750	1,450	530	210	740	710	196%	700	193%
$1.45m-$1.75m	640	260	3,790	4,690	720	270	990	3,700	474%	3,690	469%
$1.75m-$2.05m	530	180	350	1,060	550	190	740	320	143%	310	141%
$2.05m-$2.35m	290	170	170	630	310	170	480	150	131%	150	131%
$2.35m-$2.65m	200	110	120	430	220	110	330	100	130%	100	130%
$2.65m-$2.95m	140	80	80	300	140	80	220	80	136%	80	136%
$2.95m-$3.3m	160	60	70	290	140	70	210	80	138%	80	138%
$3.3m-$3.65m	80	60	80	220	70	60	130	90	169%	90	169%
$3.65m+	290	230	360	880	270	240	510	370	173%	370	173%
Total	13,600	4,000	25,200	42,800	15,400	4,200	19,600	23,200	218%	22,800	214%
Shortfall Bands	900	90	110	1,100	1,190	90	1,280	- 180	86%	- 240	82%

Source: ME Queenstown Housing Model 2017

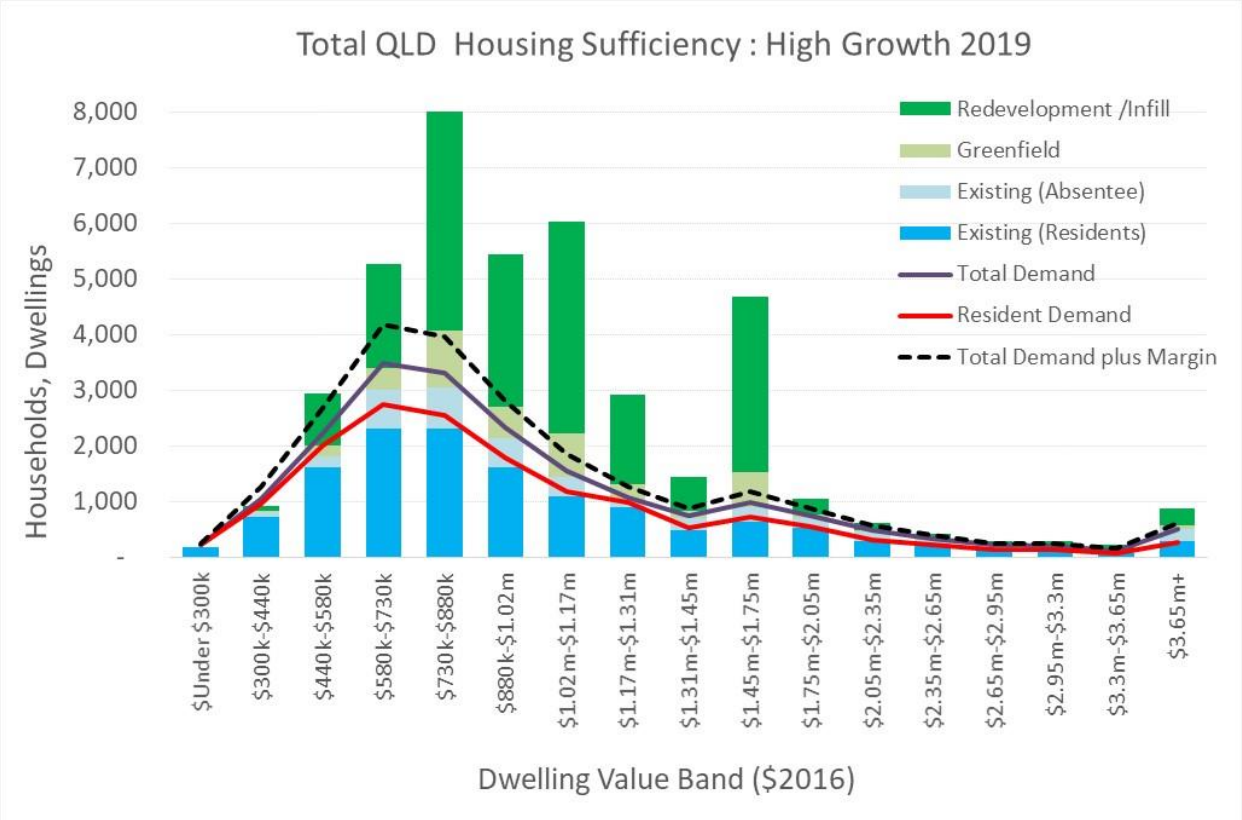
Figure 6.4 shows the supply side and the demand side in each value band, and extent of capacity shortfalls/surpluses. Overall, demand is highest in the $580-730,000 and $730-880,000 bands. The feasibility estimates indicate considerable capacity in these bands, with the indicated shortfall confined to the two lower bands.

As previously, capacity in the rural environment, proposed re-zonings in the PDP and SHAs are not included, and the base situation shows the average of the dwelling feasibility scenarios. The indicated capacity for lower value dwellings in the SHAs would reduce the indicated shortfall by more than half.

If allowance is made for short-term growth to be 20% higher than projected, to accommodate the margin required by the NPS, the shortfall in the lower value bands would be larger, at -240 dwellings (82%

sufficiency). Total sufficiency would still be very substantial, with potential supply exceeding demand by 22,800 dwellings (rather than 23,200) (Table 6.4).

Figure 6.4 – Total QLD Short-term Housing Sufficiency – High Growth 2019



6.3.5 Medium-term – High Growth 2016-2026

Table 6.5 summarises the estimated demand and supply situation for total QLD by value band as at 2026 in the high growth future.

Total feasible capacity by then is estimated at 49,500 dwellings including the existing estate (17,600 dwellings), together with an estimated 9,100 greenfield (75% of the long-term total of 12,200) and 22,700 feasible through infill and redevelopment, another 31,800 in total.

Total dwelling demand for 2026 is projected at 23,500, comprising 18,800 resident households (up by 5,200 over the 10 years) and 4,700 dwellings for absentee owners (up by 700).

The overall capacity surplus would be 25,900 dwellings (+111% in total). However, as previously, this overall surplus contains net shortfalls in the three lowest dwelling value bands, amounting to -460 dwellings in total in the under $580,000 value bands, with 89% sufficiency in those bands.

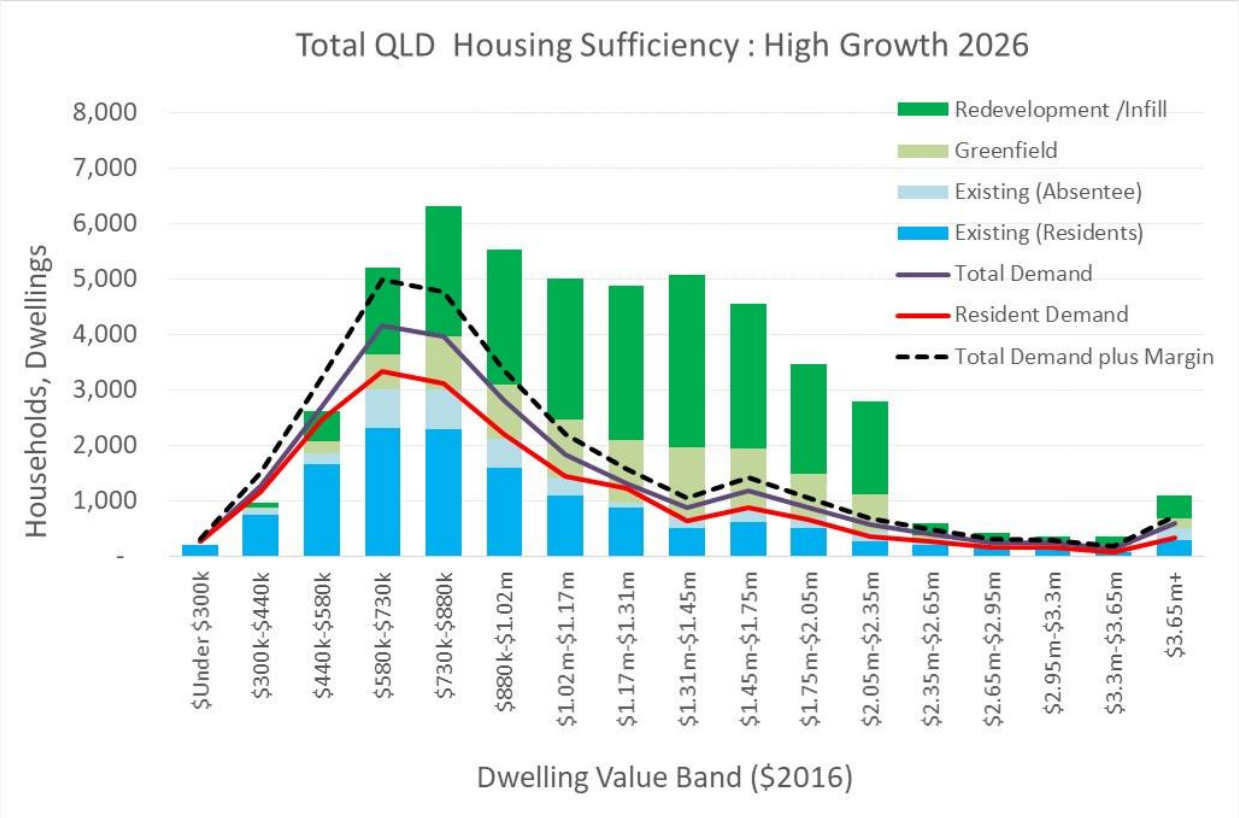
Figure 6.5 shows the supply side and the demand side in each value band, and extent of capacity shortfalls/surpluses. Overall, demand is highest in the $580-730,000 and $730-880,000 bands. The feasibility estimates indicate considerable capacity in these bands, with the indicated shortfall confined to the three lower bands.

Table 6.5 – Total QLD Medium-term Housing Sufficiency – High Growth 2026

Total QLD : High Growth Future 2026											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	200	-	-	200	270	-	270	- 70	74%	- 90	69%
$300k-$440k	750	100	110	960	1,160	110	1,270	- 310	76%	- 400	71%
$440k-$580k	1,660	200	760	2,620	2,470	230	2,700	- 80	97%	- 250	91%
$580k-$730k	2,320	700	2,190	5,210	3,330	830	4,160	1,050	125%	850	119%
$730k-$880k	2,290	730	3,300	6,320	3,120	860	3,980	2,340	159%	2,180	153%
$880k-$1.02m	1,610	510	3,420	5,540	2,200	610	2,810	2,730	197%	2,620	190%
$1.02m-$1.17m	1,090	340	3,590	5,020	1,440	400	1,840	3,180	273%	3,110	263%
$1.17m-$1.31m	890	80	3,910	4,880	1,220	90	1,310	3,570	373%	3,510	356%
$1.31m-$1.45m	510	200	4,360	5,070	650	230	880	4,190	576%	4,160	557%
$1.45m-$1.75m	630	260	3,670	4,560	880	300	1,180	3,380	386%	3,330	371%
$1.75m-$2.05m	520	180	2,760	3,460	670	210	880	2,580	393%	2,550	380%
$2.05m-$2.35m	280	170	2,340	2,790	370	200	570	2,220	489%	2,210	481%
$2.35m-$2.65m	200	110	290	600	280	130	410	190	146%	180	143%
$2.65m-$2.95m	140	80	200	420	170	90	260	160	162%	150	156%
$2.95m-$3.3m	150	60	140	350	170	80	250	100	140%	90	135%
$3.3m-$3.65m	80	70	220	370	80	70	150	220	247%	220	247%
$3.65m+	290	220	580	1,090	330	270	600	490	182%	480	179%
Total	13,600	4,000	31,800	49,500	18,800	4,700	23,500	25,900	211%	24,900	201%
Shortfall Bands	2,610	300	870	3,780	3,900	340	4,240	- 460	89%	- 740	84%

Source: ME Queenstown Housing Model 2017

Figure 6.5 – Total QLD Medium-term Housing Sufficiency – High Growth 2026



As previously, capacity in the rural environment, proposed rezoning requests in the PDP and SHAs are not included, and the base situation shows the average of the dwelling feasibility scenarios. The indicated capacity for lower value dwellings in the SHAs would reduce the indicated shortfall by around one-third.

If allowance is made for medium-term growth to be 20% higher than projected, to accommodate the margin required by the NPS, the shortfall in the lower value bands would be larger, at -740 dwellings (84% sufficiency). Total sufficiency would still be very substantial, with potential supply exceeding demand by 24,900 dwellings (rather than 25,900) (Table 6.5).

6.3.6 Long-term - High Growth 2016-2046

Table 6.6 sets out the estimated demand and supply situation for total QLD by value band as at 2046 in the high growth future.

Total feasible capacity by then is estimated at 54,100 dwellings including the existing estate (17,600 dwellings), together with an estimated 12,200 greenfield (the long-term total) and 24,300 feasible through infill and redevelopment, another 36,500 in total.

Total dwelling demand for 2046 is projected at 34,000, comprising 27,700 resident households (up by 14,100 over the 30 years) and 6,300 dwellings for absentee owners (up by 2,300).

The overall capacity surplus would be 20,200 dwellings (+59% in total). However, as previously, this overall surplus contains net shortfalls in the five lowest dwelling value bands (shaded in the table), representing -4,930 dwellings in total mainly in the under $580,000 value bands, and 73% sufficiency in those bands.

Figure 6.6 shows the supply side and the demand side in each value band, as estimated for 2046. Overall demand still peaks in the $580-730,000 and $730-880,000 bands. The feasibility estimates indicate considerable further capacity in these bands, although the indicated shortfall is across five lower bands. As previously, capacity in SHA blocks, rural environment and up-zonings in the PDP are not included, and the base situation shows the average of the dwelling feasibility scenarios. The indicated capacity for lower value dwellings in the SHAs would reduce the indicated shortfall to a minor degree.

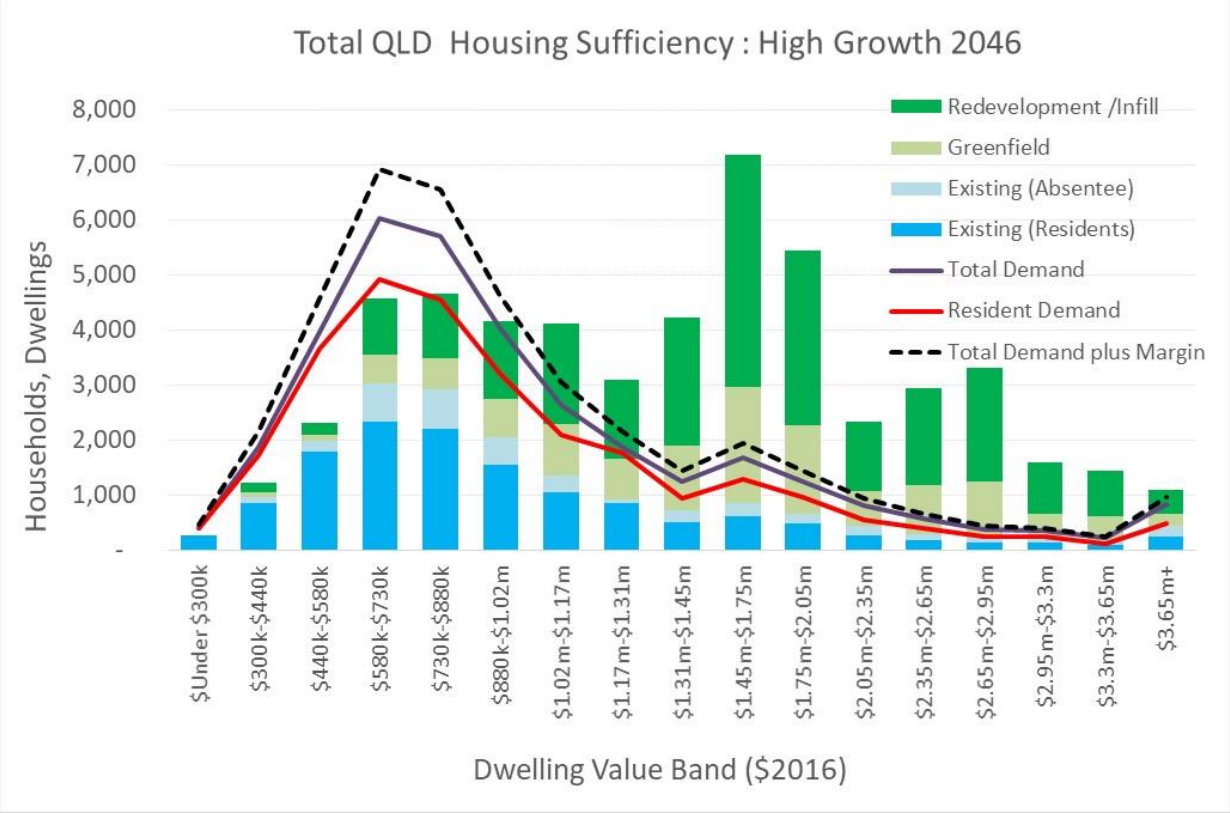
If allowance is made for long-term growth to be 15% higher than projected, to accommodate the margin required by the NPS, the shortfall in the lower value bands would be larger, at -6,150 dwellings (68% sufficiency). Total sufficiency would still be very substantial, with potential supply exceeding demand by 18,000 dwellings (rather than 20,200) (Table 6.6).

Table 6.6 – Total QLD Long-term Housing Sufficiency – High Growth 2046

Total QLD : High Growth Future 2046											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	280	-	-	280	400	-	400	- 120	70%	- 160	64%
$300k-$440k	850	110	270	1,230	1,740	140	1,880	- 650	65%	- 800	61%
$440k-$580k	1,790	210	320	2,320	3,670	310	3,980	- 1,660	58%	- 1,970	54%
$580k-$730k	2,330	700	1,550	4,580	4,920	1,110	6,030	- 1,450	76%	- 1,840	71%
$730k-$880k	2,210	710	1,740	4,660	4,560	1,150	5,710	- 1,050	82%	- 1,380	77%
$880k-$1.02m	1,560	490	2,120	4,170	3,220	810	4,030	140	103%	- 100	98%
$1.02m-$1.17m	1,050	320	2,760	4,130	2,110	540	2,650	1,480	156%	1,330	148%
$1.17m-$1.31m	850	80	2,180	3,110	1,770	120	1,890	1,220	165%	1,090	154%
$1.31m-$1.45m	520	210	3,500	4,230	940	310	1,250	2,980	338%	2,910	320%
$1.45m-$1.75m	620	250	6,320	7,190	1,290	400	1,690	5,500	425%	5,400	402%
$1.75m-$2.05m	500	170	4,790	5,460	970	280	1,250	4,210	437%	4,140	414%
$2.05m-$2.35m	280	160	1,910	2,350	560	260	820	1,530	287%	1,490	273%
$2.35m-$2.65m	190	110	2,640	2,940	410	170	580	2,360	507%	2,330	482%
$2.65m-$2.95m	140	80	3,090	3,310	260	120	380	2,930	871%	2,910	828%
$2.95m-$3.3m	150	50	1,410	1,610	250	110	360	1,250	447%	1,230	424%
$3.3m-$3.65m	100	90	1,260	1,450	130	90	220	1,230	659%	1,220	630%
$3.65m+	250	200	650	1,100	490	350	840	260	131%	230	126%
Total	13,700	3,900	36,500	54,100	27,700	6,300	34,000	20,200	159%	18,000	150%
Shortfall Bands	7,460	1,730	3,880	13,070	15,290	2,710	18,000	- 4,930	73%	- 6,150	68%

Source: ME Queenstown Housing Model 2017

Figure 6.6 – Total QLD Long-term Housing Sufficiency – High Growth 2046



6.4 Total Urban Environment Sufficiency

The focus of the NPS is urban growth capacity. Currently, the District population is predominantly urban, with some 82% residing within the area currently urban or identified to be urban. The major share of growth will be urban, and most of the district's future growth capacity is for urban growth. This section compares total urban environment demand for housing against total urban commercially feasible capacity.

6.4.1 Short-term – Medium Growth 2016-2019

Table 6.7 summarises the estimated demand and supply situation for the QLD urban environment by value band as at 2019 in the medium growth future.

Total feasible capacity by then is estimated at 38,600 dwellings including the existing urban estate (13,500 dwellings), together with an estimated 4,300 greenfield (35% of the long-term total) and 20,900 feasible through infill and redevelopment, another 25,200 in total.

Total urban dwelling demand for 2019 is projected at 14,600, comprising 12,300 resident households (up by 1,200 over the 3 years) and 2,300 dwellings for absentee owners (up by 300).

The overall surplus of 24,000 dwellings (+164% in total), contains net shortfalls in the two lowest dwelling value bands together amounting to -90 dwellings in total and representing 89% sufficiency in those two bands.

Figure 6.7 shows the urban supply and demand sides in each dwelling value band, and the gap between demand and supply across the urban dwelling estate. As with the total district, demand is highest in the $580-730,000 and $730-880,000 bands. These bands have considerable capacity, contrasting with the small shortfalls in the two lowest bands. As noted, net additional capacity in urban SHAs, the rural environment and proposed up-zonings of the PDP are not included in the overall estimate at this stage. The expected capacity for lower value dwellings in the SHAs would potentially offset the indicated shortfall.

Both residential demand and absentee ownership is concentrated in the urban area, and this is expected to increase in the future, as more than 80% of demand of both types is expected in urban Queenstown.

The observations about the effects of different scenarios for feasible capacity including the identified greenfield areas, and effects about shifts in dwelling preferences (toward attached and away from detached dwellings) apply especially in the urban areas.

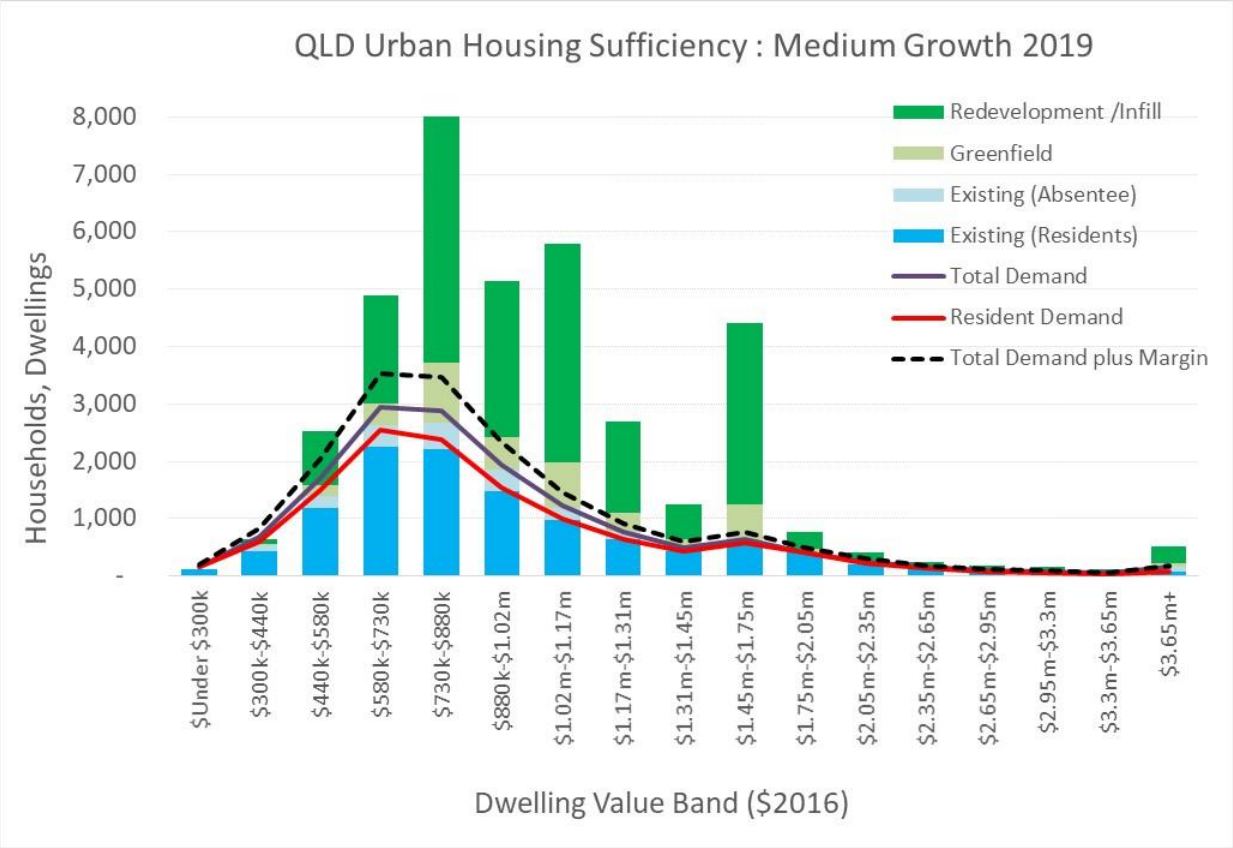
If short-term demand growth is greater by 20% than anticipated – that is, to meet the NPS-UDC requirement for a 20% additional margin in the short-term – the sufficiency shortfall in the lower dwelling value bands would be slightly higher, at -140 dwellings, and 84% overall sufficiency (Table 6.7). However, the overall surplus of potential capacity over demand means sufficiency is easily met for the market as a whole.

Table 6.7 – QLD Urban Short-term Housing Sufficiency – Medium Growth 2019

QLD Urban : Medium Growth Future 2019											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	120	-	-	120	160	-	160	- 40	75%	- 50	71%
$300k-$440k	430	100	110	640	590	100	690	- 50	93%	- 90	88%
$440k-$580k	1,190	210	1,120	2,520	1,500	210	1,710	810	147%	750	142%
$580k-$730k	2,250	380	2,250	4,880	2,540	400	2,940	1,940	166%	1,880	163%
$730k-$880k	2,200	480	6,100	8,780	2,370	510	2,880	5,900	305%	5,880	303%
$880k-$1.02m	1,480	380	3,290	5,150	1,540	400	1,940	3,210	265%	3,190	263%
$1.02m-$1.17m	980	210	4,590	5,780	1,000	220	1,220	4,560	474%	4,550	470%
$1.17m-$1.31m	640	120	1,940	2,700	640	130	770	1,930	351%	1,920	346%
$1.31m-$1.45m	420	80	750	1,250	420	80	500	750	250%	750	250%
$1.45m-$1.75m	550	60	3,790	4,400	570	60	630	3,770	698%	3,760	688%
$1.75m-$2.05m	400	10	350	760	400	10	410	350	185%	350	185%
$2.05m-$2.35m	190	40	170	400	210	40	250	150	160%	150	160%
$2.35m-$2.65m	110	20	120	250	130	20	150	100	167%	100	167%
$2.65m-$2.95m	70	30	80	180	70	30	100	80	180%	80	180%
$2.95m-$3.3m	50	30	70	150	50	30	80	70	188%	70	188%
$3.3m-$3.65m	20	20	80	120	30	20	50	70	240%	70	240%
$3.65m+	80	80	360	520	70	80	150	370	347%	370	347%
Total	11,200	2,300	25,200	38,600	12,300	2,300	14,600	24,000	264%	23,700	259%
Shortfall Bands	550	100	110	760	750	100	850	- 90	89%	- 140	84%

Source: ME Queenstown Housing Model 2017

Figure 6.7 – QLD Urban Short-term Housing Sufficiency – Medium Growth 2019



6.4.2 Medium-term - Medium Growth 2016-2026

Table 6.8 summarises the estimated demand and supply situation for urban QLD by value band as at 2026 in the medium growth future. In total, urban feasible capacity is estimated at 45,300 dwellings including the existing estate (13,500 dwellings), together with an estimated 9,200 greenfield (75% of the long-term total of 12,200) and 21,600 feasible through infill and redevelopment, another 31,800 in total.

Total urban dwelling demand for 2026 is projected at 17,200, comprising 14,600 resident households (up by 3,400 over the 10 years) and 2,600 dwellings for absentee owners (up by 400).

The overall capacity surplus would be 28,100 dwellings (+163% in total). However, as previously, this overall surplus contains net shortfalls in the three lowest dwelling value bands, amounting to -160 dwellings in total in the under $580,000 value bands, with 83% sufficiency in those bands.

Figure 6.8 shows the supply and demand sides in each value band. The peak demand in the $580-730,000 and $730-880,000 bands is associated with considerable feasible capacity for further development. The net additional capacity in urban SHAs is not included. The expected capacity for lower value dwellings in the SHAs would potentially offset about half the indicated shortfall.

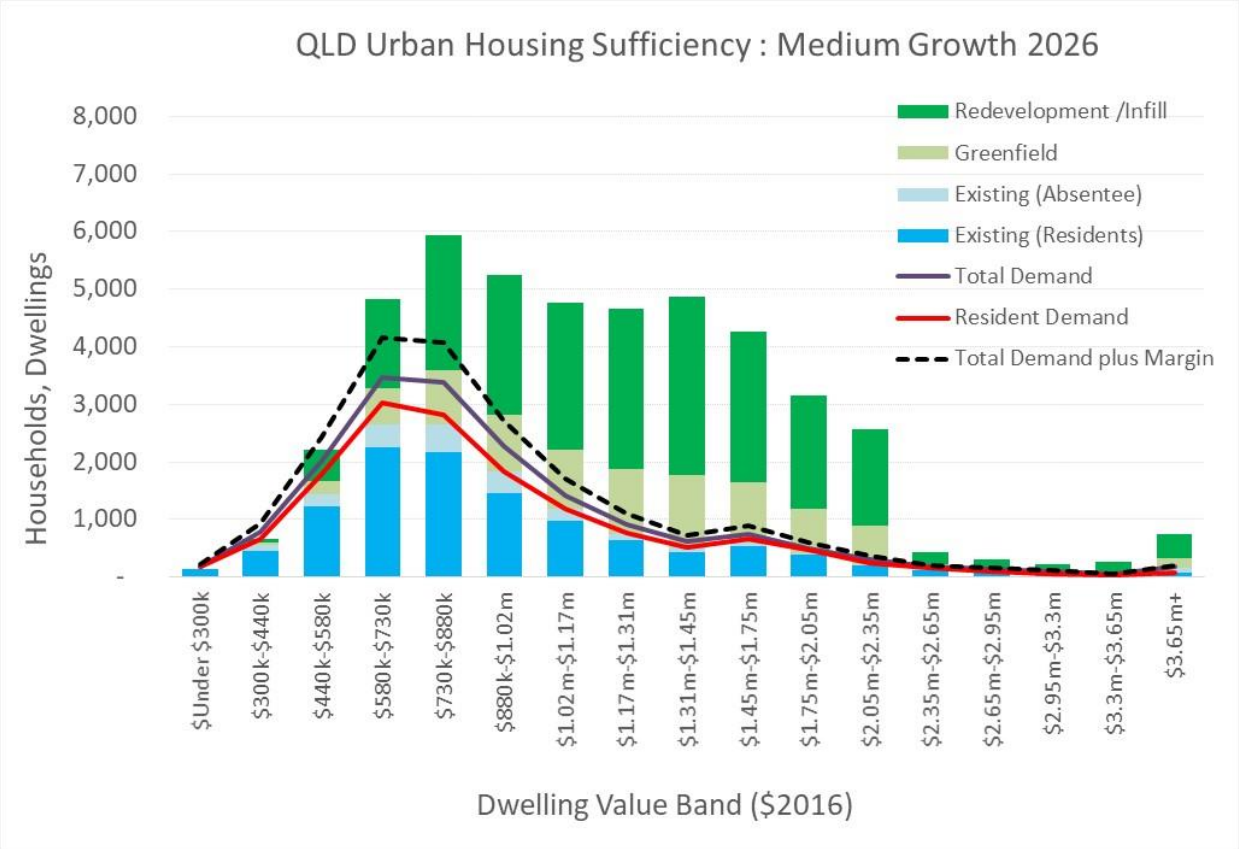
If medium-term demand growth is greater by 20% than anticipated, as per the NPS-UDC requirement for a 20% additional margin, sufficiency shortfall in the lower dwelling value bands would be slightly higher, at -230 dwellings, and 78% overall sufficiency (Table 6.8). However, the overall surplus of potential capacity over demand would be 27,400 dwellings, meaning sufficiency is met for the market as a whole.

Table 6.8 – QLD Urban Medium-term Housing Sufficiency – Medium Growth 2026

QLD Urban : Medium Growth Future 2026											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	130	-	-	130	180	-	180	- 50	72%	- 70	65%
$300k-$440k	460	100	110	670	670	110	780	- 110	86%	- 160	81%
$440k-$580k	1,230	210	760	2,200	1,800	230	2,030	170	108%	50	102%
$580k-$730k	2,260	380	2,190	4,830	3,020	440	3,460	1,370	140%	1,210	133%
$730k-$880k	2,160	480	3,300	5,940	2,820	570	3,390	2,550	175%	2,440	170%
$880k-$1.02m	1,460	370	3,420	5,250	1,830	440	2,270	2,980	231%	2,910	224%
$1.02m-$1.17m	970	210	3,590	4,770	1,180	240	1,420	3,350	336%	3,310	327%
$1.17m-$1.31m	630	120	3,910	4,660	770	140	910	3,750	512%	3,720	496%
$1.31m-$1.45m	430	80	4,360	4,870	520	90	610	4,260	798%	4,240	773%
$1.45m-$1.75m	540	60	3,670	4,270	670	70	740	3,530	577%	3,500	555%
$1.75m-$2.05m	390	10	2,760	3,160	480	10	490	2,670	645%	2,650	620%
$2.05m-$2.35m	190	40	2,340	2,570	250	50	300	2,270	857%	2,260	829%
$2.35m-$2.65m	110	20	290	420	150	20	170	250	247%	240	233%
$2.65m-$2.95m	70	30	200	300	90	40	130	170	231%	170	231%
$2.95m-$3.3m	50	30	140	220	60	40	100	120	220%	120	220%
$3.3m-$3.65m	20	20	220	260	30	20	50	210	520%	210	520%
$3.65m+	80	80	580	740	80	90	170	570	435%	570	435%
Total	11,200	2,200	31,800	45,300	14,600	2,600	17,200	28,100	263%	27,400	253%
Shortfall Bands	590	100	110	800	850	110	960	- 160	83%	- 230	78%

Source: ME Queenstown Housing Model 2017

Figure 6.8 – QLD Urban Medium-term Housing Sufficiency – Medium Growth 2026



6.4.3 Long-term - Medium Growth 2016-2046

Table 6.9 sets out the estimated demand and supply situation for urban QLD by value band as at 2046 in the medium growth future. Total feasible capacity in urban QLD by then is estimated at 49,900 dwellings including the existing estate of 13,400 dwellings, the estimated 12,200 greenfield and 24,300 feasible through infill and redevelopment, another 36,500 in total.

Urban dwelling demand for 2046 is projected at 23,200, comprising 20,000 resident households (up by 8,800 over the 30 years) and 3,200 dwellings for absentee owners (up by 1,000).

The overall capacity surplus in urban QLD would be 26,700 dwellings (+115% in total). The overall surplus contains net shortfalls in the five lowest dwelling value bands, representing -1,870 dwellings in total, mainly in the under $580,000 value bands, with 86% sufficiency in those bands below $880,000.

Figure 6.9 shows the supply side and the demand side in each value band, for urban QLD in 2046. The feasibility estimates indicate considerable further capacity in the higher value bands. As previously the base situation shows the average of the dwelling feasibility scenarios. The expected capacity for lower value dwellings in the SHAs would potentially offset a limited amount of the indicated shortfall, assuming no further SHA development occurred[122].

[122] Note that no allowance is made for any of the KiwiBuild capacity to be developed in QLD.

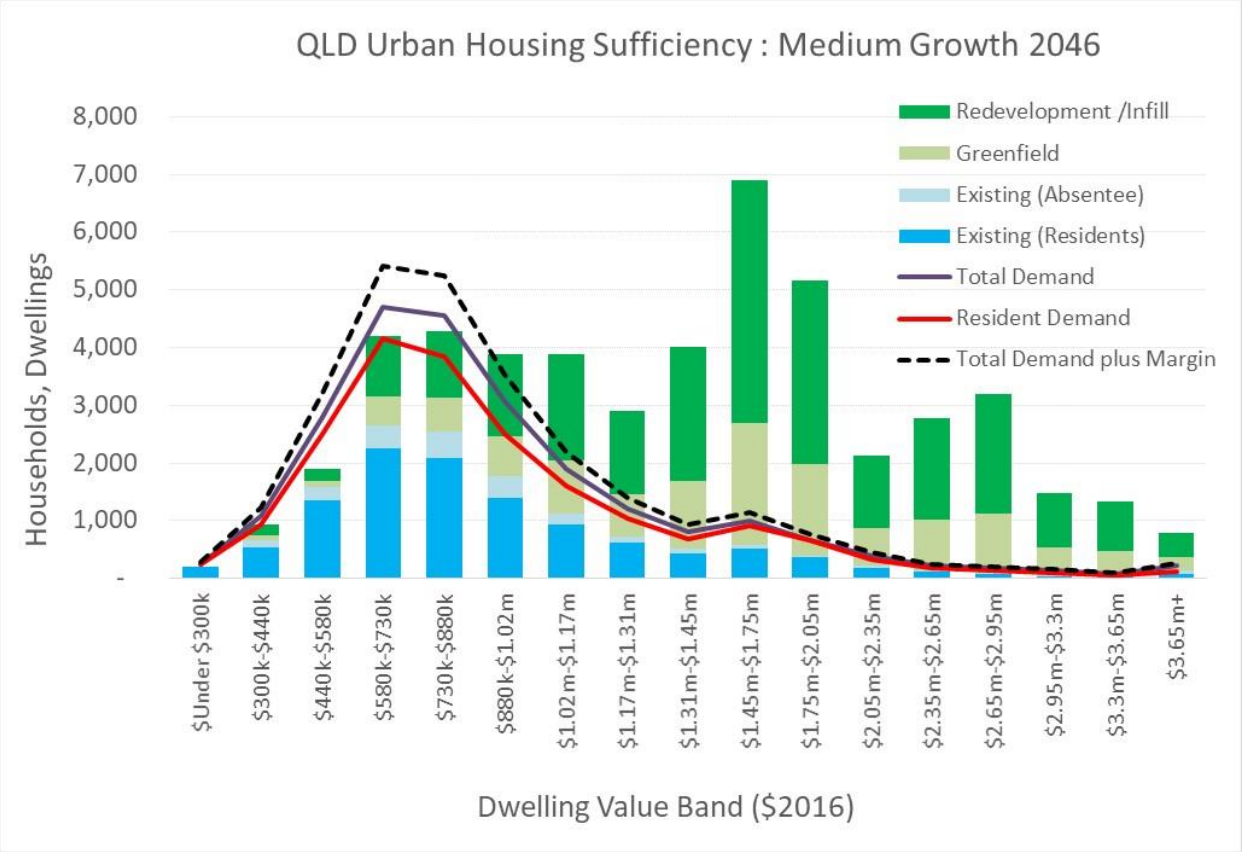
If long-term demand growth is greater by 15% than anticipated, as per the NPS-UDC requirement for a 15% additional margin, the sufficiency shortfall in the lower dwelling value bands would be slightly higher, at -2,700 dwellings, and 81% overall sufficiency (Table 6.9). The overall surplus of potential capacity over demand would be 25,400 dwellings, meaning sufficiency is met for the market as a whole.

