

BEFORE THE HEARINGS PANEL
FOR THE QUEENSTOWN LAKES PROPOSED DISTRICT PLAN

UNDER the Resource Management
Act 1991 ("**the Act**")

AND

IN THE MATTER of Hearing Stream 12 –
Upper Clutha Mapping

STATEMENT OF EVIDENCE OF NATALIE DIANNE HAMPSON
ON BEHALF OF MIKE BERESFORD
DATED 4th APRIL 2017

STATEMENT OF EVIDENCE OF NATALIE HAMPSON

1. INTRODUCTION

Qualifications and experience

- 1.1 My full name is Natalie Dianne Hampson. I am an associate director at Market Economics Limited (“**M.E**”) and hold a MSc degree in Geography from Auckland University. I have 16 years’ economic consulting and project experience, working for commercial and public sector clients. I specialise in assessment of demand and markets, the form and function of urban economies and growth, policy analysis, retail and centre analysis, demographic analysis, economic impact assessment and the evaluation of economic outcomes and effects, including costs and benefits.
- 1.2 I have applied these specialties in studies throughout New Zealand, across most sectors of the economy, including the retail and service, tourism, housing, aquaculture, education, events, arts and culture, local government and marine industry sectors.

Involvement with residential growth and urban form issues

- 1.3 I have spent many years analysing and reporting on issues related to residential and tourism growth and implications for urban form and efficiency, including in the Queenstown Lakes District. Experience relevant to this evidence includes:
- (a) Development of customised growth projections of the Auckland region for the Ministry of Education and development of a model to project roll growth in individual schools to help inform the planning and provision of additional classroom capacity and new schools. This work involved working with developers in special housing areas to understand the nature and timing of dwelling growth.
 - (b) Evidence in a number of districts looking at projected growth in households and retail and service spend to assess the viability, demand and distributional effects of additional commercial centre zoned land, including for Auckland Council in the Unitary Plan hearings.
 - (c) Detailed spatial analysis of demographic, licenced outlet, hospital admission and alcohol related offence data to inform evidence on proposed Local Alcohol Policies in Dunedin and Auckland.

- (d) A number of assessments looking at demand growth for retirement living and the changing dwelling needs of an ageing population.
- (e) In the past, I have assisted in the development of regional tourism forecasts for the Ministry of Tourism.
- (f) I have completed a range assessments looking at urban form and growth issues in the Wakatipu catchment.
- (g) I have been a resident of Wanaka for over 2 years. I am also recreational mountain biker and paid member of Bike Wanaka.

Expert Witness Code of Conduct

- 1.4 I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

Purpose and scope of evidence

- 1.5 The purpose of my evidence is to provide an independent analysis of the residential land and housing market in the Wanaka area in order to assess the anticipated costs and benefits of the proposed Low Density Residential ("LDR") and Large Lot Residential ("LLR") zoning of the site known as "Sticky Forest". My evidence does not address the proposed zoning of the balance of the site. Those aspects are addressed by Mr Greenaway, Mr Field and Mr Chrystal.
- 1.6 Specifically, my evidence examines the proposed residential zonings with regard to:
- (a) The wider Strategic Direction and Urban Development context of the district as contained in the proposed District Plan ("DP") and evidence presented on those topics;
 - (b) The issues, objectives and policies, and anticipated outcomes of the LDR Zone, proposed LLR Zone and the Rural Zone as contained in the proposed DP and economic/demographic evidence presented on those topics;

- (c) The Council's proposed residential zoning for the Wanaka urban area and the implications this has on future dwelling capacity;
- (d) The National Policy Statement – Urban Development Capacity ("**NPS UDC**"); and
- (e) Current residential development patterns in and around Wanaka and in the vicinity of the site (i.e. the changing urban form of Wanaka).

1.7 To address these matters I have examined:

- (a) Change in demographic and dwelling patterns 2001-2013;
- (b) Recent residential sector supply trends 2013-2016;
- (c) The current (2016) and projected household and dwelling structure of Wanaka and surrounding areas;
- (d) Council's growth projections for the Wanaka area 2015-2031;
- (e) Council's Dwelling Capacity Model ("**DCM**") 2015-2025 (operative zones only) and preliminary estimates of capacity under the proposed zoning;
- (f) Online information on residential subdivisions currently on the market; and
- (g) The estimated dwelling capacity of the Sticky Forest site.

1.8 My statement of evidence is structured as follows:

- (a) Section 2 briefly addresses the wider residential growth context which underpins the Strategic Direction and Urban Development chapters of the proposed District Plan. I address the urban form outcomes sought for Wanaka through the proposed residential zoning and Urban Growth Boundary ("**UGB**").
- (b) Section 3 provides an analysis of past, present and projected residential and visitor demand in the Wanaka area with respect to dwellings by type. The approach and level of detail of this analysis seeks to address the evidence base requirements recommended under the NPS UDC for high growth districts;
- (c) Section 4 provides an assessment of present and projected residential dwelling capacity based on information currently available. This capacity is evaluated relative to the nature and timing

of projected demand. Consideration is given to recent development trends and the implications this may have on the uptake rate and adequacy of zoned capacity;

- (d) Section 5 provides an analysis of the dwelling capacity enabled by the proposed residential zoning for Sticky Forest and how this contributes to capacity and projected demand;
- (e) Section 6 provides commentary on the anticipated costs and benefits of the proposed residential zoning (including opportunities for economic growth and employment) relative to the notified Rural Zoning for that portion of the site. Consideration is given to the scale and significance of those effects and the certainty and sufficiency of information to inform those effects; and
- (f) Section 7 contains my conclusions on the effectiveness and efficiency of the proposed residential zoning.
- (g) A number of appendices are included to supplement the above evidence sections.

Key findings

- 1.9 This evidence is underpinned by a detailed spatial analysis of supply, demand and capacity in the Wanaka Catchment and proposed Wanaka UGB (including sub-catchments). This evidence base addresses many of the requirements outlined by the NPS UDC. I have drawn on Council figures where available.
- 1.10 Strong growth in demand for resident dwellings and holiday homes is recognised as a strategic growth issue for the District. The Wanaka urban area is growing at an above average rate. Resident population, households, occupied dwellings and the number of rental properties have all doubled or more than doubled between 2001 and 2013. This has resulted in expansion of residential land use, particularly in Albert Town, Peninsula Bay/Beacon Point, both sides of Aubrey Road and West Meadows.
- 1.11 Household growth in the Wanaka UGB is projected to increase by 117% (3,550 households) between 2016 and 2048. Council's growth projections suggest even higher potential growth. Couple, single person and 2-parent family households account for the majority of the growth. Demand for additional dwellings in the UGB is estimated at 500 in the short term, 1,750 in the medium term and 5,550 in the long term (2046) once holiday home demand is accounted for. The major share of this demand is for standalone dwellings.

- 1.12 As at 2016 and excluding LLR capacity, the Wanaka UGB has estimated capacity for an additional 5,430 standalone dwellings and 860 additional attached dwellings. The majority of standalone capacity is enabled in the Northlake Special Zone, Three Parks Special Zone and LDR zone.
- 1.13 The capacity enabled by the proposed DP allows for significant growth over and above current dwelling supply. However, there is a latent undersupply of dwellings relative to demand as at 2016. This is contributing to strong growth in house prices, rising rents, rapid uptake of newly released sections in greenfield subdivisions and decreasing housing affordability, particularly for low income households. The latent undersupply (primarily of attached dwellings) puts increasing pressure on the demand for standalone dwellings.
- 1.14 Depending on the growth scenario applied, the Wanaka UGB area may already have a shortfall of capacity for attached dwellings (if the latent undersupply is recognised), or capacity may be sufficient to cater for medium or long term growth. Standalone dwelling capacity is less sensitive to changes in scenario. In all cases, modelled demand suggests that there is not an adequate buffer of capacity to meet demand in the medium-long term. This implies that additional capacity is required to avoid a projected shortfall during this period. The updated DCM is expected to provide a more accurate estimate of remaining capacity to confirm this finding.
- 1.15 The proposed Sticky Forest residential zones make a relatively small contribution to current estimates of standalone dwelling capacity (150 dwellings). These zone areas will benefit in reducing the projected shortfall in the medium-long term. The location is neither isolated nor disconnected in urban form terms. Accessibility to services and schools is relatively good. The dwelling type enabled by the zones aligns with projected demand and the locality (along the Aubrey Road axis) is one in which there has been a strong market preference by resident households.
- 1.16 The scale of economic and social costs and benefits anticipated from the LDR and LLR zoning (in place of Rural zoning on that portion of the site) are generally small in scale due to the limited dwelling yield proposed. Notwithstanding the cumulative effect on local traffic and infrastructure (which I have not assessed) the costs of creating a minor increase in the existing oversupply of capacity in the medium term is not considered to outweigh the benefits of creating greater choice, increasing competition and avoiding a potential undersupply of dwelling capacity in the long term. The submission is also unique in that the residential zoning forms part of a

package that would deliver significant recreational benefits to the Wanaka community.

- 1.17 Overall, I consider that the proposed zoning better enhances economic and social wellbeing. It maximises the efficient use of the land while giving effect to the strategic objectives of the DP.

2. **WIDER GROWTH CONTEXT AND STATUTORY FRAMEWORK**

- 2.1 My focus in this section is on the evidence underpinning the rationale of the various components of the strategic level policy framework that seek to manage the adverse effects of growth and development in the Queenstown Lakes District ("**the District**").
- 2.2 In doing so, the purpose of my evidence is not to contest matters already heard by the Hearings Panel¹. Rather, my purpose is to draw together the relevant evidence² from higher order topics to set an established baseline for testing the costs and benefits of including a portion of the site in the LDR and LLR zones (and inside the Wanaka UGB). That is, to frame my analysis within the context of Council's own figures.

Strategic Direction

- 2.3 I have read the s32 and s42 reports for the proposed Strategic Direction and Urban Development chapters and associated evidence. Goal/Issue 2, 3 and 6 and associated objectives of the Strategic Direction chapter provide relevant context for the proposed re-zoning. The proposed Urban Development chapter articulates a policy framework for Goal 2 of the Strategic Direction chapter (the strategic and integrated management of urban growth).
- 2.4 Queenstown Lakes District is one of the fastest growing areas in New Zealand. In the past, projections have tended to underestimate growth rates and even high growth scenarios have been quickly superseded. Council's current growth projections (2014) now take account of the significant influence and interaction of the tourism sector and in-migration on the residential market.

¹ I have not carried out a critique of Council projections, analysis or research. I have adopted them for the purpose of my evidence.

² For the purpose of this evidence, I have focussed on the evidence presented by Council (including s32 and s42 reports and rights of reply) and have not examined any opposing evidence of submitters on higher order topics.

- 2.5 The average rate of population growth between 2015 and 2031 is currently projected³ at 3.4% per annum, representing a possible increase in population to 55,000 by 2031. Demand for new dwellings will be strong. Growth may be higher still if tourism continues to grow at a high rate⁴.
- 2.6 Issue 4 of the Urban Development chapter addresses the importance of a compact urban form. It states that significant growth rates result in ongoing pressure for the supply of greenfield land at the periphery of urban areas. The costs of this are identified as “fragmented and disconnected settlements” and a “lack of coordinated growth management” (page 12, s32 UD). There are many recent examples of greenfield residential developments that have occurred in and around Queenstown, Arrowtown and Wanaka. Not all developments have resulted in fragmented and disconnected settlements – some have been adjoining existing residential land and have resulted in a cohesive expansion of the urban area.
- 2.7 Key considerations/strategic issues for managing strong dwelling demand include⁵ housing affordability⁶ (particularly for first home buyers); diverse and flexible housing options (for example, housing stock suited to an ageing population and an adequate supply of rental properties); increased capacity in proximity to places of employment and service provision; the demand for holiday homes for non-residents; the demand for visitor accommodation in residential areas, housing preferences (i.e. continued high demand for detached dwellings but a portion of demand preferring attached dwellings); the protection of landscape values; maintaining relatively compact urban form; maintaining the amenity values of the countryside; and managing impacts on infrastructure.

Proposed Provisions

- 2.8 To manage the adverse effects that high growth can have on urban form outcomes and infrastructure costs the proposed DP provides stronger and clearer direction on where growth should be directed and where it should be avoided. The proposed strategic growth and urban development objectives and policies up-zone existing residential areas to achieve higher dwelling densities (changes to density of High Density Residential (“**HDR**”), LDR, Mixed Use (“**MU**”) zones and creation of Medium Density Residential (“**MDR**”) zone) and provide areas where greenfield growth is appropriate within an UGB - a two pronged and complementary approach based on the

³ Insight Economics, 2014 and EIC of Mr Colegrave, 19th February 2016).

⁴ Strategic Direction – Section 32 Report, page 7.

⁵ Addressed in the issues analysis of the Section 32 and 42 Reports – Strategic Direction.

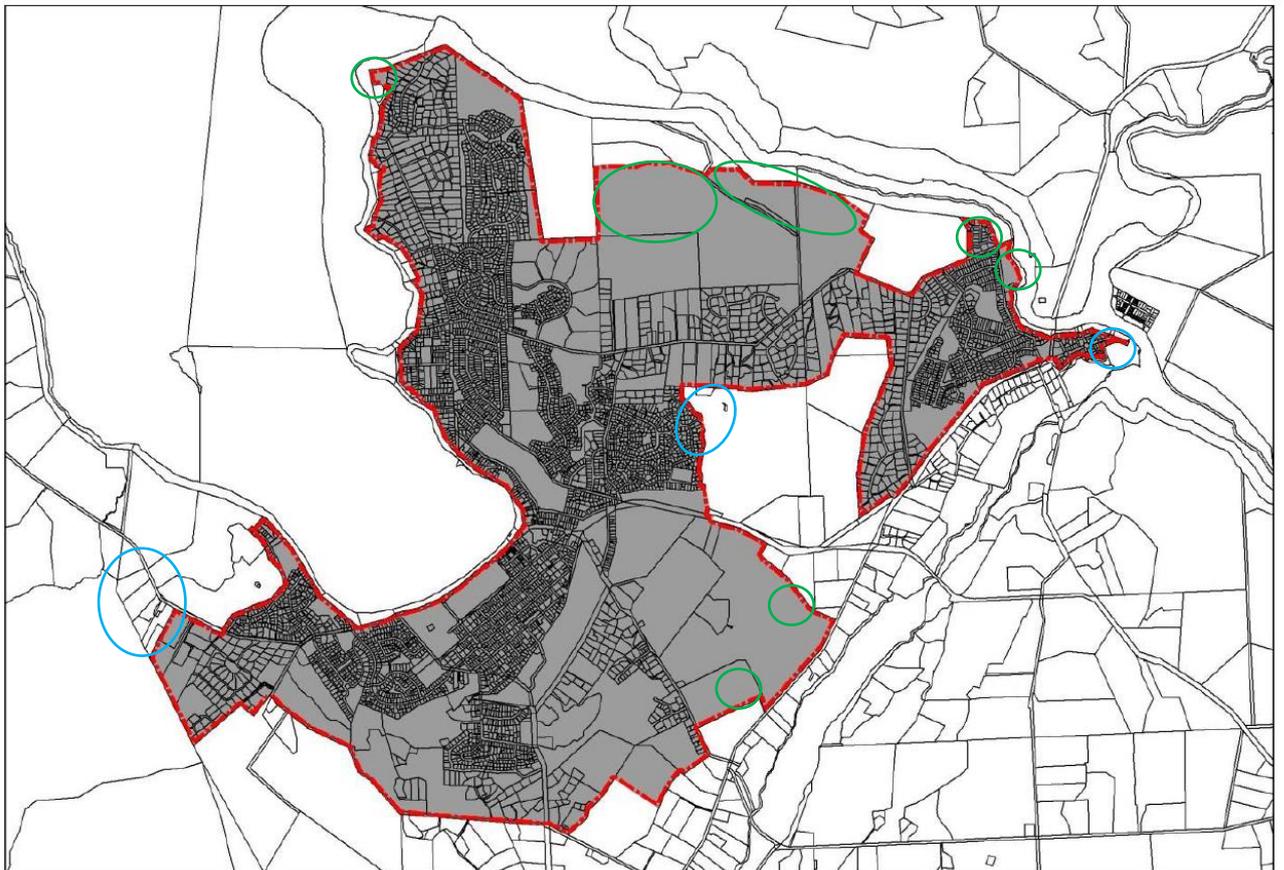
⁶ Restricting the supply of residential land and dwellings increases prices and rental costs.

principles of urban containment and that will effectively and efficiently address - based on Council's evaluation - the resource management issues identified above (para. 2.7).

2.9 With regard to the scale and location of UGBs, the Council has determined that, in conjunction with the up-zoning approach, they "provide sufficient land for future growth either through greenfield subdivision, infill housing or brownfield development" (S32 Strategic Direction, page 22). The proposed UGB also provides "some limited additional land" in addition to land zoned in the operative DP (page 11 s42).

2.10 The location of the UGB in Wanaka has been primarily informed by the Wanaka Structure Plan 2007 (inner UGB). The proposed Wanaka UGB varies slightly from the boundary determined in 2007. There are a number of locations where the area inside the boundary has been reduced (shown in the blue circles in Map 1 below) and a number of areas where the area has been increased (shown in the green circles in Map 1). The key additions of greenfield land area capture the Northlake Plan Change and two areas in the Three Parks locality.

Map 1 – Contrast between 2007 Inner UGB and Current Proposed UGB



2.12 The risk that the proposed UGB will not cater for actual growth (which is likely to result in increased housing costs and social and economic consequences) is considered by Council to be of “relatively low probability” because:

- (a) the underlying growth projections are considered to be “bullish”⁷,
- (b) the up-zoning provisions will improve brownfield and infill development feasibility, and
- (c) housing supply and costs will be monitored as a requirement of the NPS UDC (and so the boundary can be extended when needed).

3. DWELLING DEMAND

Growth and change in Wanaka 2001 – 2013

- 3.1 This section provides a high level overview of growth patterns occurring in the Wanaka urban area between the Census years of 2001, 2006 and 2013, based on Statistics NZ data and drawing on maps from M.E’s Market Meter tool.
- 3.2 Private dwelling growth in Wanaka reveals two distinct spatial patterns between 2001-06 and 2006-13 – highlighting where growth has occurred over time and Wanaka’s expanding urban form. The maps contained in Appendix A are based on private occupied dwellings, but the spatial patterns also apply for total (occupied and unoccupied) dwellings, unless discussed separately⁸.
- 3.3 Between 2001 and 2006, occupied dwelling growth was concentrated in the centre of Meadowstone (between Willowridge and Meadowstone Drive), the southern part of Kings Drive, between Matai and Totorā Drive (south of Manukau Crescent), on the eastern side of Rata Street, south of Glengyle Way (to Rob Roy Lane) and around the northern part of Mt Iron Drive. The density of occupied dwellings at the northern end of Beacon Point Road, around Lagoon Avenue in Albert Town and in other parts of Meadowstone was increasing only moderately during this period (Map A1 – Appendix A).

⁷ S32 – Strategic Direction – page 31.

⁸ Note, occupied dwellings on Census Night can include holiday home occupants present at that time. March is traditionally a shoulder season for tourism and does not generally coincide with major holidays. The portion of non-residents in occupied dwellings is considered to be small (around 5% in 2013).

- 3.4 Between 2006 and 2013, occupied dwelling growth was concentrated in new locations (many adjacent to earlier growth – representing the staged release of subdivisions in many cases). In this period, dwelling growth was occurring in the central section of Kings Drive, in a number of areas in Albert Town, north of Glengyle Way to Rob Roy Lane, and around West Meadows Drive/Niger Street. The density over much of Meadowstone continued to increase moderately, as did the density in Far Horizon Park, Bills Way, the north western end of Anderson Road and on Aubrey Road (west of Mt Iron) during these years (Map A2 – Appendix A).
- 3.5 Interestingly, as these new areas grew, several areas that had experienced density growth in the previous 5 years had started to experience a decrease in private occupied dwelling density⁹. As the number of dwellings was not declining (and dwelling demand was growing), this shows primarily a transition to unoccupied dwellings (particularly holiday/short term rental homes). Key areas experiencing a decrease in occupied dwelling density included the area west of Wanaka Primary (Beach Street/Matai Road and around Kidson Lane), the southern end of Kings Drive, along Lismore street, east of Anderson Road, and around Sargood Drive.
- 3.6 A comparison of occupied dwelling density in 2001 (Map A3 – Appendix A) with 2013 (Map A4 – Appendix A) clearly shows the significant expansion of the Wanaka urban over this time period in:
- (a) Albert Town,
 - (b) the Mount Iron Drive area,
 - (c) the Kings Drive area towards Aubrey Road,
 - (d) Beacon Point Road north of Hunter Crescent,
 - (e) Meadowstone,
 - (f) Far Horizon, and
 - (g) West Meadows.
- 3.7 In 2013, households in rented occupied private dwellings were most concentrated around Mount Iron Drive and Anderson Road, as well as the southern end of Kings Drive, Totara Avenue/Beech Street, the top of Stone Street and the eastern side of Brownston Street behind town (Map A5 –

⁹ Shown in blue on the map.

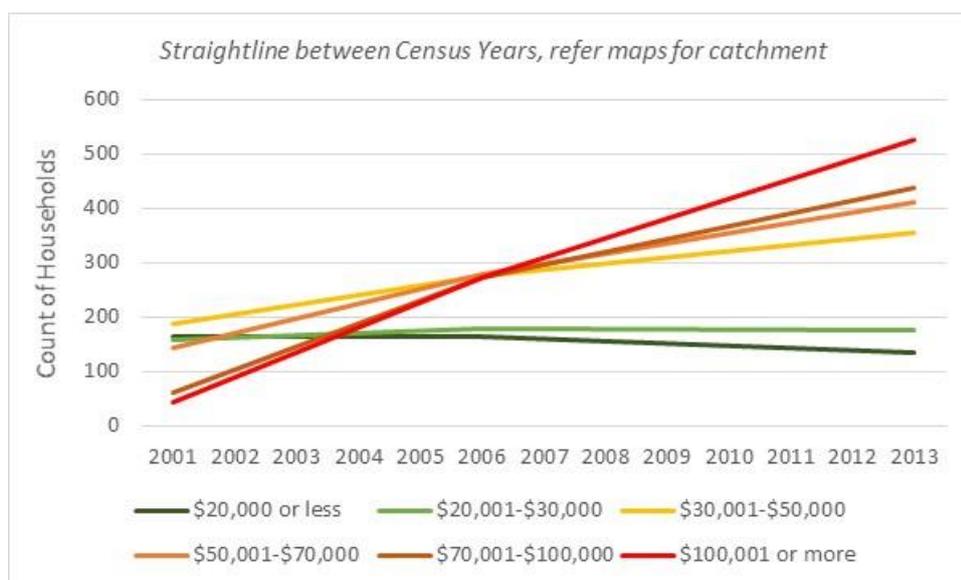
Appendix A). These areas coincide with areas of generally higher dwelling density.

