HOUSING AND BUSINESS CAPACITY ASSESSMENT

July 2021





Foreword

This Capacity Assessment Report (A2570160) for Nelson is part of a series of reports undertaken by Nelson and Tasman Councils to meet the obligations of a Tier 2 Urban Environment under the National Policy Statement on Urban Development. Reports in the series are:

A2688455 Capacity Assessment for the Nelson Tasman Urban Environment

A2578160 Capacity Assessment for Nelson City Council Territorial Area.

A2701250 Capacity Assessment for the Tasman District Council Territorial Area

All reports should be read together to gain an understanding of the urban development capacity for the Nelson Tasman Urban Environment.

Table of Contents

| Table | e of Figures | 4 |
|--------|--|-----|
| Table | e of Tables | 4 |
| Exec | utive Summary | 5 |
| | ary of key resultsng demand and capacity | |
| | ability context | |
| Housin | ess demand and capacity ng Bottom Lines | 7 |
| | mendations | |
| 1. | Introduction | |
| 1.1 | Purpose and objectives | |
| 1.2 | The tier 2 urban environment and its geographic areas | 10 |
| 1.3 | Relationship between Nelson City and Tasman District Territorial Authorities | |
| 1.4 | The housing situation in Nelson | 12 |
| 2. | Methodology and approach | .13 |
| 3. | Housing Demand | .14 |
| 3.1 | Introduction | 15 |
| 3.2 | Population projection scenarios | 15 |
| 3.3 | Household projections | 17 |
| 3.4 | Demand for new residential dwellings | 18 |
| 3.5 | Unmet Demand | 18 |
| 3.6 | Competitiveness margins under the NPSUD | 19 |
| 3.7 | Housing demand by type | 21 |
| 3.8 | Demand for dwellings, by type and location and different household groups | 22 |
| | Stoke at a glance | 25 |
| 3.9 | Housing affordability and price-efficiency | 25 |
| 3.10 | Ageing population | 29 |
| 3.11 | Māori | 31 |
| 3.12 | Public and social housing | 34 |
| 3.13 | Housing bottom line | 37 |
| 4. | Housing Capacity | .40 |
| 4.1 | Introduction | 41 |
| 4.2 | Methodology | 41 |
| 43 | Greenfield Canacity | 41 |

| ۵ | Glossary | 6 E |
|------------|---|------------|
| 8. | Recommendations | 64 |
| 7.2 | Assessment of sufficient development capacity for business land | 63 |
| 7.1 | Assessment of sufficient development capacity for housing | |
| 7. | Conclusions | 62 |
| 6. | Business land capacity | 59 |
| 5. | Business land demand | 56 |
| | 4.16.2 Residential zone management assumptions | 54 |
| | 4.16.1 Inclusion of Kaka FDS area | 53 |
| 4.16 | Alternative scenarios | 53 |
| 4.15 | Any insufficient residential capacity | 53 |
| 4.14 | Residential Capacity: Long-term | 53 |
| 4.13 | Residential Capacity: Medium-term | |
| 4.12 | Residential Capacity: Short-term | 53 |
| 4.11 | Capacity Summary | |
| 4.10 | Final housing capacity | |
| | 4.9.2 Infill and redevelopment | |
| ٦.۶ | 4.9.1 Greenfield | |
| 4.6 4.9 | Feasibility | |
| 4.7 4.8 | Infrastructure capacity Key assumptions relating to the assessment of housing capacity | |
| 4.6 | Intensification by Redevelopment | |
| 4.5 | Intensification by Infill | |
| 4.4 | Intensification Capacity | |
| | | |

Table of Figures

| Figure 1: Housing bottom line and capacity by year | 11 17 20 21 22 23 24 27 28 29 31 32 33 34 45 46 51 52 57 |
|--|--|
| Table of Tables | 01 |
| Table 1: Housing demand and capacity to 2051 | 6 |
| Table 2: Business land demand and capacity in Nelson with competitiveness margin (no | |
| cumulative) | |
| Table 3: Housing bottom line | |
| Table 4: Population projections adopted by NCC for its LTP 2021-31 | |
| Table 5: Nelson's household projections | |
| Table 6: Unmet dwelling demand – Nelson | |
| (cumulative) | |
| Table 8: Housing demand by type | |
| Table 9: Nelson City housing bottom line | |
| Table 10: Expected yield of Greenfield areas | |
| Table 11: NRMP minimum lot size and maximum building coverage rules by zone | |
| Table 12: Nelson City future housing capacity | |
| Table 13: Change in proportion of development type over time | |
| Table 14: Business land demand with competitiveness margins | |
| Table 16: Business land supply, matched to demand where possible | |
| Table 17: Remaining business land | |
| Table 18: Industrial land close to the city centre. | |
| Table 19: Industrial land price differential | |
| Table 20: Housing bottom line and capacity | |
| Table 21: Business land capacity minus supply | |

Executive Summary

The Nelson City Council territorial area forms part of the Nelson Tasman Urban Environment. An urban environment means any area of land that is part of a housing and labour market of at least 10,000 people. The Nelson Tasman Urban Environment extends from Cable Bay to Wakefield and Motueka.

This report provides an assessment of the housing and business development capacity in the Nelson Territorial Authority part of the Nelson Tasman Urban Environment. Development capacity means the capacity of land to be developed for housing or business use, based on:

- (a) Zoning, objectives, policies, rules and overlays that apply in the relevant proposed and operative RMA planning documents; and
- (b) The provision of adequate development infrastructure to support the development of land for housing and business use.

A separate report (A2701250) provides an assessment of the Tasman Territorial Authority Area and a combined overview report (A2688455) provides an assessment of the Nelson Tasman Urban Environments urban development capacity.

These assessments are required to meet Subpart 5 Housing and Business Capacity Assessments (HBA) of the National Policy Statement on Urban Development 2020. The assessments are also required to ensure that decision-makers have evidence to inform planning decisions, including the provision of a housing bottom line, and are responsive to any shortfalls in capacity through amending resource management plans and infrastructure programming.

Summary of key results

Housing demand and capacity

In summary, there is sufficient housing capacity in Nelson in the short term. In the medium term, although there is a projected shortfall of 660 dwellings, this is accommodated by a surplus of capacity in the short term. In the long-term, taking the surplus and deficits of the previous periods into account, there is a total shortfall of 864 dwellings projected.

However, if the plan change application submitted to Council for the Maitahi/Bayview development area is approved, demand is expected to exceed supply in around 2043 (instead of 2039).

The Nelson Resource Management Plan is currently being reviewed. The draft rules allow for much smaller lot sizes which have the effect of increasing infill and redevelopment capacity to a level where supply is expected to exceed demand until beyond 2051.

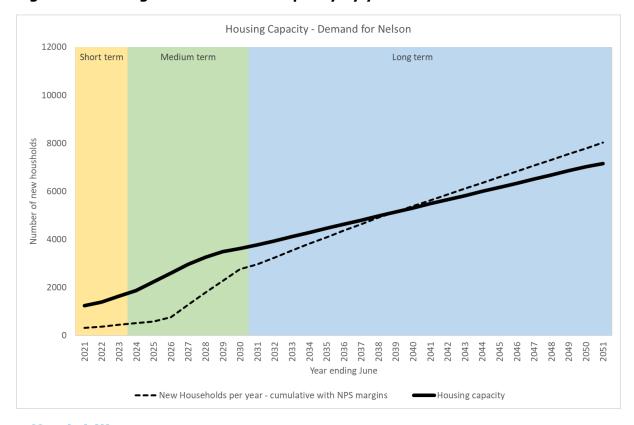
Table 1 shows the projected demand for housing by household (including NPSUD competitiveness margins) for each of the short, medium, and long term periods in comparison to the city's capacity to provide for future dwellings in Nelson to 2051.

Table 1: Housing demand and capacity to 2051.

| Period | Demand (households) for period | Sufficient capacity (dwellings) for period | Difference for period |
|--------------------------|--------------------------------------|---|-----------------------|
| Short-term (1-3 years) | 521 | 1,876 | 1,355 |
| Medium-term (4-10 years) | 2,554 | 1,894 | -660 |
| Long-term 11-30 years) | 4,950 | 3,391 | -1,559 |
| Total | 8,025 | 7,161 | Deficit of -864 |

While capacity is expected to be available in the short and medium term the pinch point, where demand exceeds supply, sits around 2039 assuming no other development proposals come forward. Figure 1 illustrates the demand-capacity relationship over time.

Figure 1: Housing bottom line and capacity by year.



Affordability context

In spite of the current demand-capacity relationship, in an environment of rising house prices and below national average wages it is getting harder to enter into the city's housing market. When taking into consideration average wages in Nelson, the city is one of New Zealand's least affordable, with growing numbers of households experiencing affordability stress. Based on household income data from the 2018 census and current house pricing this HBA estimates that the majority of residents who do not own their own home may now be unable to afford a lower quartile price point house in Nelson.

The latest Massey University Home Affordability Report (December 2020) ranks Nelson as the third least affordable region in New Zealand after Auckland and Tasman.

Business demand and capacity

The Nelson City Council and Tasman District Council commissioned Sense Partners to undertake an assessment of its business land capacity. The assessment suggested the economic shape of Nelson (and Nelson-Tasman) is changing, in line with the rest of New Zealand, estimating an increase in commercial and service type activities and a gradual decline in industrial activity over the thirty-year period.

For Nelson, this means a demand for a further 9.2 hectares of business land, largely to cater for the growth in the commercial and health education and training sector that is expected. The 9.2 hectares takes into account that 8.3 hectares of existing industrial land will no longer be needed and assumes this land can be repurposed.

To offset this demand Nelson currently has capacity for 17.1 hectares of business land which is a mix of industrial and commercial land. Commercial land is land used for ANZSIC categories J to N and P to R which include activities involving things like professional services, science and technology that are generally office-based. Due to the proximity to the city centre of a suitably sized area of industrial land, there is scope for a change in land use from industrial to commercial to accommodate any shortfall in supply in either land type. Table 2 shows that there is sufficient business land capacity over the short, medium and long term periods to 2051.

Table 2: Business land demand (with competitiveness margins) and capacity in Nelson (not cumulative)

| Period | Demand | Capacity | Difference |
|--------------------------|------------|------------|------------|
| | For period | For period | For period |
| Short-term (1-3 years) | -5.9 | 17.1 | 23 |
| Medium-term (4-10 years) | 7.4 | 23 | 15.6 |
| Long-term (11-30 years) | 7.8 | 15.6 | 7.8 |

Housing Bottom Lines

The Nelson Territorial Authority area housing bottom lines for the short, medium and long term are set out in Table 3 below and are cumulative.

Table 3: Housing bottom line

| Period | Development capacity that is sufficient to meet expected housing demand | Holiday homes margin | Competitiveness margin | Total (cumulative) |
|-----------------------------|---|----------------------------|---|-----------------------|
| Short term (1- 3 years) | 417 dwellings | 21 | +20% = 83 dwellings | 521 dwellings |
| Medium term (4-10 years) | 2,460 dwellings | 123 | +20% = 492 dwellings | 3,075 dwellings |
| Long term (11-30 years) | 6,687 dwellings | 211 | +20% (yrs 1-10) = 634 dwellings +15% (yrs 11-20) = 493 dwellings | 8,025 dwellings |

Recommendations

As a result of the shortfall in housing and business capacity identified in this report the following recommendations are provided:

- 1) To continue to progress the proposed Whakamahere Whakatū Nelson Plan change:
- To enable greater infill feasibility and higher density development where these meet the requirements of the NPSUD.
- To enhance market choice, price-points and make efficient use of the urban land resource and infrastructure to provide a well-functioning urban environment.
- To provide residential greenfield expansion areas where these meet the requirements of the NPSUD.
- That considers how to provide for relocatable housing.
- To rezone surplus industrial land for other business/mixed-use activities.
- 2) Assess potential additional capacity of housing and business land areas through the development of a new Future Development Strategy. Investigating the influence of transport accessibility on enabling intensified growth over the short, medium, and long terms may also be of benefit.
- 3) Complete Te Ara ō Whakatū, the city centre spatial plan, and programme investment in the public realm to encourage and support the uptake of inner-city housing.
- 4) Actively pursue Government funding opportunities, such as the Housing Acceleration Fund, to ensure growth areas are infrastructure ready.
- 5) Build and strengthen developer relationships and identify potential partnership opportunities, including with central government agencies, working together to affect the volume and timing of supply.
- 6) Continue to work collaboratively with the Tasman District Council taking a regional approach to solving demand for capacity to achieve sufficient housing and business capacity across the Nelson-Tasman urban environment.
- 7) Continue to evaluate and monitor residential and business capacity with Tasman District Council to ensure decision making is aligned between the Councils where it affects the potential to provide sufficient residential and business land capacity.

1. Introduction

1.1 Purpose and objectives

The Government introduced the National Policy Statement on Urban Development (NPSUD) in August 2020. The policy statement sets out the role that local authorities play in supporting productive and well-functioning cities, with a focus on housing and business development planning required to meet future demands.

A key part of this planning is the compilation of robust evidence for housing and business markets that can be used to inform planning decisions and related documents, for example, Plan Changes, Long Term Plans and Future Development Strategies.

This report provides a summary of the findings from the Council's latest Housing and Business Capacity Assessment to meet the requirements of the NPSUD. It builds on the previous assessment in 2018 prepared under the National Policy Statement Urban Development Capacity 2016 and addresses the additional requirements of the NPSUD 2020.

The process of assessing Nelson's **future housing needs** means understanding:

- the current number of households (dwellings) in Nelson.
- demand for dwellings to meet expected population growth, by type and location in the short-term (3 years), medium-term (4-10 years), and long-term (11-30 years) to 2051.
- what capacity is available now (i.e. land that is zoned residential, and is provided with wastewater, water, stormwater and transport infrastructure to support its development capacity), and in the future (i.e. development infrastructure programmed in Council's Long Term Plan and Infrastructure Strategy).
- the likely supply of housing to be brought to the market, by assessing its feasibility and what is reasonably expected to be realised in the short, medium and long term, including both rental and private ownership.
- the affordability and competitiveness of the housing market and the impact of planning decisions and infrastructure on this market.

Additionally, the assessment provides a basis for the establishment of 'housing bottom lines' for sufficient housing development capacity in Nelson, as well as quantifying any insufficiencies in housing development capacity and the nature of constraints that have been identified.

This report also provides an assessment of Nelson's **business land capacity** to 2051. Under the NPSUD this HBA must estimate, for the short term, medium term and long term, the demand from each business sector for additional business land in the region, by hectares or floor area. Including:

- the most likely projection of demand by business sector; and
- the assumptions underpinning this projection; and
- if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty; and

• An assessment of capacity in the short, medium, and long term and identification of any shortfalls.

1.2 The tier 2 urban environment and its geographic areas

Under the NPSUD (Subpart 5 (3.19(2)) the HBA is to cover the urban environment of the local authority and assess the demand and capacity within the boundaries of that urban environment, however, it may also apply to any wider area.

The Nelson Urban Environment is defined in the NPSUD to include the shared urban environment of the Nelson City Council and Tasman District Council. The NPSUD assesses this shared environment as a Tier 2 Urban Environment.

The NPSUD allows for neighbouring communities that are considered to be part of the same housing and labour market to also be included. In response, at the Joint Committee of the Nelson and Tasman Councils meeting 10 November 2020, it was agreed that the settlements of Hira, Cable Bay, Nelson, Richmond, Brightwater, Wakefield, Mapua and Motueka also be included in the Urban Environment. Figure 2 below shows the areas included in the Nelson Tasman Urban Environment.

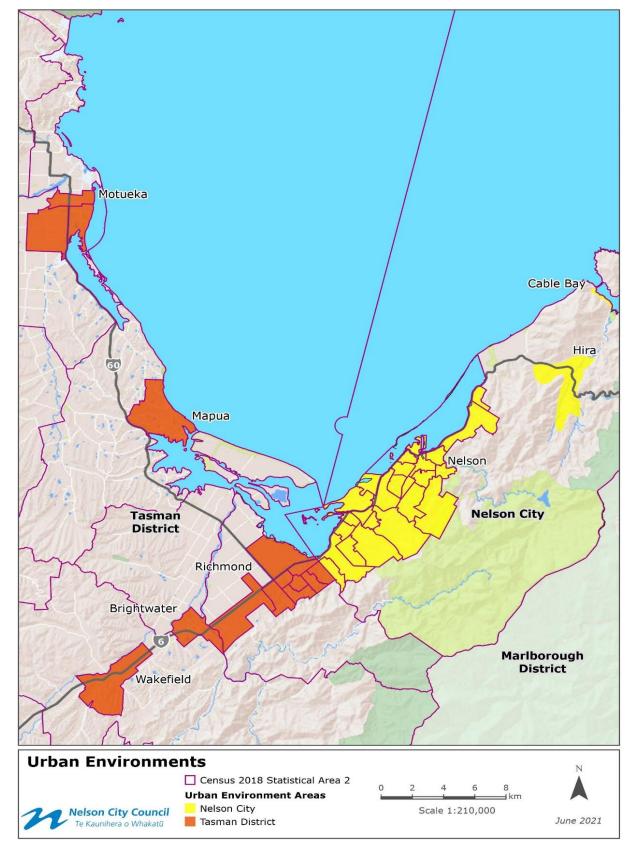


Figure 2: Nelson Tasman Urban Environment – Area covered.

This report discusses the findings of the Nelson part of the Nelson Tasman Urban Environment, as shown in yellow in Figure 2.

A separate report for the shared Urban Environment, as shown in both yellow and orange in Figure 2, has been prepared and this can be found at http://www.nelson.govt.nz/building-and-property/city-development/urban-development-capacity/.

Tasman District Council has its own report on the capacity of the Tasman District Council's part of the Nelson Tasman Urban Environment, shown in orange in Figure 2. This report can also be found at http://www.nelson.govt.nz/building-and-property/city-development/urban-development-capacity/.

1.3 Relationship between Nelson City and Tasman District Territorial Authorities

Understanding the relationship between the areas covered by Nelson and Tasman is essential to understanding how the market for housing and business land operates. The two authorities comprise similar levels of population, with the latest estimates compromising 54,600 residents in Nelson and 56,400 residents in all of Tasman.

From a transport point of view, the networks within both areas are dominated during peak times by residents of one area travelling to and from the other. This is primarily driven by places of residence and work being in different territorial authority areas. For example, around 1,400 Nelson residents work in Tasman and around 2,900 Tasman residents work in Nelson.

Internal migration also links the two regions with around 1,100 people a year¹ relocating their place of residence from Nelson to Tasman and vice versa.

The urban environment of the adjoining Authorities is intrinsically linked and essentially operating as a single urban environment i.e. the boundaries in this context do not reflect the housing choices that people make or the commercial market realities that operate across Nelson and Tasman.

1.4 The housing situation in Nelson

When taking into consideration average wages in Nelson, the city is one of New Zealand's least affordable, with growing numbers of households experiencing affordability stress. Moreover, most residents who do not own their own home may now be unable to afford even a lower quartile price point house.

- Median house prices have continued to increase and are now 88% more expensive when compared with five years ago².
- The number of applicants on the Ministry of Social Development's housing register has increased by 48% compared with 12 months ago (253 at 30 December 2020)³.
- Although affordability has improved over the last 12 months, according to the latest Massey University Index published in December 2020, Nelson continues to be the third least affordable region in the country behind Auckland and Tasman⁴.

https://insights.treasury.govt.nz/insights/#

² https://www.interest.co.nz/charts/real-estate/median-price-reinz

³ https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/housing/index.html

⁴ https://www.massey.ac.nz/massey/learning/colleges/college-business/school-of-economics-and-finance/research/reau/home-affordability-report.cfm

- Total building consents for new dwellings has reduced in Nelson to 253 for the year ending 31 December 2020 down from 312 from the previous calendar year but up from 254 for the 2018 year.
- Total new residential sections have also decreased for the year with a drop from 221 sections in 2019 to 211 sections for the year ending 30 June 2020 but up from 154 for the 2018 year.
- Total resource consents have also reduced from 703 lots for the year ending 30 June 2019, to 385 for year ending 30 June 2020.

For business (commercial and industrial) the amount of floor space in Nelson has remained relatively constant.

2. Methodology and approach

The following is a high-level summary of the method used to analyse Nelson's sufficiency of capacity for housing and business land. More detail on the method and its assumptions can be found in section 4 and section 6 of this HBA.

Housing

Housing capacity has been calculated for greenfield areas using scheme plans provided by developers for the land that is actively being developed. For land likely to be developed much further into the future, densities from the already developed adjoining land are applied and adjusted in response to opportunities and constraints on the site (i.e. lower density for steeper slopes, higher density where conditions allow).

For intensification, infill and redevelopment, capacity has been calculated using GIS tools, the rating database, and the Nelson Resource Management Plan rules.

Business land

Business land capacity has been calculated using the data compiled during a 2021 business land stocktake. This stocktake recorded all business land use throughout Nelson City including vacant land and unoccupied buildings.

3. Housing Demand

NPSUD requirements (3.24):

- Every HBA must estimate, for the short term, medium term, and long term, the demand for additional housing in the region and each constituent district of the tier 1 or tier 2 urban environment:
 - · in different locations; and
 - in terms of dwelling types. types.
- 2) Local authorities may identify locations in any way they choose.
- 3) Local authorities may identify the types of dwellings in any way they chose but must, at a minimum, distinguish between standalone dwellings and attached dwellings.
- 4) The demand for housing must be expressed in terms of numbers of dwellings.
- 5) Every HBA must:
 - set out a range of projections of demand for housing in the short term, medium term, and long term; and
 - identify which of the projections are the most likely in each of the short term, medium term, and long term; and
 - set out the assumptions underpinning the different projections and the reason for selecting the most likely; and
 - if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

Section summary:

- The number of households in Nelson is projected to increase to 30,218 by 2051.
- 8,025 additional houses are expected to be needed over the next 30 years.
- When choosing housing, Nelson residents prioritise sun, safety from crime, safety from natural hazards, a freehold title, and a standalone house in this order.
- When choosing a dwelling type and taking into account financial constraints of a household, 8% choose an apartment, 28% choose an attached dwelling, and 65% choose a freestanding dwelling.
- Housing in Nelson is still unaffordable to a large proportion of households that currently do not own their own home.
- Ageing of the population is expected to result in demand for smaller houses.
- Māori households are, on average, larger than the general population and the number of Māori households is expected to increase. This in turn will drive demand for larger houses although this demand could be offset by a reduction in demand for larger houses amongst the wider population.
- Broken down by time period, the cumulative demand for housing, including the NPSUD margins is:
 - Short term (1-3 years) 521 households
 - Medium term (4-10 years) 3,075 households
 - o Long term (11-30 years) 8,025 households

3.1 Introduction

Housing demand means estimating the demand for dwellings to meet the city's population growth for the short, medium, and long term. This is achieved by breaking down the city's population projections into household demand and then adding the required competitiveness margins and other relevant factors such as the impact of unmet demand on the Nelson market. This process is detailed more fully in the sections below which cover:

- Population projection scenarios
- Household projections
- Demand for new dwellings
- Unmet demand
- · Competitiveness margins.

3.2 Population projection scenarios

Over the last ten years, Nelson has experienced an average population growth of approximately 1.7% per year, which is the same average population growth as for the rest of New Zealand.

The Council adopted, for its 2018-28 Long Term Plan (LTP), a high growth series for the years to 2028 and a medium series after that. The previous Housing and Business Assessment, undertaken in 2018, was based on the population and household projections that had been adopted in that LTP.

More recently, however, Covid19 has introduced some uncertainties associated with migration expected to affect Nelson's population growth over the short term. Consequently, the post-Covid19 modelling of Nelson's future population for the LTP 2021-31 anticipated a low growth rate over the short term with the growth rate over the medium-long term gradually returning to sit between the medium and high growth series as previously anticipated before the Covid19 pandemic.

The population projections report looks back at recession trends of New Zealand's history and examines the effect these had on the three contributors to population change; birth rate, death rate and net migration. This analysis found the following:

- Birth rates often decrease during a recession.
- Death rates do not fluctuate much.
- Greater workforce underutilisation and a more challenging housing market can have a negative effect on net migration.

In addition, immigration and travel restrictions resulting from Covid19 are expected to have a longer term effect on net migration in Nelson. As a result of these findings, the following assumptions were recommended:

Medium births scenario for ten years and high births scenario after that.

- Medium death rate scenario.
- Zero net migration for two years, low net migration for the following three years, medium net migration for the next five years and high net migration after that.

These assumptions formed the basis of the final population projections and have been used for the purposes of developing growth assumptions for the LTP 2021-31.

Due to the variation of this projection to earlier projections two independent reviews of the population projections were undertaken by Infometrics. The first in June 2020 as a basis for the original estimate and the second in February 2021 in response to Nelson's stronger than expected economic performance. Infometrics confirmed that the population projection adopted in November 2020 should be retained and this has been used to establish demand in this report.

Final population projections were adopted by Nelson City Council on 12 November 2020 for the LTP 2021-31 and these are shown in Table 4.

Table 4: Population projections adopted by NCC for its LTP 2021-31

| Year | Projected population |
|------|----------------------|
| 2020 | 54,620 |
| 2021 | 54,700 |
| 2022 | 54,780 |
| 2023 | 54,960 |
| 2024 | 55,080 |
| 2025 | 55,200 |
| 2026 | 55,520 |
| 2027 | 55,840 |

| Year | Projected population |
|------|----------------------|
| 2028 | 56,160 |
| 2029 | 56,400 |
| 2030 | 56,640 |
| 2031 | 57,180 |
| 2032 | 57,720 |
| 2033 | 58,260 |
| 2034 | 58,760 |
| 2035 | 59,260 |

| Year | Projected population |
|------|----------------------|
| 2036 | 59,760 |
| 2037 | 60,260 |
| 2038 | 60,760 |
| 2039 | 61,200 |
| 2040 | 61,640 |
| 2041 | 62,080 |
| 2042 | 62,520 |
| 2043 | 62,960 |

| Year | Projected |
|------|------------|
| | population |
| | |
| 2044 | 63,400 |
| 2045 | 63,840 |
| 2046 | 64,280 |
| 2047 | 64,720 |
| 2048 | 65,160 |
| 2049 | 65,600 |
| 2050 | 66,040 |
| 2051 | 66,480 |

There is uncertainty around population growth, not just for Nelson but for all of New Zealand's regions in general. This uncertainty is particularly relevant in a Covid19 environment due to the uncertaintly of migration rates. Statistics New Zealand (StatsNZ) provides population projections that are updated on a regular basis to reflect the findings of each new census. To reflect the uncertainty in the projection population, StatsNZ provides low, medium and high series projections.

The NPSUD requires that a range of projected demand scenarios for the short, medium and long term also be considered. For this HBA, the StatsNZ low, and high series population projections for Nelson City are used to represent the likely minimum and maximum range in which the actual population is expected to land.

Figure 3 illustrates Nelson's adopted population projections, with a comparison to StatsNZ low, medium, and high series population projections that were released in April 2021.

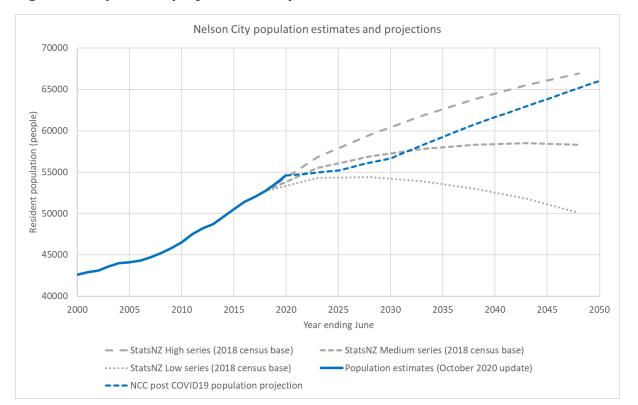


Figure 3: Population projections adopted for the Nelson LTP 2021-31

For this HBA, the NCC post Covid19 population has been adopted in line with the 2021-31 LTP. This means that out until around 2031, the population in Nelson is expected to be between the StatsNZ low and medium series projections. Beyond 2031, the population of Nelson is projected to increase at a higher rate that puts it between the StatsNZ medium and high projections.

The city's population projections are reviewed every three years in time to inform the next LTP. However, as a result of the actual population series potentially being different to the series that has been adopted and the impact of this on the city's capacity for housing, some forecasting of the impact of the different population scenarios by low, medium and high population series has also been prepared in the following section.

Further detail on how the population projection for Nelson was developed can be found in the population projection report in appendix 3 of this HBA.

3.3 Household projections

To calculate the number of households that correspond to the population projection in section 3.2, a household occupancy rate of 2.3 people per house has been used up to 2028 and 2.2 people per household after that. These rates are based broadly on the StatsNZ recommended occupancy rates. Minor smoothing between the two rates has been applied on the basis that it is not expected for the transition of rates to occur in a single year (e.g. 2.3 people up to 2028 and 2.2 people from 2029). These household projections have also been adopted for use in the Council's LTP 2021-31 as shown in Table 5.

Table 5: Nelson's household projections

| Year | Projected |
|------|------------|
| | households |
| 2020 | 23,748 |
| 2021 | 23,783 |
| 2022 | 23,817 |
| 2023 | 23,896 |
| 2024 | 23,948 |
| 2025 | 24,000 |
| 2026 | 24,139 |
| 2027 | 24,545 |

| Projected |
|------------|
| households |
| 24,960 |
| 25,348 |
| 25,745 |
| 25,991 |
| 26,236 |
| 26,482 |
| 26,709 |
| 26,936 |
| |

| Year | Projected | |
|------|------------|--|
| | households | |
| 2036 | 27,164 | |
| 2037 | 27,391 | |
| 2038 | 27,618 | |
| 2039 | 27,818 | |
| 2040 | 28,018 | |
| 2041 | 28,218 | |
| 2042 | 28,418 | |
| 2043 | 28,618 | |

| 5 |
|---|
| 5 |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

Table 5 shows that, based on the population projections in the LTP, the number of households in Nelson is expected to rise from 23,748 in 2020 to 30,218 in 2051, an increase of 6,470 households over the thirty-year period, approximately 27% growth in population.

3.4 Demand for new residential dwellings

Before converting the household projections in Table 5 into demand for new dwellings two additional factors need to be applied. These are a calculation to accommodate Nelson's unmet housing demand and application of the relevant competitiveness margins required under the NPSUD.

3.5 Unmet Demand

This HBA defines unmet demand as the demand for housing that has not been met within a set period prior to the present day. Unmet demand may be illustrated through:

- overcrowding rates;
- homelessness and transitional housing rates;
- families or individuals having to live with friends or relatives;
- households having to live apart (the salary earner in Nelson and the rest of the family living elsewhere);
- households choosing to live in a neighbouring district when their preferred place of abode would be Nelson; and
- overall housing supply shortage evidenced by unaffordable rents and house prices.

There is currently no specific data or method to accurately measure unmet housing demand although some data exists on the points noted above. More on these can be found in the public and social housing section later in this report. Therefore, household estimates based on the StatsNZ population estimates updated in October 2020 for the last three years have been compared with the number of new dwelling building consents over that same period to provide a reasonable estimate of unmet demand in Nelson. The household occupancy rate of 2.4 people per household has been applied up until 2020 to reflect the StatsNZ estimated occupancy rate for that period. The difference between the two is used as a proxy of actual unmet dwelling demand in Nelson.

Table 6 details the calculation undertaken to determine Nelson's unmet housing demand based on the method described above.

Table 6: Unmet dwelling demand - Nelson

| Year | Population | Households (based | Annual | New | Difference |
|------------------|------------|-------------------|------------|----------|------------------|
| (as at | estimates | on average | change in | dwelling | between previous |
| June | (StatsNZ | occupancy of 2.4 | households | building | household |
| 30) | - October | people per | | consents | projections and |
| | 2020) | household) | | | new building |
| | | | | | consents issued |
| 2017 | 52,000 | 21,667 | | | |
| 2018 | 52,700 | 21,958 | 292 | 254 | 38 |
| 2019 | 53,600 | 22,333 | 375 | 348 | 27 |
| 2020 | 54,600 | 22,750 | 417 | 264 | 153 |
| Three-year total | | | 217 | | |

Table 6 identifies that Nelson currently needs an additional supply of approximately 217 dwellings to meet its unmet demand based on the method described above. It is noted that there are several variables, such as the accuracy of the population estimates and household occupancy for example, that may affect this calculation and therefore it is to be treated as a simplified approximation that is used as a proxy only.

3.6 Competitiveness margins under the NPSUD

Under the NPSUD a competitiveness margin is a margin of development capacity, over and above the expected demand, that is required to support choice and competitiveness in housing markets.

The NPSUD requires the following competitiveness margins be applied:

- for the short-medium term (within the next ten years) 20%
- for the long term (between 11-30 years) 15%

This results in 20% for the period 2021-2031 and 15% for the period 2032-2051. To calculate, these margins are applied to the total sum of household projections (Table 5) plus unmet demand (Table 6).

Table 7 shows the cumulative additional housing demand for Nelson including the NPSUD competitive margins. The table shows that demand for additional households in Nelson is expected to be around 8,000 households over the period 2020-2051.

Table 7: Nelson's projected future housing demand with competitiveness margins (cumulative)

| Year | Projected households | Year |
|------|-------------------------|------|
| 2020 | 271 | 2028 |
| 2021 | 315 | 2029 |
| 2022 | 358 | 2030 |
| 2023 | 456 | 2031 |
| 2024 | 521 | 2032 |
| 2025 | 586 | 2033 |
| 2026 | 760 | 2034 |
| 2027 | 1,268 | 2035 |

| Year | Projected households |
|------|-------------------------|
| 2028 | 1,786 |
| 2029 | 2,272 |
| 2030 | 2,768 |
| 2031 | 2,952 |
| 2032 | 3,247 |
| 2033 | 3,541 |
| 2034 | 3,814 |
| 2035 | 4,087 |
| | |

| Year | Projected households |
|------|-------------------------|
| 2036 | 4,359 |
| 2037 | 4,632 |
| 2038 | 4,905 |
| 2039 | 5,145 |
| 2040 | 5,385 |
| 2041 | 5,625 |
| 2042 | 5,865 |
| 2043 | 6,105 |

| Year | Projected households | |
|------|-------------------------|--|
| 2044 | 6,345 | |
| 2045 | 6,585 | |
| 2046 | 6,825 | |
| 2047 | 7,065 | |
| 2048 | 7,305 | |
| 2049 | 7,545 | |
| 2050 | 7,785 | |
| 2051 | 8,025 | |

Figure 4 shows the projected households data from Table 7 in graphical form.

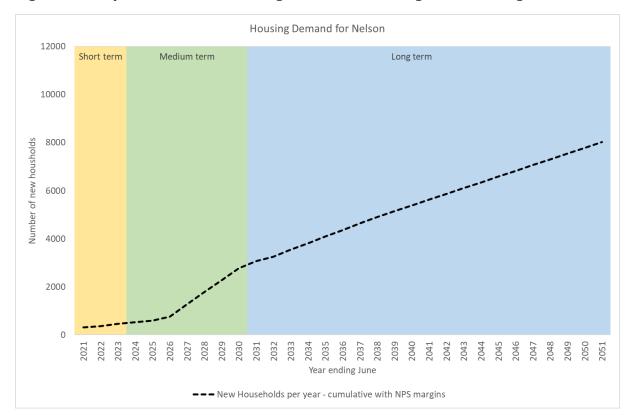


Figure 4: Graph of Nelson's Housing Demand including NPSUD margins.

Figure 4 shows the increase in demand for housing is expected to be relatively low until around 2026 due to Covid19's impact on the city's population projections, with a significant increase from 2026 onwards. For clarity, the knuckle points at 2026 and 2030 in the graph are the result of changes to the components of population and households, births, deaths, net migration and household size.

Given the uncertainty associated with growth projections, a range of projections has been analyzed below.

Figure 5 shows the housing demand expected under the StatsNZ high and low series projections including the NPSUD competitive margins.

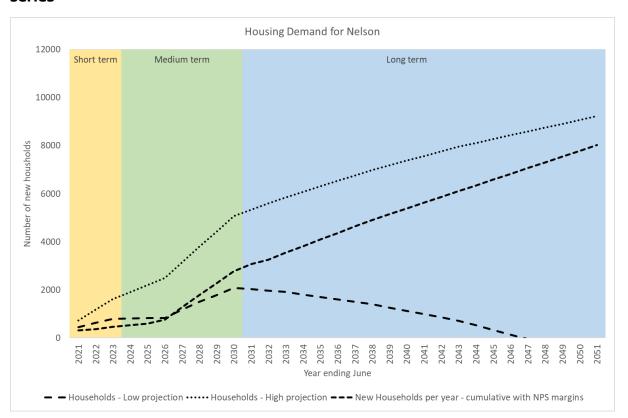


Figure 5: Projected housing demand for Nelson with StatsNZ high and low series

Figure 5 shows that under the StatsNZ high series population projections the housing demand in Nelson could be expected to be up to 274% higher than the base projection in the short to medium term, 81% higher at the start of the long term, and dropping to 15% higher at the end of the long term. This is reflective of the base projection, adopted by Nelson City Council for the 2021 LTP, having particularly low growth in the short term and beginning of the medium term. The adopted population projections are reviewed every three years and adjusted at that point to inform the next Long Term Plan.

Compared to the base projection, the StatsNZ low series projections result in a housing demand profile that is consistent with the base projection for the short and medium term before demand drops to negative in the long term.