Table 6.9 – QLD Urban Long-term Housing Sufficiency – Medium Growth 2046

QLD Urban : Medium Growth Future 2046											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	190	-	-	190	250	-	250	- 60	76%	- 80	70%
$300k-$440k	540	120	270	930	940	130	1,070	- 140	87%	- 220	81%
$440k-$580k	1,350	230	320	1,900	2,500	290	2,790	- 890	68%	- 1,090	64%
$580k-$730k	2,260	380	1,550	4,190	4,150	550	4,700	- 510	89%	- 800	84%
$730k-$880k	2,090	460	1,740	4,290	3,850	710	4,560	- 270	94%	- 510	89%
$880k-$1.02m	1,400	360	2,120	3,880	2,510	550	3,060	820	127%	660	120%
$1.02m-$1.17m	930	200	2,760	3,890	1,600	300	1,900	1,990	205%	1,900	195%
$1.17m-$1.31m	610	110	2,180	2,900	1,040	170	1,210	1,690	240%	1,630	228%
$1.31m-$1.45m	440	80	3,500	4,020	690	120	810	3,210	496%	3,170	473%
$1.45m-$1.75m	520	60	6,320	6,900	910	90	1,000	5,900	690%	5,840	651%
$1.75m-$2.05m	370	10	4,790	5,170	650	10	660	4,510	783%	4,470	739%
$2.05m-$2.35m	180	40	1,910	2,130	330	60	390	1,740	546%	1,720	520%
$2.35m-$2.65m	110	20	2,640	2,770	180	30	210	2,560	1319%	2,550	1259%
$2.65m-$2.95m	70	30	3,090	3,190	130	40	170	3,020	1876%	3,010	1772%
$2.95m-$3.3m	40	30	1,410	1,480	90	40	130	1,350	1138%	1,350	1138%
$3.3m-$3.65m	30	30	1,260	1,320	50	30	80	1,240	1650%	1,240	1650%
$3.65m+	70	70	650	790	110	120	230	560	343%	550	329%
Total	11,200	2,200	36,500	49,900	20,000	3,200	23,200	26,700	215%	25,400	203%
Shortfall Bands	6,430	1,190	3,880	11,500	11,690	1,680	13,370	- 1,870	86%	- 2,700	81%

Source: ME Queenstown Housing Model 2017

Figure 6.9 – QLD Urban Long-term Housing Sufficiency – Medium Growth 2046



6.4.4 Short-term – High Growth 2016-2019

Table 6.10 summarises the estimated demand and supply situation for total QLD by value band as at 2019 in the high growth future.

Total feasible capacity by then is estimated at 38,600 dwellings including the existing urban estate at 13,400 dwellings, an estimated 4,300 greenfield, and 20,900 feasible through infill and redevelopment, another 25,200 in total.

Total dwelling demand for 2019 is projected at 15,000 in urban QLD, comprising 12,600 resident households (up by 1,400 over the 3 years) and 2,400 dwellings for absentee owners (up by 200).

Table 6.10 – QLD Urban Short-term Housing Sufficiency – High Growth 2019

QLD Urban : High Growth Future 2019											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	120	-	-	120	170	-	170	- 50	71%	- 60	67%
$300k-$440k	430	100	110	640	590	100	690	- 50	93%	- 90	88%
$440k-$580k	1,190	210	1,120	2,520	1,540	220	1,760	760	143%	690	138%
$580k-$730k	2,250	380	2,250	4,880	2,600	410	3,010	1,870	162%	1,800	158%
$730k-$880k	2,200	480	6,100	8,780	2,420	530	2,950	5,830	298%	5,800	295%
$880k-$1.02m	1,480	380	3,290	5,150	1,590	410	2,000	3,150	258%	3,120	254%
$1.02m-$1.17m	980	210	4,590	5,780	1,020	230	1,250	4,530	462%	4,520	459%
$1.17m-$1.31m	640	120	1,940	2,700	650	130	780	1,920	346%	1,910	342%
$1.31m-$1.45m	420	80	750	1,250	440	90	530	720	236%	710	231%
$1.45m-$1.75m	550	60	3,790	4,400	580	70	650	3,750	677%	3,740	667%
$1.75m-$2.05m	400	10	350	760	400	10	410	350	185%	350	185%
$2.05m-$2.35m	190	40	170	400	210	40	250	150	160%	150	160%
$2.35m-$2.65m	110	20	120	250	130	20	150	100	167%	100	167%
$2.65m-$2.95m	70	30	80	180	80	30	110	70	164%	70	164%
$2.95m-$3.3m	50	30	70	150	50	30	80	70	188%	70	188%
$3.3m-$3.65m	20	20	80	120	30	20	50	70	240%	70	240%
$3.65m+	80	80	360	520	70	90	160	360	325%	360	325%
Total	11,200	2,300	25,200	38,600	12,600	2,400	15,000	23,600	257%	23,300	252%
Shortfall Bands	550	100	110	760	760	100	860	- 100	88%	- 150	84%

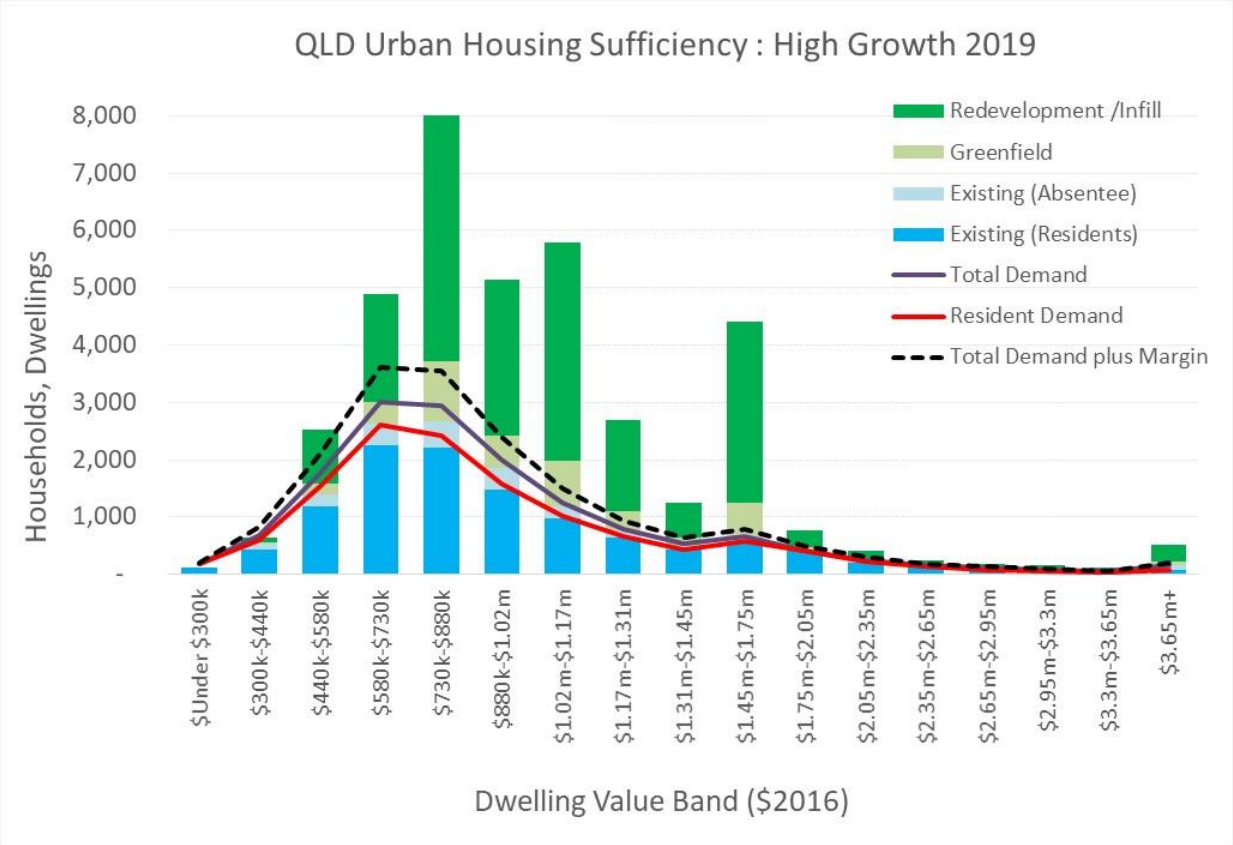
Source: ME Queenstown Housing Model 2017

The overall capacity surplus would be 23,600 dwellings (+157% in total), though with small net shortfalls in the two lowest dwelling value bands, amounting to -100 dwellings in total in the under $440,000 value bands. There would be 88% sufficiency in those bands.

Figure 6.10 shows the supply side and the demand side in each value band. The capacity plus potential capacity is substantially above projected demand in all except the lowest value bands. The base situation shows the average of the dwelling feasibility scenarios. The expected capacity for lower value dwellings in the SHAs would potentially offset much of the indicated shortfall, in the short-term.

If short-term demand growth is greater by 20% than anticipated – that is, to meet the NPS-UDC requirement for a 20% additional margin in the short-term – the sufficiency shortfall in the lower dwelling value bands would be slightly higher, at -150 dwellings, and 84% overall sufficiency (Table 6.10). However, the overall surplus of potential capacity over demand means sufficiency is easily met for the market as a whole.

Figure 6.10 –QLD Urban Short-term Housing Sufficiency – High Growth 2019



6.4.5 Medium-term – High Growth 2016-2026

Table 6.11 summarises the estimated demand and supply situation for urban QLD by value band as at 2026 in the high growth future.

Total feasible capacity by then is estimated at 45,300 dwellings including the existing urban estate of 13,400, estimated 9,100 greenfield capacity, and 22,700 feasible through infill and redevelopment, another 31,800 in total.

Urban dwelling demand for 2026 is projected at 18,300, comprising 15,500 resident households (up by 4,300 over the 10 years) and 2,800 dwellings for absentee owners (up by 600).

The overall capacity surplus would be 27,000 dwellings (+148% in total), though with net shortfalls in the three lowest dwelling value bands, amounting to -220 dwellings in total in the under $580,000 value bands, with 78% sufficiency in those bands.

Figure 6.11 shows the supply and demand in each value band, and extent of capacity shortfalls/surpluses. The feasibility estimates indicate considerable capacity in the bands which account for the main proportions of QLD urban demand, with the small indicated shortfall at the three lowest bands. The expected capacity for lower value dwellings in the SHAs would potentially offset about one quarter of the indicated shortfall, assuming no further SHA development eventuates.

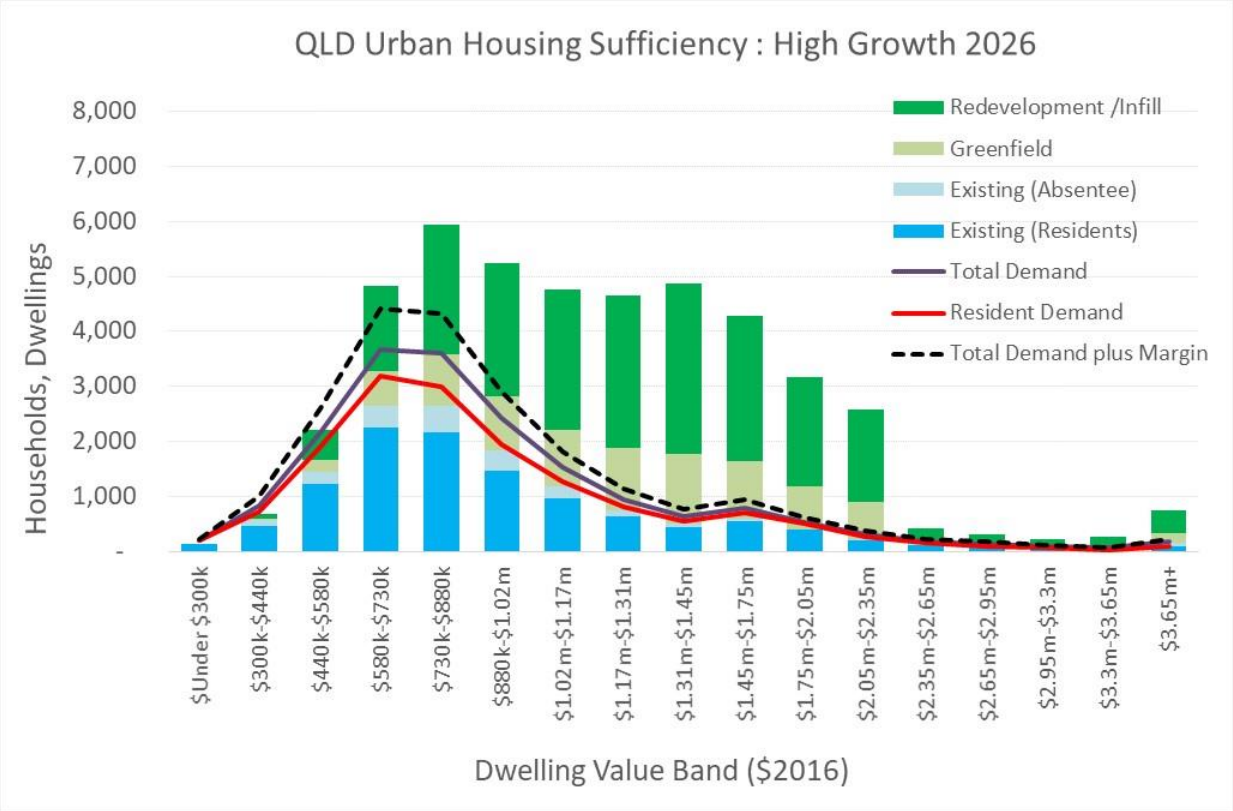
If medium-term demand growth is greater by 20% than anticipated, as per the NPS-UDC requirement for a 20% additional margin, sufficiency shortfall in the lower dwelling value bands would be slightly higher, at -400 dwellings, and 88% overall sufficiency (Table 6.11). However, the overall surplus of potential capacity over demand would be 26,100 dwellings, meaning sufficiency is met for the market as a whole.

Table 6.11 – QLD Urban Medium-term Housing Sufficiency – High Growth 2026

QLD Urban : High Growth Future 2026											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	130	-	-	130	190	-	190	- 60	68%	- 80	62%
$300k-$440k	460	100	110	670	720	110	830	- 160	81%	- 220	75%
$440k-$580k	1,230	210	760	2,200	1,910	250	2,160	40	102%	- 100	96%
$580k-$730k	2,260	380	2,190	4,830	3,200	480	3,680	1,150	131%	960	125%
$730k-$880k	2,160	480	3,300	5,940	2,990	620	3,610	2,330	165%	2,180	158%
$880k-$1.02m	1,460	370	3,420	5,250	1,940	480	2,420	2,830	217%	2,730	208%
$1.02m-$1.17m	970	210	3,590	4,770	1,260	260	1,520	3,250	314%	3,190	302%
$1.17m-$1.31m	630	120	3,910	4,660	800	150	950	3,710	491%	3,670	471%
$1.31m-$1.45m	430	80	4,360	4,870	540	100	640	4,230	761%	4,200	727%
$1.45m-$1.75m	540	60	3,670	4,270	710	80	790	3,480	541%	3,440	514%
$1.75m-$2.05m	390	10	2,760	3,160	510	10	520	2,640	608%	2,620	585%
$2.05m-$2.35m	190	40	2,340	2,570	260	50	310	2,260	829%	2,250	803%
$2.35m-$2.65m	110	20	290	420	150	30	180	240	233%	230	221%
$2.65m-$2.95m	70	30	200	300	100	40	140	160	214%	150	200%
$2.95m-$3.3m	50	30	140	220	60	40	100	120	220%	120	220%
$3.3m-$3.65m	20	20	220	260	30	30	60	200	433%	200	433%
$3.65m+	80	80	580	740	80	100	180	560	411%	560	411%
Total	11,200	2,200	31,800	45,300	15,500	2,800	18,300	27,000	248%	26,100	236%
Shortfall Bands	590	100	110	800	910	110	1,020	- 220	78%	- 400	88%

Source: ME Queenstown Housing Model 2017

Figure 6.11 – QLD Urban Medium-term Housing Sufficiency – High Growth 2026



6.4.6 Long-term - High Growth 2016-2046

Table 6.12 sets out the estimated demand and supply situation for urban QLD by value band as at 2046 in the high growth future.

Total feasible capacity by then is estimated at 49,900 dwellings including the existing urban estate at 13,400, plus 12,200 greenfield, and 24,300 feasible through infill and redevelopment, another 36,500 in total.

Dwelling demand for 2046 is projected at 27,200, comprising 23,100 resident households (up by 11,900 over the 30 years) and 4,100 dwellings for absentee owners (up by 1,900).

Table 6.12 – QLD Urban Long-term Housing Sufficiency – High Growth 2046

QLD Urban : High Growth Future 2046											
Dwelling Value Band $000)	POTENTIAL CAPACITY				DEMAND			SUFFICIENCY		with NPS MARGIN	
	QLD Residents' Estate	Absentee/ Holiday Estate	Future Feasible Supply	Total Supply	QLD Resident Demand	Absentee/ Holiday Demand	Total Demand	Net Sufficiency	Net Sufficiency %	Net Sufficiency	Net Sufficiency %
$Under $300k	190	-	-	190	290	-	290	- 100	66%	- 130	59%
$300k-$440k	540	120	270	930	1,100	160	1,260	- 330	74%	- 440	68%
$440k-$580k	1,350	230	320	1,900	2,880	360	3,240	- 1,340	59%	- 1,590	54%
$580k-$730k	2,260	380	1,550	4,190	4,780	690	5,470	- 1,280	77%	- 1,660	72%
$730k-$880k	2,090	460	1,740	4,290	4,440	890	5,330	- 1,040	80%	- 1,370	76%
$880k-$1.02m	1,400	360	2,120	3,880	2,890	690	3,580	300	108%	90	102%
$1.02m-$1.17m	930	200	2,760	3,890	1,850	380	2,230	1,660	174%	1,530	165%
$1.17m-$1.31m	610	110	2,180	2,900	1,200	220	1,420	1,480	204%	1,390	192%
$1.31m-$1.45m	440	80	3,500	4,020	800	140	940	3,080	428%	3,020	402%
$1.45m-$1.75m	520	60	6,320	6,900	1,040	110	1,150	5,750	600%	5,670	561%
$1.75m-$2.05m	370	10	4,790	5,170	760	20	780	4,390	663%	4,330	615%
$2.05m-$2.35m	180	40	1,910	2,130	390	70	460	1,670	463%	1,640	435%
$2.35m-$2.65m	110	20	2,640	2,770	220	40	260	2,510	1065%	2,490	989%
$2.65m-$2.95m	70	30	3,090	3,190	140	60	200	2,990	1595%	2,980	1519%
$2.95m-$3.3m	40	30	1,410	1,480	110	60	170	1,310	871%	1,300	822%
$3.3m-$3.65m	30	30	1,260	1,320	50	40	90	1,230	1467%	1,230	1467%
$3.65m+	70	70	650	790	130	150	280	510	282%	500	272%
Total	11,200	2,200	36,500	49,900	23,100	4,100	27,200	22,800	183%	21,000	172%
Shortfall Bands	6,430	1,190	3,880	11,500	13,490	2,100	15,590	- 4,090	74%	- 5,190	69%

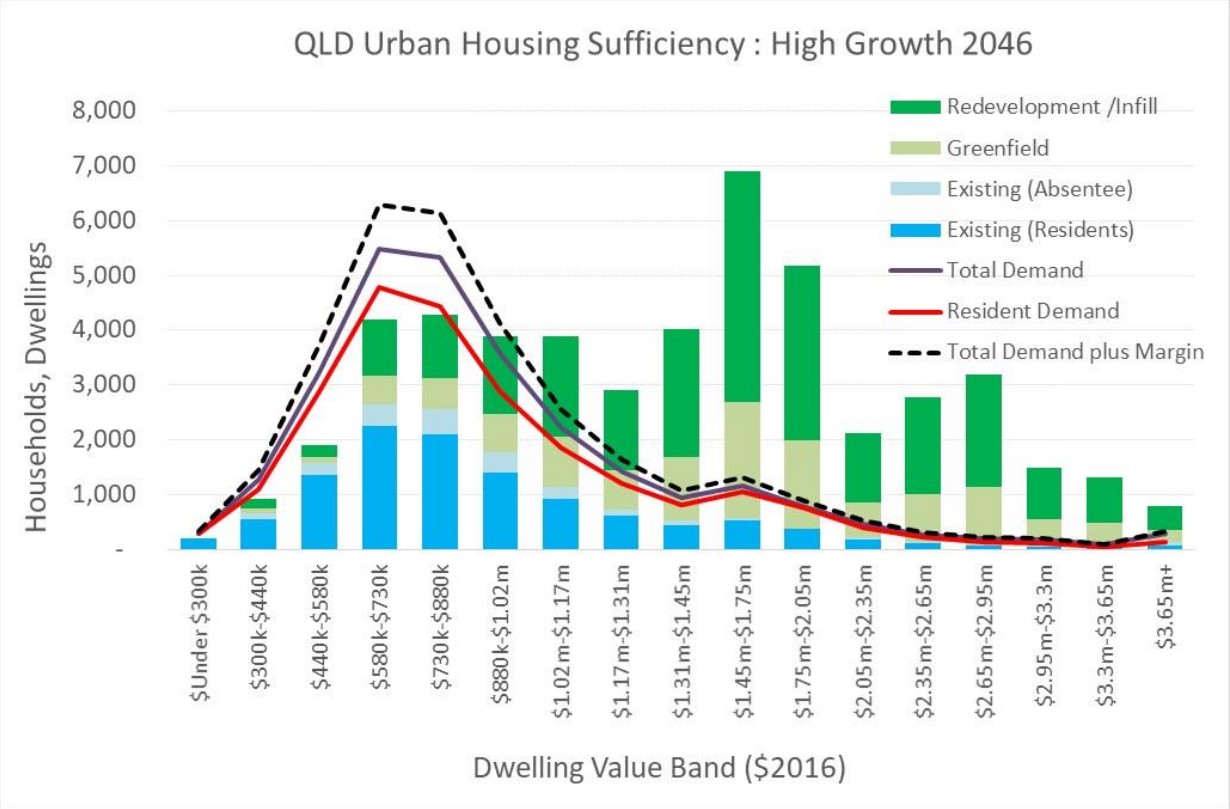
Source: ME Queenstown Housing Model 2017

The overall capacity surplus would be 22,800 dwellings (+83% in total), though with net shortfalls in the five lowest dwelling value bands totalling -4,090 in the lower and mid-level value bands, and 74% sufficiency in those bands.

Figure 6.12 shows the supply side and the demand side in each value band, as estimated for 2046. The strong growth, combined with the market's focus on the middle range values means a supply shortfall is indicated most notably in the $440,000 to $880,000 value bands.

If long-term demand growth is greater by 15% than anticipated, as per the NPS-UDC requirement for a 15% additional margin, the sufficiency shortfall in the lower dwelling value bands would be slightly higher, at -5,190 dwellings, and only 69% overall sufficiency (Table 6.12). The overall surplus of potential capacity over demand would be 21,000 dwellings, meaning sufficiency is met for the market as a whole.

Figure 6.12 – QLD Urban Long-term Housing Sufficiency – High Growth 2046



6.5 Summary

The demand and capacity assessment shows a consistent pattern where QLD total housing capacity is well in excess of demand, for both urban QLD and the total District in the short, medium and long-term. This includes allowance for the margins required by the NPS-UDC and assessment under a medium and high growth outlook (which spans Council's Recommended growth projection). At a high-level, this satisfies Policy A1 of the NPS-UDC.

6.5.1 Sufficiency in Lower Value Bands

However, the base case analysis shows small and later medium scale shortfalls in the lowest dwelling value bands. This is relevant to Policy B1a. The reason is clear, in that there is considerable demand growth expected for these lower value bands – generally under $580,000 – but limited supply currently and limited additional feasible supply into the long-term.

6.5.2 Capacity

A number of caveats must be stated. First, the capacity assessment does not include net additional SHA capacity, which would be expected to focus at least some additional supply in the lower value bands. Nor does it include the capacity in the rural environment, some of which falls within urban development typologies as opposed to larger lifestyle properties (i.e. in the small township zones like Kinloch, Glenorchy, Kingston and Makarora). These are also expected to supply some capacity in the lower value bands.

Second, the base case supply assessment has been the average of the three supply scenarios - Max Profit, Maximum Dwellings, Cheapest dwellings. The Cheapest dwellings scenario identifies housing which it is feasible to build, so this scenario may be distinguished from supply options which include some subsidy or a specified share of low value dwellings (such as some SHA structures, or the Government's indicated KiwiBuild strategy to develop dwellings for $500,000 in areas outside Auckland).

To illustrate, Table 6.13 shows the difference in the Net Sufficiency estimates for the high growth future to 2046. The two columns on the left compare the outcomes for QLD urban, one showing the Average supply outcome, the second column the outcome under the Cheapest dwellings scenario. A focus on lower cost dwellings would reduce the net shortfall by nearly three-fifths from -5,190 to -2,210, a difference of some 2,980 dwellings.

A similar outcome is shown for QLD Total, again in the high growth future to 2046. The focus on cheapest dwellings would reduce the shortfall by half, especially in the critical low value bands.

Given the solid demand for lower value dwellings, and that the estimates show lower value dwellings which are nevertheless feasible to build, there is scope for a substantial share of the potential shortfall in lower dwelling bands to be addressed by the commercial housing market. However, current information suggests that few dwellings are being released to the market at affordable price levels.

Table 6.13 – Effects of Different Housing Supply Futures - High Growth 2046

Dwelling Value Band $000)	QLD Urban High		QLD Total High	
	Average	Cheapest Dwellings	Average	Cheapest Dwellings
$Under $300k	- 130	- 100	- 120	- 120
$300k-$440k	- 440	- 570	- 650	- 140
$440k-$580k	- 1,590	- 1,540	- 1,660	- 1,130
$580k-$730k	- 1,660	160	- 1,450	300
$730k-$880k	- 1,370	1,190	- 1,050	1,340
$880k-$1.02m	90	4,190	140	3,980
$1.02m-$1.17m	1,530	5,910	1,480	5,570
$1.17m-$1.31m	1,390	4,670	1,220	4,310
$1.31m-$1.45m	3,020	2,370	2,980	2,230
$1.45m-$1.75m	5,670	3,140	5,500	2,820
$1.75m-$2.05m	4,330	1,840	4,210	1,640
$2.05m-$2.35m	1,640	250	1,530	130
$2.35m-$2.65m	2,490	70	2,360	- 30
$2.65m-$2.95m	2,980	80	2,930	50
$2.95m-$3.3m	1,300	- 10	1,250	- 70
$3.3m-$3.65m	1,230	80	1,230	90
$3.65m+	500	- 90	260	- 350
Total	21,000	21,600	20,200	20,600
Shortfall Bands	*- 5,190*	*- 2,210*	*- 4,930*	*- 1,390*

Source: ME Queenstown Housing Model 2017

Two further aspects are important. First, the apparent shortfall is limited to the lower value bands, and even in those bands the shortfall is relatively small in the short and medium-terms. Second, the results are sensitive to the estimates of both feasibility and market positioning of new dwellings, and uncertainty levels

increase with the length of time for any projection. Table 6.14 compares the outcomes for urban QLD for the short, medium and long-terms (medium growth future), The increase in the indicated shortfall over time, the variability according to assumed market position, and the substantial indicated capacity in total and across other dwelling value bands, all indicate considerable potential for market responses which to reduce or eliminate the shortfalls in those lower value bands.

Table 6.14 – Effects of Different Housing Supply Futures - Medium Growth 2046

Dwelling Value Band	Average of Feasible			Cheapest Dwellings		
	2019	2026	2046	2019	2026	2046
$Under $300k	-40	-50	-60	-40	-40	-60
$300k-$440k	-90	-180	-390	40	-130	-380
$440k-$580k	750	-150	-1,160	2,850	700	-1,090
$580k-$730k	1,780	1,160	-1,060	5,120	4,990	930
$730k-$880k	5,770	1,930	-630	8,750	6,400	1,960
$880k-$1.02m	3,210	2,990	780	2,150	6,520	4,710
$1.02m-$1.17m	4,570	3,410	2,040	3,900	3,320	6,240
$1.17m-$1.31m	1,760	3,760	1,740	340	1,660	4,880
$1.31m-$1.45m	750	4,150	3,110	100	2,910	2,500
$1.45m-$1.75m	3,790	3,580	5,970	210	510	3,290
$1.75m-$2.05m	340	2,720	4,490	120	220	1,960
$2.05m-$2.35m	140	2,310	1,610	60	140	320
$2.35m-$2.65m	90	260	2,520	140	20	120
$2.65m-$2.95m	50	160	3,070	10	-20	110
$2.95m-$3.3m	50	90	1,340	10	-10	30
$3.3m-$3.65m	70	190	1,210	10	-	90
$3.65m+	360	560	560	60	50	-40
Total	23,400	26,900	25,100	23,800	27,200	25,600
Shortfall Bands	-130	-380	-3,300	-40	-170	-1,530

Source: ME Queenstown Housing Model 2017

The third caveat is that no account has been taken of the potential for the KiwiBuild strategy or other interventions aimed at improving housing affordability to affect the market in QLD. KiwiBuild aims to build 100,000 affordable dwellings over 10 years, including 50,000 outside of Auckland. Assuming that some of the proposed dwellings would be directed to the South Island and given that QLD is expected to account for a substantial share of total South Island growth (approximately 1,000 new homes), and the widely reported affordability challenges in QLD, then there is potential for QLD to attract some share of the KiwiBuild programme. That would be expected to have a significant effect on the lower value end of the market.

This should be seen at this stage as a possibility, and no more. There is no detail yet on the structure or roll-out of KiwiBuild, and QLD may or may not be part of it.

The Mayoral Housing Affordability Taskforce was set up in April 2017 by the Mayor, Jim Boult to investigate new ways of addressing housing availability and affordability in the QLD, with membership being drawn from a wide range of parties with an interest or involvement in the supply of housing within the Queenstown Lakes area.

Recommendations have been made that identify actions that Council and other parties need to implement to reach the vision and goal set by the Taskforce whereby "*all of our workforce will be able to own or occupy*

a home in our District at a cost that allows them to live within their means by 2048, with an initial target of 1000 Community Affordable homes with secure tenure by 2028". The recommendations also include supporting a range of affordable market offerings to the Queenstown Lakes Community Trust, including the secure home, long-term rental or rent to own scheme (assisting the move from long-term rental to the Secure Home product). Other recommendations include:

- more active management of visitor accommodation (Stage 2 of the PDP review),
- investigation of enabling the development of more land,
- intensification opportunities,
- promoting a plan change requiring inclusionary zoning that means a portion larger housing developments have to be affordable,
- strengthening the partnership QLDC has with the Queenstown Lakes Community Housing Trust,
- increased engagement with the government and
- devising a new Queenstown Lakes District Housing Strategy that uses a systems approach to deliver community affordable homes with secure tenure.

Updates on these will need to report in the next HDCA.

6.5.3 Other Aspects of Sufficiency

The assessment of sufficiency in dwelling value bands is very important, given the focus on affordability. The structure of the analysis presented here means that the key aspects of demand, especially household demographics and preferences and ability to pay, have been directly incorporated in the demand analysis, to cover those aspects identified in the NPS-UDC.

However, the NPS-UDC also requires consideration of other aspects of sufficiency, including choices among dwelling types, and residential opportunities across different locations as well as dwelling value bands (Policy B1a).

The assessment has identified clearly that there is a broad range of different dwelling types available in QLD. In particular, the feasibility assessment was able to examine a range of dwelling types enabled under the PDP, and these have been tested in different locations.

Moreover, the examination of plan enabled and feasible capacity has identified a wide range of location options in QLD, including 22 specific structure plan areas including 11 in Wakatipu and 8 in Wanaka, together with substantial capacity in each of 9 broader areas within Wakatipu and Wanaka and Arrowtown. It also has been determined that the PDP promotes a range of housing options, with a real focus on intensification of existing urban areas.

6.6 Market and Price Efficiency Indicators

NPS Policies B2c and B3e require local authorities to include information from market and price efficiency indicators in their HDCA (and BDCA). This section discusses these local indicators and how they can be interpreted alongside the results of the demand and capacity modelling.

6.6.1 Market Indicators

Under the National Policy Statement, Policy B6, Councils are required to monitor a range of indicators on a quarterly basis, including:

1. Prices and Rents for housing, residential land by location and type. Changes in these prices and rents over time are to be monitored.
2. Number of resource consents and building consents granted for urban development relative to the growth in population
3. Other indicators of housing affordability

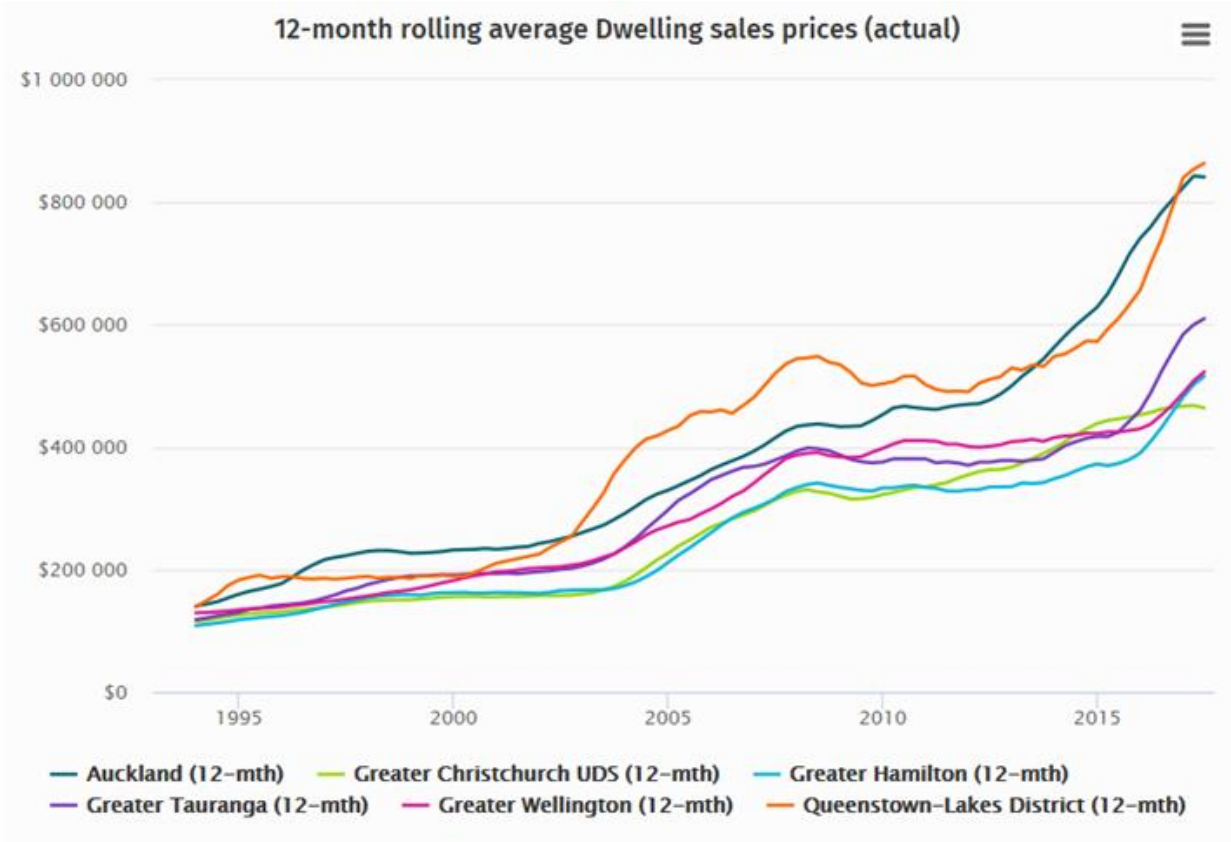
The first such report prepared by QLDC is for the June 2017 quarter and establishes baselines from which future trends will be benchmarked. QLDC have also prepared a September 2017 report. At the time of writing, both these quarterly reports are in draft state, so the figures contained within may change. The figures are replicated here under that caveat.

Within this report, a summary of both the June 2017 and September 2017 data is provided to be read alongside capacity, growth and sufficiency. Each indicator is presented separately then conclusions drawn and summarised at the end of this section.

Analysis of Sales Prices, Housing Stock and Rents

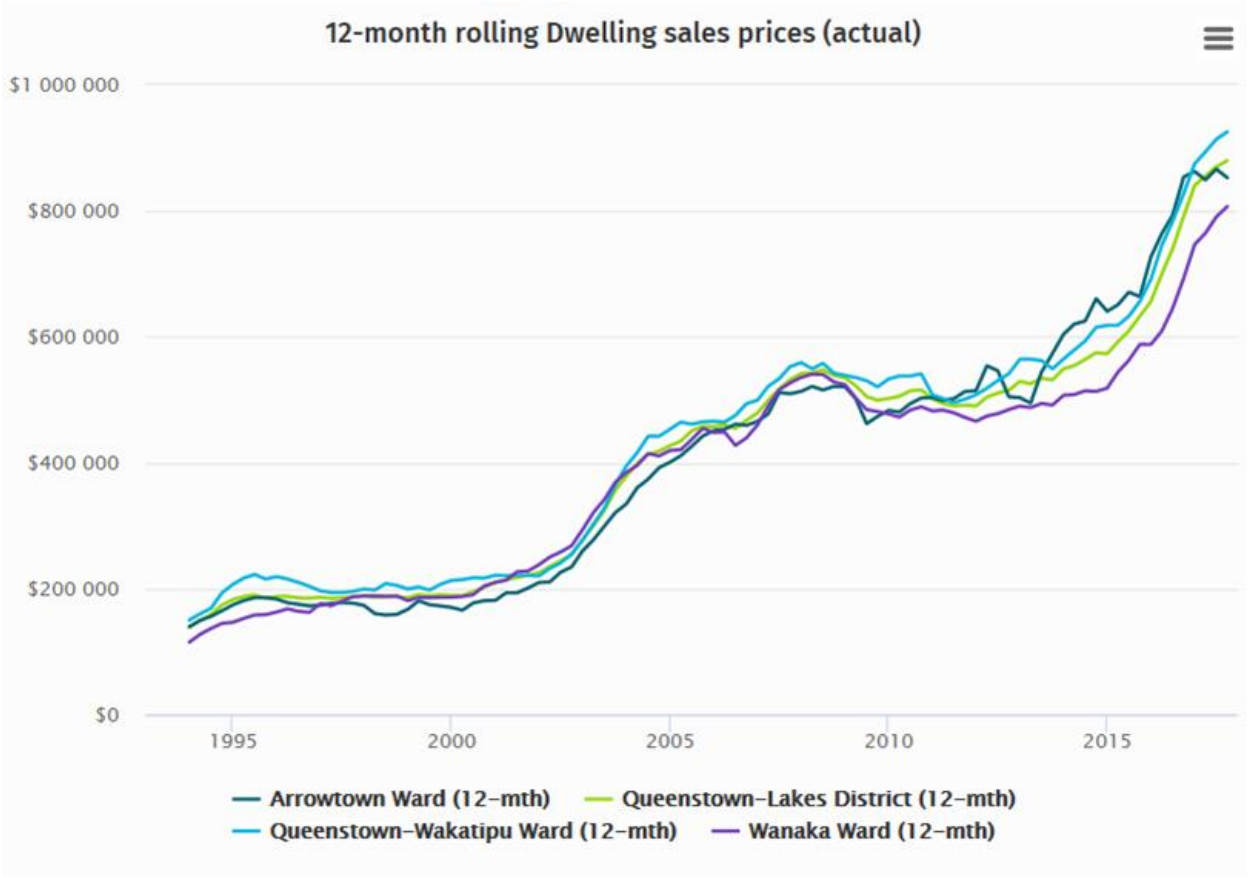
Sales Prices: The 12-month rolling average dwelling sales price data shows that in the June quarter sale prices in QLD have overtaken Auckland's. As at the 30 June 2017 the average sales price in Auckland was $840,250, while QLD was $864,938. The national trend over the past two/three years indicates that average house prices have been increasing at a steady rate in all high growth areas (with the exception of Christchurch). This indicates that increasing house prices is a national problem not confined to Auckland and QLD (Figure 6.13). Since June, average house prices increased from $864,938 to $880,125 (September 2017 Quarter).