3.8 Some key growth statistics for the area shown by the extent of the circle in the maps in Appendix A between 2001 and 2013 were:

- (a) Usually resident population almost doubled, increasing from 3,409 to 6,603 (growth of 3,194 or 94%, or an average of 266 per annum)
- (b) The Census Night population, which includes tourists and visitors staying in holiday homes and commercial accommodation increased from 4,500 to 8,394 (growth of 3,894 or 87%)
- (c) Occupied private dwellings almost doubled, increasing from 1,434 to 2,773 (growth of 1,339 or 93%, or an average of 112 per annum)
- (d) Households in occupied private dwellings doubled, increasing from 1,319 to 2,626 (growth of 1,307 or 99%, or an average of 109 per annum)
- (e) Households in rented dwellings more than doubled, increasing from 332 to 758 (growth of 426 or 128%, or an average of 36 per annum). Households in rental properties accounted for 25% of total households in private occupied dwellings in 2001, increasing to 29% in 2013.
- (f) The resident population aged 65+ years more than doubled, increasing from 513 to 1,075 (growth of 562 or 110%). This cohort accounted for a relatively stable share of total resident population (17-18%) over this period meaning that the rest of the population grew at an equal rate. This is contrary to the trend seen in many parts of New Zealand, where the 65+ cohort accounts for a growing share of the population. It highlights that while Wanaka has a growing 'mature/elderly' population, there has been strong growth in the young family and couple age group.
- (g) The number of standalone dwellings more than doubled, increasing from 1,016 to 2,283 (growth of 1,267 or 125%, or an average of 106 per annum).
- (h) The number of joined dwellings, units or apartments increased from 162 to 305 (growth of 143 or 88%, or an average of 12 per annum).

- (i) The number and share of low income households living in the Wanaka urban area has declined significantly (households with a combined income of less than \$30,000 per annum has reduced from a 43% share to a 15% share). Conversely, high income earners now dominate the resident household community (households with a combined income of \$100,000 or more have increased from a 6% share to a 26% share) (Graph 1). While growth in earnings is a contributing factor to these trends, the cost of living in Wanaka (especially housing costs, including rental prices) have made Wanaka less affordable for low income households generally over time. Deterring low income households has adverse effects on Wanaka's long term economic development.

Graph 1 – Total Household Income (Grouped) for Households in Private Occupied Dwellings 2001, 2006 and 2013 - Wanaka Catchment



- 3.9 In 2013, 29% of the usually resident population had been in their current dwelling for less than a year. A further 34% had been in that dwelling for 1-4 years. This is a combined total of 63% of the usually resident population who had been at their current address since 2009. A number of factors can contribute to this 'churn' in the market. Based on my local knowledge, I believe the main factors for Wanaka are likely to be in-migration¹⁰ (from outside Wanaka) and moving into new dwellings as they are built. Lesser

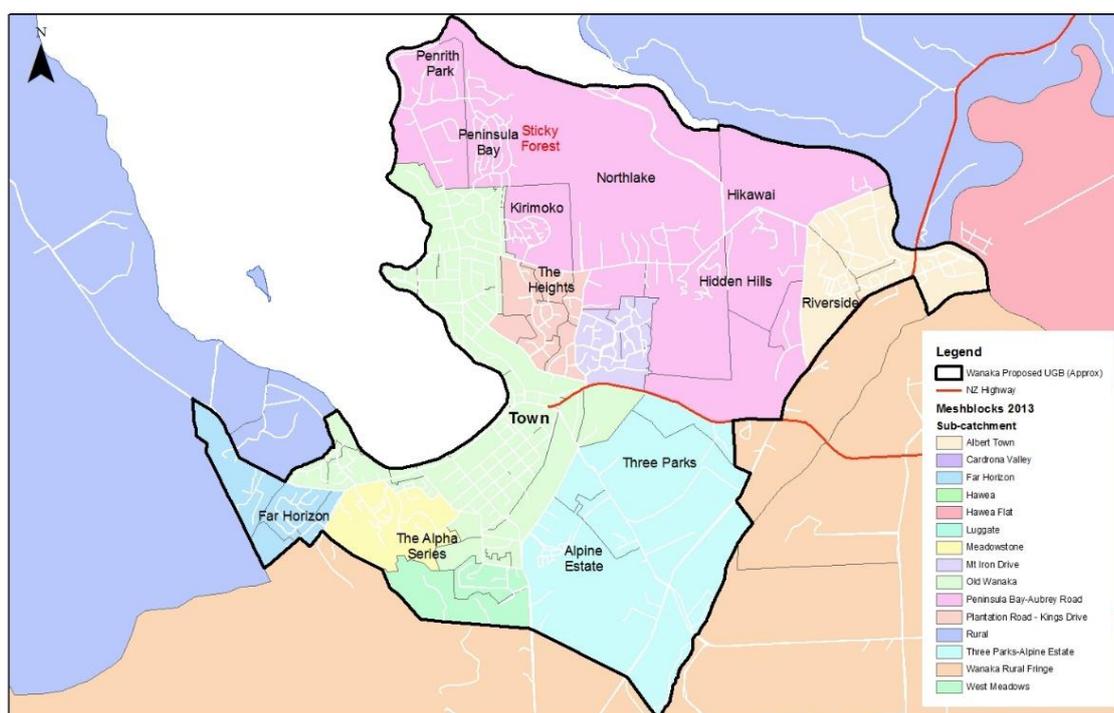
¹⁰ High in-migration for the District overall is identified by Insight Economics (Table 2) which states that in the young adult cohort (18-29 years), 75% lived elsewhere in NZ or overseas 5 years prior to the 2013 Census. Queenstown Lakes District Medium to High Density Housing Study: Stage 1, 2014.

contributing factors are likely to be buying and selling existing homes within the area (shifting house) and moving between rental properties in the area.

Analysis using a spatial framework for the Wanaka Catchment

3.10 To assist with the reporting of data analysis from this point forward in my statement – as distinct from the more simple circular catchment used for the summary above – I have developed a spatial framework based on aggregations of meshblocks within the Wanaka Catchment¹¹. A group of these sub-catchments approximate the area within the proposed Wanaka UGB, although due to meshblock boundaries they do include some small pockets of Rural and Rural Residential zoned land that is outside the proposed UGB (Map 2)¹². Outside the UGB, there are a number of sub-catchments covering the smaller settlements and their rural surrounds (refer wider scale map in Appendix B).

Map 2 – Spatial Framework – Wanaka Urban Area Sub-catchments (with recent and current residential developments labelled)



Wanaka Catchment - Spatial Framework (Urban Area)

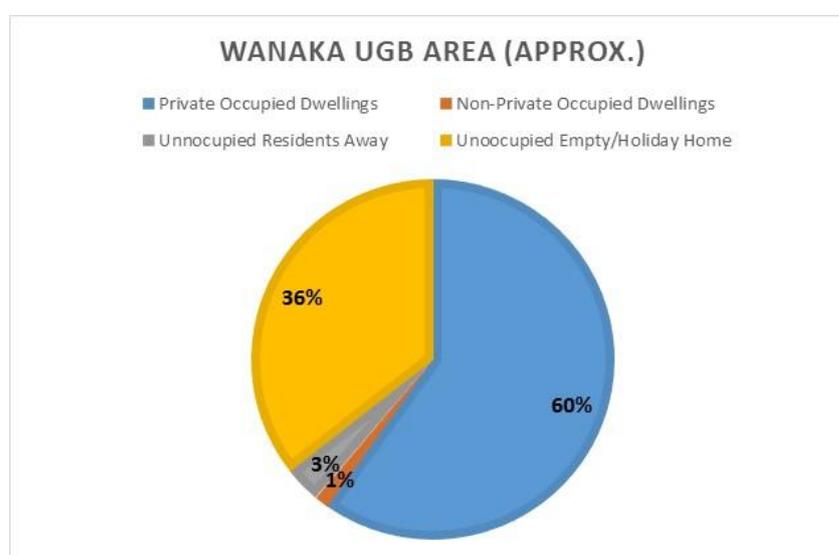
3.11 In 2013, an estimated 35% of total dwellings inside the approximate **proposed UGB** were unoccupied and 'empty'. 'Empty' is defined by

¹¹ Comprises the CAUs of Wanaka, Matukituki and Hawea. Also referred to as the Upper Clutha Area by Mr Barr (s42 report – rezoning).

¹² Exact replication of the proposed UGB is not possible using 2013 meshblock boundaries.

Statistics NZ as having no current occupants and new occupants were not expected to move in on, or before, census night. Unoccupied dwellings that are being repaired or renovated, and unoccupied baches or holiday homes are also considered 'Empty' (Graph 2). A share of 35% is considered to be slightly conservative as a portion of holiday homes (which are private dwellings) may have been occupied on Census night. Excluding non-private occupied dwellings and dwellings under construction, 'Empty' unoccupied dwellings account for 36% of total dwellings in the Wanaka UGB. Again, this may be slightly conservative. I draw on this percentage later in Section 3.

Graph 2 – Mix of Occupied and Unoccupied Dwellings in Wanaka UGB (2013 CN)



3.12 Appendix C provides a breakdown of occupied and unoccupied dwellings by location in the Wanaka Catchment. An estimated 80% of all empty unoccupied dwellings (mainly holiday homes) in the Wanaka Catchment are located in the proposed Wanaka UGB. A significant 43% are located in 'Old Wanaka' being the older, more established parts of the town and include areas closest to the town centre¹³. Within this sub-catchment, empty occupied dwellings account for 42% of dwellings, a share matched only by Meadowstone. The share in the Cardrona Valley is higher still on 43%, reflecting the units developed to cater for visitors using the Cardrona Ski Field.

Recent Growth and Change in Wanaka Residential Supply 2013 - 16

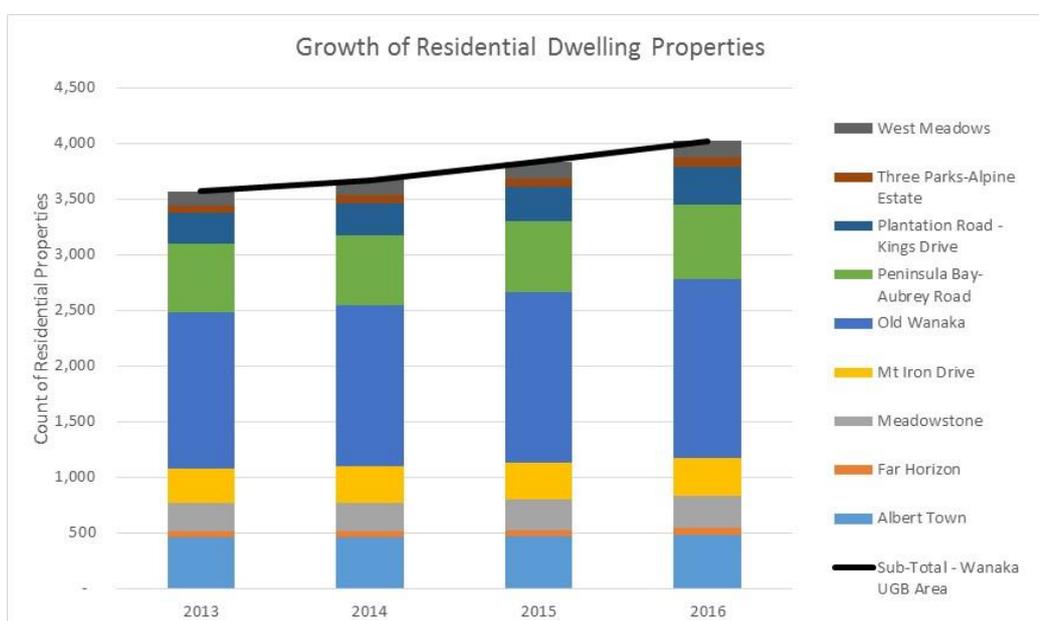
3.13 This section examines more **recent** trends in Wanaka's residential land and housing market. It draws on data purchased for the purpose of this evidence from CoreLogic for the calendar years' 2013 to 2016. While Census data up

¹³ Refer Map 7 and Appendix B to see the extent of sub-catchments described in Appendix C.

to 2013 is useful for identifying long term trends and the direction of change, the rapid changes in Wanaka make recent data a more reliable context against which trends can be considered (particularly in the short term future). This dataset also allows us to understand the residential housing market in more detail (including in a manner more aligned with the NPS UDC). The spatial extent of the CoreLogic dataset is the wider Wanaka Catchment. I have summarised the data by the spatial framework described above.

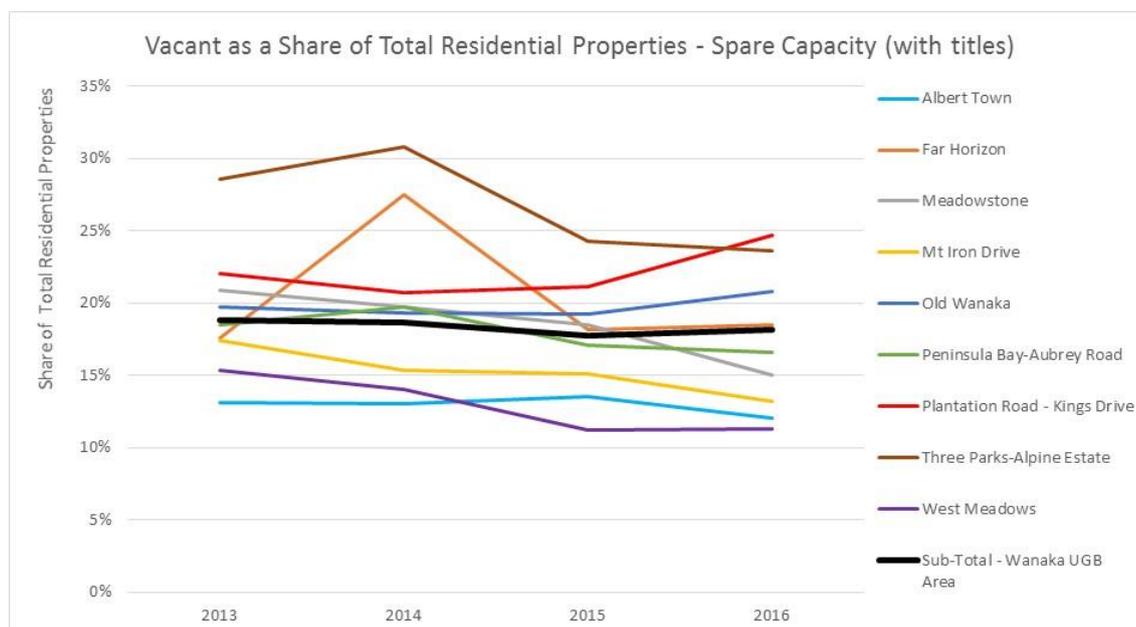
- 3.14 This data contains property level information akin to the rating database held by Council. A snap shot is provided in July for 2013 through to 2016. The data supplied contains information of property category, meshblock location, land area, building area, capital/land/improvement value (latest revision at time of snap shot), building age and number of bedrooms. The scope of the dataset is limited to residential and lifestyle properties. Additional tables are provided in Appendix D.
- 3.15 Graph 3 shows that since 2013, the count of developed residential properties (which includes dwellings, flats, and apartments) in the Wanaka UGB boundary increased by 452 or an average of 113 per annum. 'Old Wanaka' accounts for 29% of total residential dwellings in 2016 but accounted for 46% of UGB area growth in residential dwellings during 2013-2016. 'Plantation Road – Kings Drive' accounted for 6% of residential dwellings but 13% of growth and 'Peninsula Bay – Aubrey Road' accounted for 12% of dwellings and 12% of growth. This highlights where the major share of construction activity has been focussed in the last few years.

Graph 3 – Growth in Residential Dwelling (Built) Properties by Sub-Catchment 2013-16 Within Wanaka UGB Area



- 3.17 Table 2 of Appendix D shows the change in lifestyle properties since 2013. In the Wanaka UGB, lifestyle dwellings increased from 374 to 398 (growth of 24 or 6 per annum). 'Old Wanaka' accounts for 26% of total lifestyle dwellings in 2016 but accounted for 71% of UGB area growth in lifestyle dwellings between 2013 and 2016. 'Plantation Road – Kings Drive' accounted for 8% of lifestyle dwellings but 13% of growth and 'Meadowstone' accounted for 5% of dwellings in this category and 17% of growth.
- 3.18 Vacant or bare block residential properties have increased from 825 in 2013 to 893 in 2016 in the UGB. During this time, vacant residential properties have been developed (converting to residential dwelling properties). The net growth in vacant sections is 68 or an average net increase of 17 per annum. This means that residential sections are being created slightly faster than they are being consumed which is important in order to maintain a margin of feasible capacity. Vacant Lifestyle properties also show a net positive increase in the UGB, changing from a count of 163 in 2013 to 179 in 2016 (net growth of 16 or an average net increase of 4 per annum).
- 3.19 Graph 4 below and Table 3 of Appendix D shows how the supply of residential vacant sections as a share of total residential properties has changed by sub-catchment within the UGB. The margin of vacant residential sections has on average remained steady at around 18-19% for the area as a whole but this varies considerably by location. I note that 18-19% is slightly below the suggested margin for feasible capacity in the NPS UDC albeit that the NPS talks about a margin relative to demand, not supply as expressed here.
- 3.20 Low and declining margins are an indication of sub-catchments becoming fully occupied (mature). 'Mount Iron Drive' is a good example of that, as is 'Albert Town' and 'West Meadows'. Low margins may also indicate that there is a high level of demand for that location. A declining rate may be an indicator that a new stage is about to be receive titles, especially in areas where are bare blocks already zoned residential such as in 'Meadowstone'. Areas with high or increasing margins can indicate areas with new subdivisions consented (and titled) or new stages recently released. It can also be a sign of a competitive supply market (multiple land owners bringing sites to the market at the same time) and/or slow uptake of demand in that location.

Graph 4 – Vacant Residential as a Share of Total Residential Properties by Sub-Catchment 2013-16 Within Wanaka UGB Area



- 3.21 In growth areas where capacity is released in stages, the trends can show sudden changes and so care must be taken with this short time series. As at 2016, the areas with the highest margins (not quantum) of vacant capacity were 'Plantation Road – Kings Drive', 'Three Parks' and 'Old Wanaka'. In the 'Peninsula Bay – Aubrey Road' sub-catchment (where the proposed residential zoning is located), the margin of capacity has been as high as 20% but is currently on 17%.
- 3.22 I have also used this property database to examine the current profile of residential standalone dwelling properties (being the proposed dwelling type for the Sticky Forest site) by sub-catchment (Appendix D – Graphs 1-4). These profiles help identify the nature of past demand and supply for housing in specific locations. In the 'Peninsula Bay – Aubrey Road' sub-catchment, the supply of dwellings represents the following trends:
- The majority of current standalone dwellings were built between 2001 and 2010 (37%). The period from 2011 to present accounts for 15% of dwellings built – a below average share compared to the UGB.
 - The majority of current standalone dwellings are 3 bedroom (51%) followed by 4 bedroom homes (31%). This sub-catchment has an above average share of 3 bedroom homes (relative to the average for the UGB area) and a slightly below average share of 2, 4 and 5 bedroom dwellings.

- (c) The majority of standalone dwelling properties have a land area of 801-900 sqm (24%), followed by 1,001-1,100 sqm (13%) and 701-800 sqm (11%). The mix of property sizes is of course a function of the underlying zoning but as much of the area has been developed via private plan changes, the section sizes have strongly determined by anticipated market demand. This sub-catchment has an above average share of 801-900 sqm sections and sections sized between 1,101-2,000sqm (although these account for smaller shares of the total).
- (d) The majority of standalone dwellings have a registered capital value (last revised district-wide in July 2014) of \$450-550,000 (14%) followed by \$400-450,000 (13%) and roughly similar shares of dwellings in the \$350-400,000 and \$550-600,000 category. I note, this is not a reflection of market value in 2016 (which is considerably higher). The share of dwellings in each of these categories is above average for the urban area.

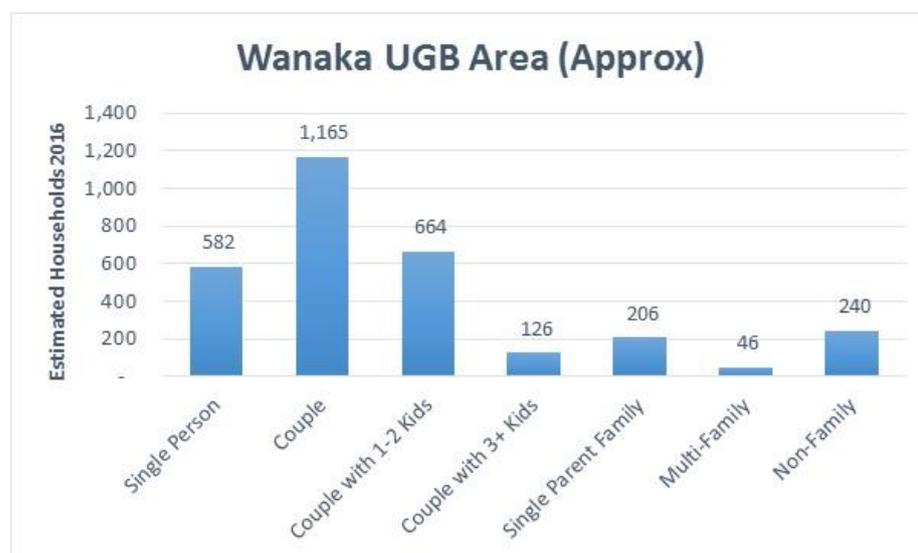
Current and Projected Household Structure (2016-2048)

- 3.23 This section examines the current and projected structure of households in the Wanaka Catchment. In accordance to the draft NPS UDC guidelines¹⁴ I have selected a High Growth projection and provided detail on the structure of households by family type, income and age of household reference person as these characteristics influence the type of dwellings required to meet demand. The data is originally sourced from Statistics NZ (customised request based on latest projections available). M.E has applied a number of best practice approaches to project households by 210 typologies at a meshblock level (the final output is a proprietary dataset).
- 3.24 Appendix E provides a breakdown of 2016 households in the Wanaka Catchment by sub-catchment location and summary characteristics¹⁵.
- 3.25 In the proposed Wanaka UGB (approximate area), there is an estimated 3,030 households (2016). The main household type is Couples (38% or 1,165), followed by 2-Parent Families (1-2 kids) (22% or 664) and Single Person households (19% or 582) (Graph 5).