3.7 Housing demand by type

The NPSUD also requires consideration of what type of housing is likely to be required in the future. To understand this, NCC jointly commissioned with the Tasman District Council a housing preferences survey "Housing We'd Choose" undertaken by Market Economics in partnership with Research First. The survey explored the housing preferences of residents to understand what households are seeking when selecting a new dwelling. The scope for this survey was a focus on new housing within the private market, for purchase by owner-occupiers or for rental. The scope did not include non-market types of housing, for example, public or social housing types. The survey, and what it means for housing demand into the future, is discussed in this section.

The methodology and approach of the "Housing We'd Choose" is set out in the full report. This includes the findings for the Nelson Tasman Urban Environment as well as for the Tasman area. A full copy of the report and its findings can be found in appendix 4 of this HBA.

Figure 6 demonstrates the breakdown of local areas used in the housing preference survey.

Legend
Nelson Urban – North
Nelson Urban – Central
Nelson Urban – South and Tahunanui
Nelson Urban – Stoke
Richmond
Motueka
Mapua-Ruby Bay
Brightwater-Wakefield
Waimea Plains
Tarsman rural
Nelson rural

Figure 6: Areas used in Housing Preferences Survey

In summary, the study concludes that Nelson residents;

- are generally willing to trade off both the type of dwelling and its location with dwelling price which is the critical consideration.
- demand for standalone dwellings remains high.
- demand for attached dwellings is growing.
- the five most important features in Nelson were that the dwelling is;
 - o sunny
 - o safe from crime
 - o safe from natural hazards
 - freehold title
 - standalone

3.8 Demand for dwellings, by type and location and different household groups

Section 3.25(2) of the NPSUD requires tier 2 councils to quantify capacity as numbers of dwellings in different locations including in existing and new urban areas and of different types including standalone and attached dwellings.

The "Housing We'd Choose" study of Nelson respondents found that the largest mismatch between constrained and unconstrained choice is observed in Stoke where 30% of respondents would live in this location if they could, but given their current

financial constraints they cannot afford new housing in this suburb, with only 24% stating they can afford to live in this location. A small number of those surveyed indicated a preference to move into rural Nelson, with more considering this location in response to financial constraints.

The findings also suggest that constrained demand in the urban areas of Nelson is higher than its unconstrained demand, e.g. these are locations that people choose when unrestrained by their financial situation. Figure 7 summarises where respondents would choose to live, identifying both constrained and unconstrained choice.

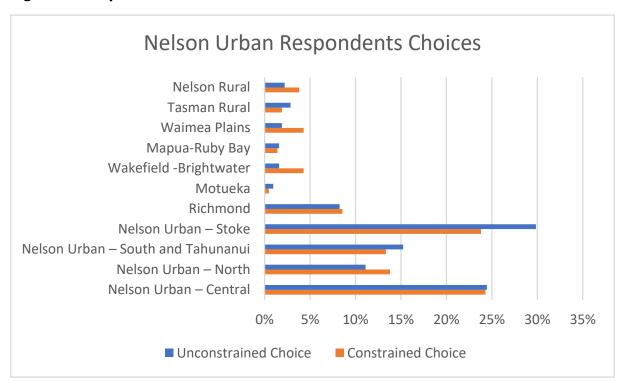


Figure 7: Respondents location choices

From a geographical spread perspective, Nelson City has a compact urban form that provides opportunities to live close to services and facilities regardless of where in the area housing is located. With this in mind, Nelson City has been treated as a single location for the purposes of this HBA both in terms of housing capacity and housing demand. When the wider Nelson Tasman Urban Environment is taken into account it is important to consider individual locations. This is dealt with by Nelson City Council and Tasman District Council preparing individual HBAs to determine the demand in each region before combining them.

Figure 8 shows the preferences of those surveyed for each of the three housing types.

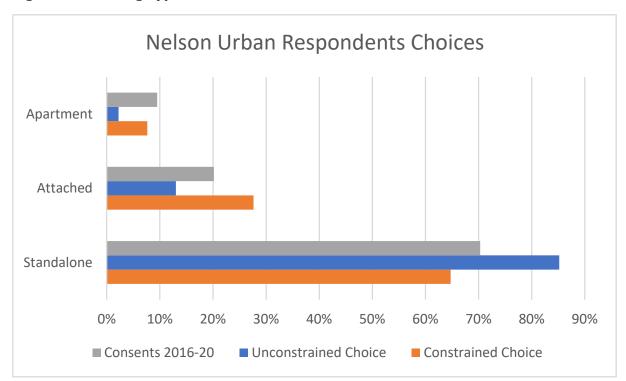


Figure 8: Housing type choice.

Figure 8 shows that some of the respondents that live in stand-alone dwellings would be willing to live within higher density dwelling types, mostly attached dwellings and some apartments. For example, 15% of the Nelson urban respondents currently live within an apartment or attached dwelling. This compares to the constrained choices within the survey which suggests that 35% would select an apartment or attached dwelling in the future. An increase in apartments and attached dwellings is already underway with 30% of recent building consents for new dwellings being for an apartment or attached dwelling.

When the data from the study is summarised for the older population, it has been found that the preferences for each of the housing types is consistent with the general population. Therefore, the population of Nelson can be treated as a whole rather than splitting out each age group separately.

Using the constrained choice proportions above, the total cumulative demand for additional housing can be split down by broad typology. Table 8 summarises the demand for housing by dwelling type for Nelson City.

Table 8: Housing demand by type

| Period | Apartments | Attached | Standalone |
|--------------------------|------------|----------|------------|
| Short-term (1-3 years) | 40 | 144 | 338 |
| Medium-term (4-10 years) | 224 | 815 | 1913 |
| Long-term 11-30 years) | 610 | 2215 | 5200 |

Stoke at a glance

Stoke consists of the area from Bishopdale Hill to the northern edge of Richmond.

Stoke is a popular area that has seen a lot of growth in recent years. Situated on largely flat land surrounded by hills with views it is home to a number of schools, supermarkets, medical centres and shops while also offering a range of community amenity e.g. community centre, sport parks and walkways for recreational activity.

As one of the city's older suburbs, Stoke contains a variety of house types including retirement villages and some larger blocks of public housing. Its blocks of older style bungalows and new housing in subdivisions means that prices vary considerably depending on location and age.

Since around 2001 a number of large new subdivisions mostly located in the Marsden and Ngawhatu Valleys have added 460 new homes or residential sections to the market.

Dwellings in these subdivisions are predominantly standalone with many sold as part of house and land packages offered by local development companies. The recent acceleration of land and building prices means that many of these are now selling for approximately \$950,000.

Other types of new development are also popping up in Stoke and include a number of standalone or attached townhouses that are appearing on the market. Despite the increase in supply in this area prices are high, for example, a two bedroom townhouse priced at over \$700,000.

3.9 Housing affordability and price-efficiency

Nelson housing continues to be out of reach for growing numbers as house prices and rents continue to increase. For example, data produced by the Ministry for Housing and Urban Development indicates that in December 2020 house prices have increased by 88% over five years to now be a median of \$743k (compared to \$395k in April 2016). Rents have also increased by 30% over five years to now be a median of \$428 per week (compared to \$328 per week in December 2015)⁵.

Furthermore, as the average household income in Nelson is lower than the national average, housing at an affordable price point is constrained. The income to housing cost ratio is relevant as what is considered to be an appropriate amount to spend on housing is a combination of assessing people's:

- Housing costs (usually rent or mortgage) as a ratio of, or proportion to, household incomes. The most frequent measure is between 25% and 30% of household income especially for lower-income households (households earning less than 80 % of the median income).
- Residual incomes after housing costs. Housing is considered unaffordable if housing costs cannot be 'fitted' within a household's remaining income after its basic needs are catered for.

⁵ MBIE rental bond data – April 2021

• House price to household income. Often used to understand the extent to which house prices are aligned with, or outstrip, household incomes⁶.

According to market indicators from the Ministry of Housing and Urban Development's Urban Development dashboard at 31 December 2018⁷, Nelson's share of first home buyer households spending more than 30% of their income on housing costs is 80%. the share of renting households spending more than 30% of their income on housing costs is 36%.

The September 2020 Massey University Home Affordability Report⁸ ranks Nelson as the second least affordable region in New Zealand after Auckland.

Approximately 7% of the current population receives support through an accommodation supplement from the Ministry of Social Development. An Accommodation Supplement can be paid to those that rent, board, or own their own home.

To quantify the problem of unaffordability in Nelson, data from the 2018 census along with residential house sales data was used to estimate the number of households likely to be able to purchase a house in Nelson. To start, the household earnings for households that did not own the home they lived in at census time were used, along with the Westpac bank mortgage calculator to estimate how much a household could borrow to finance a house purchase. This was then compared with the proportion of homes sold in 2018 in each price bracket.

Figure 9 below suggests that most households that live in a home they don't own may find it a challenge to purchase even a lower quartile price point house in Nelson. By far the largest group at 43% of the total are those households that are expected to find servicing a loan prohibitive due to their income only being enough, or in some cases not enough, to cover the cost of day to day living expenses. This group could be lifetime renters or those in need of social housing.

⁶ New Zealand Productivity Commission. (2012). *Housing Affordability Inquiry Report.* Wellington: New Zealand Productivity Commission.

⁷ Latest updated data available at https://huddashboards.shinyapps.io/urban-development/

⁸ Massey University Real Estate Analysis Unit - HOME AFFORDABILITY REPORT QUARTERLY SURVEY SEPTEMBER 2020, VOL 31, NO.2



Figure 9: Housing affordability for households not living in their own home.

Under the National Policy Statement on Urban Development Capacity 2016, there was the requirement to report on price efficiency indicators that were deemed relevant for the region. These indicators were designed to provide at least part of the picture regarding whether or not there was enough land available or whether there was enough competition in the land supply market. Some of the measures were identified as not being suitable for Nelson due to the elongated shape of the urban area with the main centre at one end and the geographical constraints of steep hills on one side and the sea on the other. The two indicators that were identified as being relevant to Nelson City were the Price-Cost ratio and the Land Ownership Concentration. Both of these indicators have been monitored and reported on regularly over the last three years.

The 2020/21 annual monitoring report shows that the price-cost ratio for Nelson was around 1.53 in 2020. This is above the threshold of 1.5 that identifies when the proportion of the land cost of the overall cost to bring completed houses to the market is appropriate. This indicator does not describe affordability but does provide some indication that the ratio between land cost and house cost is out of balance. The land cost representing over one-third of the total sale price, indicating that land supply is constrained. Figure 10 below shows the change in the price-cost ratio for Nelson since 1993.

Figure 10: Housing price-cost ratio9



The land ownership concentration for Nelson shows that around 65% of the undeveloped, residentially zoned land is currently owned by approximately 10 companies or individuals. This represents a large portion of the available bare land and can be expected to be contributing to the high cost of land in the region. Landholders may also have little incentive to develop land due to the current competition from buyers in the market. This concentration of land ownership can result in the roll-out of a limited number of new lots per year, affecting and constraining supply and adding to high sales prices.

 $^{^{9}}$ MHUD urban development dashboard - https://huddashboards.shinyapps.io/urban-development/

3.10 Ageing population

Over the next 30 years, the number of people aged 65 or over is expected to grow to approximately 30% of Nelson's population, while other population groups are expected to slightly decline. Figure 11 shows the estimated breakdown of the population by age over the period of the population projections.

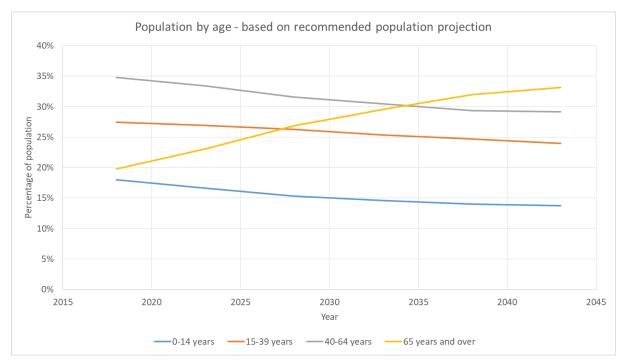


Figure 11: Population by age - Nelson City

The impact of a growing ageing population means that, over time, it is anticipated that there will be an increase in demand for one and two-bedroom dwellings. Figure 12 shows the occupancy of dwellings by the number of bedrooms for Nelson¹⁰.

A2578160 Page | 29

_

¹⁰ StatsNZ 2018 Census

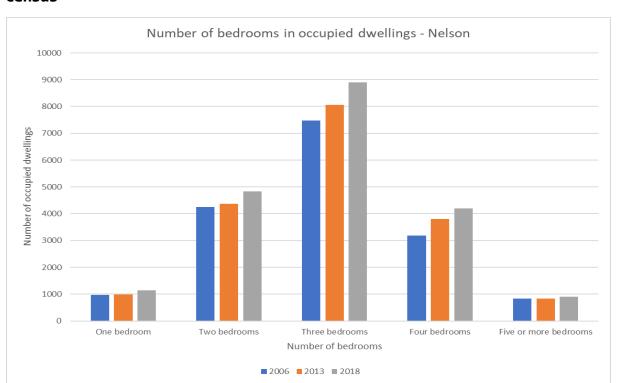


Figure 12: Number of occupied dwellings by number of bedrooms 2006-2018 census

Figure 12 shows that, at the 2018 census, Nelson City had approximately 1,100 occupied one-bedroom dwellings and 4,800 occupied two-bedroom dwellings (totalling approximately 6,000 one or two-bedroom dwellings). Over time, the number of two, three and four-bedroom dwellings has increased steadily but the number of one-bedroom units has only marginally increased. If the market responds to housing types sought by an ageing demographic, then it is expected that a greater number of one and two-bedroom dwellings will be developed in the future.

Included in the above figure of approximately 6,000 one or two-bedroom dwellings are those located in retirement villages. These provide approximately 1,500 already built or consented dwellings for the over 65+ cohort at the time of this report. The dwellings cater to those in need of care suites and hospital beds as well as those seeking a one, two or three-bedroom residential unit.

Housing stress can also be experienced amongst the older population, especially those who rent where risk of rental insecurity can be high, and residents can end up in unsafe or unsuitable housing¹¹. Nelson has 3,924 residents who receive an accommodation supplement (at 31 March 2021), and approximately 12% of these were aged 65 years or over¹².

It is important now and into the future that the design of new dwellings accommodates older populations, for example through incorporating universal design. This would contribute to producing a housing stock that is fit for purpose for a wider range of populations over its lifetime.

 $^{^{11}}$ Tenure insecurity, precarious housing and hidden homelessness among older renters in New Zealand. (2020) B James, L Bates, TM Coleman, R Kearns & F Cram

¹² Ministry of Housing and Urban Development June 2021

3.11 Māori

There are eight iwi in Nelson with Whakatū Marae providing some papakāinga housing. Nelson's Māori population was 5,421 at the 2018 census or around 17% of the total population that returned census forms. Figure 13 shows the population distribution of Māori by age.

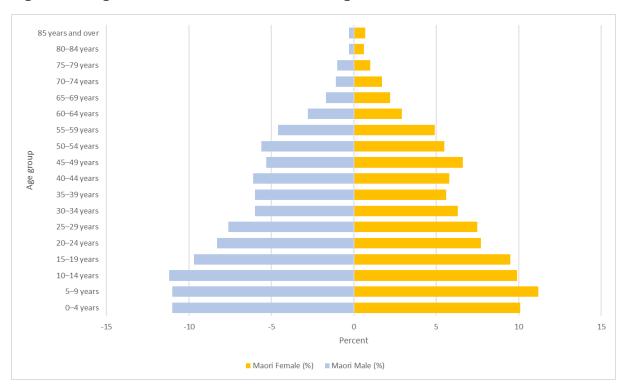


Figure 13: Age and sex of Māori in Nelson region - 2018 census

Figure 13 shows that there is a significant bulge in the proportion of the Māori population in the younger age groups. This distribution typically signals that household sizes will be relatively large for Māori with families making up the majority of the population.

Figure 14 shows the age distribution of the total population of Nelson for comparison.

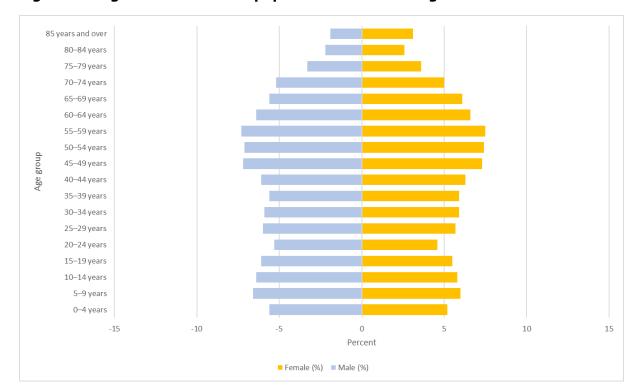


Figure 14: Age and sex of total population in Nelson region - 2018 census

The distribution shown in Figure 14 is relatively even along its length but with a distinct bulge at around the 55-59 years age group. This also suggests that Māori households are generally larger than the wider population, given that Māori are included in the data in Figure 14.

For the purposes of the analysis that follows, the census approach to ethnicity has been applied. This means that a Māori household is one where the person who filled out the household form in the 2018 census identified as Māori. This method of identifying the ethnicity of a household is limited, however, without any other available data this has been assessed as the most appropriate method of understanding the distribution of households and the issues that they might face in Nelson.

Figure 15 shows the usual number of residents per dwelling split by Māori and total households in Nelson.

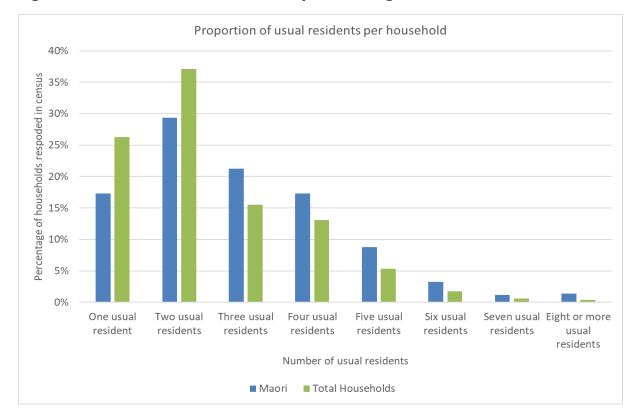


Figure 15: Number of usual residents per dwelling

Figure 15 shows that Māori households are generally larger than those of the general population with a higher proportion of Māori households being three or more usual residents than the general population. Inversely, the proportion of Māori households to usual residents or less is significantly lower than the general population.

Figure 16 shows the proportion of Māori households and households in the general population that live in dwellings with a particular number of bedrooms.

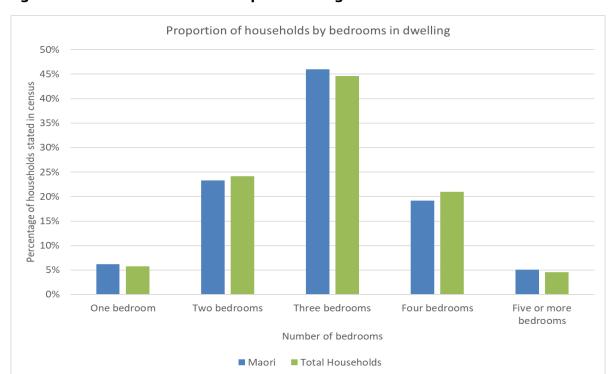


Figure 16: Number of bedrooms per dwellings

Figure 16 shows that, even though Māori households are typically larger than households in the general population, the houses they live in are not any larger in terms of the number of bedrooms that the dwelling has. This would indicate that there is generally a higher number of people per bedroom in Māori households.

Figure 17 shows the household composition of Māori households and households in the general population.

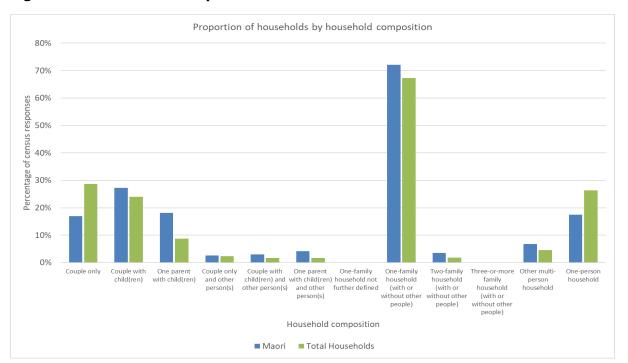


Figure 17: Household composition

Figure 17 shows that Māori households are more likely to be a family or family grouping than the general population. Couple only and one-person households have a much higher proportion for the general population than Māori households.

To summarise the information contained in this section, Māori are more likely to live in larger households but in houses with fewer bedrooms. The age of the Māori population in Nelson is younger than the general population with the likely effect of this being that the population of Māori as a proportion of the total population in Nelson City is expected to increase over time. This may increase the demand for larger homes for Māori households over time. With the reverse occurring in the remainder of the population, it is expected that some redistribution of dwellings from older members of the general population moving to smaller homes to younger Māori families requiring a larger home may occur.

The issue of affordability remains, but in general, the overall demand for smaller houses is projected to increase with an ageing population. As a result of this downsizing, there should be a greater supply of existing housing stock of larger houses to meet this demand.

3.12 Public and social housing

Another important factor in providing for long term residential housing demand is the provision of an appropriate mix of housing types to match household types and sizes. This includes that housing is available across the housing continuum including for those in need of housing support. Figure 18 shows diagrammatically the housing affordability continuum.

Figure 18: Affordable housing continuum¹³



Although not official statistics, according to a 2018 research report¹⁴, more people, per 10,000 people, were also living in temporary accommodation in Nelson than anywhere else in New Zealand. Temporary accommodation includes emergency and transitional accommodation e.g. night shelter and women's refuge, as well as commercial accommodation such as campgrounds, motor camps, boarding houses etc. Accommodation at marae is also included in the definition.

Kāinga Ora is the government's public housing provider. Kāinga Ora currently has approximately 708¹⁵ properties in Nelson which is approximately 3% of Nelson's current housing stock. The properties are predominately made up of one, two or three-bedroom dwellings. A further 123 public housing units are anticipated by 2024¹⁶ although there may be some variability in final numbers.

Additionally, there are now 29 transitional housing places in Nelson. Transitional housing offers warm, dry short-term accommodation for people and families that don't have anywhere to live and are in urgent need of a place to stay. A portion of these are in motel units. In response to Covid19 some extra short-term accommodation, 58 motel units, has also been available although this additional support is expected to be time limited.

A2578160 Page | 35

_

¹³ https://www.communityhousing.org.nz/housing-continuum/

¹⁴Amore, K., & Howden-Chapman, P. (2020). *Severe housing deprivation in Aotearoa New Zealand, 2018*. Wellington: University of Otago. Retrieved April 7, 2021, from https://www.hud.govt.nz/assets/News-and-Resources/Statistics-and-Research/2018-Severe-housing-deprivation-estimate/Severe-Housing-Deprivation-2018-Estimate-Report.pdf

 $^{^{15}}$ This figure includes the 142 community housing units that recently transferred from the Council, in March 2021.

¹⁶ Ministry of Housing and Urban Development June 2021.

Housing First, an initiative that houses and supports people who have been homeless for a long time or experiencing multiple and complex issues, also has a presence in Nelson/Tasman. As of 31 March 2021, there is one Housing First provider who had 39 households across both regions that were engaged but all of these were not yet housed.

A range of Community Housing Providers provide affordable rentals in the city (approximately 53 consented or built dwellings at the time of this report). Habitat for Humanity also provides affordable rent to buy options and has a further 17 homes planned for 2021. Franklyn Village offers both temporary accommodation and more permanent homes to people in need and can house approximately 220 adults plus their children at any one time.

Despite the public housing and other social housing types, a growing number of people continue to register for public/social housing support. At March 2021 264 people in Nelson were registered on the Social Housing Register¹⁷, most of those assessed as priority A (applicants who are considered at risk and includes households with a severe and persistent housing need that must be addressed immediately). This is up from 171 in March 2020 and 139 in March 2019. The Register also reports that the majority of those who are listed require a one-bedroom dwelling.

Council is working with Kāinga Ora on options to advance the provision of additional social and affordable housing in Nelson.

¹⁷ https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/housing/index.html#LatestresultsndashnbspDecember20201

3.13 Housing bottom line

NPSUD REQUIREMENTS (3.6) Housing bottom lines for tier 1 and 2 urban environments

- 2) For each tier 1 or tier 2 urban environment, as soon as practicable after an HBA is made publicly available:
 - (a) the relevant regional council must insert into its regional policy statement:
 - (i) a housing bottom line for the short-medium term; and
 - (ii) a housing bottom line for the long term; and
 - (b) every relevant territorial authority must insert into its district plan;
 - (i) a housing bottom line for the short-medium term that is the proportion of the housing bottom line for the short-medium term (as set out in the relevant policy statement) that is attributable to the district of the territorial authority; and
 - (ii) a housing bottom line for the long term that is the proportion of the housing bottom line for the long term (as set out in the relevant policy statement) that is attributable to the district of the territorial authority.
- 3) The housing bottom lines must be based on information in the most recently publicly available HBA for the urban environment and are:
 - (a) for the short-medium term, the sum of:
 - (i) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the short term; and
 - (ii) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the medium term; and
 - (b) for the long term, the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the long term.
- 4) The insertion of bottom lines must be done without using a process in Schedule 1 of the Act, but any changes to RMA planning documents required to give effect to the bottom lines must be made using a Schedule 1 process.

A housing bottom line is the amount of development capacity that is sufficient to meet expected housing demand plus the relevant competitiveness margin. It is used to inform the district plan/regional policy statement and will be updated every three years.

This results in the following total housing demand for the Nelson City area that is within the Nelson Tasman Urban Environment:

• Short term (1-3 years) – 521 households

- Medium term (4-10 years) 2,554 households
- Long term (11-30 years) 4,950 households

It can be useful in some situations to view the demand for housing in cumulative form as it allows for an easier description of the overall demand rather than just the demand in each time bracket. The total cumulative housing demand for the Nelson City area that is within the Nelson Tasman Urban Environment is as follows:

- Short term (1-3 years) 521 households
- Medium term (4-10 years) 3,075 households
- Long term (11-30 years) 8,025 households

Figure 19 below shows the change in housing demand (including competitiveness margins) over time.

Housing Demand for Nelson 12000 Short term Medium term Long term 10000 8000 Number of new housholds 6000 4000 2000 2039 2040 2041 2043 2045 2045 2047 2048 2049 2050 2032 2033 2031 2036 2037 2038 Year ending June New Households per year - cumulative with NPS margins

Figure 19: Nelson City housing bottom line by year

A housing bottom line is the amount of development capacity that is sufficient to meet expected housing demand, plus the relevant competitiveness margin, in the short, medium, and long term. The Nelson City area component of the housing bottom lines must be included in the Nelson Regional Policy Statement and District Plan provisions.

The Nelson City area housing bottom lines for the short-medium and long term are set out in

Table 9 below and are cumulative.

Table 9: Nelson City housing bottom lines

| Period | Development capacity that is sufficient to meet expected housing demand | Holiday homes margin | Competitiveness margin | Total (cumulative) |
|--------------------------------|---|----------------------------|---|-----------------------|
| Short term (1-3 years) | 417 dwellings | 21 | +20% = 83 dwellings | 521 dwellings |
| Medium term (4-10 years) | 2,460 dwellings | 123 | +20% = 492 dwellings | 3,075 dwellings |
| Long term (11-30 years) | 6,687 dwellings | 211 | +20% (yrs 1-10) = 634 dwellings +15% (yrs 11-20) = 493 dwellings | 8,025 dwellings |

4. Housing Capacity

NPSUD requirements (Part 3-subpart 1 (3.2)):

- 1) Every tier 1, 2, and 3 local authority must provide at least sufficient development capacity in its region or district to meet expected demand for housing:
 - (a) in existing and new urban areas; and
 - (b) for both standalone dwellings and attached dwellings; and
 - (c) in the short term, medium term, and long term
- 2) In order to be sufficient to meet expected demand for housing, the development capacity must be:
 - (a) plan-enabled (see clause 3.4(1)); and
 - (b) infrastructure-ready (see clause 3.4(3)); and
 - (c) feasible and reasonably expected to be realised (see clause 3.26); and
 - (d) for tier 1 and 2 local authorities only, meet the expected demand plus the appropriate competitiveness margin (see clause 3.22).

Section summary:

- Nelson has capacity for 7,161 new houses over the next 30 years.
- As greenfield land is used up, infill and redevelopment are expected to increase as a proportion of the total capacity.
- The capacity analysis shows that there is a shortfall occurring in the long term amounting to an estimated 864 dwellings for the Nelson Territorial Area of the Nelson Tasman Urban Environment.
- Under current resource management plan settings and planned infrastructure roll-out, demand is expected to exceed supply in around 2039.
- If the plan change application submitted to Council for the Maitahi/Bayview development area is approved, demand is expected to exceed supply in around 2046 (instead of 2039).
- The Nelson Resource Management Plan is currently being reviewed. The draft rules allow for much smaller lot sizes which has the effect of increasing infill and redevelopment capacity to a level where supply is expected to exceed demand until beyond 2051.
- Broken down by time period, the housing capacity for Nelson is:
 - Short term (1-3 years) 1,876 households
 - Medium term (4-10 years) 1,894 households
 - Long term (11-30 years) 3,391 households
- Cumulatively, the housing capacity for Nelson by time period is:
 - Short term (1-3 years) 1,876 households
 - Medium term (4-10 years) 3,770 households
 - Long term (11-30 years) 7,161 households

4.1 Introduction

This section sets out the methodology and results of the assessment of capacity for additional housing for the Nelson region.

Working out housing capacity involves assessing plan enabled (residentially zoned land) and serviced or planned to be serviced land for its feasibility for development and estimating what is reasonably expected to be realised over the short, medium, and long term.

Although interrelated, working out Nelson's housing capacity is different from working out its housing supply. Housing supply is the supply of housing brought to the market at any given time, including both the rental and private ownership markets. Council can affect housing capacity through appropriate zoning and infrastructure planning however, it has little effect on housing supply which is led by the market.

4.2 Methodology

The NPSUD requires capacity to be assessed as follows.

Every HBA must quantify, for the short term, medium term, and long term, the housing development capacity for housing in the region and each constituent district of the tier 1 or tier 2 urban environment that is:

- plan-enabled; and
- plan-enabled and infrastructure-ready; and
- plan-enabled, infrastructure-ready, and feasible and reasonably expected to be realised.

The development capacity must be quantified as numbers of dwellings:

- in different locations, including in existing and new urban areas; and
- of different types, including standalone dwellings and attached dwellings.

4.3 Greenfield Capacity

For assessing greenfield capacity, resource consent applications and developer master plans were assessed. Where these were not available comparative assessments with adjoining developed land of the same nature were made. In most cases, the current and future greenfield areas already had detailed subdivision scheme plans which were then used to inform the likely feasible housing capacity of specific areas.

Table 10 summarises the estimation of capacity yield for each of Nelson's greenfield areas.

Table 10: Expected yield of Greenfield areas

| Area code | Area name | Total yield (lots) |
|-----------|----------------------------|--------------------|
| 2 | Ballard Drive/Ashdonleigh | 44 |
| 3 | Ngawhatu Valley | 975 |
| 4 | Marsden Valley | 346 |
| 6 | Coster/The Ridgeway | 14 |
| 9 | Tasman Heights | 481 |
| 10A | Emano | 96 |
| 10B | Murphy | 75 |
| 11 | Toi Toi | 202 |
| 12 | Washington Valley | 46 |
| 13 | St Lawrence Street | 15 |
| 15 | Upper Brook | 100 |
| 18A | Iwa Road/Davies Drive | 10 |
| 19A | Brooklands | 5 |
| 19B | Paremata | 10 |
| 19D | Lower Bayview | 100 |
| 19E | Upper Bayview | 200 |
| 20 | Werneth | 20 |
| 21 | Wastney Terrace | 29 |
| 22 | Todd Valley | 4 |
| 24 | Enner Glynn | 110 |
| 26A | Saxton - South | 750 |
| 26B | Saxton - North | 100 |
| 26C | Saxton - Summerset, Wakatu | 66 |
| 29 | Bishopdale Pottery | 90 |

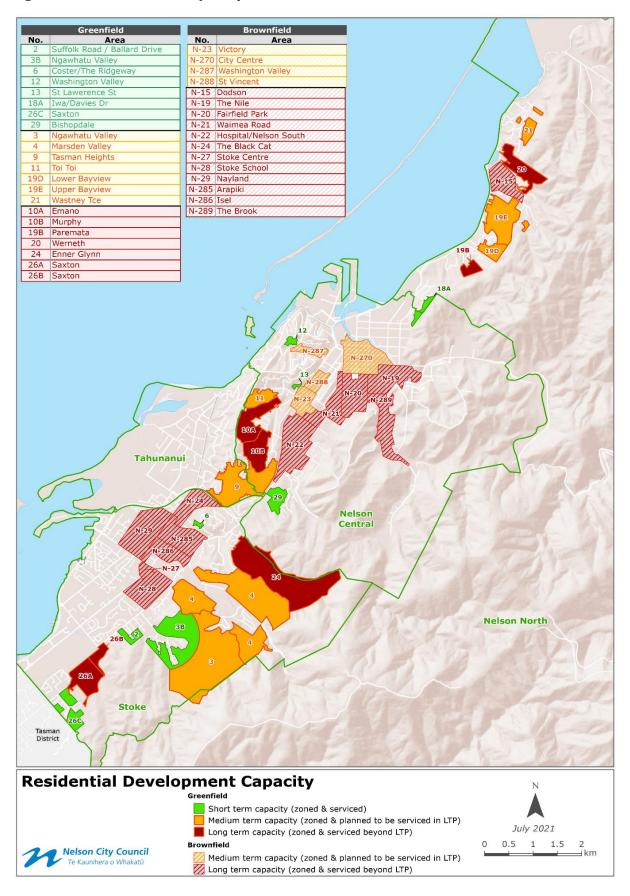
Figure 20 shows each of the greenfield development areas and groups them based on whether they are already serviced or are planned to be serviced. This information informs when or if each area's capacity is counted as part of the greenfield capacity assessment.

The map below illustrates both greenfield and intensification development capacity in Nelson and indicates the infrastructure release of that capacity in the short, medium, and long term. Each of the areas listed in

Table 10 has been assessed for development feasibility using the MHUD provided feasibility calculator. A summary of the calculation for each area is included in appendix 2.

Intensification capacity is discussed in the sections below the map.

Figure 20: Residential Capacity



4.4 Intensification Capacity

Intensification of the existing urban area takes place via two development type mechanisms: infill and redevelopment. A model has been developed of the entire built urban area to assess every site for its potential capacity for infill and redevelopment.

Infill takes place when unoccupied land at the front or rear of an existing dwelling is utilised for an additional dwelling. Redevelopment of a site takes place when an existing dwelling is demolished, and multiple dwellings are developed on the same site to replace it.

The key constraints that affect whether intensification can take place and what type it is have been identified as follows:

- Slope hazards
- Fault hazards
- Inundation hazards
- Zoning
- Nelson Resource Management Plan lot shape rules
- Nelson Resource Management Plan minimum lot size and maximum site coverage rules

(The constraints above are defined by rules REr.23 and REr.24, REr.107 and those between REr.110 to REr. 116 in the Nelson Resource Management Plan. Breach of these rules results in a discretionary activity status (therefore capacity is not plan enabled)).

- Capitalisation ratio
- Covenant restrictions

These factors determine the identification of likely infill and redevelopment sites.

Figure 21 outlines at a high level the flow of logic used to determine whether a site is suitable for infill or redevelopment.

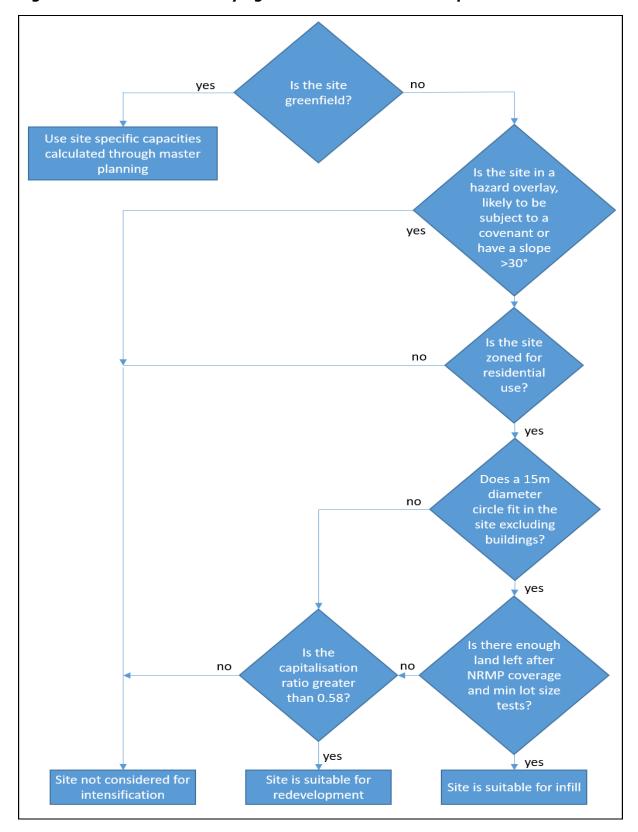


Figure 21: Flow chart identifying sites for infill or redevelopment

A key limitation of the current model methodology is how plan enabled, infrastructure ready and feasible measures can be reported in this HBA. This is because the current model combines these measures but does not allow for individual reporting on each of these. This has been identified as an improvement action for the model when it is revised to inform the next HBA.