Figure 6.13 - High Growth Area Average Sales Prices (Source: MBIE 2017)



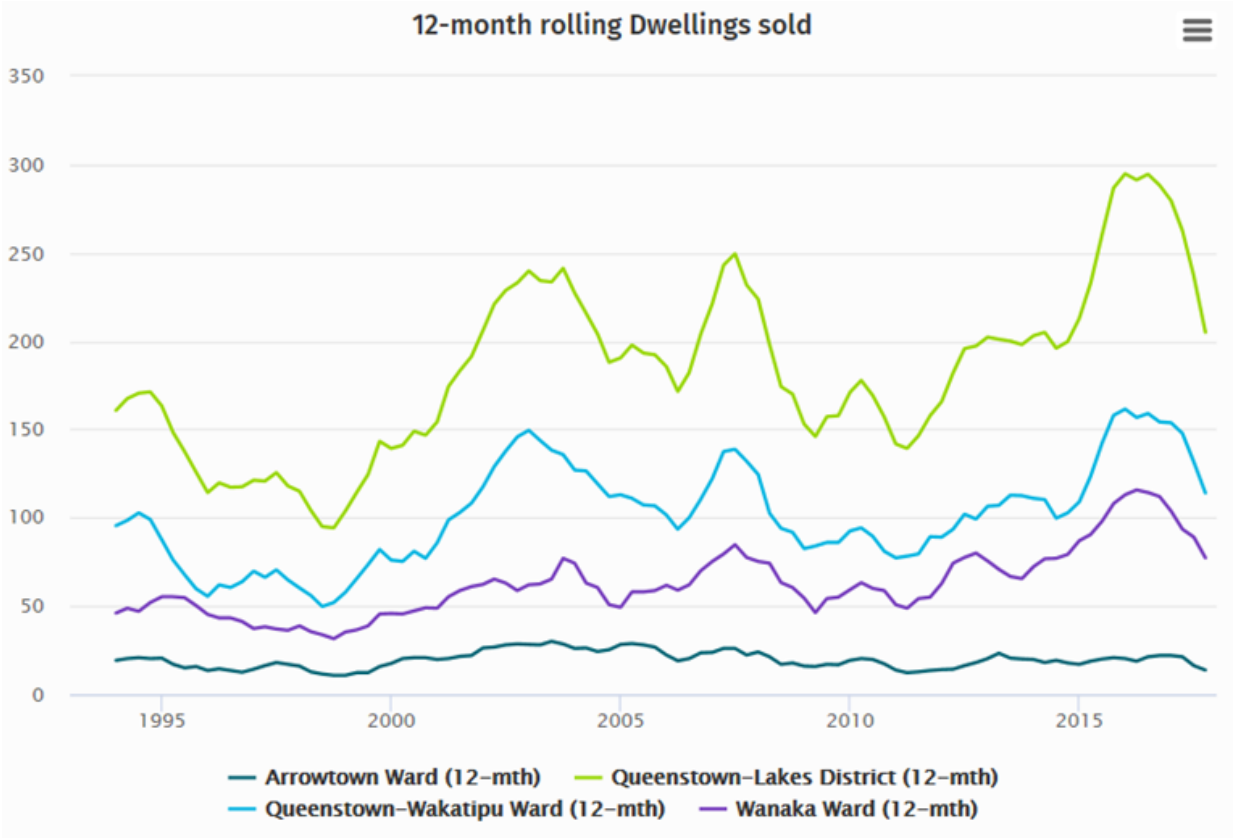
Within QLD, average sales prices in the Wakatipu Ward have consistently been higher than the average in the Wanaka Ward, certainly since 2005. Average prices in the small Arrowtown Ward have fluctuated above and below both Wakatipu and Wanaka Wards in recent years, but presently they sit between the two. Over the past four quarters, average prices have increased at a similar rate in Wakatipu and Wanaka, while prices have not shown much movement in Arrowtown during the same period (Figure 6.14). If this trend continues, prices in Wanaka Ward may exceed those in Arrowtown in the short-term.

Figure 6.14 - Twelve Month Rolling Dwelling Sales Prices (Actual) to September 2017 Quarter



Dwellings Sold / Land Values: The June 2017 report depicts a decreasing trend in the number of dwellings sold across QLD however the data is only up to 2015. In the September 2017 report, the data shows that the number of dwellings sold has declined significantly and this could be potentially from a slowing down of the market and/or due to the limited number of houses/sections available for sale (Figure 6.15).

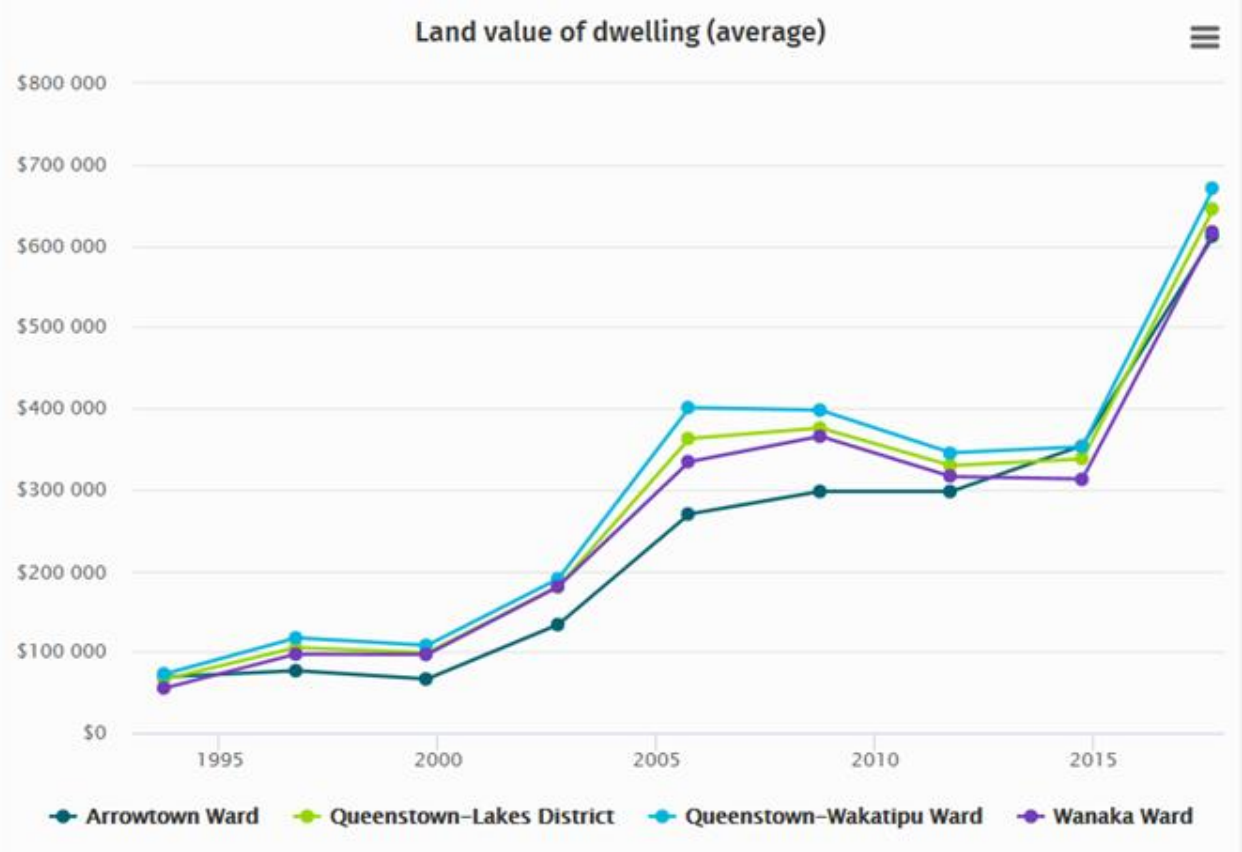
Figure 6.15 - 12 Month Rolling Number of Dwellings Sold, QLD (1993 – 2017)



The September 2017 monitoring report states that the following with regard to Figure 6.16;

> "The land value component of dwelling prices is a key market indicator as this cost component compared to overall sales prices is thought to be a strong indicator of land supply being either sufficient to meet demand or being artificially constrained by a lack of zoned capacity for development. A review of the dashboard data shows that this data has significantly changed since the previous monitoring period, as more up to date data has been obtained. The updated data suggests land values have significantly increased in all wards from 2015 to 2016. Across all wards the average increase is approximately $307,862, which is considered to be significant" (QLDC).

Figure 6.16 - Land Value Portion of Dwellings, QLD 1993 - 2017



This indicator captures total dwelling sales, not just new builds. It is natural that the land value in established houses in a growing economy will make up an increasing proportion of total sales price as the built component depreciates over time, while land increases in value. This fact, viewed alongside the fact that demand has been shown to be in decline means that established houses are likely to make a greater proportion of total sales than has historically been the case. This is likely to be distorting the Land Value share of dwelling figures.

Therefore, it is not possible to draw the conclusion that there is a shortage of land and the effect it is having on house prices is significant. More detail on this is presented in section 6.6.4 below.

The June 2017 report states; "The steep rises in land values between 2000 and 2007 are typical of high growth territorial authorities across New Zealand at this time" (QLDC). Across the 2000 – 2007 period, land values and house values across New Zealand grew strongly. This was the result of a number of forces including:

- Low Interest Rates: This has a 2-fold effect, first, it reduces barriers to entry to the housing market for first home buyers thereby increasing demand, raising prices. Second, low interest rates reduce returns across other asset classes. This means that investors start looking around for stronger returns, notice the increasing demand in the housing market and move capital into the housing market – further raising demand.
- Tax Policy: New Zealand does not have a strong or effective capital gains tax. Over this period of strong induced demand growth in the housing market, investors saw

significant capital gains that were in effect, tax free. This further stimulated demand driving prices further.

- Thin Capital Markets: New Zealand has thin capital markets. This means that the options for householders to invest are thin. Investing in the family home or leveraging off the capital in the family home to purchase a rental dwelling has been seen as an appropriate, capital gains tax free way to secure future wealth.
- Banking Policy: Across this period, the amount of money available from banks and second tier sources (sub-prime) ballooned. This money flowed into New Zealand in significant amounts as New Zealand was viewed as a safe location to invest in the housing markets (as the banks saw this as being).
- Immigration Policy: Strong net migration

None of these forces that worked to drive up house prices and residential land prices had anything to do with capacity shortages, therefore this indicator needs to be interpreted with care and a single conclusion cannot be drawn that capacity constraints, such as Urban Limits and other policies that might have constrained supply, drove prices up.

This is demonstrated by comparing residential price growth in Auckland and Gisborne over this time period. Growth in house prices in Gisborne outstripped Auckland Region over this period. There are no capacity constraints in Gisborne that might have caused this. The forces described above drove prices meaning that providing additional capacity in Gisborne would have had no effect on housing affordability.

Providing additional capacity in response to this Market Indicator in QLDCs case this time, is likely to have no effect either, as it does not address the key drivers of price growth.

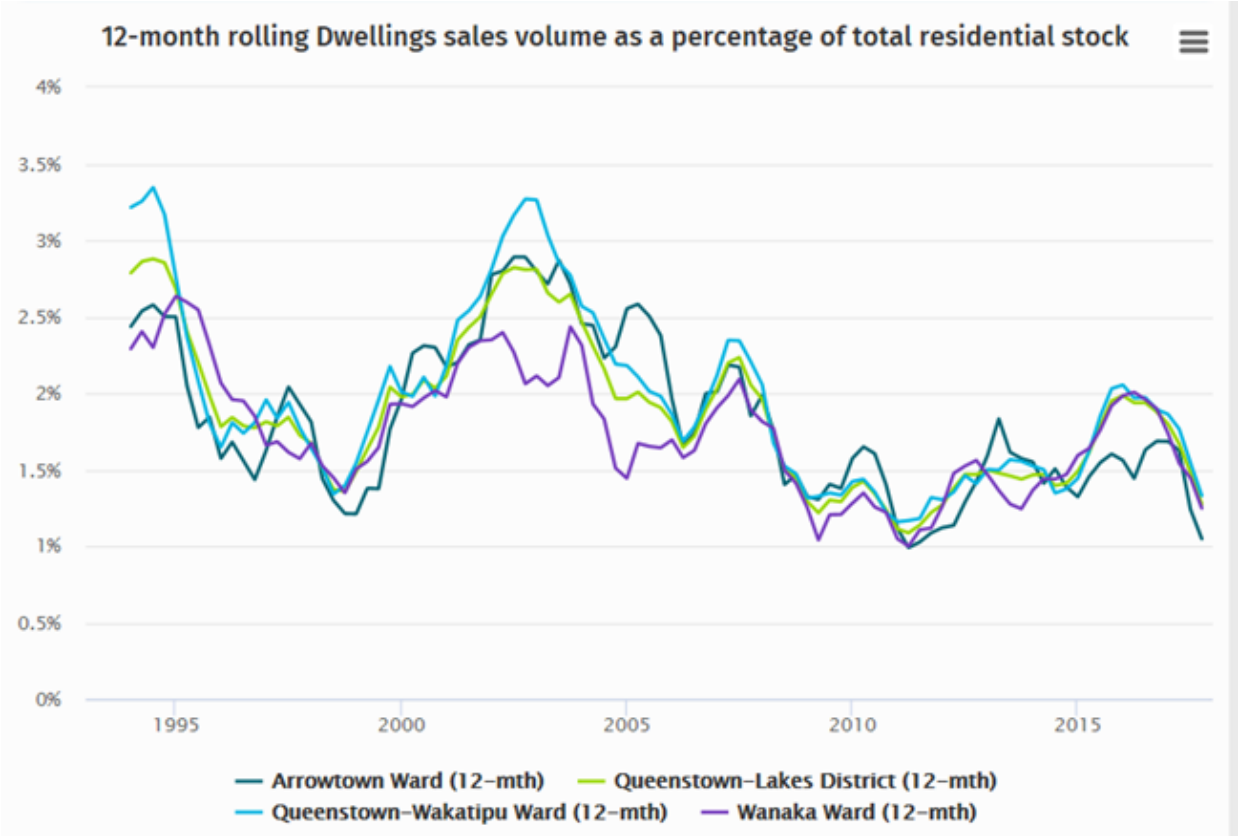
Rents: The June 2017 monitoring report states that QLD rents have surpassed average rents in Auckland as at March 2017 making QLD the most expensive average rental in the country. The increases in QLD have been recorded at an unsteady rate since 2000, with a sharp rise over the past 2 years. The September 2017 reports the trend continuing and identifies that the;

> *"...significant increases in rents align with the rise of sale prices. This continues to be a very big concern given the large number of residents who are transient and who are low-income earners and the risk this may contribute to overcrowding of homes, problematic levels of commuting and severe difficulties with recruiting and retaining workers" (QLDC)*

The September report also notes that the demand for rental accommodation is now year-round with limited off or shoulder season variability. This is driven by migrant workers and a spreading of the type of visitor travelling to Queenstown with tourism products diversifying.

Housing Stock: The September 2017 monitoring report notes that the quantity of dwellings sold relative to total stock is decreasing in QLD in line with other high growth councils. This trend is normal as urban areas grow - steady growth represents a smaller and smaller share of the total. Unless growth is accelerating, this will be the case. M.E caution against drawing the conclusion that it is a function of availability of residential land – or the lack of it. Figure 6.17 shows trends across QLD.

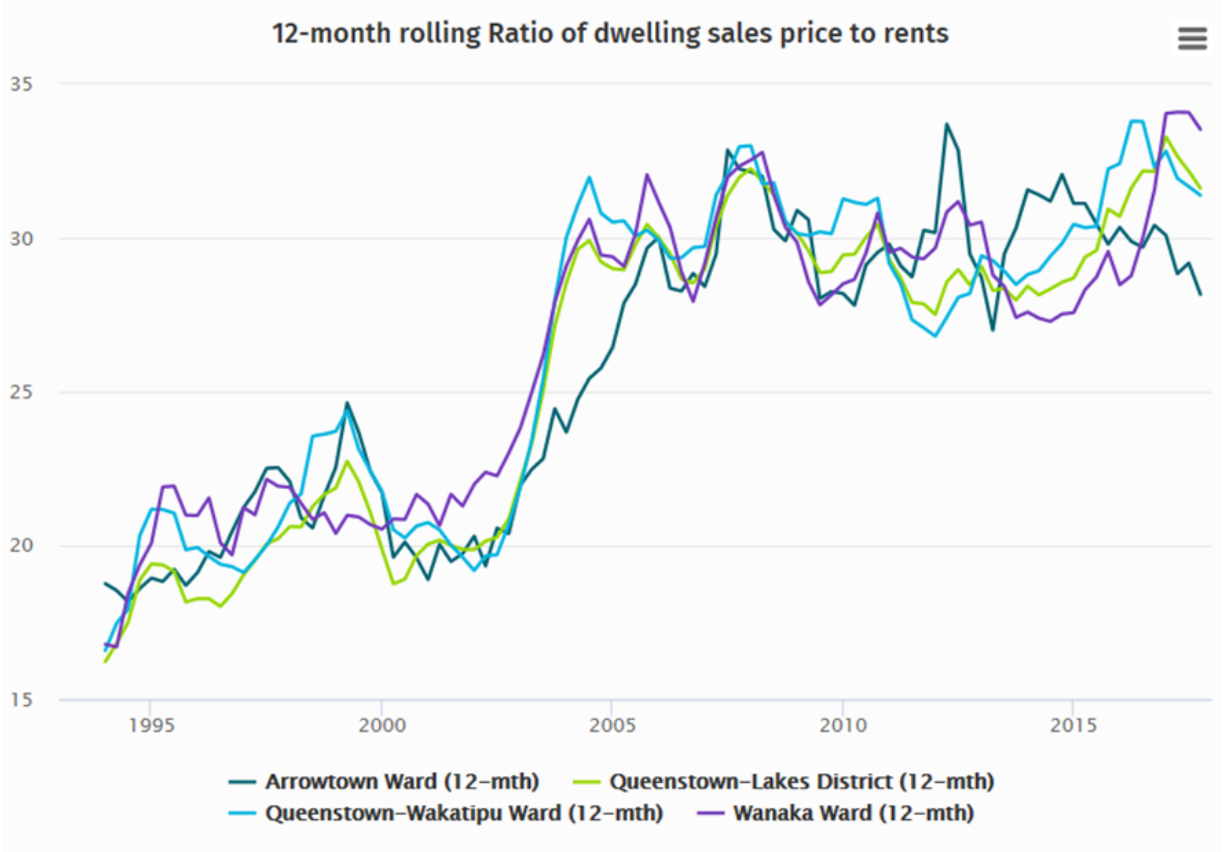
Figure 6.17 - 12 Month Rolling Dwelling Sales as a Share of Total Stock, QLD (1993 – 2017)



Sales Prices to Rent: The Sales Prices to Rent market indicator (Figure 5.18) is supposed to measure the ease of moving from renting to home ownership. However, because it compares the average rental with the average sales price, it does not capture the actual movements that would occur. It is not the case that someone paying the average rental would be in the market for the medium house.

It is important for the metric to look at house values in the lower quartile rather than the medium to better reflect the ease of moving from renting to home ownership. Figure 6.18, presents the ratios by ward for QLD. The recent decline for the district overall followed two years of strong rises – yet overall the ratio has not increased significantly since 2005, albeit fluctuating around the 30 year mark.

Figure 6.18 - 12-month rolling ratio of dwelling sales prices to rents, QLD by Ward 1993 - 2017

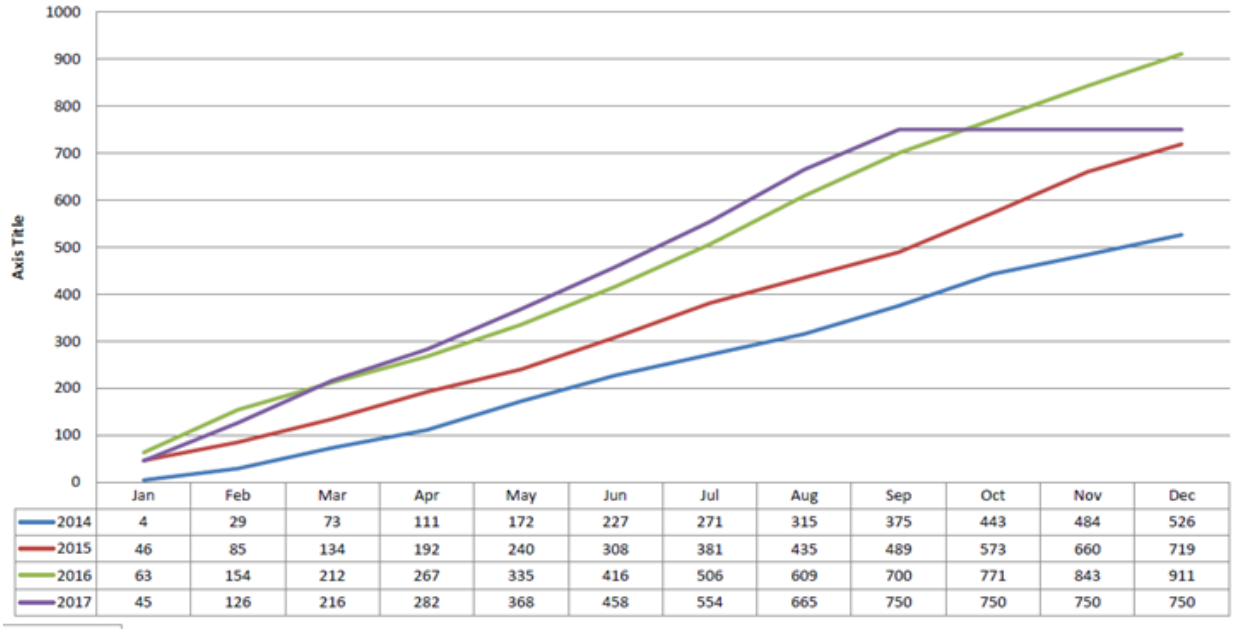


Analysis of Resource and Building Consents

Figure 6.19 shows resource consents issued for 2017 up till September running ahead of the previous three years. The rate of growth month on month from 2016 – 2017 is significantly lower than the previous years. Extrapolating the 2017 year out would generate approximately 1,000 consents, up from 900 in 2016. The previous two jumps have been twice this (2014 to 2015 was 200 consents, as was 2015 – 2016).

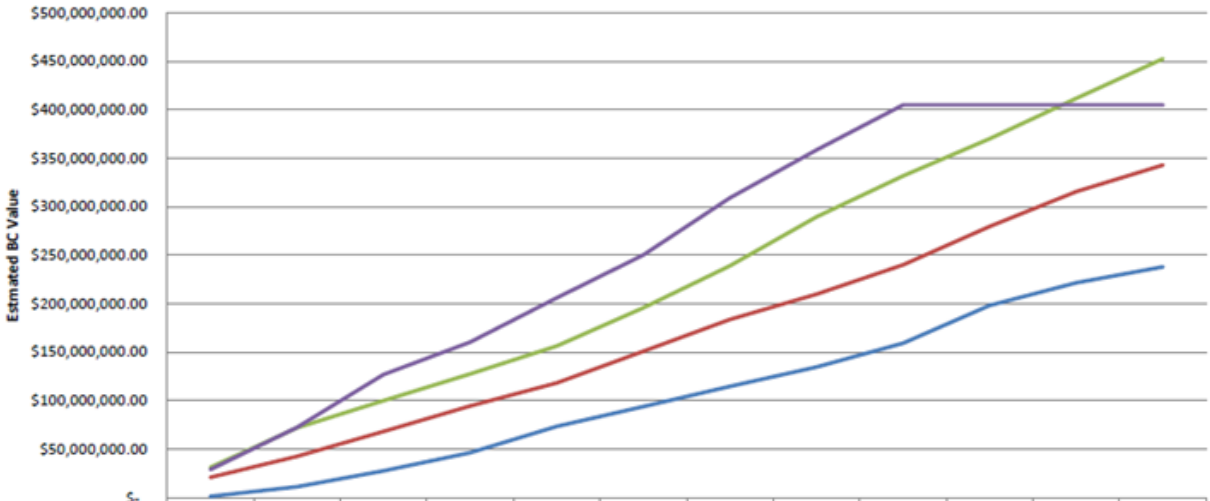
However, the value of these consents appears to be increasing at the same rate between all years listed (Figure 6.20).

Figure 6.19 - Monthly Resource Consents for QLD, 2014 - 2017



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	4	29	73	111	172	227	271	315	375	443	484	526
2015	46	85	134	192	240	308	381	435	489	573	660	719
2016	63	154	212	267	335	416	506	609	700	771	843	911
2017	45	126	216	282	368	458	554	665	750	750	750	750

Figure 6.20 - Value of Residential Building Consents, QLD 2014 - 2017

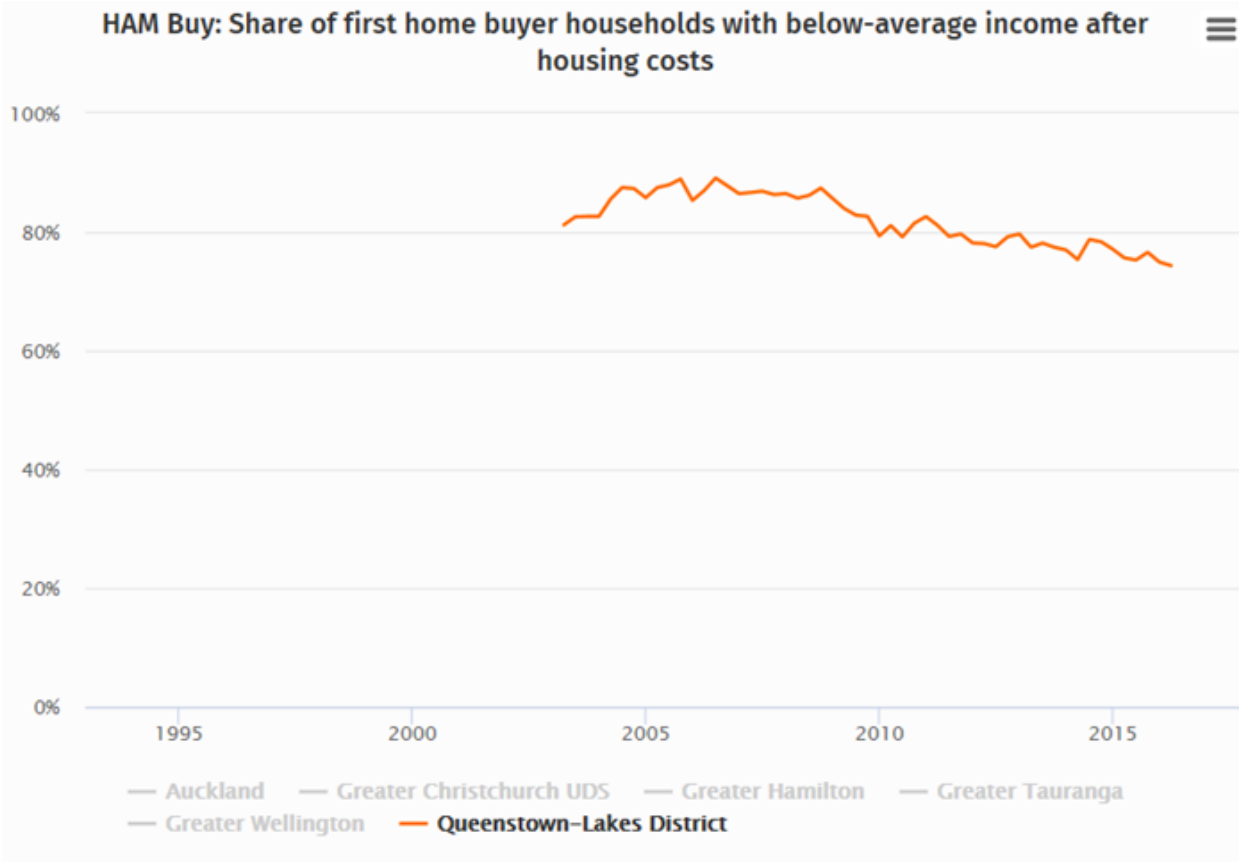


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	$1,290,000.	$11,252,373	$27,673,805	$46,402,720	$73,470,363	$93,896,503	$114,913,68	$134,805,84	$159,454,05	$198,379,74	$221,728,04	$238,136,68
2015	$21,057,618	$42,602,698	$68,228,738	$94,686,448	$118,433,32	$150,987,99	$183,736,25	$209,926,99	$240,275,28	$279,805,66	$315,804,22	$343,173,11
2016	$31,293,376	$72,028,538	$100,045,43	$127,594,95	$156,488,03	$195,778,52	$239,208,12	$289,637,63	$332,013,15	$370,236,18	$411,959,22	$452,746,27
2017	$29,053,326	$72,558,255	$126,961,34	$160,493,58	$206,151,79	$250,423,58	$309,186,72	$358,729,57	$405,222,77	$405,222,77	$405,222,77	$405,222,77

Analysis of Housing Affordability

Housing Affordability Measure – Buy and Rent: This is only reported in the June Monitoring report as it has not been updated for September. It shows that housing is getting more affordable in QLD (Figure 6.21).

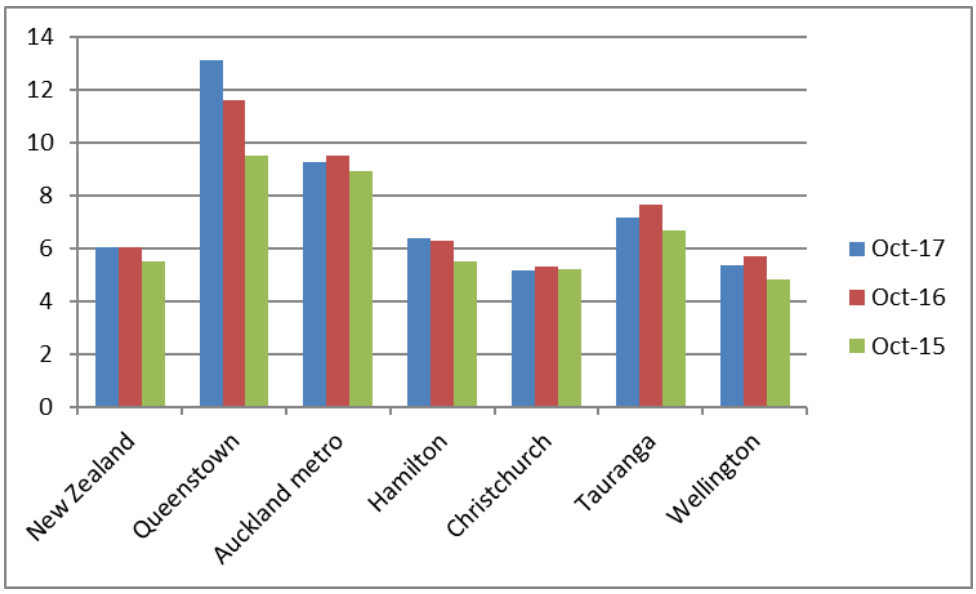
Figure 6.21 - HAM Indicator for QLD, 2003 - 2017



Other Affordability Measures: The September 2017 monitoring report makes comment on another affordability measure – median house price to median annual household income. The data shows increasing unaffordability in QLD and with QLD having the most unaffordable real estate of the Council areas listed (Figure 6.22).

Again, M.E suggest caution with this indicator as people earning the median household income will be in the market for dwellings in the lower quartile rather than in the median. This is especially the case in QLD, where the median is heavily distorted by a large share of very high value homes unconnected to local earning conditions. We recommend this indicator is realigned against the average values of lower quartile homes.

Figure 6.22 - Median House Price to Median Household Income, 2015 - 2017



Conclusions

The June 2017 report concludes;

> *"that while house prices and rental costs in the QLD are continuing to increase, evidence suggests this is being matched with increases in the issuing of new residential building consents and subdivision consents which are being consented at records rates.*
>
> *The findings also suggest that increased supplies in land and housing is* ***not resulting in decreased house prices and rents, raising the possibility that Council processes and planning factors may not be the main factors influencing prices and availability****. Further investigation and analysis is required to understand the full range of contributing factors constraining construction of new homes in the QLD and influencing prices and affordability in New Zealand's fastest growing territorial authority."* (Emphasis added)

M.E agree with this conclusion, as described above, there are a large range of price drivers unrelated to capacity influencing the market. Council do not have power to influence these factors. Therefore, the indicators in the Council's draft monitoring reports must be read in the context of other evidence provided that imply sufficient residential capacity for growth in the short, medium and long-term is available and feasible today.

The conclusion continues:

> *"Challenges with meeting increasing growth demands particular to Queenstown include the impact from increasing visitor and migrant worker numbers and the high proportion of holiday homes, the natural constraints of the district's outstanding landscapes, mountainous terrain, lakes and natural hazards, pressure on roading and three waters infrastructure capacity, all of which make readily developable land more scarce and constrain the outward growth of urban areas as well as influence the cost of development. Other barriers such as land banking, construction industry capacity*

constraints, the cost of local building materials and labour also adversely impact on the affordability of dwellings in the QLD and also need to be understood.

M.E agree with these conclusions and add that more work is needed to fine tune the indicators to ensure they are capturing appropriate measures of affordability and capacity constraints.

The draft September 2017 Market Indicator report concludes that;

- house prices and rental costs in the QLD are continuing to increase,
- and that this period has also seen increases in the issuing of new residential building consents and subdivision consents which are being consented at records rates.
- The number of new residential sections approved via resource consent has doubled since the previous monitoring period.

6.6.2 Price Efficiency Indicators

The NPS-UDC requires that Councils use information provided by indicators of price efficiency in their land and development market to assist in assessing the sufficiency of development capacity provided by District Plans, and Regional Policy Statements. The measures provide a partial indication of the markets response to planning decisions as they highlight price differentials between zones as an indication of when additional capacity may be needed.

To assist councils MBIE have developed and published information on the price efficiency indicators on a dashboard as part of the MBIE website[123]. The requirement to use price efficiency indicators responds to the New Zealand Productivity Commission recommendation that local authorities use price signals such as the rural-urban land price differential in their planning decisions.

M.E caution against using these indicators in isolation, as through research carried out in response to criticisms of Auckland Rural-Urban boundary (RUB), it has been found that there are a large range of factors that influence the price differential between urban and rural land. Seeking equivalency between land prices across the urban rural divide is not necessarily a measure of an efficient urban environment.

There are two Price Efficiency indicators currently available on the MBIE dashboard that relate to residential markets; the Housing price to cost ratio, and the Rural-urban zone differentials (that relate to land price). The third indicator, Land ownership concentration is not yet available so will not be included in the discussion below.

The available indicators are described in turn, then discussed together in terms of what they mean with respect to the operation of the housing markets in Queenstown.

6.6.3 Housing Price-Cost Ratio

The Housing price to cost indicator is described in the NPS-UDC Guidance document as "*a general indicator of the extent to which the costs of land or construction have been contributing to the prices of homes. This*

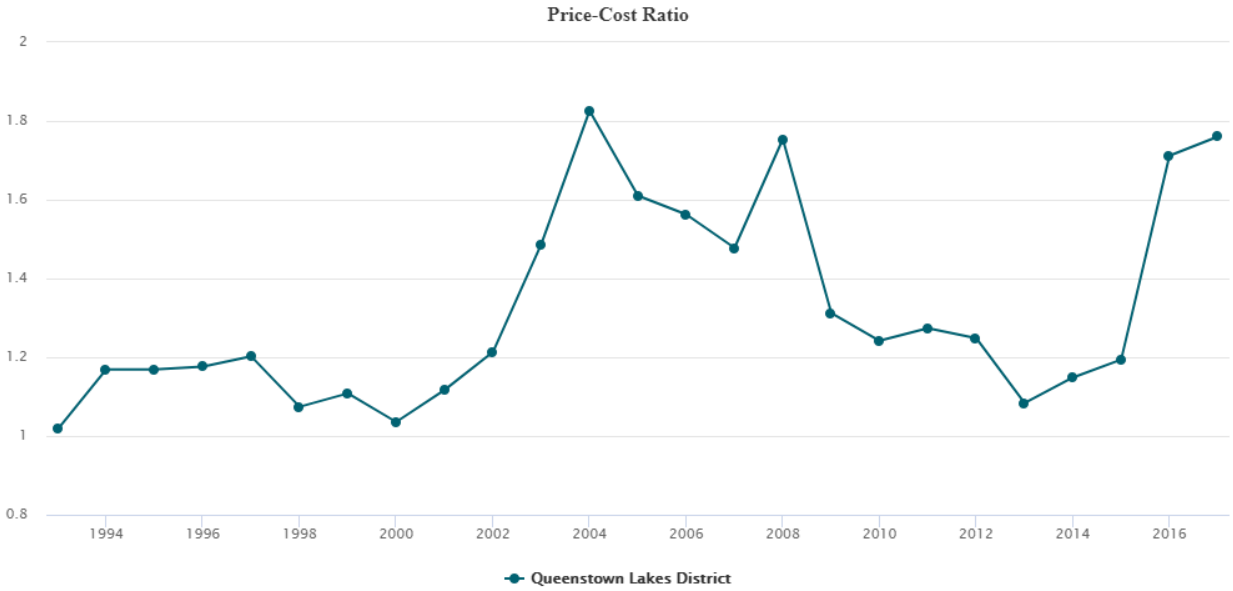
[123] https://mbienz.shinyapps.io/urban-development-capacity/

indicator signals if there is a shortage of sections and development opportunities relative to demand." The indicator compares house prices with construction costs to determine how much of the final cost is driven by the cost of land. Because this is a time series indicator, it highlights whether this ratio remains constant or is changing over time.

By definition the price-cost ratio is the gap between house prices and construction costs across QLD. The residual approach attributes the remaining price (after subtracting construction costs) to the price of land.

Figure 6.23 shows how the Price-cost ratio for QLD has fluctuated between 1993 and 2017. This data shows that starting from a base of very close to 1 in 1993, the ratio today is 1.76. However, the peak figure of 1.826 was reached in 2004. The ratio reached a second peak in 2008 at 1.75, before dropping to a recent low of 1.08 in 2013.