¹⁴ MFE, dated 24th March 2017. Accessed by M.E due to Peer Review role.

¹⁵ This analysis is more up-to-date and has a more detailed geographic breakdown than contained in the the Council's referenced report (Insight Economics, 2014) which is limited to the Wanaka Catchment (Ward) as a whole, or the total District.

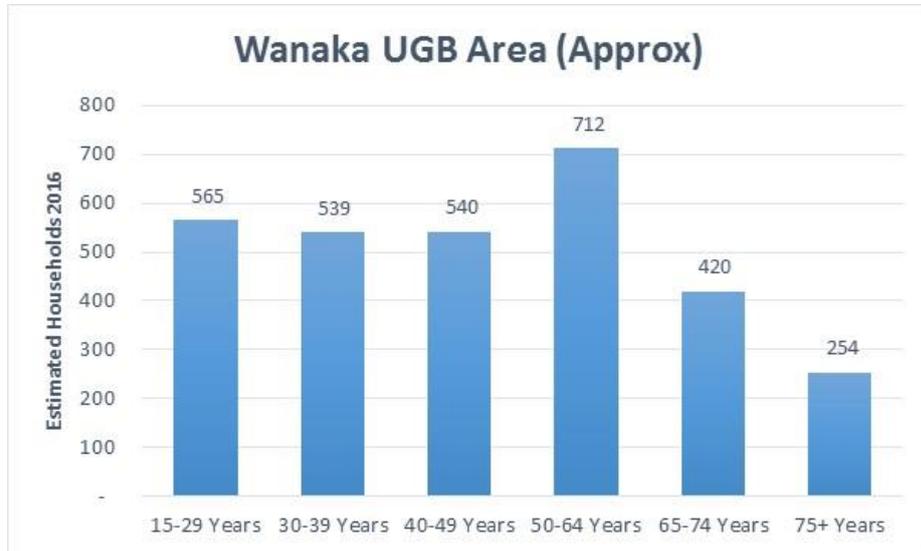
Graph 5 – Households by Family Type in Wanaka UGB 2016



- 3.26 Across the Wanaka Catchment, the number and mix of household types varies by location (Appendix E). The Wanaka UGB area accounts for 71% of total Catchment households. 'Old Wanaka' accounts for 27% (at 1,162 households) and 'Albert Town' 9% (at 404 households). 'Hawea' has the same number of households as 'Albert Town' currently, but a different mix (with significantly more single person households and less family households relative to 'Albert Town').
- 3.27 Proportionally, 'West Meadows' has the highest share of households in the Couple category (46%), Hawea has the highest share of households in the Single Person Category (29%), Hawea Flat has the highest share of households in the 2-Parent Family (1-2 kids) category (35%), the Cardona Valley has the highest share of households in the 2-Parent Family (3+ kids) (15%). In quantum terms however, these sub-catchments make up relatively small shares of total households in each category.
- 3.28 Graph 6 shows the breakdown of households in the proposed Wanaka UGB area by age of reference person. The main household age group is 50-54 year olds (23% or 712), followed by 15-29 year olds (19% or 565) and equal shares of 30-39 and 40-49 year olds (18% or approximately 540 respectively). Although households aged 75+ years are the smallest group in quantum terms in the UGB area, there are an above average share living inside the UGB (close to shops and services) compared with other age groups (81% inside compared to an average across all age groups of 71%). Households aged 40-49 years account for an above average share of households living outside the UGB than other household types (35%

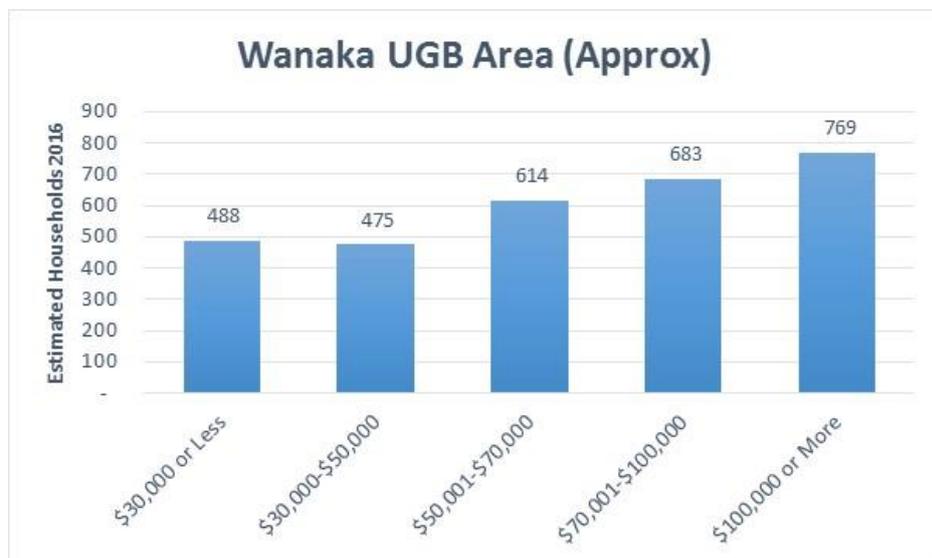
compared to an average of 29%) but are still important in quantum terms inside the UGB.

Graph 6 – Households by Age of Reference Person in Wanaka UGB 2016



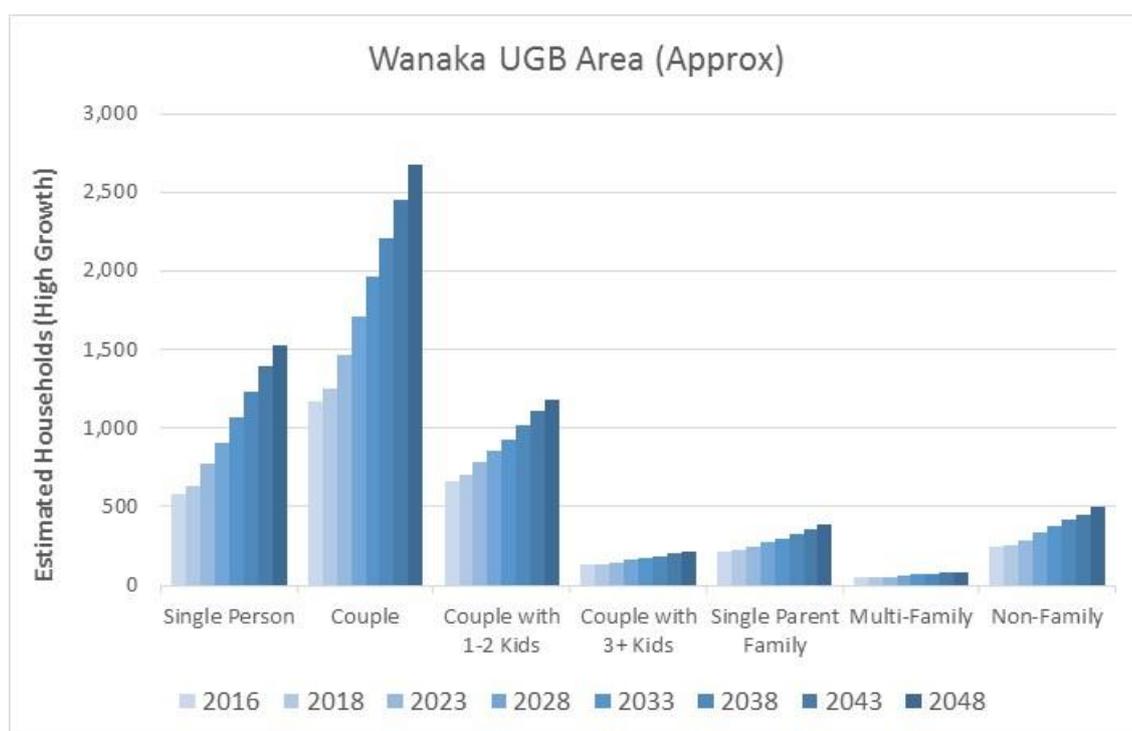
3.29 Graph 7 shows the breakdown of households in the proposed Wanaka UGB area by household income group. The main household income group is \$100,000 plus (25% or 769). Households in this income bracket are more likely to live inside the UGB with 75% of households compared to an average across all age groups of 71%. Households in the lowest income group are more likely to live outside the UGB than other household types (35% compared to an average of 29%).

Graph 7 – Households by Household Income in Wanaka UGB 2016



- 3.30 These spatial and demographic trends (Appendix E) reflect the current combination of household location preferences (e.g. central versus urban fringe, rural versus urban, flat versus elevated, west versus east, etc) **and** suitability of housing supply in different locations (lifestyle versus residential, higher cost versus lower cost, small versus large homes, etc). Often, low income households are more constrained by suitability of locations (especially affordability) and high income households are less constrained by suitability and have greater choice. As such, more low income households may prefer to be located within the Wanaka UGB than are represented in current figures.
- 3.31 M.E has examined the High growth projections by 210 household typologies in the Wanaka Catchment. Detailed tables by locality are provided in Appendix F. Graph 8 provides a summary of projected households by family type in the proposed Wanaka UGB to 2048. Based on these projections, the Wanaka UGB area could expect an additional 310 households in the short term future (by 2019), 1,060 households in the medium term future (by 2026) and 3,320 households in the long term future (by 2046). This growth in demand assumes no constraints in terms of suitable housing supply. Based on a one-to-one relationship, the projected growth in households equates to the projected demand for additional occupied dwellings. This is a high growth scenario according to Statistics NZ.

Graph 8 – High Growth Households Projections by Household Type in Wanaka UGB 2016-48



Current and Projected Dwelling Structure (2016-2048)

- 3.32 In order to translate projected household growth into demand for dwellings by type, I have generated a national matrix of households by 210 typologies¹⁶ by occupied dwelling type from the 2013 Census¹⁷. I have simplified the matrix to show the average percentage split of each household typology between standalone dwellings (separate house) and attached dwellings (being flats, units, townhouses, apartments or other joined houses)¹⁸.
- 3.33 A summary from the national matrix is included in Appendix G. It shows, for example, that single person households and non-family households (flating situations) are more likely to occupy attached dwellings relative to other family types. Similarly, families with children are more likely to occupy standalone houses relative to other family types. It also shows that as households gets older they are more likely to occupy standalone dwellings and less likely to occupy attached dwellings. More detailed patterns emerge when these three characteristics are combined.
- 3.34 I have applied the national percentage splits to the corresponding projected households by 210 typologies for the proposed Wanaka UGB area (discussed above). I have applied it for each projected year, assuming that the splits hold constant over time (i.e. that the probability of occupying a standalone dwelling relative to an attached dwelling holds true in 2046 (for example) just as it did in 2013). There are limitations to this assumption, but in the absence of better information on how housing preferences might change in future I consider it sufficient, particularly for projecting short and medium term dwelling demand growth.
- 3.35 Appendix H provides a summary of results. The raw projections of occupied dwellings (first group of columns) assume growth of attached dwellings as a result of resident household demand in all localities in the Wanaka Catchment. Given that attached dwellings are less enabled in zones outside the Wanaka urban area, I have assumed that the majority of this demand (90%¹⁹) is relocated to the Wanaka UGB area (see modified allocation in second group of columns) where there is greater enablement of attached dwelling development.

¹⁶ Combinations of family type, income and age of reference person.

¹⁷ Customised Data request by M.E.

¹⁸ This approach is referred to as the Household to Dwelling Propensity Model in the draft NPS UDC Guidelines.

¹⁹ This is slightly conservative in terms of implications for the UGB – splits between standalone and attached in the rest of the Wanaka Catchment range between 91% and 93% in 2016.

- 3.36 The final step is to add demand for holiday homes. Based on my analysis of the 2013 Census, 36% of private occupied and unoccupied dwellings combined were 'Empty – Unoccupied Dwellings' in the Wanaka UGB area²⁰, with correspondingly lower shares in the rest of the Wanaka Catchment. The Census does not contain data that helps to determine the mix of empty homes between standalone dwellings and attached dwellings, so I have assumed a pro-rata split.
- 3.37 It is not uncommon in holiday destinations influenced by high demand for resident dwellings for holiday homes to convert to resident homes and the overall share of unoccupied dwellings to decrease over time. However, acknowledging the strong projected growth in tourism nights and the likely increase in market share of holiday homes (including AirBnB) relative to other commercial accommodation²¹, I have assumed that these trends may cancel each other out. As such, I have held the 2013 shares of empty dwellings constant over the long term (Appendix H)²².
- 3.38 Results of this approach show:
- (a) An implied demand for an additional 3,880 standalone and 1,170 attached dwellings (a total of 5,050 dwellings) in 2016 in the Wanaka UGB area based on national average household-dwelling preferences. When compared to the recorded built dwellings in the property database as at July 2016²³ (supply) this highlights two key outcomes (Appendix H, Table 2).
 - (i) First, the actual 2016 count of standalone dwellings in the UGB area is approximately 4,040. Compared to implied demand, this suggests a surplus of 160 standalone dwellings. The actual 2016 count of attached dwellings in the UGB area is approximately 350 suggesting a shortfall of approximately 820 attached dwellings. This indicates that many households living in standalone dwellings at present would have occupied an attached dwelling if there was an adequate supply, or (and perhaps less likely) that households in Wanaka have different dwelling preferences to the national average. These scenarios are discussed further in Section 5.

²⁰ Discussed in my paragraph 3.11 above.

²¹ Discussed by Insight Economics 2014 and 2015.

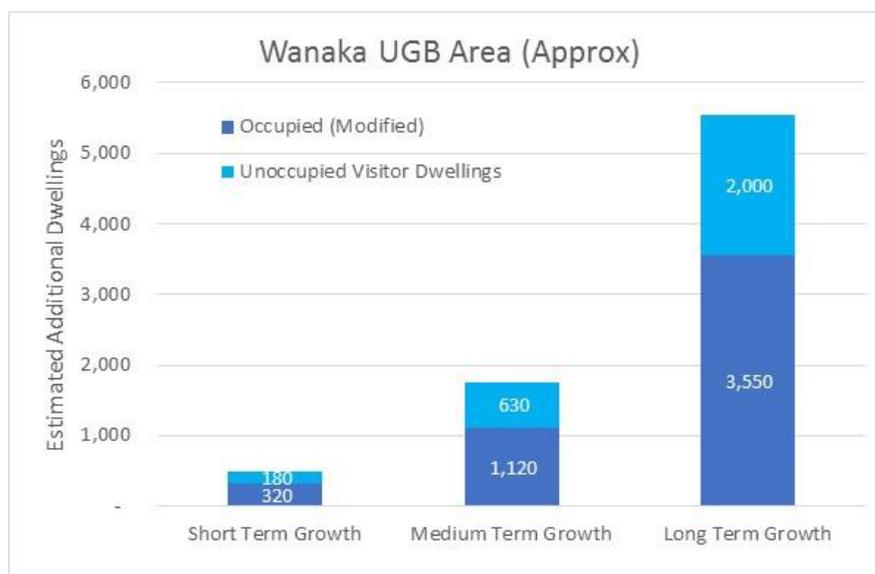
²² Appendix G describes the dwelling projections for the Wanaka UGB area under a higher scenario of unoccupied to occupied dwellings also (40% as opposed to 36%).

²³ Source: CoreLogic. Discussed earlier in Section 3.

- (ii) Second, the net shortfall of dwellings (across both types) is 660 for the UGB area. The same data on actual dwellings shows a surplus relative to implied demand in other localities in the Wanaka Catchment, but a net shortfall of approximately 420 dwellings for the Catchment overall. Mr Osborne similarly calculated a latent undersupply of dwellings for the District overall (of approximately 1,000 dwellings as at 2016)²⁴. I believe that my undersupply calculations in the Wanaka Catchment are proportional to the District undersupply calculated by Mr Osborne.
- (b) **Short term** (3 year) demand for an additional 390 standalone and 110 attached dwellings (a total of 500 dwellings or 167 per annum) in the Wanaka UGB area, and a total of 650 dwellings (217 per annum) in the Wanaka Catchment overall. This is over and above any latent undersupply.
- (c) **Medium term** (10 year) demand for an additional 1,340 standalone and 410 attached dwellings (a total of 1,750 dwellings or 175 per annum) in the Wanaka UGB area, and a total of 2,260 dwellings (226 per annum) in the Wanaka Catchment overall (over and above any latent undersupply).
- (d) **Long term** (30 year) demand for an additional 4,250 standalone and 1,300 attached dwellings (a total of 5,550 dwellings or 185 per annum) in the Wanaka UGB area, and a total of 7,190 dwellings (240 per annum) in the Wanaka Catchment overall (over and above any latent undersupply).
- 3.39 Graph 9 provides a summary just for the proposed Wanaka UGB area, showing the split by occupied and unoccupied dwellings rather than by dwelling type. It shows that in the short term, there is projected demand for 320 resident homes and 180 holiday homes (500 total by 2019). This increases to 1,120 and 630 dwellings respectively in the medium term (1,750 total by 2026) and increases to 3,550 and 2,000 respectively in the long term (5,550 total). Again, these would be over and above any latent undersupply of occupied dwellings for resident households.

²⁴ Summary of Evidence, TO6, 7th October 2016.

Graph 9 – High Growth Dwelling Demand (Occupied and Unoccupied) in Wanaka UGB 2016-46



Council's Growth Projections

- 3.40 I have read the evidence of Mr Colegrave on Topic 1b as well as his report completed in 2014 (QLD Medium to High Density Housing Study: Stage 1, Insight Economics). This report is relatively high level and discusses only a District wide population projection (to 2031) off a 2011 base. I understand these are the Council's latest and preferred projections and are referred to by Mr Paetz on a number of occasions.
- 3.41 Mr Colegrave's population projections are higher than the Statistics NZ High growth scenario. However, he confirmed in his 2016 evidence that actual population growth rates for the District (3.35% pa since 2011) have been tracking just under his projected growth rate of 3.4% pa. This suggests to me that the Statistics NZ High growth projection is a suitable lower bound and Mr Colgrave's projections are a suitable upper bound for planning purposes, as the actual growth is tracking somewhere in between.
- 3.42 Mr Colegrave's report and evidence does not contain population projections for the Wanaka Catchment (Ward). I have not found any data files that contain more detail on the growth projections. The report does state that historically, Wanaka is growing faster than the District average. There is no information reported on household or dwelling projections, other than to state "if recent trends continue, the district is likely to see a steady stream of consents for ever-larger standalone dwellings, with only moderate consents for other dwelling types" page 12.

- 3.43 In a memorandum responding to a request for further information (dated 18th March 2016), Mr Paetz clarifies that the preferred projection assumes an increase in resident population of 19,580 between 2016 and 2031 to reach 55,000. "Assuming a household occupancy rate of 2.57 persons per household, an additional 7,619 dwellings is required. Assuming around 10% of that population growth lives in rural areas, then approximately 6,857 additional dwellings will be required within urban areas including townships" page 7. I note, that this relates only to resident demand (occupied dwellings) and excludes demand for visitor based private dwellings.
- 3.44 In Mr Osborne's economic evidence for Council in Hearing Stream 6 (Residential Chapters)²⁵, he makes reference to the Council's latest growth projections²⁶ at a district-wide level. He refers to a medium growth projection whereby "the District will accommodate an additional 20,000 residents, which is an increase of 1.6% per annum or a further 8,500 dwellings. Additionally, under this scenario it is expected that a further 1,700 private residences will be utilised for visitors" (para 3.13).
- 3.45 Mr Osborne then describes a high growth projection with growth to 2045 "at 30,000 residents requiring 13,500 new homes with private visitor homes adding a further ... 2,500 dwellings. This is total demand for 10,200-16,000 additional dwellings (medium and high growth respectively) by 2045 or an average of 340-530 per annum.
- 3.46 All the information referred to above relates to total district growth. I have focussed on Wanaka Catchment growth only in my analysis (and more specifically the Wanaka UGB area), and so cannot draw any direct comparisons with these figures. In the absence of more specific information that would allow me to contrast Council dwelling projections with my own estimates specifically for the Wanaka UGB area and the rest of the Wanaka Catchment (based on Statistics NZ high growth projections and supporting analysis described in Section 3), I have relied on my dwelling projections for the reconciliation of demand and capacity in the sections below.

²⁵ Dated 14 September 2016.

²⁶ Mr Colegrave's evidence and underlying report discusses projections to 2031. In contrast, Mr Osborne's evidence refers to a 2045 horizon.

4. DWELLING CAPACITY

4.1 This section relies on the DCM 2015 and figures reported in Mr Paetz's Right of Reply Evidence (Topic 01B)²⁷. Aspects of this section are likely to be revised when the updated DCM based on the proposed zoning is provided. It is assumed that capacity reported by Council is limited to feasible development²⁸. I have not considered the potential contribution of capacity raised through submissions both inside and on the fringe of the proposed UGB given the uncertainty of these outcomes.

Operative Urban Zone Capacity (including Northlake)

4.2 The Council's DCM 2015 shows "substantial potential for housing supply exists in existing greenfield zones in the District"²⁹. The operative urban zones³⁰ (which exclude Rural Lifestyle and Rural Residential zones – of which some are located within the proposed UGB), have residual capacity for around 15,223 additional dwellings (DCM March 2015). Including the Northlake Special Zone (dwelling capacity of 1,500 dwelling)³¹, operative urban zones have capacity for an additional 16,724 dwellings.