4.5 Intensification by Infill

To assess sites for suitability to accommodate infill development, the process, as shown in Figure 21 was applied across the built areas of the city. The sections below provide further detail.

Step one - Identify land that has potential for backyard infill

Step one was to identify any land that has the potential for backyard infill. This involved an assessment of all sites to determine sites that had bare land of a suitable shape and size to allow for additional dwellings. Using Council's Geographic Information System (GIS) sites were identified by applying a 15m diameter circle that needed to be able to fit within each lot and not overlap any existing dwellings. The circle diameter is selected to represent the Nelson Resource Management Plan rule that requires a 15m x 18m rectangle to be able to fit any new residential lot. The 15m diameter circle, when combined with the minimum lot size, applies this rule. Figure 22 below shows the visual output from this GIS analysis.

Figure 22: Backyard shape analysis



Step two - Remove land/sites assumed to be not suitable

This step involved consideration of other relevant limitations to infill by applying hazard and other filters. The filters include:

- Hazards; areas that had slope stability, fault and inundation overlays.
- Covenants; areas that were subject to a covenant that restricted any further subdivision or additional dwelling/s.
- Land currently zoned residential but used for activities such as hospitals, schools or reserves.
- Land that had a slope of over 30 degrees.

Step three - Filter remaining sites by Nelson Resource Management Plan rules

The final step applied the Nelson Resource Management Plan minimum lot size and maximum building coverage rules for each zone to determine whether enough land is available once the primary dwelling has the limits applied.

Minimum lot size and maximum site coverage is defined in the Nelson Resource Management Plan rules in Table 11 below:

Table 11: Nelson Resource Management Plan minimum lot size and maximum building coverage rules by zone

| Zone | Minimum lot size | Maximum building coverage | |
|--------------------------------------|------------------|---------------------------|--|
| Residential | 400 | 40% | |
| Residential – Lower Density | 600 | 30% | |
| Residential – Higher Density Area | 300 | 40% | |
| Residential – Lower Density Stoke | 850 | 30% | |

For infill development, only one single additional dwelling has been counted for each site. The assumption is that it is landowners rather than developers undertaking this type of development and they have a lower threshold for risk (due to unfamiliarity with the consenting and development process and ability to finance for example).

4.6 Intensification by Redevelopment

Accurately determining the redevelopment potential of one or more residential sites is more complex than for infill. There is a large range of costs and associated financial risks that are difficult to model as each landowner or developer operates from a different mix of criteria and risk assessment profiles.

Step one – Work out feasibility for redevelopment

As part of the development of an updated resource management plan, a consultant was engaged in 2018 to assess the feasibility of infill and redevelopment types in the Nelson context. The approach used the MBIE feasibility tool, although as this tool was not designed to test the mixed-use scenarios required it was supported by separate market research and an adapted MBIE tool to enable like for like comparisons to be made. The assessment suggested that infill and redevelopment in almost any form was not theoretically feasible. However, as infill and redevelopment is occurring in Nelson it has been necessary to develop a Nelson specific feasibility assessment method for this HBA.

Instead of introducing too much complexity to the housing capacity model by attempting to account for all the complex variables, a simpler approach of using a capitalisation ratio has been used.

The capitalisation ratio is defined as being the ratio between the land value and the capital value or:

| Land value |
|-----------------------------------|
| (land value + improvements value) |

To allow the capitalisation ratio to be applied to all land parcels in Nelson City, it was identified that a custom ratio that related to the land and improvements values contained in the NCC rating database was required. By looking back at site redevelopment that has taken place over the last three years and calculating the capitalisation ratio based on the values just prior to development we can get a ratio, specific to the rating database, that represents feasible development in Nelson City.

Analysis has shown that, based on the land and improvement values contained in the NCC rating database as at December 2020, the capitalisation ratio for feasible site redevelopment for residential use is around 0.58. It is important to understand that this ratio is specific to Nelson and only to the values in the database in December 2020. For efficiency reasons this model has been applied across the city. Further detail regarding how this is applied is contained in 4.9.2 below.

Step two - Remove land/sites assumed to be not suitable

For all sites that were identified in the capitalisation ratio analysis as potentially feasible for redevelopment, a series of filters were then applied. The filters removed all sites that fell within the slope stability, fault and inundation overlays because under the Nelson Resource Management Plan these are not plan enabled. Sites with covenants restricting further development or subdivision were also removed as was land currently zoned residential but used for activities such as hospitals, schools or reserves, and land that had a slope of over 30 degrees.

Step three - Filter remaining sites by Nelson Resource Management Plan rules

The final step was to apply the Nelson Resource Management Plan minimum lot size rules for each zone to determine how many lots each site could be divided into. These are noted in Table 11 above. The Nelson Resource Management Plan only enables comprehensive housing developments in the two areas of the city that are zoned residential high density and as these are already densely developed little additional capacity remains.

4.7 Infrastructure capacity

To assess infrastructure capacity a series of meetings were held with the Infrastructure Asset Management teams of Council. The purpose of these meetings was to identify infrastructure extensions and capacity upgrades and their potential timing and costs to inform the housing capacity assessment.

For intensification, the capacity model has been run using the steps detailed above. Once the capacity of the urban area to produce additional housing within the limitations of feasibility, hazards and the Nelson Resource Management Plan rules has been determined, an asset management assessment for each of the three waters and transport was undertaken. In all cases, the asset management assessment determined that the level of potential development identified in the intensification capacity model could be accommodated fully within the current infrastructure network and programme.

The 2021-31 LTP identifies projects in three intensification areas from the FDS (Washington, City Centre and Victory) that will allow for a much higher level of intensification than modelled.

Nelson City Council has already provided infrastructure servicing to almost all of the greenfield growth areas identified as capacity. Therefore, there are very few infrastructure constraints limiting development in these areas. Where there are constraints, these are planned to be remediated through further infrastructure provision in the LTP 2021-31.

The Government is currently undertaking a reform of the three waters activity which is expected to result in these activities being managed by an entity other than the Council. These changes may introduce some uncertainty regarding infrastructure provision going forward however any impacts of this, should it eventuate, will form part of the next HBA.

4.8 Key assumptions relating to the assessment of housing capacity

A full list of the assumptions that have been applied, some of which are discussed in more detail above, can be found in the appendices section.

4.9 Feasibility

4.9.1 Greenfield

The feasibility of greenfield sites uses the Ministry of Housing and Urban Development (MHUD) feasibility tool for land development. The MHUD tool has been used in consultation with developers as well as being a tool to assist Council in understanding the drivers of risk and cost in development. Early in the revision of the feasibility calculations, costing data was provided by developers to enable the key cost inputs in the spreadsheet to be updated. Nelson City Council staff regularly meet with developers regarding their plans for development and the constraints they are facing, and their feedback has assisted in testing and refining calculations.

A key input into the feasibility spreadsheet is the undeveloped land value. To determine the pre-development land value, the profit margin for the most likely development type has been set at 20.1% and the spreadsheet forced to back-calculate the land value.

This has had the effect of showing how much more profitable a higher development density typically is, which looks to have prompted developers to consider options other than the low-density development type that has been typical to date in Nelson City.

4.9.2 Infill and redevelopment

As detailed above, the feasibility of brownfield intensification has been calculated by applying a capitalisation ratio, that is the ratio of land value to capital value using Council's rating valuation data. It is recognised that the land value and the capital value contained in the rating valuation database does not represent the likely market value, however, the strength of this method is that it offers a ratio between known values specific to Nelson City.

Based on analysis of development undertaken in Nelson a ratio of 0.58 has been used to determine whether the site was suitable for infill or redevelopment. If the ratio was greater than 0.58 then the value of site improvements was believed to be of low enough value relative to land value to make that site feasible for infill or redevelopment. If the ratio was less than 0.58 then the value of site improvements was considered to be of

high enough value relative to land value making it not feasible to demolish an existing house and redevelop a site. Therefore, properties with a ratio of less than 0.58 were considered for backyard infill only.

Following the feasibility test, an uptake rate was applied based on the uptake of these development types over the last 5 years. The uptake rate assumed a take-up of sites that met the earlier tests of 40% over the 30 years.

4.10 Final housing capacity

Applying all the assumptions and methods above, the housing capacity within Nelson City can be determined. Table 12 shows the cumulative housing capacity.

Table 12: Nelson City future housing capacity

| Year | Housing |
|------|--------------|
| | capacity |
| | (households) |
| 2021 | 1248 |
| 2022 | 1389 |
| 2023 | 1638 |
| 2024 | 1876 |
| 2025 | 2225 |
| 2026 | 2590 |
| 2027 | 2950 |
| 2028 | 3249 |

| Year | Housing capacity (households) |
|------|-------------------------------------|
| 2029 | 3479 |
| 2030 | 3625 |
| 2031 | 3770 |
| 2032 | 3941 |
| 2033 | 4112 |
| 2034 | 4283 |
| 2035 | 4454 |
| 2036 | 4625 |

| Year | Housing capacity | |
|------|----------------------|--|
| 2037 | (households) 4796 | |
| 2038 | 4967 | |
| 2039 | 5138 | |
| 2040 | 5309 | |
| 2041 | 5480 | |
| 2042 | 5651 | |
| 2043 | 5822 | |
| 2044 | 5993 | |

| Year | Housing | | |
|------|--------------|--|--|
| | capacity | | |
| | (households) | | |
| 2045 | 6165 | | |
| 2046 | 6336 | | |
| 2047 | 6507 | | |
| 2048 | 6678 | | |
| 2049 | 6849 | | |
| 2050 | 7020 | | |
| 2051 | 7161 | | |
| | | | |

Figure 23 shows the housing capacity in graphical form along with the housing bottom line demand. The demand line includes the competitiveness margins.

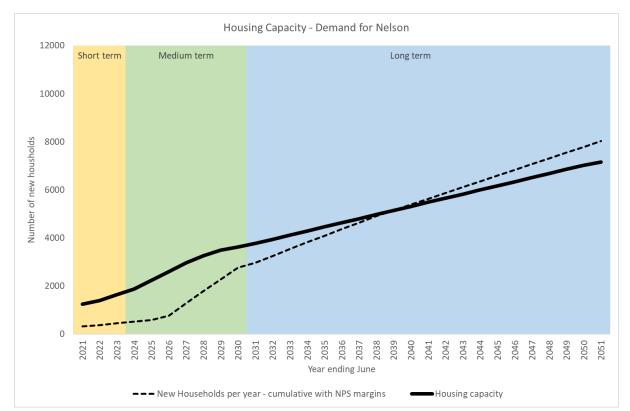


Figure 23: Nelson City housing bottom line and capacity.

Figure 23 shows that housing capacity, shown as the solid line, exceeds the housing bottom-line until around 2039 or half of the way through the long term. However, if the plan change application submitted to Council for the Maitahi/Bayview development area is approved, demand is expected to exceed supply in around 2043 (instead of 2039).

The current capacity excess of around 1000 households is significant to note given the high property prices currently in the Nelson housing market. Careful monitoring of the gap between capacity and demand and the potential for it to narrow further will be required.

Capacity is broken down into the greenfield, infill and redevelopment components to view how each influence the final figure. Figure 24 below shows housing capacity broken down by type.

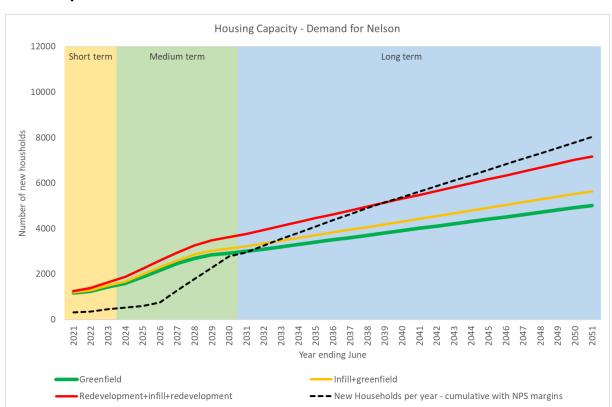


Figure 24: Housing bottom line and capacity by greenfield, infill and redevelopment

Figure 24 shows that under current zoning, over time development capacity of infill and redevelopment increases, while greenfield capacity slows. The proportion of change is shown in Table 13 below.

| Development type | 2021 | | | 2051 |
|------------------|-------|-----|-------|------|
| Greenfield | 1,178 | 94% | 5,016 | 70% |
| Infill | 20 | 3% | 620 | 9% |

4%

1524

21%

Table 13: Change in proportion of development type over time

50

Table 13 shows that the proportion of infill or redevelopment for residential development is expected to rise from approximately 7% of all residential development in 2021 to 30% in 2050. This change is generated in part by Nelson's currently identified greenfield development land gradually being taken up. Backyard infill and redevelopment is expected to increase over time, reflective of land value changes and the influence of these on development densities and types in the future. While the increase in intensified development is important it also highlights the contribution of greenfield development to Nelson's housing capacity.

4.11 Capacity Summary

Redevelopment

Capacity and demand for the short, medium, and long term are noted below. A limitation of these figures is that they are points in time of 3 years, 10 years and 30 years and do

not describe the changes between those points. Therefore, it is recommended that the numbers expressed below are considered in conjunction with the graphs and descriptions detailed in previous sections of this report.

4.12 Residential Capacity: Short-term

Short-term residential capacity is evaluated through the assessment of zoned land, fitting the definition of Plan enabled, and serviced land, fitting the definition of infrastructure ready. The figures below correspond to year three totals.

Demand (bottom line) at year 3 - 521 households

Capacity at year 3 - 1,876 dwellings

4.13 Residential Capacity: Medium-term

Medium-term residential capacity is derived from what is currently zoned and planned to be serviced in Council's Long Term Plan. The figures below correspond to year 10.

Demand (bottom line) at year 10 - 2,554 households or 3,075 households cumulative with the short term.

Capacity at year 10 – 1,894 dwellings or 3,770 dwellings cumulative with the short term.

4.14 Residential Capacity: Long-term

Long-term residential capacity is derived from land that is zoned or identified in the Nelson Tasman Future Development Strategy 2019 and planned to be serviced in Council's Long Term Plan or Infrastructure Strategy. The figures below correspond to year 30.

Demand (bottom line) at year 30 - 4,950 households or 8,025 households cumulative with the short and medium-term

Capacity at year 30 – 3,391 dwellings or 7,161 dwellings cumulative with the short and medium-term.

4.15 Any insufficient residential capacity

The capacity analysis contained in the sections above shows that there is a shortfall occurring in the long term amounting to an estimated 864 dwellings for the Nelson Territorial Area of the Nelson Tasman Urban Environment. The shortfall is projected to occur in 2039 with a gradual narrowing of the gap between capacity and demand from around 2029. However, if the plan change application submitted to Council for the Maitahi/Bayview development area is approved, demand is expected to exceed supply in around 2043 (instead of 2039).

4.16 Alternative scenarios

4.16.1 Inclusion of Kaka FDS area

The analysis above excludes a greenfield growth area identified in the Future Development Strategy (FDS) 2019. The Kaka area is not included as it does not fully meet the NPSUD definition of plan enabled and infrastructure ready, i.e. infrastructure projects required to support it are not identified in the 2021 LTP or Infrastructure Strategy.

At the time of preparing this assessment a private plan change application has been received by the Council for the development of the Kaka Valley area (known as Maitahi/Bayview Private Plan Change 28).

Figure 25 below shows the demand-capacity relationship over time if the Maitahi/Bayview growth area from the FDS 2019 is included in the capacity assessment.

Housing Capacity - Demand for Nelson

Short term Medium term Long term

8000

8000

2000

2000

Figure 25: Nelson housing bottom line and capacity including Maitahi/Bayview area

As shown above in Figure 25, if this area is plan enabled and infrastructure ready in the future, the total housing capacity increases to 7,689 at 2051 and in doing so reduces the total shortfall to 564 dwellings. The point at which demand exceeds supply moves out to around 2043.

■ ■ New Households per year - cumulative with NPS margins

2036

Year ending June

2042

Housing capacity

4.16.2 Residential zone management assumptions

This HBA uses the operative rules under the Nelson Resource Management Plan to assess Nelson's capacity. A review of the Nelson Resource Management Plan is currently underway, and this has produced the draft Whakamahere Whakatū Nelson Plan. The development of the draft Whakamahere Whakatū Nelson Plan has been informed by the analysis that has been undertaken as part of this HBA. In response to the shortfall identified in the housing capacity model, the proposed Whakamahere Whakatū Nelson Plan has been modified to include provisions for a wider range of higher-density housing and small homes. These provisions include the following:

- Smaller minimum lot size
- Higher maximum site coverage
- Removal or refinement of courtyard and outdoor living rules
- Changes to maximum building heights

These proposed changes to planning rules in Nelson City are still in the process of being developed and consulted on so are some way off being operative and are unable to be assessed as plan enabled in this HBA.

5. Business land demand

NPSUD requirements (3.28):

- 1) Every HBA must estimate, for the short term, medium term, and long term, the demand from each business sector for additional business land in the region and each constituent district of the tier 1 or tier 2 urban environment.
- 2) The demand must be expressed in hectares or floor areas.
- 3) For the purpose of this clause, a local authority may identify business sectors in any way it chooses but must, as a minimum, distinguish between sectors that would use land zoned for commercial, retail, or industrial uses.
- 4) The HBA for a tier 2 urban environment must:
 - (a) set out the most likely projection of demand for business land by business sector in the short term, medium term, and long term; and
 - (b) set out the assumptions underpinning that projection; and
 - (c) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

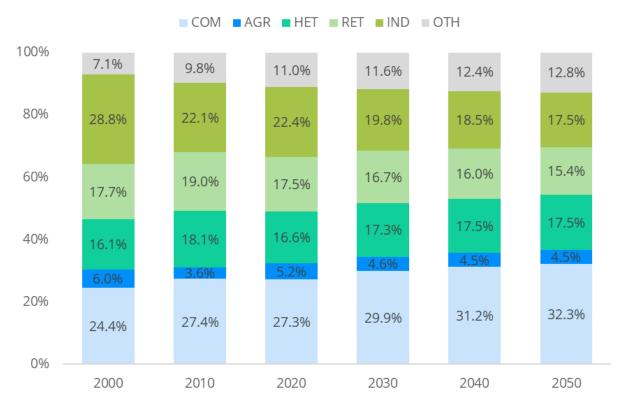
Section summary:

- Demand for commercial land is expected to increase by 14.6Ha over the next 30 years.
- Demand for industrial land is expected to decrease by 5.4Ha over the next 30 years.

Nelson City Council and Tasman District Council commissioned Sense Partners to undertake an assessment of business land capacity for each city/district as well as the Nelson Tasman Urban Environment.

Figure 26 provides an illustration of the forecasts of business land demand for Nelson City over fifty years from 2000 to 2050. The report forecasts additional demand for commercial activity and a small decrease in demand of industrial land over time, reflecting the changes to the economy including an ageing labour force, and a shift away from industrial activity towards services.

Figure 26: Nelson's Business land demand estimates without competitiveness margins



An assessment of business land demand was undertaken as part of the Sense Partners report on business land demand. For Nelson, the assessment concluded that a further 9.2 hectares of business land will be required to meet the expected demand, as shown in Table 14 below.

Table 14: Business land demand with competitiveness margins

| Business Land demand (in hectares) | Short term | Medium term | Long term | Total |
|---|------------|----------------|-----------|-------|
| Commercial (and retail) | 2.4 | 3.7 | 8.5 | 14.6 |
| Industrial (includes some agriculture activity) | -8.3 | 3.7 | -0.7 | -5.4 |
| Total of additional land required | -6.0 | 7.3 | 7.9 | 9.2 |

The methodology of assessing future demand is set out in the Sense Partners report, as is the dialogue on the uncertainties associated with the business land demand forecast. The report can be found in appendix 5 of this Housing and Business Capacity assessment.

The full report that provides a regional assessment of Nelson City and of the shared urban environment is included in Appendix 5 and available on the Nelson City Council website at http://www.nelson.govt.nz/urban-development-capacity

6. Business land capacity

NPSUD requirements (3.29):

- 1) Every HBA must estimate the following, for the short term, medium term, and long term, for the region and each constituent district of the tier 1 or tier 2 urban environment:
 - (a) the development capacity (in terms of hectares or floor areas) to meet expected demand for business land for each business sector, plus the appropriate competitiveness margin; and
 - (b) of that development capacity, the development capacity that is:
 - i. plan-enabled; and
 - ii. plan-enabled and infrastructure-ready; and
 - iii. plan-enabled, infrastructure-ready, and suitable for each business sector.
- 2) A local authority may define what it means for development capacity to be "suitable" in any way it chooses, but suitability must, at a minimum, include suitability in terms of location and site size.

Section summary:

- There is approximately 4.9Ha of flat business land that is currently vacant or undeveloped, with no building or activity on it.
- There is 12.2Ha of flat business land that has an unoccupied building located on it.
- Under the current resource management plan rules and zoning, insufficient commercial land and an excess of industrial land over the 30 years.

This section sets out the methodology and results of the assessment of capacity for additional business land for the Nelson region.

During the summer of 2020/2021, Nelson City Council undertook a full stocktake of all business activity and land zoned for business activity in the Nelson Resource Management Plan. The purpose of the stocktake was to allow the capacity for further business demand to be accommodated as well as providing useful information to the Planning team in their plan review.

The stocktake recorded the use of each business property parcels in Nelson City, including vacant and unoccupied properties. The stocktake found:

- A total of 1,421 properties are either zoned for business use or used for business use although not zoned for it.
- There is a total of 970Ha of business land and 124Ha of building floor area.
- 4.9Ha of flat business land is vacant, with no building located on the property it is associated with.
- 12.2Ha of flat business land has a building on it but the building is not occupied.

The existing business land capacity is plan enabled and infrastructure ready, and therefore available for uptake now.

Table 15 below summarises the business land capacity assessment.

Table 15: Business land capacity and demand in Nelson

| Type of land | Total demand | Total capacity | Difference (Ha) |
|---------------------------|--------------|----------------|-----------------|
| | (Ha) | (Ha) | |
| Commercial (and retail) | 14.6 | 5.9 | -8.7 |
| Industrial (includes some | -5.4 | 11.3 | 16.7 |
| agriculture activity) | | | |
| Totals | 9.2 | 17.2 | 8.0 |

To meet the requirements of the NPSUD, capacity and demand are required to be identified over the short, medium, and long term. To meet the NPSUD requirements, capacity has been matched to demand in Table 16.

Table 16: Business land supply, matched to demand where possible

| Business Land supply (in hectares) | Baseline supply at year zero (Ha) | Short term (Ha) | Medium term (Ha) | Long term (Ha) |
|---|--|-----------------------|------------------------|-------------------|
| Commercial (and retail) | 5.9 | 2.4 | 3.5 | 0 |
| Industrial (includes some agriculture activity) | 11.3 | -8.3 | 3.7 | -0.7 |
| Total of additional land required | 17.2 | -5.9 | 7.2 | -0.7 |

A summary of the land remaining in each of the short, medium and long term after the demand is subtracted, or added in the case of industrial land is shown in Table 17.

Table 17: Remaining business land.

| Business Land remaining (in hectares) - cumulative | Baseline supply at year zero (Ha) | Short term (Ha) | Medium term (Ha) | Long term (Ha) |
|--|--|-----------------------|------------------------|-------------------|
| Commercial (and retail) | 5.9 | 3.5 | -0.2 | -8.7 |
| Industrial (includes some agriculture activity) | 11.3 | 19.6 | 15.9 | 16.6 |
| Total of additional land remaining capacity | 17.2 | 23.1 | 15.7 | 7.9 |

Table 17 above shows that there is shortfall in the medium and long term for commercial land. There is excess industrial land in all three time periods totalling 16.6Ha overall.

Nelson City has a compact urban form that currently allows for a relatively large area of industrial land near the city centre. This location is suitable for conversion to commercial activity over time and is expected to occur as land values increase along with increasing

pressure on land available for commercial activity. Figure 27 shows the areas of industrial land close to the city centre.

Planning and Consents

NRMP Zones

Conservation
Industrial
Industrial Nayland Rd South Area
Inner City - Enringe
Inner City - Intense Development
Open Space Recreation
Residential

Figure 27: Industrial zoned land close to Nelson city centre.

Table 18 below summarises the areas currently zoned for industrial use close to the city centre and their distance from the city centre. The distances expressed in Table 18 are 'as the crow flies' and provide a useful measure of proximity.

Table 18: Industrial land close to the city centre.

| Area description | Area number (see Figure 27) | Total Area (Ha) | Area currently used for industrial or residential purposes and is flat enough (Ha) | Distance from shape centre to edge of city centre (m) |
|---|---|-----------------------|--|--|
| Victory - Bounded by Vanguard, St Vincent, Parere and Gloucester Streets | 1 | 6.6 | 3.3 | 440 |
| Victory - Bounded by Vanguard and Konini Streets | 2 | 0.9 | 0.3 | 330 |
| Victory - Bounded by St Vincent Street and Abraham Heights | 3 | 2.6 | 0.3 | 520 |
| Victory - Bounded by Vanguard, St Vincent, Parere and Northesk Streets | 4 | 5.8 | 4.1 | 740 |
| Totals | | 15.9 | 8.0 | |

Table 18 shows that there is insufficient industrial land close to the city centre that is suitable, as far as location is concerned, for eventual conversion to commercial use to meet demand. There is currently a high proportion of commercial and residential use in this industrial zoned land. This indicates the market is already transitioning this area. If all the current industrial zone identified above was to be rezoned for commercial use, only around half of that land would become available as it is already in other uses. With the conversion of all the areas above to commercial land use, there is still projected to be a 0.7Ha shortfall in commercial land.

With a new resource management plan currently in development, it will be important to consider the future zoning of commercial land to enable sufficient capacity.

To understand how the use of land may change over time and its relative attractiveness for commercial use it is helpful to assess the differential in land price between the current industrial zoned land and the surrounding zones. The MHUD dashboard provides this data which is summarised in Table 19 below.

| Adjacent non- industrial zone | Number of industrial parcels | Average industrial land value (\$/m2) | Number of non- ind parcels | Average non-ind land value (\$/m2) | Difference in land value (\$/m2) | Ratio of land values |
|--|---------------------------------------|---------------------------------------|-------------------------------------|---|---|----------------------------|
| commercial | 59 | 382 | 80 | 741 | -359 | 0.516 |
| recidential | 97 | 363 | 582 | 242 | 120 | 1 408 |

Table 19: Industrial land price differential

Table 19 shows that along the boundary between industrial and commercial land the commercial properties are of much higher value. This suggests that, in time, a drift of commercial land across into the industrial zone might be expected some of which is already occurring. As the residentially zoned properties on the boundary tend to be of lower value residential drift into the current industrial zone without some form of complementary commercial use is anticipated to be minimal.

7. Conclusions

7.1 Assessment of sufficient development capacity for housing

The assessment of housing demand and capacity as set out in this report suggests an overall insufficiency of development capacity to meet demand for housing in Nelson. Table 20 summarises the housing bottom line (including competitiveness margins) and the projected capacity along with the difference between the two.

Table 20: Housing bottom line and capacity

| Period | Housing bottom line (dwellings) | Cumulative Capacity (dwellings) | Cumulative Difference |
|--------------------------|---------------------------------|---------------------------------|--------------------------|
| Short-term (1-3 years) | 521 | 1,876 | 1,355 |
| Medium-term (4-10 years) | 3,075 | 3,770 | 695 |
| Long-term 11-30 years) | 8,025 | 7,161 | -864 |

As detailed in this HBA, Table 20 shows that there is sufficient capacity for the short and medium term but an insufficiency in the long term of 864 dwellings this insufficiency is expected to occur in around 2039.

7.2 Assessment of sufficient development capacity for business land

The assessment of demand and capacity as set out in this report identifies an overall insufficiency of commercial land in Nelson. Table 21 shows the business land capacity minus demand for the short, medium, and long term.

Table 21: Business land capacity minus supply

| Business Land remaining (in hectares) - cumulative | Baseline supply at year zero (Ha) | Short term (Ha) | Medium term (Ha) | Long term (Ha) |
|--|--|-----------------------|------------------------|-------------------|
| Commercial (and retail) | 5.9 | 3.5 | -0.2 | -8.7 |
| Industrial (includes some agriculture activity) | 11.3 | 19.6 | 15.9 | 16.6 |
| Total of additional land remaining capacity | 17.2 | 23.1 | 15.7 | 7.9 |

As detailed in this HBA, Table 21 shows that there is sufficient capacity for the short, medium, and long term for industrial land. There is sufficient land for commercial use in the short term but an insufficiency in the medium term of 0.2Ha and insufficiency in the long term of 8.7Ha.

The NPSUD details the actions required of a local authority when any insufficiency in housing of business land capacity is identified as follows:

- 3.7 When there is insufficient development capacity
 - 1) If a local authority determines that there is insufficient development capacity (as described in clauses 3.2 and 3.3) over the short term, medium term, or long term, it must:
 - a. immediately notify the Minister for the Environment; and
 - b. if the insufficiency is wholly or partly a result of RMA planning documents, change those documents to increase development capacity for housing or business land (as applicable) as soon as practicable, and update any other relevant plan or strategy (including any FDS, as required by subpart 4); and
 - c. consider other options for:
 - (i) increasing development capacity; and
 - (ii) otherwise enabling development.

The recommendations contained in the next section outline the recommendations to address this requirement of the NPSUD as detailed above.

8. Recommendations

As a result of the shortfall in housing and commercial business land capacity that has been identified in this report the following recommendations are provided.

- 1) To continue to progress the proposed Whakamahere Whakatū Nelson Plan change:
 - To enable greater infill feasibility and higher density development where these meet the requirements of the NPSUD.
 - To enhance market choice, price-points and make efficient use of the urban land resource and infrastructure to provide a well-functioning urban environment.
 - To provide residential greenfield expansion areas where these meet the requirements of the NPSUD.
 - That considers how to provide for relocatable housing.
 - To rezone surplus industrial land for other business/mixed-use activities.
- 2) Assess potential additional capacity of housing and business land areas through the development of a new Future Development Strategy. Investigating the influence of transport accessibility on enabling intensified growth over the short, medium and long terms may also be of benefit.
- 3) Complete Te Ara ō Whakatū, the city centre spatial plan, and programme investment in the public realm to encourage and support the uptake of inner city housing.
- 4) Actively pursue Government funding opportunities, such as the Housing Acceleration Fund, to ensure growth areas are infrastructure ready.
- 5) Build and strengthen developer relationships and identify potential partnership opportunities, including with central government agencies, working together to affect the volume and timing of supply.
- 6) Continue to work collaboratively with the Tasman District Council taking a regional approach to solving demand for capacity to achieve sufficient housing and business capacity across the Nelson-Tasman urban environment.
- 7) Continue to evaluate and monitor residential and business capacity with Tasman District Council to ensure decision making is aligned between the Councils where it affects the potential to provide sufficient residential and business land capacity.

9. Glossary

Backyard infill means the development of one additional residential dwelling on a plan enabled section.

Business land means land that is zoned, or identified in an FDS or similar strategy or plan, for business uses in urban environments, including but not limited to land in the following:

- any industrial zone
- the commercial zone
- the large format retail zone
- any centre zone, to the extent it allows business uses
- the mixed-use zone, to the extent it allows business uses

Competitiveness margin means a margin of development capacity, over and above the expected demand that local authorities are required to provide, that is required in order to support choice and competitiveness in housing and business land markets.

Demand in relation to housing means the demand for dwellings, expressed in the number of dwellings, in an urban environment in the short, medium and long-term:

- in different locations
- in terms of dwelling types but at a minimum must distinguish between standalone dwellings and attached dwellings.

Demand in relation to business land, means the demand for floor area and land area in an urban environment in the short, medium and long-term, including:

- the quantum of floor area to meet forecast growth of different business activities;
- the demands of both land extensive and intensive activities; and
- the demands of different types of business activities for different locations within the urban environment.

Development capacity means the capacity of land to be developed for housing or for business use, based on:

- the zoning, objectives, policies, rules and overlays that apply in the relevant proposed and operative regional RMA planning documents; and
- the provision of adequate development infrastructure to support the development of land for housing or business use

Development infrastructure means the following, to the extent they are controlled by a local authority or council controlled organisation (as defined in section 6 of the local Government Act 2002):

- network infrastructure for water supply, wastewater, or stormwater
- land transport (as defined in section 5 of the Land Transport Management Act 2003)

Feasible means:

- for the short term or medium term, commercially viable to a developer based on the current relationship between costs and revenue
- for the long term, commercially viable to a developer based on the current relationship between costs and revenue, or on any reasonable adjustment to that relationship

GIS means Geographic Information System mapping.

FDS means Future Development Strategy required by subpart 4 of Part 3 of the NPSUD.

HBA means Housing and Business Development Capacity Assessment required by subpart 5 of Part 3 of the NPSUD.

Development capacity is infrastructure ready if;

- in relation to the short term, there is adequate existing development infrastructure to support the development of the land
- in relation to the medium term, either paragraph (a) applies, or funding for adequate infrastructure to support the development capacity

Intensification means development that increases the density of an existing urban area. Intensification can occur as infill, redevelopment or within greenfield development areas where zoning allows.

Long term means between ten and thirty years.

Medium term means between three and ten years.

NPSUD means National Policy Statement on Urban Development.

NRMP means the Nelson Resource Management Plan.

Planning decision means a decision on any of the following:

- a regional policy statement or proposed regional policy statement
- a regional plan or proposed regional plan
- a district plan or proposed district plan
- a resource consent
- a designation
- a heritage order
- a water conservation order

Plan-enabled means

- in relation to the short term, it is on land that is zoned for housing or for business use (as applicable) in an operative district plan
- in relation to the medium term, either paragraph (a) applies, or it is on land that is zoned for housing or for business use (as applicable) in a proposed district plan

 in relation to the long term, either paragraph (b) applies, or it is on land identified by the local authority for future urban use or urban intensification in an FDS or, if the local authority is not required to have a FDS, any other relevant plan or strategy.

Redevelopment means the redevelopment of one or more already developed, occupied and serviced site/s.

RMA planning document means all or any of the following:

- a regional policy statement
- · a regional plan
- a district plan

Short term means within the next three years.

Sufficient development capacity for housing means the development capacity must be:

- plan-enabled; and
- infrastructure-ready; and
- feasible and reasonably expected to be realised; and
- meet the expected demand plus the appropriate competitiveness margin.

Tier 2 urban environment means an urban environment listed in column 1 of table 2 in the appendix of the NPSUD.

Urban environment means any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

- is, or is intended to be, predominantly urban in character; and
- is, or is intended to be, part of a housing and labour market of at least 10,000 people

Appendix 1: Summary of assumptions made in housing capacity assessment

| Development type | Assumption | Rationale |
|--------------------------|--|---|
| Greenfield | Feasibility | The MHUD supplied feasibility calculator was used to determine whether a site was feasible to develop. Developers supplied broad costs to allow the tool to be calibrated for current local conditions. |
| Greenfield | Reasonably expected to be realised | Discussions with developers and their representatives were used to determine the likely timing of development over the 30 years of this HBA. |
| Intensification - all | Hazards | Areas that are subject to natural hazards (slope risk, fault hazard and flood model) are not counted as potential capacity for backyard infill and/or site redevelopment. This is because the development of such sites is not plan enabled or considered to be economically feasible under current settings. |
| Intensification - all | Unsuitable land | Land that is currently zoned residential but used for activities such as hospitals, schools or reserves, is not counted as suitable for backyard infill and/or site redevelopment. |
| Intensification - all | Slope | Land with a slope of over 30 degrees is not considered feasible for intensification and not counted as capacity. |
| Intensification - all | Covenants | Land that contains a land covenant preventing subdivision or second dwellings has not been counted. A search of titles created in each decade since the 1960s showed that covenants of this type were not common until the late 1990s/early 2000s. Therefore, covenant restrictions limiting this type of infill or redevelopment have been applied as follows: |
| | | For subdivisions after 2000 – all sites restricted, before 2000 – no restrictions. |
| Intensification - all | Uptake Rates (reasonably expected to be realised) | The uptake of infill development is based on historical rates from the last 5 years and spread forward over the 30 years of this HBA. The uptake rate has been assessed to be around 40% of the total land feasible for intensification. |
| Intensification - infill | Suitable land shape | Using Council's Geographic Information System (GIS) sites were identified by applying a 15m diameter circle that needed to be able to fit within each lot and not overlap any existing |

| | | dwellings. This size shape was obtained from the NRMP rules which state that a 15mx18m piece of land is required for each dwelling. |
|---|-------------------------|---|
| Intensification - infill | NRMP rules | To be counted as feasible infill sites must meet NRMP minimum lot size and site coverage rules which are zone specific. The land area required for the existing building was calculated using the maximum site coverage rules then subtracted from the total lot size. The remaining land area was then tested against the minimum lot size requirements for the zone to determine if a second dwelling/lot was allowed. Although no longer required, parking and drive on access is still estimated for 80% of future infill developments. |
| Intensification - redevelopment | Feasibility | To determine the feasibility for redevelopment, sites that have been redeveloped over the last five years were assessed to determine the ratio between land value and total capital value. This assessment showed that a ratio of around 0.58 was the key to a site being considered feasible for redevelopment. |
| Intensification - City Centre/Fringe | Capacity calculation | Mixed-use zone capacity is calculated by what is plan enabled under the NRMP, with a feasibility lens. Although the NRMP allows for greater height in the city centre/fringe capacity has been calculated using three-storey buildings. The buildings in the model have commercial activity on the ground floor and two levels of residential above. The average apartment size is assumed to be 70sqm which corresponds to 35sqm of land per apartment. |



This appendix details the timing of completion of infrastructure projects to zoned areas and therefore the timing of the release of residential capacity. This section also evaluates the feasibility of each of the significant capacity areas.