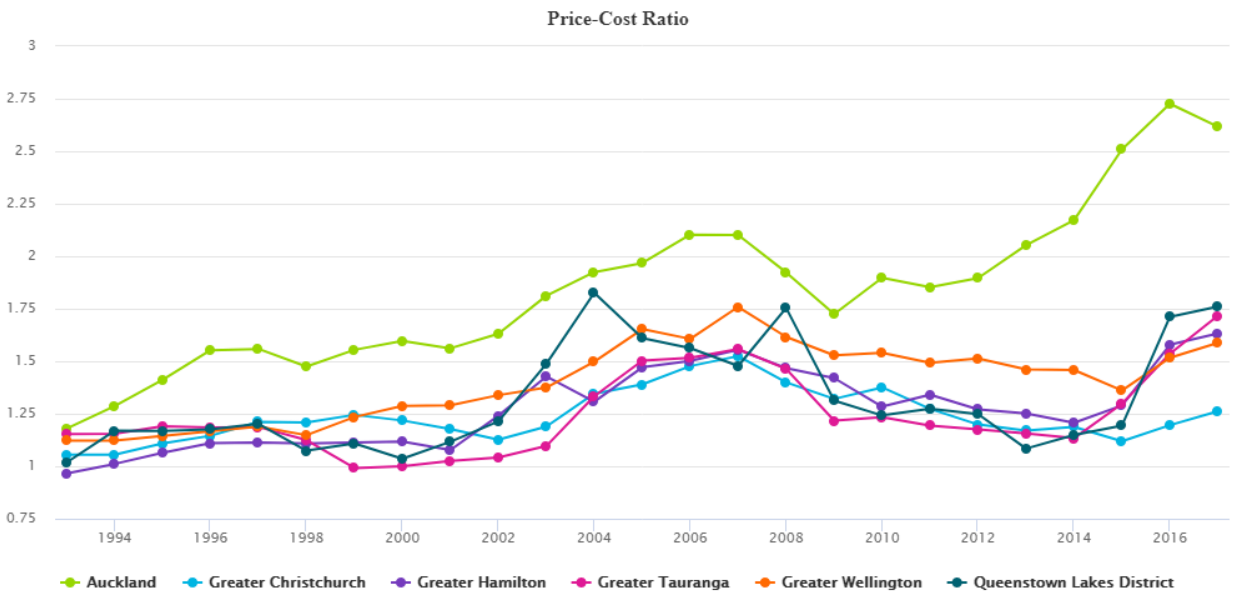
Figure 6.23 - Price Cost Ratio, QLD 1993 – 2017 (Source MBIE)



The data appears to be volatile, however, when viewed in line with other high growth Council areas, Queenstown's ratios follow a similar trend to the other councils (Figure 6.24) (a peak in the mid 2000's and a rise from 2014/15 till today. Note that Queenstown's Price-Cost ratio is lower than Auckland's by some margin (1.76 versus 2.62 for Auckland in 2017)[124].

[124] It is important to note that land values are not tied to a production process in the same manner that construction costs are. This means that they do not respond to the same sorts of fluctuations that construction costs do. In the long-term residential land prices are likely to be tied with proportional movements in nominal disposable income and interest rates, whereas the replacement cost of structures is likely to be tied to the cost of construction inputs and the productivity of capital and labour used to build structures ("*The Price and Quantity of Residential Land in the USA*", published by Federal Reserve and Georgetown University, M.A David and J Heathcote, July 2004).

Figure 6.24 - Price Cost Ratios for NZ High Growth Areas, 1993 – 2017.



The MBIE guidance document proposes that a ratio of greater than 1.5 suggests a land supply constraint where the component of the price the measure attributes to land is a greater portion than a threshold recommended within the guidance document. It states that an increasing ratio suggests an increasing land constraint. However, there are several aspects to this approach and how it has been applied within Queenstown that do not enable these conclusions to be drawn.

First, the measure is calculated only for standalone houses. A focus only on the lowest density dwelling typology means the results do not capture any intensification through a shift in the mix of dwelling typologies that has occurred across the district through time. Intensification is a substantial city growth and development process that has a significant effect on any resulting ratios of built form to land value. The measure instead only captures changes in the ratios of a lower density development typology that is an underlying driver for the more important measure of the resulting changes in the built form, which is excluded from the measure.

Second, the measure is calculated across the district as a whole thus treating location within the district neutrally. Land prices vary substantially across different parts of the urban area to reflect differences in amenity and accessibility. These ratios change through time with growth, and at different rates across the district. New land in desirable locations is not able to be manufactured, therefore as demand rises, so does its price. Taking the district as a whole, the measure does not allow for the effect of geographical expansion on the relative location of houses within each urban area. This is compounded by considering only standalone houses, meaning that any changes to these ratios with higher density dwelling typologies cannot be captured within the urban areas as land values increase. An analysis of the prices of new dwellings only at the urban edge may be more useful in this respect as a comparator through time.

Third, the rationale for identifying a negative effect through a level or change in the indicator relative to the defined threshold is not clear. Such a ratio is expected to increase in any growing urban economy irrespective of any land constraint. Population growth drives an increase in land values as the land becomes more desirable and the benefits of an urban location increase. This is particularly the case where it has

been calculated across the city or district as a whole and takes into account only standalone dwellings. A threshold held constant does not recognise these changes in value and amenity by location.

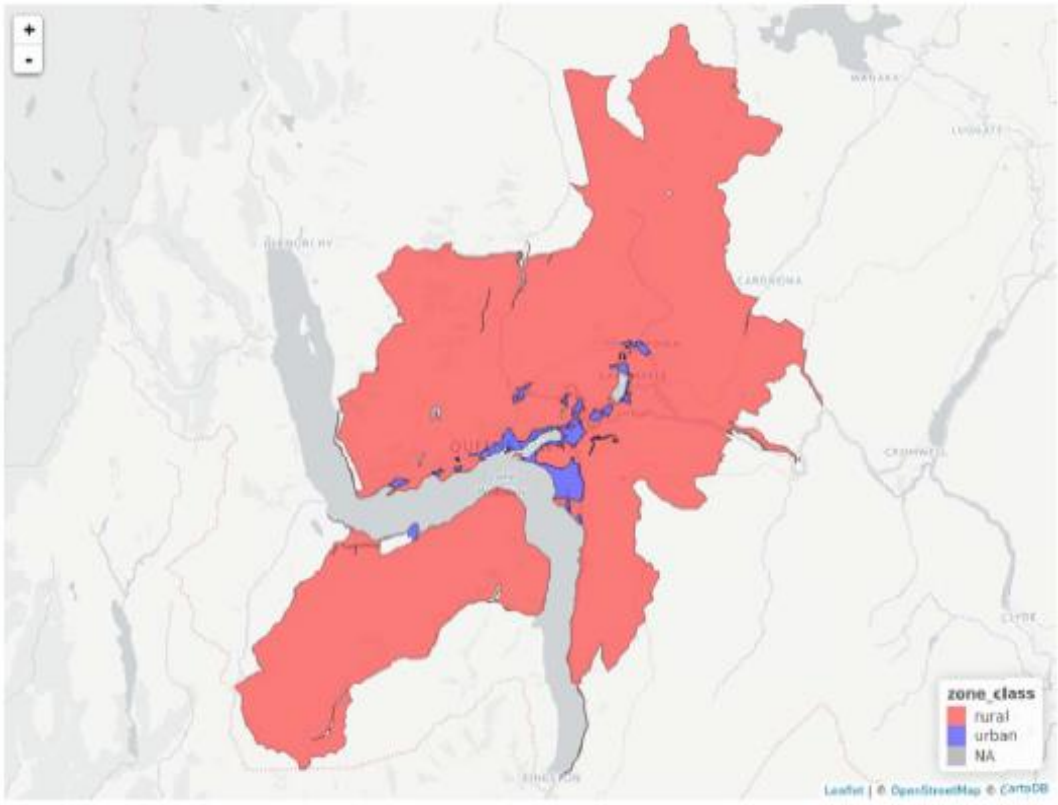
Moreover, the use of a universal threshold, and one that remains constant through time, also treats location neutrally between cities. As above, larger cities typically grow faster and can therefore expect higher ratio values as opposed to smaller areas with less demand. Again, this occurs irrespective of land constraints and instead reflects the increased benefits of location within larger cities, particularly where analysis has occurred across the city as a whole. Aspiring to achieve a constant ratio would therefore necessitate corresponding growth in construction costs. It would be difficult to reconcile the large differences that would emerge in construction costs between cities through time.

Fourth, a measure at the district level is difficult to reconcile with analyses of the urban environment across a different geographic area. The urban area differs substantially to the district as a whole, with the measure likely to be significantly affected by this geographic difference.

6.6.4 Rural-Urban Differentials

The rural-urban land zone differentials have been calculated to compare the value of residential land on either side of the urban boundary as defined by MBIE. Figure 6.26 shows the extent - it includes some pockets of land not included in the Council's defined urban environment in the Wakatipu Ward but otherwise appears broadly similar. However, it excludes all urban areas identified by Council in the Wanaka Ward (Wanaka, Hawea and Luggate). The discussion below is therefore limited to trends evident in the Wakatipu Ward.

Figure 6.25 – Estimated Location of Rural and Urban Zones – MBIE

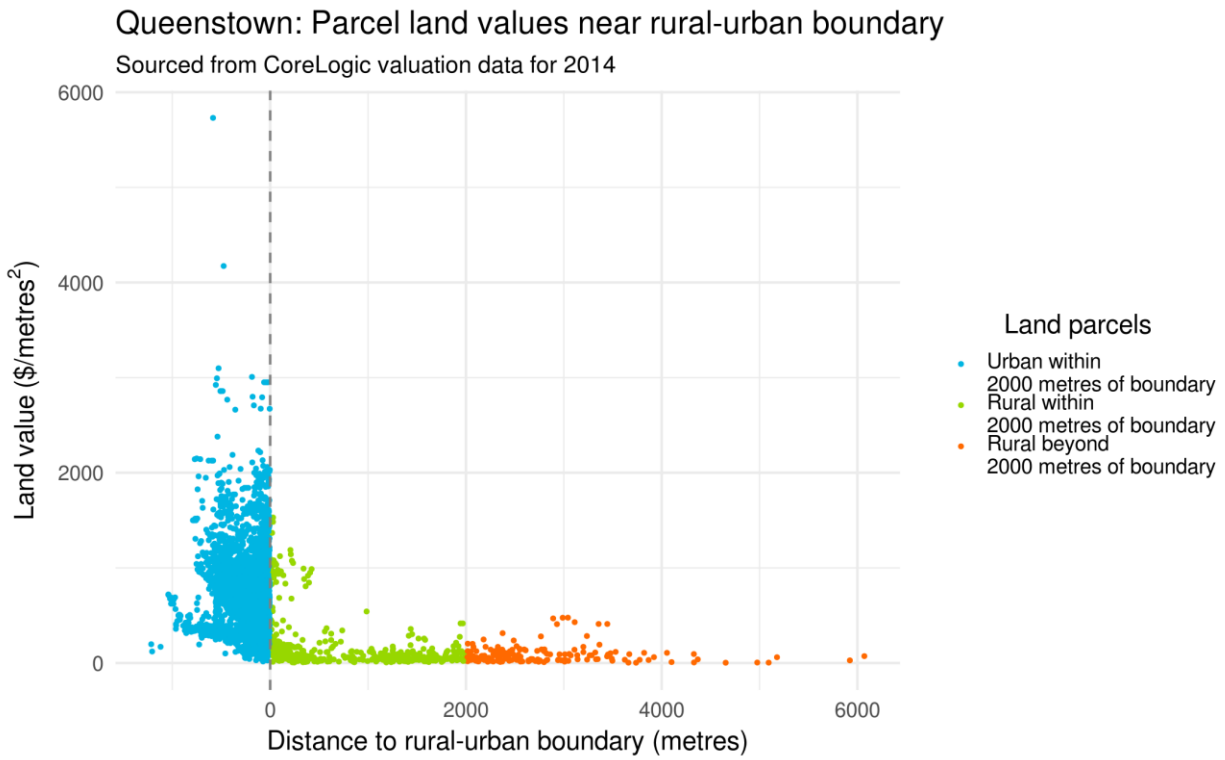


The effect of differences in amenities, geographic characteristics and infrastructure have been removed from the equation to enable a consistent comparison. The indicator implies that if significant differences occur in the value of residential land on either side of the boundary, once all other factors have been removed, then the market is not working efficiently due to a potential land constraint. The guidance document suggests possible planning responses through the supply of additional urban residential land or the reduction of development constraints within existing urban areas to improve housing affordability (assuming urban residential land is more highly valued).

Data provided by MBIE is presented in Figure 6.26, based on the most recent CoreLogic valuation data at the parcel level. The data shows a large difference between the land values on either side of the urban boundary. The indicator interpretation notes suggest that this implies that there is likely to be a significant shortfall of residential land zoned and available for development within the Queenstown area that is constraining the growth of the urban area.

The MBIE dashboard estimates that the effect of the urban boundary is approximately $337 per sqm of residential land. On a 600sqm section this equates to around $202,485 of additional costs that could be avoided by freeing up the urban boundary.

Figure 6.26 - Urban Rural Residential Land Values across the Urban Boundary, Queenstown



However, the suggested indicator interpretation is contrary to the information available on existing capacity within Queenstown. The modelled capacity in this HDCA shows that Queenstown has capacity for new dwellings well in excess of demand over the short, medium and long-term. Furthermore, there is capacity for a large majority share of this growth within the greenfield areas alone. The available capacity

is large and any changes to the amount of capacity are unlikely to have a meaningful impact on the differential described in the indicator.

Other forces are in play that influence the land values across the urban boundary and are not being captured in the indicator. They include the following;

- It is not clear that all the costs have been included in the comparisons across boundaries. For example, the conversion process from raw land to urban land often results in losses of up to 50% of the land for a combination of roads, parks, wetlands and other non-residential uses. It is not clear whether the indicator compares the average value of land (on a per m2 basis) between the raw rural land across the entirety of the rural land parcel, with the final saleable land area contained within the property parcels of the subdivision. If this land area conversion factor is taken into account, then the differential may halve.

- The value of land within versus without the urban boundary is already affected by the different zoning provisions. The number and range of uses urban residential land can be put to are vastly greater than rural land. Even if both are zoned for a form of residential use, this difference is likely to be reflected in price differentials.

- The urban area included within the indicator does not align with the main urban areas of the district. Only Queenstown has been included within the development of the ratio, while Wanaka has been excluded. Furthermore, non-urban areas adjacent to Queenstown have been included that are either inaccessible via the road network or other geographical conditions.

The presence of any differentials should be interpreted with caution and given careful consideration in any resulting planning response. They should not by default translate into a requirement to increase land supply. After taking into account the above factors, it may still be appropriate and desirable to have a differential in land prices at the urban edge. Where appropriate, this differential could reflect the effect of urban expansion on the overall urban form of the city. By way of example, effects include the centralised and efficient provision of public transport, the transport network generally (for both people choosing to live on the urban edge and others within the existing urban area affected by the transport network and distribution of activity affected by the dynamics at the urban edge), and other public infrastructure.

A large part of this effect is not captured within price signals at the urban edge. Many of the effects do not have efficient price mechanisms and are therefore not captured by the commercial market. The effects of urban form typically occur more broadly to society as a whole and fall outside the private costs and benefits that are capitalised into the land prices through land market transactions between individuals.

The alternative where no differential exists would therefore suggest a process of unrestricted urban expansion and sprawl. The costs of such an approach occur to society as a whole and are only partially capitalised into the price of land at the urban edge. This is also contrary to the Strategic Direction of both the RPS, PRPS and PDP.

6.6.5 Price Efficiency Indicators Combined

Currently the price efficiency indicators are of limited value to QLDC. It is M.E's view that the land price indicator does not reflect the actual costs and other unique demand factors that play out within QLD. The reliance on stand alone housing as the key driver of the indicator doesn't reflect well the typology of stock being produced for the Queenstown residential market. The embodiment of all the unique landscape and locational attributes are loaded onto land value rather than distributed between the land value and the build cost. The difference between established housing stock sales and land values and new build sales and land values is not accounted for in the indicator and other factors make it interesting but not especially helpful for Council to respond to.

The Rural Urban land price differential highlights a difference of around $202,485 per section as a result of the restrictions placed on development by the urban boundary[125]. This is second only to Auckland in impact. This indicator needs to be interpreted with caution. As noted above, there are many additional factors that need to be taken into consideration.

6.7 Monitoring

M.E recommend that the Council carries out a range of monitoring of residential land development, uptake and redevelopment to help with future updates and planning responses.

- Further information collection following the building consent process would enable a more accurate picture of existing urban development and assist in the monitoring of capacity up-take going forward. It would be useful to have a systematic process to identify and record when building consents have been completed with the final building work signed-off through the Council inspection. An important extension to this would include the digitisation of the new building footprint into the existing building footprint file. QLDC is currently setting up a process to undertake this modelling and will start reporting on it in subsequent monitoring reports.
- Within the building consent file, it would be helpful to establish a coding framework to attach indicators to each consent to enable the consent data to be analysed without the significant time requirement to apply the coding to the individual 'description of works' contained within each consent. This framework could include the following indicators:
  - Full construction of a single dwelling – i.e. a distinction between a consent for an extension vs. a full house construction.
  - Dwelling typology.
  - Inclusion of demolition costs.
  - Inclusion of other costs (e.g. site preparation, existing house removal).

[125] MBIE Price Efficiency Dashboard, 2018

- Number of dwellings constructed.
- Addition of a granny flat/minor dwelling (to an existing dwelling), and separately, and identified for new dwellings that also contain a granny flat/minor dwelling.
- The LINZ property parcel ID of the new dwelling.

- Sales of dwellings by type, location and value band.
- Addition of new dwellings on to Council and other records (such as QV or Corelogic) to capture dwellings which are completed but have no sale recorded as they are built under contract.

6.8 Recommendations

The analysis of demand and feasible plan enabled capacity in this HDCA has shown that the Operative and Proposed District Plans are able to meet all the requirements under the NPS-UDC in terms of total capacity for growth. This inclusion applies to both the urban environment and the total district.

The UGBs effectively provide for growth in a range of locations and there is capacity for growth in other localities across the rural environment. The PDP increases the opportunities for intensification through infill development as well further green field capacity – all in the context of an outstanding natural environment. These provisions provide for a range of dwelling types and locations.

The analysis shows that the existing and future dwelling estate is expected to meet the housing requirements of the great majority of the future district population. In common with other parts of New Zealand, there is some indicated shortfall in lower value/affordable dwellings. Predominantly property values of under $\$_{2016}$600,000, which coincides with the Governments' KiwiBuild Strategy.

QLD has relatively high property values – a product of its popularity as a holiday and investment location and its relatively rapid growth. This combination of features means that increasing the supply of dwellings in the lower value bands (e.g. under $600,000) will take specific effort and initiatives to make development of such dwellings feasible. Further supply of land or density provisions, where already expansively available, are therefore unlikely in and of themselves to increase the rate of take-up unless these are targeted to the lower spectrum of the housing where it has been determined that there are shortages in supply.

Encouraging and enabling such initiatives to complement the broad-brush mechanisms like zoning and development controls in the District Plan, will be important to help ensure a comprehensive and balanced future dwelling estate.

7 Reflection and Future Updates

The NPS-UDC requires high growth Councils to carry out this assessment every three years. This means that it is important that the 2017/18 study forms an appropriate baseline from which future change can be measured. The important point from the assessment is that the QLDC has ensured that there is sufficient residential land capacity to cater for anticipated growth in the short, medium and long-term.

The most important thing Council can do to ensure they remain in touch with growth and change, is to constantly monitor residential land development. By consistently updating datasets on development, Council will be well placed to address development and broader economic trends as they begin to emerge.

7.1 Overview of HDCA Process

The process followed in this report is based strongly on that outlined in the Guidance on Evidence and Monitoring, published by MfE and MBIE, updated November 2017. The overall purpose and intent of the work is to provide QLDC with more information, such that they are able to make better informed decisions about residential land.

The assessment process breaks down into two workstreams; a Demand Assessment based on a combination of household, visitor and worker demand within the QLD; and an assessment of the capacity for dwellings within each location. These workstreams are brought together in the assessment of sufficiency where capacity is compared to the level of demand for dwellings.

In addition, the development community has been consulted to provide inputs into the housing capacity Commercial Feasibility Model and to understand the key modelling outputs. Specifically, input was sought from the development community on costs and sales prices used within the model.

7.2 Key Issues Faced

QLDC and M.E staff worked effectively together through-out the project. QLDC always responded in a timely manner to any requests for data, input or feedback/review. As a result of the recent and ongoing PDP review process, they had many datasets in a readily available and useable format. There were however a few technical issues faced by M.E in preparing this report, all of which were overcome.

1. The key issue faced in preparing this assessment of housing capacity sufficiency has been the state of the base data sets. Significant time was needed to align the core datasets – ratings database, planning zone shapefiles, structure plan information, parcel data and other sets of spatial data. While the overall process is a relatively simple one, issues with the capacity information have dominated the time required to deliver this report.

    a. Council supplied mapping files for core underlying zones, sub-zones, transition zones, overlays and designations as separate layers. M.E required parcels to be tagged to one geographic layer according to their location. As such, the many

layers needed to be 'unioned' in GIS before it could be used. This is however a relatively simple process (but one that needed several iterations as errors or changes were addressed).

b. While initially the zoning files were to capture the Stage 1 PDP zones, the Stage 2 PDP zones (i.e. Visitor Accommodation Sub-Zones) were also notified before the completion of the work and M.E were expected to include them. Changes to the zoning framework of the modelling required the model development steps to be repeated and the integrity of the model to be re-established each time.

c. The parcel file supplied by Council contained a large number of duplicate or overlapping parcels. This was not evident initially when mapped. Additional time was needed to develop a method that removed the duplicates to leave a single layer of contiguous parcels and repeat the model build process.

2. As a general observation, the QLD has a large number of Special Zones (with detailed structure plans) where zoning provisions were specific to each individual area. This increased the work significantly compared to districts that have a more consistently applied set of planning zones.

3. Information on dwelling yields was available from the developers, or from the plan change or approved resource consent for most of the Special Zone areas. This provided increased accuracy of the capacity estimates as the developer signalled yields removed the need to apply assumptions about average site sizes. However, no detail was available on the timing or pricing of these areas. The unique conditions of the QLD market are such that almost all new subdivision sections are sold within a very short duration and at a price set by the developer. In the absence of this information, it was assumed that the price profile would reflect that of the average of new builds within the respective UGBs. A conservative assumption on timing was applied where it was assumed that only 45% of the capacity would be feasible within the short-term, 80% within the medium-term and 100% within the long-term.

4. The planning provisions within the PDP generally enable a greater level of residential development than the ODP. Consequently, assumptions were required on the level of residential uptake in business zones where residential activity is enabled as greater provision is made for residential development than previously enabled under the Plan. M.E undertook a base level of analysis of existing patterns of residential development within these areas, with assumptions around future development levels provided by Council to be incorporated within the model.

5. During the local stakeholder/expert workshop, an alternative profit margin of 30% was suggested to use within the Commercial Feasibility Model (with 20% being the currently used margin). Further investigation of this suggestion determined that 30% was not appropriate to use within the model. Analysis of the SNZ Annual Enterprise Survey suggested much lower profit margins (8%-9%), along with the use of 20% across other high growth council's and within MBIE's own feasibility model. While 30% may

represent a margin sought by QLD developers, the information suggested it was not required to result in feasibility.

6. The share of plan enabled infill capacity within QLD calculated to currently be commercially feasible was very high. Developers expressed concern at these findings insofar as high levels of feasibility could be interpreted as eliminating any need to provide further capacity. Concern was also raised at the prospect of misinterpretation of capacity with resulting rates of growth. These concerns do not affect the calculations within the model, however, care is required by Council in the communication of capacity figures to avoid any confusion with likely growth. The overall picture of sufficiency within QLD is only slightly affected by the high shares of infill capacity as feasible given the large supply of greenfield capacity relative to demand – i.e. put simply, the sufficiency of capacity is not reliant on a high uptake of infill capacity. The levels of take-up will need to be monitored to gain a better understanding of what is happening throughout the QLD.

7.2.1 QLDC Long Term Plan, Annual Plan and Infrastructure Strategy

The NPS-UDC requires the integration between land use and infrastructure planning, recognising that urban development is dependent upon infrastructure. Policy A1 specifies that development capacity provided in plans must either be serviced (in the short-term), identified in a LTP (medium-term), or identified in a relevant Infrastructure Strategy (long-term).

Under the Local Government Act (LGA), local authorities are required to prepare LTP every three years, and an annual plan every year. The LTP (and the annual plan) strategically manages the growth in the district, including location and timing of the growth. The LTP sets out an agreement between the Council and the community as to the sequencing, method and timing of infrastructure and servicing and how this will be funded. Alongside the LTP, an 'Infrastructure Strategy' is also required to be prepared by Council under the LGA for a 30 year period.

Council is currently preparing the Annual Plan for 2017/2018 and at the end of March 2018 will be going out for consultation. At the same time, Council will be consulting on the 10 Year Plan (2018-2028) in February 2018 and the review of the 30 year Infrastructure Strategy (2015-2045). Due to the significant lead in time of these projects which have substantially commenced at the date of this report, these LGA plans are not able to take account of the results of the BDCA and HDCA and will need to be picked up in subsequent additions. It is acknowledged that this is an issue for all high growth Councils undertaking these assessments.

Additionally, the FDS (to be prepared in 2018), is required to demonstrate feasible development capacity in the medium (2026) and long-terms (2046). The capacity considered by the FDS will therefore be limited to the current versions of the LTP and Infrastructure Strategy, and could not, for example, identify strategies to provide capacity in new locations which are not planned in either the 2018 LTP or Infrastructure Strategy.

7.3 Key Learnings

The development of the HDCA has been a learning process for both M.E and Council. The result is a workable (albeit complex) modelling process and structure that can now be updated as required. The updates will not be automatic but require the systematic completion of several steps – starting with GIS outputs and integrating those into the established Excel modelling frameworks. Much of the work that has gone into developing working demand and capacity models will not need to be repeated. Rather, will require only relatively minor adjustments in future to keep them up to date.

In hindsight, the modelling process would have benefited from:

- Additional data cleaning prior to running through the model.
- More comprehensive data on the relationships between household types and incomes, and dwelling types and values. The analyses done for Queenstown, Auckland, Hamilton are a very solid start, but as yet there is no comparator information from other areas to provide any base for comparison.
- More consultation and input from the ORC, NZTA, CODC (discussed further in Section 7.4.1 below) and the local input regarding the inputs and assumptions used throughout this assessment.

7.4 Gaps and Potential Improvements

In completing this first HDCA, both M.E and Council have identified some technical areas where Council's data capture, storage, access and reporting/communication could be further refined to facilitate monitoring and future assessment updates. These will be discussed further, separate from this report.

Throughout this report, a few areas for potential further work have been identified. These would improve the accuracy of the report findings in future updates. In summary these were:

- Incorporation of further information on hazards and geology. The geology may affect building costs, but this has at least partly been captured within the model. Some restrictions on hazards have been included within the model that have flowed through from sub-zoning layers.
- Further investigation on the interrelationship with the Cromwell housing market is required, this includes understanding traffic movements and numbers. Anecdotally it is known that a lot of people commute from Cromwell to either Wanaka or Queenstown for work. The numbers and the extent of this is unknown (and is discussed further below).
- Analysis of dwelling feasibility and how it changes over time. The conceptual base for expecting continual change in feasibility is very strong, not least because of the known drivers of urban development, growth and change. The underlying pattern of differential rates of change was well researched in the Auckland market for the IHP hearings and identified as a basic driver of urban development and redevelopment.

- Maintaining information sets which may be used easily in any future update. Considerable effort was required here to assemble and clean information and gather information to inform understanding of key processes. That should flow through into regular information collection and monitoring.
- Considerable care is required in developing and applying indicators of market efficiency. These need to be very sound conceptually, and practically, as there is considerable risk of misinterpreting results and/or applying "findings" incorrectly.
- At the same time, there is a considerable learning curve for Council staff and others before indicators may be applied accurately and interpreted appropriately.

Other areas that may also warrant further discussion include:

- The recommended margins on top of demand and whether this is appropriate for the QLD market.
- Seasonal workers and the degree to which they are captured in the current projections and estimates of dwelling demand.
- Further work on visitor accommodation including the take-up in zones that permit both visitor accommodation and residential activities.
- More work to understand residential flats (combined with better data collection).
- The outcomes of the stage 1 PDP re-zoning decisions.

7.4.1 Cooperation with CODC and ORC

The NPS-UDC (Policy D1 a) strongly encourages local authorities that share jurisdiction over a SNZ urban area to work together on a joint HDCA and BDCA. QLDC does not share any statistically defined urban areas with a neighbouring council but does have shared jurisdiction with ORC.

However, Cromwell in neighbouring Central Otago District (COD) has a close economic relationship with both the Queenstown and Wanaka urban environments. It is between a 30 minute and 1 hour drive from Luggate, Wanaka, Arrowtown and Queenstown. It serves an important role as a service centre for an extensive farming and stone fruit growing area, and a transport logistics hub located centrally between Wanaka, Queenstown and Alexandra and the Lindis and Haast Passes.

There is a flow of commuter traffic between Cromwell, Wanaka and Queenstown. The 2013 Census looked at where people live and work on different scales. In 2013 there was 423 people who lived in the COD and worked in QLD and 267 people who lived in QLD and worked in COD. When organised by Census Area Unit (CAU) Cromwell had 1,197 people who lived in the Cromwell CAU and worked in Cromwell CAU, there was then 198 people who lived in the Cromwell CAU working in the CAU's within QLD. The total amount of people who live in Cromwell and work was 2,526 people, this means that 7.8% of people who work, do so in QLD.

There is also anecdotal evidence to suggest that the number of people who live in Cromwell and work in QLD is increasing and residential developers are starting to respond to that market. There is also a potential

that development capacity in CODC may be 'easier' to bring to market than in Queenstown and Wanaka. More research is needed in this area, however better information on how these patterns have changed or grown will be available after the 2018 census.

Discussions with NZTA, ORC and CODC highlight that more detailed investigation into business, tourist and workforce movements between the two districts is required. This would be a good opportunity to work together to produce a joint body of work between all the organisations. It is noted that CODC is currently not defined as a medium or high growth urban area, and although the NPS-UDC still applies to the district, the council is not currently required to prepare a HDCA or BDCA. Therefore, the Council has limited quantitative data that could be utilised for QLD's current assessment.

QLDC recognise that in future updates of the HDCA and BDCA, a joint assessment with CODC would support alignment of decision-making between the local authorities, toward efficient use of land and infrastructure funding. Discussions with the ORC, NZTA and CODC have highlighted this is an area where joint assessment is required.

Appendix 1 – NPS Objectives

Objectives

The following objectives apply to all decision-makers when making planning decisions that affect an urban environment.

Objective Group A – Outcomes for planning decisions

OA1: Effective and efficient urban environments that enable people and communities and future generations to provide for their social, economic, cultural and environmental wellbeing.

OA2: Urban environments that have sufficient opportunities for the development of housing and business land to meet demand, and which provide choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations, working environments and places to locate businesses.

OA3: Urban environments that, over time, develop and change in response to the changing needs of people and communities and future generations.

Objective Group B – Evidence and monitoring to support planning decisions

OB1: A robustly developed, comprehensive and frequently updated evidence base to inform planning decisions in urban environments.

Objective Group C – Responsive planning

OC1: Planning decisions, practices and methods that enable urban development which provides for the social, economic, cultural and environmental wellbeing of people and communities and future generations in the short, medium and long-term.

OC2: Local authorities adapt and respond to evidence about urban development, market activity and the social, economic, cultural and environmental wellbeing of people and communities and future generations, in a timely way.

Objective Group D – Coordinated planning evidence and decision-making

OD1: Urban environments where land use, development, development infrastructure and other infrastructure are integrated with each other.

OD2: Coordinated and aligned planning decisions within and across local authority boundaries.

Appendix 2 – Stakeholder Workshop Agenda

QLDC NPS Urban Development Capacity Project

Agenda – Workshop 4 (Housing Engagement)

Details:

Date	Location	Time
25th Jan. 2018	QLDC Gorge Road Offices – Council Chambers	1pm-4pm

Attendees:

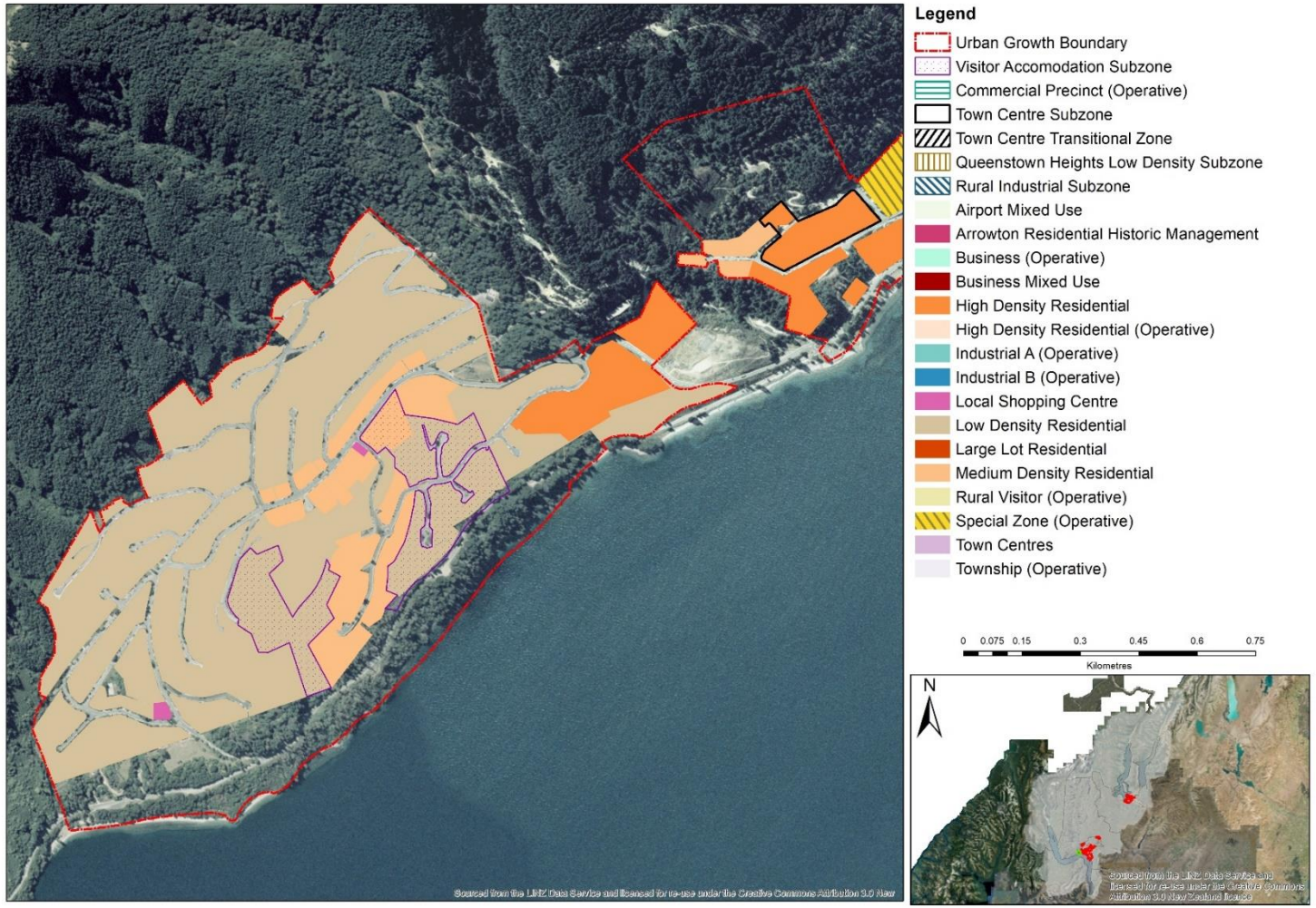
Name + Organisation	Name + Organisation
Natalie Hampson – M.E (Project Manager)	Tim Williams – Remarkables Park
Susan Fairgray – M.E (Presenter)	Mike Coburn – Jacks Point
Tony Avery - QLDC	Guy Taylor – Darby Partners
Ian Bayliss - QLDC	Rachel Tregidga – Queenstown Airport
Myles Lind – QLDC	Ann Lockhart – Queenstown Chamber of Commerce
Mark Baker - QLDC	Alan Grove – Ngai Tahu Property
Peter Harris – QLDC	Ian Greaves – Southern Ventures (tentative)
Michelle Morss – QLDC	Lauren Christie – Winton Partners
Anita Vanstone - QLDC	Marc Bretherton – Winton Partners (tentative)
Tony MacColl - NZTA	Cameron Reed – Ray White
David Reid – Three Plus	Jason Watkins – Business Development Manager, CUBE
John Scobie – Colliers International	Cameron Reed – Ray White

Agenda Items:

Time	Focus	Lead
1:00pm	Introductions/NPS Overview	Anita/Natalie
1:10pm	Overview of M.E's approach to meet the NPS-UDC Housing Capacity Assessment Requirements Objectives of workshop	Susan
1:25pm	Outline the modelling approach applied by ME to calculate plan enabled and commercially feasible residential capacity in the District's Urban Environment	Susan / Stakeholders
2:05pm	Present initial modelling results of estimated plan enabled and commercially feasible residential capacity, covering dwelling typologies and locations	Susan / Stakeholders
3:00pm	Feedback on the modelling outputs to understand whether they align with the current residential market situation and expectations.	Susan / Stakeholders
3:45pm	Next steps, close.	Susan/Natalie/Anita