4.3 Of this capacity, 38% (6,434 potential dwellings) is located in the Wanaka Catchment and 62% is located in the southern part of the District (the Wakatipu Catchment). A smaller portion (28% of total District dwelling capacity or 4,406 potential dwellings) is located in the urban zones contained within the proposed Wanaka UGB area. The balance of the Wanaka Catchment urban zone capacity is located in Hawea, Luggate, Cardrona and Makarora urban areas.

4.4 Capacity of 4,406 potential dwellings (2015) is not the total capacity in the proposed Wanaka UGB area as there is also capacity available in rural zones, such as Rural Residential ("RR") and Rural Lifestyle ("RL"). The current DCM aggregates locations for this rural capacity and as such, it is not possible to distinguish what capacity lies inside the proposed UGB. It is my understanding that RR inside the UGB is rezoned to LLR in the proposed DP, and this is classed as an urban zone. The updated DCM will therefore provide a more complete picture of UGB area capacity.

²⁷ In preparing this evidence, I have not managed to find a copy of the Insight Economics review of the DCM (Stage 1b report) within the documents supplied in previous hearing streams (even though it is referenced on a number of occasions).

²⁸ This is the current requirements outlined in the NPS UDC. It relates to capacity that is both economic to develop and serviced by appropriate infrastructure.

²⁹ S42 – Strategic Direction and Urban Development, page 10.

³⁰ Refer DCM – Total Urban.

³¹ Summary of evidence of Matthew Paetz T01B, 9th March 2016, para 7 and para 7.4 T01B Right of Reply (7th April 2016).

Proposed Zone Capacity within the Wanaka UGB

- 4.5 In his Right of Reply evidence, Mr Paetz estimates the additional capacity realistically enabled by the proposed zoning in the District's urban areas (paragraphs 7.14-7.29). He estimates total additional dwelling capacity of 4,973 dwellings over and above the capacity already enabled by the operative zones. This is broken down as follows:
- (a) The proposed 'up-zoning' provisions³² seek to make brownfield development more feasible. The desired development outcome is a shift from greenfield focussed development to a mix of greenfield development and some intensification³³ to reduce pressure on urban sprawl. Mr Paetz estimates that uplift in capacity as a result of changes to the High Density Residential ("HDR"), Medium Density Residential ("MDR"), Mixed Use ("MU") and LDR zones would be an additional 4,487 dwellings across the District³⁴.
 - (b) The rezoning of Rural zoned land within the UGB to LDR would add realistic capacity of 486 new dwellings across the District³⁵.
- 4.6 In total, the proposed DP increases residential dwelling capacity enabled by the Operative zones by 30%, albeit that approximately 90% of the increase will occur through intensification and 10% from rezoning rural land for urban development. Based on these figures, total additional dwelling capacity in the District's urban zones will be 21,697 under the proposed DP³⁶. As noted above, some additional capacity inside the UGB is provided in the RR (proposed LLR) zone.
- 4.7 Mr Paetz states that "this provides significant contingency relative to the population projections for 25,000 additional extra people in the District by 2031, noting further that housing in rural areas will accommodate some of that population growth. Significant contingency is required – not only because not all the capacity will be delivered, but because of the reality in this District that dwellings are often second homes, or used as 'Air B and B' type accommodation" (para. 8, TO1B evidence). Mr Paetz expressed

³² Proposed MDR and Business MU zones and changes in density/building height in HDR and LDR zones.

³³ Future monitoring under the NPS will reveal the effectiveness of these provisions in achieving the objectives of the PDP.

³⁴ Mr Paetz identifies MDR capacity on greenfield sites of 749 dwellings. One of these sites is currently RG and the other (located in Wanaka) is LDR. There is insufficient detail to determine if the stated capacity is over and above the capacity enabled by the LDR site which would be included in the operative zone capacity. Mr Paetz has treated it as net additional capacity because of the change in zone density.

³⁵ From my comparison of operative and proposed zoning maps, I believe that parcels of RG and Rural Lifestyle (Large Lot Residential) have been rezoned to LDR inside the Wanaka UGB.

³⁶ 16,724 + 4,973 = 21,697

confidence that “there is more than sufficient dwelling capacity to cater for the next 15-20 years growth” (para 9).

- 4.8 Mr Paetz’s evidence does not provide sufficient detail to accurately determine what contribution the proposed zoning makes to additional dwelling capacity in the Wanaka UGB. However, I have made the following approximations based on information that was provided (on gross area) and estimates of land area using Council’s online GIS maps:
- (a) All additional HDR capacity is attributed to Queenstown given no change in building height in Wanaka.
 - (b) 40% of MU capacity is attributed to Wanaka (Anderson Road) based on a rough estimate of size relative to Gorge Road.
 - (c) 32% of MDR greenfield capacity is attributed to Wanaka based on the approximate size of Scurr Heights.
 - (d) 47% of MDR brownfield capacity is attributed to Wanaka based on estimated zone area.
 - (e) 59% of LDR intensification is attributed to Wanaka – figures provided.
 - (f) 80% of LDR new greenfield capacity is attributed to Wanaka – based only on the statement that “relatively significant areas of greenfield land in Wanaka are proposed” (para 7.13 Paetz Right of Reply evidence T01B).
- 4.9 Based on these assumptions, the proposed zoning enables approximately 2,070 additional dwellings in the Wanaka UGB, over and above the capacity already enabled by the operative urban zones in this location (estimated at 4,406 dwellings³⁷). Of that additional capacity, 81% (1,683 potential dwellings) is enabled through intensification. However, if the Scurr Heights³⁸ MDR is treated as greenfield, this reduces the intensification share to 70% (1,442 potential dwellings) and the greenfield LDR or MDR share of growth capacity increases from 19% (389 potential dwellings) to 30% (632 potential dwellings). This mix is important as it determines the type of dwelling units created and therefore the segment of housing demand that can be satisfied at an aggregate level.

³⁷ Does not include capacity of RR or RL zones within the proposed UGB.

³⁸ The subdivision is now referred to as The Heights.

4.10 Combining the net additional capacity enabled by the proposed District Plan with the capacity enabled under the operative urban zones (and including Northlake), this suggests total approximate growth capacity of 6,480 dwellings in the Wanaka UGB to cater for future demand. This is a snap shot as at March 2015 and excludes remaining capacity in the proposed Large Lot Residential zone (Table 1).

Table 1 – Estimated Contribution of Total Dwelling Capacity in the Wanaka UGB 2015

Location	Zone Name	District Plan Status	Predominant Development Opportunity	Total Residual Capacity (Realistic) March 2015
Central Wanaka	Town Centre	Operative	Brownfield	53
Lakeside Road	High Density Residential	Operative	Brown/Greenfield Mix	49
Albert Town	Township	Operative	Greenfield	275
Three Parks	Special Zone	Operative	Greenfield	750
Northlake	Special Zone	Operative	Greenfield	1,500
North Wanaka	Low Density Residential	Operative	Greenfield	1,083
South Wanaka	Low Density Residential	Operative	Greenfield	696
Sub-Total Operative Urban Zone Capacity				4,406
North/South Wanaka	Low Density Residential	Proposed *	Infill**	760
Rezoning from Rural	Low Density Residential	Proposed *	Greenfield	389
Scurr Heights	Medium Density Residential	Proposed *	Greenfield	244
Central Wanaka	Medium Density Residential	Proposed *	Brownfield	342
Anderson Road	Mixed Use	Proposed *	Brownfield	339
Sub-Total Proposed Zone Capacity (net additional)				2,074
Total Potential Dwelling Capacity in Wanaka UGB (Excluding Rural/Large Lot Residential)				6,480

Source: 2015 DCM, QLDC Evidence, M.E

* assumed net additional to underlying operative zone capacity

** Paetz evidence in reply suggested infill without demolition of existing home.

Summary of Residential Capacity in the Wanaka UGB

4.11 Based on my estimate of additional dwelling capacity enabled within the urban zones of the Wanaka UGB under the proposed/operative DP (Table 1 above) I have categorised capacity according to zone and likely dwelling type (Table 2). The allocation assumptions are estimates only, although some are informed by a review of outline development plans associated with plan change documents. The result is that potential dwelling capacity remaining in the Wanaka UGB area may indicatively comprise of 6% apartments, 7% terrace homes, and 87% standalone dwellings. More simply, a split of 13% attached and 87% standalone dwellings.

Table 2 – Estimated Breakdown of Dwelling Capacity in the Wanaka UGB 2015

Location	Zone Name	District Plan Status	Total Residual Capacity (Realistic) March 2015	Allocation Assumptions			Allocation Results		
				Apartments	Terraced Housing/ Flats	Standalone (incl Minor Dwellings)	Apartments	Terraced Housing/ Flats	Standalone (incl Minor Dwellings)
Central Wanaka	Town Centre	Operative	53	100%	0%	0%	53	-	-
Lakeside Road	High Density Residential	Operative	49	50%	50%	0%	25	25	-
Albert Town	Township	Operative	275	0%	0%	100%	-	-	275
Three Parks	Special Zone	Operative	750	0%	20%	80%	-	150	600
Northlake	Special Zone	Operative	1,500	0%	10%	90%	-	150	1,350
North Wanaka	Low Density Residential	Operative	1,083	0%	0%	100%	-	-	1,083
South Wanaka	Low Density Residential	Operative	696	0%	0%	100%	-	-	696
Sub-Total Operative Urban Zone Capacity			4,406	2%	7%	91%	78	325	4,004
North/South Wanaka	Low Density Residential	Proposed *	760	0%	0%	100%	-	-	760
Rezoning from Rural	Low Density Residential	Proposed *	389	0%	0%	100%	-	-	389
Scurr Heights	Medium Density Residential	Proposed *	244	0%	50%	50%	-	122	122
Central Wanaka	Medium Density Residential	Proposed *	342	0%	0%	100%	-	-	342
Anderson Road	Mixed Use	Proposed *	339	100%	0%	0%	339	-	-
Sub-Total Proposed Zone Capacity (net additional)			2,074	16%	6%	78%	339	122	1,613
Total Potential Dwelling Capacity in Wanaka UGB (Excluding Rural/Larg			6,480	6%	7%	87%	417	446	5,617

Source: 2015 DCM, QLDC Evidence, M.E

* assumed net additional to underlying operative zone capacity

** Paetz evidence in reply suggested infill without demolition of existing home.

4.12 Before projected demand can be compared with potential capacity, it is important to look at what dwelling capacity has been utilised already between 2015 and 2016 – thus enabling a common starting point. Based on an analysis of existing residential buildings in the Property data supplied by CoreLogic for the Wanaka UGB, there was no change in the number of apartments or terraced housing/flats between July 2015 and July 2016. There was growth of approximately 200 standalone dwellings.

4.13 I have assumed that 185 of these dwellings were built in urban zones (predominantly development of vacant residential sites) based on the location of this growth by sub-catchment. This reduces³⁹ total potential capacity in the Wanaka UGB (urban zones) to an estimated 6,295 by 2016⁴⁰.

4.14 When remaining dwelling capacity (as at 2016) is summarised by development opportunity, greenfield growth accounts for 75% of the growth capacity and 91% of that is for standalone dwellings (Table 3). Generally, greenfield growth faces less development constraints and often proceeds sooner than brownfield development, all else being equal.

³⁹ Of the 185 estimated new dwellings, I have apportioned 6% to Albert Town, 57% to operative LDR North Wanaka and 37% to operative LDR South Wanaka (approximates only). These reduction are made to greenfield capacity.

⁴⁰ 6,480 – 185 = 6,295.

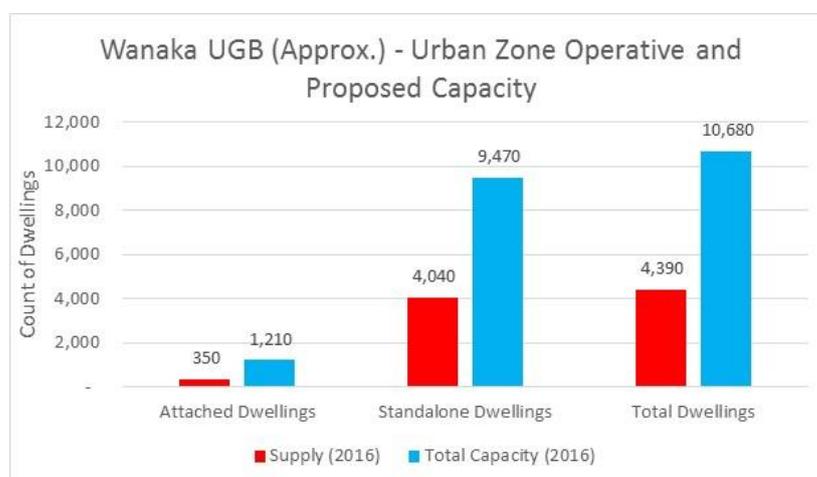
Table 3 – Summary of Dwelling Capacity in the Wanaka UGB by Development Opportunity 2016

Predominant Development Opportunity	Apartments	Terraced Housing/ Flats	Sub-Total Attached Dwellings	Standalone (incl Minor Dwellings)	Total Dwellings
Count of Potential Dwellings (Estimates Only) as at 2016					
Infill	-	-	-	760	760
Greenfield	-	422	422	4,330	4,751
Brownfield	392	-	392	342	735
Brown/Greenfield Mix	25	25	49	-	49
Total Potential Capacity	417	446	863	5,432	6,295
Share of Development Opportunity by Dwelling Type (%)					
Infill	0%	0%	0%	14%	12%
Greenfield	0%	95%	49%	80%	75%
Brownfield	94%	0%	45%	6%	12%
Brown/Greenfield Mix	6%	5%	6%	0%	1%
Total Potential Capacity	100%	100%	100%	100%	100%
Share of Dwelling Types by Development Opportunity (%)					
Infill	0%	0%	0%	100%	100%
Greenfield	0%	9%	9%	91%	100%
Brownfield	53%	0%	53%	47%	100%
Brown/Greenfield Mix	50%	50%	100%	0%	100%
Total Potential Capacity	7%	7%	14%	86%	100%

Capacity Relative to Current Supply

4.15 Graph 10 compares estimated capacity to current supply⁴¹. Total (existing and potential) capacity for attached dwellings is 246% of current supply of attached dwellings. Total capacity for standalone dwellings is 134% of current supply of standalone dwellings. The total capacity (all types) is 143% of current supply. Capacity in the RR (LLR) zone inside the UGB is additional and not included below.

Graph 10 – Comparison of Estimated Dwelling Capacity and 2016 Dwelling Supply in the Wanaka UGB



⁴¹ I have added capacity to the current count of residential dwellings in the Property dataset as opposed to the existing dwellings in the 2015 DCM to ensure a common baseline.

- 4.16 This shows that the zoning provisions inside the proposed UGB enable significant room for growth relative to what is developed at present. However, according to the NPS UDC, the appropriateness of enabled capacity is measured relative to projected demand. This is discussed below.

Capacity Relative to Demand

- 4.17 This section compares the projected demand for attached, standalone and total dwellings (occupied and unoccupied) in the short, medium and long term against estimated attached, standalone and total feasible dwelling capacity. I have adopted three scenarios to test the appropriateness of dwelling capacity, which are described as follows:

- (a) **Scenario 1 – Latent Undersupply Excluded.** This scenario ignores the estimated undersupply (820) of attached dwellings in the Wanaka UGB based on 2016 household demand and current attached dwelling supply. It also ignores the estimated oversupply (160) of standalone dwellings and the net undersupply of total dwellings (660). It assumes that in the current market, supply = demand, including dwelling preferences – i.e. that the market is 100% efficient. The benefit of this scenario is that it focusses just on implied growth from the current baseline of development and measures the appropriateness of capacity accordingly. It does however, underrepresent the pressures faced by the community to find appropriate types of dwellings and assumes that while there is no unmet demand for attached homes at present, future demand will follow national average household dwelling preferences (i.e. a significant shift in preferences from current patterns).
- (b) **Scenario 2 – Latent Undersupply Included.** This scenario captures the estimated imbalance between implied demand for attached and standalone dwellings and actual supply. That is, it recognises that the market is not efficient and assumes the market will rebalance itself (across preferred dwelling types) when supply becomes available. The benefit of this scenario is that it recognises that the market has some catching up to do (especially for attached dwellings) and measures the appropriateness of capacity accordingly. It does however assume that latent undersupply is real and not just a reflection of different local household dwelling preferences from the national average and that the market will effectively meet latent and future demand (i.e. adjusts to better meet the market).

(c) **Scenario 3 – Latent Undersupply Excluded + Status Quo Attached Supply Ratio.** This scenario is based on Scenario 1 (supply = demand for both attached and standalone dwellings in 2016) but assumes that demand for attached dwellings is unique in Wanaka and not in fact aligned with national average household dwelling preferences. It assumes that only 30% of implied demand for attached dwellings is real (based on supply relative to implied demand in 2016), and holds this constant over time. The balance of implied attached dwelling demand is instead attributed to standalone dwelling demand as per current patterns. This more closely reflects historical supply patterns; slow growth in demand for attached dwellings and increasingly strong demand for standalone dwellings. The benefit of this scenario is that it focusses just on implied growth from the current baseline of development and measures the appropriateness of capacity accordingly. It also assumes that the development sector is responding to demand but not constraining its preferences. It potentially underrepresent the pressures faced by the community to find appropriate dwellings.

- 4.18 For each scenario, demand reflects growth in resident households and holiday homes. Recent supply (2013-2016) is included on each graph for context. I have provided a rough projection of short and medium term supply based on a review of key local subdivisions and the sections that they have recently released to market (allowing for approximate lags for title and construction and realistic yield) as well as an estimate of development outside of these subdivisions but within the UGB. Further detail is provided in Appendix I. These columns (shown in paler colours in the following graphs) are therefore indicative only and not based on any detailed analysis.
- 4.19 It is important to note that for presentation purposes, short, medium and long term demand are shown with equal spacing and do not reflect the real differences in elapsed time (i.e. 2019, 2026 and 2046). This has the effect of inferring demand growth is non-linear, when in fact it is generally linear as shown earlier in Graph 8).
- 4.20 I have also included on the graph total estimated capacity as at 2016 as well as the recommended margin (buffer) for capacity as guided by the NPS UDC. This is a margin of 20% in the short and medium term and 15% in the long term. The purpose of this margin is to approximate realistic take-up of feasible capacity. I have not carried out any analysis to determine if the suggested margins are appropriate for the Wanaka UGB area or should be

higher or lower⁴². The inclusion of this on the graphs help show when the suggested margin is being exceeded by demand and indicates the time period in which additional capacity should be enabled.

Results – Scenario 1 - Latent Undersupply Excluded

- 4.21 Results are shown in Appendix J. Under this scenario projected demand in attached dwellings utilises 38% of total (existing and potential) feasible capacity in the short term, 63% of total capacity in the medium term and 136% of total capacity in the long term. The suggested buffer of capacity is exceeded by 160% in the long term, implying that additional capacity for attached dwellings should be enabled within the medium to long term period.
- 4.22 Projected demand in standalone dwellings utilises 47% of total feasible capacity in the short term, 57% of capacity in the medium term and 88% of capacity in the long term. The suggested buffer of capacity is exceeded by 103% in the long term, implying that additional capacity for standalone dwellings should be enabled prior to 2046.
- 4.23 In aggregate, projected demand for total dwellings utilises 46% of total feasible capacity in the short term, 57% of capacity in the medium term and 93% of capacity in the long term. The buffer of capacity is exceeded (109%) between the medium and long term. Assuming this margin is correct, this implies that some additional residential capacity should be enabled within the medium to long term period.
- 4.24 The total capacity shortfall (for the suggested margin only) for the Wanaka UGB area in this scenario may be offset once capacity for LLR is included in the capacity estimates (which has not been possible to include based on information currently available). However, this capacity does little to alleviate the shortfall of attached dwellings. Similarly, a higher growth projection (as suggested by Council and Insight Economics) may show higher (and slightly sooner) capacity shortfalls for attached and standalone dwellings.

Results – Scenario 2 - Latent Undersupply Included

- 4.25 Results are shown in Appendix K. Under this scenario projected demand in attached dwellings is already greater than total (existing and potential) feasible capacity in the short term (106%) due to the latent undersupply of attached dwellings. The short term market is exceeded by 132%. Demand

⁴² Under the NPS UDC, Council will be required to determine the appropriate margin for different locations within the District.

utilises 130% of total capacity in the medium term and 204% of total capacity in the long term. This scenario shows that that the proposed DP does not do enough to enable capacity for attached dwellings in the short term or the long term.

- 4.26 Projected demand in standalone dwellings utilises 45% of total feasible capacity in the short term, 55% of capacity in the medium term and 86% of capacity in the long term. The suggested buffer of capacity is exceeded by just 101% in the long term, implying that additional capacity for standalone dwellings is broadly appropriate to 2046.
- 4.27 In aggregate, projected demand for total dwellings utilises 52% of total feasible capacity in the short term, 64% of capacity in the medium term and 99% of capacity in the long term. The buffer of capacity is exceeded (117%) between the medium and long term. Assuming this margin is correct, this implies that some additional residential capacity should be enabled within the medium to long term period.
- 4.28 Again, the total capacity shortfall (for the suggested margin only) for the Wanaka UGB area in this scenario may be offset once capacity for LLR is included in the capacity estimates. However, this capacity does little to alleviate the shortfall of attached dwellings. Similarly, a higher growth projection may show higher (and slightly sooner) capacity shortfalls for attached and standalone dwellings.

Results – Scenario 3 - Latent Undersupply Excluded + Status Quo Attached Supply Ratio

- 4.29 Results are shown in Appendix L. Under this scenario projected demand in attached dwellings utilises 31% of total feasible capacity in the short term, 39% of total capacity in the medium term and 61% of total capacity in the long term. There is sufficient capacity enabled over the long term, even when considering the suggested margin.
- 4.30 Projected demand in standalone dwellings utilises 48% of total feasible capacity in the short term, 60% of capacity in the medium term and 97% of capacity in the long term. The suggested buffer of capacity is exceeded by 114% in the long term, implying that additional capacity for standalone dwellings should be enabled prior to 2046.
- 4.31 In aggregate, projected demand for total dwellings is the same as in Scenario 1. It utilises 46% of total feasible capacity in the short term, 57% of capacity in the medium term and 93% of capacity in the long term. The buffer of

capacity is exceeded (109%) between the medium and long term. Assuming this margin is correct, this implies that some additional residential capacity should be enabled within the medium to long term period.