Area 3: Ngawhatu Valley

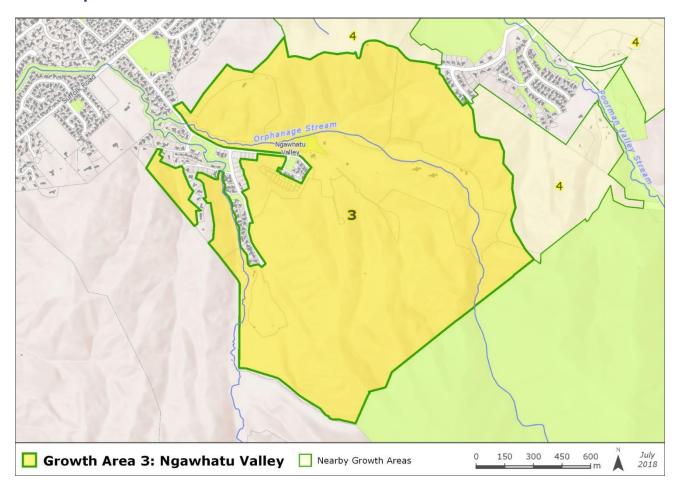
| Projected Yield | 975 lots based on development plans received |
|--------------------------------|--|
| Gross site area | 175Ha |
| Estimated Net developable area | 120Ha |
| Projected market delivery | 675 lots years 3-10, 300 lots years 11-30 |
| Servicing cost per lot | \$1,128 |

Description

Area 3 sits within the Ngawhatu Valley in Stoke and extends to meet area 4 at the top of the ridge between Ngawhatu Valley and Marsden Valley. The area is currently partially developed but still has significant capacity remaining. The bottom of the valley is relatively flat with the ground steepening further to the sides. All access to the valley is via the intersection of Suffolk Road and Ngawhatu Road. A small high density area (300sqm minimum lot size) has been developed on Montebello Avenue with lot sizes ranging from 400-500 sqm.

Development in the valley to date has been primarily on the valley floor and on the north facing slopes of the southern side of the valley with residential lot sizes generally following the typical pattern seen in Nelson of around 600-700sqm.

The undeveloped land in the valley is almost all owned by two companies, Stoke Valley Holdings Ltd and Solitaire Investments Ltd.



Servicing constraints

As shown in the table below, growth area 3 is constrained by transport and water infrastructure. All projects needed to release the remaining capacity will be completed in 2026 according to the project list in the 2021 Nelson Long Term Plan.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | No | | | |
| Stormwater | No | | | |
| Water | Yes | \$1,100,000 | Yes | 2026 |
| Wastewater | No | | | |
| | Total | \$1,100,000 | Final completion | 2026 |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare.

Area 3 Solitaire

| Type | Item | Units | Value | Туре | Section price funct | tion | Comment | | |
|----------|---|----------------|--------------|------|---|---|-------------------------|--|--|
| | Gross site area | ha | 175.5 | | Note: This requires u | Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows | | | |
| | Land capital value (CV) | \$ | \$75,915,268 | | | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | | |
| | Road Reserve area for 15 dw/ha | % of area | 20% | | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | | NewLot Area 1 | 400 | m2 | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | |
| | Extra landscape reserve for dwha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | |
| | Wastevater/stormvater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradient | | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercept | | |
| | Maximum net density | dwellings/ha | 30 | | | | | | |
| | Time to develop | months | 24 | | View modelled section price gradient | | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|-------------------------|---------------------------------------|---------------------|------|------|--|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | 100% | |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% | |
| Cost paramete | Civil works | | | Sele | ect civil works cos | sts | | |
| rs | Fees and charges | | Select fees and charges | | | | | |

| | | | | Dens | ity of dwellings [dv | vellings / ha] | |
|----------|---|-------------|----------------|----------------|----------------------|----------------|----------------|
| Туре | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 32.47 | 35.10 | 37.73 | 40.37 | 43.00 |
| Net Land | Landscape Reserve Area | ha of land | 8.34 | 8.78 | 9.21 | 9.65 | 10.09 |
| Area | Stormwater Reserve Area | ha of land | 8.78 | 8.78 | 8.78 | 8.78 | 8.78 |
| Calcs | Other constraints that reduce net site area | ha of land | 26.33 | 26.33 | 26.33 | 26.33 | 26.33 |
| | Net Developable land Area | ha of land | 99.60 | 96.53 | 93.45 | 90.38 | 87.31 |
| | Subdivision Lots created | total lots | 996 | 1,448 | 1,869 | 2,260 | 2,619 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 349,735,137 | \$ 477,239,215 | \$ 589,015,124 | \$ 687,692,935 | \$ 774,818,447 |
| | 1 Rawland purchase and holding cost | | \$91,857,474 | \$91,857,474 | \$91,857,474 | \$91,857,474 | \$91,857,474 |
| | 2 Civil works, incl holding costs | | \$142,117,338 | \$148,658,300 | \$155,156,045 | \$161,610,573 | \$168,021,883 |
| | 3 Fees and charges, incl holding costs | | \$87,190,699 | \$120,614,102 | \$151,139,941 | \$179,009,816 | \$204,365,724 |
| Costs | 4 Project contingency | | \$32,116,551 | \$36,112,988 | \$39,815,346 | \$43,247,786 | \$46,424,508 |
| | Total costs | | \$353,282,062 | \$397,242,864 | \$437,968,807 | \$475,725,650 | \$510,669,590 |
| | per section costs (excl rawland) | | \$262,484 | \$210,920 | \$185,178 | \$169,886 | \$159,892 |
| | per section (total) | | \$354,714 | \$274,363 | \$234,324 | \$210,539 | \$194,961 |
| Profit | Pre tax profit \$ | | -\$3,546,925 | \$79,996,351 | \$151,046,317 | \$211,967,285 | \$264,148,856 |
| 1-TOIR | Pre tax margin % | | -1.0% | 20.1% | 34.5% | 44.6% | 51.7% |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Area 4: Marsden Valley

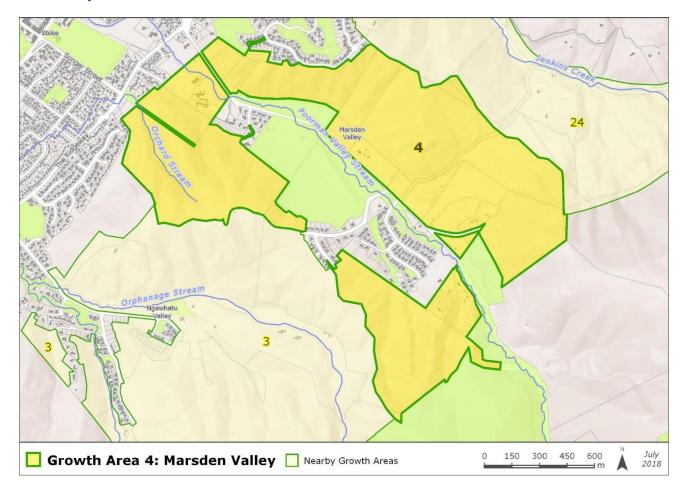
| Projected Yield | 336 lots |
|--------------------------------|--|
| Gross site area | 67Ha |
| Estimated Net developable area | 46Ha |
| Projected market delivery | 196 lots years 3-7, 150 lots years 11-30 |
| Servicing cost per lot | \$2,714 |

Description

Area 4 sits within the Marsden Valley in Stoke and extends to meet area 3 at the top of the ridge between Ngawhatu Valley and Marsden Valley. The area is currently partially developed but still has significant capacity remaining. The bottom of the valley is relatively flat with the ground steepening further to the sides. All access to the valley is via the intersection of Suffolk Road and Ngawhatu Road.

Development in the valley to date has been primarily on the north facing slopes of the southern side of the valley with residential lot sizes slightly smaller than typically seen in Nelson at 500-600sqm.

The majority of the undeveloped land in the valley is owned by three entities.



Servicing constraints

As shown in the table below, growth area 4 is constrained by transport servicing. All projects needed to release the remaining capacity will be completed in 2025 according to the project list in the 2021 Nelson Long Term Plan.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | Yes | \$2,497,200 | Yes | 2025 |
| Stormwater | No | | | |
| Water | No | | | |
| Wastewater | No | | | |
| | Total | \$2,497,200 | Final completion | 2025 |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare.

Area 4: Marsden Valley

| Type | Item | Units | Value | Туре | Section price funct | ion | Comment | | |
|-----------------|---|----------------|--------------|------|---|-----------------------|-------------------------|--|--|
| | Gross site area | ha | 75.1 | | Note: This requires users to enter local prices for two lots of | | | | |
| | Land capital value (CV) | \$ | \$41,246,101 | | varying size, eg a price for a 400m2 and a 800m2 lot. This | | | | |
| | Land sale price relative to CV, ex GST | % | 150% | | allows prices for sect | tions of varying size | es to be estimated | | |
| | Road Reserve area for 15 dw/ha | % of area | 20% | _ | below. | | | | |
| | Extra roading for increased dw/ha | % per dw/ha | 0.30% | | NewLot Area 1 | 400 | m2 | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | |
| | Extra landscape reserve for dwha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | |
| | Other constraints that reduce net site area | % of land area | 21% | | m | 0.156 | Section price gradient | | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercept | | |
| | Maximum net density | dwellings/ha | 30 | | | | | | |
| | Time to develop | months | 24 | 1 | View modelled section price gradient | | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|---------------------|------|------|--|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | 100% | |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% | |
| Cost paramete | Civil works | | | Sele | ect civil works cos | ts | | |
| rs | Fees and charges | | | Sele | ctfees and charge | es | | |

| | | | | Dens | ity of dwellings [dw | ellings / ha] | |
|----------|---|-------------|----------------|----------------|----------------------|----------------|----------------|
| Туре | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 13.89 | 15.02 | 16.15 | 17.27 | 18.40 |
| Net Land | Landscape Reserve Area | ha of land | 3.57 | 3.76 | 3.94 | 4.13 | 4.32 |
| Area | Stormwater Reserve Area | ha of land | 3.76 | 3.76 | 3.76 | 3.76 | 3.76 |
| Calcs | Other constraints that reduce net site area | ha of land | 15.77 | 15.77 | 15.77 | 15.77 | 15.77 |
| | Net Developable land Area | ha of land | 38.11 | 52.57 | 51.26 | 49.94 | 48.63 |
| | Subdivision Lots created | total lots | 381 | 789 | 1,025 | 1,249 | 1,459 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 133,835,789 | \$ 259,916,763 | \$ 323,051,905 | \$ 379,989,674 | \$ 431,528,472 |
| | 1 Rawland purchase and holding cost | | \$74,861,674 | \$74,861,674 | \$74,861,674 | \$74,861,674 | \$74,861,674 |
| | 2 Civil works, incl holding costs | | \$54,356,070 | \$57,455,021 | \$60,313,556 | \$63,153,598 | \$65,975,146 |
| | 3 Fees and charges, incl holding costs | | \$33,373,168 | \$64,369,767 | \$81,502,442 | \$97,444,155 | \$112,268,248 |
| Costs | 4 Project contingency | | \$16,259,091 | \$19,668,646 | \$21,667,767 | \$23,545,943 | \$25,310,507 |
| | Total costs | | \$178,850,003 | \$216,355,108 | \$238,345,439 | \$259,005,370 | \$278,415,575 |
| | per section costs (excl rawland) | | \$272,840 | \$179,435 | \$159,478 | \$147,488 | \$139,533 |
| | per section (total) | | \$469,259 | \$274,371 | \$232,506 | \$207,447 | \$190,850 |
| Profit | Pre tax profit \$ | | -\$45,014,214 | \$43,561,655 | \$84,706,465 | \$120,984,304 | \$153,112,897 |
| Tiont | Pre tax margin % | | -25.2% | 20.1% | 35.5% | 46.7% | 55.0% |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Area 9: Tasman Heights (500 lots)

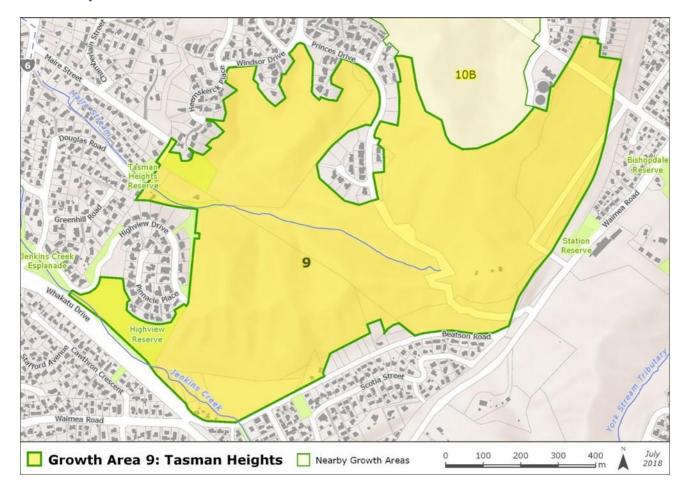
| Projected Yield | 481 lots |
|--------------------------------|--|
| Gross site area | 58Ha |
| Estimated Net developable area | 28На |
| Projected market delivery | 233 lots years 1-7, 248 lots years 11-30 |
| Servicing cost per lot | \$4,970 |

Description

Area 9 sits on the hills above the southern end of Tahunanui and Bishopdale. The land has been gradually developed over the last 15 years. The terrain includes relatively gentle hill tops dropping down to steeper slopes further down.

A large retirement village is currently under construction on the lower south facing slopes of the site. Site sizes in this type of development will be much smaller and likely to bring the average lot size of the overall development area down within the range 500-600sqm

The majority of the undeveloped land in this development area is owned by two separate but related development entities.



Servicing constraints

As shown in the table below, growth area 9 is constrained by wastewater services. All projects needed to release the remaining capacity will be completed in 2022 according to the project list in the 2021 Nelson Long Term Plan.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | No | | | |
| Stormwater | No | | | |
| Water | No | | | |
| Wastewater | Yes | \$2,390,945 | Yes | 2022 |
| | Total | \$2,390,945 | Final completion | 2022 |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare.

Area 9: Tasman Heights

| Type | Item | Units | Value | Type | Section price fund | tion | Comment | | |
|-----------------|---|----------------|--------------|---------|---|------------------|----------------------|------|--|
| | Gross site area | ha | 58.4 | | Note: This requires users to enter local prices for two lots of | | | | |
| | Land capital value (CV) | \$ | \$25,690,190 | | varying size, eg a price for a 400m2 and a 800m2 lot. This all | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | | |
| | Road Reserve area for 15 dwha | % of area | 20% | | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | Revenue | NewLot Area 1 | 400 | m2 | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | |
| | Extra landscape reserve for dw/ha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradi | ient | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price interd | cept | |
| | Maximum net density | dwellings/ha | 30 | | | | | | |
| | Time to develop | months | 24 | | View modell | ed section price | gradient | | |

| | | | | Dens | sity of dwellings [d | wellings / ha] | |
|---------------|-------------------------|-------|------|------|----------------------|----------------|------|
| Туре | Item | Units | 10 | 15 | 20 | 25 | 30 |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | 100% |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% |
| Cost paramete | Civil works | | | Sel | ect civil works co | sts | |
| rs | Fees and charges | | | Sele | ect fees and char | ges | |

| | | | Density of dwellings [dwellings / ha] | | | | |
|-----------------|---|-------------|---------------------------------------|----------------|----------------|----------------|----------------|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 10.80 | 11.68 | 12.56 | 13.43 | 14.31 |
| Net Land | Landscape Reserve Area | ha of land | 2.77 | 2.92 | 3.07 | 3.21 | 3.36 |
| Area | Stormwater Reserve Area | ha of land | 2.92 | 2.92 | 2.92 | 2.92 | 2.92 |
| Calcs | Other constraints that reduce net site area | ha of land | 8.76 | 8.76 | 8.76 | 8.76 | 8.76 |
| | Net Developable land Area | ha of land | 33.14 | 32.12 | 31.10 | 30.08 | 29.05 |
| | Subdivision Lots created | total lots | 331 | 482 | 622 | 752 | 872 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 116,379,100 | \$ 158,807,807 | \$ 196,002,754 | \$ 228,839,130 | \$ 257,831,324 |
| | 1 Rawland purchase and holding cost | | \$31,085,130 | \$31,085,130 | \$31,085,130 | \$31,085,130 | \$31,085,130 |
| | 2 Civil works, incl holding costs | | \$46,836,725 | \$49,012,355 | \$51,173,604 | \$53,320,472 | \$55,452,959 |
| | 3 Fees and charges, incl holding costs | | \$28,988,133 | \$40,110,166 | \$50,267,996 | \$59,542,017 | \$67,979,482 |
| Costs | 4 Project contingency | | \$10,690,999 | \$12,020,765 | \$13,252,673 | \$14,394,762 | \$15,451,757 |
| | Total costs | | \$117,600,987 | \$132,228,417 | \$145,779,403 | \$158,342,381 | \$169,969,328 |
| | per section costs (excl rawland) | | \$261,046 | \$209,928 | \$184,408 | \$169,248 | \$159,340 |
| | per section (total) | | \$354,840 | \$274,447 | \$234,387 | \$210,590 | \$195,004 |
| Profit | Pre tax profit \$ | | -\$1,221,888 | \$26,579,390 | \$50,223,350 | \$70,496,749 | \$87,861,995 |
| Fionit | Pre tax margin % | | -1.0% | 20.1% | 34.5% | 44.5% | 51.7% |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

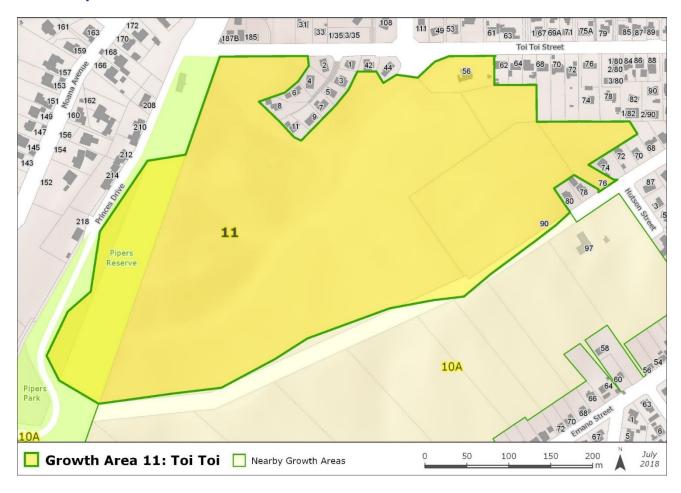
Area 11: Toi Toi

| Projected Yield | 202 lots |
|--------------------------------|--------------------|
| Gross site area | 14.4Ha |
| Estimated Net developable area | 8На |
| Projected market delivery | 202 lots years 6-9 |
| Servicing cost per lot | \$474 |

Description

Area 11 sits to the north of the Emano growth area in the Victory area of Nelson. The terrain varies between moderately steep to very steep and is located on the north side of a spur. Access to the site is planned to be from both Toi Toi Street and Princes Drive.

The undeveloped land in this growth area is primarily held by a single owner. A resource consent has been issued by Council using the Special Housing Areas (SHA) provisions under the Housing Accord - Special Housing Areas Act (HASHAA) permitting development of 202 lots. Resource consent has been issued corresponds to a density of around 25-30 lots per Hectare which is much higher than typically seen in Nelson. To achieve this relatively high density, the developer has proposed a mix of conventional lots and higher density attached housing spread throughout the site.



Servicing constraints

As shown in the table below, growth area 11 is constrained by transport services. The transport constraint is shared with areas 10a and 10b with the potential to release up to 210 lots in total in 2023 depending on which area is developed first.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | Yes | \$95,649 | Yes | 2023 |
| Stormwater | No | | | |
| Water | No | | | |
| Wastewater | No | | | |
| | Total | \$95,649 | Final completion | 2023 |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare.

Area 11 Toi Toi

| Type | Item | Units | Value | Туре | Section price funct | tion | Comment | | |
|----------|---|----------------|-------------|---------|--|------------------|------------------------|--|--|
| | Gross site area | ha | 14.4 | | Note: This requires users to enter local prices for two k | | | | |
| | Land capital value (CV) | \$ | \$2,073,173 | | varying size, eg a price for a 400m2 and a 800m2 lot. This a | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | | |
| | Road Reserve area for 15 dw/ha | % of area | 25% | | | | | | |
| | Extra roading for increased dw/ha | % per dw/ha | 0.30% | Revenue | NewLot Area 1 | 400 | m2 | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | |
| | Extra landscape reserve for dw/ha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | |
| | Wastevater/stormvater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradient | | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercep | | |
| | Maximum net density | dwellings/ha | 30 | | | | | | |
| | Time to develop | months | 36 | | View modelle | ed section price | gradient | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|--------------------|------|----|------|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | | 100% |
| | Project contingency | % | 10% | 10% | 10% | 10% | | 10% |
| Cost paramete | Civil works | | | Sele | ect civil works co | sts | | |
| rs | Fees and charges | | | Sele | ctfees and char | ges | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|-----------------|---|-------------|---------------|---------------------------------------|---------------|---------------|---------------|--|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | |
| | Road Reserve Area | ha of land | 3.38 | 3.60 | 3.82 | 4.03 | 4.25 | |
| Net Land | Landscape Reserve Area | ha of land | 0.68 | 0.72 | 0.76 | 0.79 | 0.83 | |
| Area | Stormwater Reserve Area | ha of land | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | |
| Calcs | Other constraints that reduce net site area | ha of land | 2.16 | 2.16 | 2.16 | 2.16 | 2.16 | |
| | Net Developable land Area | ha of land | 7.45 | 7.20 | 6.95 | 6.70 | 6.44 | |
| | Subdivision Lots created | total lots | 75 | 108 | 139 | 167 | 193 | |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 | |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 | |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 | |
| | Total revenue | | \$ 26,167,915 | \$ 35,598,263 | \$ 43,791,470 | \$ 50,947,826 | \$ 57,185,415 | |
| | 1 Rawland purchase and holding cost | | \$2,759,393 | \$2,759,393 | \$2,759,393 | \$2,759,393 | \$2,759,393 | |
| | 2 Civil works, incl holding costs | | \$13,929,315 | \$14,497,716 | \$15,062,276 | \$15,622,995 | \$16,179,873 | |
| | 3 Fees and charges, incl holding costs | | \$7,063,969 | \$9,697,927 | \$12,085,737 | \$14,246,420 | \$16,191,193 | |
| Costs | 4 Project contingency | | \$2,375,268 | \$2,695,504 | \$2,990,741 | \$3,262,881 | \$3,513,046 | |
| | Total costs | | \$26,127,944 | \$29,650,539 | \$32,898,146 | \$35,891,689 | \$38,643,504 | |
| | per section costs (excl rawland) | | \$313,588 | \$248,992 | \$216,888 | \$197,923 | \$185,620 | |
| | per section (total) | | \$350,617 | \$274,542 | \$236,745 | \$214,407 | \$199,894 | |
| Profit | Pre tax profit \$ | | \$39,971 | \$5,947,724 | \$10,893,324 | \$15,056,138 | \$18,541,911 | |
| PTOIIL | Pre tax margin % | | 0.2% | 20.1% | 33.1% | 41.9% | 48.0% | |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Growth Area 19d: Lower Bayview

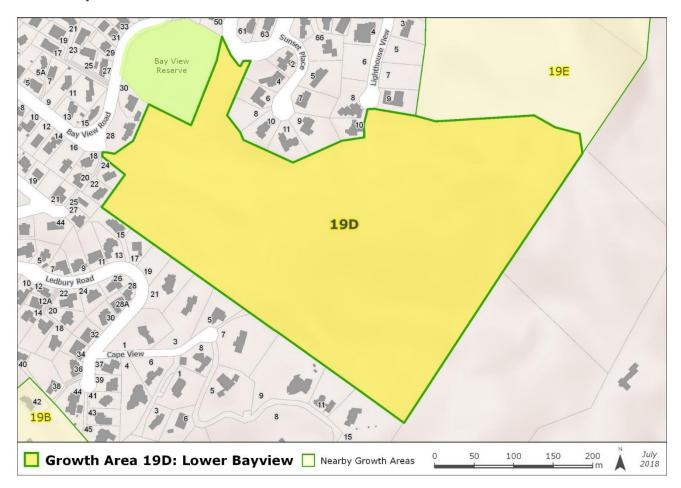
| Projected Yield | 100 lots |
|--------------------------------|--------------------|
| Gross site area | 14Ha |
| Estimated Net developable area | 8На |
| Projected market delivery | 100 lots years 5-7 |
| Servicing cost per lot | \$12,600 |

Description

Growth area 19d sits on the hills to the north of Nelson overlooking the boulder bank and estuary. The land is moderately steep to very steep with a number of gullies containing unstable soils that require careful geotechnical work prior to subdivision.

Access to the growth area is via Bayview Road which in turn intersects with State Highway 6 at the bottom of the hill. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

Area 19d is held by a single owner syndicate that also owns Bayview area 19e. The owner syndicate has been gradually developing the combined areas 19d and 19e over the last 15-20 years, releasing a small number of lots in each stage.



Servicing constraints

As shown in the table below, growth area 19d is constrained by transport, water and wastewater services. All Council projects needed to release the remaining capacity will be completed in 2025 according to the project list in the 2021 Nelson Long Term Plan. The unknown at this stage is what requirements NZTA will have and what the timing of any works on State Highway 6 will be.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | Likely | NZTA project | | |
| Stormwater | No | | | |
| Water | Yes | \$8,224,486 | Yes | 2024 |
| Wastewater | Yes | \$510,462 | Yes | 2025 |
| | Total | \$1,260,000 | Final completion | 2025 |

With the pre-tax margin for the 10 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a much higher density. The profit margin more than doubles with an increase in density to 15 dwellings per hectare.

Area 19d Lower Bayview

| Туре | Item | Units | Value | Туре | Section price funct | tion | Comment | | | |
|-----------------|---|----------------|-------------|------|---|----------------------------|-------------------------|--|--|--|
| | Gross site area | ha | 14.1 | | Note: This requires users to enter local prices for two lots of | | | | | |
| | Land capital value (CV) | \$ | \$6,115,680 | | | l a 800m2 lot. This allows | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | | | |
| | Road Reserve area for 15 dw/ha | % of area | 20% | | | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | | NewLot Area 1 | 400 | m2 | | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | | |
| | Extra landscape reserve for dw/ha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradient | | | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercept | | | |
| | Maximum net density | dwellings/ha | 30 | | | | | | | |
| | Time to develop | months | 24 | | View modelled section price gradient | | | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|--------------------|------|--|------|
| Type | Item | Units | 10 | 15 | 20 | 25 | | 30 |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | | 100% |
| | Project contingency | % | 10% | 10% | 10% | 10% | | 10% |
| Cost paramete | Civil works | | | Sel | ect civil works co | sts | | |
| rs | Fees and charges | | | Sele | ectfees and char | jes | | |

| | | | Density of dwellings [dwellings / ha] | | | | |
|----------|---|-------------|---------------------------------------|---------------|---------------|---------------|---------------|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 2.61 | 2.82 | 3.03 | 3.24 | 3.45 |
| Net Land | Landscape Reserve Area | ha of land | 0.67 | 0.71 | 0.74 | 0.78 | 0.81 |
| Area | Stormwater Reserve Area | ha of land | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 |
| Calcs | Other constraints that reduce net site area | ha of land | 2.12 | 2.12 | 2.12 | 2.12 | 2.12 |
| | Net Developable land Area | ha of land | 8.00 | 7.76 | 7.51 | 7.26 | 7.01 |
| | Subdivision Lots created | total lots | 80 | 116 | 150 | 182 | 210 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 28,098,379 | \$ 38,342,296 | \$ 47,322,583 | \$ 55,250,543 | \$ 62,250,371 |
| | 1 Rawland purchase and holding cost | | \$7,399,973 | \$7,399,973 | \$7,399,973 | \$7,399,973 | \$7,399,973 |
| | 2 Civil works, incl holding costs | | \$11,407,690 | \$11,932,971 | \$12,454,779 | \$12,973,115 | \$13,487,980 |
| | 3 Fees and charges, incl holding costs | | \$7,004,463 | \$9,689,749 | \$12,142,239 | \$14,381,343 | \$16,418,471 |
| Costs | 4 Project contingency | | \$2,581,213 | \$2,902,269 | \$3,199,699 | \$3,475,443 | \$3,730,642 |
| | Total costs | | \$28,393,340 | \$31,924,962 | \$35,196,690 | \$38,229,875 | \$41,037,066 |
| | per section costs (excl rawland) | | \$262,360 | \$210,832 | \$185,108 | \$169,827 | \$159,840 |
| | per section (total) | | \$354,839 | \$274,446 | \$234,387 | \$210,589 | \$195,004 |
| Profit | Pre tax profit \$ | | -\$294,961 | \$6,417,334 | \$12,125,892 | \$17,020,668 | \$21,213,305 |
| FTOIIL | Pre tax margin % | | -1.0% | 20.1% | 34.5% | 44.5% | 51.7% |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Growth Area 19e: Upper Bayview

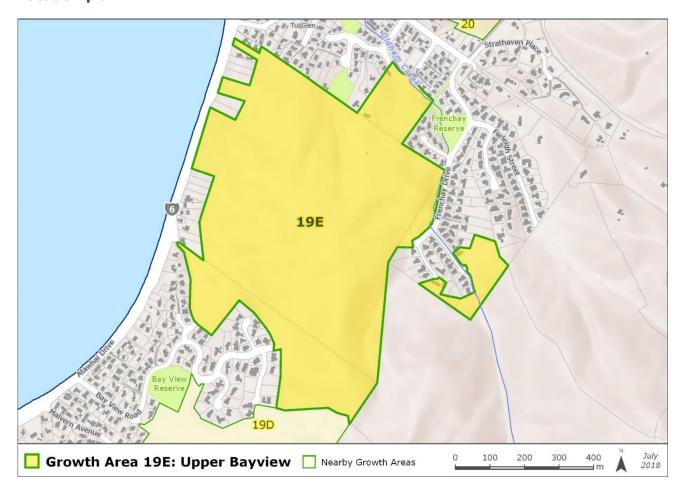
| Projected Yield | 200 lots |
|--------------------------------|--------------------|
| Gross site area | 53На |
| Estimated Net developable area | 30Ha |
| Projected market delivery | 200 lots years 2-7 |
| Servicing cost per lot | \$13,929 |

Description

Growth area 19e sits on the hills to the north of Nelson overlooking the boulder bank and estuary. The land is moderately steep to very steep with a number of gullies containing unstable soils that require careful geotechnical work prior to subdivision.

Access to the growth area is via Bayview Road which in turn intersects with State Highway 6 at the bottom of the hill. An additional connection is expected to be established to Frenchay Drive at the top of the hill once development takes place. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

Area 19e is held by a single owner syndicate that also owns Bayview area 19d. The owner syndicate has been gradually developing the combined areas 19d and 19e over the last 15-20 years, releasing a small number of lots in each stage.



Servicing constraints

As shown in the table below, growth area 19e is constrained by transport, stormwater and wastewater services. All Council projects needed to release the remaining capacity will be completed in 2028 according to the project list in the 2021 Nelson Long Term Plan. The unknown at this stage is what requirements NZTA will have and what the timing of any works on State Highway 6 will be.

If the developer chooses to deal with stormwater on the site and not rely on the Council system during rain events development of the site could potentially occur any time after 2025 dependant of course on NZTA.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | Likely | NZTA project | | |
| Stormwater | Yes | \$1,200,140 | Yes | 2028 |
| Water | No | | | |
| Wastewater | Yes | \$694,228 | Yes | 2025 |
| | Total | \$1,894,368 | Final completion | 2028 |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare.

Area 19e Upper Bayview

| Type | Item | Units | Value | Туре | Section price function | | Comment | | |
|-----------------|---|----------------|--------------|------|--|-----------|-------------------------|--|--|
| | Gross site area | ha | 53.0 | | Note: This requires users to enter local prices for two lots of | | | | |
| | Land capital value (CV) | \$ | \$20,976,373 | | varying size, eg a price for a 400m2 and a 800m2 lot. This allow | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | | |
| | Road Reserve area for 15 dw/ha | % of area | 20% | | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | | NewLot Area 1 | 400 | m2 | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | |
| | Extra landscape reserve for dwha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | |
| | Wastevater/stormvater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradient | | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercept | | |
| | Maximum net density | dwellings/ha | 30 | | | | | | |
| | Time to develop | months | 24 | | View modelled section price gradient | | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|--------------------|------|--|------|
| Type | Item | Units | 10 | 15 | 20 | 25 | | 30 |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | | 100% |
| | Project contingency | % | 10% | 10% | 10% | 10% | | 10% |
| Cost paramete | Civil works | | | Sel | ect civil works co | sts | | |
| rs | Fees and charges | | | Sele | ectfees and char | jes | | |

| | | | Density of dwellings [dwellings / ha] | | | | |
|----------|---|-------------|---------------------------------------|----------------|----------------|----------------|----------------|
| Туре | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 9.81 | 10.60 | 11.40 | 12.19 | 12.99 |
| Net Land | Landscape Reserve Area | ha of land | 2.52 | 2.65 | 2.78 | 2.92 | 3.05 |
| Area | Stormwater Reserve Area | ha of land | 2.65 | 2.65 | 2.65 | 2.65 | 2.65 |
| Calcs | Other constraints that reduce net site area | ha of land | 7.95 | 7.95 | 7.95 | 7.95 | 7.95 |
| | Net Developable land Area | ha of land | 30.08 | 29.15 | 28.22 | 27.30 | 26.37 |
| | Subdivision Lots created | total lots | 301 | 437 | 564 | 682 | 791 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 105,618,019 | \$ 144,123,524 | \$ 177,879,211 | \$ 207,679,348 | \$ 233,990,756 |
| | 1 Rawland purchase and holding cost | | \$25,381,411 | \$25,381,411 | \$25,381,411 | \$25,381,411 | \$25,381,411 |
| | 2 Civil works, incl holding costs | | \$45,117,344 | \$47,091,803 | \$49,053,211 | \$51,001,567 | \$52,936,871 |
| | 3 Fees and charges, incl holding costs | | \$26,452,108 | \$36,545,734 | \$45,764,313 | \$54,180,805 | \$61,838,093 |
| Costs | 4 Project contingency | | \$9,695,086 | \$10,901,895 | \$12,019,893 | \$13,056,378 | \$14,015,638 |
| | Total costs | | \$106,645,950 | \$119,920,844 | \$132,218,828 | \$143,620,161 | \$154,172,013 |
| | per section costs (excl rawland) | | \$270,184 | \$216,214 | \$189,277 | \$173,275 | \$162,815 |
| | per section (total) | | \$354,571 | \$274,262 | \$234,244 | \$210,471 | \$194,902 |
| Profit | Pre tax profit \$ | | -\$1,027,932 | \$24,202,680 | \$45,660,383 | \$64,059,187 | \$79,818,743 |
| FTOIIL | Pre tax margin % | | -1.0% | 20.2% | 34.5% | 44.6% | 51.8% |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Growth Area 22: Todd Valley

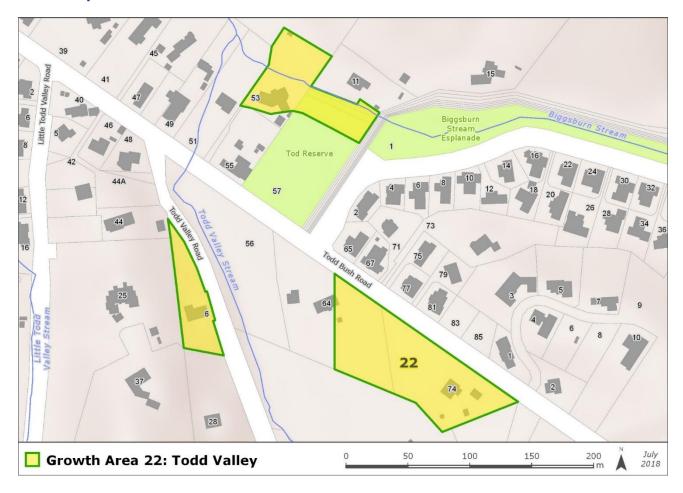
| Projected Yield | 4 lots |
|---------------------------|-----------|
| Gross site area | 1.4Ha |
| Projected market delivery | Year 8 |
| Servicing cost per lot | \$388,677 |

Description

Growth area 22 sits in Todd Valley approximately 7km north east of Nelson. The area is made up of three separate land parcels divided by Todd Valley Road and Todd Bush Road. The majority of the area is relatively flat other than a small portion (6 Todd Valley Road) that is moderately steep.

Access to the growth area is available via Todd Valley Road and Todd Bush Road with connection to the wider transport network being via the intersection of Todd Bush Road and State Highway 6. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

The undeveloped part of Area 22 is held by four independent owners.



Servicing constraints

As shown in the table below, growth area 22 is constrained by the three waters with the last project expected to be completed in 2028. The unknown at this stage is what requirements NZTA will have and what the timing of any works on State Highway 6 will be.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | Likely | NZTA project | | |
| Stormwater | Yes | \$222,404 | Yes | 2028 |
| Water | No | | | |
| Wastewater | Yes | \$1,332,305 | Yes | 2025 |
| | Total | \$1,554,709 | Final completion | 2028 |

Feasibility

Given the small number of lots that are likely to be developed, no feasibility assessment of this site has been undertaken.