Appendix 3 – Land Use Maps Queenstown & Surrounds

Queenstown West


Legend
Urban Growth Boundary
Visitor Accomodation Subzone
Commercial Precinct (Operative)
Town Centre Subzone
Town Centre Transitional Zone
Queenstown Heights Low Density Subzone
Rural Industrial Subzone
Airport Mixed Use
Arrowton Residential Historic Management
Business (Operative)
Business Mixed Use
High Density Residential
High Density Residential (Operative)
Industrial A (Operative)
Industrial B (Operative)
Local Shopping Centre
Low Density Residential
Large Lot Residential
Medium Density Residential
Rural Visitor (Operative)
Special Zone (Operative)
Town Centres
Township (Operative)
0 0.075 0.15 0.3 0.45 0.6 0.75
Kilometres
N
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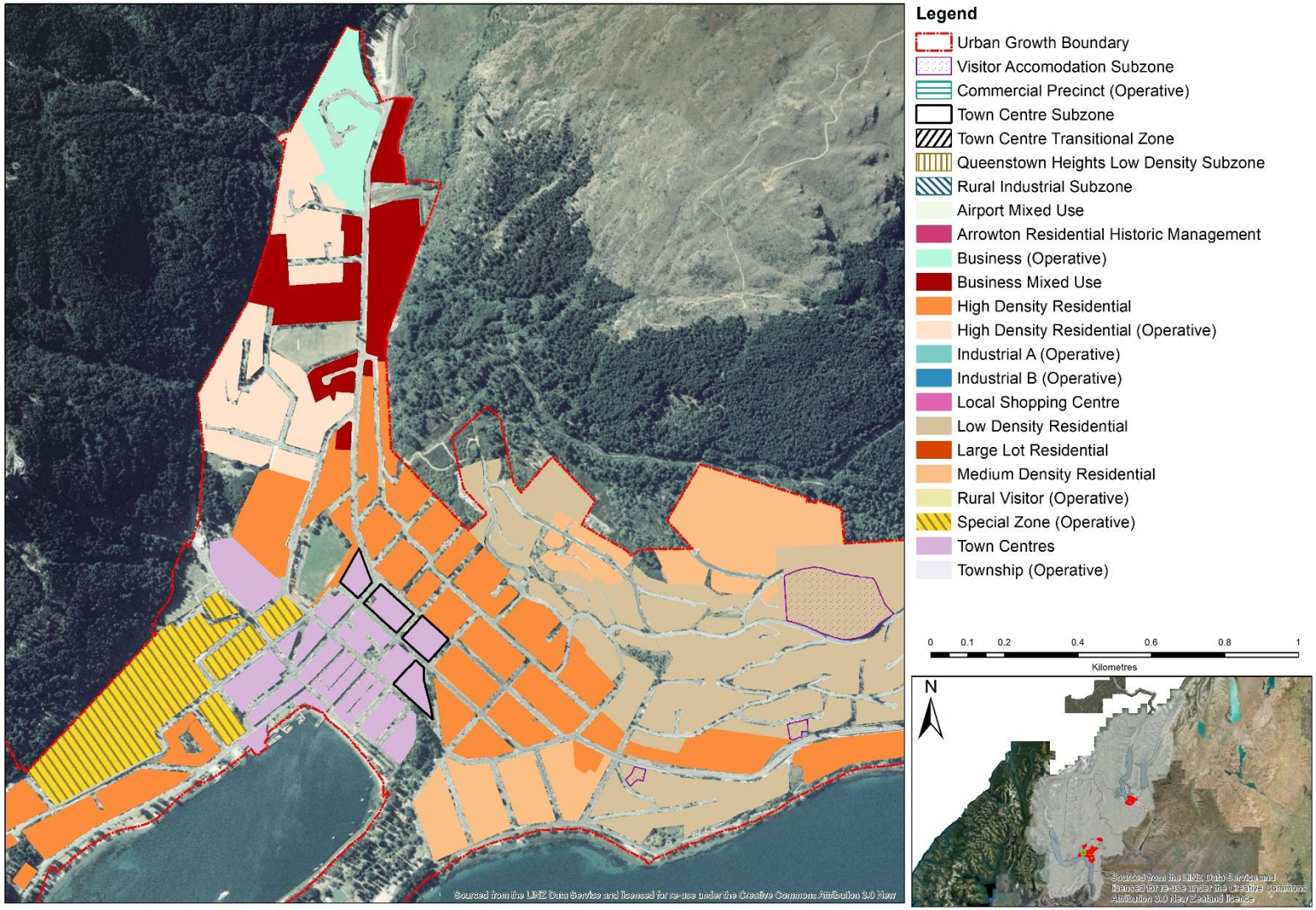
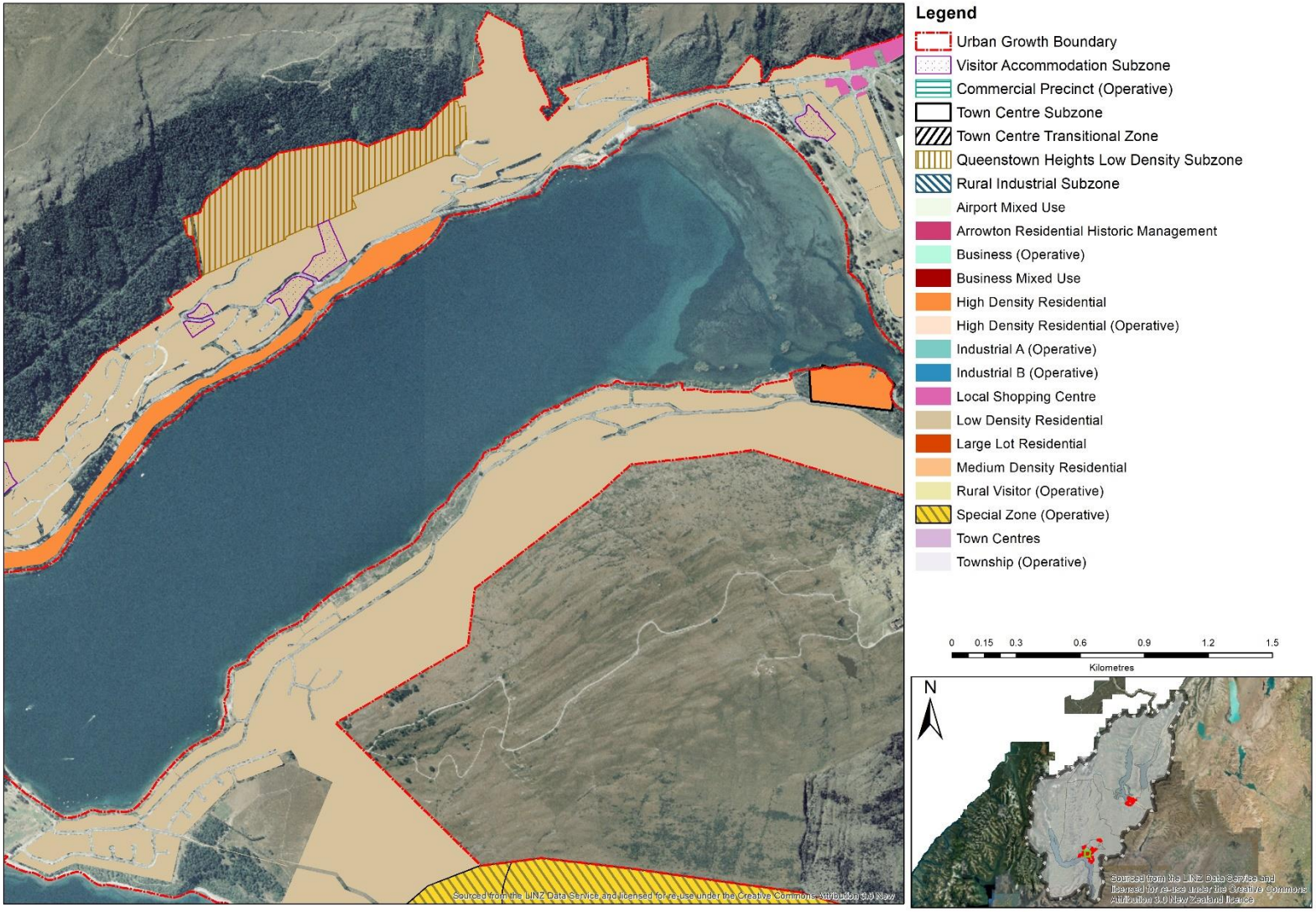
Queenstown Central

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Commercial Precinct (Operative)
Town Centre Subzone
Town Centre Transitional Zone
Queenstown Heights Low Density Subzone
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Industrial B (Operative)
Local Shopping Centre
Low Density Residential
Large Lot Residential
Medium Density Residential
Rural Visitor (Operative)
Special Zone (Operative)
Town Centres
Township (Operative)
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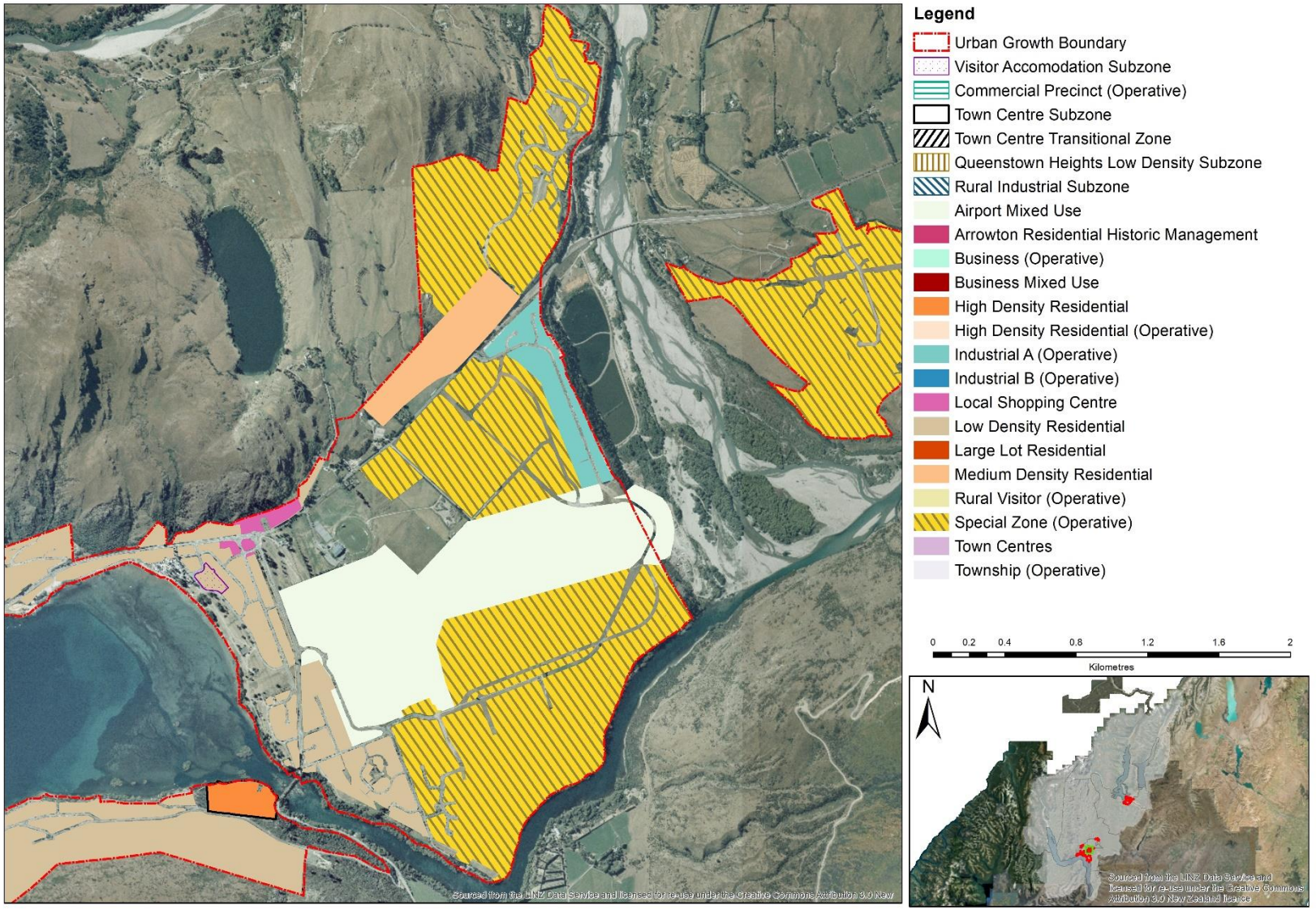
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Commercial Precinct (Operative)
Town Centre Subzone
Town Centre Transitional Zone
Queenstown Heights Low Density Subzone
Rural Industrial Subzone
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Industrial B (Operative)
Local Shopping Centre
Low Density Residential
Large Lot Residential
Medium Density Residential
Rural Visitor (Operative)
Special Zone (Operative)
Town Centres
Township (Operative)
0 0.2 0.4 0.8 1.2 1.6 2
Kilometres
N
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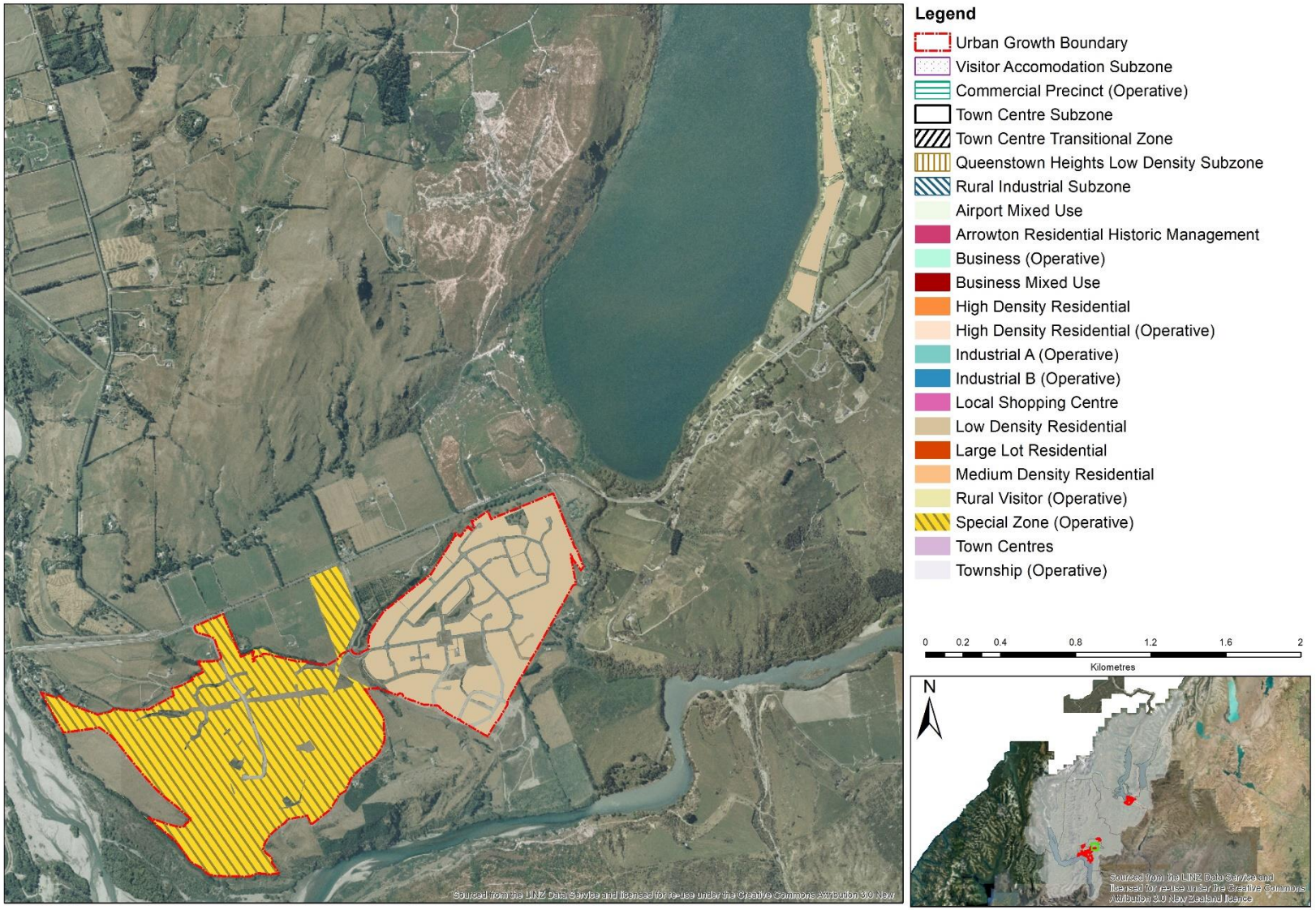
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Medium Density Residential
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Special Zone (Operative)
Town Centres
Township (Operative)
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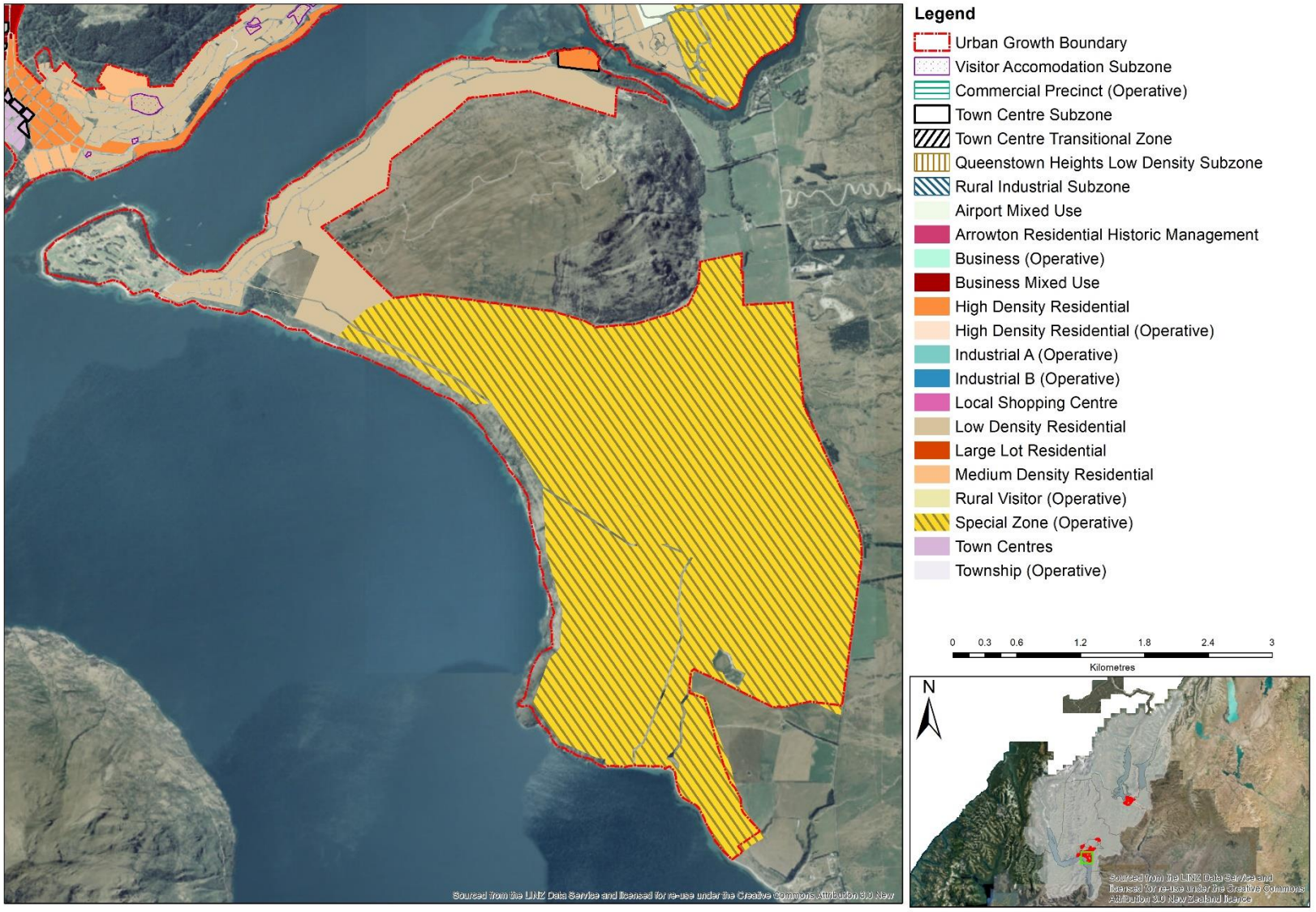
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Urban Growth Boundary
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Town Centre Subzone
Town Centre Transitional Zone
Queenstown Heights Low Density Subzone
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Industrial B (Operative)
Local Shopping Centre
Low Density Residential
Large Lot Residential
Medium Density Residential
Rural Visitor (Operative)
Special Zone (Operative)
Town Centres
Township (Operative)
0 0.3 0.6 1.2 1.8 2.4 3
Kilometres
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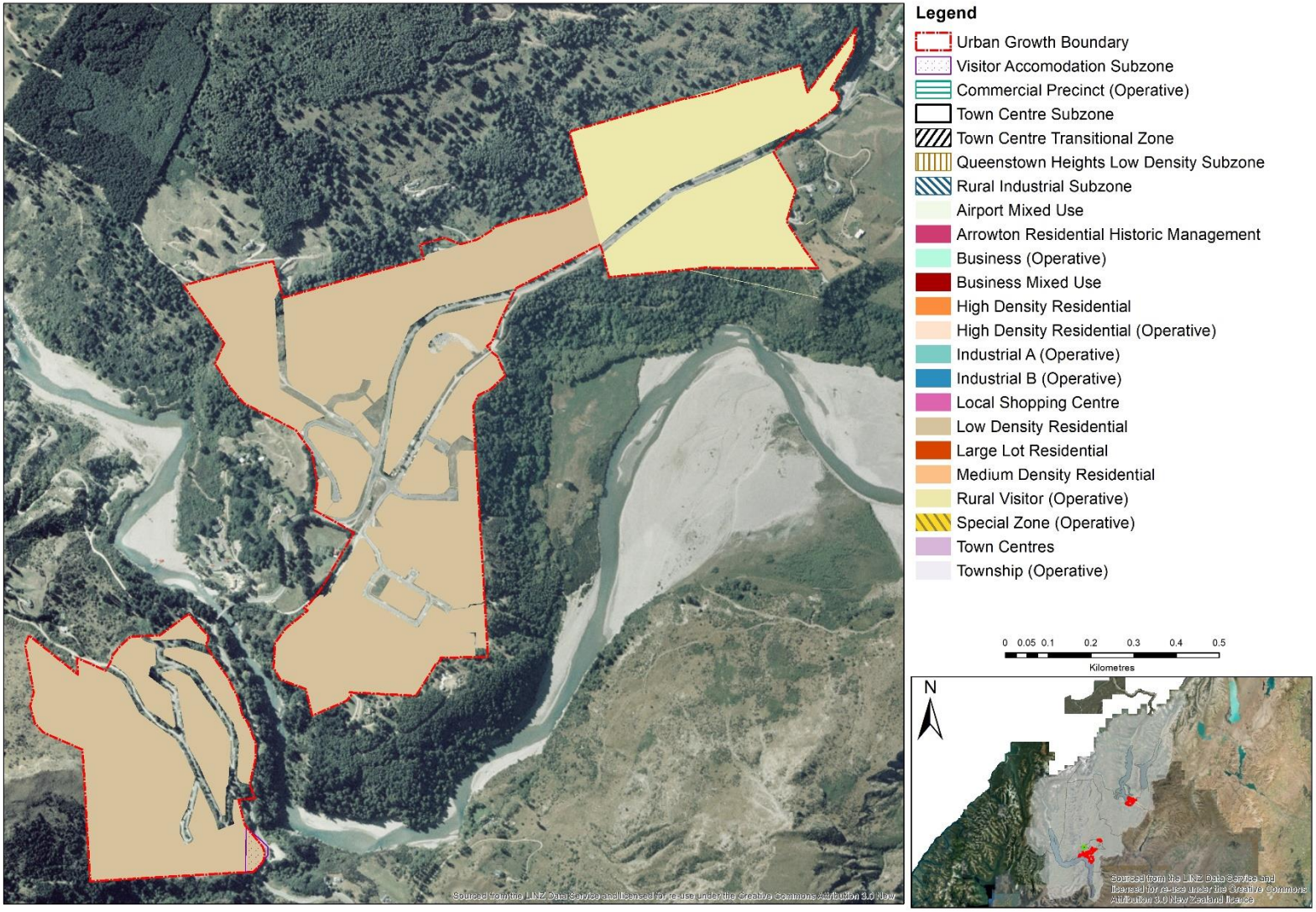
Legend
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Town Centre Subzone
Town Centre Transitional Zone
Queenstown Heights Low Density Subzone
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Low Density Residential
Large Lot Residential
Medium Density Residential
Rural Visitor (Operative)
Special Zone (Operative)
Town Centres
Township (Operative)
0 0.05 0.1 0.2 0.3 0.4 0.5
Kilometres
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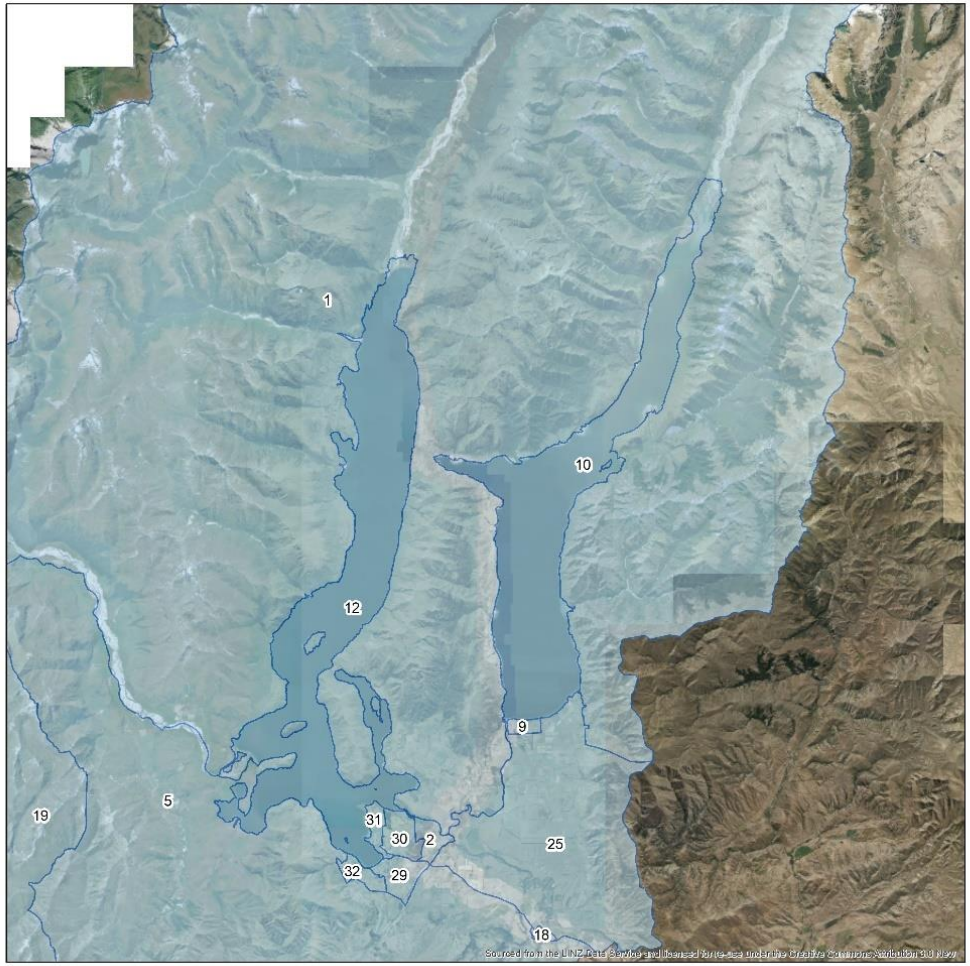
Appendix 4 – Spatial Framework Areas

Spatial Framework – North QLD



1 - Ahuriri (Queenstown-Lakes District)

2 - Albert Town

5 - Cadrona

9 - Hawea Locality

10 - Inland water-Lake Hawea

12 - Inland water-Lake Wanaka

18 - Luggate Locality

19 - Outer Wakatipu

25 - Rest of Upper Clutha Valley

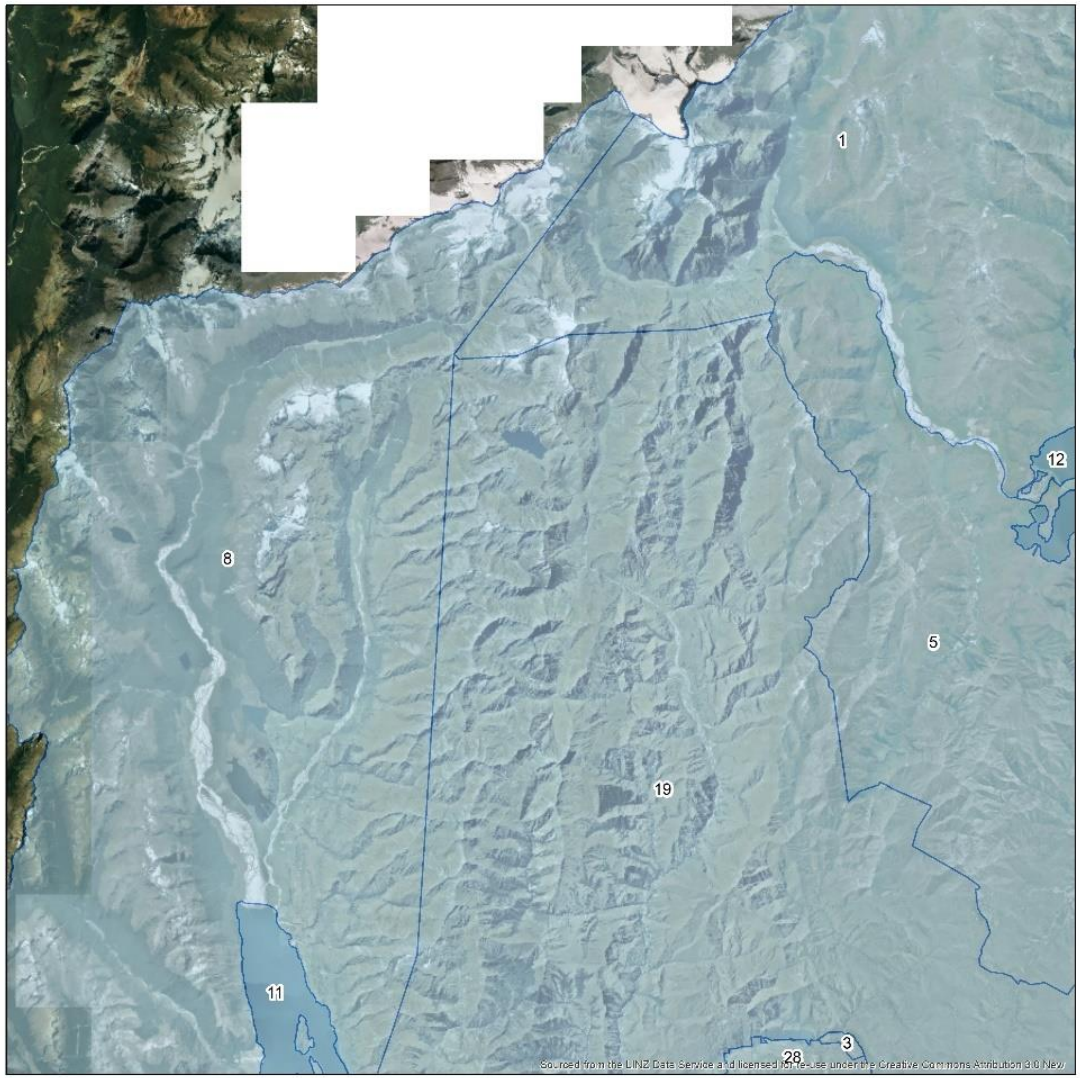
29 - Wanaka Central

30 - Wanaka North

31 - Wanaka Waterfront

32 - Wanaka West

Spatial Framework - North West QLD



1 - Ahuriri (Queenstown-Lakes District)

3 - Arrowtown

5 - Cadrona

8 - Glenorchy

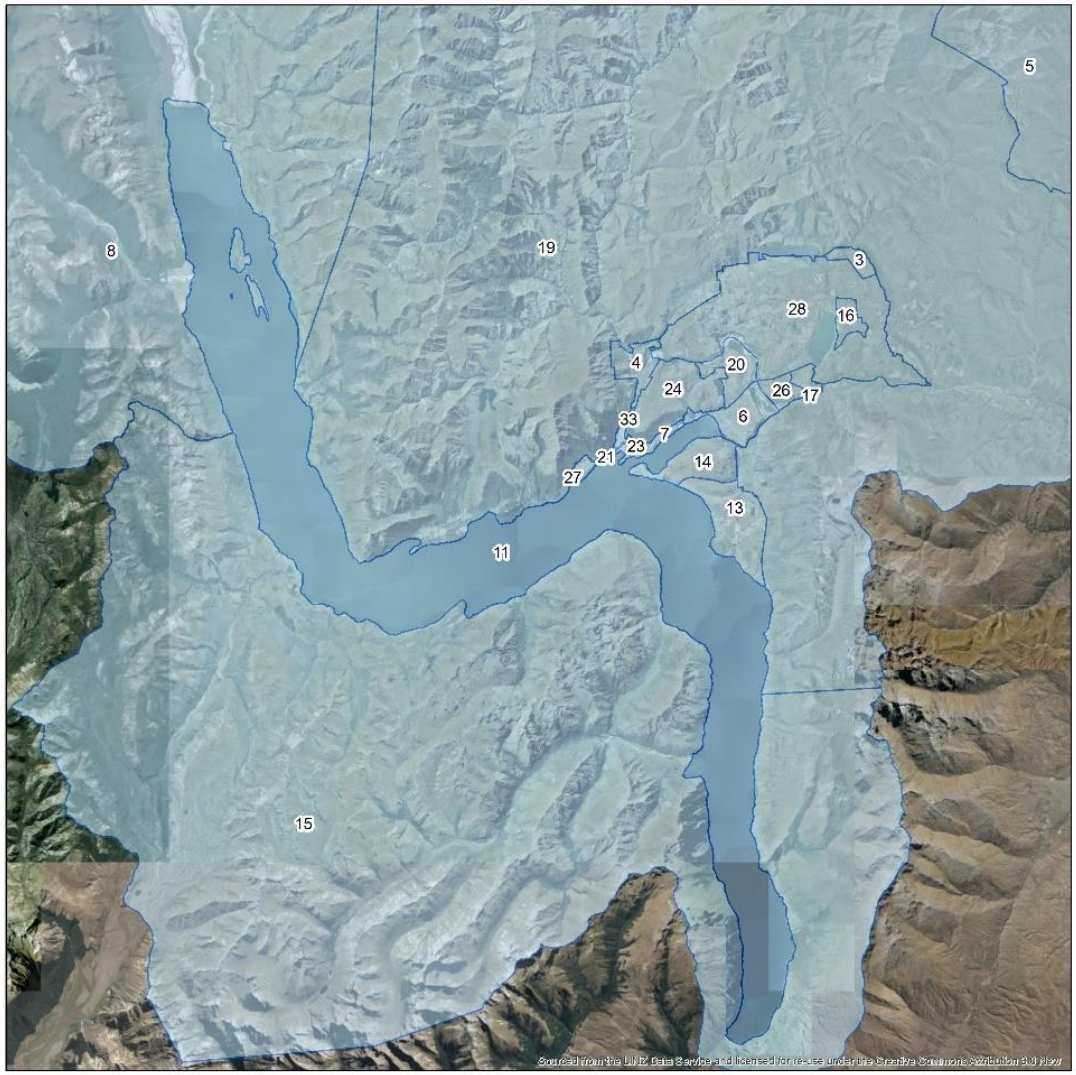
11 - Inland water-Lake Wakatipu

12 - Inland water-Lake Wanaka

19 - Outer Wakatipu

28 - Wakatipu Basin

Spatial Framework – South QLD



3 - Arrowtown

4 - Arthurs Point

5 - Cadrona

6 - Frankton

7 - Frankton Arm

8 - Glenorchy

11 - Inland water-Lake Wakatipu

13 - Jacks Point

14 - Kelvin Heights

15 - Kingston

16 - Lake Hayes

17 - Lake Hayes Estate

19 - Outer Wakatipu

20 - Quail Rise

21 - Queenstown Bay

22 - Queenstown Central

23 - Queenstown East

24 - Queenstown Hill

26 - Shotover Country

27 - Sunshine Bay

28 - Wakatipu Basin

33 - Warren Park

Concordance of Spatial Framework Locations to Broad Sub-Areas

Locations (Spatial Framework)	Demand Analysis - Broad Sub-Areas	Capacity Analysis - Broad Sub-Areas
Arrowtown	Arrowtown	Arrowtown
Arthurs Point	Arthurs Point	Arthurs Point
Hawea Locality	Hawea Locality	Hawea Locality
Jacks Point	Jacks Point	Jacks Point
Lake Hayes	Lake Hayes	Other Areas
Lake Hayes Estate	Lake Hayes	Queenstown Far East
Shotover Country	Lake Hayes	Queenstown Far East
Luggate Locality	Luggate Locality	Luggate Locality
Ahuriri (Queenstown-Lakes District)	Other Wanaka	Other Areas
Cadrona	Other Wanaka	Other Areas
Glenorchy	Other Wakatipu	Other Areas
Kingston	Other Wakatipu	Other Areas
Outer Wakatipu	Other Wakatipu	Other Areas
Rest of Upper Clutha Valley	Other Wanaka	Other Areas
Wakatipu Basin	Other Wakatipu	Other Areas
Frankton	Queenstown	Queenstown Far East
Frankton Arm	Queenstown	Queenstown East
Kelvin Heights	Queenstown	Queenstown East
Quail Rise	Queenstown	Queenstown Far East
Queenstown Bay	Queenstown	Queenstown Central and West
Queenstown Central	Queenstown	Queenstown Central and West
Queenstown East	Queenstown	Queenstown East
Queenstown Hill	Queenstown	Queenstown East
Sunshine Bay	Queenstown	Queenstown East
Warren Park	Queenstown	Queenstown Central and West
Albert Town	Wanaka	Wanaka
Wanaka Central	Wanaka	Wanaka
Wanaka North	Wanaka	Wanaka
Wanaka Waterfront	Wanaka	Wanaka
Wanaka West	Wanaka	Wanaka

Source: M.E, SNZ (2018)

Appendix 5 – QLD Housing Model 2017

The M.E QLD Housing Model (the "Model") offers detailed analysis of current housing demand, based on 2013 Census counts and update to concord with 2016 household estimates, and projected future outcomes to 2046. While a very wide range of combinations may be examined, the focus in this Report is the basic outputs. This appendix describes the key components of the Model and its approach to meeting the needs of the NPS-UDC.

The Model combines information on the demand-side, in terms of current (2016) and future numbers of households of each type over the period to 2046, and on the dwelling supply-side. The supply-side analysis focuses on dwelling types and dwelling values, in order to understand the relationships between household types and the type and value of dwellings which they occupy.

The estimates of future demand for dwellings are based primarily on the projected increases in household numbers over the planning period (discussed above). However, the future supply-side outcome will depend on a range of matters, including the plan enabled capacity, dwelling affordability, and shifts in the revealed preferences for dwellings. Any shifts in preferences will be affected by, and in turn affect, the supply of dwellings of each type, and the value of those dwellings.

The Model considers these matters through a scenario approach, which takes into account:

a. The projected demand from households of each type;

b. The base case or current demand by household type, to identify a simple *pro rata* future where dwelling demand is driven by the change in the number of households in each segment of the community;

c. Progressive shifts in the supply of new dwellings, which are generally manifest as a trend away from detached dwellings, and toward attached dwellings, such that the balance shifts over time;

d. Associated with the trend toward attached dwellings is allowance for the proportion of multi-level attached dwellings to increase, reflecting the trend toward apartments and terrace housing;

e. The change in dwelling preferences implies some change in the value range of the housing estate, given that attached dwellings are generally lower value than detached dwellings (especially because of the larger land area, dwelling size and value associated with detached dwellings). However, that relationship does not necessarily follow, given the generally higher construction costs per sqm for apartments (especially those requiring lift access), and the expected preference for larger attached dwellings by households opting to re-locate from detached dwellings (including those in the baby boom generation in their later life-stages).

These matters are taken into account in the core outputs of the QLD Housing Model, to provide an overview of future demand for housing by household type, and the associated demand for owned and rental dwellings, by indicative value band.

f. To provide a more nuanced assessment, allowance also needs to be made for housing demand which arises from specific segments of the population, including social housing. Housing New Zealand Corporation (HNZC) has only a few dwellings in the District (reportedly 9), and then there is the Queenstown Lakes Community Housing Trust, as well as retirement villages. The Government's KiwiBuild initiative is expected to deliver up to 100,000 affordable dwellings into the New Zealand market in the medium-long term, with 50,000 of these to be outside of Auckland. However, there is no indication yet as to whether any KiwiBuild dwellings are intended for QLD. Retirement village demand is oriented toward the older age groups and is expected to account for 4.5 to 5.5% of total demand growth into the longer term.