- 4.32 Again, the total capacity shortfall (for the suggested margin only) for the Wanaka UGB area in this scenario may be offset once capacity for LLR is included in the capacity estimates. Similarly, a higher growth projection (as suggested by Council and Insight Economics) may show higher (and slightly sooner) capacity shortfalls for standalone dwellings only.

Other Relevant Considerations

- 4.33 The above results are based on a number of estimates and assumptions. A more accurate analysis of capacity will be possible once the DCM is updated for the proposed DP. At an aggregate level, additional residential capacity is required under all scenarios to maintain a margin of feasible capacity between the medium and long term. Actual feasible capacity appears broadly adequate unless a higher growth scenario is applied. At an aggregate level, my findings are broadly consistent with that of Mr Paetz⁴³, i.e. that the UGB provides sufficient capacity for long term demand. I have considered a longer time frame in accordance with the NPS UDC, and Mr Paetz is unlikely to have factored in the suggested margin of feasible capacity which does indicate a requirement to consider some additional capacity.
- 4.34 At a disaggregated level, additional capacity is required for attached dwellings either immediately (Scenario 2) or between the medium and long term period (Scenario 1). Under Scenario 3, the enabled capacity is adequate to cover long term demand. Additional capacity for standalone dwellings is only required between the medium and long term period to maintain a margin of feasible development under all scenarios, unless a higher growth scenario is applied (in which case actual capacity might fall short in the long term).

5. PROPOSED DWELLING CAPACITY IN CONTEXT

- 5.1 Submission 149, revised in accordance with the evidence provided, proposes that approximately 8.7 ha of the 50 ha Sticky Forest site be zoned LDR. This is estimated to yield approximately 90-100 standalone dwellings. A further

⁴³ My understanding is that Mr Paetz has only considered aggregate demand and capacity.

11.3ha (approximately) is proposed for LLR zoning, with an estimated yield of approximately 50 standalone dwellings.

- 5.2 Total yield is therefore anticipated at approximately 150 additional standalone dwellings. Given the current constraints faced by the site and the time it may take to address these, I consider that this additional capacity should be considered as feasible capacity in the medium term and beyond (for analysis purposes).
- 5.3 Table 4 shows that the proposed residential capacity equates to a 2.8% increase to potential additional standalone capacity (as at 2016) and a 2.4% increase in total potential dwelling capacity in either the medium or long term. In terms of total existing and potential capacity, the site equates to a 1.6% and 1.4% increase respectively⁴⁴. If fully occupied, the capacity would satisfy between 2.6-2.9% of total demand for standalone dwellings in the medium term (depending on the scenario) and between 2.2-2.4% of total demand in the long term.

Table 4 – Increase in Dwelling Capacity Enabled by Proposed Submission

	Short Term	Medium Term	Long Term
Potential Capacity Enabled *			
Capacity - Attached	863	863	863
Capacity - Standalone	5,432	5,432	5,432
Capacity - Total	6,295	6,295	6,295
Total Capacity (Existing and Potential) **			
Capacity - Attached	1,213	1,213	1,213
Capacity - Standalone	9,472	9,472	9,472
Capacity - Total	10,685	10,685	10,685
Proposed Potential Capacity			
Capacity - Attached	0	0	0
Capacity - Standalone	0	150	150
Capacity - Total	0	150	150
Proposed Potential Capacity as share of Potential Capacity			
Capacity - Attached	0.0%	0.0%	0.0%
Capacity - Standalone	0.0%	2.8%	2.8%
Capacity - Total	0.0%	2.4%	2.4%
Proposed Potential Capacity as share of Total Capacity			
Capacity - Attached	0.0%	0.0%	0.0%
Capacity - Standalone	0.0%	1.6%	1.6%
Capacity - Total	0.0%	1.4%	1.4%

* Estimated from DCM 2015 and evidence of Mr Paetz.

** Potential Capacity + 2016 Residential Properties (CoreLogic dataset)

⁴⁴ This contrasts the combined LDR and LLR capacity (combined) against estimated capacity (which excludes LLR capacity in the Wanaka UGB area). This presents a conservative (i.e. maximum) effect.

- 5.4 The proposed site is located within the 'Peninsula Bay – Aubrey Road' sub-catchment in my spatial framework. Based on the proportion of 'Empty Unoccupied' dwellings to total private occupied and unoccupied dwellings in this sub-catchment in 2013 (25%), it is estimated that the proposed site could contribute 38 holiday homes if these trends apply in the future.
- 5.5 Overall, the effect of the proposed capacity is small. By subdivision standards, it would be smaller than the nearby 'Hikawai' development (200 lots) and small in comparison to the neighbouring 'Northlake' development (combined these two areas form part of the Northlake Special Zone with estimated capacity of 1,500 dwellings). Nonetheless, its contribution to standalone dwelling capacity assists in the requirement to ensure a suitable margin of dwelling capacity between the medium and long term period.

Urban Form Implications

- 5.6 From an urban form perspective, I consider that the proposed residential zones are an appropriate location for growth for the following reasons:
- (a) It is a discrete addition to the urban extent and in an area expecting strong growth. The size of residential properties proposed in the two zones is in keeping with the profile of supply and demand in the sub-catchment as at 2016⁴⁵.
 - (b) It increases the area inside the UGB without compromising the integrity of the delineation between urban and 'open countryside' character. I consider that the most important role of the UGB is to define the urban limit on the eastern and south eastern sides of Wanaka where there is no natural barrier to growth (such as a water body). That is, to avoid the encroachment of urban land use further towards Glendhu Bay, up the foothills of the ranges, towards the Cardrona Valley and up to and adjoining the Cardrona River.
 - (c) It will effectively appear as an addition to the Northlake residential community given its aspect and potential roading linkages. It will therefore be a relatively cohesive expansion of the existing zoned urban area – not isolated or disconnected.
 - (d) The yield estimates are based on likely maximum potential of the site given landscape and topographic constraints. There is a low risk of

⁴⁵ Refer Section 3, CoreLogic data analysis and Appendix D Graphs 1-4.

subsequent plan changes to further expand the proposed residential zoning.

- (e) The area will have very similar accessibility to schools and the main town centre as adjacent residential developments (and better access relative to residential areas in places like Penrith Park, parts of Peninsula Bay and Albert Town).
- (f) The area will be serviced by the local convenience centre planned for Northlake (and will contribute to its vitality and productivity).
- (g) The land will have excellent access to public open space and recreational opportunities.

6. **COSTS AND BENEFITS OF PROPOSED RESIDENTIAL ZONING**

6.1 This section provides a high level commentary on the costs and benefits anticipated from the proposed residential zonings relative to the notified Rural zone. Costs and benefits are discussed from the perspective of residential demand and capacity and effects on social and economic wellbeing.

Costs:

- (a) The proposed residential zones currently sit outside the proposed UGB.
- (b) Residential zoning slightly increases feasible dwelling capacity in the medium term (by 2.4-2.8%) over and above the suggested margin of capacity. Inefficient use of land with potential to slow growth in other residential zones within the UGB, including growth through infill and brownfield development.
- (c) Residential land use places additional pressure (and costs) on existing infrastructure (including 'other' infrastructure) within the UGB.
- (d) If the rural zone is retained, forestry activity may have adverse effects on surrounding residential communities.

Benefits:

- (a) Residential land use on this portion of the site is consistent with Council's strategic direction to increase supply of housing stock in response to demand. It creates additional dwelling capacity for standalone dwellings which helps to address strong demand for this dwelling type and a projected shortfall in the recommended margin of feasible capacity in (or near) the long term. It is therefore consistent with the NPS UDC.
- (b) The residential land would be adjacent to an existing residential zoned area, i.e. a cohesive expansion of residential land use while avoiding sensitive landscapes. This approach is not inconsistent with Council's strategic direction to create a compact urban form.
- (c) The residential zoning would be located close to amenities and services, including open space, recreational trails, and the proposed convenience centre in Northlake. Relatively close access to existing schools and Anderson Road BMUZ.
- (d) Provides capacity in a location of recent high demand (i.e. an area where people want to live).
- (e) Reduces competition in the residential market by spreading greenfield capacity amongst more land owners. Reduces opportunities for landowners to control the rate of development.
- (f) Increasing supply helps reduce rising house prices and contributes to housing affordability.
- (g) Creates more choice for housing in LDR and LLR zones as well as opportunities for long term rental properties and holiday homes.
- (h) Residential zoning generates net additional rates revenue.
- (i) Residential zoning provides greater opportunities for employment and economic growth during the construction phase (relative to forestry).
- (j) Residential zoning facilitates opportunities for wider economic growth by increasing the number of resident and visiting households in Wanaka.
- (k) It is anticipated that residential zoning better contributes to the economic wellbeing of the landowners⁴⁶. While this would not

⁴⁶ I have verified the revenue potential for managed forestry.

necessarily be a relevant concern under the Act, the site is unique in that it benefits over 1,000 individuals and was given for the purpose of providing for their economic wellbeing.

- (l) The residential zoning secures public access and potential further development opportunities on the balance of the site for recreation and leisure as part of the proposed rezoning package. The Rural Zone does not provide for public access to the land.

Scale and Significance

- 6.2 The scale of effects on residential capacity are relatively small but housing demand and supply are significant strategic issues for the District. While I have quantified the effects on capacity and demand, I have not quantified all costs and benefits. Given the significant change in the proposal from the original submission, the Council's evidence (s42 report) on infrastructure in particular is of limited help in considering the scale of infrastructure costs.
- 6.3 In terms of the matters that I *have* focussed on, I consider that the anticipated economic and social benefits (including opportunities for economic growth and employment) arising from the provision of 150 standalone dwellings in the proposed location outweigh the costs. In this regard, I refer to the following quote from the draft guidance on the NPS UDC which states that:

"The implications for individuals and the community from an under-supply of enabled residential capacity (e.g. house price escalation, over-crowding, extended commuting distances, and migration out of the region) are much more severe than those of an over-supply of enabled capacity (e.g. the inefficient use for a period of land zoned for future urban use). Property markets are able to respond to the over-supply of enabled capacity by, for example, deferring the development of some land zoned for future urban, whereas markets are not able to remove the constraints and distortions from the under-supply of enabled capacity" (page 8)⁴⁷.

- 6.4 Similarly, I am aware that the community's interest in securing public access to the trails network developed on this private land is high. Bike riding is a popular recreational activity in Wanaka and it sustains a portion of tourist activity (with flow-on effects for the local and wider economy). The biking

⁴⁷ National Policy Statement on Urban Development Capacity 2016: Guide to assessing demand for, and supply of, dwelling development capacity. Draft, 24 March 2017. Supplied commercial in confidence to M.E as peer reviewers. Public release expected soon.

experience offered by Sticky Forest is not easily replicated in Wanaka, and certainly not in a location as accessible as this. While my evidence has focussed on the effects (costs and benefits) of the residential zone component of the proposed submission, it is important to evaluate the proposal based on the package of proposed zones.

- 6.5 When considered in conjunction with the benefits for recreational use (discussed in more detail by Mr Greenaway) I consider that the benefits significantly outweigh the costs.

Certainty and Sufficiency of Information

- 6.6 My evidence has relied on a detailed analysis that included a number of estimates and assumptions. There is always uncertainty when dealing with projections and markets which are influenced by local, national and international (economic) forces. However, there is good information available to help understand demand, supply and capacity in the Wanaka Catchment and within the proposed UGB. I consider my methods of analysis to be appropriate for the purpose of this evaluation and are recognised by the NPS UDC draft guidance document⁴⁸.

7. CONCLUSIONS – EFFECTIVENESS AND EFFICIENCY

- 7.1 I have reviewed the Section 42 report(s) for the Upper Clutha Zoning. There are a number of submissions that seek to increase (or create) residential densities inside the proposed UGB. Each should be evaluated on its merits, but equally the cumulative effect on capacity should also be considered. I am not aware of any other submission that contributes so significantly to recreational use values for the wider Wanaka community while also contributing capacity (and avoiding long term capacity shortfalls) for standalone dwellings in a relatively central location to meet high projected demand.
- 7.2 I consider the proposed zoning to be an efficient use of the land that supports the strategic and urban development objectives of the proposed DP.

Natalie Hampson

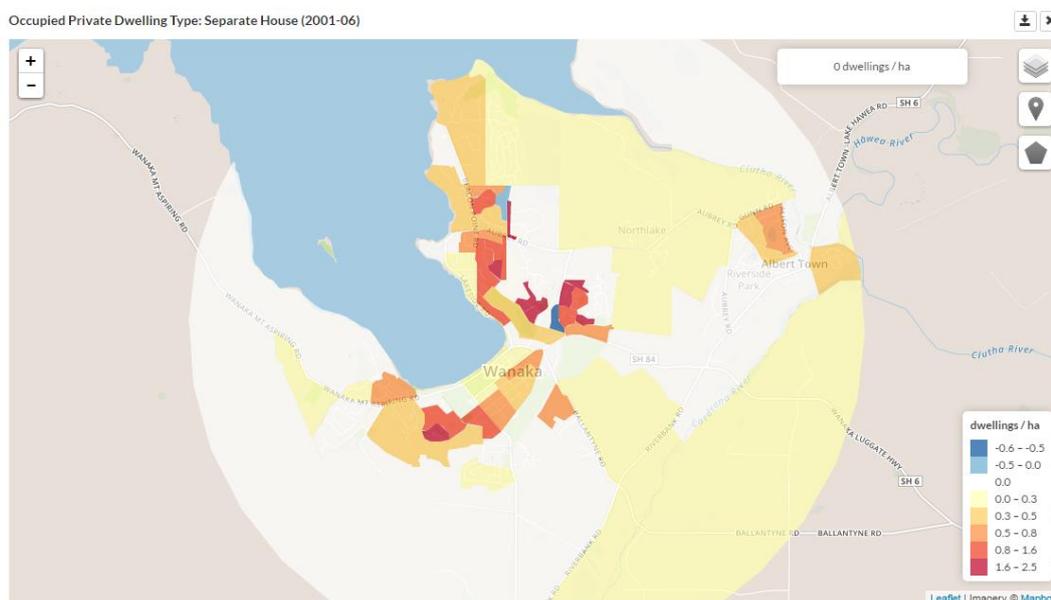
4th April 2017

⁴⁸ Ibid.

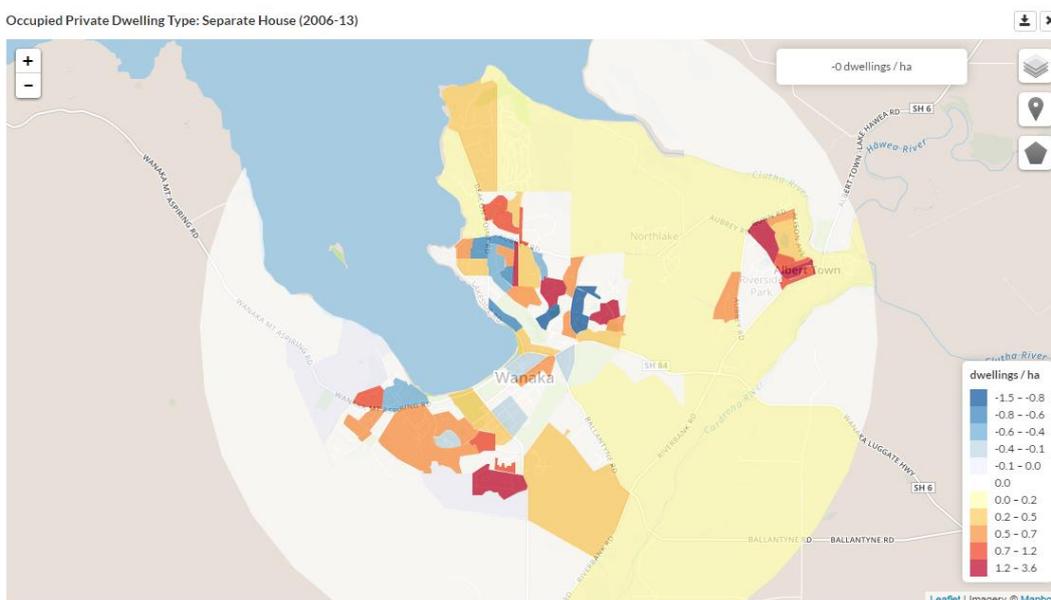
APPENDIX A – SPATIAL FRAMEWORK MAPS (TOTAL CATCHMENT)

The maps used in this appendix are based on densities per hectare for 2013 meshblock boundaries. There are limitations to this analysis where meshblocks are large. This limitation is most applicable for the single year density maps as opposed to the change in density maps (which can pick up changes in density even when overall density in large meshblocks is low). Notwithstanding the limited resolution, I consider that the trends shown are a suitable and accurate representation of actual growth patterns.

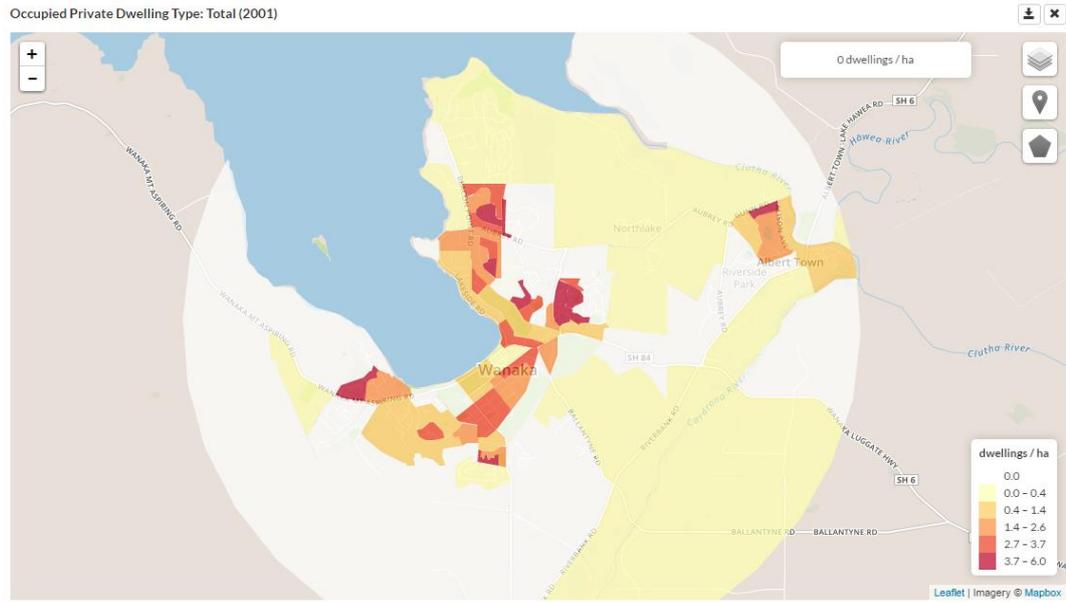
Map A1 – Change in Occupied Dwelling Density per Ha by Meshblock 2001-06



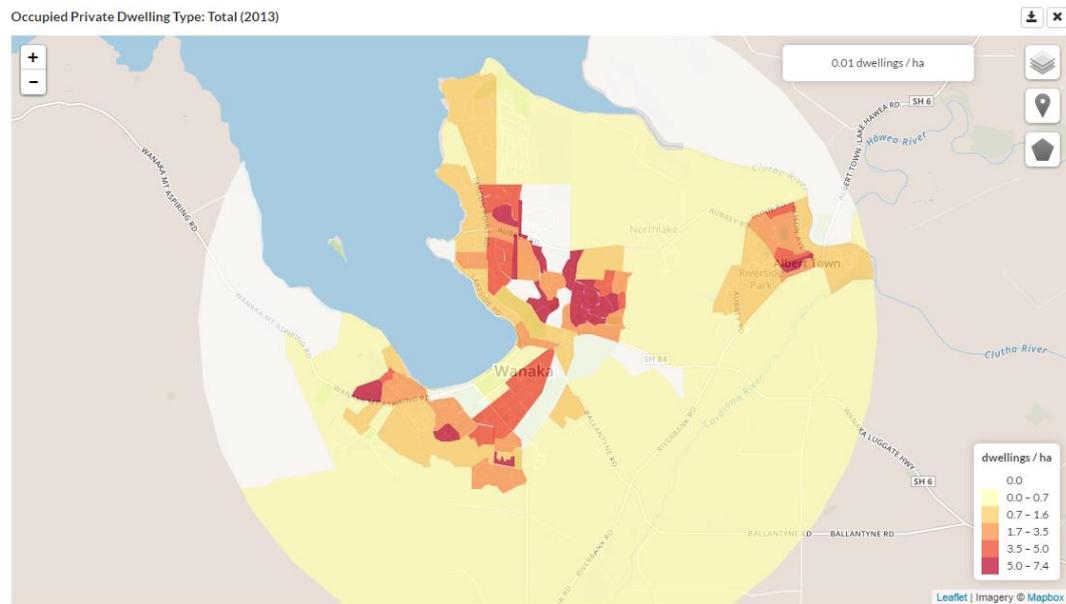
Map A2 – Change in Occupied Dwelling Density per Ha by Meshblock 2006-13