Area 10a: Emano

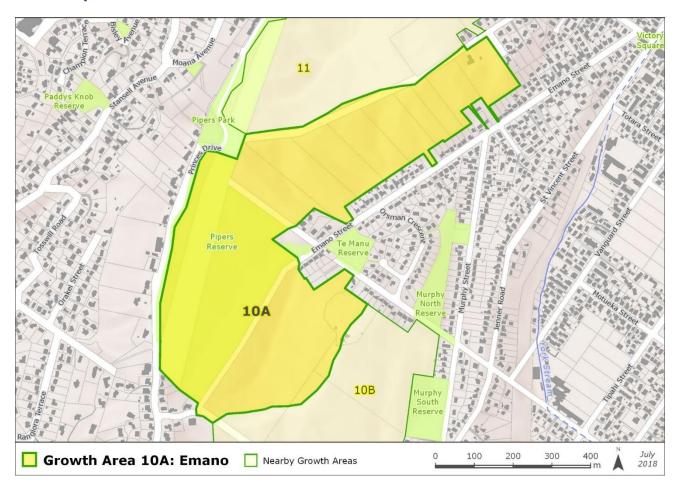
| Projected Yield | 96 lots |
|--------------------------------|-------------|
| Gross site area | 22Ha |
| Estimated Net developable area | 12Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$11,640 |

Description

Area 10a extends from the top of the port hills down to and around the southern end of Emano Street in the Victory area. The terrain is moderately steep to very steep and generally east facing. The Pipers Park Council reserve is included in the boundary of this growth area but has been excluded for the purposes of the capacity and feasibility assessments.

Currently, none of the land has been developed with little indication from the owners that this is likely to take place in the near future. The undeveloped land is owned by three entities with two of them owning the majority.

It is anticipated that the final lot sizes will be relatively large due to the steep terrain. This is unlikely to significantly influence the prices of the lots as the useful area in each lot will remain at around 400sqm as typically seen in other developments on steeper ground in Nelson.



Servicing constraints

As shown in the table below, growth area 10a is constrained by transport and wastewater services. The transport constraint is shared with areas 10b and 11 with the potential to release up to 210 lots in total in 2023 depending on which area is developed first. All projects needed to release the remaining capacity will be completed sometime in the period beyond year ten of the 2021 LTP.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Yes | \$174,895 | No | Beyond 10 years |
| Transport | Yes | \$140,285 | Yes | 2023 |
| Stormwater | No | \$713,123 | Yes | 2026 |
| Water | No | | | |
| Wastewater | Yes | \$89,112 | No | Beyond 10 years |
| | Total | \$1,117,414 | Final completion | Beyond 10 years |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare. The section price for lots in this area are expected to be marginally lower than average due to the shaded aspect of the land.

Area 10a Emano

| Type | Item | Units | Value | Туре | Section price fund | tion | Comment | | |
|-----------------|---|----------------|-------------|------|---|---|----------------------|------|--|
| | Gross site area | ha | 22.4 | | Note: This requires users to enter local prices for two lots of | | | | |
| | Land capital value (CV) | \$ | \$3,889,747 | | | varying size, eg a price for a 400m2 and a 800m2 lot. This allows | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of | estimated below. | | | |
| | Road Reserve area for 15 dwha | % of area | 20% | - | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | | NewLot Area 1 | 400 | m2 | | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | | |
| | Extra landscape reserve for dwha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradi | ient | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price interc | cept | |
| | Maximum net density | dwellings/ha | 30 | | | | | | |
| | Time to develop | months | 24 | | View modelled section price gradient | | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|--------------------|------|------|--|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | 100% | |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% | |
| Cost paramete | Civil works | | | Sel | ect civil works co | sts | | |
| rs | Fees and charges | | | Sele | ect fees and char | jes | | |

| | | | Density of dwellings [dwellings / ha] | | | | |
|----------|---|-------------|---------------------------------------|---------------|---------------|---------------|---------------|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 4.14 | 4.48 | 4.82 | 5.15 | 5.49 |
| Net Land | Landscape Reserve Area | ha of land | 1.06 | 1.12 | 1.18 | 1.23 | 1.29 |
| Area | Stormwater Reserve Area | ha of land | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 |
| Calcs | Other constraints that reduce net site area | ha of land | 3.36 | 3.36 | 3.36 | 3.36 | 3.36 |
| | Net Developable land Area | ha of land | 12.71 | 12.32 | 11.93 | 11.54 | 11.14 |
| | Subdivision Lots created | total lots | 127 | 185 | 239 | 288 | 334 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 44,638,559 | \$ 60,912,584 | \$ 75,179,138 | \$ 87,773,913 | \$ 98,894,206 |
| | 1 Rawland purchase and holding cost | | \$4,706,594 | \$4,706,594 | \$4,706,594 | \$4,706,594 | \$4,706,594 |
| | 2 Civil works, incl holding costs | | \$17,964,771 | \$18,799,259 | \$19,628,232 | \$20,451,688 | \$21,269,628 |
| | 3 Fees and charges, incl holding costs | | \$11,118,736 | \$15,384,721 | \$19,280,875 | \$22,838,034 | \$26,074,322 |
| Costs | 4 Project contingency | | \$3,379,010 | \$3,889,057 | \$4,361,570 | \$4,799,632 | \$5,205,054 |
| | Total costs | | \$37,169,111 | \$42,779,632 | \$47,977,271 | \$52,795,947 | \$57,255,598 |
| | per section costs (excl rawland) | | \$255,369 | \$206,023 | \$181,383 | \$166,745 | \$157,182 |
| | per section (total) | | \$292,394 | \$231,492 | \$201,112 | \$183,065 | \$171,260 |
| Profit | Pre tax profit \$ | | \$7,469,447 | \$18,132,951 | \$27,201,868 | \$34,977,966 | \$41,638,608 |
| Tront | Pre tax margin % | | 20.1% | 42.4% | 56.7% | 66.3% | 72.7% |

| Development feasible? | Yes | Yes | Yes | Yes | Yes |
|-----------------------|-----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Area 10b: Murphy

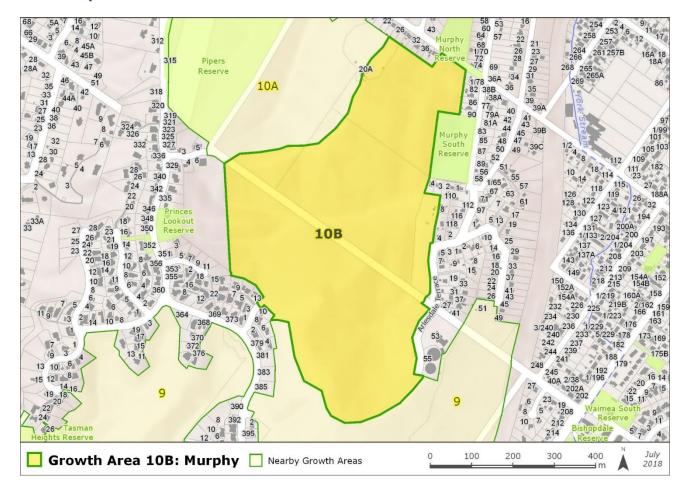
| Projected Yield | 75 lots |
|--------------------------------|-------------|
| Gross site area | 27На |
| Estimated Net developable area | 15Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$18,239 |

Description

Area 10b sits between the Tasman Heights and Emano growth areas in the Victory area of Nelson. The terrain in this growth area is moderately steep to very steep with slopes a mixed aspect.

The undeveloped land is owned by two entities. Currently, none of the land has been developed with little indication from the owners that this is likely to take place in the near future.

It is anticipated that the final lot sizes will be relatively large due to the steep terrain. This is unlikely to significantly influence the prices of the lots as the useful area in each lot will remain at around 400sqm as typically seen in other developments on steeper ground in Nelson.



Servicing constraints

As shown in the table below, growth area 10b is constrained by transport, stormwater and wastewater services. The transport constraint is shared with areas 10a and 11 with the potential to release up to 210 lots in total in 2023 depending on which area is developed first. All projects needed to release the remaining capacity will be completed sometime in the period beyond year ten of the 2021 LTP.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Yes | \$119,247 | Yes | Beyond 10 years |
| Transport | Yes | \$95,649 | Yes | 2023 |
| Stormwater | Yes | \$1,083,443 | Yes | 2028 |
| Water | No | | | |
| Wastewater | Yes | \$69,618 | No | Beyond 10 years |
| | Total | \$1,367,957 | Final completion | Beyond 10 years |

With the pre-tax margin for the 15 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin doubles with an increase in density to 25 dwellings per hectare. The section price for lots in this area are expected to be marginally lower than average due to the shaded aspect of the land.

Area 10b Murphy

| Alca los malphy | | | | | | | | |
|-----------------|---|----------------|-------------|------|---|------------------------|-------------------|-----------|
| Type | Item | Units | Value | Туре | Section price fund | tion | Comment | |
| | Gross site area | ha | 27.0 | | Note: This requires | users to enter local p | orices for two lo | ots of |
| | Land capital value (CV) | \$ | \$4,074,612 | | varying size, eg a p | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | |
| | Road Reserve area for 15 dwha | % of area | 20% | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | | NewLot Area 1 | 400 | m2 | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price | \$ |
| | Extra landscape reserve for dw/ha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price | \$ |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price | gradient |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price | intercept |
| | Maximum net density | dwellings/ha | 30 | | | | | 1 |
| | Time to develop | months | 24 | | View modelled section price gradient | | | |

| | | | | Dens | sity of dwellings [dv | wellings / ha] | |
|---------------|-------------------------|-------|--------------------------|------|-----------------------|----------------|-----|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 |
| Ancillary | DC contributions factor | % | 111% | 94% | 100% | 96% | 93% |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% |
| Cost paramete | Civil works | | Select civil works costs | | | | |
| rs | Fees and charges | | | Sele | ect fees and char | jes | |

| | | | Density of dwellings [dwellings / ha] | | | | |
|-----------------|---|-------------|---------------------------------------|---------------|---------------|----------------|----------------|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 5.00 | 5.40 | 5.81 | 6.21 | 6.62 |
| Net Land | Landscape Reserve Area | ha of land | 1.28 | 1.35 | 1.42 | 1.49 | 1.55 |
| Area | Stormwater Reserve Area | ha of land | 1.35 | 1.35 | 1.35 | 1.35 | 1.35 |
| Calcs | Other constraints that reduce net site area | ha of land | 4.05 | 4.05 | 4.05 | 4.05 | 4.05 |
| | Net Developable land Area | ha of land | 15.32 | 14.85 | 14.38 | 13.91 | 13.43 |
| | Subdivision Lots created | total lots | 153 | 223 | 288 | 348 | 403 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 53,805,406 | \$ 73,421,418 | \$ 90,617,711 | \$ 105,798,913 | \$ 119,202,838 |
| | 1 Rawland purchase and holding cost | | \$4,930,280 | \$4,930,280 | \$4,930,280 | \$4,930,280 | \$4,930,280 |
| | 2 Civil works, incl holding costs | | \$21,653,965 | \$22,659,822 | \$23,659,029 | \$24,651,588 | \$25,637,498 |
| | 3 Fees and charges, incl holding costs | | \$14,127,193 | \$17,969,079 | \$23,240,341 | \$26,929,750 | \$30,215,261 |
| Costs | 4 Project contingency | | \$4,071,144 | \$4,555,918 | \$5,182,965 | \$5,651,162 | \$6,078,304 |
| | Total costs | | \$44,782,582 | \$50,115,098 | \$57,012,615 | \$62,162,780 | \$66,861,343 |
| | per section costs (excl rawland) | | \$260,090 | \$202,850 | \$181,124 | \$164,639 | \$153,685 |
| | per section (total) | | \$292,267 | \$224,984 | \$198,270 | \$178,821 | \$165,919 |
| Profit | Pre tax profit \$ | | \$9,022,824 | \$23,306,319 | \$33,605,097 | \$43,636,133 | \$52,341,495 |
| Pioni | Pre tax margin % | | 20.1% | 46.5% | 58.9% | 70.2% | 78.3% |

| Development feasible? | Yes | Yes | Yes | Yes | Yes |
|-----------------------|-----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Area 16: Atmore Terrace/Cleveland Terrace

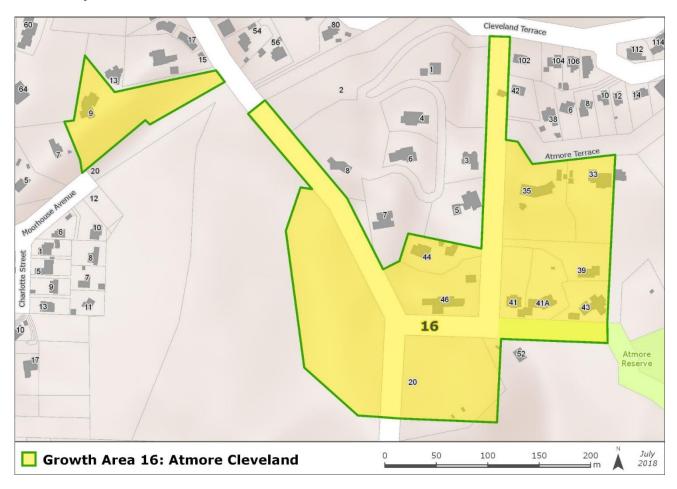
| Projected Yield | 15 lots |
|---------------------------|-------------|
| Gross site area | 6.7Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$133,436 |

Description

Area 16 sits on the hills to the east of Nelson overlooking the main Nelson city centre. The land is moderately steep for the most part but with significant geotechnical work required prior to subdivision.

Access to the growth area is via City Heights and Atmore Terrace which provide transport links to the bottom of the hill.

The undeveloped portions of Area 16 are held by two owners. Approximately half of the growth area has been developed over the last five years with section sizes of around 2,000-5,000sqm. This density is what was anticipated in determining the projected yield prior to development taking place.



Servicing constraints

As shown in the table below, growth area 16 is constrained by Transport and stormwater services. All of the necessary projects are not included in the first ten years of the 2021 Nelson Long Term Plan so further development of this growth area is not anticipated until sometime in the period 2028-2048.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Yes | \$1,800,000 | No | Beyond 10 years |
| Stormwater | Yes | \$201,540 | No | Beyond 10 years |
| Water | No | | | |
| Wastewater | No | | | |
| | Total | \$2,001,540 | Final completion | Beyond 10 years |

Feasibility

Given the small number of lots that are likely to be developed, no feasibility assessment of this site has been undertaken.

Area 17: Upper Nile Street

| Projected Yield | 10 lots |
|---------------------------|-------------|
| Gross area | 12Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$76,500 |

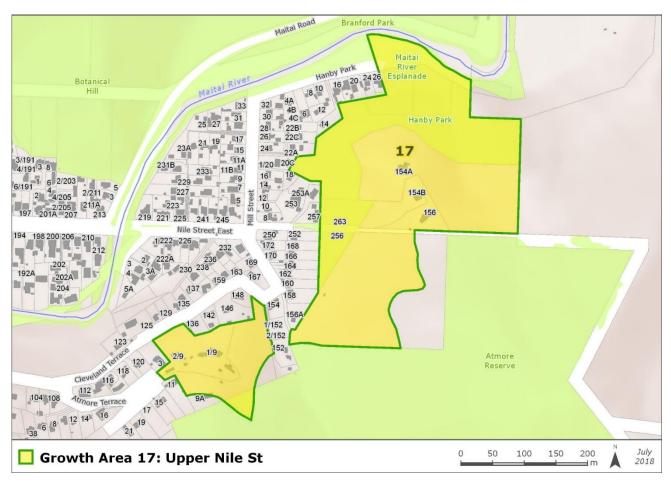
Description

Area 17 sits on the hills to the east of Nelson overlooking the main Nelson city centre. The land is steep for the most part with significant geotechnical work required prior to subdivision.

Access to the growth area is via Cleveland Terrace which provides transport links to the bottom of the hill, to Nile Street East and across the Maitai River to Nelson.

The undeveloped portions of Area 17 are held by four owners.

Location plan



Servicing constraints

As shown in the table below, growth area 17 is constrained by transport infrastructure needs which are not planned to be completed within the term of the current LTP.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Yes | \$765,000 | No | Beyond 10 years |
| Stormwater | No | | | |
| Water | No | | | |
| Wastewater | No | | | |
| | Total | \$765,000 | Final completion | Beyond 10 years |

Feasibility

Given the small number of lots that are likely to be developed, no feasibility assessment of this site has been undertaken.

Area 19a: Brooklands

| Projected Yield | 15 lots |
|---------------------------|-------------|
| Net developable area | 7.4Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$16,832 |

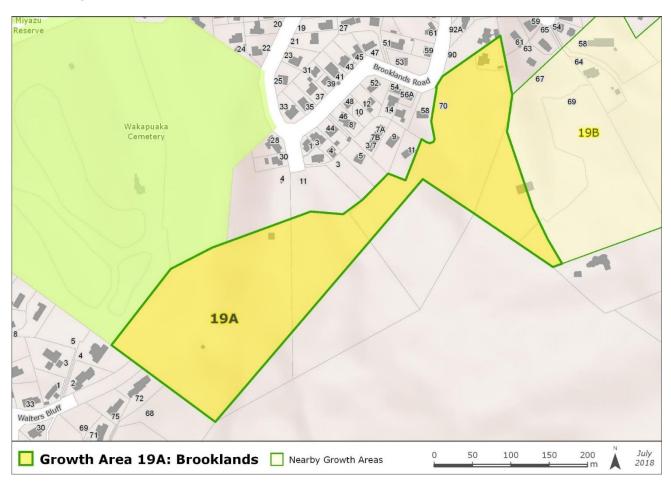
Description

Area 19a sits on the hills to the north of Nelson overlooking the boulder bank and estuary. The land is moderately steep to very steep with a number of gullies containing unstable soils that require careful geotechnical work prior to subdivision.

Access to the growth area is via Brooklands Road which in turn intersects with State Highway 6 at the bottom of the hill. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

The undeveloped portion of Area 19a is held by two owners.

Location plan



Servicing constraints

As shown in the table below, growth area 19a is constrained by all four services. There are no plans to resolve this in the current LTP.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Likely | NZTA project | | |
| Stormwater | No | | | |
| Water | Yes | \$85,680 | No | Beyond 10 years |
| Wastewater | Yes | \$166,809 | No | Beyond 10 years |
| | Total | \$252,489 | Final completion | Beyond 10 years |

Feasibility

Given the small number of lots that are likely to be developed, no feasibility assessment of this site has been undertaken.

Area 19b: Paremata

| Projected Yield | 10 lots |
|---------------------------|-------------|
| Net developable area | 10.6Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$31,553 |

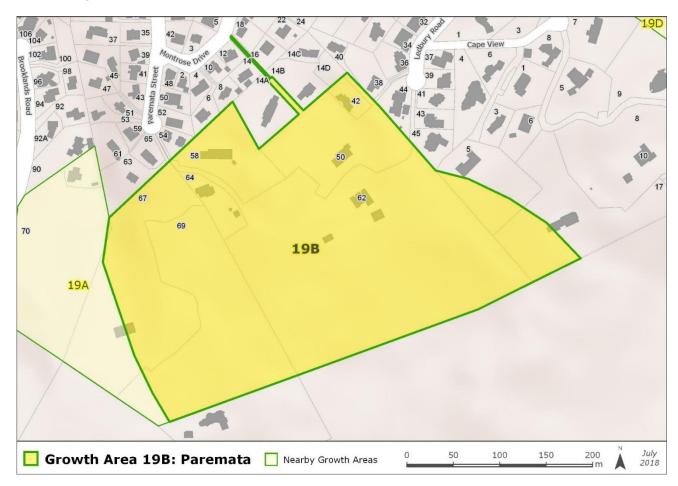
Description

Area 19b sits on the hills to the north of Nelson overlooking the boulder bank and estuary. The land is moderately steep to very steep with a number of gullies containing unstable soils that require careful geotechnical work prior to subdivision.

Access to the growth area is via Paremata Street which in turn intersects with State Highway 6 at the bottom of the hill. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

The undeveloped portion of Area 19b is held by a four independent owners.

Location plan



Servicing constraints

As shown in the table below, growth area 19b is constrained by all four services. There are no plans to resolve this in the current LTP.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Likely | NZTA project | | |
| Stormwater | Yes | \$264,480 | No | Beyond 10 years |
| Water | Yes | \$0 | Yes | 2024 |
| Wastewater | Yes | \$51,046 | Yes | 2025 |
| | Total | \$315,526 | Final completion | Beyond 10 years |

Feasibility

Given the small number of lots that are likely to be developed, no feasibility assessment of this site has been undertaken.

Area 20: Werneth

| Projected Yield | 20 lots |
|---------------------------|-------------|
| Gross site area | 32Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$17,847 |

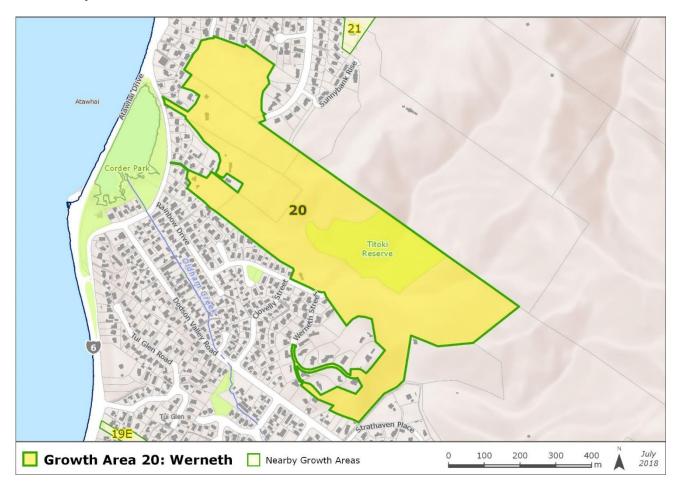
Description

Area 20 sits on the hills to the north of Nelson overlooking the boulder bank and estuary. The land is moderately steep to very steep and faces generally west to south west with Dodson Valley immediately to the south.

Access to the growth area is available via Werneth Street and Atawhai Crescent with connection to the wider transport network being via the intersection of Atawhai Crescent and State Highway 6. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

The majority of the undeveloped part of Area 20 is held by three independent owners. Small pockets of residential subdivision have occurred in the last 5-10 years in the growth area at the end of Glenbrae Street and off a long ROW from Atawhai Crescent.

Location plan



Servicing constraints

As shown in the table below, growth area 20 is constrained by transport and stormwater services. All Council projects needed to release the remaining capacity are expected to be completed in the 11-30 year period (base year 2018). The unknown at this stage is what requirements NZTA will have and what the timing of any works on State Highway 6 will be.

If the developer chooses to deal with stormwater on the site and not rely on the Council system during rain events development of the site could potentially occur any time dependant of course on NZTA.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Likely | NZTA project | | |
| Stormwater | Yes | \$356,940 | No | Beyond 10 years |
| Water | No | | | |
| Wastewater | No | | | |
| | Total | \$356,940 | Final completion | Beyond 10 years |

Feasibility

Given the small number of lots that are likely to be developed and the timeframe for development, no feasibility assessment of this site has been undertaken.

Area 21: Wastney Terrace

| Projected Yield | 29 lots |
|--------------------------------|-------------|
| Gross site area | 12.5Ha |
| Estimated Net developable area | 4.9Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$131,786 |

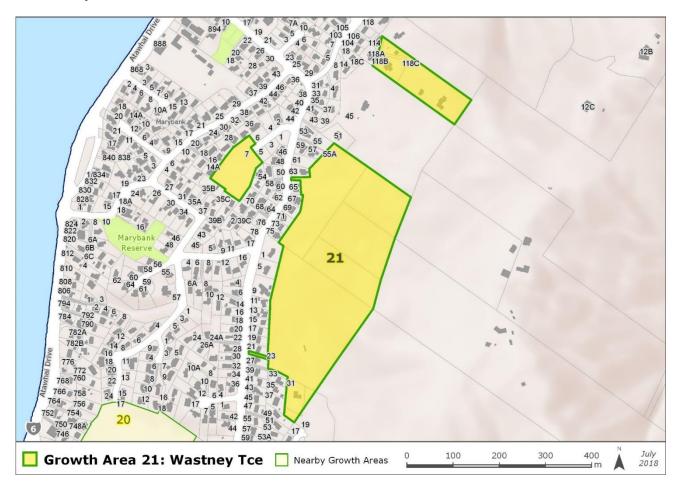
Description

Area 21 sits on the hills to the north of Nelson overlooking the boulder bank and estuary. The land is very steep and faces generally west to North West. The steepness of the site is expected to limit the development density in the main bulk of the growth area which will likely impact feasibility unless particularly high prices are achieved for the finished sections.

Access to the growth area is available via Maybank Road with connection to the wider transport network being via the intersection of Marybank Road and State Highway 6. NZTA are the road controlling authority for all state highways and as a result there maybe requirements on the developer to contribute to intersection improvements works prior to subdivision.

The undeveloped part of Area 21 is held by a three independent owners. Small pockets of residential subdivision have occurred in the last 5-10 years adjacent to the growth area at the end of Sunnybank Rise and off Tresillian Avenue.

Location plan



Servicing constraints

As shown in the table below, growth area 21 is constrained by transport and stormwater services. All Council projects needed to release the remaining capacity are expected to be completed in 2024 according to the project list in the 2021 Nelson Long Term Plan. The unknown at this stage is what requirements NZTA will have and what the timing of any works on State Highway 6 will be.

The site is too steep for the developer to be able to retain stormwater onsite so no development can take place until after 2024.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|---------------|
| Transport | Likely | NZTA project | | |
| Stormwater | Yes | \$3,821,781 | Yes | 2024 |
| Water | No | | | |
| Wastewater | No | | | |
| | Total | \$3,821,781 | Final completion | 2024 |

Feasibility

With the pre-tax margin for the 10 dwellings per hectare set at just over 20% the MBIE feasibility model indicates that the profit and margin maximising option would be to develop at a higher density than typically adopted in Nelson. The profit margin more than doubles with an increase in density to 15 dwellings per hectare.

Area 21 Wastney Terrace

| Type | Item | Units | Value | Туре | Section price func | tion | Comment | |
|-----------------|---|----------------|-------------|---------|---|-----------|-------------------------|--|
| | Gross site area | ha | 7.1 | | Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows | | | |
| | Land capital value (CV) | \$ | \$2,458,990 | | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | |
| | Road Reserve area for 15 dw/ha | % of area | 20% | | | | | |
| | Extra roading for increased dw/ha | % per dw/ha | 0.00% | Revenue | NewLot Area 1 | 400 | m2 | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | |
| | Extra landscape reserve for dwha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | |
| | Other constraints that reduce net site area | % of land area | 0% | | m | 0.156 | Section price gradient | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercept | |
| | Maximum net density | dwellings/ha | 30 | | | | | |
| | Time to develop | months | 24 |] | View modelled section price gradient | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|---------------------|------|------|--|
| Туре | Item | Units | 10 | 15 | 20 | 25 | 30 | |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | 100% | |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% | |
| Cost paramete | Civil works | | | Sel | ect civil works cos | sts | | |
| rs | Fees and charges | | | Sele | ect fees and char | jes | | |

| | | | | Density of dwellings [dwellings / ha] | | | | | |
|-----------------|---|-------------|---------------|---------------------------------------|---------------|---------------|---------------|--|--|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | | |
| | Road Reserve Area | ha of land | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | | |
| Net Land | Landscape Reserve Area | ha of land | 0.34 | 0.36 | 0.37 | 0.39 | 0.41 | | |
| Area | Stormwater Reserve Area | ha of land | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | | |
| Calcs | Other constraints that reduce net site area | ha of land | - | - | - | - | • | | |
| | Net Developable land Area | ha of land | 4.99 | 4.97 | 4.95 | 4.93 | 4.92 | | |
| | Subdivision Lots created | total lots | 50 | 75 | 99 | 123 | 148 | | |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 | | |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 | | |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 | | |
| | Total revenue | | \$ 17,514,630 | \$ 24,572,690 | \$ 31,212,767 | \$ 37,545,109 | \$ 43,632,276 | | |
| | 1 Rawland purchase and holding cost | | \$2,975,378 | \$2,975,378 | \$2,975,378 | \$2,975,378 | \$2,975,378 | | |
| | 2 Civil works, incl holding costs | | \$5,977,232 | \$6,031,280 | \$6,085,078 | \$6,138,626 | \$6,191,925 | | |
| | 3 Fees and charges, incl holding costs | | \$4,302,031 | \$6,118,585 | \$7,888,348 | \$9,621,445 | \$11,323,624 | | |
| Costs | 4 Project contingency | | \$1,325,464 | \$1,512,524 | \$1,694,880 | \$1,873,545 | \$2,049,093 | | |
| | Total costs | | \$14,580,105 | \$16,637,768 | \$18,643,684 | \$20,608,994 | \$22,540,020 | | |
| | per section costs (excl rawland) | | \$232,665 | \$183,265 | \$158,194 | \$142,941 | \$132,639 | | |
| | per section (total) | | \$292,318 | \$223,176 | \$188,234 | \$167,060 | \$152,811 | | |
| Profit | Pre tax profit \$ | | \$2,934,525 | \$7,934,922 | \$12,569,084 | \$16,936,115 | \$21,092,257 | | |
| Pioni | Pre tax margin % | | 20.1% | 47.7% | 67.4% | 82.2% | 93.6% | | |

| Development feasible? | Yes | Yes | Yes | Yes | Yes |
|-----------------------|-----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |

Area 24: Enner Glynn

| Projected Yield | 110 lots |
|--------------------------------|-------------|
| Gross site area | 110Ha |
| Estimated Net developable area | 60Ha |
| Projected market delivery | Years 11-30 |
| Servicing cost per lot | \$68,052 |

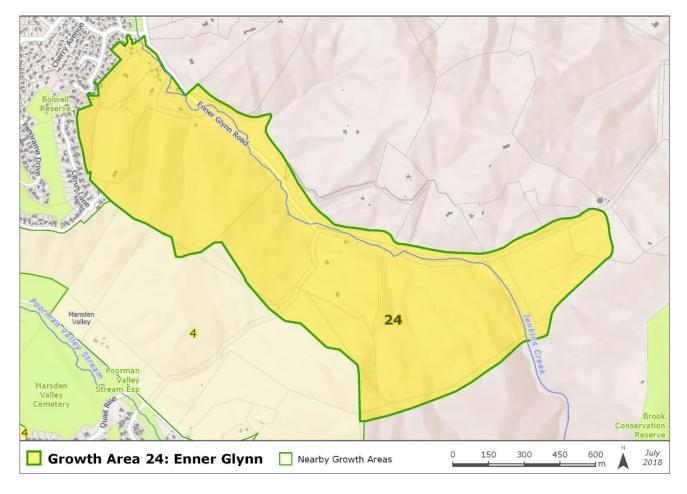
Description

Area 24 sits on the predominantly north facing slopes above Enner Glynn Road to the east of the Wakatu area of Nelson. The land varies from almost flat nearer the bottom of the slopes to very steep on the mid-slopes. The area is zoned a mixture of Residential and Rural lower density small holdings. The top of the growth area borders growth area 4.

Access to the area is via Enner Glynn Road which connects to The Ridgeway and on to Waimea Road.

The bulk of the undeveloped land is held by three independent landowners.

Location plan



Servicing constraints

As shown in the table below, growth area 24 is constrained by all services other than water. The bulk of the services are not anticipated to be delivered in the term of the current LTP.

| Infrastructure | Constraint | Cost to remove constraint | In LTP | Year complete |
|----------------|------------|---------------------------|------------------|-----------------|
| Transport | Yes | \$2,330,000 | No | Beyond 10 years |
| Stormwater | Yes | \$2,764,812 | No | Beyond 10 years |
| Water | No | | | |
| Wastewater | Yes | \$2,390,945 | Yes | 2022 |
| | Total | \$7,485,757 | Final completion | Beyond 10 years |

Feasibility

As shown in the table below, all development densities of 15 dwellings per hectare and above are feasible with pre-tax margins of between 21% and 49%.

Area 24 Enner Glynn

| Type | Item | Units | Value | Туре | Section price fund | tion | Comment | |
|-----------------|---|----------------|--------------|---------|---|-----------|-------------------------|--|
| | Gross site area | ha | 110.3 | | Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows | | | |
| | Land capital value (CV) | \$ | \$35,704,888 | | | | | |
| | Land sale price relative to CV, ex GST | % | 100% | | prices for sections of varying sizes to be estimated below. | | | |
| | Road Reserve area for 15 dw/ha | % of area | 20% | | | | | |
| | Extra roading for increased dwha | % per dw/ha | 0.30% | Revenue | NewLot Area 1 | 400 | m2 | |
| Physical | Landscape Reserve for 15 dw/ha | % of area | 5% | | NewLot Price 1 | \$350,000 | Section price \$ | |
| | Extra landscape reserve for dwha | % per dw/ha | 0.05% | | NewLot Area 2 | 800 | m2 | |
| | Wastewater/stormwater Reserve | % of area | 5% | | NewLot Price 2 | \$390,000 | Section price \$ | |
| | Other constraints that reduce net site area | % of land area | 15% | | m | 0.156 | Section price gradient | |
| | Minimum net density | dwellings/ha | 10 | | С | 12 | Section price intercept | |
| | Maximum net density | dwellings/ha | 30 | | | | | |
| | Time to develop | months | 36 | | View modelled section price gradient | | | |

| | | | | Density of dwellings [dwellings / ha] | | | | | |
|---------------|-------------------------|-------|------|---------------------------------------|--------------------|------|------|--|--|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 | | |
| Ancillary | DC contributions factor | % | 100% | 100% | 100% | 100% | 100% | | |
| | Project contingency | % | 10% | 10% | 10% | 10% | 10% | | |
| Cost paramete | Civil works | | | Sel | ect civil works co | sts | | | |
| rs | Fees and charges | | | Sele | ectfees and char | ges | | | |

| | | | | Dens | sity of dwellings [dv | wellings / ha] | |
|-----------------|---|-------------|----------------|----------------|-----------------------|----------------|----------------|
| Type | Item | Units | 10 | 15 | 20 | 25 | 30 |
| | Road Reserve Area | ha of land | 20.41 | 22.06 | 23.71 | 25.37 | 27.02 |
| Net Land | Landscape Reserve Area | ha of land | 5.24 | 5.52 | 5.79 | 6.07 | 6.34 |
| Area | Stormwater Reserve Area | ha of land | 5.52 | 5.52 | 5.52 | 5.52 | 5.52 |
| Calcs | Other constraints that reduce net site area | ha of land | 16.55 | 16.55 | 16.55 | 16.55 | 16.55 |
| | Net Developable land Area | ha of land | 62.60 | 60.67 | 58.73 | 56.80 | 54.87 |
| | Subdivision Lots created | total lots | 626 | 910 | 1,175 | 1,420 | 1,646 |
| | Average section size | sqm / site | 1,000 | 667 | 500 | 400 | 333 |
| Revenue | Average sales price (inc GST) | per section | \$403,826 | \$379,056 | \$362,408 | \$350,000 | \$340,178 |
| | Average sales price (ex GST) | per section | \$351,153 | \$329,614 | \$315,137 | \$304,348 | \$295,807 |
| | Total revenue | | \$ 219,805,046 | \$ 299,940,088 | \$ 370,190,132 | \$ 432,208,152 | \$ 486,965,668 |
| | 1 Rawland purchase and holding cost | | \$47,523,205 | \$47,523,205 | \$47,523,205 | \$47,523,205 | \$47,523,205 |
| | 2 Civil works, incl holding costs | | \$94,618,867 | \$99,014,691 | \$103,381,094 | \$107,718,076 | \$112,025,636 |
| | 3 Fees and charges, incl holding costs | | \$58,082,495 | \$80,416,057 | \$100,825,361 | \$119,467,397 | \$136,434,435 |
| Costs | 4 Project contingency | | \$20,022,457 | \$22,695,395 | \$25,172,966 | \$27,470,868 | \$29,598,328 |
| | Total costs | | \$220,247,025 | \$249,649,349 | \$276,902,626 | \$302,179,546 | \$325,581,605 |
| | per section costs (excl rawland) | | \$275,938 | \$222,123 | \$195,267 | \$179,321 | \$168,906 |
| | per section (total) | | \$351,859 | \$274,347 | \$235,723 | \$212,786 | \$197,774 |
| Profit | Pre tax profit \$ | | -\$441,979 | \$50,290,739 | \$93,287,506 | \$130,028,606 | \$161,384,063 |
| Profit | Pre tax margin % | | -0.2% | 20.1% | 33.7% | 43.0% | 49.6% |

| Development feasible? | No | Yes | Yes | Yes | Yes |
|-----------------------|----|-----|-----|-----|-----|
| Profit maximising? | No | No | No | No | Yes |
| Margin maximising? | No | No | No | No | Yes |



Long Term Plan and Activity Management Plans 2021

Population Growth and Demographics

Nelson City Council

Executive Summary

The purpose of this report is to present a population projection for use in developing Nelson City Councils Asset Management Plans and Long Term Plan. Traditionally, Statistics New Zealand would provide high, medium and low scenarios for Councils to use. In 2018, the latest census was completed but due to shortcomings in the move to online forms the return rate was lower than previously experienced. As a result, there has been significant delays in Statistics New Zealand providing updated population projections.