The Model covers resident households only. It does not examine the housing needs of absentee owners.

This assessment covers both total resident households (current and projected) and urban households (current and projected). While the NPS-UDC is focussed on urban capacity, we note there is considerable potential for housing demand which is directed in the first instance to non-urban locations to be re-directed as demand for urban capacity. In practical terms, this would mean the projected urban futures (see above) would be understated, and urban demand greater than expected – which would be directly relevant to the NPS-UDC requirements.

7.4.2 Model Household Types

The NPS-UDC requires assessment of housing demand by different types of household within a community, including demographics (household structure, size and age) which are important drivers of housing needs, and household incomes, which are an important driver of ability to pay. Dwelling affordability is a key matter in the NPS-UDC (Policy B6c).

Households may be defined on a number of dimensions, and the more standard ones are household type (such as single persons, couples or 2-parent families), household size or the number of members, the age of the householders, and their income level. These dimensions directly influence housing preferences and affordability.

A standard household typology used by M.E has been applied, based on Census information. The typology broadly conforms with SNZ household types, although it offers more detail on matters directly relevant to housing affordability[126].

The segmentation used here is based first on household type:

a. Single person
b. Couple
c. 2-parent family with 1-2 children
d. 2-parent family with 3+ children

[126] This typology has been applied over three decades to effectively differentiate household needs – both for dwellings and a range of consumer goods and services – according to household requirements and their ability to pay (as driven by income levels).

e. 1-parent family

f. Multi-family

g. Non-family.

Households are further differentiated by household age. This is the age of the "reference person" (as identified for Census purposes) and is a strong indicator of a household's stage in the life-cycle. It is important because housing needs and future expectations vary during the life-cycle. For this analysis, six age bands are used – from young adults of 15-29 years, 30-39 years, 40-49 years, 50-64 years, 65-74 years, through to older households in the 75 years and over age band.

The third key point of differentiation is household income level. This is based 2013 Census bands which broadly correspond with household income quintiles, though do not correspond exactly. The five bands used in the 2013 Census are less than $30,000 per year (pre-tax); $30,000 to 50,000; $50,000 to 70,000; $70,000 to 100,000; and more than $100,000.

These combinations provide the option to define up to 210 household groups – 7 types x 6 age bands x 5 income bands – although this level of disaggregation is typically applied only at national level, or for large regional or TA populations. For most analysis, detail by household type and income, or by household type and age, is easily sufficient to identify the most important patterns of demand.

The mix of household types varies by location. For this HDCA analysis, a dataset from 2013 Census has been applied, which counts the numbers of households of each type *by* age *by* income category. This is available at the 2013 census unit (CAU) level. The numbers of households as at June 2016 have been estimated according to the change in resident population from 2013 (SNZ, 2017).

7.4.3 Future Housing Demand

The total housing growth projections are set out in section 3.5.2 (total district) and section 3.5.3 (total urban environment). A core underlying assumption is that QLD resident housing demand reflects household numbers, on the basis of one dwelling per household[127]. QLD has a large number of dwellings which are not usually occupied, and these are allowed for in the projections, so there is little risk of understating housing demand by not making allowance for dwellings not usually occupied. The net increase in resident dwelling demand is therefore based on the net increase in resident household numbers, from the 2016 base.

7.4.4 Dwelling Types

The HDCA also requires assessment of how demand for housing is currently being met by the QLD dwelling estate. The analysis reported on here is based on the situation as at the 2013 Census, and estimated for 2016, and covers the number of dwellings by type and value.

[127] QLD has a large number of dwellings which are not usually occupied, and these are allowed for in the projections, so there is little risk of understating housing demand by not making allowance for dwellings not usually occupied.

There is a substantial amount of information available from the 2013 Census to identify dwelling types. A customised dataset has been used which identifies dwelling numbers by type and location within QLD, to show dwellings as being a separate house or one of 2 or more dwellings in a building. Dwelling type categories are:

a. Separate house (77.0% nationally);
b. (one of) 2 or more dwellings in a 1-storey building (9.6%)
c. 2 or more dwellings in a 2- to 3-storey building (5.8%)
d. 2 or more dwellings in a 4 or more storey dwelling (1.4%)
e. 2 or more dwellings not further defined (0.03%)
f. Other private dwellings (0.4%)
g. Private dwellings not further defined (5.8%)

Simple cross-tabulation of household types with these dwelling types offers a base analysis of the local relationship of households and dwellings.

However, for the NPS-UDC a more detailed assessment is necessary, especially to understand how the household-type to dwelling-type relationships vary according to household age and income.

7.4.5 Dwelling Tenure

It is also important to understand the importance of dwelling tenure, within those patterns of dwelling occupancy. This analysis is also based on the customised Census 2013 dataset from SNZ. The basic Census output is detail of owned dwellings and rented dwellings, each identified by dwelling type, and the distribution of households (by type) across this dwelling estate.

7.4.6 Dwelling Occupancy

Dwelling occupancy is used here as a key indicator of resident demand. This is because the Census describes the households which occupy a dwelling, and their tenure as owners or renters, but it does not identify the owners of dwellings which are occupied by renters[128].

Accordingly, the household which occupied a dwelling as at Census 2013 is taken here as the best indicator of that household's demand for that dwelling. This is on the basis that the Census 2013 snapshot is a sound indicator of the dwellings sought by those owner occupiers, and the type of dwelling sought by those renting a dwelling.

[128] Including those who may not being paying rent, as family members or others.

7.4.7 Dwelling Value

A core aspect of the NPS-UDC Policy B1a is to identify *"demand for dwellings, including the demand for different types of dwellings, locations and price points."* This adds a further dimension to the analysis. The 2013 Census does not capture any information about property values.

For this assessment, a detailed analysis of the QLDC rating database was undertaken. This dataset provides detail on each rating assessment, and identifies improvements including the number of dwellings of each type, and the assessment's land, improvement and capital values, as at June 2014.

A considerable number of the rating assessments show the presence of more than one dwelling. This required examination to identify the number and type of dwellings, in order to show the numbers of detached and attached dwellings, and their mean value.

This process identified some 12,570 detached dwellings in QLD (excluding 300 farm dwellings), 3,370 attached dwellings, a total of 15,940, together with 1,360 dwellings on lifestyle properties. This indicates 17,300 dwellings as at June 2016, or 17,600 including farm dwellings.

The dwelling value data was then further disaggregated to identify the estimated value range for detached and attached dwellings at the 2013 CAU level, to be applied to the dwelling data available from the Census.

7.4.8 Households, Dwellings and Values

There is no data available to directly link household types to dwelling values. Understanding this relationship is a key requirement for the NPS-UDC. These inter-relationships have been estimated for QLD, by making use of the spatial data at CAU level, for households and dwelling types on one hand, and dwelling types and dwelling values, on the other.

The approach is to use the Census data on households and dwelling types occupied at CAU level and apply the dwelling types to dwelling value relationships at CAU level. The relationships between household types, dwelling types, and dwelling values may be reasonably approximated by *pro rating* dwelling values across household types.

Thus, if 50 single-person households occupy a separate house in a CAU, then the value pattern for separate houses in that CAU is assumed to apply to those households *pro rata*. If 20% of all separate houses in that CAU are in the $300,000 to $400,000 value band, then it is assumed *a priori* that 20% of all single person households occupying separate houses in that CAU will occupy a house in that value band.

In most instances at the CAU level, the number of dwellings does not concord exactly with the number of usually resident households. This is because some dwellings counted at Census time may be unoccupied, or be occupied by visitors. For that reason, the analysis of the relationship between household types, dwelling types and dwelling values is based on the number of usually resident households. The dwelling type and dwelling value information is in effect distributed across those resident households, at the CAU level. This is the appropriate base point, because the analysis is focused on household types, and the dwellings which they occupy as owners or tenants. The practical outcome is that at the CAU level it avoids the need to account for unoccupied dwellings and bases the demand on resident households – that is, for

the given number of households of each type, the demand is estimated for *x* separate dwellings and *y* attached dwellings, and further disaggregated into value bands.

This approach does not achieve a direct matching of households to dwelling values, and it is necessarily an approximation. However, there are 30 locations (spatial framework) making up the 16 2013 CAUs in QLD for which household, dwelling and dwelling value data is available. There are sufficient differences among CAUs in the mix of household types and income bands to offer a suitable basis for understanding how each type of household (including their income levels and age) is related to the dwelling estate.

7.4.9 Demand by Household Type, Dwelling Type and Dwelling Value

The purpose of the analysis and reconciliation described above is to understand and where possible quantify the patterns of dwelling ownership and occupancy by each household type (including the household type to dwelling type relationships), and the relationships between household types and dwelling values. This reconciliation has not been undertaken before, primarily because of the lack of information on the value of dwellings which can be linked to Census detail on households and incomes.

Understanding this relationship is a core requirement of the NPS-UDC, with current patterns of demand being the base indicator of future demands – by dwelling type and value band – from the future population.

A major output from the analysis described above is estimates of how households of each type including income band, and age group, occupy dwellings of each type and value band. The estimates for QLD provide the overall view of the relationships between resident household types and dwelling types and values, at a level which is appropriate for the NPS-UDC requirements. The relationships for 2013 and estimated for 2016 are captured in the QLD Housing Model 2017.

7.4.10 Projected Demand for Resident Housing

The Model estimates future demand for resident housing in QLD by dwelling type and value band, based on the projected numbers of households of each type. A major output is estimated dwelling numbers by type (detached and attached) in each value band.

Overall demand for resident housing is further disaggregated by dwelling tenure, based on current shares of owned and rented dwellings). This pattern is shown by each household type, in order to better understand the nature of future demand.

Base Case

The Base Case output applies the medium and high growth projections and allows for the current dwelling mix and dwelling value distribution for each household type to persist into the future. In effect, this *pro rates* forward the existing demand levels. It factors demand (dwelling numbers) up (or down) according to the net change in household numbers.

Variations

However, the Model also provides a number of capabilities to test possible future outcomes. In particular, there is scope to vary the future mix of dwellings, as between detached dwellings and attached dwellings.

A key aspect is the ability to reduce the share of dwellings which are detached and increase the share of attached dwellings. This is not done *pro rata*, however, because part of an expected change in dwelling typology will be a reduction in the importance of one-level attached dwellings – the units and town houses commonly built in the 1970s and 1980s – and a corresponding increase in the importance of 2 and 3 level dwellings (terrace houses) and developments of 4 or more levels (mainly apartments).

The structure of the Model means that any shift in the structure of housing supply over time will flow on as changes in the mix of detached and attached dwellings which are occupied by households of each type. This is an approximation, based on the current (2016) mix of attached and detached dwellings.

Dwellings by Value

Any change in the mix of dwellings can be expected to have some effect on the numbers of dwellings in each value band. The base case assumption is that the future mix of detached and attached dwellings will each have a distribution of values which is very close to that observed in 2016. The future distribution of dwelling values will change, but this is simply the result of a *pro rata* estimate which reflects only the greater proportion of attached dwellings and the lower proportion of detached dwellings.

The QLD Housing Model does not itself have capability to estimate the values of new dwellings which would be added to the existing building estate through a development process. This is part of the analysis of feasible dwelling capacity, in section 5.5.

Appendix 6 - QLD Housing Futures by Dwelling Type

Resident Housing Demand by Dwelling Type – Medium Growth

Very High Preference Shift

Table 1 shows the projected dwelling demand under a Very *High Preference shift* scenario. This would reflect an outcome where just less than half (48%) of the new dwelling stock added during the 2016-2046 period were detached dwellings, and some 52% was in terrace housing and apartments.

Table 1 - Total QLD Dwelling Growth – Medium 2016-2046 – Very High Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	9,940	10,110	10,670	12,200	13,460	13,990	14,540	14,760	730	2,260	4,820
2+ Dwgs : 1 level	1,040	980	1,090	1,450	1,590	1,780	1,980	2,100	50	410	1,060
2+ Dwgs : 2-3 levels	1,940	2,110	2,300	3,040	3,910	4,530	5,250	5,680	360	1,100	3,740
2+ Dwgs : 4+ levels	10	40	50	60	70	80	90	100	40	50	90
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	50	50	50	10	10	20
Private Not Defined	490	500	540	610	700	760	820	850	50	120	360
TOTAL	**13,500**	**13,800**	**14,700**	**17,400**	**19,800**	**21,200**	**22,700**	**23,500**	**1,200**	**4,000**	**10,100**
Detached House	74%	73%	73%	70%	68%	66%	64%	63%	61%	57%	48%
2+ Dwgs : 1 level	8%	7%	7%	8%	8%	8%	9%	9%	4%	10%	10%
2+ Dwgs : 2-3 levels	14%	15%	16%	17%	20%	21%	23%	24%	30%	28%	37%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	4%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

The notable shift would be in the role of attached housing, with another 5,200 terrace houses or apartments. There would be substantial growth also in single storey attached dwellings.

Resident Housing Demand by Dwelling Type – High Growth

Very High Preference Shift

Table 2 shows the projected dwelling demand under a Very *High Preference shift* scenario. This would reflect an outcome where just more than half (51%) of the new dwelling stock added during the 2016-2046 period were detached dwellings, and some 49% was in terrace housing and apartments.

Table 2 - Total QLD Dwelling Growth – High 2016-2046 – Very High Preference Shift

Dwelling Type	2016	2017	2019	2026	2033	2038	2043	2046	2016-19	2016-26	2016-46
Detached House	10,000	10,270	11,020	12,940	14,710	15,580	16,450	16,890	1,020	2,940	6,890
2+ Dwgs : 1 level	1,040	1,000	1,130	1,540	1,750	2,000	2,290	2,450	90	500	1,410
2+ Dwgs : 2-3 levels	1,960	2,140	2,370	3,220	4,280	5,070	6,020	6,610	410	1,260	4,650
2+ Dwgs : 4+ levels	10	40	50	60	80	90	110	110	40	50	100
2+ Dwgs : undef	-	-	-	-	-	-	-	-	-	-	-
Other Private	30	30	40	40	50	60	60	60	10	10	30
Private Not Defined	510	510	550	640	780	840	940	1,000	40	130	490
TOTAL	**13,600**	**14,000**	**15,200**	**18,400**	**21,700**	**23,600**	**25,900**	**27,100**	**1,600**	**4,900**	**13,600**
Detached House	74%	73%	73%	70%	68%	66%	64%	62%	64%	60%	51%
2+ Dwgs : 1 level	8%	7%	7%	8%	8%	8%	9%	9%	6%	10%	10%
2+ Dwgs : 2-3 levels	14%	15%	16%	18%	20%	21%	23%	24%	26%	26%	34%
2+ Dwgs : 4+ levels	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%
2+ Dwgs : undef	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Private	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Private Not Defined	4%	4%	4%	3%	4%	4%	4%	4%	3%	3%	4%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: ME Queenstown Housing Model 2017

The notable shift would be in the role of attached housing, with another 4,800 or so terrace houses or apartments. There would be substantial growth (1,400) also in single storey attached dwellings.

Appendix 7 - QLD Housing Futures by Dwelling Value

Resident Housing Demand by Dwelling Value - Medium Growth

High Preference Shift

Table 1 shows the projected dwelling numbers for 2046 in a medium growth future, with a high preference shift. The distribution still reflects continuation of the overall pattern, but the transfer toward dwellings in the lower value range is more marked. Table 2 shows the outcome by dwelling type.

Table 1 - QLD Resident Demand by Tenure & Value – Medium, High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	600	590	1,190	300	360	660	6.6%
$280-420	940	620	1,560	1,770	1,580	3,350	830	960	1,790	17.9%
$420-560	1,410	890	2,300	2,390	1,970	4,360	980	1,080	2,060	20.6%
$560-710	1,670	910	2,580	2,660	1,700	4,360	990	790	1,780	17.8%
$710-850	1,060	590	1,650	1,610	950	2,560	550	360	910	9.1%
$850-990	720	360	1,080	1,110	580	1,690	390	220	610	6.1%
$990-1130	430	270	700	680	400	1,080	250	130	380	3.8%
$1130-1270	290	170	460	520	290	810	230	120	350	3.5%
$1270-1410	260	140	400	420	190	610	160	50	210	2.1%
$1410-1690	390	220	610	650	330	980	260	110	370	3.7%
$1690-1980	260	200	460	510	420	930	250	220	470	4.7%
$1980-2260	130	90	220	200	100	300	70	10	80	0.8%
$2260-2540	100	70	170	160	90	250	60	20	80	0.8%
$2540-2820	110	50	160	180	60	240	70	10	80	0.8%
$2820-3180	40	30	70	60	20	80	20	- 10	10	0.1%
$3180-3530	80	50	130	120	50	170	40	-	40	0.4%
$3530+	160	110	270	250	130	380	90	20	110	1.1%
Total	**8,400**	**5,000**	**13,400**	**13,900**	**9,500**	**23,300**	**5,500**	**4,500**	**10,000**	**100.0%**
Share %	*63%*	*37%*	*100%*	*60%*	*41%*	*100%*	*55%*	*45%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 2 – QLD Resident Demand by Type & Value – Medium, High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	460	730	1,190	140	520	660	6.6%
$280-420	980	580	1,560	1,470	1,880	3,350	490	1,300	1,790	17.9%
$420-560	1,660	640	2,300	2,360	2,000	4,360	700	1,360	2,060	20.6%
$560-710	2,180	400	2,580	3,050	1,310	4,360	870	910	1,780	17.8%
$710-850	1,490	160	1,650	2,040	520	2,560	550	360	910	9.1%
$850-990	990	90	1,080	1,410	280	1,690	420	190	610	6.1%
$990-1130	650	50	700	940	140	1,080	290	90	380	3.8%
$1130-1270	400	60	460	600	210	810	200	150	350	3.5%
$1270-1410	380	20	400	570	40	610	190	20	210	2.1%
$1410-1690	570	40	610	870	110	980	300	70	370	3.7%
$1690-1980	330	130	460	490	440	930	160	310	470	4.7%
$1980-2260	210	10	220	280	20	300	70	10	80	0.8%
$2260-2540	170	-	170	230	20	250	60	20	80	0.8%
$2540-2820	160	-	160	230	10	240	70	10	80	0.8%
$2820-3180	70	-	70	80	-	80	10	-	10	0.1%
$3180-3530	130	-	130	170	-	170	40	-	40	0.4%
$3530+	270	-	270	370	10	380	100	10	110	1.1%
Total	**11,000**	**2,400**	**13,400**	**15,600**	**7,700**	**23,300**	**4,700**	**5,300**	**10,000**	**100.0%**
Share %	*82%*	*18%*	*100%*	*67%*	*33%*	*100%*	*47%*	*53%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 3 summarises the implied changes in demand in terms of main dwelling type (detached, attached) and tenure (owned, not owned) over the period, carrying forward the existing patterns for each household type in QLD. In this future, the shares of attached dwellings increase significantly (to 33% from 18%), and the number of not-owned (rented) dwellings increases to 40% from 37%.

Table 3 - QLD Resident Structural Change – Medium, High Preference Shift 2016-46

Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	10,930	2,960	13,890	4,690	4,760	9,450	15,620	7,720	23,340
2016-46	3,510	2,030	5,540	1,150	3,300	4,450	4,660	5,330	9,990
Change 2016-46	47%	218%	66%	32%	226%	89%	43%	223%	75%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	47%	13%	60%	20%	20%	40%	67%	33%	100%
2016-46 %	35%	20%	55%	12%	33%	45%	47%	53%	100%

Source: ME Queenstown Housing Model 2017

Very High Preference Change

Table 4 shows the projected dwelling numbers for 2046 in a medium growth future, with very high preference shift. The distribution still reflects continuation of the overall pattern, but the transfer toward dwellings in the lower value range is much more apparent. Table 5 shows the outcome by dwelling type.

Table 4 - QLD Resident Demand by Tenure & Value – Medium, Very High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	640	600	1,240	340	370	710	7.1%
$280-420	940	620	1,560	1,870	1,630	3,500	930	1,010	1,940	19.4%
$420-560	1,410	890	2,300	2,440	2,000	4,440	1,030	1,110	2,140	21.4%
$560-710	1,670	910	2,580	2,640	1,690	4,330	970	780	1,750	17.5%
$710-850	1,060	590	1,650	1,590	920	2,510	530	330	860	8.6%
$850-990	720	360	1,080	1,080	560	1,640	360	200	560	5.6%
$990-1130	430	270	700	670	390	1,060	240	120	360	3.6%
$1130-1270	290	170	460	530	290	820	240	120	360	3.6%
$1270-1410	260	140	400	410	190	600	150	50	200	2.0%
$1410-1690	390	220	610	630	320	950	240	100	340	3.4%
$1690-1980	260	200	460	510	410	920	250	210	460	4.6%
$1980-2260	130	90	220	200	100	300	70	10	80	0.8%
$2260-2540	100	70	170	150	90	240	50	20	70	0.7%
$2540-2820	110	50	160	170	50	220	60	-	60	0.6%
$2820-3180	40	30	70	50	10	60	10	- 20	- 10	-0.1%
$3180-3530	80	50	130	110	40	150	30	- 10	20	0.2%
$3530+	160	110	270	230	130	360	70	20	90	0.9%
Total	**8,400**	**5,000**	**13,400**	**13,900**	**9,400**	**23,300**	**5,600**	**4,400**	**10,000**	**100.0%**
Share %	*63%*	*37%*	*100%*	*60%*	*40%*	*100%*	*56%*	*44%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 5 - QLD Resident Demand by Type & Value – Medium, Very High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	420	820	1,240	100	610	710	7.1%
$280-420	980	580	1,560	1,390	2,110	3,500	410	1,530	1,940	19.4%
$420-560	1,660	640	2,300	2,220	2,220	4,440	560	1,580	2,140	21.4%
$560-710	2,180	400	2,580	2,870	1,460	4,330	690	1,060	1,750	17.5%
$710-850	1,490	160	1,650	1,910	600	2,510	420	440	860	8.6%
$850-990	990	90	1,080	1,320	320	1,640	330	230	560	5.6%
$990-1130	650	50	700	890	170	1,060	240	120	360	3.6%
$1130-1270	400	60	460	570	250	820	170	190	360	3.6%
$1270-1410	380	20	400	540	60	600	160	40	200	2.0%
$1410-1690	570	40	610	830	120	950	260	80	340	3.4%
$1690-1980	330	130	460	450	470	920	120	340	460	4.6%
$1980-2260	210	10	220	280	20	300	70	10	80	0.8%
$2260-2540	170	-	170	220	20	240	50	20	70	0.7%
$2540-2820	160	-	160	210	10	220	50	10	60	0.6%
$2820-3180	70	-	70	60	-	60	- 10	-	- 10	-0.1%
$3180-3530	130	-	130	150	-	150	20	-	20	0.2%
$3530+	270	-	270	340	20	360	70	20	90	0.9%
Total	**11,000**	**2,400**	**13,400**	**14,700**	**8,700**	**23,300**	**3,700**	**6,300**	**10,000**	**100.0%**
Share %	*82%*	*18%*	*100%*	*63%*	*37%*	*100%*	*37%*	*63%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 6 summarises the implied changes in demand in terms of main dwelling type (detached, attached) and tenure (owned, not owned) over the period, carrying forward the existing patterns for each household

type in QLD. In this future, the shares of attached dwellings increase significantly (to 37% from 18%), while the number of not-owned (rented) dwellings increases to 40% from 37%.

Table 6 - QLD Resident Structural Change – Medium, Very High Pref. Shift 2016-46

Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	10,330	3,590	13,920	4,340	5,080	9,420	14,670	8,670	23,340
2016-46	2,910	2,660	5,570	800	3,620	4,420	3,710	6,280	9,990
Change 2016-46	39%	286%	67%	23%	248%	88%	34%	263%	75%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	44%	15%	60%	19%	22%	40%	63%	37%	100%
2016-46 %	29%	27%	56%	8%	36%	44%	37%	63%	100%

Source: ME Queenstown Housing Model 2017

Resident Housing Demand by Dwelling Value - High Growth

High Preference Shift

Table 7 shows the projected dwelling numbers for 2046 in a high growth future, with a high preference shift. The distribution still shows continuation of the existing pattern, but the greater volume of growth means the transition toward the lower value ranges is somewhat more marked. Table 8 shows the outcome by dwelling type.

Table 7 - QLD Resident Demand by Tenure & Value – High, High Pref. Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	680	690	1,370	380	460	840	6.2%
$280-420	940	620	1,560	2,030	1,860	3,890	1,090	1,240	2,330	17.3%
$420-560	1,410	890	2,300	2,720	2,300	5,020	1,310	1,410	2,720	20.1%
$560-710	1,670	910	2,580	3,030	1,990	5,020	1,360	1,080	2,440	18.1%
$710-850	1,060	590	1,650	1,840	1,100	2,940	780	510	1,290	9.6%
$850-990	720	360	1,080	1,260	660	1,920	540	300	840	6.2%
$990-1130	430	270	700	770	470	1,240	340	200	540	4.0%
$1130-1270	290	170	460	580	340	920	290	170	460	3.4%
$1270-1410	260	140	400	470	230	700	210	90	300	2.2%
$1410-1690	390	220	610	740	390	1,130	350	170	520	3.9%
$1690-1980	260	200	460	560	500	1,060	300	300	600	4.4%
$1980-2260	130	90	220	240	130	370	110	40	150	1.1%
$2260-2540	100	70	170	180	110	290	80	40	120	0.9%
$2540-2820	110	50	160	200	70	270	90	20	110	0.8%
$2820-3180	40	30	70	70	20	90	30	- 10	20	0.1%
$3180-3530	80	50	130	140	60	200	60	10	70	0.5%
$3530+	160	110	270	280	160	440	120	50	170	1.3%
Total	**8,400**	**5,000**	**13,400**	**15,800**	**11,100**	**26,900**	**7,400**	**6,100**	**13,500**	**100.0%**
Share %	*63%*	*37%*	*100%*	*59%*	*41%*	*100%*	*55%*	*45%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 8 - QLD Resident Demand by Type & Value – High, High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	520	850	1,370	200	640	840	6.2%
$280-420	980	580	1,560	1,680	2,210	3,890	700	1,630	2,330	17.3%
$420-560	1,660	640	2,300	2,690	2,330	5,020	1,030	1,690	2,720	20.1%
$560-710	2,180	400	2,580	3,500	1,520	5,020	1,320	1,120	2,440	18.1%
$710-850	1,490	160	1,650	2,330	610	2,940	840	450	1,290	9.6%
$850-990	990	90	1,080	1,600	320	1,920	610	230	840	6.2%
$990-1130	650	50	700	1,080	160	1,240	430	110	540	4.0%
$1130-1270	400	60	460	680	240	920	280	180	460	3.4%
$1270-1410	380	20	400	650	50	700	270	30	300	2.2%
$1410-1690	570	40	610	1,000	130	1,130	430	90	520	3.9%
$1690-1980	330	130	460	560	500	1,060	230	370	600	4.4%
$1980-2260	210	10	220	350	20	370	140	10	150	1.1%
$2260-2540	170	-	170	270	20	290	100	20	120	0.9%
$2540-2820	160	-	160	260	10	270	100	10	110	0.8%
$2820-3180	70	-	70	90	-	90	20	-	20	0.1%
$3180-3530	130	-	130	200	-	200	70	-	70	0.5%
$3530+	270	-	270	420	20	440	150	20	170	1.3%
Total	**11,000**	**2,400**	**13,400**	**17,900**	**9,000**	**26,900**	**6,900**	**6,600**	**13,500**	**100.0%**
Share %	*82%*	*18%*	*100%*	*67%*	*33%*	*100%*	*51%*	*49%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 9 summarises the implied changes in demand in terms of main dwelling type and tenure over the period, as previously carrying forward the existing patterns for each household type in QLD. In this future, the shares of attached dwellings increase to 33% from 18%, and the number of not-owned (rented) dwellings increases to 41% from 37%.

Table 9 - QLD Resident Structural Change – High, High Preference Shift 2016-46

Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	12,410	3,380	15,790	5,470	5,610	11,080	17,880	8,990	26,870
2016-46	4,990	2,450	7,440	1,930	4,150	6,080	6,920	6,600	13,520
Change 2016-46	67%	263%	89%	55%	284%	122%	63%	276%	101%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	46%	13%	59%	20%	21%	41%	67%	33%	100%
2016-46 %	37%	18%	55%	14%	31%	45%	51%	49%	100%

Source: ME Queenstown Housing Model 2017

Very High Preference Change

Table 10 shows the projected dwelling numbers for 2046 in a medium growth future, with a very high shift in dwelling preferences. The distribution still reflects continuation of the overall pattern, but the transfer toward dwellings in the lower value range is more apparent. Table 11 shows the outcome by dwelling type.

Table 10 - QLD Resident Demand by Tenure & Value – High, Very High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Owned	Not Owned	Total	Owned	Not Owned	Total	Owned	Not Owned	Total	Total %
$0-280	300	230	530	740	720	1,460	440	490	930	6.8%
$280-420	940	620	1,560	2,130	1,910	4,040	1,190	1,290	2,480	18.2%
$420-560	1,410	890	2,300	2,790	2,350	5,140	1,380	1,460	2,840	20.9%
$560-710	1,670	910	2,580	3,020	1,980	5,000	1,350	1,070	2,420	17.8%
$710-850	1,060	590	1,650	1,820	1,070	2,890	760	480	1,240	9.1%
$850-990	720	360	1,080	1,240	650	1,890	520	290	810	6.0%
$990-1130	430	270	700	750	450	1,200	320	180	500	3.7%
$1130-1270	290	170	460	600	330	930	310	160	470	3.5%
$1270-1410	260	140	400	460	220	680	200	80	280	2.1%
$1410-1690	390	220	610	710	360	1,070	320	140	460	3.4%
$1690-1980	260	200	460	590	500	1,090	330	300	630	4.6%
$1980-2260	130	90	220	230	110	340	100	20	120	0.9%
$2260-2540	100	70	170	170	100	270	70	30	100	0.7%
$2540-2820	110	50	160	200	60	260	90	10	100	0.7%
$2820-3180	40	30	70	60	20	80	20	- 10	10	0.1%
$3180-3530	80	50	130	130	50	180	50	-	50	0.4%
$3530+	160	110	270	260	150	410	100	40	140	1.0%
Total	**8,400**	**5,000**	**13,400**	**15,900**	**11,000**	**26,900**	**7,600**	**6,000**	**13,600**	**100.0%**
Share %	*63%*	*37%*	*100%*	*59%*	*41%*	*100%*	*56%*	*44%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 11 - QLD Resident Demand by Type & Value – High, Very High Preference Shift 2016-46

Value Band (000)	2016			2046			Net Change 2016-46			
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Total %
$0-280	320	210	530	510	950	1,460	190	740	930	6.8%
$280-420	980	580	1,560	1,590	2,450	4,040	610	1,870	2,480	18.2%
$420-560	1,660	640	2,300	2,540	2,600	5,140	880	1,960	2,840	20.9%
$560-710	2,180	400	2,580	3,300	1,700	5,000	1,120	1,300	2,420	17.8%
$710-850	1,490	160	1,650	2,200	690	2,890	710	530	1,240	9.1%
$850-990	990	90	1,080	1,510	380	1,890	520	290	810	6.0%
$990-1130	650	50	700	1,010	190	1,200	360	140	500	3.7%
$1130-1270	400	60	460	640	290	930	240	230	470	3.5%
$1270-1410	380	20	400	620	60	680	240	40	280	2.1%
$1410-1690	570	40	610	930	140	1,070	360	100	460	3.4%
$1690-1980	330	130	460	520	570	1,090	190	440	630	4.6%
$1980-2260	210	10	220	310	30	340	100	20	120	0.9%
$2260-2540	170	-	170	250	20	270	80	20	100	0.7%
$2540-2820	160	-	160	250	10	260	90	10	100	0.7%
$2820-3180	70	-	70	80	-	80	10	-	10	0.1%
$3180-3530	130	-	130	180	-	180	50	-	50	0.4%
$3530+	270	-	270	390	20	410	120	20	140	1.0%
Total	**11,000**	**2,400**	**13,400**	**16,800**	**10,100**	**26,900**	**5,900**	**7,700**	**13,600**	**100.0%**
Share %	*82%*	*18%*	*100%*	*62%*	*38%*	*100%*	*43%*	*57%*	*100%*	

Source: ME Queenstown Housing Model 2017

Table 12 summarises the implied changes in demand in terms of main dwelling type and tenure over the period. The existing patterns for each household type in QLD are carried forward. In this future, the shares

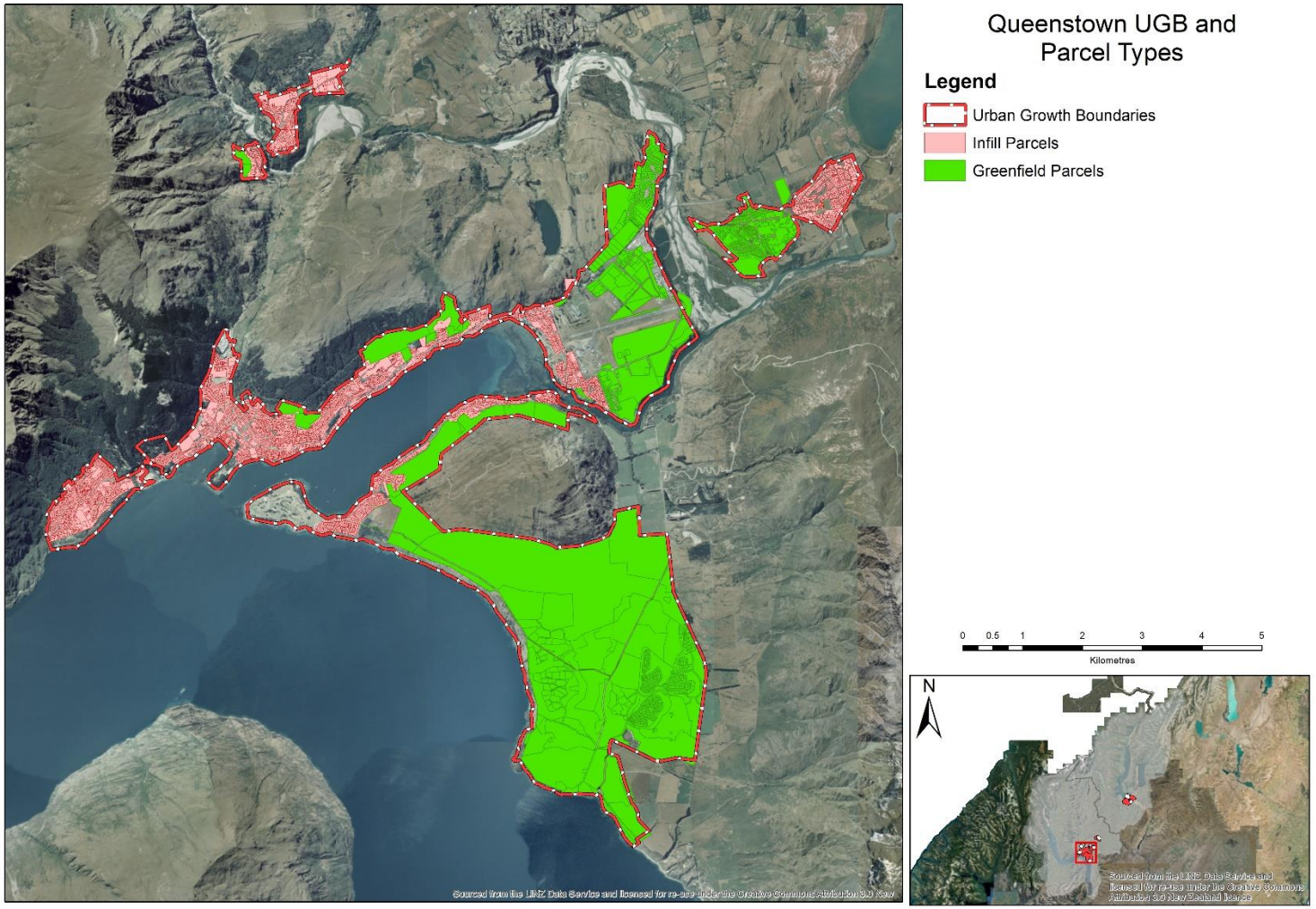
of attached dwellings increase to 38% from 18%, as 57% of the additional dwellings are attached, and only 43% detached. The number of not-owned (rented) dwellings increases to 41% from 37%.