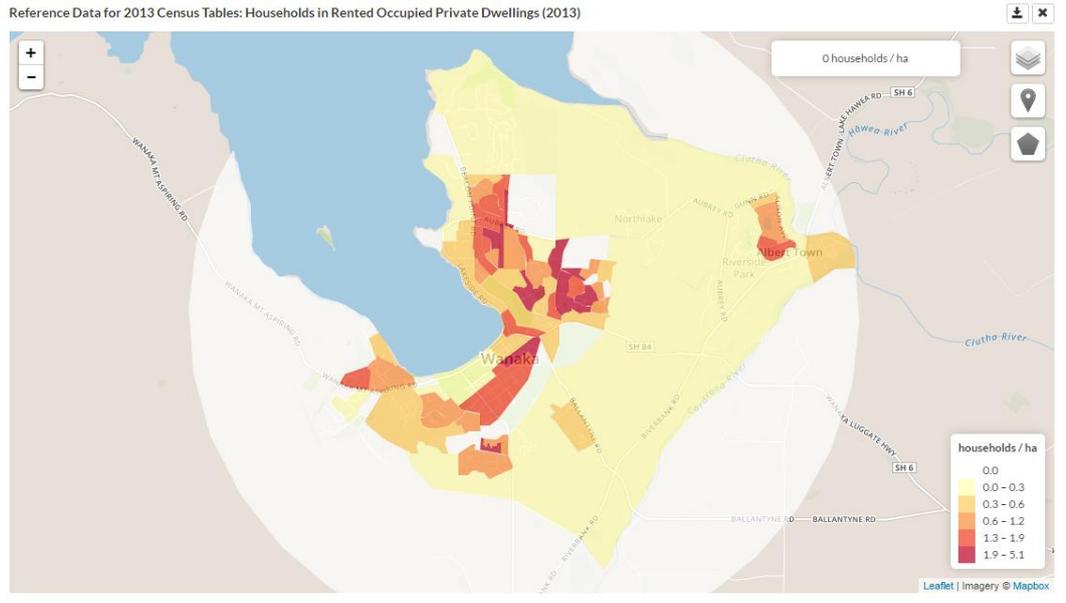
Map A3 – Occupied Dwelling Density per Ha by Meshblock 2001



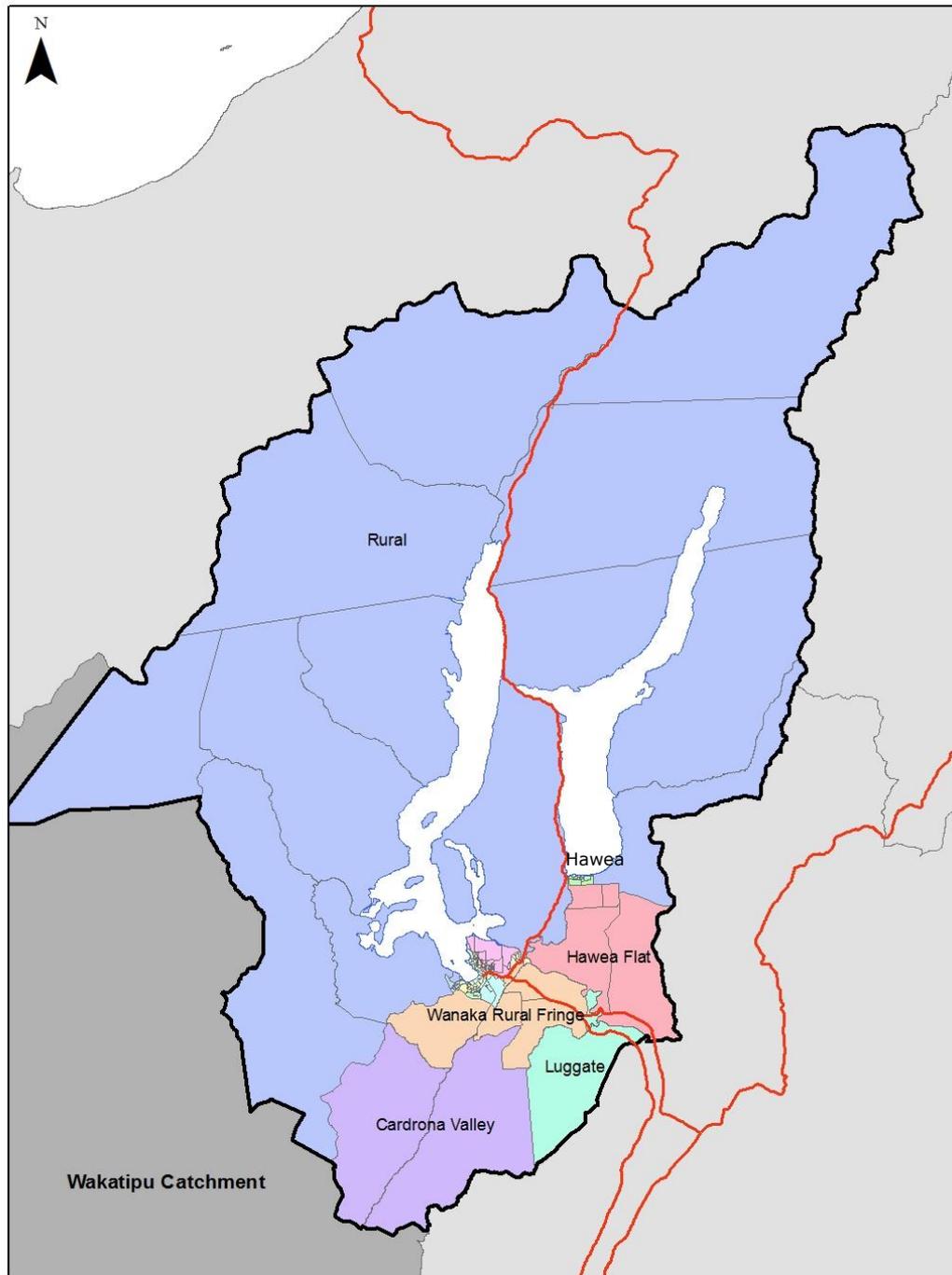
Map A4 – Occupied Dwelling Density per Ha by Meshblock 2013



Map A5 – Density per Ha of Households in Long Term Rental Properties 2013



APPENDIX B – SPATIAL FRAMEWORK MAPS (TOTAL CATCHMENT)



Wanaka Catchment - Spatial Framework (Wide)

APPENDIX C – OCCUPIED AND UNOCCUPIED DWELLING SUMMARY 2013

Sub-Catchment	Locality	Private Occupied Dwellings					Non-Private Occupied Dwellings***	Total Occupied Dwellings	Unoccupied Dwellings		Total unoccupied dwellings	Dwellings Under Construction	TOTAL DWELLINGS (incl Under Construction)
		Separate house	Two or more flats/units/ townhouses/ apartments/ houses joined together	Other occupied private dwelling	Occupied private dwelling not further defined	sub-total occupied private dwellings			Residents away*	Empty dwelling**			
Albert Town	Wanaka UGB (Approx)	309	23	2	16	350	2	352	17	122	139	13	504
Far Horizon	Wanaka UGB (Approx)	40	4	-	3	47	5	52	6	14	20	-	72
Meadowstone	Wanaka UGB (Approx)	171	11	-	1	183	2	185	13	144	157	2	344
Mt Iron Drive	Wanaka UGB (Approx)	272	21	1	2	296	4	300	11	133	144	7	451
Old Wanaka	Wanaka UGB (Approx)	825	159	10	55	1,049	34	1,083	50	859	909	30	2,022
Peninsula Bay-Aubrey Road	Wanaka UGB (Approx)	278	21	7	14	320	2	322	20	112	132	23	477
Plantation Road - Kings Drive	Wanaka UGB (Approx)	181	44	3	14	242	4	246	7	129	136	3	385
Three Parks-Alpine Estate	Wanaka UGB (Approx)	86	17	1	2	106	2	108	5	42	47	1	156
West Meadows	Wanaka UGB (Approx)	61	14	4	1	80	1	81	16	33	49	2	132
Sub-Total - Wanaka UGB Area		2,223	314	28	108	2,673	56	2,729	145	1,588	1,733	81	4,543
Wanaka Rural Fringe	Wanaka Rural Fringe	179	7	1	14	201	4	205	17	23	40	3	248
Hawea	Rural Settlement	318	14	3	19	354	4	358	14	209	223	13	594
Hawea Flat	Rural Settlement	151	5	4	7	167	-	167	6	20	26	1	194
Luggate	Rural Settlement	118	2	10	3	133	5	138	2	24	26	2	166
Sub-Total Rural Fringe and Settlements		766	28	18	43	855	13	868	39	276	315	19	1,202
Cardrona Valley	Rural	30	-	-	-	30	5	35	-	26	26	-	61
Rural	Rural	172	18	11	4	205	20	225	15	92	107	5	337
Sub-Total Rural/Remote		202	18	11	4	235	25	260	15	118	133	5	398
TOTAL WANAKA CATCHMENT		3,191	360	57	155	3,763	94	3,857	199	1,982	2,181	105	6,143

Source: Statistics NZ, Census of Population and Dwellings 2013, customised data request. M.E has used GAMS software to identify confidential mb values and remove rounding.

* An unoccupied dwelling is classified as 'Residents away' if the residents were known to be temporarily not present and were not expected to return on, or before, census night.

** An unoccupied dwelling is classified as 'Empty' if it clearly had no current occupants and new occupants were not expected to move in on, or before, census night. Unoccupied dwellings that are being repaired or renovated, and unoccupied baches or holiday homes are also considered 'Empty'.

*** Occupied non-private dwellings include: backpackers, guest accommodation, hotels, motels, youth hostels, camps, communal staff quarters, hospitals, and institutional complexes, bed-and-breakfasts, farm stays, and home stays that are mainly intended to be used as facilities for paying guests.

Continued...

Share of Dwellings by Category for Each Sub-Catchment Area

Sub-Catchment	Locality	Private Occupied Dwellings					Non-Private Occupied Dwellings***	Total Occupied Dwellings	Unoccupied Dwellings		Total unoccupied dwellings	Dwellings Under Construction	TOTAL DWELLINGS (incl Under Construction)
		Separate house	Two or more flats/units/ townhouses/ apartments/ houses joined together	Other occupied private dwelling	Occupied private dwelling not further defined	sub-total occupied private dwellings			Residents away*	Empty dwelling**			
Albert Town	Wanaka UGB (Approx)	61%	5%	0%	3%	69%	0%	70%	3%	24%	28%	3%	100%
Far Horizon	Wanaka UGB (Approx)	56%	6%	0%	4%	65%	7%	72%	8%	19%	28%	0%	100%
Meadowstone	Wanaka UGB (Approx)	50%	3%	0%	0%	53%	1%	54%	4%	42%	46%	1%	100%
Mt Iron Drive	Wanaka UGB (Approx)	60%	5%	0%	0%	66%	1%	67%	2%	29%	32%	2%	100%
Old Wanaka	Wanaka UGB (Approx)	41%	8%	0%	3%	52%	2%	54%	2%	42%	45%	1%	100%
Peninsula Bay-Aubrey Road	Wanaka UGB (Approx)	58%	4%	1%	3%	67%	0%	68%	4%	23%	28%	5%	100%
Plantation Road - Kings Drive	Wanaka UGB (Approx)	47%	11%	1%	4%	63%	1%	64%	2%	34%	35%	1%	100%
Three Parks-Alpine Estate	Wanaka UGB (Approx)	55%	11%	1%	1%	68%	1%	69%	3%	27%	30%	1%	100%
West Meadows	Wanaka UGB (Approx)	46%	11%	3%	1%	61%	1%	61%	12%	25%	37%	2%	100%
Sub-Total - Wanaka UGB Area		49%	7%	1%	2%	59%	1%	60%	3%	35%	38%	2%	100%
Wanaka Rural Fringe	Wanaka Rural Fringe	72%	3%	0%	6%	81%	2%	83%	7%	9%	16%	1%	100%
Hawea	Rural Settlement	54%	2%	1%	3%	60%	1%	60%	2%	35%	38%	2%	100%
Hawea Flat	Rural Settlement	78%	3%	2%	4%	86%	0%	86%	3%	10%	13%	1%	100%
Luggate	Rural Settlement	71%	1%	6%	2%	80%	3%	83%	1%	14%	16%	1%	100%
Sub-Total Rural Fringe and Settlements		64%	2%	1%	4%	71%	1%	72%	3%	23%	26%	2%	100%
Cardrona Valley	Rural	49%	0%	0%	0%	49%	8%	57%	0%	43%	43%	0%	100%
Rural	Rural	51%	5%	3%	1%	61%	6%	67%	4%	27%	32%	1%	100%
Sub-Total Rural/Remote		51%	5%	3%	1%	59%	6%	65%	4%	30%	33%	1%	100%
TOTAL WANAKA CATCHMENT		52%	6%	1%	3%	61%	2%	63%	3%	32%	36%	2%	100%

Source: Statistics NZ, Census of Population and Dwellings 2013, customised data request. M.E has used GAMS software to identify confidential mb values and remove rounding.

* An unoccupied dwelling is classified as 'Residents away' if the residents were known to be temporarily not present and were not expected to return on, or before, census night.

** An unoccupied dwelling is classified as 'Empty' if it clearly had no current occupants and new occupants were not expected to move in on, or before, census night. Unoccupied dwellings that are being repaired or renovated, and unoccupied bachs or holiday homes are also considered 'Empty'.

*** Occupied non-private dwellings include: backpackers, guest accommodation, hotels, motels, youth hostels, camps, communal staff quarters, hospitals, and institutional complexes, bed-and-breakfasts, farm stays, and home stays that are mainly intended to be used as facilities for paying guests.

Continued...

Share of Dwellings by Sub-Catchment Area for Each Category

Sub-Catchment	Locality	Private Occupied Dwellings					Non-Private Occupied Dwellings***	Total Occupied Dwellings	Unoccupied Dwellings		Total unoccupied dwellings	Dwellings Under Construction	TOTAL DWELLINGS (incl Under Construction)
		Separate house	Two or more flats/units/ townhouses/ apartments/ houses joined together	Other occupied private dwelling	Occupied private dwelling not further defined	sub-total occupied private dwellings			Residents away*	Empty dwelling**			
Albert Town	Wanaka UGB (Approx)	10%	6%	4%	10%	9%	2%	9%	9%	6%	6%	12%	8%
Far Horizon	Wanaka UGB (Approx)	1%	1%	0%	2%	1%	5%	1%	3%	1%	1%	0%	1%
Meadowstone	Wanaka UGB (Approx)	5%	3%	0%	1%	5%	2%	5%	7%	7%	7%	2%	6%
Mt Iron Drive	Wanaka UGB (Approx)	9%	6%	2%	1%	8%	4%	8%	6%	7%	7%	7%	7%
Old Wanaka	Wanaka UGB (Approx)	26%	44%	18%	35%	28%	36%	28%	25%	43%	42%	29%	33%
Peninsula Bay-Aubrey Road	Wanaka UGB (Approx)	9%	6%	12%	9%	9%	2%	8%	10%	6%	6%	22%	8%
Plantation Road - Kings Drive	Wanaka UGB (Approx)	6%	12%	5%	9%	6%	4%	6%	4%	7%	6%	3%	6%
Three Parks-Alpine Estate	Wanaka UGB (Approx)	3%	5%	2%	1%	3%	2%	3%	3%	2%	2%	1%	3%
West Meadows	Wanaka UGB (Approx)	2%	4%	7%	1%	2%	1%	2%	8%	2%	2%	2%	2%
Sub-Total - Wanaka UGB Area		70%	87%	49%	70%	71%	60%	71%	73%	80%	79%	77%	74%
Wanaka Rural Fringe	Wanaka Rural Fringe	6%	2%	2%	9%	5%	4%	5%	9%	1%	2%	3%	4%
Hawea	Rural Settlement	10%	4%	5%	12%	9%	4%	9%	7%	11%	10%	12%	10%
Hawea Flat	Rural Settlement	5%	1%	7%	5%	4%	0%	4%	3%	1%	1%	1%	3%
Luggate	Rural Settlement	4%	1%	18%	2%	4%	5%	4%	1%	1%	1%	2%	3%
Sub-Total Rural Fringe and Settlements		24%	8%	32%	28%	23%	14%	23%	20%	14%	14%	18%	20%
Cardrona Valley	Rural	1%	0%	0%	0%	1%	5%	1%	0%	1%	1%	0%	1%
Rural	Rural	5%	5%	19%	3%	5%	21%	6%	8%	5%	5%	5%	5%
Sub-Total Rural/Remote		6%	5%	19%	3%	6%	27%	7%	8%	6%	6%	5%	6%
TOTAL WANAKA CATCHMENT		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Statistics NZ, Census of Population and Dwellings 2013, customised data request. M.E has used GAMS software to identify confidential mb values and remove rounding.

* An unoccupied dwelling is classified as 'Residents away' if the residents were known to be temporarily not present and were not expected to return on, or before, census night.

** An unoccupied dwelling is classified as 'Empty' if it clearly had no current occupants and new occupants were not expected to move in on, or before, census night. Unoccupied dwellings that are being repaired or renovated, and unoccupied baches or holiday homes are also considered 'Empty'.

*** Occupied non-private dwellings include: backpackers, guest accommodation, hotels, motels, youth hostels, camps, communal staff quarters, hospitals, and institutional complexes, bed-and-breakfasts, farm stays, and home stays that are mainly intended to be used as facilities for paying guests.

APPENDIX D – SUMMARY OF RESIDENTIAL AND LIFESTYLE PROPERTY DATA BY SUB-CATCHMENT 2013-2016

Table 1 – Residential Built and Vacant Property – Distribution and Growth

Sub-Catchment	Residential Dwellings/Flats/Apartments						Residential Vacant/Bare Block						Total Residential Built/Vacant Properties					
	2013	2014	2015	2016	Growth 2013-16	Mean Growth Per annum	2013	2014	2015	2016	Growth 2013-16	Mean Growth Per annum	2013	2014	2015	2016	Growth 2013-16	Mean Growth Per annum
Albert Town	465	460	473	483	18	5	70	69	74	66	- 4	- 1	535	529	547	549	14	4
Far Horizon	47	50	54	66	19	5	10	19	12	15	5	5	57	69	66	81	24	6
Meadowstone	257	261	273	283	26	7	68	64	62	50	- 18	- 5	325	325	335	333	8	2
Mt Iron Drive	309	325	331	342	33	8	65	59	59	52	- 13	- 3	374	384	390	394	20	5
Old Wanaka	1,399	1,444	1,526	1,606	207	52	344	345	363	422	78	20	1,743	1,789	1,889	2,028	285	71
Peninsula Bay-Aubrey Road	617	634	641	673	56	14	140	156	132	134	- 6	- 2	757	790	773	807	50	13
Plantation Road - Kings Drive	276	283	306	333	57	14	78	74	82	109	31	8	354	357	388	442	88	22
Three Parks-Alpine Estate	65	72	81	84	19	5	26	32	26	26	-	-	91	104	107	110	19	5
West Meadows	132	141	150	149	17	4	24	23	19	19	- 5	- 1	156	164	169	168	12	3
Sub-Total - Wanaka UGB Area	3,567	3,670	3,835	4,019	452	113	825	841	829	893	68	17	4,392	4,511	4,664	4,912	520	130
Wanaka Rural Fringe	206	211	224	237	31	8	34	62	57	44	10	3	240	273	281	281	41	10
Hawea	529	532	544	553	24	6	78	81	94	99	21	5	607	613	638	652	45	11
Hawea Flat	177	180	182	190	13	3	28	30	28	33	5	1	205	210	210	223	18	5
Luggate	183	189	191	192	9	2	23	26	32	28	5	1	206	215	223	220	14	4
Sub-Total Rural Fringe and Sett	1,095	1,112	1,141	1,172	77	19	163	199	211	204	41	10	1,258	1,311	1,352	1,376	118	30
Cardrona Valley	79	84	87	88	9	2	8	12	12	8	-	-	87	96	99	96	9	2
Rural	210	218	233	244	34	9	21	49	35	43	22	6	231	267	268	287	56	14
Sub-Total Rural/Remote	289	302	320	332	43	11	29	61	47	51	22	6	318	363	367	383	65	16
TOTAL WANAKA CATCHMENT	4,951	5,084	5,296	5,523	572	143	1,017	1,101	1,087	1,148	131	33	5,968	6,185	6,383	6,671	703	176

Source: CoreLogic, M.E

Table 2 – Lifestyle Built and Vacant Property – Distribution and Growth

Sub-Catchment	Lifestyle Dwelling						Lifestyle Vacant/Bareblock						Lifestyle Vacant/Bareblock									
	2013	2014	2015	2016	Growth 2013-16	Mean Growth Per annum	2013	2014	2015	2016	Growth 2013-16	Mean Growth Per annum	2013	2014	2015	2016	Growth 2013-16	Mean Growth Per annum				
Albert Town	49	54	50	49	-	-	18	13	14	14	-	4	-	1	67	67	64	63	-	4	-	1
Far Horizon	14	13	12	12	-	2	-	1	5	7	5	5	-	-	19	20	17	17	-	2	-	1
Meadowstone	24	28	30	28	4	1	12	12	10	11	-	1	-	0	36	40	40	39	-	3	-	1
Mt Iron Drive	68	68	69	67	-	1	-	0	28	26	25	28	-	-	96	94	94	95	-	1	-	0
Old Wanaka	118	118	123	135	17	4	53	63	67	71	18	5	171	181	190	206	35	9				
Peninsula Bay-Aubrey Road	47	51	53	49	2	1	29	42	32	29	-	-	76	93	85	78	2	1				
Plantation Road - Kings Drive	39	35	39	42	3	1	11	12	12	11	-	-	50	47	51	53	3	1				
Three Parks-Alpine Estate	4	3	1	3	-	1	-	0	2	4	7	6	4	1	6	7	8	9	3	1		
West Meadows	11	9	11	13	2	1	5	3	4	4	-	1	-	0	16	12	15	17	1	0		
Sub-Total - Wanaka UGB Area	374	379	388	398	24	6	163	182	176	179	16	4	537	561	564	577	40	10				
Wanaka Rural Fringe	22	21	18	17	-	5	-	1	10	18	19	17	7	2	32	39	37	34	2	1		
Hawea	49	44	48	53	4	1	22	22	25	24	2	1	71	66	73	77	6	2				
Hawea Flat	12	13	15	17	5	1	8	7	4	4	-	4	-	1	20	20	19	21	1	0		
Luggate	6	8	9	12	6	2	9	9	9	6	-	3	-	1	15	17	18	18	3	1		
Sub-Total Rural Fringe and Sett	89	86	90	99	10	3	49	56	57	51	2	1	138	142	147	150	12	3				
Cardrona Valley	2	3	5	5	3	1	1	1	1	1	-	-	3	4	6	6	3	1				
Rural	7	12	13	20	13	3	5	11	11	8	3	1	12	23	24	28	16	4				
Sub-Total Rural/Remote	9	15	18	25	16	4	6	12	12	9	3	1	15	27	30	34	19	5				
TOTAL WANAKA CATCHMENT	472	480	496	522	50	13	218	250	245	239	21	5	690	730	741	761	71	18				