The COVID19 event is expected to have significant immediate and future economic effects particularly as it restricts the movement of people regionally and internationally.

In this context there is a lot of uncertainty involved with projecting future population change. To account for this a custom, or hybrid, population projection for Nelson has been developed. This report looks back at trends over previous recessionary periods to assist in developing rationale for choosing variables to develop the custom population projection.

It is recommended that the following assumptions inform a future population projection for Nelson:

- Medium births scenario for ten years
- High births scenario after that
- Medium deaths
- zero net migration for two years
- low net migration for the next three years
- medium net migration for the next five years
- high net migration after that

These assumptions result in a recommended population projection for use in developing the Asset Management Plans and Long Term Plan for 2021 as shown in the table below.

| Year | Projected population |
|------|----------------------|
| 2020 | 54,620 |
| 2021 | 54,700 |
| 2022 | 54,780 |
| 2023 | 54,960 |
| 2024 | 55,080 |
| 2025 | 55,200 |
| 2026 | 55,520 |
| 2027 | 55,840 |

| Year | Projected population |
|------|----------------------|
| 2028 | 56,160 |
| 2029 | 56,400 |
| 2030 | 56,640 |
| 2031 | 57,180 |
| 2032 | 57,720 |
| 2033 | 58,260 |
| 2034 | 58,760 |
| 2035 | 59,260 |

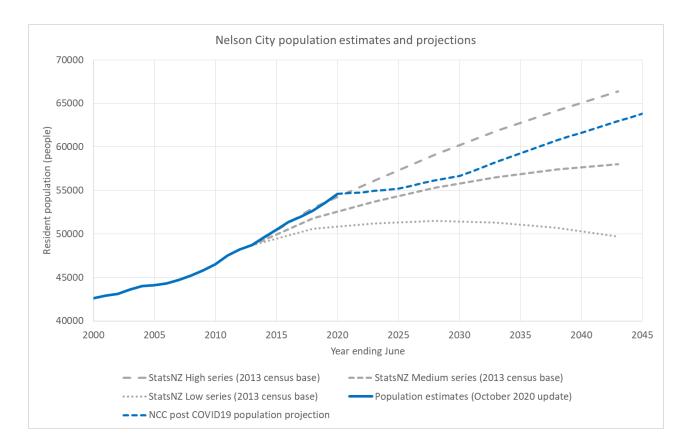
| Projected population |
|----------------------|
| 59,760 |
| 60,260 |
| 60,760 |
| 61,200 |
| 61,640 |
| 62,080 |
| 62,520 |
| 62,960 |
| |

| Year | Projected population |
|------|----------------------|
| 2044 | 63,400 |
| 2045 | 63,840 |
| 2046 | 64,280 |
| 2047 | 64,720 |
| 2048 | 65,160 |
| 2049 | 65,600 |
| 2050 | 66,040 |

The starting population for the population projections in the table above has been adjusted to reflect the latest Nelson population estimates published by StatsNZ in October 2020. This adjustment has increased the population estimated in 2020 by around 1,600 residents compared to the figures presented in the draft of this report.

The figure below shows the recommended population projection in graphical form.

A2380354 Page *2 of 25*



It is clear from the figure above that the recommended projection is very low compared to the Statistics New Zealand high and medium series scenarios. The projection anticipates very low growth out until around 2025 before the rate of growth returns gradually to the high growth rate.

It is important to recognise that there is very significant uncertainty in any population projection as the short, medium and long term effects of the COVID19 event are not clear and are unlikely to be for some time. A precautionary approach is therefore recommended.

A2380354 Page 3 of 25

1.0 Introduction

- 1.1 This report provides the population and household projections recommended for use in the Nelson City Council Activity Management Plans and Long Term Plan for 2021. Predicting growth for the Long Term Plan and Asset Management Plans in 2021 has been made more complex by delays in receiving projections from Statistics New Zealand (StatsNZ) based on the 2018 census data.
- 1.2 With the release of 2018 census base projections delayed until at least December 2020, it has been necessary to utilise alternative methods for determining future population growth in Nelson. The following sections detail the methods used and the risks and uncertainty associated with using these methods and population projections in general.
- 1.3 Further complicating projecting the future population of Nelson is the COVID19 event. This report provides summary data and commentary on the recommended population projection and highlight the uncertainties and risks associated with that projection.
- 1.4 This report has been reviewed by Infometrics (a specialist economics and demographics consultancy) and the resulting population projection has been adjusted slightly to reflect the feedback received as part of the review process.
- 1.5 The projections have been updated with the 2020 StatsNZ population estimates that were released on 22 October 2020. These estimates set the starting point for the projections at a 2020 population of 54,620 people in Nelson City. This represents a higher starting point compared to the October 2019 population estimates as a result of StatsNZ having underestimated the population.

2.0 Uncertainty

- 2.1 Predicting future populations is an activity that involves uncertainty and risk. In particular, there is a lot of uncertainty around post COVID-19 economic performance, movement of people, and the timelines of both. This creates greater uncertainty than usual, especially when combined with the delay in receipt of StatsNZ population projections.
- 2.2 Given this uncertainty, it is important to understand the consequences of projections being incorrect and how they can be represented to make them as useful as possible.
- 2.3 Given this situation, it is considered appropriate to make some broad assumptions and understand the limitations of these assumptions rather than building a complicated model that is credited with a greater level of accuracy than it actually represents.
- 2.4 This report contains analysis, figures, and tables showing different date ranges. This is a limitation of the available data and needs to be acknowledged.
- 2.5 One of the ways that Council manages the risk of using incorrect population projections is through the annual plan process and the three yearly LTP process. Both of these processes enable projections to be updated yearly and three-yearly.

A2380354 Page *4 of 25*

3.0 The Pre COVID19 population projections

Historical and current population

3.1 Every year, StatsNZ provides estimates of resident population for each territorial authority in New Zealand. The estimate is typically based on birth and death records as well as building consents and other indicative measures. The population estimates are validated every five years with census data. Figure 1 below shows the StatsNZ population estimates for Nelson City between 2000 and 2020.

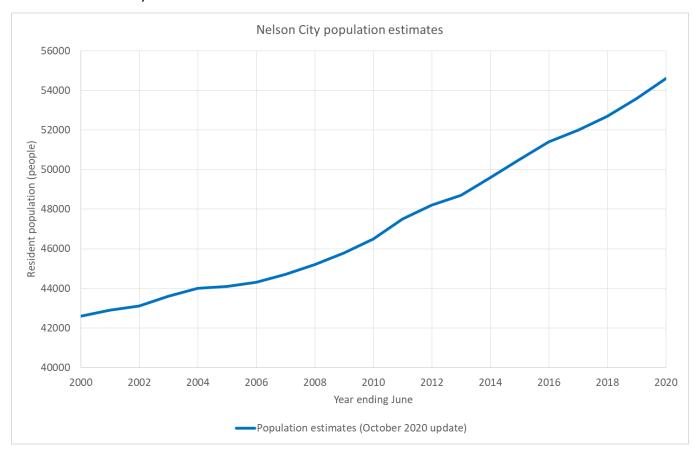


Figure 1: Nelson City population estimates from StatsNZ (as at end June 2020)1

3.2 Figure 1 shows that the estimated population has tracked in two distinct stages. Between 2000 and 2008 the population of Nelson grew by around 330 people or 130 households per year on average. Since 2008 the rate of population growth has increased to around 700 additional residents or 290 additional households per year.

A2380354 Page *5 of 25*

¹ StatsNZ http://nzdotstat.stats.govt.nz/wbos/Index.aspx - Estimated Resident Population for Regional Council Areas, at 30 June (1996+) (Annual-Jun)

Future population

- 3.3 In previous Long Term Plan development rounds StatsNZ has supplied population projections within the five years previous, following a census, for around 30 years into the future. Due to challenges faced during the 2018 census, StatsNZ are not able to provide population projections in time for the development of activity management plans and the 2021 Long Term Plan. Instead, the latest population projections provided by StatsNZ at the end of 2018 are based on the 2013 census.
- 3.4 Figure 2 below shows the StatsNZ high, medium and low population projections based on the 2013 census data along with the Nelson City population estimates from Figure 1.

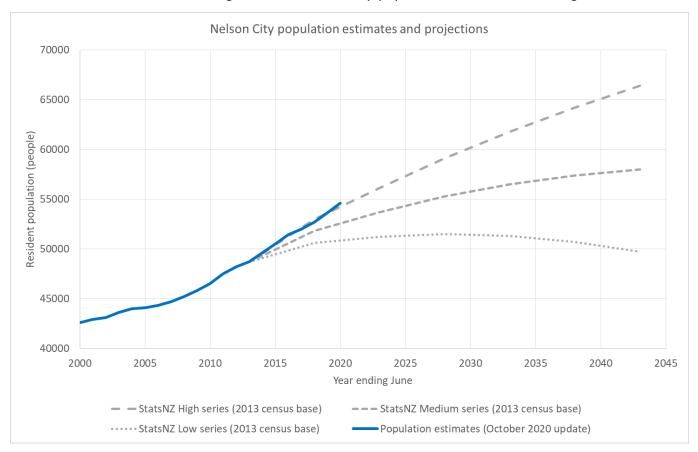


Figure 2: Nelson Population projections (2013 census base)²

3.5 These population projections are no longer relevant in the light of COVID19 and alternative analysis methods are needed. The remainder of this report deals with these alternative methods.

A2380354 Page 6 of 25

² StatsNZ http://nzdotstat.stats.govt.nz/wbos/Index.aspx - Dataset: Subnational population projections, characteristics, 2013(base)-2043 update

4.0 Recessions through history

- 4.1 With a significant recessionary period expected during and following COVID19 it is useful to look back at other recessions in history to see the effect on the various factors that influence population growth.
- 4.2 Since 1930 there have been seven clear recessions starting with the wool bust in 1930 through to the most recent, prior to COVID19, with the Global Financial Crisis in 2007-2008. Table 1 below summarises the recessions since 1930.

| Recession name | Start year (inclusive) | Finish year (inclusive) | Period (years) |
|-------------------|------------------------|-------------------------|-------------------|
| Depression | 1930 | 1934 | 5 |
| Wool bust | 1967 | 1969 | 3 |
| Oil price shock 1 | 1974 | 1977 | 4 |
| Oil price shock 2 | 1979 | 1982 | 4 |
| Recession | 1991 | 1992 | 2 |
| Asian Crisis | 1997 | 1999 | 3 |
| GFC | 2007 | 2008 | 2 |

Table 1: Recessions through history³

- 4.3 It is important to consider the different characteristics of each recession in that they influence things like travel and unemployment in different ways depending on their size and geographical spread amongst other things. For example, COVID19 has resulted in far more restrictions on travel internationally than all of the previous recessionary periods and as a result the tourism industry has been affected more severely. With the tourism industry employing approximately 11% of Nelsons employed population in 2019 this characteristic that is unique to COVID19 is particularly significant.
- 4.4 Figure 3 below shows a table from the Reserve Bank of New Zealand: Bulletin, Vol. 71, No. 2, June 2008 which provides a summary of the various attributes of the recessionary periods prior to the GFC. The document was prepared for the purposes of attempting to describe the likely economic effects to the GFC. While the document is over 10 years old now, its conclusions are still relevant.

A2380354 Page 7 of 25

³ Reserve Bank of New Zealand: Bulletin, Vol. 71, No. 2, June 2008

| | | Recessionary Periods | | | | | | |
|--|---|----------------------|----------|--------------|--------------|--------------|-------|-----------------|
| | | | | Mod | 1st | 2nd | | A aia sa |
| | | | Depress. | Wool Bust | Oil Shock | Oil Shock | 91-91 | Asian Crisis |
| | Rapid credit and | Global | | | | | | |
| | asset price expansion | NZ | | | | | | |
| | | Commodity prices | | | | | | |
| | Well above trend | Real exchange rate | | | | | | |
| Pre-existing | | House prices | | | | | | |
| imbalances | | Real interest rates | | | | | | |
| | Unusually large current | account deficit | | | | | | |
| | Large public debt | | | | | | | |
| Inflation problem | | | | | | | | |
| Domestic financial fragility | | | | | | | | |
| | World downturn | | | | | | | |
| | Global credit/asset price squeeze | | | | | | | |
| T 2 | Large fall in commodity prices | | | | | | | |
| Triggers and exacerbating | I Large lise iii oii biiles | | | | | | | |
| events | Drought | | | | | | | |
| CVCIIIS | Contractionary discretionary fiscal policy | | | | | | | |
| | Tightened monetary policy/ interest rates rose after the downturn was under way | | | | | | | |
| Exacerbating | rbating Fixed or pegged exchange rate | | | | | | | |
| structural factors | | | | | | | | |
| Key: A critical factor A contributing factor | | | | | | | | |

Not a factor

Figure 3: The characteristics of recessionary periods⁴

- 4.5 Figure 3 shows that each recessionary period is unique and in fact no two periods had all of their attributes matching during the period of recession. During and following COVID19 will have its own unique attributes which will make predicting population change with any certainty very difficult.
- 4.6 In April 2020 Treasury released a paper titled "COVID19 Information Release" which detailed some of the thinking and analysis that Treasury had been undertaking. A key statement in this paper is:

The path the economy takes from here is extremely uncertain. The magnitude and duration of the downturn and the subsequent pace of the recovery depends on many unknown factors, including the course of the virus, how long activity restrictions are in place, how quickly the global

A2380354 Page 8 of 25

⁴ Reserve Bank of New Zealand: Bulletin, Vol. 71, No. 2, June 2008

economy will recover, how behaviours and production might change, and how successful government policies will be in supporting households and firms.⁵

4.7 In light of the above information and given the unprecedented nature of COVID19, it is impossible to predict the extent and timing of the potential impacts on Nelson's population with any degree of accuracy. Instead, the following sections of this report assess the factors that are likely to influence any change in population in a broad way so the level of uncertainty around the final proposed population projection is understood.

A2380354 Page 9 of 25

⁵ Treasury Report T2020/973: Economic scenarios - 13 April 2020 https://treasury.govt.nz/sites/default/files/2020-04/c19-4265378-t2020-973-economic-scenarios-v3.pdf

5.0 Factors influencing population change

- 5.1 There are three major influencers of population change that represent the collated wider factors. These are:
 - Births
 - Deaths
 - Net migration
- 5.2 Within each of these bulk factors are multiple others such as economic performance and immigration policy. These factors themselves may have further dependencies on things like how easy it is to sell and buy houses, or gain employment. All of these factors are not related in a purely linear fashion but instead form a complex web of interdependency.
- 5.3 Figure 4 below provides a simplified description of the relationship between the main factors that influence population change.

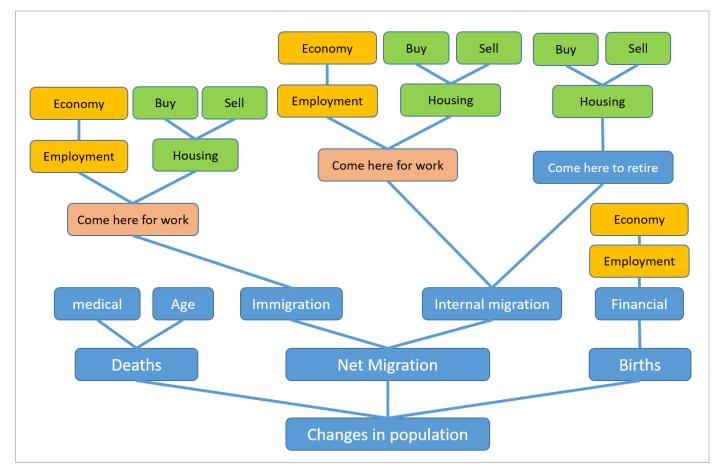


Figure 4: Simplified relationship between factors influencing changes in population

5.4 It is clear from Figure 4 above that the economy and housing market are two key drivers of population change. The remainder of section 3 provides commentary on the effect of each of the factors on population change in the Nelson region.

A2380354 Page 10 of 25

6.0 Births

- 6.1 One major influencer of births in a developed country like New Zealand is its economic performance and how that influences unemployment rates.
- 6.2 Figure 5 below shows the number of live births over time for New Zealand as a whole with the timelines of each of the recessionary periods since 1935.

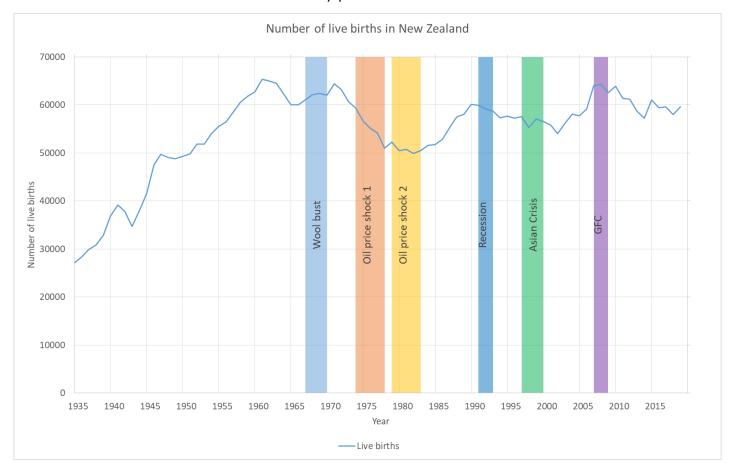


Figure 5: Live births in New Zealand over time⁶

- 6.3 Figure 5 above shows that for all recessionary periods other than the wool bust there was a dip in births for some time during or after the period of recession. In three of the recessions the number of births picked up almost immediately in the economic recovery. The immediate increase in births after the GFC has moved to a gradually reducing trend to return to the 60,000 births mark that the number has varied around since around the late 1950s.
- 6.4 Long term births data at a regional level are not available at the resolution needed to test whether the trend holds in Nelson over all of the same recessionary periods. In the shorter term, reliable births data is available from 2004 and can be compared to the national response during the GFC. Figure 6 below compares the two.

A2380354 Page 11 of 25

⁶ StatsNZ Infoshare - Table: Birth numbers - VSBA (Annual-Dec)

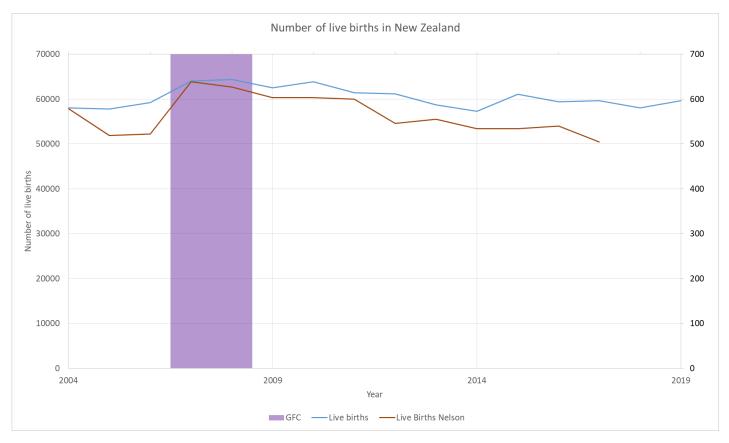


Figure 6: Nelson births over time compared to New Zealand trend⁷

- 6.5 Figure 6 shows that the number of live births in Nelson broadly followed the same trend as the rest of New Zealand during and after the GFC. The number of births in Nelson flattened then dropped during the GFC and have continued to drop through to 2017. The trend of reducing births continues for around ten years although there are other factors influencing this such as the generally reducing birth rates in developed countries.
- 6.6 Economists are divided in how long they see any economic recovery taking with some predicting sometime in late 2021 and others the end of 2022 or beyond.
- 6.7 Figure 7 below shows the latest StatsNZ population projections (2013 census base) for live births in Nelson.

A2380354 Page 12 of 25

⁷ https://www.stats.govt.nz/information-releases/births-and-deaths-year-ended-december-2018

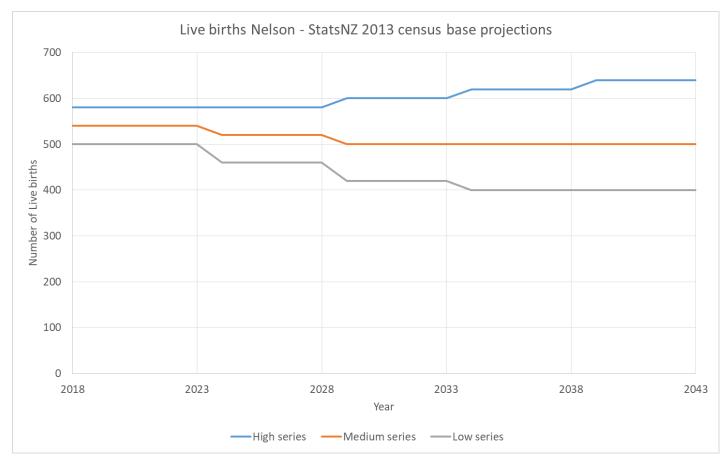


Figure 7: Live births assumptions in StatsNZ population projections⁸

- 6.8 Figure 7 above shows that both the low and medium series of the StatsNZ population projections anticipate a drop in live births in Nelson. The records of births for Nelson in figure 6 show that the current number of births per year are around the 500 live births per year. This is the same as the low series shown in figure 7 above and can be expected to drop lower during the economic recession that will follow COVID 19.
- 6.9 Countering the current low birth rate is the fact that the population of Nelson is slightly younger, with more residents of childbearing age than anticipated by the 2013 census base projections. This is likely to result in the birth rate being slightly higher than currently anticipated by each of the StatsNZ projection scenarios.
- 6.10 With this in mind it is recommended that the medium birth rate be adopted in any analysis for the next ten years to mirror the trend seen post GFC. It is recommended to return the birth rate to high after that to allow for some recovery, keeping in mind that the current high scenario still reflects the generally reducing birth rate in first world countries.

7.0 Deaths

7.1 The number of deaths in Nelson number around 470 per year currently. The majority of these deaths are as a result of natural aging. In estimating the likely effect of the COVID19 event on the death rate, the most important influencing factor is the ability of the medical system to deal with COVID19 and the normal medical services. With the government's

A2380354 Page 13 of 25

⁸ StatsNZ NZ.Stat - Dataset: Subnational population projections, characteristics, 2013(base)-2043 update

- response to COVID19 so far being comprehensive enough to keep additional deaths very low the number of deaths is not expected to increase noticeably over the normal year to year variation.
- 7.2 The StatsNZ high and medium series use the same the same death rates so it is recommended that these be used rather than the higher death rate of the low series. This should be used for the full period of the population projections.

A2380354 Page 14 of 25

8.0 Net Migration

- 8.1 The third main factor influencing population change is net migration. In Nelson, net migration has typically accounted for the majority of population growth. There are a lot of different factors that influence peoples decision making when choosing to move to or from Nelson but the major ones that need to be considered in the context of COVID19 are the following:
 - Tourism
 - Unemployment
 - International migration
 - Housing market
- 8.2 It is clear that the variables above are not independent of each other but it is useful to consider them separately in the first instance to simplify description of the issues associated with each of them.

Tourism

- 8.3 Tourism is a strong driver of employment in Nelson with around 11% of all jobs in the region linked to this activity. Since 1965 tourism has grown at a rapid rate from almost zero to over three million visitors every year in Nelson.
- 8.4 Figure 8 below shows the trend in visitor numbers in New Zealand over time and how they are affected by the various recessionary periods.

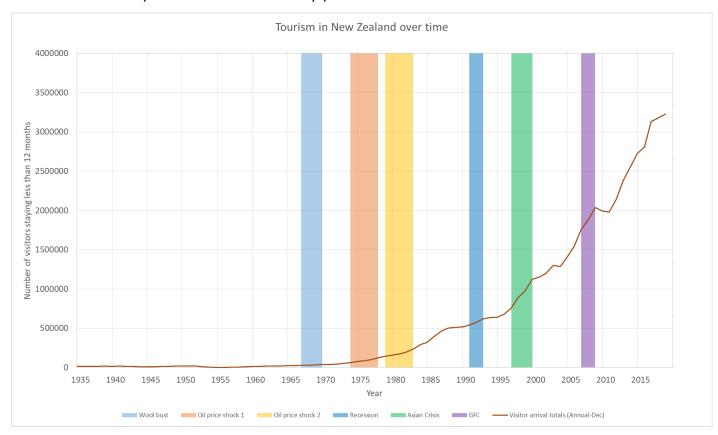


Figure 8: Visitor numbers to New Zealand9

A2380354 Page 15 of 25

⁹ StatsNZ Infoshare – Table: Visitor arrival totals (Annual-Dec)

- 8.5 Figure 8 above shows that when visitor numbers were low between 1965 and 1985 the recessionary periods had very little effect but for the last three recessionary periods the effect has grown. The GFC resulted in visitor numbers dropping for two years before recovering to a similar trajectory as before the GFC.
- 8.6 One factor that is unique to COVID19 is the full shutdown of international travel. This has had the effect of greatly reducing the scale of the airlines that service New Zealand. This factor, along with the fact that the borders are likely to stay closed to a large number of countries for some time will mean that the effect on tourism is going to be severe, potentially for several years.
- 8.7 With the relatively high number of jobs associated with tourism in Nelson it can be expected that unemployment will remain higher than normal for around 2-5 years.

Unemployment

8.8 Increased unemployment is a very likely outcome of COVID in Nelson. Figure 9 shows the total number of people unemployed in New Zealand over time against the backdrop of each of the recessionary periods since 1986.

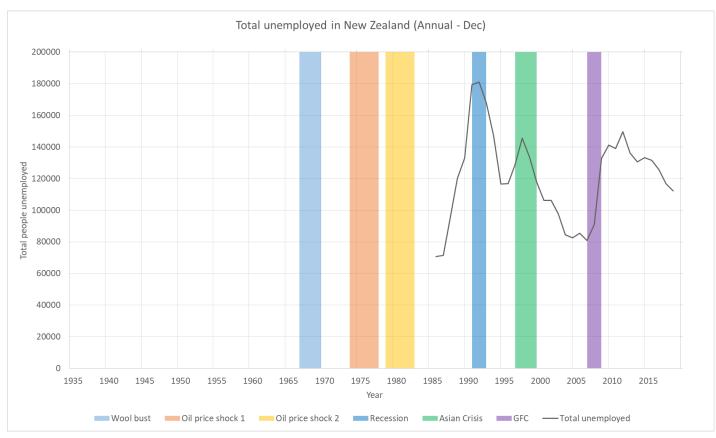


Figure 9: New Zealand unemployment – Long term trend¹⁰

8.9 Figure 9 shows that there is an inevitable increase in unemployment in New Zealand in the lead up to or during each of the last three recessionary periods. Of interest is the recovery after the GFC being delayed slightly compared to the two previous recessionary periods.

A2380354 Page 16 of 25

-

 $^{^{10}}$ StatsNZ Infoshare – Table: Unemployed by Sex by Duration of Unemployment (Annual-Dec)

- 8.10 To compare Nelsons unemployment to the rest of New Zealand, underutilisation is a more effective measure as more reliable data is available over a longer period. Underutilisation is defined as the following:
 - do not have a job, but are available to work and are actively seeking employment
 unemployed
 - are employed part time (fewer than 30 hours a week) and who both want and are available to increase the number of hours they work – underemployed
 - want a job and are available to work, but are not currently looking for a job available potential jobseeker
 - are unavailable to start work but are looking for a job as they will be able to start work within the next month – unavailable jobseeker.
- 8.11 Figure 10 below shows the underutilisation for Nelson and New Zealand over the period leading up to, during and following the GFC.

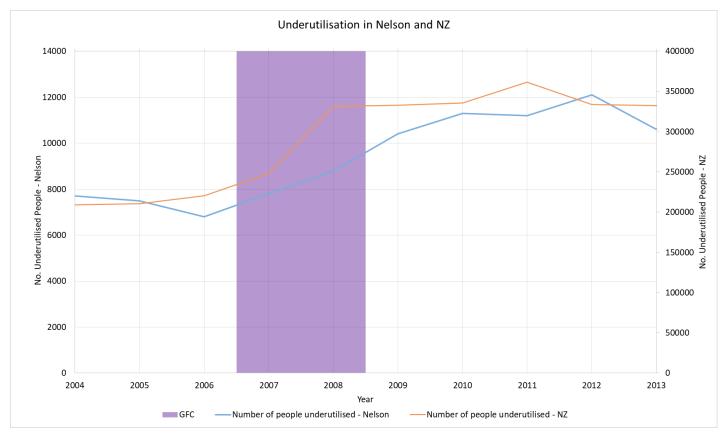


Figure 10: Workforce underutilisation¹¹

- 8.12 Figure 10 above shows that the underutilisation for Nelson generally follows the trend in New Zealand as a whole with an increase in underutilisation in the lead up to, during and after the GFC.
- 8.13 An increase in underutilisation or unemployment has the potential to limit the ability of people to migrate to and from Nelson. In the case of domestic migration, it is unlikely that employment will be any better elsewhere in the country and therefore we could expect

A2380354 Page 17 of 25

¹¹ StatsNZ Infoshare – Table: Underutilisation by Sex by Regional Council (Annual-Dec)

- internal migration to be relatively balanced for around the next five years if the GFC example is used.
- 8.14 In the case of migration to and from international locations, the response to COVID19 will limit people's ability to move here or move away, likely for several years.

Housing market

8.15 A key factor in attracting people to move to Nelson, aside from employment, is the availability of housing and their ability to sell their existing house. Figure 11 below shows the average number of days that it has taken to sell residential properties in New Zealand since 1992. The data is sourced from REINZ monthly reporting but needs to be treated with some caution as the data does not take into account properties being on the market for a longer period but the vendor changing estate agents throughout the process.

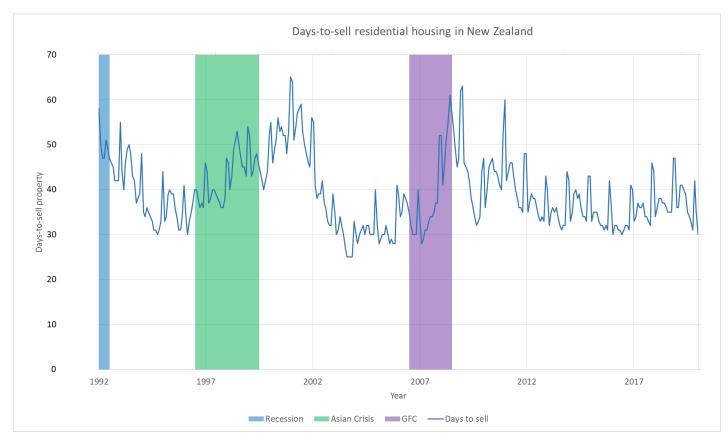


Figure 11: Days to sell residential property in New Zealand¹²

8.16 Figure 11 above shows that over the last two recessionary periods the housing market has slowed with the time taken to sell property increasing significantly before, during and after the recessions. This has the effect of limiting people's ability to move between centres within New Zealand. Those wanting to move from overseas have the same problems as the property market in places like Australia and the United Kingdom often mirror what the happening in the housing market in New Zealand.

A2380354 Page 18 of 25

¹² https://www.interest.co.nz/charts/real-estate/days-sell

International Migration

8.17 As discussed in the unemployment and housing market sections above, the increased unemployment and the slowing of the housing market globally is likely to significantly slow the arrivals of international migrants to Nelson. The data available to provide analysis of this issue is not of suitable quality or resolution to allow meaningful numbers for determining the actual arrival rate.

Net Migration Summary

- 8.18 In summary, there are a lot of interrelated factors that influence net migration for Nelson. There is uncertainty in how the factors may work together to limit the actual net migration creating uncertainty in population projections. A broad overall view of the factors is therefore taken and a StatsNZ net migration figure (or figures) selected that limits Councils financial risk.
- 8.19 It is recommended that the following net migration numbers be adopted for the purposes of the Asset Management Plans and LTP:
 - zero net migration for two years
 - low net migration for the next three years
 - medium net migration for the next five years
 - high net migration after that
- 8.20 The above recommended net migration profile will limit Councils financial risk by giving time to monitor the actual growth over the next three years and adjust as needed without overinvesting in infrastructure and services or under collecting rates.

9.0 Final recommended variables

- 9.1 The assumptions for the purposes of developing a population projection for Asset Management Plans and the LTP are recommended as follows:
 - medium births for ten years
 - high births after that
 - medium deaths
 - zero net migration for two years
 - low net migration for the next three years
 - medium net migration for the next five years
 - high net migration after that
- 9.2 All are Statistics New Zealand variables from the latest population projections.

10.0 Population Projection

10.1 Using the variables recommended for adoption in section seven above, population projections in table 2 below have been developed.

A2380354 Page 19 of 25

| | Projected |
|------|------------|
| Vacu | |
| Year | population |
| 2020 | 54,620 |
| 2021 | 54,700 |
| 2022 | 54,780 |
| 2023 | 54,960 |
| 2024 | 55,080 |
| 2025 | 55,200 |
| 2026 | 55,520 |
| 2027 | 55,840 |

| Projected population |
|----------------------|
| 56,160 |
| 56,400 |
| 56,640 |
| 57,180 |
| 57,720 |
| 58,260 |
| 58,760 |
| 59,260 |
| |

| Year | Projected population |
|------|----------------------|
| 2036 | 59,760 |
| 2037 | 60,260 |
| 2038 | 60,760 |
| 2039 | 61,200 |
| 2040 | 61,640 |
| 2041 | 62,080 |
| 2042 | 62,520 |
| 2043 | 62,960 |
| | |

| ., | Projected |
|------|------------|
| Year | population |
| 2044 | 63,400 |
| 2045 | 63,840 |
| 2046 | 64,280 |
| 2047 | 64,720 |
| 2048 | 65,160 |
| 2049 | 65,600 |
| 2050 | 66,040 |

Table 2: Recommended population projection for AMPs and LTP

10.2 Figure 12 below shows the projection in graphical form along with the StatsNZ high and medium series projections adjusted for the latest October 2020 population estimates which were higher than expected.

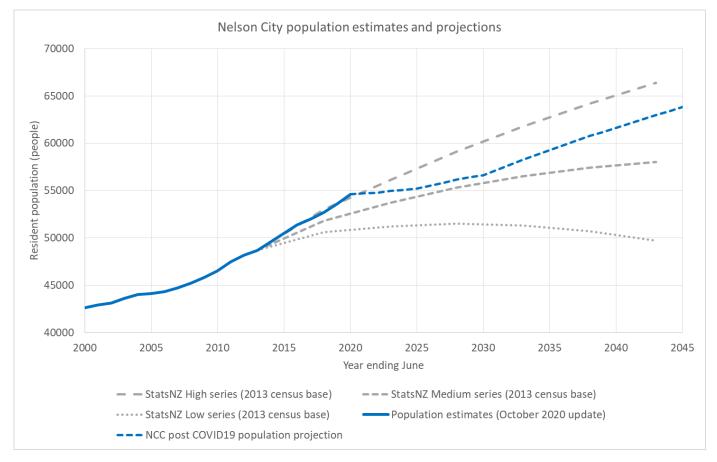


Figure 12: Recommended population projection and comparison projections

10.3 Figure 12 above shows that the recommended population projection tracks down, away from the high series before gradually returning to the same rate of growth as the high series some eight years later.

A2380354 Page 20 of 25

11.0 Households

- 11.1 To calculate the number of households that correspond to the recommended population projection in section 8, a household occupancy rate of 2.3 people per house was used for up until 2028 and 2.2 people per household after that based broadly on the StatsNZ recommended occupancy rates. Minor smoothing between the two rates has been done to allow for the fact that the jump would not occur in single year.
- 11.2 Table 3 below summarises the number of households expected each year under the recommended population projection.

| V | Projected |
|------|------------|
| Year | households |
| 2020 | 23,748 |
| 2021 | 23,783 |
| 2022 | 23,817 |
| 2023 | 23,896 |
| 2024 | 23,948 |
| 2025 | 24,000 |
| 2026 | 24,139 |
| 2027 | 24,545 |

| | Projected | |
|----------------------|------------|--|
| Year | households | |
| 2028 | 24,960 | |
| 2029 | 25,348 | |
| 2030 | 25,745 | |
| 2031 | 25,991 | |
| 2032 | 26,236 | |
| 2033 | 26,482 | |
| 2034 | 26,709 | |
| 2035 | 26,936 | |
| sahalda bu yaar unda | | |

| Year | Projected households |
|------|----------------------|
| 2036 | 27,164 |
| 2037 | 27,391 |
| 2038 | 27,618 |
| 2039 | 27,818 |
| 2040 | 28,018 |
| 2041 | 28,218 |
| 2042 | 28,418 |
| 2043 | 28,618 |

| Projected households |
|----------------------|
| 28,818 |
| 29,018 |
| 29,218 |
| 29,418 |
| 29,618 |
| 29,818 |
| 30,018 |
| |

Table 3: Households by year under recommended population projection

11.3 Figure 13 below shows the household projection in graphical form.

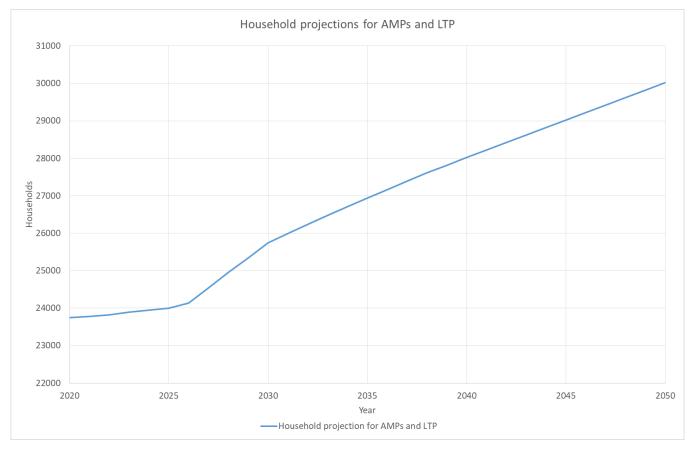


Figure 13: Household projection based on recommended population projection

A2380354 Page *21 of 25*

12.0Age profile

- 12.1 It is important to consider the age breakdown of Nelson residents when considering what, how, when and where Council should provide services. The age demographics provided by StatsNZ begin to break down under a hybrid population due to the complex relationship between births, deaths and net migration.
- 12.2 For the purposes of enabling decision making around an aging population figure 14 shows the breakdown of the Nelson population by age group and gender from the 2018 census.