Table 12 - QLD Resident Structural Change – High, Very High Preference Shift 2016-46

Year	Detached Owned	Attached Owned	Total Owned	Detached Not Owned	Attached Not Owned	Total Not Owned	Detached Total	Attached Total	Total
2016	7,420	930	8,350	3,540	1,460	5,000	10,960	2,390	13,350
2046	11,760	4,140	15,900	5,070	5,960	11,030	16,830	10,100	26,930
2016-46	4,340	3,210	7,550	1,530	4,500	6,030	5,870	7,710	13,580
Change 2016-46	58%	345%	90%	43%	308%	121%	54%	323%	102%
Implied Structural Change in Demand									
2016 %	56%	7%	63%	27%	11%	37%	82%	18%	100%
2046 %	44%	15%	59%	19%	22%	41%	62%	38%	100%
2016-46 %	32%	24%	56%	11%	33%	44%	43%	57%	100%

Source: ME Queenstown Housing Model 2017

Appendix 8 – Greenfield vs. Infill Parcel Classification


Queenstown UGB and Parcel Types
Legend
Urban Growth Boundaries
Infill Parcels
Greenfield Parcels
0 0.5 1 2 3 4 5
Kilometres
N
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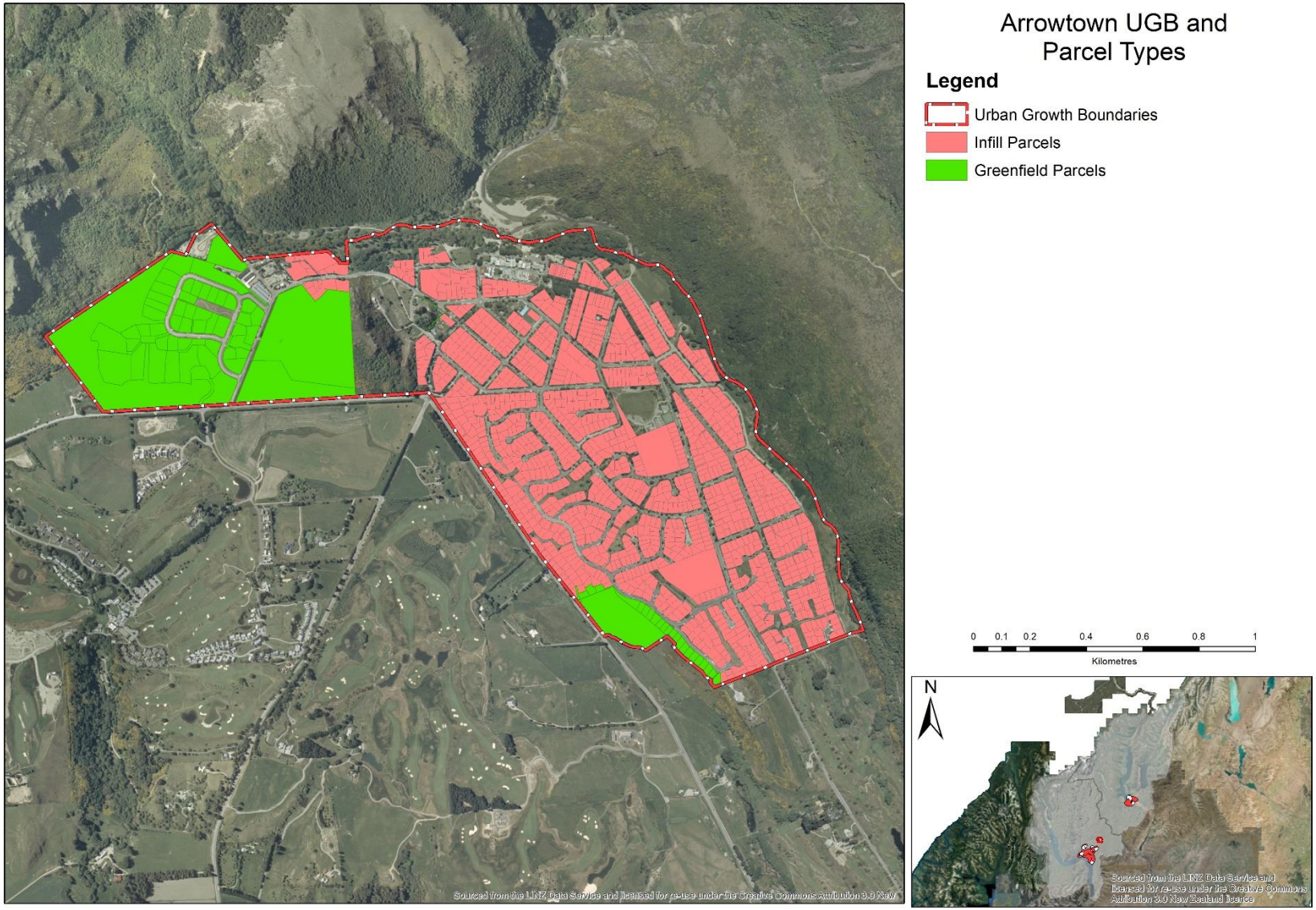
Arrowtown UGB and
Parcel Types
Legend
Urban Growth Boundaries
Infill Parcels
Greenfield Parcels
0 0.1 0.2 0.4 0.6 0.8 1
Kilometres
N
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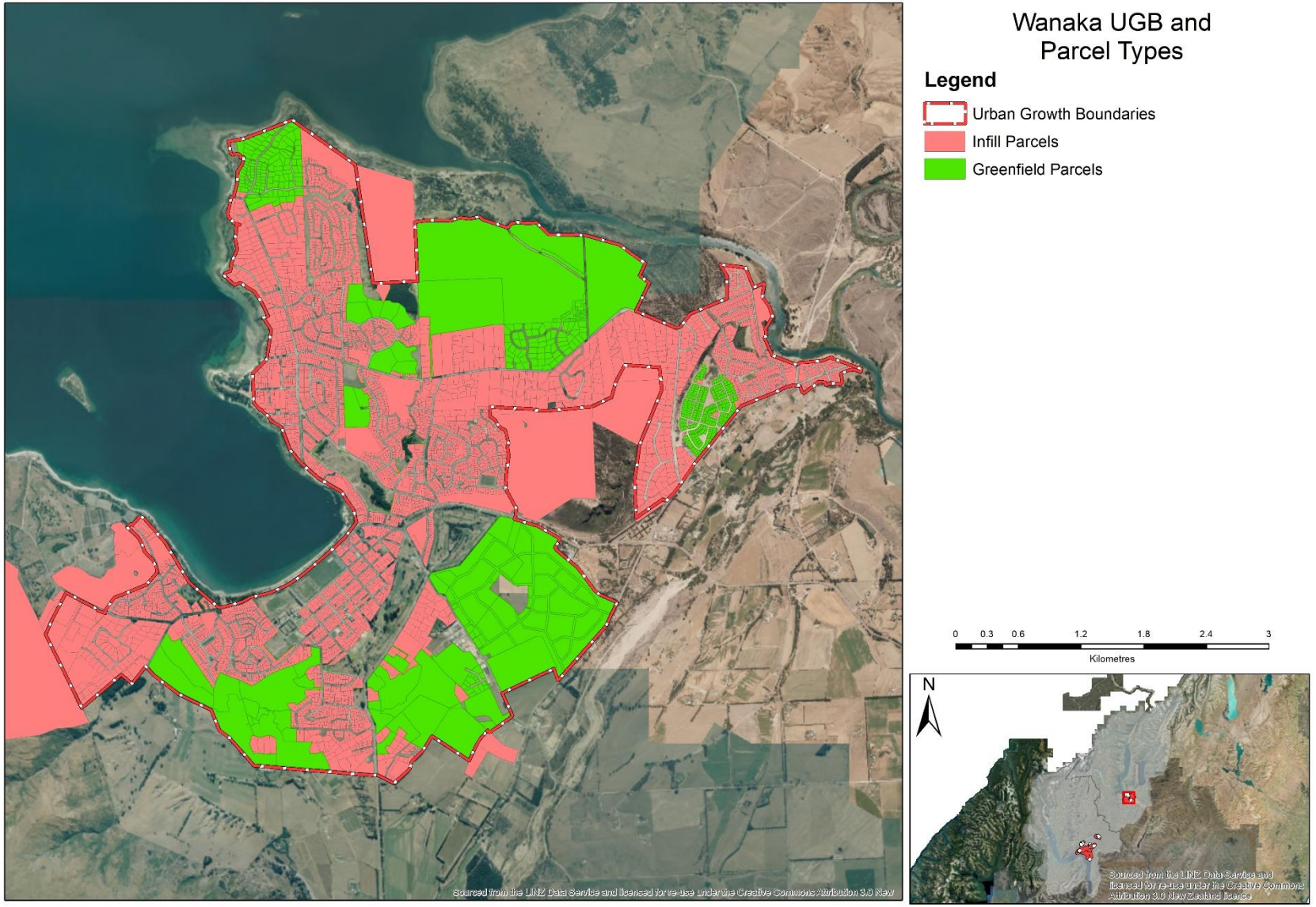
Wanaka UGB and
Parcel Types
Legend
Urban Growth Boundaries
Infill Parcels
Greenfield Parcels
0 0.3 0.6 1.2 1.8 2.4 3
Kilometres
N
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Sourced from the LINZ Data Service and licensed for re-use under the Creative Commons Attribution 3.0 New

Appendix 9 – Infill Capacity GIS Modelling

The key stages in the GIS modelling to identify areas on each parcel to accommodate further infill dwellings within the existing urban areas are described as follows:

7. Buffering Building Footprints and Identifying Vacant Area. Identifying the vacant area on each parcel was the first stage of the subdivision capacity analysis[129]. This area is defined by the land that is not covered by an existing building. It also excludes the area immediately surrounding the building (as per the Plan minimum setback requirements).

   Figure 1 illustrates the identification of vacant parcel areas. To identify the vacant area within each parcel, building footprints greater than 50 m^2 [(130)] were buffered by the minimum setback of 2 metres as determined by the District Plan. An oriented bounding box was applied to each of these buffered building footprints, to minimise irregularly shaped areas that occur within indentations of existing building footprints. This reflects a somewhat conservative approach whereby it is assumed that any site subdivision will not occur within the immediate building envelope. This bounding box was then clipped to the parcel boundary within which the building footprint is located, to ensure that the vacant area on each site is not impacted by structures on neighbouring sites. The result of these processes can be seen on the right-hand side of Figure 1, where the remainder of the parcel area has been identified as vacant.

Figure 1 - Identification of Vacant Parcel Area

8. Triangulating Vacant Area: Once the vacant area within each parcel was identified, the next stage was to identify whether the vacant area on each parcel can be subdivided as determined by the zoning rules relating to subdivision. Identifying the most appropriate area on each parcel

[129] The PDP allows further dwellings to be added to parcels either through a subdivision or land use consent process. Each process has different minimum site size requirements. For simplicity, this sub-section collectively refers to these processes as 'infill subdivision'.

[130] 50m^2 buildings were considered small and easily removed, so were not considered to represent a constraint upon the vacant capacity of a parcel.

for subdivision was determined through further geospatial processing, incorporating assumptions relating to shape geometries.

Identifying the sub-dividable area on a parcel is achieved through first triangulating the previously vacant area. The results of the triangulation can be seen in Figure 2.

Figure 2 - Triangulating Vacant Area

The triangles within each parcel are measured for both their area, and the length of their perimeters. These area and perimeter characteristics are attached to the triangles and progressed to the next stage of processing. These characteristics are used to determine the area:perimeter ratio of the triangles, a measure which is later used to estimate the geometric appropriateness of each triangle.

9. Circumscription and Bounding of Triangles: Each of the triangles from the previous step are circumscribed by the smallest possible circle, whereby the circle perimeter touches all of the points on the triangle, while also encapsulating the entirety of the triangle. This is done to expand the spatial coverage of each triangle. The circumscription process can be seen in Figure 3. Again, each of the circles has retained the triangle area and perimeter information from the previous step.

   Each of the circles was then clipped to the parcel and buffered building footprint, so that the spatial coverage did not extend upon the bounds of the previously determined vacant space. The clipped circles then had bounding box applied to them to square the edges of any circles that fell within the vacant space. Again, the bounding box was clipped back down to the vacant area on each site. The output of this bounding and clipping process can be seen in Figure 4.

Figure 3 - Circumscription of Triangles

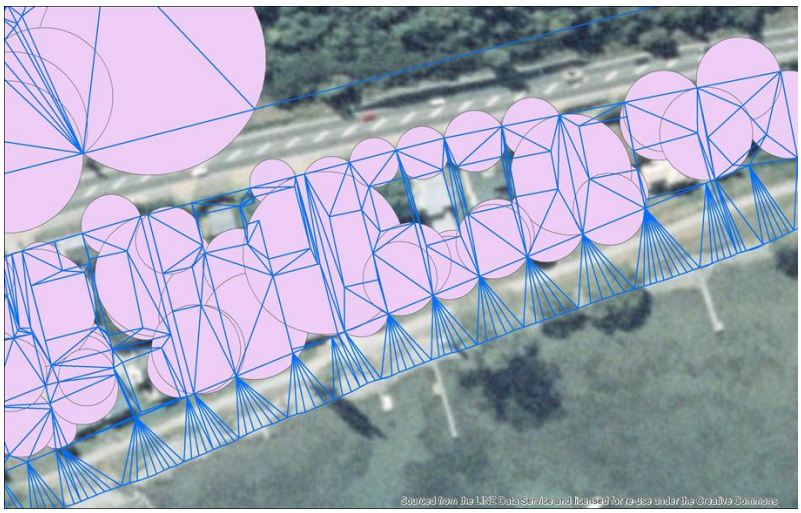
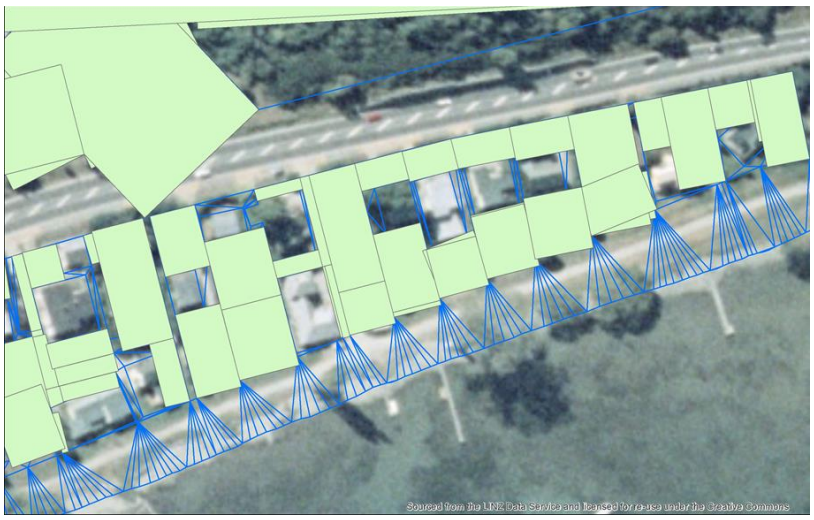


Figure 4 - Bounding and Clipping of Circles



10. Selecting and Dissolving Bounding Boxes: Once the triangles within each parcel have been circumscribed, bounded and clipped, the output boxes were selected based on the area and perimeter characteristics of the original triangle that each was derived from. The area and perimeter of the originating triangles are useful in determining the most appropriate area on each parcel that is likely to enable subdivision and infill. On each occupied parcel, the boxes derived from the three largest triangles with the shortest sides are selected. In most cases, these triangles represent the squattest and least angular areas on each parcel.

    The selected bounding boxes within each parcel are then dissolved to combine any overlapping portions. The dissolved bounding boxes can be seen in Figure 5. It should be noted that each of the dissolved areas at this point was given a unique identifier, even where the box was within the same parcel. This means that in some cases, two or even three unique areas were progressed to the next stage. The reason for this was to reflect the possibility (as demonstrated

in Figure 5) that triangles within both the back and front of a site may represent the largest and best shaped areas for potential subdivision.

Figure 5 - Dissolved Bounding Boxes

11. Testing for Site Shape Factor: The dissolved bounding boxes output from the previous test are then tested for the minimum site shape factor required under the zoning rules and subdivision plans. Within each of the unique areas (identified above), the largest possible circle was found. Each circle was then tested to check whether it satisfied the site shape factor requirement. A 15m x 15m square was used for the majority of the DP Zones, except for the Medium Density Residential zone which required a 12m x 12m square; and the Large Lot and Rural Residential-type zones which require a 30m x 30m square.

    The ability of a site to contain a square of the specified dimensions indicates that a subdivided site will be able to have a reasonably sized dwelling built upon it. Areas that meet the shape factor requirement are then progressed to the final stage of the subdivision assessment – testing for site accessibility. Figure 6 shows an example of the minimum site shape test used in this modelling process.

Figure 6 - Testing for Minimum Site Shape Requirement

12. Testing for Site Accessibility: Testing for driveway accessibility onto potentially sub-dividable sites is the final requirement as determined by the District Plan. The requirement in all of the residential zones in the ODP is for a 3.5 metre driveway allowing access to the subdivided area. The Plan does not require any setback distance between the edge of the driveway and the existing dwelling, so this has not been modelled.

    Driveway accessibility was tested using an inverse buffer on the parcel boundary, set to the minimum 3.5m width for each zone. Overlaid upon this was the building footprint, representing the area occupied by the existing dwelling(s). Where there was no buffer overlap on at least one side of the dwelling, driveway accessibility was assumed. Areas that passed this driveway accessibility test were deemed suitable for subdivision and used as inputs into the feasibility model.

13. Building Consents: Finally, parcels were also checked for incomplete or recently completed building consents. This was largely due to the variable age of the aerial photography from which the building footprints were derived. The age of the photography means that certain sites are identified as vacant capacity when they are not. Calibrating the vacant capacity outputs from the above GIS processing with building consents highlighted areas that needed removal.

Appendix 10 – Assumptions on Residential Uses within Business Zones

The following table contains the assumptions agreed between Council and M.E on the share of future capacity within business zones allocated to residential uses where they are enabled by the PDP. Noting the residential capacities for Special Zones were obtained from consultation from developers/landowners, approved resource consents (and previous consents in the zone, for example existing residential densities in the Rural Visitor Zone), from the original plan change or from maximum densities calculated via minimum lot area.

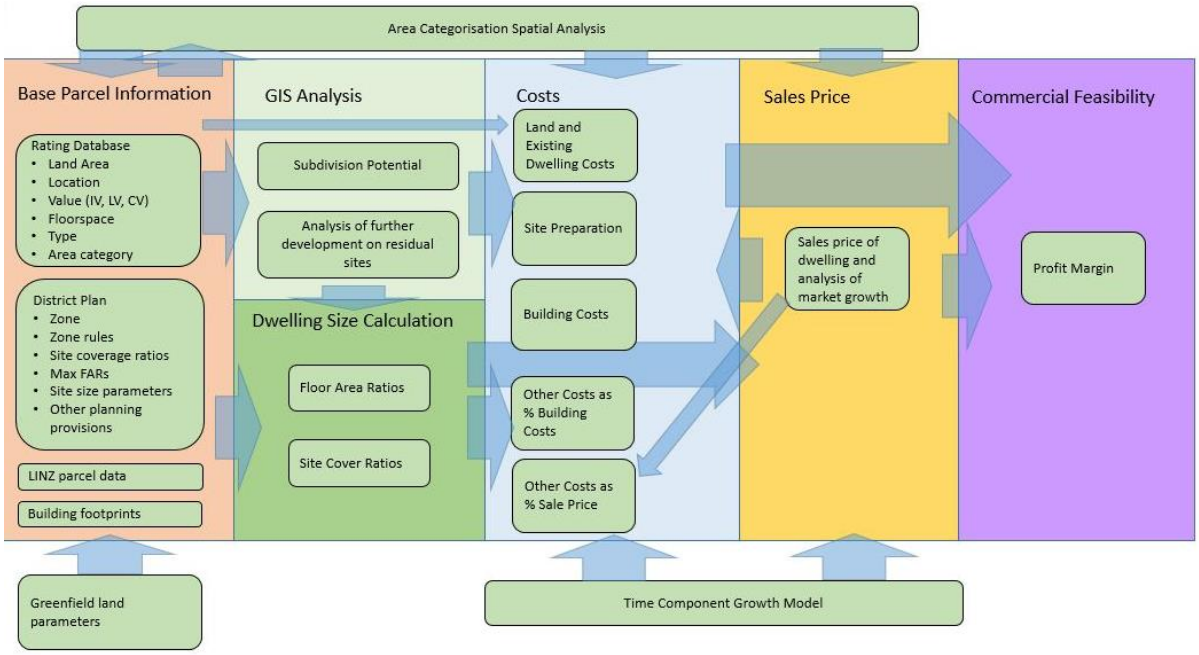
Zones	Spatial Framework Area	Share of existing floorspace as residential	Storeys allowed in zone	Share of future new capacity (excl. existing stock) as residential	Implied storeys taken up by residential
Local Shopping Centre	Wanaka	0%	2	33%	0.67
Local Shopping Centre	Albert Town	0%	2	25%	0.50
Local Shopping Centre	Arrowtown	0%	2	0%	0.00
Local Shopping Centre-Frankton	Frankton	7%	3	33%	1.00
Local Shopping Centre	Hawea Locality	29%	2	50%	1.00
Local Shopping Centre	Sunshine Bay	36%	2	50%	1.00
Business Mixed Use	Wanaka North	1%	4	20%	0.80
Business Mixed Use	Warren Park	6%	4	40%	1.60
Town Centre Queenstown	Queenstown Central	2%	4	10%	0.40
Town Centre Queenstown	Warren Park	0%	4	10%	0.40
Rural Visitor	Arthurs Point	10%	4	20%	0.80
Rural Visitor	Cadrona	21%	4	50%	2.00
Town Centre Wanaka	Wanaka Central	4%	3	10%	0.30
Town Centre Wanaka	Wanaka Waterfront	5%	3	10%	0.30
Town Centre Arrowtown	Arrowtown		2	0%	0
Medium Density Residential-Town Centre Transitional Zone	Wanaka Central		2	10%	0.2
Town Centre Queenstown-Town Centre Sub-Zone	Queenstown Central		4	10%	0.4
Town Centre Queenstown-Town Centre Sub-Zone	Warren Park		4	10%	0.4
Arrowtown Residential Historic Management Zone-Town Centre Transitional Zone	Arrowtown		1	0%	0
Township (Operative)-Commercial Precinct Overlay	Luggate Locality		2	0%	0
Structure Plan Precincts	**Spatial Framework Area**	**Share of existing floorspace as residential**	**Storeys allowed in zone**	**Share of future new capacity (excl. existing stock) as residential**	**Implied storeys taken up by residential**
Frankton Flats B---C1	Frankton		3	0%	0
Frankton Flats B---C2	Frankton		3	93%	2.8
Jacks Point Special Zone---Residential (HD) A-E	Jacks Point		1	0%	0
Jacks Point Special Zone---Village (HB)	Jacks Point		2	25%	0.5
Jacks Point Special Zone---Village (JP)	Jacks Point		3	33%	1
PC45---D	Wanaka Waterfront		3	33%	1
PC50---PC50	Queenstown Central		2	0%	0
PC50---PC50 - Isle Street East Sub-zone	Warren Park		4	13%	0.5
PC50---PC50 - Isle Street West Sub-zone	Warren Park		4	13%	0.5
PC50---PC50 - Lake View Sub-zone - 12m Height Zone	Queenstown Bay		4	13%	0.5
PC50---PC50 - Lake View Sub-zone - 12m Height Zone	Warren Park		4	13%	0.5
PC50---PC50 - Lake View Sub-zone - 15.5m Height Zone	Queenstown Bay		5	20%	1
PC50---PC50 - Lake View Sub-zone - 15.5m Height Zone	Warren Park		5	10%	0.5
PC50---PC50 - Lake View Sub-zone - 19m Height Zone	Queenstown Bay		6	17%	1
PC50---PC50 - Lake View Sub-zone - 22.5m Height Zone	Queenstown Bay		7	29%	2
PC50---PC50 - Lake View Sub-zone - 26m Height Zone	Queenstown Bay		8	25%	2
Remarkables Park Activity Area---3	Frankton		5	60%	3
Remarkables Park Activity Area---4	Frankton		4	75%	3
Remarkables Park Activity Area---5	Frankton		4	50%	2
Remarkables Park Activity Area---6	Frankton		4	50%	2
Remarkables Park Activity Area---7	Frankton		5	60%	3
Shotover Country---2a - Commercial	Shotover Country		3	0%	0
Three Parks---Commercial Core	Wanaka Central		3	0%	0
Three Parks---Def	Wanaka Central		3	0%	0
Three Parks---Med Density Res/Mixed Use	Wanaka Central		3	33%	1
Three Parks---Tourism & Commercial	Wanaka Central		3	0%	0

Source: QLDC and M.E

Appendix 11 – Residential Commercial Feasibility Model

This appendix contains further information on each of the components of the Residential Commercial Feasibility Model. The structure of the model is shown below.

Residential Commercial Feasibility Model Structure



Base Parcel Information

Each property parcel is tagged with core base attributes described in section 4.1.1. These include information from the rating database, PDP, LINZ parcel information, building footprints, building consents, sales data, slope topography and any other available sources. These attributes include those relating to the parcel's land, any existing dwellings on the parcel and the planning controls of its location.

Attributes relating to the land include land area, value, shape, use and location and are sourced from a combination of the rating database and LINZ parcel information. QLDC has also provided information allowing simple slope (topography) parameters to be included.

The rating database provides information on any dwellings on each parcel. It includes the number of dwellings, floorspace, type of dwelling and value. The building footprint file determines the location of the dwelling within the parcel.

Planning information is obtained from the District Plan and applied to each parcel. It includes development typologies provided for and any parameters on site sizes associated with each typology and zone. Further

planning information on shape factor[131] requirements guiding dwelling placements and possibilities are captured within the GIS analysis component of the model.

Area Categorisation and Spatial Analysis

The Residential Commercial Feasibility Model is underpinned by the Spatial Framework areas defined from SNZ 2018 boundaries (Appendix 4). Analysis of this framework, together with the core large datasets, determined its suitability in capturing the core spatial relationships that drive the costs and prices within the model.

This framework is used to differentiate costs and prices spatially within the model. The 30 framework areas are aggregated into 8 larger areas to represent geographic differences in costs[132]. These reflect differences in the base costs of each area as well as costs associated with differences in the building style profile across different areas. The full set of 33 framework areas are used to drive dwelling sales prices.

While the Spatial Framework provides the base patterns of costs and prices, further differentiation of both costs and sales prices occurs within each of the framework areas. This is driven by parcel size, existing dwellings, new dwelling type, topography and location of the parcel within the framework area so that each parcel results in an individual set of prices and costs specific to the dwelling size, type and location.

The area classification is an important process as it captures the core relationships between location, costs, prices and dwelling attributes. It allows the model to differentiate between the costs and prices inherent to different types of locations rather than applying average values across the district or urban area.

Although the model tests a range of different dwelling sizes within each parcel, the cost and sale prices of these differ in relation to the *type* of area. While this is readily apparent for sale prices where higher land values flow through to higher prices, it is also true for the floorspace (dwelling) component of the property. There are key relationships of dwelling cost/price and location within each of the dwelling size bands – an equivalent sized house is likely to be more expensive to construct in a higher value area than a lower value area due to the more expensive construction styles.

GIS Analysis

The GIS analysis component of the model involves calculating the areas within each parcel that are available to be subdivided. This component uses the base parcel information to determine the planning requirements for subdivision and land use (e.g. minimum site sizes and shape factors) and takes into account the existing dwelling location within the parcel, to identify whether subdivision is possible.

---

[131] The PDP includes shape factor requirements for the ability to subdivide parcels or to construct additional dwellings through a land use consent. These are a function of the size and shape of the parcel whereby the parcel needs to be able to incorporate a specific geometric area to be able to subdivide or add a further dwelling.

[132] Note, the aggregation to 8 broad areas for the purpose of capacity modelling differs slightly from the aggregation to 10 broad areas used for the purpose of demand modelling.

Through the same process, this stage also assesses the potential for un-subdivided sites to accommodate a further dwelling together with an existing dwelling through a land use consent. The technical detail of the GIS analysis is outlined in Appendix 9.

Dwelling Size Calculation

The model calculates the maximum potential dwelling size for each site. This is conducted on the combination of two parameters. The first, site coverage ratios, are controls within the Plan which set out the land area of each parcel which is able to be covered. The second parameter, floor area ratios (FARs) – the ratio of floorspace to land area – have been applied in the model to ensure that maximum building size calculations are within the correct order of magnitude relative to that being delivered by the market. In most zones there are not specific FARs specified within the Plan. As such, these have been determined exogenously through analysis of existing built form within the Queenstown District urban economy. The FARs are broadly consistent with the analysis undertaken within Auckland for the NPS-UDC within the Auckland Council Developable Capacity (ACDC) Model.

Costs

The model takes into account the costs associated with the dwelling construction process. It assumes that land is purchased once it is ready for development – i.e. it is serviced by infrastructure, has had bulk earthworks completed and has the final property parcel boundaries established. As such, the greenfield component of the model requires the input of exogenous assumptions about section prices.

The costs included in the model, and the processes for establishing these costs, are set out below.

Land and Existing Dwelling Costs

The model uses the rating database CV (based on the 2014 valuation) as a basis for land and existing dwelling costs. This has been inflated to 2016 values based upon the level of dwelling price growth by location across QLD. Existing dwelling costs are included within the calculation of feasibility for infill redevelopment as any existing dwellings on a site are also required to be purchased.

Site Preparation

Site preparation costs include any costs to prepare a site once bulk earthworks have been completed. They also include landscaping costs.

On most parcels and dwelling combinations, site preparation costs are expressed as a percentage of dwelling construction costs. The costs were based on analysis of data contained within the QV Cost Builder database. The percentage is consistent with that used within the ACDC Model when site preparation costs are expressed as a percentage of building costs.

A minimum parameter has been set for site preparation costs. The model applies this cost in instances where dwelling construction values are very low (small, lower specification dwelling) and section sizes are above average. This value is sourced from the QV cost builder database and is applied on a per m2 of land area basis. The value reflects the lowest cost per m2 within the database.

Building Costs

Building costs relate to the physical construction of the dwelling and are expressed on a per m2 of floorspace basis.

The model uses a cost matrix of dwelling size by location type. This captures the important relationships both between costs and dwelling size, as well as between the nature of dwellings and types of location, which occur irrespective of size. While a significant part of the variation in dwelling prices (as distinct from land) occurs through a correlation between the type of area and dwelling size (with more expensive areas typically having larger houses), there is also a significant relationship between type of location and specification of the dwelling. Put simply, the construction cost (excluding land) of a dwelling in one type of location will differ to the cost of an equivalently sized dwelling in a different type of location.

Dwelling costs have been established through the triangulation of data sources. These include the building consents data and cost ranges within the QV Cost Builder database. Data on building consents was obtained at an individual property parcel level. This enabled an analysis of costs by type of location and dwelling size and type.

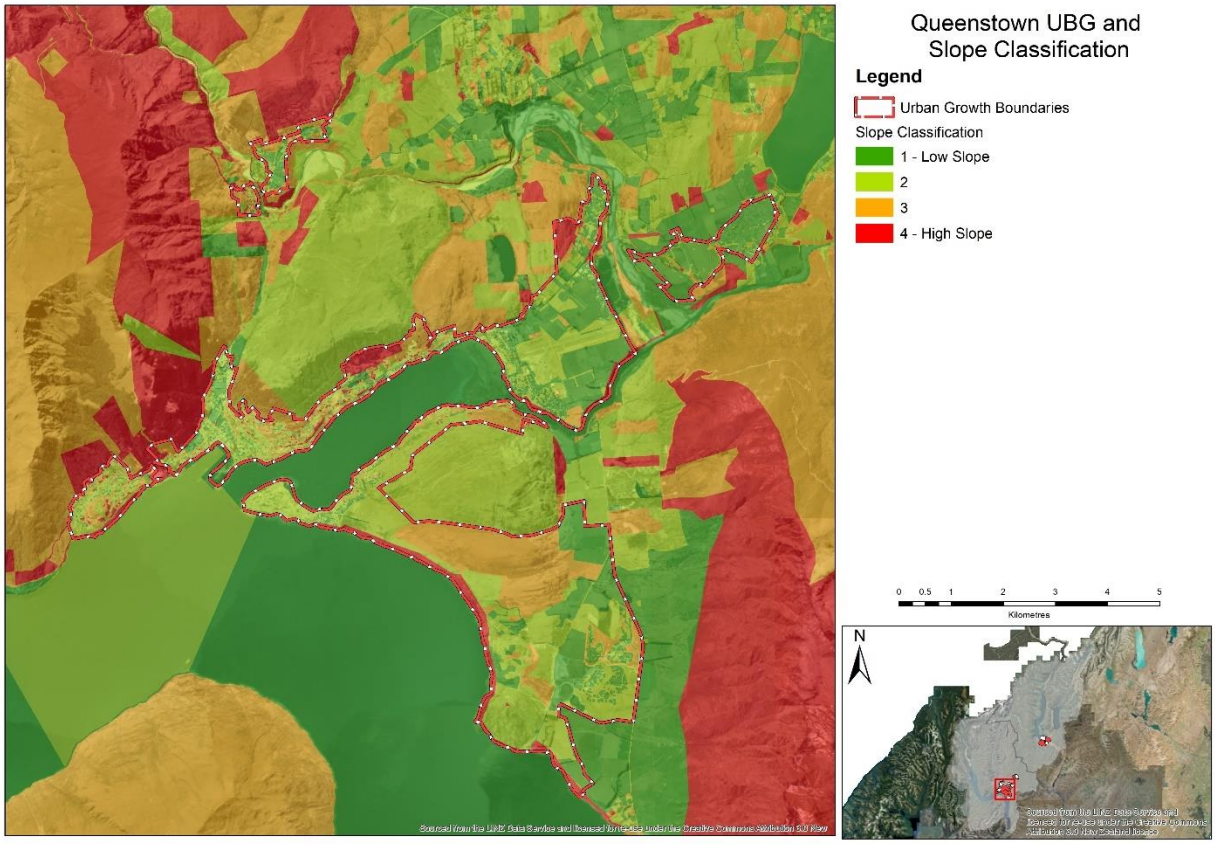
Members of the development community within QLD have provided feedback and input on the cost ranges used within the model. Apartment construction costs were increased and the differences in cost rates by dwelling size were reduced following the first set of feedback. The second set of feedback identified that the cost ranges, growth rates and prices used within the model were appropriate. See Appendix 2 for a copy of the stakeholder workshop agenda and attendee list.

Other Costs as a Share of Building Costs

The model incorporates further costs as part of the development process, which are expressed as a percentage of overall building costs. These include design fees, planning costs, rates, building certificates, building consents, legal, surveying, development management and a contingency. The percentages vary by development typology and area type, with higher percentages for higher density forms of development. The costs are also higher in more expensive areas to reflect the increased complexity of construction design relative to cheaper areas.

Effect of Topography

QLDC undertook topographical analysis within the district to categorise each property parcel into a gradient band. A sample of this data is shown below.



M.E spatially integrated this dataset with the building consent dataset to identify the effect of land slope on costs. These were then applied at the individual property parcel level to further adjust the construction and site preparation costs within the model. These costs were subject to additional local stakeholder input.

Other Costs as a Share of Sale Prices

The model incorporates other costs as part of the development and sale process. These include funding costs and sales and marketing, which are expressed as a percentage of sales costs. The percentages vary by development typology, with higher shares for higher density development types.

Demolition Costs

The demolition costs of any existing dwellings on each site are included within the feasibility calculation of infill redevelopment. Demolition costs have been estimated based on the size of the existing dwelling(s).

Sales Price

The model estimates the sales price of each development option tested. The sale price is determined from a combination of dwelling size and type and the type of location.

Sales data was obtained for approximately 11,000 property sales across QLD between 2005 and 2017, with approximately 3,000 sales within 2015-2017 (sourced from Core Logic). These were available at the individual parcel level and contained data on dwelling size, type, age and location. From this, corresponding

matrices of sales values by dwelling size and location type were produced. The variables within this database also enabled factors to be established to differentiate sales prices between older and new floorspace, where newly constructed floorspace has a higher sales value. Further analysis of current property sales listing was undertaken to verify and calibrate the matrices.

The model made further adjustments to the expected sales price of each dwelling based on the section size of the dwelling relative to each local area average within each zone type. Within the greenfield model, sales prices were further adjusted based on the distance of the parcel centroid from the closest existing urban edge.

Model Sales Price Growth Assumptions

Spatial Framework Areas	Component	Time Period 2016-2018	2018-2031	2031-2046
Ahuriri (Queenstown-Lakes District) Cadrona Glenorchy Hawea Locality Kingston Lake Hayes Luggate Locality Outer Wakatipu Rest of Upper Clutha Valley Wakatipu Basin	Land	3.50%	3.50%	1.75%
	Standalone	3.50%	3.50%	1.75%
	Duplex	3.50%	3.50%	1.75%
	Apartments	3.00%	3.00%	1.50%
Albert Town Arrowtown Arthurs Point Frankton Jacks Point Lake Hayes Estate Quail Rise Queenstown Hill	Land	4.50%	5.00%	2.75%
	Standalone	4.50%	5.00%	2.75%
	Duplex	4.50%	5.00%	2.75%
	Apartments	4.00%	4.50%	2.25%
Frankton Arm Kelvin Heights Queenstown Bay Queenstown Central Queenstown East Shotover Country Sunshine Bay Wanaka Central Wanaka North Wanaka Waterfront Wanaka West Warren Park	Land	5.00%	5.50%	3.00%
	Standalone	5.00%	5.50%	3.00%
	Duplex	5.00%	5.50%	3.00%
	Apartments	4.50%	5.00%	2.50%

Time Component Growth Model

Importantly, the model has a time component which enables it to estimate the commercial feasibility of capacity through time. Population and other demand growth will affect prices through time, which affects the feasibility of different developments through time. This enables the model to reflect typical trends within a growing urban economy where a greater range of locations and types of dwellings become commercially feasible through time.

The model has a series of growth rates that enable changes in the costs and prices of each component through time. These include construction costs and the sales prices for each property type within each location type.

These prices can be adjusted within the model to reflect any future structural changes within the market, as well as any changes in the wider economy that flow through to growth rates. As such, the model is able to have differential growth rates across different dwelling types and locations that are informed by the dwelling demand projections.

Commercial Feasibility

The model compares the total costs for each development option with the projected sale price. If the sale price exceeds the total costs by a minimum of a specified margin, then the development option is regarded as commercially feasible. The required profit margin has currently been set at 20% to be consistent with

the approach taken as a base case across other council's modelling and with the individual parcel model established by MBIE. However, the margin is able to be changed to test different levels of feasibility.