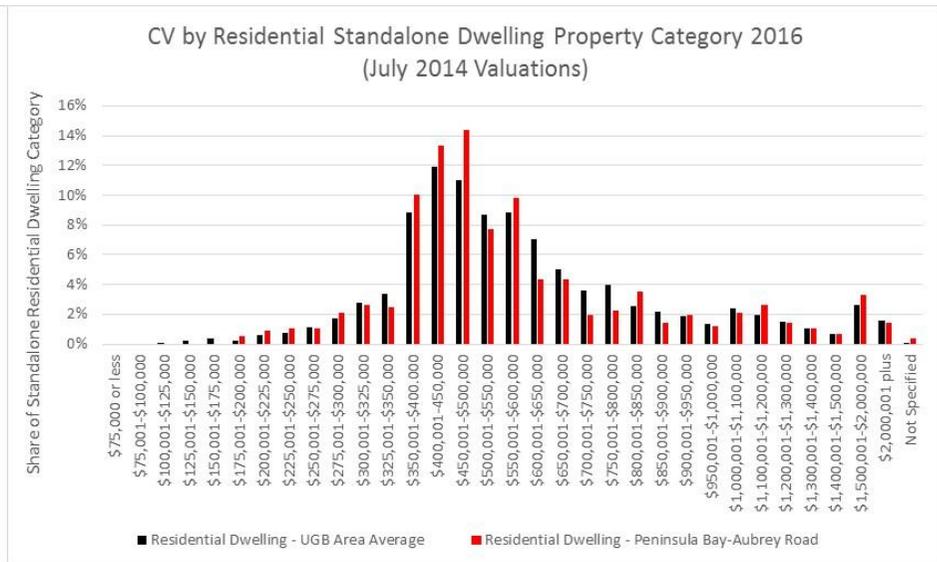
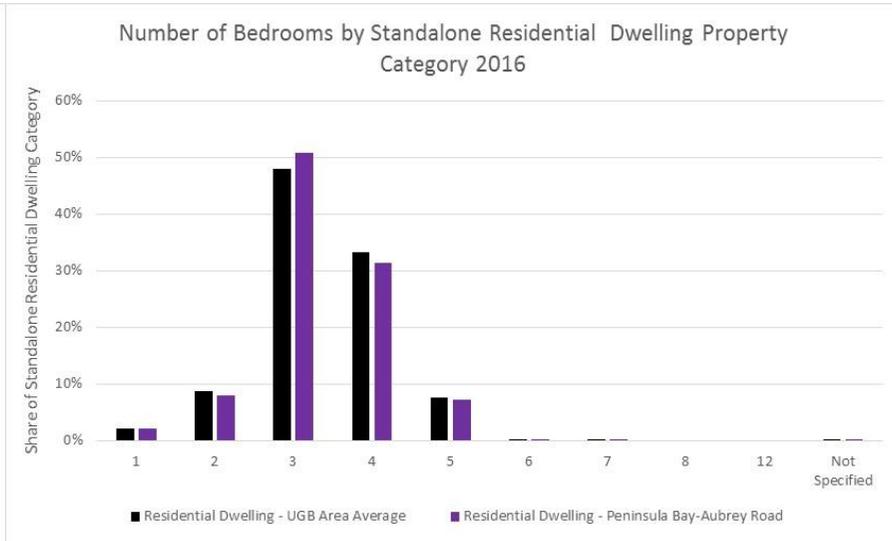
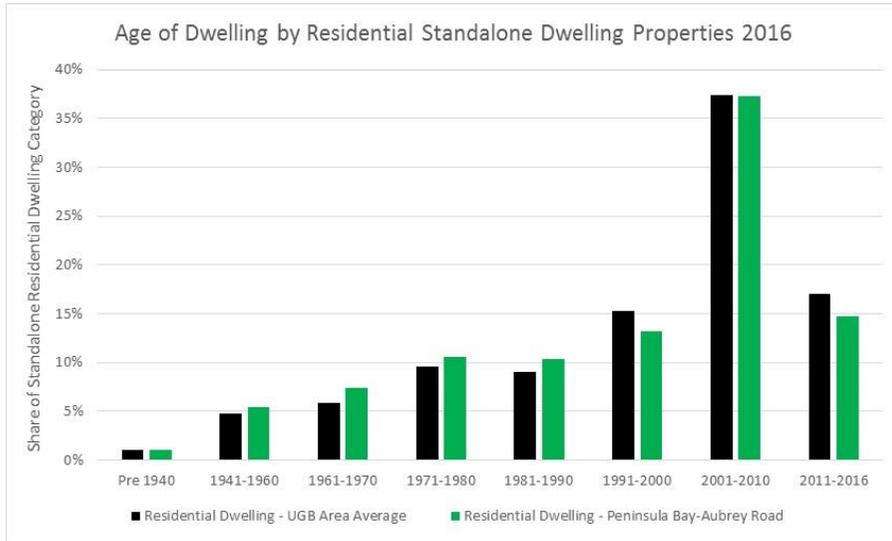
Source: CoreLogic, M.E

Table 3 – Residential Vacant as a share of Total Residential – Distribution and Change

Sub-Catchment	Vacant Residential as a Share of Total Residential			
	2013	2014	2015	2016
Albert Town	13%	13%	14%	12%
Far Horizon	18%	28%	18%	19%
Meadowstone	21%	20%	19%	15%
Mt Iron Drive	17%	15%	15%	13%
Old Wanaka	20%	19%	19%	21%
Peninsula Bay-Aubrey Road	18%	20%	17%	17%
Plantation Road - Kings Drive	22%	21%	21%	25%
Three Parks-Alpine Estate	29%	31%	24%	24%
West Meadows	15%	14%	11%	11%
Sub-Total - Wanaka UGB Area	19%	19%	18%	18%
Wanaka Rural Fringe	14%	23%	20%	16%
Hawea	13%	13%	15%	15%
Hawea Flat	14%	14%	13%	15%
Luggate	11%	12%	14%	13%
Sub-Total Rural Fringe and Sett	13%	15%	16%	15%
Cardrona Valley	9%	13%	12%	8%
Rural	9%	18%	13%	15%
Sub-Total Rural/Remote	9%	17%	13%	13%
TOTAL WANAKA CATCHMENT	17%	18%	17%	17%

Source: CoreLogic, M.E

Graphs 1-4 – Profile of 'Peninsula Bay – Aubrey Road' sub-catchment relative to average profile for the Wanaka UGB area



APPENDIX E – SUMMARY OF HOUSEHOLDS BY TYPE AND SUB-CATCHMENT 2016

Sub-Catchment	Locality	Family Type (2016)							Total Hholds	Age of Household Reference Person (2016)							Household Income (2016)					
		Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family		15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years	Total Hholds	\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	Total Hholds
Albert Town	Wanaka UGB (Approx)	75	143	108	11	31	7	30	404	74	72	72	95	56	34	404	55	61	109	82	98	404
Far Horizon	Wanaka UGB (Approx)	9	24	13	2	3	1	3	54	10	10	10	13	8	5	54	8	9	8	7	22	54
Meadowstone	Wanaka UGB (Approx)	34	87	44	13	16	5	11	210	39	37	37	49	29	18	210	25	32	36	48	69	210
Mt Iron Drive	Wanaka UGB (Approx)	55	138	91	14	29	3	23	352	66	63	63	83	49	29	352	58	56	66	87	86	352
Old Wanaka	Wanaka UGB (Approx)	277	439	214	38	77	20	96	1,162	215	207	208	273	161	97	1,162	204	196	232	269	260	1,162
Peninsula Bay-Aubrey Road	Wanaka UGB (Approx)	47	148	89	23	17	6	32	362	70	64	64	84	50	30	362	55	52	59	77	118	362
Plantation Road - Kings Drive	Wanaka UGB (Approx)	55	109	53	12	20	2	28	279	52	50	50	66	39	23	279	49	37	63	66	65	279
Three Parks-Alpine Estate	Wanaka UGB (Approx)	15	39	33	9	11	2	14	123	23	22	22	29	17	10	123	21	18	20	30	35	123
West Meadows	Wanaka UGB (Approx)	16	38	19	3	3	1	3	83	16	15	15	20	12	7	83	14	14	20	18	17	83
Sub-Total - Wanaka UGB Area		582	1,165	664	126	206	46	240	3,030	565	539	540	712	420	254	3,030	488	475	614	683	769	3,030
Wanaka Rural Fringe	Wanaka Rural Fringe	43	87	57	12	11	13	6	229	35	37	47	63	34	14	229	40	35	34	43	78	229
Hawea	Rural Settlement	117	135	101	12	26	2	10	404	62	72	99	109	45	17	404	91	96	88	78	51	404
Hawea Flat	Rural Settlement	37	63	71	12	10	2	9	203	35	35	49	54	22	8	203	37	40	33	53	41	203
Luggate	Rural Settlement	35	68	42	5	13	2	3	167	27	29	41	45	19	7	167	35	41	24	39	29	167
Sub-Total Rural Fringe and Settlements		232	353	271	41	60	19	28	1,004	159	173	236	270	121	46	1,004	202	212	179	212	199	1,004
Cardrona Valley	Rural	6	14	6	5	1	0	0	33	4	5	6	10	6	2	33	5	9	4	5	9	33
Rural	Rural	48	73	60	13	9	2	6	211	33	36	49	57	26	10	211	59	35	32	37	49	211
Sub-Total Rural/Remote		54	87	65	18	11	2	7	244	37	41	55	67	32	12	244	64	44	36	42	59	244
TOTAL WANAKA CATCHMENT		867	1,605	1,001	186	277	67	275	4,277	760	753	832	1,048	573	311	4,277	754	731	829	937	1,026	4,277

Source: Statistics NZ. Customised data request and proprietary analysis by M.E - households in private occupied dwellings - High Growth Projection. Refer Appendix A for extent of sub-catchments.

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Share of Households by Category for Each Sub-Catchment Area

Sub-Catchment	Locality	Family Type (2016)							Total Hholds	Age of Household Reference Person (2016)						Total Hholds	Household Income (2016)					Total Hholds
		Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family		15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years		\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	
Albert Town	Wanaka UGB (Approx)	19%	35%	27%	3%	8%	2%	7%	100%	18%	18%	18%	24%	14%	8%	100%	14%	15%	27%	20%	24%	100%
Far Horizon	Wanaka UGB (Approx)	16%	44%	23%	4%	6%	1%	6%	100%	18%	18%	18%	24%	14%	8%	100%	14%	16%	15%	13%	41%	100%
Meadowstone	Wanaka UGB (Approx)	16%	41%	21%	6%	8%	2%	5%	100%	19%	18%	18%	23%	14%	8%	100%	12%	15%	17%	23%	33%	100%
Mt Iron Drive	Wanaka UGB (Approx)	16%	39%	26%	4%	8%	1%	6%	100%	19%	18%	18%	23%	14%	8%	100%	16%	16%	19%	25%	24%	100%
Old Wanaka	Wanaka UGB (Approx)	24%	38%	18%	3%	7%	2%	8%	100%	19%	18%	18%	24%	14%	8%	100%	18%	17%	20%	23%	22%	100%
Peninsula Bay-Aubrey Road	Wanaka UGB (Approx)	13%	41%	25%	6%	5%	2%	9%	100%	19%	18%	18%	23%	14%	8%	100%	15%	14%	16%	21%	33%	100%
Plantation Road - Kings Drive	Wanaka UGB (Approx)	20%	39%	19%	4%	7%	1%	10%	100%	19%	18%	18%	23%	14%	8%	100%	17%	13%	23%	24%	23%	100%
Three Parks-Alpine Estate	Wanaka UGB (Approx)	12%	32%	27%	8%	9%	1%	11%	100%	19%	18%	18%	24%	14%	8%	100%	17%	15%	16%	24%	28%	100%
West Meadows	Wanaka UGB (Approx)	20%	46%	23%	4%	4%	1%	3%	100%	19%	18%	18%	23%	14%	8%	100%	17%	17%	24%	22%	20%	100%
Sub-Total - Wanaka UGB Area		19%	38%	22%	4%	7%	2%	8%	100%	19%	18%	18%	23%	14%	8%	100%	16%	16%	20%	23%	25%	100%
Wanaka Rural Fringe	Wanaka Rural Fringe	19%	38%	25%	5%	5%	6%	3%	100%	15%	16%	21%	27%	15%	6%	100%	17%	15%	15%	19%	34%	100%
Hawea	Rural Settlement	29%	33%	25%	3%	7%	1%	2%	100%	15%	18%	25%	27%	11%	4%	100%	22%	24%	22%	19%	13%	100%
Hawea Flat	Rural Settlement	18%	31%	35%	6%	5%	1%	4%	100%	17%	17%	24%	26%	11%	4%	100%	18%	20%	16%	26%	20%	100%
Luggate	Rural Settlement	21%	41%	25%	3%	8%	1%	2%	100%	16%	18%	24%	27%	11%	4%	100%	21%	24%	14%	23%	17%	100%
Sub-Total Rural Fringe and Settlements		23%	35%	27%	4%	6%	2%	3%	100%	16%	17%	24%	27%	12%	5%	100%	20%	21%	18%	21%	20%	100%
Cardrona Valley	Rural	18%	43%	17%	15%	4%	1%	1%	100%	13%	14%	19%	30%	19%	6%	100%	14%	28%	13%	17%	29%	100%
Rural	Rural	23%	34%	28%	6%	4%	1%	3%	100%	16%	17%	23%	27%	12%	5%	100%	28%	16%	15%	17%	23%	100%
Sub-Total Rural/Remote		22%	36%	27%	8%	4%	1%	3%	100%	15%	17%	23%	27%	13%	5%	100%	26%	18%	15%	17%	24%	100%
TOTAL WANAKA CATCHMENT		20%	38%	23%	4%	6%	2%	6%	100%	18%	18%	19%	25%	13%	7%	100%	18%	17%	19%	22%	24%	100%

Source: Statistics NZ. Customised data request and proprietary analysis by M.E - households in private occupied dwellings - High Growth Projection. Refer Appendix A for extent of sub-catchments.

Continued...

Share of Households by Sub-Catchment Area for Each Category

Sub-Catchment	Locality	Family Type (2016)								Age of Household Reference Person (2016)							Household Income (2016)					
		Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family	Total Hholds	15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years	Total Hholds	\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	Total Hholds
Albert Town	Wanaka UGB (Approx)	9%	9%	11%	6%	11%	10%	11%	9%	10%	10%	9%	9%	10%	11%	9%	7%	8%	13%	9%	10%	9%
Far Horizon	Wanaka UGB (Approx)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	1%
Meadowstone	Wanaka UGB (Approx)	4%	5%	4%	7%	6%	7%	4%	5%	5%	5%	5%	5%	5%	6%	5%	3%	4%	4%	5%	7%	5%
Mt Iron Drive	Wanaka UGB (Approx)	6%	9%	9%	8%	10%	5%	8%	8%	9%	8%	8%	8%	9%	9%	8%	8%	8%	8%	9%	8%	8%
Old Wanaka	Wanaka UGB (Approx)	32%	27%	21%	20%	28%	30%	35%	27%	28%	28%	25%	26%	28%	31%	27%	27%	27%	28%	29%	25%	27%
Peninsula Bay-Aubrey Road	Wanaka UGB (Approx)	5%	9%	9%	13%	6%	9%	12%	8%	9%	8%	8%	8%	9%	10%	8%	7%	7%	7%	8%	12%	8%
Plantation Road - Kings Drive	Wanaka UGB (Approx)	6%	7%	5%	6%	7%	3%	10%	7%	7%	7%	6%	6%	7%	8%	7%	6%	5%	8%	7%	6%	7%
Three Parks-Alpine Estate	Wanaka UGB (Approx)	2%	2%	3%	5%	4%	3%	5%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	3%	3%	3%
West Meadows	Wanaka UGB (Approx)	2%	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Sub-Total - Wanaka UGB Area		67%	73%	66%	68%	74%	69%	87%	71%	74%	72%	65%	68%	73%	81%	71%	65%	65%	74%	73%	75%	71%
Wanaka Rural Fringe	Wanaka Rural Fringe	5%	5%	6%	6%	4%	20%	2%	5%	5%	5%	6%	6%	6%	4%	5%	5%	5%	4%	5%	8%	5%
Hawea	Rural Settlement	13%	8%	10%	7%	10%	4%	4%	9%	8%	10%	12%	10%	8%	5%	9%	12%	13%	11%	8%	5%	9%
Hawea Flat	Rural Settlement	4%	4%	7%	7%	4%	3%	3%	5%	5%	5%	6%	5%	4%	3%	5%	5%	5%	4%	6%	4%	5%
Luggate	Rural Settlement	4%	4%	4%	3%	5%	2%	1%	4%	4%	4%	5%	4%	3%	2%	4%	5%	6%	3%	4%	3%	4%
Sub-Total Rural Fringe and Settlements		27%	22%	27%	22%	22%	28%	10%	23%	21%	23%	28%	26%	21%	15%	23%	27%	29%	22%	23%	19%	23%
Cardrona Valley	Rural	1%	1%	1%	3%	0%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Rural	Rural	6%	5%	6%	7%	3%	3%	2%	5%	4%	5%	6%	5%	5%	3%	5%	8%	5%	4%	4%	5%	5%
Sub-Total Rural/Remote		6%	5%	7%	10%	4%	3%	2%	6%	5%	5%	7%	6%	6%	4%	6%	8%	6%	4%	4%	6%	6%
TOTAL WANAKA CATCHMENT		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Statistics NZ. Customised data request and proprietary analysis by M.E - households in private occupied dwellings - High Growth Projection. Refer Appendix A for extent of sub-catchments.

APPENDIX F – SUMMARY OF HOUSEHOLDS PROJECTIONS BY TYPE AND LOCALITY WITHING THE WANAKA CATCHMENT (HIGH)

Household Projections (High) – Approximate Wanaka Urban Growth Boundary Area

Wanaka UGB (Approx)									Age of Household Reference Person							Household Income						
Year	Family Type								Total Hholds	15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years	Total Hholds	\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	Total Hholds
	Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family	Total Hholds														
2016	580	1,170	660	130	210	50	240	3,030	560	540	540	710	420	250	3,030	490	480	610	680	770	3,030	
2018	630	1,250	700	130	220	50	260	3,240	600	550	580	750	470	290	3,240	530	520	650	730	810	3,240	
2023	770	1,470	780	140	250	50	290	3,760	710	560	650	890	530	420	3,760	630	610	750	830	930	3,760	
2028	910	1,710	850	160	280	60	340	4,320	850	590	690	1,010	610	570	4,320	750	720	860	940	1,050	4,320	
2033	1,070	1,960	930	170	300	70	380	4,890	960	660	700	1,150	680	740	4,890	870	840	960	1,050	1,160	4,890	
2038	1,230	2,210	1,020	180	330	70	420	5,470	1,050	750	740	1,240	780	920	5,470	990	960	1,070	1,160	1,280	5,470	
2043	1,390	2,450	1,110	200	360	80	450	6,040	1,100	850	800	1,300	890	1,100	6,040	1,120	1,080	1,180	1,270	1,390	6,040	
2048	1,530	2,680	1,180	210	390	80	500	6,580	1,260	860	830	1,460	950	1,230	6,580	1,220	1,180	1,280	1,380	1,510	6,580	
Growth in Households (n)																						
Short Term Growth*	80	120	60	-	20	-	30	310	60	10	50	70	60	60	310	60	60	60	70	60	310	
Medium Term Growth*	270	440	160	20	60	10	80	1,060	230	40	130	250	160	250	1,060	210	190	200	210	230	1,060	
Long Term Growth*	890	1,420	490	70	160	30	240	3,320	650	290	280	710	490	920	3,320	690	660	630	650	690	3,320	
Growth in Households (%)																						
Short Term Growth*	14%	10%	9%	0%	10%	0%	13%	10%	11%	2%	9%	10%	14%	24%	10%	12%	13%	10%	10%	8%	10%	
Medium Term Growth*	47%	38%	24%	15%	29%	20%	33%	35%	41%	7%	24%	35%	38%	100%	35%	43%	40%	33%	31%	30%	35%	
Long Term Growth*	153%	121%	74%	54%	76%	60%	100%	110%	116%	54%	52%	100%	117%	368%	110%	141%	138%	103%	96%	90%	110%	

* Based on NPS UDC definitions (short term = 3 years 2016-2019, medium term = 10 years 2016-2026, long term = 30 years 2016-2046). Calculated with 2016 base year and interpolated household counts. High Growth Projection.

Continued...

Household Projections (High) – Wanaka Urban Fringe (Refer Appendix B)

Wanaka Rural Fringe									Age of Household Reference Person							Household Income						
Year	Family Type								Total Hholds	15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years	Total Hholds	\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	Total Hholds
	Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family	Total Hholds														
2016	40	90	60	10	10	10	10	230	30	40	50	60	30	10	230	40	30	30	40	80	230	
2018	50	90	60	10	10	10	10	240	40	40	50	70	40	20	240	40	40	40	50	80	240	
2023	60	110	70	10	10	20	10	280	50	40	50	80	40	30	280	50	40	40	50	100	280	
2028	70	130	70	10	10	20	10	320	70	40	50	80	40	40	320	60	50	40	60	110	320	
2033	80	140	80	10	10	20	10	360	70	50	50	90	50	50	360	70	60	50	60	130	360	
2038	90	160	90	20	10	20	10	400	80	60	50	90	60	60	400	80	60	50	70	140	400	
2043	110	170	90	20	10	30	10	440	80	70	60	90	60	80	440	90	70	60	70	150	440	
2048	120	190	100	20	10	30	10	480	100	70	50	100	70	90	480	100	80	60	80	170	480	
Growth in Households (n)																						
Short Term Growth*	10	-	-	-	-	-	-	20	10	-	-	10	10	10	20	-	10	10	10	-	20	
Medium Term Growth*	30	30	10	-	-	10	-	70	30	-	-	20	10	30	70	20	20	10	20	30	70	
Long Term Growth*	70	90	40	10	-	20	-	230	60	30	-	40	30	70	230	60	40	30	40	80	230	
Growth in Households (%)																						
Short Term Growth*	25%	0%	0%	0%	0%	0%	0%	9%	33%	0%	0%	17%	33%	100%	9%	0%	33%	33%	25%	0%	9%	
Medium Term Growth*	75%	33%	17%	0%	0%	100%	0%	30%	100%	0%	0%	33%	33%	300%	30%	50%	67%	33%	50%	38%	30%	
Long Term Growth*	175%	100%	67%	100%	0%	200%	0%	100%	200%	75%	0%	67%	100%	700%	100%	150%	133%	100%	100%	100%	100%	

* Based on NPS UDC definitions (short term = 3 years 2016-2019, medium term = 10 years 2016-2026, long term = 30 years 2016-2046). Calculated with 2016 base year and interpolated household counts. High Growth Projection.