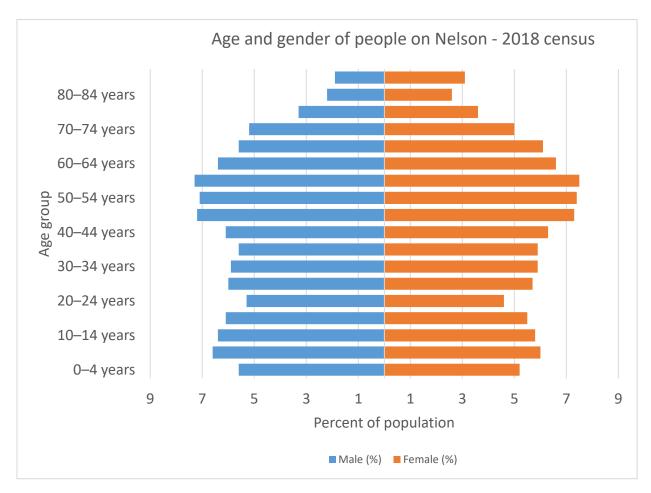


Figure 14: Age and gender breakdown of Nelson population at census 2018¹³

- 12.3 Figure 14 shows there are two distinct bulges for the age groups 5-19 years old and 45-59 years old with a narrowing between these ages at the 20-24 year old cohort.
- 12.4 Previous analysis has shown that the Nelson population, under all three of the StatsNZ growth series, will age rapidly and at a much faster rate than New Zealand as a whole. Figure 15 below shows the estimated proportion of each age cohort over time. Again, this is a high level estimate and only the overall trends should be considered rather than the actual numbers.

A2380354 Page *22 of 25*

-

¹³ NZStats Place Summaries - https://www.stats.govt.nz/tools/2018-census-place-summaries/nelson-region#population-counts

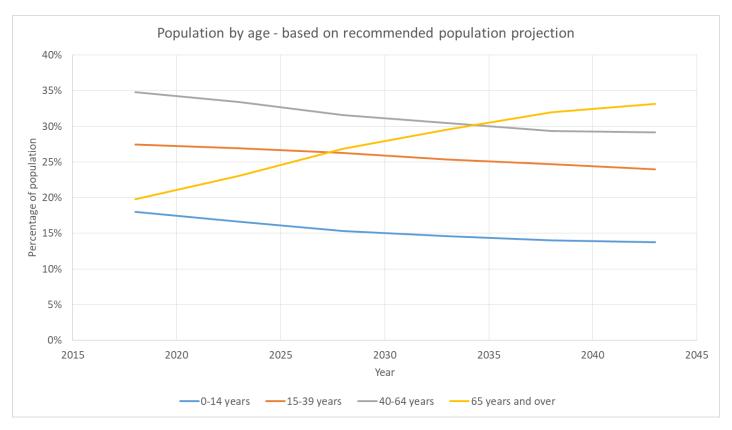


Figure 15: Age cohort trends for Nelson

- 12.5 Figure 15 above shows, as expected, the 65 years and over cohort to be the only increasing cohort. The reduction in all other cohorts is as a result of the low birth rate in the projection as well as the large number of people moving from the 40-65 years group into the 65 years and over group.
- 12.6 Broadly, the 65 years and over cohort will make up around a third of Nelsons population by 2043 under this scenario.

13.0Conclusion

- 13.1 The purpose of the preceding report is to present a population projection for use in developing Nelson City Councils Asset Management Plans and Long Term Plan.
- 13.2 In 2018, the latest census was completed but due to shortcomings in the move to online forms the return rate was lower than previously experienced. As a result, there has been significant delays in Statistics New Zealand providing updated population projections.
- 13.3 Additionally, the COVID19 event is expected to have significant immediate and future economic effects particularly as it restricts the movement of people regionally and internationally.
- 13.4 New population estimates were published by StatsNZ in October 2020 and these have been used to provide an updated 2020 base population for the population projections. This base population is higher than previously presented in the draft of this report.
- 13.5 In this context there is a lot of uncertainty involved with projecting future population change. To account for this a custom, or hybrid, population projection for Nelson has been developed.

A2380354 Page 23 of 25

- 13.6 It is recommended that the following assumptions inform a future population projection for Nelson:
 - medium births for ten years
 - high births after that
 - medium deaths
 - zero net migration for two years
 - low net migration for the next three years
 - medium net migration for the next five years
 - high net migration after that
- 13.7 These assumptions result in a recommended population projection for use in developing the Asset Management Plans and Long Term Plan for 2021 as shown in table 4 below.

| | Projected |
|------|------------|
| Year | population |
| 2020 | 54,620 |
| 2021 | 54,700 |
| 2022 | 54,780 |
| 2023 | 54,960 |
| 2024 | 55,080 |
| 2025 | 55,200 |
| 2026 | 55,520 |
| 2027 | 55.840 |

| Year | Projected population |
|------|----------------------|
| 2028 | 56,160 |
| 2029 | 56,400 |
| 2030 | 56,640 |
| 2031 | 57,180 |
| 2032 | 57,720 |
| 2033 | 58,260 |
| 2034 | 58,760 |
| 2035 | 59,260 |

| Year | Projected population |
|------|----------------------|
| 2036 | 59,760 |
| 2037 | 60,260 |
| 2038 | 60,760 |
| 2039 | 61,200 |
| 2040 | 61,640 |
| 2041 | 62,080 |
| 2042 | 62,520 |
| 2043 | 62,960 |

| Year | Projected population |
|------|----------------------|
| 2044 | 63,400 |
| 2045 | 63,840 |
| 2046 | 64,280 |
| 2047 | 64,720 |
| 2048 | 65,160 |
| 2049 | 65,600 |
| 2050 | 66,040 |

Table 4: Recommended population projection for AMPs and LTP

13.8 Figure 16 below shows the recommended population projection in graphical form along with the latest (2018) Statistics New Zealand high and medium and low series based on the 2013 census for the purposes of comparison.

A2380354 Page 24 of 25

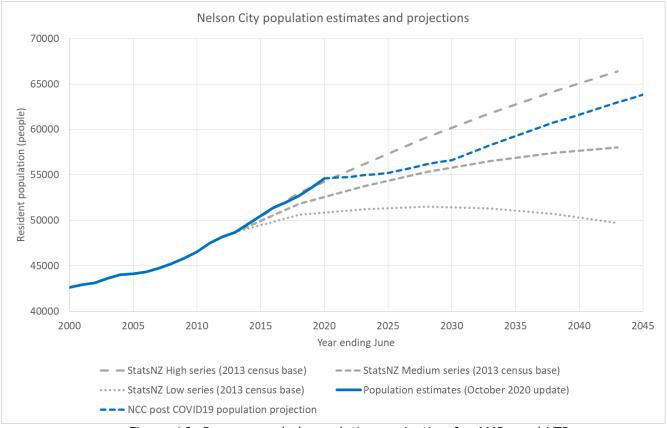


Figure 16: Recommended population projection for AMPs and LTP

- 13.9 It is clear from figure 16 above that the recommended projection is very low compared to the Statistics New Zealand high and medium series scenarios. The projection anticipates very low growth out until around 2030 before the rate of growth eventually increases to the same as the high series.
- 13.10 It is important to recognise that there is very significant uncertainty in any population projection as the short, medium and long term effects of the COVID19 event are not clear and are unlikely to be for some time. A precautionary approach is therefore recommended.

A2380354 Page 25 of 25



Nelson-Tasman Housing We'd Choose Housing Demand Preferences

June 2021 Version: FINAL





Prepared for

Nelson City Council and Tasman District Council

Document reference: TDC 002.21 HWC Tasman Nelson

Date of this version: 09 June 2021

Version: FINAL v2

Report authors: Rodney Yeoman, Greg Akehurst and Kieran McLean.

Research authors: James Maguire. Director approval: Greg Akehurst.

www.me.co.nz

Disclaimer: Although every effort has been made to ensure accuracy and reliability of the information contained in this report, Market Economics Limited, nor any of their employees shall be held liable for the information, opinions and forecasts expressed in this report.



Contents

| EXECUT | TVE SUMMARY | 1 |
|--------|--|----|
| 1 | INTRODUCTION | 3 |
| 1.1 | Purpose of report | 3 |
| 1.2 | Scope of report | 4 |
| 1.3 | STRUCTURE OF REPORT | 5 |
| 2 | NELSON-TASMAN HOUSING MARKET | 6 |
| 2.1 | BACKGROUND | 6 |
| 2.2 | HOUSING SUPPLY | 7 |
| 2.3 | HOUSING DEMAND | 10 |
| 2.4 | Housing Market Prices | 11 |
| 2.5 | FINDINGS ON THE HOUSING MARKET SITUATION | 13 |
| 3 | HOUSING WE'D CHOOSE METHOD | 14 |
| 3.1 | Survey Method | 14 |
| 3.2 | SURVEY SAMPLE | 15 |
| 3.3 | Survey Sectors | 16 |
| 3.4 | Survey Structure | 17 |
| 4 | DEMAND PREFERENCES SURVEY | 19 |
| 4.1 | CURRENT SITUATION | 19 |
| 4.2 | WHAT IS IMPORTANT TO HOUSEHOLDS? | 20 |
| 4.3 | WHAT DID HOUSEHOLDS CHOOSE? | 30 |
| 4.4 | FINDINGS OF DEMAND PREFERENCE SURVEY | 33 |
| 5 | CONCLUSION | 35 |
| APPEN | DIX A – SURVEY TECHNICAL REPORT | 36 |
| APPENI | DIX B – SURVEY SAMPLE | 37 |

Figures

| FIGURE 2.1: MAP OF NELSON AND TASMAN REGIONS | 6 |
|---|----|
| FIGURE 2.2: New Dwelling Consents Nelson and Tasman Regions, 1991-2020 | 8 |
| FIGURE 2.3: Types of New Dwelling Consented Nelson and Tasman Regions, 1991-2020 | 9 |
| FIGURE 2.4: POPULATION GROWTH 1996 – 2020, NELSON AND TASMAN REGIONS | 11 |
| FIGURE 2.5: MEDIAN HOUSE PRICES NELSON AND TASMAN REGIONS, 2003-2020 | 12 |
| FIGURE 2.6: MEDIAN WEEKLY RENTAL NELSON AND TASMAN REGIONS, 2003-2020 | 13 |
| FIGURE 3.1: OVERVIEW OF DATA COLLECTION PROCESS | 15 |
| FIGURE 3.2: LOCATIONS — POPULATION, QUOTA'S AND COMPLETED SURVEYS | 16 |
| FIGURE 3.3: SURVEY SECTORS WITHIN NELSON AND TASMAN REGIONS | 17 |
| FIGURE 4.1: PREFERENCES FOR LOCATION FEATURES OF HOUSING — NELSON URBAN | 21 |
| FIGURE 4.2: Preferences for Location Features of Housing – Tasman Urban | 22 |
| FIGURE 4.3: PREFERENCES FOR FACILITIES FEATURES OF HOUSING — NELSON URBAN | 23 |
| FIGURE 4.4: PREFERENCES FOR FACILITIES FEATURES OF HOUSING — TASMAN URBAN | 23 |
| FIGURE 4.5: PREFERENCES FOR ENVIRONMENTAL FEATURES OF HOUSING — NELSON URBAN | 24 |
| Figure 4.6: Preferences for Environmental Features of Housing – Tasman Urban | 25 |
| FIGURE 4.7: PREFERENCES FOR PROPERTY FEATURES OF HOUSING — NELSON URBAN | 26 |
| FIGURE 4.8: PREFERENCES FOR PROPERTY FEATURES OF HOUSING — TASMAN URBAN | 27 |
| Figure 4.9: Ranked Preferences of Housing – Nelson Urban | 28 |
| FIGURE 4.10: RANKED PREFERENCES OF HOUSING — TASMAN URBAN | 28 |
| FIGURE 4.11: NELSON TASMAN RENTERS OVERALL PREFERENCE RANKING | 29 |
| FIGURE 4.12: RENTAL RESPONDENTS LEVELS OF IMPORTANCE FOR DECISION FACTORS ON HOUSING CHOICE | 30 |
| FIGURE 4.13: DWELLING LOCATION - UNCONSTRAINED VS CHOICE EXPERIMENT — NELSON URBAN | 31 |
| FIGURE 4.14: DWELLING LOCATION - UNCONSTRAINED VS CHOICE EXPERIMENT — TASMAN URBAN | 31 |
| FIGURE 4.15: DWELLING TYPE - CURRENT VS CHOICE EXPERIMENT — NELSON URBAN | 32 |
| FIGURE 4.16: DWELLING TYPE - CURRENT VS CHOICE EXPERIMENT — TASMAN URBAN | 33 |



Tables

| Table 2.1: Nelson and Tasman Regions Dwelling Consents by Type, 1990 - 2020 | . 10 |
|--|------|
| Table 2.2: Study Area Urban and Rural Dwelling Consents by Type, 1990 - 2020 | . 10 |
| Table A.O.1: Distribution of household type by catchment area, 2018 Census (%) | . 37 |
| Table A.O.2: Distribution of household type by sector, survey sample (%) | . 38 |
| Table A.O.3: Household income distribution, survey sample vs population | . 39 |
| Table A.0.4: Dwelling tenure, survey sample compared to population | . 40 |
| Table A.O.5: Ethnic distribution, survey sample compared with population | . 41 |
| Table A.O.6: Age distribution, survey sample compared with population | . 42 |

Executive Summary

As with other regions and areas across New Zealand, Nelson and Tasman regions are facing growth pressures and are assessing how to deliver housing solutions to address housing needs and affordability, while delivering well-functioning urban environments. The Nelson and Tasman region, with Nelson City as its core urban centre, is a high growth area, facing pressures from internal growth as well as from growth in retirees from further south, and from other areas in New Zealand.

Aligned with this growth are changes in the nature of households, their formation, and their needs. A desire to maximise the efficiency of urban space, reduce sprawl and consumption of highly productive lands, along with a belief that the current planning provisions are not delivering an appropriate mix of housing, means the councils are looking closely at what people need and want in terms of their dwelling choices and the forces working behind those choices. Through the use of planning provisions and with reinforcement from Central Government by way of the National Policy Statement on Urban Development, councils are aiming to ensure supply and demand are more closely aligned. Recognising a gap in their understanding of demand, Nelson/Tasman have commissioned this study into the housing choice process.

What did this research investigate?

The Housing We'd Choose study contributes a unique understanding of the demand side of the housing equation. This study collected the views of more than 600 residents across the Nelson and Tasman regions to understand what is important to them in choosing a place to live, and it has explored what types of housing they would choose to buy or to rent, if it were available, within their current income and financial constraints. The main difference between this study and previous research into housing preferences is that this research introduced 'real life' constraints on people's choices. As the report discusses in more detail, respondents were asked to choose between a variety of housing types, sizes and locations across the Nelson and Tasman regions, within their own financial constraints. These constraints were established using household and financial information that they provided during the survey.

Respondents were recruited by phone and invited to complete the online survey. Being online allowed presentation of unique visuals and allowed calculations of affordability to occur in real time, adjusting to respondents' answers throughout the process – again in real time. Efforts were made to ensure the survey sampled an appropriate cross section of Households. In total, 891 respondents indicated they were interested in taking part in the survey. Of those, some 622 completed the questionnaire. This equates to a completion rate of 70%. With an achieved sample size of 622, the results have a margin of error of +/-3.9% at a 95% confidence level.

What did households choose?

It is clear from this study that residents in the Nelson and Tasman regions are generally willing to trade off both the type of dwelling and location, with dwelling price being a critical consideration. While the demand for stand-alone dwellings remains high, demand for attached dwelling, such as apartments, terraces and duplexes, is significant when compared to the supply that is being provided by the market.

The following are key findings of the demand preference survey:

- Respondents consider that the most important features of a dwelling are that it is **Safe from crime**, followed by having a **Freehold Title** and is **Sunny**. Other important features of housing include; **Safe from natural hazards** and that it is **Standalone**.
- In terms of location choice, there is a difference between unconstrained and constrained choice. The difference between the choices shows that financial constraints mean that respondents did not pick popular urban fringe areas (Stoke and Motueka) due to price. It would seem that respondents traded away from this location for other lower cost, potentially rural parts of the region due to prices being too high.
- The constrained choice data showed that some respondents currently living in stand-alone dwellings, would be willing to live within higher density dwelling types, mostly attached dwellings and some apartments.



1 Introduction

Within the Nelson and Tasman regions, as with other regions and growth areas across the country, there is considerable interest in the manner in which residential capacity is being supplied and enabled under District Plan planning provisions. There is a belief that demand for dwellings is exceeding the ability of the market to supply housing, resulting in significant house price increases and reductions in housing affordability. There is also a concern that the various planning provisions may not be providing an appropriate mix of housing by type, price and location to meet market demands. While it is important to understand the raw scale of growth in residential demand and capacity to meet that demand, it is as important to have a strong understanding of the type and nature of housing demand and more importantly, when presented with a range of choices and constraints, the trade-offs households are prepared to make to meet their needs.

This report is a study of housing preferences of the community that lives within and around the urban areas of Nelson and Tasman ('Urban Nelson-Tasman'¹). The research method applied in this study is a continuation of similar research called Housing We'd Choose ('HWC'), which has been conducted by Market Economics/Research First for other cities in New Zealand (Auckland², Dunedin³, Hamilton⁴) and Australia (Melbourne/Sydney⁵ and Perth⁶).

1.1 Purpose of report

Nelson City Council and Tasman District Council are currently preparing a Housing and Business Capacity assessment ('HBA') as required by the National Policy Statement on Urban Development ('NPSUD'). To inform the HBA the councils need to understand the choices households make in response to their housing needs. The ability to provide for sufficient housing, in places where people want to live, and where services can be provided in an efficient and effective manner, is a critical matter that the updated HBA and Future Development Strategy review ('FDS') will need to address.

In relation to housing, the NPSUD seeks to enable sufficient capacity to meet community demand for housing at a range of locations and dwelling types, and prices. The first objective of the NPS-UD is for "New Zealand to have well-functioning urban environments that enable all people and communities to provide for their social, economic and cultural well-being and for their health and safety, now and into the future". Therefore, provisions within planning documents need to provide for a range of residential opportunities such that all people can meet their needs. The final objective of the NPSUD is that "New Zealand's urban

¹ Urban Nelson-Tasman is defined as Nelson, Richmond, Brightwater, Wakefield, Mapua and Motueka. See Figure 3.3 for details on the spatial extents of each of the urban areas.

² Yeoman, R. and Akehurst, G. (2015). The Housing We'd Choose: A study of housing preferences, choices and trade-offs in Auckland. A report prepared by Market Economics Limited for Auckland Council.

³ Akehurst, G. (2019). Housing Framework Predictions: The Housing We'd Choose. A report prepared by Market Economics Limited for Dunedin City Council.

⁴ Akehurst, G., Tucker, M., Yeoman, R. and Ashby, H (2020) Future Proof sub-region Housing Study: Demand Preferences and Supply Matters.

⁵ Kelly, J.F., Weidmann, B., and Walsh, M. (2011). The Housing We'd Choose. Melbourne, Australia: Grattan Institute.

⁶ Department of Housing & Department of Planning. (2013). The Housing We'd Choose: a study for Perth and Peel. Perth: Government of Western Australia.

environments; (a) support reductions in greenhouse gas emissions." In this context that means planning provisions should be designed to support development, largely intensification and higher density forms of housing close to centres and transport nodes, thereby reducing the transport friction that generates greenhouse gas emissions and commuter time. The purpose of this piece of research is to understand how households trade off higher priced stand-alone dwellings in more remote suburbs against more intensive forms of dwellings (Terraced houses, duplexes and apartments) that are significantly closer to places of high urban amenity (such as centres, work areas, the river, parks and social infrastructure).

The second objective of the NPSUD supports future housing development (and intensification) by seeking to ensure that planning decisions improve housing affordability by supporting competitive land and development markets. The NPSUD incorporates a new focus on offering people access to a choice of homes that meet their dwelling needs or demands, as well as providing access to jobs, opportunities for social interaction, high-quality diverse services, and open space. There is a focus on providing a range of dwelling types and locations, which include significant intensification within walking distance of large centres (central city).

Nelson City Council and Tasman District Council have significant data and models of household growth translated into housing units projected to be needed over the next 30 years. This shows where and how they are looking to provide for demand however, very little research has been carried out into people's housing preferences. Nelson City Council and Tasman District Council decision makers do not have a clear idea of preferences in terms of; housing attributes, preferred environments and the relative importance of all dwelling and locational characteristics households weigh up when making a housing decision. Finally, and importantly, there is virtually no research to date that explores the kinds of trade-offs households may be willing to make if they can't meet all of their preferences in a way that is affordable to them. The Housing We'd Choose research is seeking to better understand these trade-offs.

Tasman and Nelson Councils, will also use the report to provide evidence for the individual Resource Management Plans (RMA), which are currently at different stages of preparation, to inform the scale of zoning for different types of residential in its District/City.

1.2 Scope of report

The scope of the research was to investigate housing preferences in the Urban Nelson-Tasman area. The following objectives were noted by Nelson City Council ('NCC') and Tasman District Council ('TDC'):

- Establish research specific to the Urban Nelson-Tasman area;
- Establish a better understanding of what is important to people in the Urban Nelson-Tasman area when choosing a place to live;
- Exploring the type and location of housing that people would choose to live in, if the options were available, based on real-world constraints; and
- Comparing existing housing stock and what is coming online (currently being built, or planned to be built), with what people say they would choose if they could.

The scope of this report was to focus on new housing within the private market, primarily for purchase by owner occupiers or for rental. It is acknowledged that there is a housing continuum which includes non-market housing types, such as social housing, papakāinga and co-housing. It was beyond the scope of this report to test the preferences of households that are not catered for in the private market. We consider

that a separate study of household needs within this segment of the community would be valuable. However, such a study may be outside the purview of local government and therefore likely to be more appropriately handled by central government, iwi and other community providers who control most non-market housing.

Market Economics has led a team to undertake two sets of research to meet these objectives. First, was to collect secondary data on the households and dwellings within Nelson-Tasman regions, along with other relevant secondary data. This information was used to define the survey population, sub areas of interest within the Nelson Tasman Urban Area, dwelling typology, sales/rents of these dwellings and mortgage calculator (economic research by Market Economics).

Second, to take the information from the economic research to design a survey script that would collect primary data on the housing preferences of the community (a survey conducted by Research First Ltd).

Finally, develop a short report that provides results from the research streams. In other HWC research Market Economics has conducted post survey modelling, which has included;

- 1) statistical analysis of relationships that exist in the primary data. This would take the form of building a discreet choice model or conditional logit model that provided insight into what was driving trade-offs.
- 2) projections of housing demand based on the preferences observed in the primary data.

The team would be available to provide additional economic research if required into either of these areas.

1.3 Structure of report

This report is structured as follows:

- Section 2 Nelson-Tasman Housing Market, provides a discussion on the current housing market
 in Nelson-Tasman area which briefly discusses the dwelling stock (both existing and new), dwelling
 sales prices and rents and some aspects of the community (demographics and household types).
 This discussion provides context about the market conditions, demand and supply, which exist
 within the Nelson-Tasman area.
- Section 3 Housing We'd Choose Method, outlines a summary of the key steps undertaken in the research. This methodology has been applied by Market Economics and Research First to many of the high growth urban areas in New Zealand.
- Section 4 Demand Preferences Survey, presents the responses that were observed in the survey, both in terms of unconstrainted preferences and constrained preferences.
- Section 5 Conclusions, provides a summary of the report's findings.

2 Nelson-Tasman Housing Market

2.1 Background

The Nelson and Tasman regions are renowned for receiving the most sunshine hours in New Zealand. The regions are located in north-westerly part of the South Island, which means that they are sheltered from cold weather systems arriving from the south (Figure 2.1). Unsurprisingly the regions have experienced rapid growth, from both international and internal migrants moving to live in the area.

The population growth in Nelson City and Tasman District has been faster than most of the other areas in New Zealand. Tasman District's population grew by 2.4%, or 1,300 residents in the last year, while Nelson City's population grew by 1.9% or 1,000 residents. In total, the two areas now have a population of 111,000 residents. It is likely that Nelson and Tasman region will continue to grow strongly in the coming decades. The official projections suggest that another 30,000 people may locate in the regions over the coming three decades.⁸

Growth pressures have extended out from Nelson into the urban parts of Tasman region, with large scale developments occurring around many of the towns in Tasman – Richmond, Brightwater, Wakefield, Mapua and Motueka. Nelson City has also experienced strong growth, which has mainly occurred within the existing urban area.



Figure 2.1: Map of Nelson and Tasman Regions

⁷ Stats NZ (2020) Subnational population estimates (TA, SA2), by age and sex, at 30 June 1996-2020 (2019 boundaries).

⁸ Stats NZ (2021) Population projections, by age and sex, 2018(base)-2048 – high projection.

A key concern of the councils is to understand how best to accommodate growth. Specifically, how best to encourage growth in forms that best meet the demands of households while achieving the objectives of the NPSUD and the various plans and strategic documents that outline the regions' future. A key driver for both councils is how to provide a diversity of housing options and what does this diversity look like. The councils want to understand how households will respond to a range of dwelling typologies, prices and locations and most importantly, the trade-offs households will make to achieve either locational preference or to maximise their private amenity in another manner.

Specifically, what types of dwellings and what locations should be encouraged within the regions. For the purposes of this study and to ensure that the findings of the research are able to be applied to council's HBA reporting under the NPS-UD, the focus is on the Nelson Tasman Urban Environment. However, it is recognised that this market operates in a wider sub-regional context — especially because the distances involved are not significant from some of the 'rural' hinterlands into the core urban zones. This means that the trade-offs households may be making in terms of trading more distance for a lower cost dwelling are not necessarily onerous.

2.2 Housing Supply

Dwelling consents data⁹ suggests that the number of new dwellings built in the Nelson and Tasman regions peaked in early 2000 at around 950 per annum, then declined to a little over 400 per annum around 2009-2011 and has since recovered to over 800 per annum in 2020 (see Figure 2.2). While there was a significant decline in new dwelling consents during the Global Financial Crisis, supply has recovered strongly over the last decade reaching record levels in Tasman last year¹⁰. Figure 2.2 also shows that the role of Nelson and Tasman regions has switched, with Nelson issuing more consents in the first 5 years (1990 – 95), but with Tasman District playing the major role in supplying new dwellings from then on (58%) and Nelson providing the balance (42%).

The dwelling consent data indicates that since 1991, there has been a fairly constant split between Urban and non-urban development. In total, over the 30 years around 75% of consents have been issued in the Nelson Tasman Urban Environment and 25% in rural areas. Over the last 5 years it has averaged 78% urban, but this is similar to the 1991 – 95 period where 79% of consent were urban.

⁹ Statistics New Zealand, February 2021, Building Consents issued: December 2020

¹⁰ Year ending March 2021, Tasman recorded a record 601 building consents issued

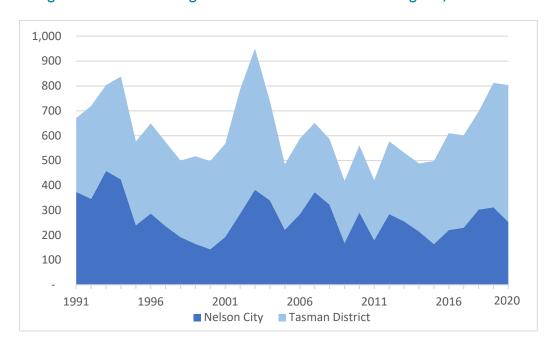


Figure 2.2: New Dwelling Consents Nelson and Tasman Regions, 1991-2020

Source: Statistics New Zealand

The types of dwellings consented in the Nelson and Tasman regions have changed over the last three decades, with a growing share being retirement units and a decline in apartments in Nelson City. The number of retirement units as a share of the total has increased from 2% in the 1990 – 94 time period to almost 12% over the past decade (2010 – 2020). Apartments on the other had have declined, with over 840 issued in the 1990 – 94 period in Nelson, declining to 27 in the 2010 – 14 period before rising to 125 between 2015 and 2020. Townhouses/flats as a share have remained fairly stable across each TA. In both cases they represent around 4-5% of total consents issued. Their share peaked in Nelson during the late 1990's early 2000's at 6% share. While both low- and high-density dwelling consents have increased significantly since the GFC, there has been much more growth in consents for high density units. It is likely that Tasman has only medium density, while Nelson will have both medium density and high density.

In addition, much of the change in dwelling types has occurred in the last five years and has been driven by the developments of retirement units.

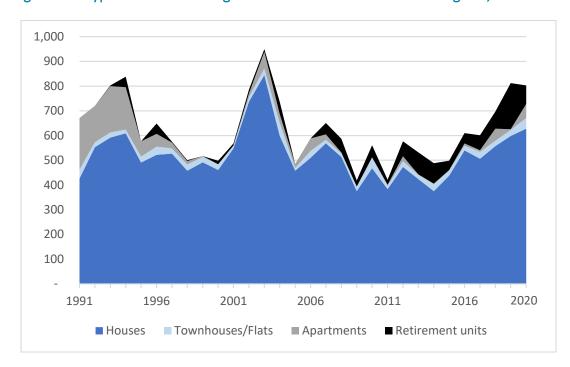


Figure 2.3: Types of New Dwelling Consented Nelson and Tasman Regions, 1991-2020

Source: Statistics New Zealand Building Consents by SA2, 1990-2020

Figure 2.3 highlights recent growth in importance of more intensive forms of residential accommodation within the Nelson and Tasman regions – in particular retirement accommodation. This growth has mostly occurred over the past five years (2015 – 2020). The growth in more intensive forms is also concentrated spatially into Nelson. In 2009, Nelson consented 24 retirement units and 0 apartments. By 2020 this had grown to 48 retirement units and 57 apartments – although the interveening years the data is lumpy. Tasman District in this time had an increase from 16 Townhouses/Flats, 0 retirement units and 1 apartment in 2009 to 38 townhouses and 27 retirement units in 2020 (Table 2.1). Table 2.2 presents the same data but cut according to the Nelson Tasman urban rural divide.

Interestingly for Nelson City, while there has been an increase in consents for apartments over the past 6 years (2015-2020), up to 125 issued compared with only 27 in the previous 5 years (2010 - 2014), the number of retirement units has declined slightly (down to 241 over the past 6 years versus 266 for the previous 5). Standalone dwellings are also growing strongly with over 1,060 consents issued from 2015 - 20, compared with 860 from 2010 - 2014.

In Tasman District, the total number of consents has increased to almost 2,540 (over the 2015-20 period). This is almost double the number issued between 2010 and 2014 (1,350 an 87% increase). However, consents for standalone houses have increased by 75% between these 2 periods. Tasman has experienced a significant increase in consents for Retirement Village Units (up to 229 from 2015 – 2020, up from 36 between 2010 and 2015).

This means standalone houses as a share of total consents is dropping slowly over time. IN the 2000-2004 period they made up 90% of building consents issued, by the 2015-2020 period they accounted for 81% of the total. has dropped from 83% to 78% in the combined Nelson and Tasman regions .

Table 2.1: Nelson and Tasman Regions Dwelling Consents by Type, 1990 - 2020

| | | Ne | Ison | | Tasman | | | |
|-----------|---------------|------------|--------------------------|---------------------------------------|--------|------------|--------------------------|---------------------------------------|
| Years | Houses | Apartments | Retirement village units | Townhouses, flats, units, other | Houses | Apartments | Retirement village units | Townhouses, flats, units, other |
| 1990 - 94 | 981 | 846 | 0 | 65 | 1,530 | 14 | 59 | 85 |
| 1995 - 99 | 878 | 153 | 20 | 69 | 1,612 | 3 | 28 | 55 |
| 2000 - 04 | 1,098 | 110 | 55 | 82 | 2,093 | 12 | 42 | 47 |
| 2005 - 09 | 1,141 | 91 | 110 | 29 | 1,284 | 1 | 16 | 57 |
| 2010 - 14 | 862 | 27 | 266 | 72 | 1,261 | 1 | 36 | 54 |
| 2015 - 20 | 1,061 | 125 | 241 | 55 | 2,206 | 0 | 229 | 104 |
| | Share of Each | n TA Total | | | | | | |
| 1990 - 94 | 52% | 45% | 0% | 3% | 91% | 1% | 3% | 5% |
| 1995 - 99 | 78% | 14% | 2% | 6% | 95% | 0% | 2% | 3% |
| 2000 - 04 | 82% | 8% | 4% | 6% | 95% | 1% | 2% | 2% |
| 2005 - 09 | 83% | 7% | 8% | 2% | 95% | 0% | 1% | 4% |
| 2010 - 14 | 70% | 2% | 22% | 6% | 93% | 0% | 3% | 4% |
| 2015 - 20 | 72% | 8% | 16% | 4% | 87% | 0% | 9% | 4% |

Source: Statistics New Zealand's, Building Consents by SA2

Table 2.2: Study Area Urban and Rural Dwelling Consents by Type, 1990 - 2020

| | Nelson Tasman Urban Environment | | | | | Rural Areas | | | | |
|-----------|---------------------------------|------------|--------------------------|--|--|-------------|------------|--------------------------|--|--|
| Years | Houses | Apartments | Retirement village units | Townhouse s, flats, units, other | | Houses | Apartments | Retirement village units | Townhouse s, flats, units, other | |
| 1990 - 94 | 1,793 | 854 | 59 | 116 | | 718 | 6 | 0 | 34 | |
| 1995 - 99 | 1,787 | 153 | 48 | 102 | | 703 | 3 | 0 | 22 | |
| 2000 - 04 | 2,216 | 110 | 97 | 98 | | 975 | 12 | 0 | 31 | |
| 2005 - 09 | 1,688 | 91 | 126 | 49 | | 737 | 1 | 0 | 37 | |
| 2010 - 14 | 1,484 | 27 | 302 | 111 | | 639 | 1 | 0 | 15 | |
| 2015 - 20 | 2,412 | 125 | 470 | 129 | | 855 | 0 | 0 | 30 | |
| | Share of Each | n TA Total | | | | | | | | |
| 1990 - 94 | 64% | 30% | 2% | 4% | | 95% | 1% | 0% | 4% | |
| 1995 - 99 | 86% | 7% | 2% | 5% | | 97% | 0% | 0% | 3% | |
| 2000 - 04 | 88% | 4% | 4% | 4% | | 96% | 1% | 0% | 3% | |
| 2005 - 09 | 86% | 5% | 6% | 3% | | 95% | 0% | 0% | 5% | |
| 2010 - 14 | 77% | 1% | 16% | 6% | | 98% | 0% | 0% | 2% | |
| 2015 - 20 | 77% | 4% | 15% | 4% | | 97% | 0% | 0% | 3% | |

2.3 Housing Demand

Over the past 25 years, the Nelson and Tasman regions have grown strongly. Between 1996 and 2020 they have grown by approximately 40% or by around 31,000 residents, collectively. The majority of growth occurred in Tasman district (57%), where population grew by 17,600 between 1996 and 2020. Nelson City grew by 13,400 people over this period, which is 43% of the regions' growth.

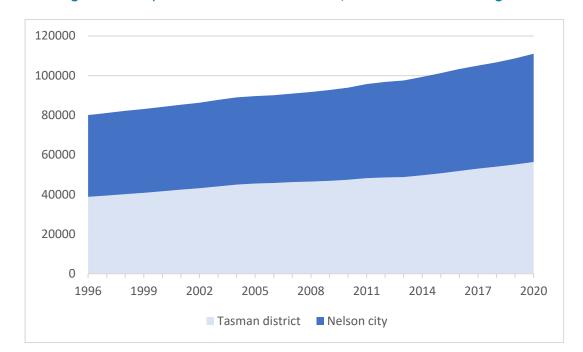


Figure 2.4: Population Growth 1996 – 2020, Nelson and Tasman Regions

Source: Statistics New Zealand, Subnational Population Estimates 30 June 1996 - 2020

2.4 Housing Market Prices

Housing Demand has increased markedly in the Nelson and Tasman region. Since 2003 house prices have more than doubled, from \$310,000 to over \$680,000 for the median house. ¹¹ Compared with six years ago, since March 2015 median house prices in Tasman have increased by around 64% ¹². This trend has been fairly consistent across the two regions, however prices in Nelson have been marginally higher than Tasman. Nationally, the median house price has increased at a faster rate than in the Nelson and Tasman regions. This is mostly driven by strong growth in Auckland and its high volume causing Auckland growth rates to drive the New Zealand national average.