Appendix 12 – Short-term Commercially Feasible Capacity by Zone

Short-Term (to 2019) Commercially Feasible Capacity for Additional Dwellings by Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Infill Subdivision Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max	Share of PEC feasible Infill Standalone H	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	290	180	-	180	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	50	50	-	50	-	-	100%	100%	-	100%
	High Density Residential	960	2,050	1,440	2,070	110	2,180	98%	96%	68%	97%	100%	97%
	High Density Residential (Operative)	30	140	130	140	-	140	100%	93%	87%	93%	-	93%
	Low Density Residential	1,590	1,800	-	1,980	2,730	4,710	98%	86%	-	94%	84%	88%
	Medium Density Residential	120	100	-	150	330	480	92%	63%	-	88%	100%	96%
	Rural Visitor	-	-	300	370	-	370	-	-	100%	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	4,230	4,230	-	-	-	-	45%	45%
	Town Centre	-	-	30	80	-	80	-	-	75%	89%	-	89%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	130	160	-	160	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	230	360	-	360	-	-	88%	90%	-	90%
	High Density Residential	150	180	180	180	-	180	100%	95%	95%	95%	-	95%
	Large Lot Residential	170	80	-	180	10	190	94%	42%	-	95%	100%	95%
	Low Density Residential	1,620	1,910	-	2,060	2,140	4,200	98%	88%	-	95%	94%	95%
	Medium Density Residential	140	160	-	180	-	180	93%	76%	-	86%	-	86%
	Special Zone/Structure Plan Area	-	-	-	-	1,250	1,250	-	-	-	-	45%	45%
	Town Centre	-	-	20	70	-	70	-	-	100%	88%	-	88%
	Township (Operative)	90	100	-	100	-	100	100%	100%	-	111%	0%	100%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	60	80	-	80	-	80	100%	89%	-	89%	-	89%
	Medium Density Residential	-	10	-	10	-	10	-	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**4,940**	**6,630**	**2,800**	**8,420**	**10,800**	**19,220**	**97%**	**88%**	**79%**	**95%**	**59%**	**71%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	20	20	-	20	-	-	100%	100%	-	100%
	Low Density Residential	30	30	-	40	-	40	100%	75%	-	100%	-	100%
	Township (Operative)	150	170	-	170	-	170	94%	94%	-	94%	0%	30%
TOTAL		**5,120**	**6,830**	**2,820**	**8,650**	**10,800**	**19,450**	**97%**	**88%**	**79%**	**95%**	**58%**	**70%**

Short-Term (to 2019) Commercially Feasible Capacity for Additional Dwellings by Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity			Max Infill	Greenfields	Total Max
		Infill Subdivision					
		Standalone	Duplex	Apartments			
Arrowtown	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20
Arrowtown	Local Shopping Centre	-	-	-	-	-	-
Arrowtown	Low Density Residential	60	80	-	80	-	80
Arrowtown	Medium Density Residential	-	10	-	10	-	10
Arrowtown	Special Zone/Structure Plan Area	-	-	-	-	30	30
Arthurs Point	Low Density Residential	360	390	-	390	110	500
Arthurs Point	Rural Visitor	-	-	300	370	-	370
Hawea Locality	Local Shopping Centre	-	-	20	20	-	20
Hawea Locality	Township (Operative)	130	150	-	160	-	160
Jacks Point	Low Density Residential	-	-	-	-	-	-
Jacks Point	Special Zone/Structure Plan Area	-	-	-	-	1,670	1,670
Luggate Locality	Township (Operative)	20	20	-	20	-	20
Other Areas	High Density Residential	-	-	-	-	-	-
Other Areas	Low Density Residential	30	30	-	40	-	40
Other Areas	Rural Visitor	-	-	-	-	-	-
Other Areas	Township (Operative)	-	-	-	-	-	-
Queenstown Central and West	Business Mixed Use	-	-	290	180	-	180
Queenstown Central and West	High Density Residential	410	1,130	1,050	1,130	-	1,130
Queenstown Central and West	High Density Residential (Operative)	30	140	130	140	-	140
Queenstown Central and West	Medium Density Residential	-	10	-	10	-	10
Queenstown Central and West	Special Zone/Structure Plan Area	-	-	-	-	-	-
Queenstown Central and West	Town Centre	-	-	30	80	-	80
Queenstown East	High Density Residential	550	910	400	930	110	1,040
Queenstown East	Local Shopping Centre	-	-	-	-	-	-
Queenstown East	Low Density Residential	900	890	-	1,050	2,260	3,310
Queenstown East	Medium Density Residential	120	90	-	140	-	140
Queenstown Far East	Local Shopping Centre	-	-	50	50	-	50
Queenstown Far East	Low Density Residential	330	530	-	550	360	910
Queenstown Far East	Medium Density Residential	-	-	-	-	330	330
Queenstown Far East	Special Zone/Structure Plan Area	-	-	-	-	2,370	2,370
Wanaka	Business Mixed Use	-	-	130	160	-	160
Wanaka	High Density Residential	150	180	180	180	-	180
Wanaka	Large Lot Residential	170	80	-	180	10	190
Wanaka	Local Shopping Centre	-	-	230	360	-	360
Wanaka	Low Density Residential	1,620	1,910	-	2,060	2,140	4,200
Wanaka	Medium Density Residential	140	160	-	180	-	180
Wanaka	PC 46 Wanaka	-	-	-	-	-	-
Wanaka	Special Zone/Structure Plan Area	-	-	-	-	1,250	1,250
Wanaka	Town Centre	-	-	20	70	-	70
Wanaka	Township (Operative)	90	100	-	100	-	100
TOTAL	**TOTAL**	**5,130**	**6,820**	**2,810**	**8,660**	**10,820**	**19,430**

Short-Term (to 2019) Commercially Feasible Capacity for Additional Dwellings by Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Redevelopment			Max Infill	Greenfields	Total Max	Share of PEC feasible Infill			Max Infill	Greenfields	Total Max
		Standalone H	Duplex	Apartments				Standalone H	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	710	440	-	440	-	-	92%	92%	-	92%
	Local Shopping Centre	-	-	160	160	-	160	-	-	80%	80%	-	80%
	High Density Residential	-	3,240	1,940	3,410	110	3,520	0%	79%	48%	84%	100%	84%
	High Density Residential (Operative)	-	280	230	290	-	290	0%	85%	70%	88%	-	88%
	Low Density Residential	5,320	4,020	-	5,500	2,730	8,230	89%	67%	-	91%	84%	88%
	Medium Density Residential	220	110	-	250	330	580	61%	31%	-	68%	100%	83%
	Rural Visitor	-	-	520	640	-	640	-	-	100%	98%	-	98%
	Special Zone/Structure Plan Area	-	-	-	-	4,230	4,230	-	-	-	-	45%	45%
	Town Centre	-	-	80	210	-	210	-	-	47%	49%	-	49%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	240	300	-	300	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	270	430	-	430	-	-	82%	80%	-	80%
	High Density Residential	-	180	230	250	-	250	0%	67%	85%	93%	-	93%
	Large Lot Residential	200	80	-	240	10	250	74%	30%	-	89%	100%	89%
	Low Density Residential	3,220	2,170	-	3,490	2,140	5,630	70%	47%	-	76%	94%	82%
	Medium Density Residential	180	150	-	240	-	240	58%	48%	-	77%	-	77%
	Special Zone/Structure Plan Area	-	-	-	-	1,250	1,250	-	-	-	-	45%	45%
	Town Centre	-	-	30	90	-	90	-	-	60%	53%	-	53%
	Township (Operative)	120	120	-	120	-	120	92%	92%	-	100%	0%	92%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	130	130	-	130	-	130	87%	87%	-	87%	-	87%
	Medium Density Residential	10	10	-	10	-	10	100%	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**9,430**	**10,520**	**4,410**	**16,230**	**10,800**	**27,030**	**65%**	**64%**	**63%**	**84%**	**59%**	**72%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	20	30	-	30	-	-	50%	75%	-	75%
	Low Density Residential	50	50	-	50	-	50	100%	100%	-	100%	-	100%
	Township (Operative)	260	220	-	280	-	280	84%	71%	-	90%	0%	41%
TOTAL		**9,740**	**10,790**	**4,430**	**16,590**	**10,800**	**27,390**	**66%**	**64%**	**63%**	**84%**	**58%**	**71%**

Short-Term (to 2019) Commercially Feasible Capacity for Additional Dwellings by Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Subdivision and Redevelopment			Max Infill	Greenfields	Total Max
		Standalone	Duplex	Apartments			
Arrowtown	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30
Arrowtown	Local Shopping Centre	-	-	-	-	-	-
Arrowtown	Low Density Residential	130	130	-	130	-	130
Arrowtown	Medium Density Residential	10	10	-	10	-	10
Arrowtown	Special Zone/Structure Plan Area	-	-	-	-	30	30
Arthurs Point	Low Density Residential	580	500	-	580	110	690
Arthurs Point	Rural Visitor	-	-	520	640	-	640
Hawea Locality	Local Shopping Centre	-	-	20	30	-	30
Hawea Locality	Township (Operative)	200	170	-	210	-	210
Jacks Point	Low Density Residential	-	-	-	-	-	-
Jacks Point	Special Zone/Structure Plan Area	-	-	-	-	1,670	1,670
Luggate Locality	Township (Operative)	60	40	-	60	-	60
Other Areas	High Density Residential	-	-	-	-	-	-
Other Areas	Low Density Residential	50	50	-	50	-	50
Other Areas	Rural Visitor	-	-	-	-	-	-
Other Areas	Township (Operative)	-	-	-	-	-	-
Queenstown Central and West	Business Mixed Use	-	-	710	440	-	440
Queenstown Central and West	High Density Residential	-	1,930	1,620	1,970	-	1,970
Queenstown Central and West	High Density Residential (Operative)	-	280	230	290	-	290
Queenstown Central and West	Medium Density Residential	20	20	-	20	-	20
Queenstown Central and West	Special Zone/Structure Plan Area	-	-	-	-	-	-
Queenstown Central and West	Town Centre	-	-	80	210	-	210
Queenstown East	High Density Residential	-	1,310	320	1,440	110	1,550
Queenstown East	Local Shopping Centre	-	-	-	-	-	-
Queenstown East	Low Density Residential	3,340	2,670	-	3,450	2,260	5,710
Queenstown East	Medium Density Residential	210	90	-	230	-	230
Queenstown Far East	Local Shopping Centre	-	-	160	160	-	160
Queenstown Far East	Low Density Residential	1,400	850	-	1,470	360	1,830
Queenstown Far East	Medium Density Residential	-	-	-	10	330	340
Queenstown Far East	Special Zone/Structure Plan Area	-	-	-	-	2,370	2,370
Wanaka	Business Mixed Use	-	-	240	300	-	300
Wanaka	High Density Residential	-	180	230	250	-	250
Wanaka	Large Lot Residential	200	80	-	240	10	250
Wanaka	Local Shopping Centre	-	-	270	430	-	430
Wanaka	Low Density Residential	3,220	2,170	-	3,490	2,140	5,630
Wanaka	Medium Density Residential	180	150	-	240	-	240
Wanaka	PC 46 Wanaka	-	-	-	-	-	-
Wanaka	Special Zone/Structure Plan Area	-	-	-	-	1,250	1,250
Wanaka	Town Centre	-	-	30	90	-	90
Wanaka	Township (Operative)	120	120	-	120	-	120
TOTAL	**TOTAL**	**9,750**	**10,760**	**4,410**	**16,570**	**10,820**	**27,390**

Appendix 13 – Medium-term Commercial Feasible Capacity by Zone

Medium-Term (to 2026) Commercially Feasible Capacity for Additional Dwellings by Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Infill Subdivision Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max	Share of PEC feasible Infill Standalone	Duplex	Apartments	Max Infill	Greenfields	Total Max
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	290	180	-	180	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	50	50	-	50	-	-	100%	100%	-	100%
	High Density Residential	960	2,060	1,940	2,090	110	2,200	98%	97%	91%	98%	100%	98%
	High Density Residential (Operative)	30	140	130	140	-	140	100%	93%	87%	93%	-	93%
	Low Density Residential	1,600	1,980	-	2,040	2,730	4,770	98%	94%	-	97%	84%	89%
	Medium Density Residential	120	140	-	160	330	490	92%	88%	-	94%	100%	98%
	Rural Visitor	-	-	300	370	-	370	-	-	100%	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	7,520	7,520	-	-	-	-	80%	80%
	Town Centre	-	-	30	80	-	80	-	-	75%	89%	-	89%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	130	160	-	160	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	260	400	-	400	-	-	100%	100%	-	100%
	High Density Residential	150	190	190	190	-	190	100%	100%	100%	100%	-	100%
	Large Lot Residential	170	170	-	180	10	190	94%	89%	-	95%	100%	95%
	Low Density Residential	1,650	2,090	-	2,140	2,270	4,410	99%	97%	-	99%	100%	99%
	Medium Density Residential	140	190	-	190	-	190	93%	90%	-	90%	-	90%
	Special Zone/Structure Plan Area	-	-	-	-	2,230	2,230	-	-	-	-	80%	80%
	Town Centre	-	-	20	70	-	70	-	-	100%	88%	-	88%
	Township (Operative)	90	100	-	90	10	100	100%	100%	-	100%	100%	100%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	60	80	-	80	-	80	100%	89%	-	89%	-	89%
	Medium Density Residential	-	10	-	10	-	10	-	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**4,980**	**7,170**	**3,340**	**8,640**	**15,210**	**23,850**	**98%**	**95%**	**94%**	**98%**	**84%**	**88%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	20	20	-	20	-	-	100%	100%	-	100%
	Low Density Residential	30	40	-	40	-	40	100%	100%	-	100%	-	100%
	Township (Operative)	160	180	-	170	150	320	100%	100%	-	94%	39%	57%
TOTAL		**5,170**	**7,390**	**3,360**	**8,870**	**15,360**	**24,230**	**98%**	**96%**	**94%**	**98%**	**83%**	**88%**

Medium-Term (to 2026) Commercially Feasible Capacity for Additional Dwellings by Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity			Max Infill	Greenfields	Total Max
		Infill Subdivision					
		Standalone	Duplex	Apartments			
Arrowtown	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20
Arrowtown	Local Shopping Centre	-	-	-	-	-	-
Arrowtown	Low Density Residential	60	80	-	80	-	80
Arrowtown	Medium Density Residential	-	10	-	10	-	10
Arrowtown	Special Zone/Structure Plan Area	-	-	-	-	50	50
Arthurs Point	Low Density Residential	360	390	-	390	110	500
Arthurs Point	Rural Visitor	-	-	300	370	-	370
Hawea Locality	Local Shopping Centre	-	-	20	20	-	20
Hawea Locality	Township (Operative)	140	160	-	160	140	300
Jacks Point	Low Density Residential	-	-	-	-	-	-
Jacks Point	Special Zone/Structure Plan Area	-	-	-	-	2,960	2,960
Luggate Locality	Township (Operative)	20	20	-	10	10	20
Other Areas	High Density Residential	-	-	-	-	-	-
Other Areas	Low Density Residential	30	40	-	40	-	40
Other Areas	Rural Visitor	-	-	-	-	-	-
Other Areas	Township (Operative)	-	-	-	-	-	-
Queenstown Central and West	Business Mixed Use	-	-	290	180	-	180
Queenstown Central and West	High Density Residential	410	1,140	1,080	1,140	-	1,140
Queenstown Central and West	High Density Residential (Operative)	30	140	130	140	-	140
Queenstown Central and West	Medium Density Residential	-	10	-	10	-	10
Queenstown Central and West	Special Zone/Structure Plan Area	-	-	-	-	-	-
Queenstown Central and West	Town Centre	-	-	30	80	-	80
Queenstown East	High Density Residential	550	930	860	950	110	1,060
Queenstown East	Local Shopping Centre	-	-	-	-	-	-
Queenstown East	Low Density Residential	910	1,040	-	1,090	2,260	3,350
Queenstown East	Medium Density Residential	120	130	-	150	-	150
Queenstown Far East	Local Shopping Centre	-	-	50	50	-	50
Queenstown Far East	Low Density Residential	330	560	-	570	360	930
Queenstown Far East	Medium Density Residential	-	-	-	-	330	330
Queenstown Far East	Special Zone/Structure Plan Area	-	-	-	-	4,210	4,210
Wanaka	Business Mixed Use	-	-	130	160	-	160
Wanaka	High Density Residential	150	190	190	190	-	190
Wanaka	Large Lot Residential	170	170	-	180	10	190
Wanaka	Local Shopping Centre	-	-	260	400	-	400
Wanaka	Low Density Residential	1,650	2,090	-	2,140	2,270	4,410
Wanaka	Medium Density Residential	140	190	-	190	-	190
Wanaka	PC 46 Wanaka	-	-	-	-	-	-
Wanaka	Special Zone/Structure Plan Area	-	-	-	-	2,230	2,230
Wanaka	Town Centre	-	-	20	70	-	70
Wanaka	Township (Operative)	90	100	-	90	10	100
TOTAL	**TOTAL**	**5,190**	**7,370**	**3,340**	**8,880**	**15,370**	**24,240**

Medium-Term (to 2026) Commercially Feasible Capacity for Additional Dwellings by Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Redevelopment			Max Infill	Greenfields	Total Max	Share of PEC feasible Infill			Max Infill	Greenfields	Total Max
		Standalone H	Duplex	Apartments				Standalone H	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	720	450	-	450	-	-	94%	94%	-	94%
	Local Shopping Centre	-	-	180	180	-	180	-	-	90%	90%	-	90%
	High Density Residential	-	3,560	2,770	3,660	110	3,770	0%	87%	68%	90%	100%	90%
	High Density Residential (Operative)	-	290	240	300	-	300	0%	88%	73%	91%	-	91%
	Low Density Residential	5,570	4,510	-	5,720	2,730	8,450	93%	75%	-	95%	84%	91%
	Medium Density Residential	240	170	-	260	330	590	67%	47%	-	70%	100%	84%
	Rural Visitor	-	-	520	650	-	650	-	-	100%	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	7,520	7,520	-	-	-	-	80%	80%
	Town Centre	-	-	90	230	-	230	-	-	53%	53%	-	53%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	240	300	-	300	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	330	540	-	540	-	-	100%	100%	-	100%
	High Density Residential	-	250	240	260	-	260	0%	93%	89%	96%	-	96%
	Large Lot Residential	250	230	-	260	10	270	93%	85%	-	96%	100%	96%
	Low Density Residential	3,900	2,780	-	4,050	2,270	6,320	85%	61%	-	88%	100%	92%
	Medium Density Residential	250	200	-	260	-	260	81%	65%	-	84%	-	84%
	Special Zone/Structure Plan Area	-	-	-	-	2,230	2,230	-	-	-	-	80%	80%
	Town Centre	-	-	30	100	-	100	-	-	60%	59%	-	59%
	Township (Operative)	120	120	-	120	10	130	92%	92%	-	100%	100%	100%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	140	130	-	140	-	140	93%	87%	-	93%	-	93%
	Medium Density Residential	10	10	-	10	-	10	100%	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**10,510**	**12,280**	**5,360**	**17,520**	**15,210**	**32,730**	**73%**	**74%**	**77%**	**90%**	**84%**	**87%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	40	40	-	40	-	-	100%	100%	-	100%
	Low Density Residential	50	50	-	50	-	50	100%	100%	-	100%	-	100%
	Township (Operative)	290	290	-	290	150	440	94%	94%	-	94%	39%	64%
TOTAL		**10,850**	**12,620**	**5,400**	**17,900**	**15,360**	**33,260**	**73%**	**75%**	**77%**	**91%**	**83%**	**87%**

Medium-Term (to 2026) Commercially Feasible Capacity for Additional Dwellings by Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Subdivision and Redevelopment			Max Infill	Greenfields	Total Max
		Standalone	Duplex	Apartments			
Arrowtown	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30
Arrowtown	Local Shopping Centre	-	-	-	-	-	-
Arrowtown	Low Density Residential	140	130	-	140	-	140
Arrowtown	Medium Density Residential	10	10	-	10	-	10
Arrowtown	Special Zone/Structure Plan Area	-	-	-	-	50	50
Arthurs Point	Low Density Residential	590	540	-	590	110	700
Arthurs Point	Rural Visitor	-	-	520	650	-	650
Hawea Locality	Local Shopping Centre	-	-	40	40	-	40
Hawea Locality	Township (Operative)	220	220	-	230	140	370
Jacks Point	Low Density Residential	-	-	-	-	-	-
Jacks Point	Special Zone/Structure Plan Area	-	-	-	-	2,960	2,960
Luggate Locality	Township (Operative)	60	60	-	60	10	70
Other Areas	High Density Residential	-	-	-	-	-	-
Other Areas	Low Density Residential	50	50	-	50	-	50
Other Areas	Rural Visitor	-	-	-	-	-	-
Other Areas	Township (Operative)	-	-	-	-	-	-
Queenstown Central and West	Business Mixed Use	-	-	720	450	-	450
Queenstown Central and West	High Density Residential	-	2,040	1,780	2,080	-	2,080
Queenstown Central and West	High Density Residential (Operative)	-	290	240	300	-	300
Queenstown Central and West	Medium Density Residential	20	20	-	20	-	20
Queenstown Central and West	Special Zone/Structure Plan Area	-	-	-	-	-	-
Queenstown Central and West	Town Centre	-	-	90	230	-	230
Queenstown East	High Density Residential	-	1,510	980	1,590	110	1,700
Queenstown East	Local Shopping Centre	-	-	20	20	-	20
Queenstown East	Low Density Residential	3,510	2,950	-	3,590	2,260	5,850
Queenstown East	Medium Density Residential	220	160	-	240	-	240
Queenstown Far East	Local Shopping Centre	-	-	160	160	-	160
Queenstown Far East	Low Density Residential	1,460	1,010	-	1,530	360	1,890
Queenstown Far East	Medium Density Residential	-	-	-	10	330	340
Queenstown Far East	Special Zone/Structure Plan Area	-	-	-	-	4,210	4,210
Wanaka	Business Mixed Use	-	-	240	300	-	300
Wanaka	High Density Residential	-	250	240	260	-	260
Wanaka	Large Lot Residential	250	230	-	260	10	270
Wanaka	Local Shopping Centre	-	-	330	540	-	540
Wanaka	Low Density Residential	3,900	2,780	-	4,050	2,270	6,320
Wanaka	Medium Density Residential	250	200	-	260	-	260
Wanaka	PC 46 Wanaka	-	-	-	-	-	-
Wanaka	Special Zone/Structure Plan Area	-	-	-	-	2,230	2,230
Wanaka	Town Centre	-	-	30	100	-	100
Wanaka	Township (Operative)	120	120	-	120	10	130
TOTAL	**TOTAL**	**10,840**	**12,610**	**5,380**	**17,890**	**15,370**	**33,260**

Appendix 14 – Long-term Commercial Feasible Capacity by Zone

Long-Term (to 2046) Commercially Feasible Capacity for Additional Dwellings by Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity			Max Infill	Greenfields	Total Max	Share of PEC feasible			Max Infill	Greenfields	Total Max
		Infill Subdivision						Infill					
		Standalone H	Duplex	Apartments				Standalone H	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	290	180	-	180	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	50	50	-	50	-	-	100%	100%	-	100%
	High Density Residential	970	2,060	2,040	2,090	110	2,200	99%	97%	96%	98%	100%	98%
	High Density Residential (Operative)	30	140	130	140	-	140	100%	93%	87%	93%	-	93%
	Low Density Residential	1,620	2,050	-	2,070	3,260	5,330	99%	98%	-	99%	100%	99%
	Medium Density Residential	130	150	-	160	330	490	100%	94%	-	94%	100%	98%
	Rural Visitor	-	-	300	370	-	370	-	-	100%	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	9,400	9,400	-	-	-	-	100%	100%
	Town Centre	-	-	30	80	-	80	-	-	75%	89%	-	89%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	130	160	-	160	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	260	400	-	400	-	-	100%	100%	-	100%
	High Density Residential	150	190	190	190	-	190	100%	100%	100%	100%	-	100%
	Large Lot Residential	170	180	-	180	10	190	94%	95%	-	95%	100%	95%
	Low Density Residential	1,660	2,150	-	2,160	2,280	4,440	100%	100%	-	100%	100%	100%
	Medium Density Residential	150	200	-	200	-	200	100%	95%	-	95%	-	95%
	Special Zone/Structure Plan Area	-	-	-	-	2,790	2,790	-	-	-	-	100%	100%
	Town Centre	-	-	20	80	-	80	-	-	100%	100%	-	100%
	Township (Operative)	90	100	-	90	10	100	100%	100%	-	100%	100%	100%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	60	90	-	90	-	90	100%	100%	-	100%	-	100%
	Medium Density Residential	-	10	-	10	-	10	-	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**5,040**	**7,340**	**3,440**	**8,720**	**18,190**	**26,910**	**99%**	**98%**	**97%**	**99%**	**100%**	**99%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	20	20	-	20	-	-	100%	100%	-	100%
	Low Density Residential	30	40	-	40	-	40	100%	100%	-	100%	-	100%
	Township (Operative)	160	180	-	180	380	560	100%	100%	-	100%	100%	100%
TOTAL		**5,230**	**7,560**	**3,460**	**8,960**	**18,570**	**27,530**	**99%**	**98%**	**97%**	**99%**	**100%**	**99%**

Long-Term (to 2046) Commercially Feasible Capacity for Additional Dwellings by Zone (Excluding Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity			Max Infill	Greenfields	Total Max
		Infill Subdivision					
		Standalone	Duplex	Apartments			
Arrowtown	Arrowtown Residential Historic Management Zone	10	20	-	20	-	20
Arrowtown	Local Shopping Centre	-	-	-	-	-	-
Arrowtown	Low Density Residential	60	90	-	90	-	90
Arrowtown	Medium Density Residential	-	10	-	10	-	10
Arrowtown	Special Zone/Structure Plan Area	-	-	-	-	60	60
Arthurs Point	Low Density Residential	360	390	-	390	110	500
Arthurs Point	Rural Visitor	-	-	300	370	-	370
Hawea Locality	Local Shopping Centre	-	-	20	20	-	20
Hawea Locality	Township (Operative)	140	160	-	170	330	500
Jacks Point	Low Density Residential	-	-	-	-	-	-
Jacks Point	Special Zone/Structure Plan Area	-	-	-	-	3,700	3,700
Luggate Locality	Township (Operative)	20	20	-	20	50	70
Other Areas	High Density Residential	-	-	-	-	-	-
Other Areas	Low Density Residential	30	40	-	40	-	40
Other Areas	Rural Visitor	-	-	-	-	-	-
Other Areas	Township (Operative)	-	-	-	-	-	-
Queenstown Central and West	Business Mixed Use	-	-	290	180	-	180
Queenstown Central and West	High Density Residential	410	1,140	1,110	1,140	-	1,140
Queenstown Central and West	High Density Residential (Operative)	30	140	130	140	-	140
Queenstown Central and West	Medium Density Residential	-	10	-	10	-	10
Queenstown Central and West	Special Zone/Structure Plan Area	-	-	-	-	-	-
Queenstown Central and West	Town Centre	-	-	30	80	-	80
Queenstown East	High Density Residential	560	930	930	950	110	1,060
Queenstown East	Local Shopping Centre	-	-	-	-	-	-
Queenstown East	Low Density Residential	920	1,100	-	1,110	2,790	3,900
Queenstown East	Medium Density Residential	130	150	-	150	-	150
Queenstown Far East	Local Shopping Centre	-	-	50	50	-	50
Queenstown Far East	Low Density Residential	350	560	-	570	360	930
Queenstown Far East	Medium Density Residential	-	-	-	-	330	330
Queenstown Far East	Special Zone/Structure Plan Area	-	-	-	-	5,260	5,260
Wanaka	Business Mixed Use	-	-	130	160	-	160
Wanaka	High Density Residential	150	190	190	190	-	190
Wanaka	Large Lot Residential	170	180	-	180	10	190
Wanaka	Local Shopping Centre	-	-	260	400	-	400
Wanaka	Low Density Residential	1,660	2,150	-	2,160	2,280	4,440
Wanaka	Medium Density Residential	150	200	-	200	-	200
Wanaka	PC 46 Wanaka	-	-	-	-	-	-
Wanaka	Special Zone/Structure Plan Area	-	-	-	-	2,790	2,790
Wanaka	Town Centre	-	-	20	80	-	80
Wanaka	Township (Operative)	90	100	-	90	10	100
TOTAL	**TOTAL**	**5,220**	**7,550**	**3,450**	**8,970**	**18,590**	**27,540**

Long-Term (to 2046) Commercially Feasible Capacity for Additional Dwellings by Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity						Share of PEC feasible					
		Redevelopment			Max Infill	Greenfields	Total Max	Infill			Max Infill	Greenfields	Total Max
		Standalone H	Duplex	Apartments				Standalone H	Duplex	Apartments			
Queenstown Urban Growth Boundary	Business Mixed Use	-	-	750	470	-	470	-	-	97%	98%	-	98%
	Local Shopping Centre	-	-	180	180	-	180	-	-	90%	90%	-	90%
	High Density Residential	-	3,730	3,260	3,800	110	3,910	0%	91%	80%	93%	100%	93%
	High Density Residential (Operative)	-	300	240	300	-	300	0%	91%	73%	91%	-	91%
	Low Density Residential	5,700	5,070	-	5,830	3,260	9,090	95%	85%	-	96%	100%	98%
	Medium Density Residential	250	220	-	270	330	600	69%	61%	-	73%	100%	86%
	Rural Visitor	-	-	520	650	-	650	-	-	100%	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	9,400	9,400	-	-	-	-	100%	100%
	Town Centre	-	-	110	280	-	280	-	-	65%	65%	-	65%
Wanaka Urban Growth Boundary	Business Mixed Use	-	-	240	300	-	300	-	-	100%	100%	-	100%
	Local Shopping Centre	-	-	330	540	-	540	-	-	100%	100%	-	100%
	High Density Residential	-	270	260	270	-	270	0%	100%	96%	100%	-	100%
	Large Lot Residential	260	250	-	260	10	270	96%	93%	-	96%	100%	96%
	Low Density Residential	4,390	3,550	-	4,450	2,280	6,730	96%	77%	-	97%	100%	98%
	Medium Density Residential	290	260	-	290	-	290	94%	84%	-	94%	-	94%
	Special Zone/Structure Plan Area	-	-	-	-	2,790	2,790	-	-	-	-	100%	100%
	Town Centre	-	-	40	150	-	150	-	-	80%	88%	-	88%
	Township (Operative)	130	130	-	120	10	130	100%	100%	-	100%	100%	100%
Arrowtown Urban Growth Boundary	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30	100%	100%	-	100%	-	100%
	Local Shopping Centre	-	-	-	-	-	-	-	-	-	-	-	-
	Low Density Residential	140	130	-	140	-	140	93%	87%	-	93%	-	93%
	Medium Density Residential	10	10	-	10	-	10	100%	100%	-	100%	-	100%
	Special Zone/Structure Plan Area	-	-	-	-	-	-	-	-	-	-	0%	0%
TOTAL UGB	**TOTAL UGB**	**11,200**	**13,950**	**5,930**	**18,340**	**18,190**	**36,530**	**77%**	**84%**	**85%**	**95%**	**100%**	**97%**
Areas Outside Urban Growth Boundaries	Local Shopping Centre	-	-	40	40	-	40	-	-	100%	100%	-	100%
	Low Density Residential	50	50	-	50	-	50	100%	100%	-	100%	-	100%
	Township (Operative)	300	300	-	300	380	680	97%	97%	-	97%	100%	99%
TOTAL		**11,550**	**14,300**	**5,970**	**18,730**	**18,570**	**37,300**	**78%**	**85%**	**85%**	**95%**	**100%**	**97%**

Long-Term (to 2046) Commercially Feasible Capacity for Additional Dwellings by Zone (Including Redevelopment)

Urban Growth Boundary Area	Zone	Commercially Feasible Capacity Subdivision and Redevelopment			Max Infill	Greenfields	Total Max
		Standalone	Duplex	Apartments			
Arrowtown	Arrowtown Residential Historic Management Zone	30	30	-	30	-	30
Arrowtown	Local Shopping Centre	-	-	-	-	-	-
Arrowtown	Low Density Residential	140	130	-	140	-	140
Arrowtown	Medium Density Residential	10	10	-	10	-	10
Arrowtown	Special Zone/Structure Plan Area	-	-	-	-	60	60
Arthurs Point	Low Density Residential	600	580	-	600	110	710
Arthurs Point	Rural Visitor	-	-	520	650	-	650
Hawea Locality	Local Shopping Centre	-	-	40	40	-	40
Hawea Locality	Township (Operative)	230	230	-	240	330	570
Jacks Point	Low Density Residential	-	-	-	-	-	-
Jacks Point	Special Zone/Structure Plan Area	-	-	-	-	3,700	3,700
Luggate Locality	Township (Operative)	60	60	-	60	50	110
Other Areas	High Density Residential	-	-	-	-	-	-
Other Areas	Low Density Residential	50	50	-	50	-	50
Other Areas	Rural Visitor	-	-	-	-	-	-
Other Areas	Township (Operative)	-	-	-	-	-	-
Queenstown Central and West	Business Mixed Use	-	-	750	470	-	470
Queenstown Central and West	High Density Residential	-	2,130	1,840	2,150	-	2,150
Queenstown Central and West	High Density Residential (Operative)	-	300	240	300	-	300
Queenstown Central and West	Medium Density Residential	20	20	-	20	-	20
Queenstown Central and West	Special Zone/Structure Plan Area	-	-	-	-	-	-
Queenstown Central and West	Town Centre	-	-	110	280	-	280
Queenstown East	High Density Residential	-	1,610	1,420	1,650	110	1,760
Queenstown East	Local Shopping Centre	-	-	20	20	-	20
Queenstown East	Low Density Residential	3,610	3,280	-	3,670	2,790	6,460
Queenstown East	Medium Density Residential	230	200	-	250	-	250
Queenstown Far East	Local Shopping Centre	-	-	160	160	-	160
Queenstown Far East	Low Density Residential	1,490	1,210	-	1,560	360	1,920
Queenstown Far East	Medium Density Residential	-	-	-	10	330	340
Queenstown Far East	Special Zone/Structure Plan Area	-	-	-	-	5,260	5,260
Wanaka	Business Mixed Use	-	-	240	300	-	300
Wanaka	High Density Residential	-	270	260	270	-	270
Wanaka	Large Lot Residential	260	250	-	260	10	270
Wanaka	Local Shopping Centre	-	-	330	540	-	540
Wanaka	Low Density Residential	4,390	3,550	-	4,450	2,280	6,730
Wanaka	Medium Density Residential	290	260	-	290	-	290
Wanaka	PC 46 Wanaka	-	-	-	-	-	-
Wanaka	Special Zone/Structure Plan Area	-	-	-	-	2,790	2,790
Wanaka	Town Centre	-	-	40	150	-	150
Wanaka	Township (Operative)	130	130	-	120	10	130
TOTAL	**TOTAL**	**11,520**	**14,270**	**5,970**	**18,710**	**18,590**	**37,300**

Appendix 15 – Evaluation Criteria Index

The following table identifies the section(s) of this HDCA that are relevant to each of the criteria identified in the MBIE Evaluation Sheet (DRAFT, November 2017). It is included as a check list for M.E and Council and to assist with MBIE's evaluation.

Content	
The assessment produces a rigorous estimate of **aggregate demand for homes** in the short, medium and long term.	
Have all contributions to total housing demand relevant to the urban market been considered? *For example, population demographics, household projections, visitors, migrant workers (there for 1 year or less), students (there for the academic year)*	Section 3 Note, students are less relevant to QLD. Further work on understanding seasonal workers is identified as a gap in this HDCA and an area for further work.
Is the basis of the demand assessment the 2017 Statistics New Zealand medium household growth projection? If not, is any alternative projection justified?	Section 1.5.2, section 3.2, section 3.3.1, section 3.3.2, section 3.5.2, section 4, section 6.3 and section 6.4.
Does the assessment use rigorous methods to explore the range of demands for types, locations and price points to the extent relevant in the urban market? *For example, (if relevant) the assessment matches demands of different population groups to housing types, locations and price points and forecasts the impact of demographic change; it also considers current unmet or latent demand if relevant to the urban market.*	Section 4 Section 4
Does the assessment produce an estimated number of dwellings required in the short, medium and long term for the area (broken down by associated districts if relevant)? *Does the assessment provide estimates either side of the main projection, with discussion of the key drivers of these estimates?*	Section 3.3 Section 3.4 Section 4 Section 6.3 Section 6.4
The assessment produces a rigorous estimate of the **feasible development capacity for housing** provided for by current plans and development infrastructure.	
Does the assessment reasonably quantify all housing development capacity enabled by relevant proposed and operative RPSs, regional plans and district plans, and is the assessment clear about what enabled capacity is also supported by development infrastructure?	Section 5.1 Section 5.3 Appendix 9 Section 5.2.4 Section 5.2.5 Section 2.4.1 Section 7.2.1

Has a robust assessment of development feasibility been undertaken? *Are the methods and assumptions used in this assessment clear?* *Are key assumptions about construction costs, land prices, target profits and cost of capital up to date?* *Has the local property community been asked for input?*	Section 5.2 Section 5.4 Section 5.5 Appendix 11 Appendix 11 Section 1.6 Appendix 2 Appendix 11
Does the assessment of development feasibility include sensitivity analysis of relevant key assumptions? *Does the assessment describe the range of feasible development capacity that is possible if there are changes to assumptions on:* • *Development sale price* • *Land cost* • *Construction cost (for building development)* • *Land development cost* • *Development timeframes, and/or* • *Minimum gross profit required in order for a development to be considered feasible*	Refer Appendix 9 for details on assumptions in the feasibility model and Section 5.5 (scenario modelling) and 5.5.5. Section 7.2
Does the assessment provide information about take-up of feasible development capacity? *Using quantitative info (e.g. building consents and code compliance certificates), and qualitative analysis (e.g. discussions with development community).*	Section 5.6
Is there a clear conclusion on whether development capacity for housing is sufficient? *Discusses what the rural-urban land price differential suggests about current sufficiency. Aggregate demand + margin compared to estimated feasible and plan-enabled DC. Is there an estimate of the no. dwellings over/under?* *Where relevant to the urban market, is there discussion of sufficiency to meet demand by dwelling, type, location and price?* *Sensitivity analysis based on changes in key drivers of demand and capacity?*	Section 6 Section 6.5 Section 6 Section 6.3 Section 6.4
Does the assessment analyse the contributing factors to any shortfall in sufficiency? *I.e. how do different factors (enablement in plans, development infrastructure or feasibility) contribute to a shortfall in sufficiency?*	Section 3.1 Section 6.5 Section 6.6
The assessment considers interactions between housing and business activities and their impact on each other	
Does the assessment consider the interactions between	Section 5.1.4

business and housing capacity? *Does the assessment ensure that capacity is not double counted or under- or over-estimated?* *Does it consider the positive and negative spatial interactions between housing and business capacity, and impacts on accessibility and transport?* *Does it analyse barriers and opportunities for development and change?*	Appendix 7 and 8 Section 5.1 Indirectly Discussed throughout, particularly Section 3, 4 and 6
The assessment explicitly uses market and price efficiency indicators	
Are results from the quarterly monitoring of market indicators reflected in the assessment and are they consistent with the final assessments of housing and business land sufficiency?	Section 6.6.1
Does the assessment include consideration of price efficiency indicators as a package and an analysis of what these suggest about the sufficiency of supply and location of development capacity?	Section 6.6.2- 6.6.5
Communication	
Clarity *Is the capacity assessment easy to read and understand?* *Does it use appropriate headings, plain English, exec summary and visuals or spatial information where appropriate?* *Is it of a readable length?*	Yes Yes
Narrative *Does the assessment provide a clear narrative about the urban markets for housing and business space and their interaction with land use planning?* *Is the analysis of the indicators clearly grounded in the local context?* *Is it an appropriate level of detail for the local authority in question?*	Yes Yes Yes
Usefulness to decision-makers *Will the assessment inform targets, plan changes and future development strategies (where relevant), and long term plans?* *Does it draw clear conclusions on the 'so what' and next steps (possibly through a recommendations section)?* *Does it link the HBA to other key responsive planning requirements under the NPS-UDC?* *Does it contain the key information necessary for further decisions?* *Are key risks and timing issues highlighted?*	Yes Section 7 Yes Yes Yes, see also section 5.5.5
Process	
Agreement between the relevant councils on the	Section 2.2

geographic area of focus for the assessment *Is this clearly delineated and does it have some logical basis e.g. the functional market, coordination arrangements, the application of planning decisions?*	
Local expertise sought and used *Is there evidence that the input of iwi authorities, the property development sector, significant land owners, social housing providers, requiring authorities, and the providers of development infrastructure and other infrastructure has been sought and used?*	Section 1.6 Appendix 2 Appendix 11
Transparency *Are the methodology and assumptions clear, even when work has been procured?* *If there is a disclosure statement, does this detail key gaps, strengths and weaknesses?* *Are options for filling these gaps explored?* *Has consideration been given to releasing the report to the public?*	Yes Section 7.3 and 7.4 Partially Yes (when finalised)

Acronyms

The following acronyms can be found in this report:

- BDCA – Business Development Capacity Assessment
- BMU – Business Mixed Use
- COD – Central Otago District
- CODC – Central Otago District Council
- FDS – Future Development Strategy
- GFA – Gross Floor Area
- GIS – Geographic Information Systems
- HA – Hectare
- HASHAA – Housing Accords and Special Housing Areas Act 2013
- HDCA – Housing Development Capacity Assessment
- HIF – Housing Infrastructure Fund
- LDR – Low Density Residential
- LINZ – Land Information New Zealand
- LTP – Long Term Plan
- MBIE – Ministry for Business, Innovation and Employment
- MDR – Medium Density Residential
- MfE – Ministry for the Environment
- M.E – Market Economics Limited
- NPS-UDC – National Policy Statement – Urban Development Capacity
- NZTA – New Zealand Transport Agency
- ODP – Operative District Plan
- ORPS – Operative Regional Policy Statement
- ONF – Outstanding Natural Feature
- ONL – Outstanding Natural Landscape
- ORC – Otago Regional Council

- PC – Plan Change
- PDP – Proposed District Plan
- QLD – Queenstown Lakes District
- QLDC – Queenstown Lakes District Council
- RMA – Resource Management Act 1991
- RPS – Regional Policy Statement
- SHA – Special Housing Area
- SNZ – Statistics New Zealand
- SQM – Square meters
- UGB – Urban Growth Boundary
- VA – Visitor Accommodation