Continued...

Household Projections (High) – Rural Settlement (Refer Appendix B, comprises Hawea, Hawea Flat and Luggate Sub-catchments)

Rural Settlement									Age of Household Reference Person							Household Income						
Year	Family Type								Total Hholds	15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years	Total Hholds	\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	Total Hholds
	Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family	Total Hholds														
2016	190	270	210	30	50	10	20	770	120	140	190	210	90	30	770	160	180	150	170	120	770	
2018	210	290	220	30	50	10	20	830	140	140	190	230	100	40	830	180	190	150	180	130	830	
2023	250	350	250	30	60	10	30	970	190	140	190	280	110	70	970	220	230	180	210	140	970	
2028	300	410	280	30	60	10	40	1,130	230	160	190	310	140	100	1,130	260	270	210	230	160	1,130	
2033	350	480	310	40	70	10	50	1,300	280	180	200	330	170	140	1,300	310	310	240	270	180	1,300	
2038	400	540	350	40	70	10	50	1,470	300	220	220	330	220	190	1,470	360	350	270	300	200	1,470	
2043	460	600	390	50	80	10	50	1,640	310	250	240	350	230	260	1,640	420	390	290	320	220	1,640	
2048	500	660	410	50	80	10	60	1,790	370	260	240	390	260	270	1,790	450	430	320	350	240	1,790	
Growth in Households (n)																						
Short Term Growth*	30	30	20	-	-	-	-	90	30	-	-	30	10	10	90	30	20	10	20	10	90	
Medium Term Growth*	90	110	60	-	10	-	20	290	90	10	-	90	40	60	290	80	70	50	50	30	290	
Long Term Growth*	290	370	190	20	30	-	40	950	240	110	40	170	160	230	950	280	230	160	170	110	950	
Growth in Households (%)																						
Short Term Growth*	16%	11%	10%	0%	0%	0%	0%	12%	25%	0%	0%	14%	11%	33%	12%	19%	11%	7%	12%	8%	12%	
Medium Term Growth*	47%	41%	29%	0%	20%	0%	100%	38%	75%	7%	0%	43%	44%	200%	38%	50%	39%	33%	29%	25%	38%	
Long Term Growth*	153%	137%	90%	67%	60%	0%	200%	123%	200%	79%	21%	81%	178%	767%	123%	175%	128%	107%	100%	92%	123%	

* Based on NPS UDC definitions (short term = 3 years 2016-2019, medium term = 10 years 2016-2026, long term = 30 years 2016-2046). Calculated with 2016 base year and interpolated household counts. High Growth Projection.

Continued...

Household Projections (High) – Rural (Refer Appendix B, comprises Cardrona Valley and Rural Sub-catchments)

Rural									Age of Household Reference Person							Household Income					
Year	Family Type							Total Hholds	15-29 Years	30-39 Years	40-49 Years	50-64 Years	65-74 Years	75+ Years	Total Hholds	\$30,000 or Less	\$30,000-\$50,000	\$50,001-\$70,000	\$70,001-\$100,000	\$100,000 or More	Total Hholds
	Single Person	Couple	Couple with 1-2 Kids	Couple with 3+ Kids	Single Parent Family	Multi-Family	Non-Family														
2016	50	90	70	20	10	-	10	240	40	40	60	70	30	10	240	60	40	40	40	60	240
2018	60	90	70	20	10	-	10	260	40	40	60	70	30	20	260	70	50	40	40	60	260
2023	80	110	80	20	10	-	10	300	60	40	60	80	40	30	300	90	50	40	50	70	300
2028	90	120	90	20	10	-	10	350	70	50	50	90	40	40	350	110	60	40	50	80	350
2033	110	140	90	20	10	-	10	400	80	50	60	100	50	50	400	130	70	50	60	90	400
2038	130	150	100	30	20	-	10	440	90	70	60	100	70	60	440	150	80	50	70	100	440
2043	150	160	110	30	20	-	10	490	90	70	70	100	70	80	490	170	80	60	70	100	490
2048	160	180	110	30	20	-	10	530	110	80	60	110	80	90	530	190	90	60	80	110	530
Growth in Households (n)																					
Short Term Growth*	10	-	-	-	-	-	-	30	-	-	-	-	-	10	30	10	10	-	-	-	30
Medium Term Growth*	40	30	20	-	-	-	-	90	30	10	-	10	20	10	90	40	20	-	10	20	90
Long Term Growth*	110	80	40	10	10	-	-	280	60	30	-	40	50	70	280	120	50	20	40	50	280
Growth in Households (%)																					
Short Term Growth*	20%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	100%	13%	17%	25%	0%	0%	0%	13%
Medium Term Growth*	80%	33%	29%	0%	0%	0%	0%	38%	75%	25%	-17%	29%	33%	300%	38%	67%	50%	0%	25%	33%	38%
Long Term Growth*	220%	89%	57%	50%	100%	0%	0%	117%	150%	75%	0%	57%	167%	700%	117%	200%	125%	50%	100%	83%	117%

* Based on NPS UDC definitions (short term = 3 years 2016-2019, medium term = 10 years 2016-2026, long term = 30 years 2016-2046). Calculated with 2016 base year and interpolated household counts. High Growth Projection.

**APPENDIX G – NATIONAL SUMMARY OF HOUSEHOLD
CHARACTERISTICS BY OCCUPIED DWELLING TYPE 2013**

	Standalone Dwelling	Attached Dwelling	Total Dwellings	Standalone Dwelling	Attached Dwelling
Share of Households and Relative Significance by Family Type					
Single Person	65%	35%	100%	0.80	1.91
Couple	85%	15%	100%	1.04	0.81
Couple with 1-2 Kids	91%	9%	100%	1.12	0.48
Couple with 3+ Kids	95%	5%	100%	1.16	0.28
Single Parent Family	83%	17%	100%	1.01	0.96
Multi-Family	91%	9%	100%	1.11	0.49
Non-Family	69%	31%	100%	0.84	1.73
Total Households	82%	18%	100%	1.00	1.00
Share of Households and Relative Significance by Family Type					
15-29 Years	70%	30%	100%	0.86	1.65
30-39 Years	73%	27%	100%	0.90	1.47
40-49 Years	81%	19%	100%	0.99	1.05
50-64 Years	83%	17%	100%	1.02	0.92
65-74 Years	87%	13%	100%	1.07	0.69
75+ Years	91%	9%	100%	1.11	0.48
Total Households	82%	18%	100%	1.00	1.00
Share of Households and Relative Significance by Family Type					
\$30,000 or Less	80%	20%	100%	0.97	1.12
\$30,000-\$50,000	86%	14%	100%	1.05	0.78
\$50,001-\$70,000	85%	15%	100%	1.04	0.82
\$70,001-\$100,000	78%	22%	100%	0.96	1.20
\$100,000 or More	79%	21%	100%	0.97	1.13
Total Households	82%	18%	100%	1.00	1.00

Source: Statistics NZ Census 2013, Market Economics

APPENDIX H – M.E ESTIMATED PROJECTED DWELLING DEMAND BY WANAKA CATCHMENT LOCALITY

Locality	Original Allocation (Occupied)			Modified Allocation (Occupied) *			Unoccupied Factor **	Adjusted for Unoccupied Dwellings			Average Annual Demand		
	Standalone Dwellings	Attached Dwellings	Total Dwellings	Standalone Dwellings	Attached Dwellings	Total Dwellings		Standalone Dwellings	Attached Dwellings	Total Dwellings	Standalone Dwellings	Attached Dwellings	Total Dwellings
2016 (Demand)							<i>2013 Value</i>						
Wanaka UGB (Approx)	2,480	550	3,030	2,480	750	3,230	36%	3,880	1,170	5,050			
Wanaka Rural Fringe	190	40	230	190	-	190	10%	210	-	210			
Rural Settlement	630	140	770	630	10	640	27%	870	10	880			
Rural	200	40	240	200	-	200	32%	290	-	290			
Total Wanaka Catchment	3,500	770	4,270	3,500	760	4,260		5,250	1,180	6,430			
Short Term Additional Demand (2016-2019)													
Wanaka UGB (Approx)	250	60	310	250	70	320	36%	390	110	500	130	37	167
Wanaka Rural Fringe	20	-	20	20	-	20	10%	20	-	20	7	-	7
Rural Settlement	70	10	80	70	-	70	27%	100	-	100	33	-	33
Rural	20	-	20	20	-	20	32%	30	-	30	10	-	10
Total Wanaka Catchment	360	70	430	360	70	430		540	110	650	180	37	217
Medium Term Additional Demand (2016-2026)													
Wanaka UGB (Approx)	860	190	1,050	860	260	1,120	36%	1,340	410	1,750	134	41	175
Wanaka Rural Fringe	60	10	80	60	-	60	10%	70	-	70	7	-	7
Rural Settlement	240	50	290	240	10	250	27%	330	10	340	33	1	34
Rural	70	20	80	70	-	70	32%	100	-	100	10	-	10
Total Wanaka Catchment	1,230	270	1,500	1,230	270	1,500		1,840	420	2,260	184	42	226
Long Term Additional Demand (by 2016-2046)													
Wanaka UGB (Approx)	2,720	600	3,320	2,720	830	3,550	36%	4,250	1,300	5,550	142	43	185
Wanaka Rural Fringe	190	40	240	190	-	190	10%	210	-	210	7	-	7
Rural Settlement	780	170	950	780	20	800	27%	1,070	30	1,100	36	1	37
Rural	220	50	270	220	10	230	32%	320	10	330	11	0	11
Total Wanaka Catchment	3,910	860	4,780	3,910	860	4,770		5,850	1,340	7,190	195	45	240

Source: Statistics New Zealand and M.E. Figures have been rounded to the nearest 10.

* Based on allocating 90% (estimate only) of attached dwelling demand in Wanaka Rural Fringe, Rural Settlement and Rural localities to the Wanaka UGB.

** Share of Private Occupied and Unoccupied Built Dwellings that are 'Empty' 2013 Census (excludes non-private occupied and under construction). Assume applies equally to standalone and attached dwellings as no information available to distinguish otherwise.

Modified Allocation = estimated occupied dwellings for resident households. Adjusted = inclusion of estimated demand for unoccupied holiday homes. Note, total dwelling projections are sensitive to the estimated share of 'Empty' dwellings (holiday homes). If a higher percent is applied in the Wanaka UGB, say 40%, total demand projections increase to 540 (short term), 1,860 (medium term) and 5,910 (long term) in the UGB area.

Comparison of 2016 Implied Dwelling Demand with Actual Dwelling Supply

Locality	Adjusted for Unoccupied Dwellings			Actual Dwelling Supply 2016 ***			Implied Shortfall / Surplus				
	Standalone Dwellings	Attached Dwellings	Total Dwellings	Standalone Dwellings	Attached Dwellings	Total Dwellings	Standalone Dwellings	Attached Dwellings	Net Total Dwellings		
2016 (Demand)											
Wanaka UGB (Approx)	3,880	1,170	5,050	4,040	350	4,390	160	-	820	-	660
Wanaka Rural Fringe	210	-	210	240	20	260	30	20			50
Rural Settlement	870	10	880	930	80	1,010	60	70			130
Rural	290	-	290	320	30	350	30	30			60
Total Wanaka Catchment	5,250	1,180	6,430	5,530	480	6,010	280	-	700	-	420

Source: Statistics New Zealand and M.E. Figures have been rounded to the nearest 10.

*** Source: Property Stock Dataset 2013-2016 by locality (Residential and Lifestyle properties) - combined standalone and attached property types

APPENDIX I – M.E ESTIMATED PROJECTED DWELLING DEMAND BY WANAKA CATCHMENT LOCALITY

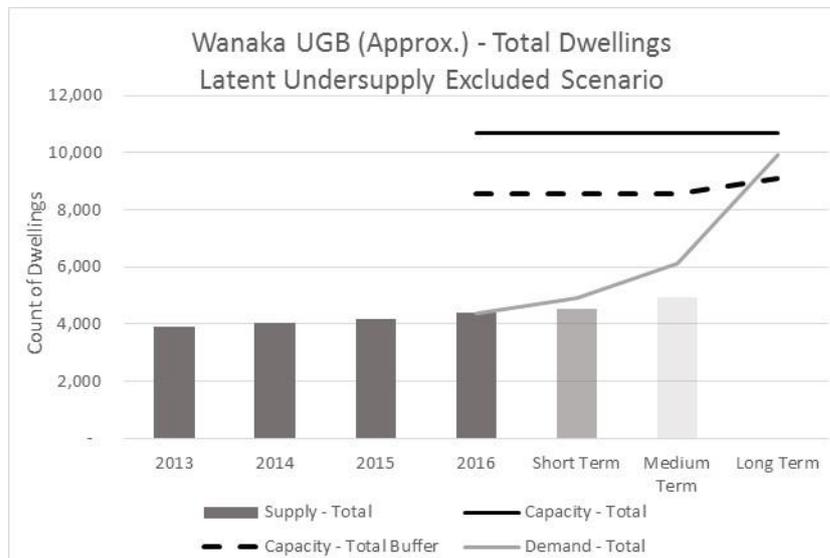
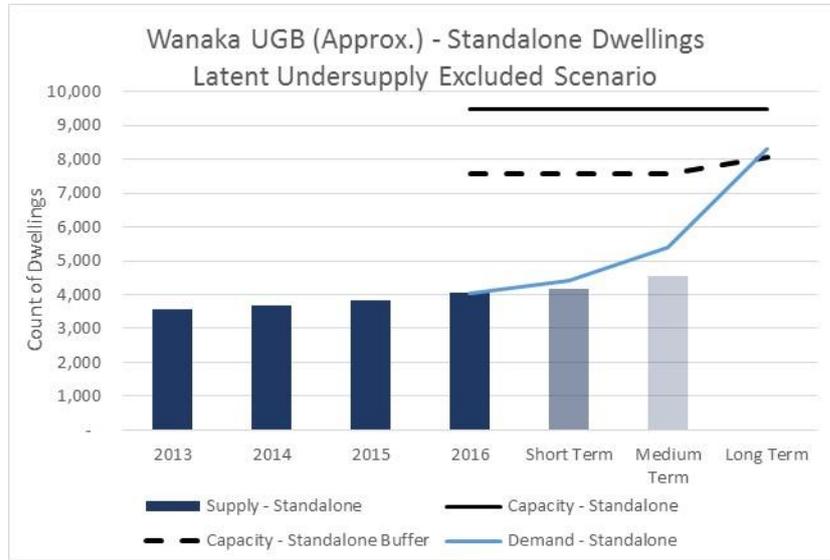
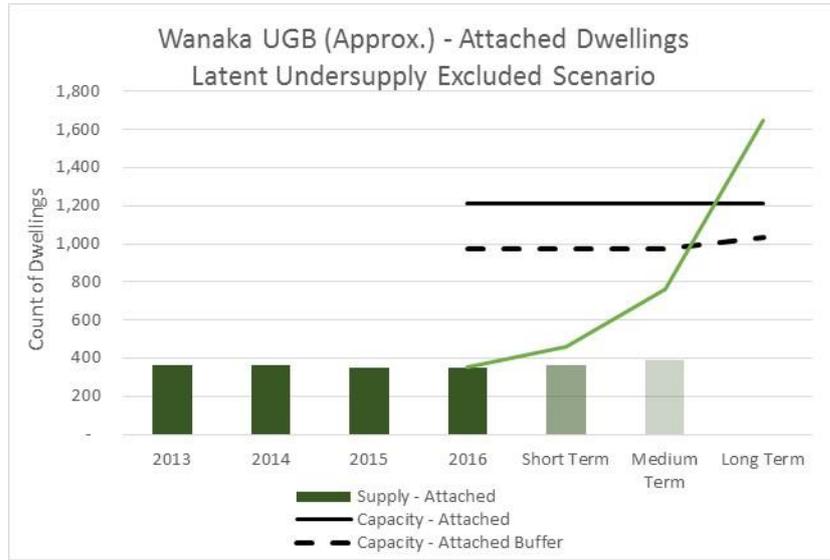
Selected Subdivisions Currently Marketing Sections	Standalone - Released	Attached - Released	Total - Released
The Heights	33	0	33
Northlake	239	36	275
Hikawai	61	12	73
The Alpha Series	115	0	115
Alpine Estate	94	0	94
Heritage Estate	14	0	14
Total	556	48	604
Percent Occupied by 2019 *	20%	20%	20%
Likely Additional Built Supply (Selected Subdivisions)	111	10	121
Net Additional Supply Elsewhere **	115%	105%	
Likely Additional Built Supply (Total)	128	10	138
Percent Occupied by 2026 *	80%	80%	80%
Likely Additional Built Supply (Selected Subdivisions)	445	38	483
Net Additional Supply Elsewhere **	115%	105%	
Likely Additional Built Supply (Total)	512	40	552

Source: Interpreted from subdivision websites, current as at March 2017

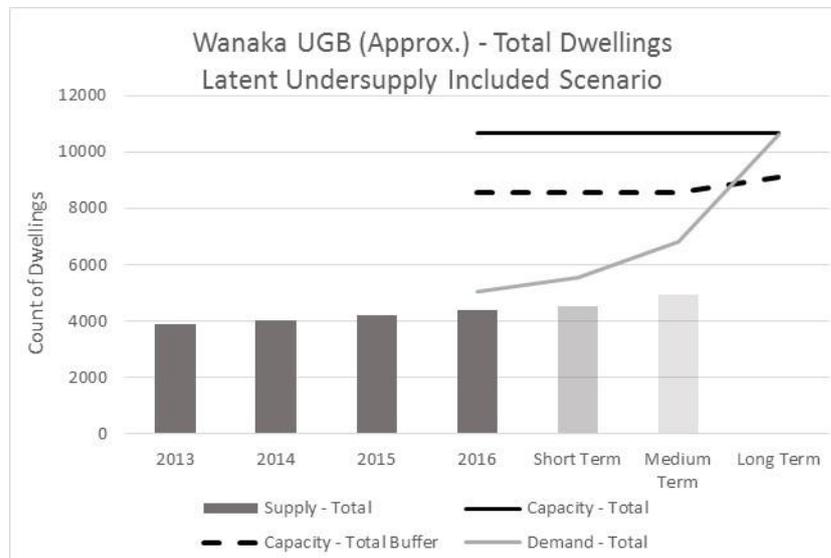
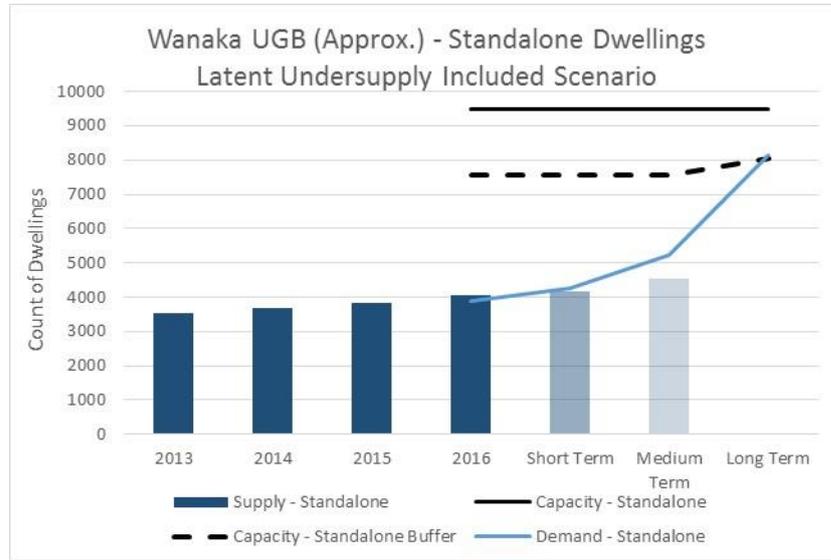
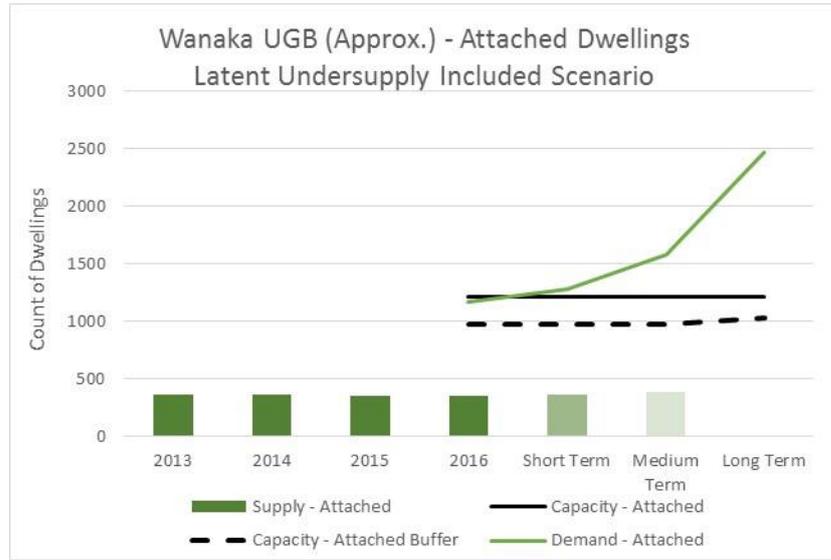
* M.E Estimate only taking into consideration lag time to receive title, seek building consent, secure builder and complete construction, plus portion that may be landbanked.

** M.E Estimate only taking into consideration development

APPENDIX J – DEMAND VERSUS CAPACITY – SCENARIO 1 RESULTS



APPENDIX K – DEMAND VERSUS CAPACITY – SCENARIO 2 RESULTS



APPENDIX L – DEMAND VERSUS CAPACITY – SCENARIO 3 RESULTS