Embodied in this growth is a general price rise (CPI). Over the same time period prices in general have increased by 40%, meaning that House Price inflation in the Nelson and Tasman region is almost 3 times general inflation (over the same time period). This is a significant level of price change, yet below the national average which is driven by Auckland growth.

¹¹ Corelogic (2021) 12-month rolling Dwelling Sales Price (actual) – median price series.

¹² Ministry of Housing and Urban Development, Dashboard

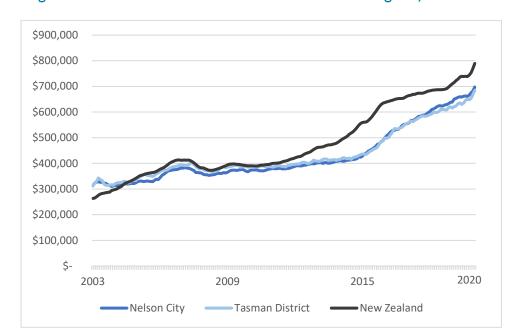


Figure 2.5: Median House Prices Nelson and Tasman Regions, 2003-2020

Source: Corelogic (2021) 12 month rolling Dwelling Sales Price – median price series

Demand for rental properties has also been strong in the Nelson and Tasman regions. However, weekly rents have increased by a smaller amount relative to house prices. The average weekly rent increased from \$240 per week in 2003 to over \$450 per week in 2020.¹³ Interestingly, rental prices have not moved as far or as fast as house prices as rental prices are more likely to be driven by the need for a place to live, therefore driven more by population growth. House prices are also driven by things other than the drive to have somewhere to live. Housing's role as an investment means prices are tied to capital markets or the price of other investment goods, interest rates, tax policy and so on.

In the Nelson Tasman area, over the same time period, rentals have almost doubled – which is roughly one-fifth slower than the rate of house price growth.

¹³ MBIE (2020) 12-month rolling Dwelling Rents (actual) – nominal mean rents private bond lodgement.

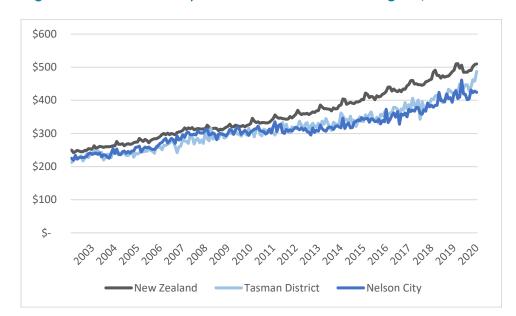


Figure 2.6: Median Weekly Rental Nelson and Tasman regions, 2003-2020

2.5 Findings on the Housing Market Situation

The Nelson and Tasman regions have experienced rapid growth, which has resulted in key changes in the housing market and housing policy. This growth is expected to continue in the coming decades, with potential for 30,000 new residents living within regions under the Statistics New Zealand High growth future $(2018 - 2048)^{14}$. Growth will place pressure on the urban areas within the regions.

Discussion in this section provides the following key findings about the housing market,

- Consent data indicates that the market has been shifting to supply greater numbers of higher density dwellings, townhouses, flats, apartments and retirement units. Over 22% of new supply is now in these higher density typologies.
- The location of consents has changed over the last three decades, with Tasman district playing a greater role (57%) and Nelson City reducing in importance (43%).
- The majority of growth remains within the Nelson Tasman Urban Environment which has captured 75% of dwelling consents over the past 25 years. This split is reasonably stable on a year to year basis.
- Sales data shows a significant increase in prices over the last two decades, from \$310,000 to over \$680,000 for the median dwelling. This rapid increase in prices indicates that housing demand has been strong in the regions.
- Rental costs have grown, albeit at a slower rate compared to the sales data. The average weekly rent has increased from \$240 per week to over \$450 per week.

Housing policy has responded to the changing housing market. The implementation of two National Policy Statements has required councils to provide sufficient capacity for housing within Regional Policy Statements and District Plans.

¹⁴ Statistics New Zealand's Population Projections, 2018 (base) – 2048.

3 Housing We'd Choose Method

This chapter briefly outlines the data collection methods used in this study. The content provided here is intended to provide the reader with a broad understanding of the techniques used. Further detail is provided in the appendices and Research Firsts' technical report.

3.1 Survey Method

The primary research utilised a mixed-method research design, as it involved initial telephone recruitment of the sample population, who (subject to meeting certain criteria) were invited to complete a survey online. Respondents were asked to agree from the outset to complete the survey. In the initial telephone contact, the purpose of the research was outlined, and people were offered an incentive to participate, in line with standard market research practise. If they agreed, they were then communicated with by email.

An online surveying method was used, for a variety of reasons. First, it is not possible to display the visual or the dynamic components of the survey using traditional methods (such as telephone or hard copy). In addition, online data collection is cost-effective, as there is no interviewer presence and labour costs are minimised; and it allows respondents to complete the survey in their own time, which can maximise response rates. The survey combines what had previously been 2 surveys into a single package using the online interview suite NEBU.

An overview of the data collection process is shown in Figure 3.1.

The second part of the survey required respondents to undertake a discrete choice experiment in which they had to trade-off housing type, size, and location within 'real world' financial constraints base on the answers they provided in the first part of the survey and a house price and rental cost framework by location and type developed by M.E from Nelson and Tasman specific housing costs.

The fieldwork took place in March and April 2021 and was administered by Research First.



Initial telephone contact

Randomised sample of Nelson-Tasman urban residents drawn from Research First's database. This sample was matched to quotas from the sample frame, as interviewers gathered demographic information (household composition and suburb they lived in).

The purpose of the research was outlined and email addresses were collected.



Email with link to online survey

Participants were sent an email containing a hyperlink to the first online survey. This link was personal to the individual and matched their responses in the online survey to the information they had provided during the initial telephone contact.

The text in the email reiterated the purpose of the project and informed participants that they would need to disclose some personal financial details in the second survey.



Follow up emails

Participants who had not yet completed the survey were sent up to three reminders via email.

3.2 Survey Sample

In total, some 14,309 people were contained in the sample. Of these some 891 indicated that they were interested in taking part in the survey. This represents a response rate of 6%. Of these, approximately 622 respondents completed the survey for a completion rate of 70%. As further outlined in Chapter 4, there were several points at which respondents could be 'exited' from the online survey however, and a total of 450 respondents completed the discrete choice experiment. Regardless of whether respondents completed the fulfilled discrete choice experiment, they provided information about their preferences and who they were. This important information has been retained.

Efforts were made during recruitment and sampling to ensure that the final sample represented a variety of household types across Nelson-Tasman urban area, as it was considered by the research team that household composition plays a key role in driving housing needs and requirements. The survey was split between the two regions. In total 315 interviews were carried out with Nelson urban respondents, and 219 in Tasman urban (Figure 3.2).

Details of error margins at contained in Appendix A. However, overall the Survey has a confidence level of +/-3.9%. This is inside the maximum recommended for these types of surveys (+/-5%). Once the sample is split between the two regions, the error margins increase (see Appendix A). This limits (to a certain

extent), the reliability of smaller sub-samples and conclusions drawn from them for small towns in Tasman when viewed in isolation. However, the collective values still apply.

Figure 3.2: Locations – Population, Quota's and Completed Surveys

| Location | Household Quota | | Surveys | % of | % of Survey |
|---------------------|-----------------|-------|----------|-------------|-------------|
| Location | Estimates | Quota | Complete | Population | Respondents |
| Nelson | | | | | |
| Nelson Urban | 19,112 | 289 | 315 | 96% | 95% |
| Nelson Rural | 710 | 11 | 17 | 4% | 5% |
| Subtotal | 19,822 | 300 | 332 | 100% | 100% |
| Tasman | | | | | |
| Tasman Urban | 11,017 | 240 | 219 | 56% | 76% |
| Tasman Rural | 8,535 | 60 | 71 | 44% | 24% |
| Subtotal | 19,552 | 300 | 290 | 100% | 100% |
| Nelson Tasman Urban | | | | _ | |
| Environment | 30,129 | 529 | 534 | 77 % | 86% |

Source: Research First, Housing Preferences Study, Technical Report, May 2021

In addition, despite best efforts, households with children were under-represented in the final sample, while couples without children were over-represented. With respect to individual characteristics of the respondents, it should be noted that Māori, Pacific, and Asian people, and those in younger age groups (29 years and under) and less wealthy (under \$30,000 income) were also under-represented, when compared to the general population. For an overview of the survey sample characteristics please refer to Appendix B.

3.3 Survey Sectors

For the purposes of sample selection and the discrete choice experiment, the Nelson and Tasman regions were divided into eleven 'sectors' according to land value and spatial location, with the goal of defining a limited number of markets. The sectors are as follows (also refer to map in Figure 3.3):

- Sector 1: 'Nelson Urban Central', which covers the City centre and inner suburbs of Nelson.
- Sector 2: 'Nelson Urban North', which covers the north suburbs of Nelson.
- Sector 3: 'Nelson Urban South and Tahunanui', the suburbs south of Nelson central, which includes Tahunanui.
- Sector 4: 'Nelson Urban Stoke', the urban area around Stoke up to the edge of regional boundary.
- Sector 5: 'Richmond', the urban area around Richmond.
- Sector 6: 'Motueka', the urban area around Motueka.
- Sector 7: 'Wakefield-Brightwater', two townships of Wakefield and Brightwater.
- Sector 8: 'Mapua-Ruby Bay', the township of Mapua and the coastal area north of the town (Ruby Bay).
- Sector 9: 'Waimea Plans', which covers the rural land in the Waimea Plans, which surrounds the towns in Tasman region.

- Sector 10: 'Tasman Rural', the remainder of the rural area in Tasman region.
- Sector 11: 'Nelson Rural', the remainder of the rural area in Nelson region.

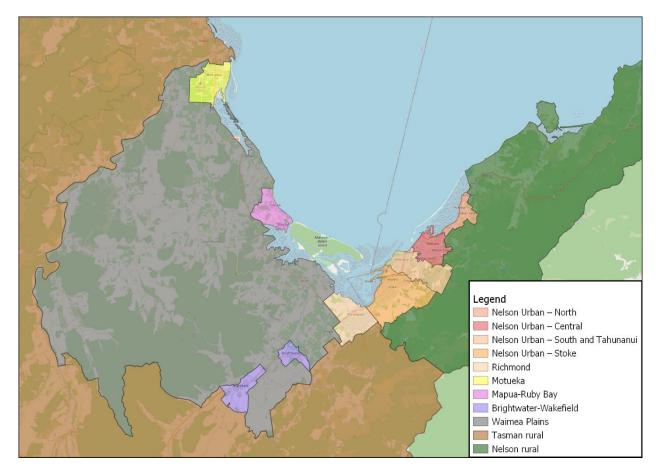


Figure 3.3: Survey Sectors within Nelson and Tasman Regions

Each sector covers many suburbs, which have some unifying characteristics and geography, but also have very different characteristics. In order to identify which sector respondents lived in, they were asked what suburb they lived in and were later allocated to a sector during the data analysis stage.

The selection of eleven sectors was a compromise between providing sufficient detail and difference across parts of Nelson and Tasman regions for the choice modelling, and being succinct enough to ensure the questionnaire was not onerous. The previous Australian and New Zealand studies used similar numbers of spatial sectors and used land value as a tool to delineate boundaries between sectors.

3.4 Survey Structure

The survey was structured in two separate parts, telephone invitation and online survey.

The telephone invitation was short, with only seven questions. Many of the questions act as a filter to removing respondents that are not the target of the survey (market researchers, people 18 years and younger, non-residents) or who do not want to participate in an online survey. The remaining questions collect information about the respondent, which includes the household make up, suburb, first name and

email address. The respondents that successfully passed the invitation criteria were then sent an email with a link to the online survey.

The online survey asked a range of questions about preferences for housing, which includes questions that are both unconstrained and constrained by respondents' financial information. The Survey is separated into the following five sections,

- Section 1: About Your Current Situation, collects information about the respondents current housing situation. The respondents were asks questions about their current dwelling, type (standalone, attached, apartment, etc.), ownership (occupier, rent, etc.), length of tenure, intentions to move (with location considered) and motivation for move.
- Section 2: About your Preferred Housing Features, examines how important various features are to respondents when thinking about choosing a place to live. The respondents were asked to rate the importance of features of housing on a three-point scale of Not Important, Of some importance and Very important.
- **Section 3: Living and Working**, which collects information about the respondent's current address, where they work and where they would prefer to live in the Nelson and Tasman regions.
- Section 4: Financial Situation, collects information about household composition, income, expenses, liabilities, and assets. This information is used to establish the maximum amount that the respondent's household can afford to buy, or to rent.
- Section 5: Choice Experiment, this section of the survey shows the respondent four sets of dwellings that the respondent can afford to buy or rent, with the options shown being constrained by the financial situation of the respondent. The respondent was shown the four dwellings that they selected and asked to select which of the dwellings best reflects the housing they would choose.

This report focusses on the results in Section 2 and Section 5 of the online survey. Section 2 asks respondents about their housing preferences, in terms of types of features i.e. what dwelling would you like? Section 5 constrains the respondent preferences based on their financial position, i.e. what dwelling can you afford? The choice experiment tests how respondents undertake trade-offs when deciding which house to buy?

4 Demand Preferences Survey

In this section of the report, we summarise some of the key findings of the Housing Preferences Survey. First, we explore housing preferences to establish what households are seeking when selecting a dwelling. Household preferences at the conceptual level are then translated into a real-world selection process. In the first instance households are asked to select where they would choose to live in terms of dwelling type and location in an unconstrained way. Finally, they are asked to repeat the process with financial constraints derived from their responses. The outcomes are then compared to provide insight into the manner in which households trade off size, space and location once they are not able to have it all.

The focus in this section is on responses from Nelson Tasman Urban Environment respondents, so respondents from the rural areas have been excluded.

4.1 Current Situation

The majority of the urban respondents stated that they currently lived in stand-alone dwellings (85%), while 11% lived in a unit or a semi-detached dwelling, 2% lived in an apartment and 2% live in other dwellings.¹⁵

Home ownership was relatively high among the sample. Over two thirds (77%) of respondents owned the dwelling they lived in, either with or without a mortgage, and a further 7% stated that a family trust owned the dwelling (it is not possible to ascertain from the results however, whether the person completing the survey was part of that family trust). About one in five (13%) were renting from a private landlord and 3% renting from a community housing provider (Kāinga Ora, Ministry, iwi, a religious group, or a community group). The ownership distribution was the same for Nelson and Tasman respondents.

Before being asked to rate what was important to them in choosing a place to live, respondents were asked whether they were planning to move in the next five years, and if so, where to and why. Many were not planning on moving (49%), with almost a quarter indicating that they were considering moving (24%) and the rest (27%) were unsure.¹⁶

Of those respondents who stated they were considering moving in the next five years, over two thirds (67%) said they were thinking of moving within Nelson and Tasman area, and 17% said they would move outside of Nelson and Tasman area, while the rest (16%) were unsure.

Reasons for considering a move were mixed. For example, while 30% of survey respondents stated that they would move if they had a change in their personal circumstances, 10% said they would consider a move to a better location, 19% would consider a move to a smaller home if they were to move, a further

¹⁵ Nelson Urban - stand-alone dwellings (83%), while 13% lived in a unit or a semi-detached dwelling, 2% lived in an apartment and 2% live in other dwellings. Tasman Urban - stand-alone dwellings (88%), while 11% lived in a unit or a semi-detached dwelling, 2% lived in an apartment and 2% live in other dwellings.

¹⁶ The plans to move was more or less the same for Nelson and Tasman respondents.

8% said they wanted to move to a bigger home. Approximately half of renters wished to move from renting to buying a home.

Of the people who provide free text reasons for moving many referenced the following reasons; shift to retirement villages, wish to build, or live on a lifestyle block. Many of the respondents had individual reasons for wanting to shift, such as travel, gardens, a missing characteristic of existing house, etc.

4.2 What is Important to Households?

The respondents were asked to rate the importance of features of housing on a three-point scale of Not Important, Of some importance and Very important. The "features of housing" include; its location, facilities, environment, and the nature of the property. The respondent was then asked to rank the group of features that they selected as 'Very Important'.

The set of features respondents could choose from have been drawn from both the HWC studies carried out in other parts of the country and to reflect local conditions. In the original Auckland work, the selection set of housing and locational attributes was generated through focus groups held across the city. Respondents were asked to identify the range and list of attributes that might be important to them when thinking about choosing a place to live. The set of attributes was generic enough to be applied more generally to studies of this nature. In subsequent studies, there was a good alignment between the list of selection attributes and the choices people felt they would make.

4.2.1 Location Features

The 12 features in this category related to ease of access to work, school, tertiary education facility, family and friends, restaurants and bars, as well as transport options. Because there is no universal measure of "easy access to", the survey relied on each respondent to translate "easy access to..." in their own way relative to their own situation. However, overall, these characteristics did not rate highly relative to the features in other categories.

The item rated as most important among these features was **easy access to shops** – over a third rated this as being very important (Figure 4.1 and Figure 4.2). Other important features include being **near family and friends**, **access to town centre** and **access to places of work** was very important for 20-30% of respondents. In summary, the Nelson respondents placed more importance on the location features than Tasman respondents. However, interestingly Tasman respondents placed higher importance on being **near family and friends**, than Nelson respondents.

For Nelson, the item rated as very important the most among these features was also **easy access to shops**, however, this was more prominent than in Tasman with 36% rating this as being very important. This was followed by **easy walking/cycling distance to centre**, **easy access to city or town centre**, and **easy access to place of work** (Figure 4.1). The lowest proportion rated as being very important was **easy access to place of study** and the **airport**. In general, when compared to Tasman, the features have higher proportions rating them as very important. This may suggest that respondents in Nelson place a greater value on proximity to features.

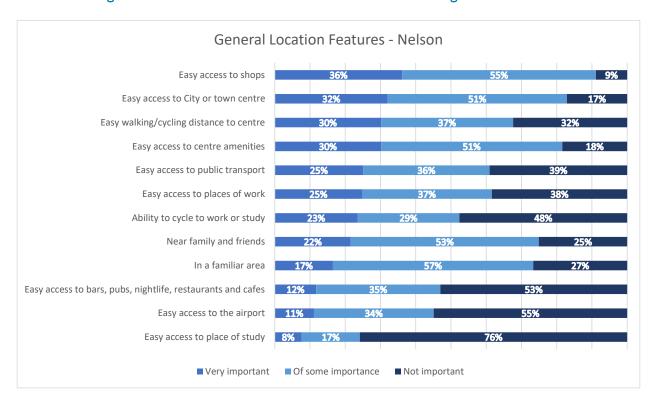


Figure 4.1: Preferences for Location Features of Housing – Nelson Urban

For Tasman respondents, the item rated as very important the most among these features was **easy access** to shops, where 29% rated this as being very important. This is followed by near family and friends, easy walking/cycling distance to centre, easy access to city or town centre, and easy access to places of work. The lowest proportion rated as being very important was easy access to place of study and the airport with 6% or less of the respondents.

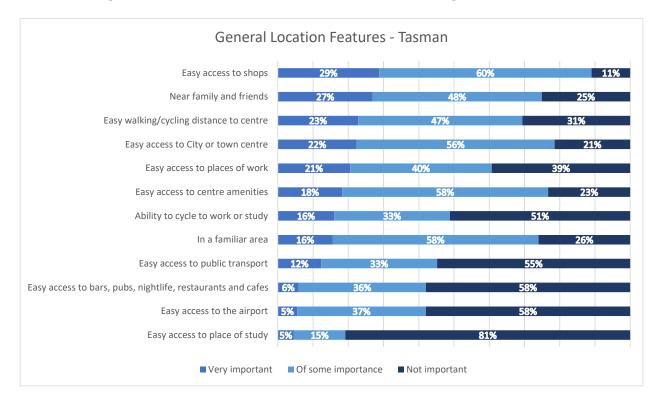


Figure 4.2: Preferences for Location Features of Housing – Tasman Urban

4.2.2 Facilities Features

The 'facilities' category included 11 features related to aspects of the neighbouring environment. Generally, most of these features were not rated as being 'very important' (Figure 4.3 and Figure 4.4). The preferences were different between Nelson and Tasman respondents.

For Nelson the highest rated features were near a park or reserve, community centre, sportsclub/fields and Near recreational activities. While for Tasman highest rated features were being near a GP/healthcare provider, and the coast/beach. This may reflect the different distribution of facilities within these two areas, with respondents in Nelson being comparatively close to healthcare and the coast, relative to Tasman respondents.

It may also be because Tasman residents are older than Nelson residents, therefore proximity to a GP or health care provider is more important.

Figure 4.3: Preferences for Facilities Features of Housing – Nelson Urban

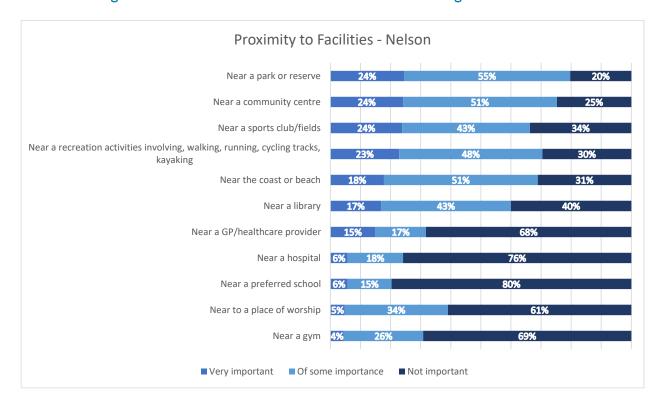
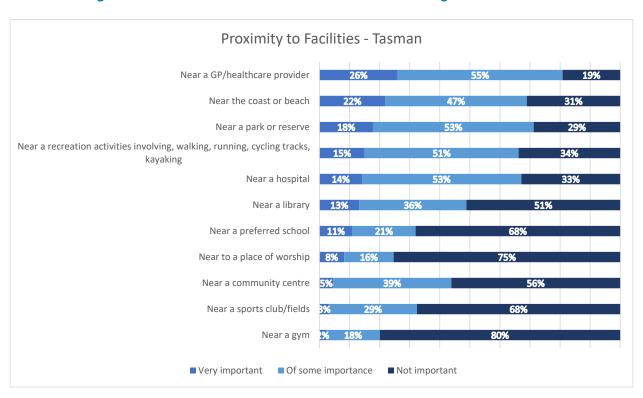


Figure 4.4: Preferences for Facilities Features of Housing – Tasman Urban



4.2.3 Local Environment Features

The 'environment' category included 13 features related to aspects of the neighbouring or local environment. Generally, most of these features were rated as being 'very important' or of 'some importance'. Preferences were broadly consistent between Nelson and Tasman respondents (Figure 4.5 and Figure 4.6), and with other HWC studies.

The local environment category has some of the highest regarded features. A large majority of respondents (75%-78%) consider that **safe from crime** is very important and a further 21%-23% consider it to be of some importance. This was the highest rated feature overall across all categories. Given that Safety is a fundamental need, second only to the physiological needs identified in Maslow's hierarchy of needs, it is unsurprising safety is highest on this list.

A large number of respondents also considered **Safe from natural hazards** is very important (over 60%) or of some importance (over 30%). Being **away from industrial areas** was also rated very important (over 60%). Other important features include **lack of noise**, **presence of trees**, and **away from busy road**.

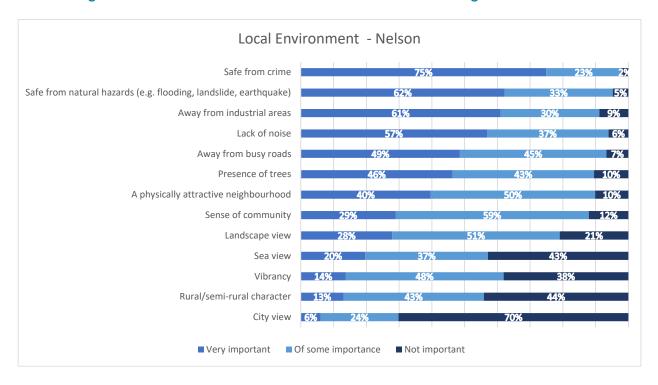


Figure 4.5: Preferences for Environmental Features of Housing – Nelson Urban

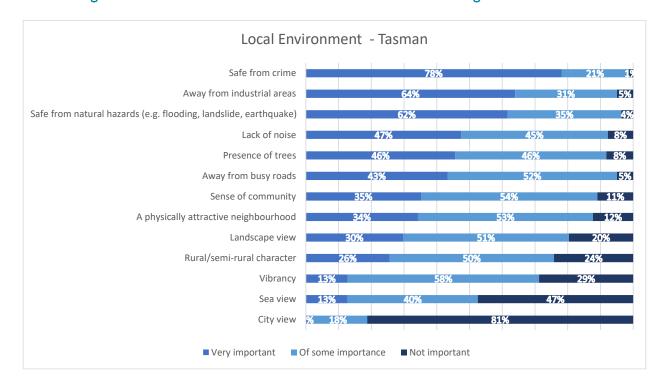


Figure 4.6: Preferences for Environmental Features of Housing – Tasman Urban

4.2.4 Property Features

Many of the features related to properties were rated as being very important to many respondents when thinking about choosing a place to live, in particular over two thirds consider that **Sunny**, **Adequate off-street parking** and **Freehold title** where very important to over half the respondents (Figure 4.7 and Figure 4.8).

Sunny is aligned with warmth – one of the core physiological needs identified by Maslow. Given he postulated that people need to satisfy these fundamental needs before attending to needs higher up the scale – such as self-fulfilment and self-esteem, it is not surprising **Sunny** scored highly here.

For Nelson, **Sunny** was the highest rated property feature, with 77% considering it as 'very important'. Other features rated as 'very important' by more than half of respondents were **Adequate parking** (68%), **Freehold title** (68%), **Standalone dwelling** (59%), and **Section easy to maintain** (54%).

A noticeable difference between Nelson and Tasman was the lower ratings for **Has a lawn** and **Large section** in Nelson.

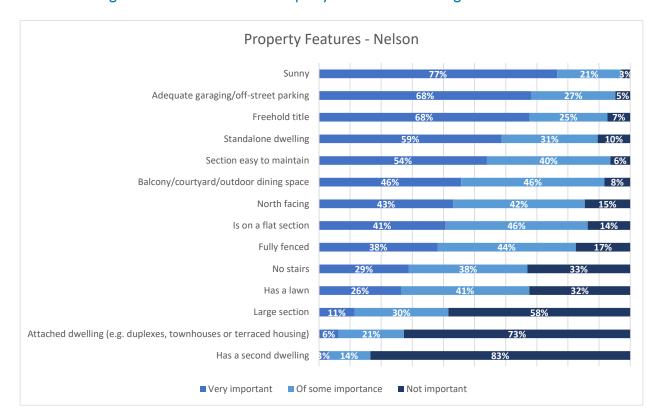


Figure 4.7: Preferences for Property Features of Housing – Nelson Urban

For Tasman, the top property features were **Sunny**, **Adequate parking**, and **Freehold Title**, all rated as 'very important' by 73% of respondents. **Standalone dwelling** (58%) was also very important to over half of the respondents. There are also a number of other property features that are very important to a third or more of the respondents (**Fully fenced**, **Section easy to maintain**, **Balcony/courtyard/outdoor dining space**, **North facing**, **Has a lawn**, and **is on a flat section**).

In total 10 of the features out of 14 were rated as 'very important' by a third or more and had less than 20% of respondents rate them as 'not important'.

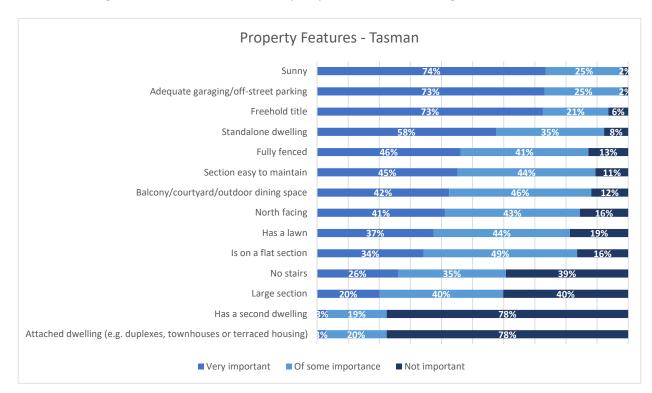


Figure 4.8: Preferences for Property Features of Housing – Tasman Urban

4.2.5 Overall Rankings of Features of Housing

The respondents were asked to then rank the features that they selected as 'Very Important' from 1 to 5. Figure 4.9 and Figure 4.10 below shows an index of the relative importance of these features, which is based on the most highly rated feature. The colours in the bar graph indicate which type of features they are, with green being an Environment feature, yellow being a Property feature, blue being a Location feature and purple being a Facility feature.

The figures shows that respondents ranked features that relate to environment and property most highly. By far the most important features were **Safe from crime**, **Sunny** and **Freehold title**. (index of 0.65). Other important features of housing include **Safe from natural hazards** and being a **standalone dwelling**. While there are some differences between Nelson and Tasman, the respondents in each area have broadly consistent preferences. Also we note that these results are consistent with the previous Housing We'd Choose studies.

Figure 4.9: Ranked Preferences of Housing – Nelson Urban

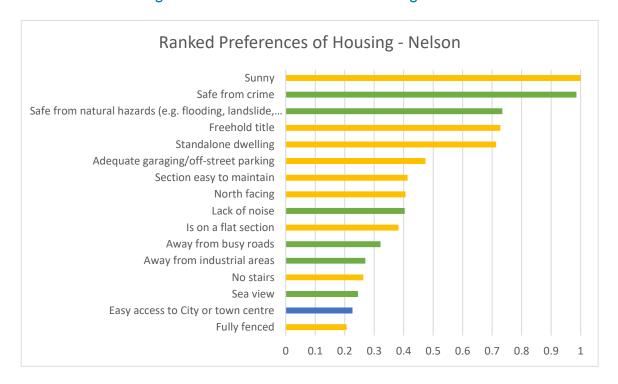


Figure 4.10: Ranked Preferences of Housing – Tasman Urban



4.2.6 What is important to Renters

While the above assessment covers all residents within the Nelson Tasman Urban Area, it is important to focus on the renter subsection of the market as well. There are some differences between Renters as a whole across the Urban are in terms of their ranking of housing features.

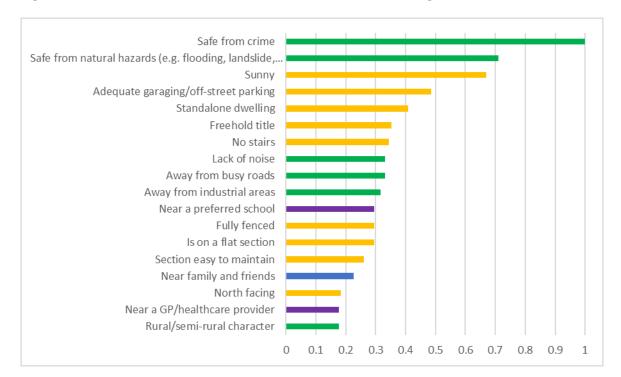


Figure 4.11: Nelson Tasman Renters Overall Preference Ranking

The top 2 features were safety from Crime and Natural hazards. While having Freehold Title is obviously not important (they are renting), having a Standalone dwelling still ranks highly (5th most important feature – the same as both the overall for Tasman Urban and Nelson Urban). In terms of proximity to facilities, 2 characteristics stood out; near a preferred school and near a GP/Healthcare provider. This probably reflects younger families in the rental market before purchasing a first home looking to be close to schools. This characteristic didn't feature in the overall household assessment in 4.2.2, above.

Looking at what Renters chose, that is, those that went through the survey and answered questions about rental options, the most important factor in making a decision on housing, is location (the area they chose). The location chosen was ranked as most important by 46% of rental respondents – almost twice as high as the next category (House type) (Figure 4.12).

Least important in their choice is the Dwellings value (Figure 4.12).

Figure 4.12: Rental Respondents Levels of Importance for Decision Factors on Housing Choice

| Feature Set | Most Important | >>>>>> | >>>>>> | Least Important |
|-------------------|-------------------|--------|--------|--------------------|
| Dwelling features | 27 | 34 | 41 | 18 |
| Dwelling value | 13 | 12 | 22 | 74 |
| House type | 30 | 49 | 32 | 13 |
| Location | 59 | 25 | 24 | 13 |
| Total Responses | 129 | 120 | 119 | 118 |

4.3 What Did Households Choose?

Before respondents undertook the choice experiment, they were asked to indicate which location they would prefer to live in (i.e. unconstrained choice). Their responses were used to refine a list of potential options presented to them in the choice exercise, both in terms of type of dwelling that can be afford and the potential to buy or rent.

In total 66% of respondents could afford to buy a dwelling within Nelson and Tasman regions, these respondents where shown dwellings from the buy set that they could afford. Approximately 34% of respondents could not afford to buy a dwelling. A share (5% of the total) of these respondents could afford a private rental, they were shown dwellings from the rental set that they could afford. The remaining 28% of respondents could not afford to buy or rent any dwelling in the list. While this outcome is a high percentage, it is not unexpected as the choice sets do not include dwellings supplied by community housing providers and was targeted at medium value new build dwellings at the request of the client. Community housing providers supply dwellings for approximately 3-5% of the households who cannot afford to buy or rent on the private market. Logic dictates that Community housing providers are catering for a portion of the 28% (but that is not confirmed in the survey) – leaving some 23-25% without new build housing options.

The respondents were then shown a range of dwellings that they could afford which were located across the Nelson and Tasman regions. The respondent then selected the dwelling from within this selection set that best fit their preference (i.e. making a financially constrained choice).

4.3.1 Dwelling Location Choice

Figure 4.13 and Figure 4.14 below compares the locational choices respondents made in both an unconstrained and constrained manner. For the Nelson urban respondents, the largest mismatch is observed in Stoke where 30% respondents would live in this location if they could, but given financial constraints only 24% are able to afford to live in this location. Conversely the constrained demand in Wakefield-Brightwater and Waimea plains is higher than the unconstrained demand. This indicates that respondents who may not have chosen to live there given a choice unconstrained by finances, are choosing Wakefield-Brightwater once their finances are limited by their ability to pay.

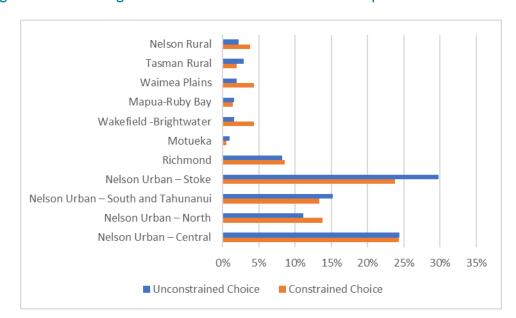


Figure 4.13: Dwelling Location - Unconstrained vs Choice Experiment - Nelson Urban

For the Tasman urban respondents, the largest mismatch is observed in Motueka where 26% respondents would live in this location if they could but given financial constraints this drops to 11%.

Conversely the constrained demand in Tasman Rural, Waimea plains and urban areas of Nelson is higher than the unconstrained demand. These are therefore locations that people choose less often when unrestrained by their financial situation. The findings indicate that some of the urban demand may be driven these more rural areas of Tasman or even back into residential parts of Nelson. given they are constrained in terms of their first choices by affordability issues.

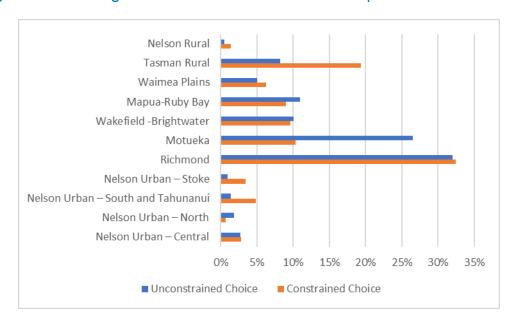


Figure 4.14: Dwelling Location - Unconstrained vs Choice Experiment - Tasman Urban

4.3.2 Dwelling Type Choice

Before the respondents undertook the choice experiment, they were asked to indicate which type of dwelling they currently live in. Respondents were shown a range of dwellings types that they could afford. The respondent then selected the dwelling that best fit their preference (i.e. make a financially constrained choice) from within their affordable range. Figure 4.15 and Figure 4.16 below shows that some of the respondents that live in stand-alone dwellings would be willing to live within higher density dwelling types, mostly attached dwellings and some apartments.

For example, 15% of the Nelson urban respondents currently live within an apartment or attached dwelling. This compares to the constrained choices within the survey which suggests that 35% would select an apartment or attached dwelling. This also can be compared to recent building consents which had 30% of new dwellings are apartment or attached dwellings.

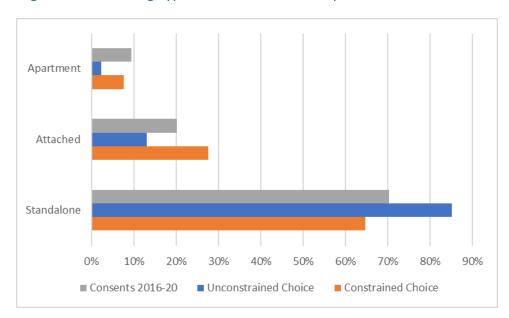


Figure 4.15: Dwelling Type - Current vs Choice Experiment - Nelson Urban

This difference is also observed in Tasman, where 10% of urban respondents currently live within an apartment or attached dwelling. This compares to the constrained choices within the survey which suggests that 29% would select an apartment or attached dwelling. The recent building consents had 14% of new dwellings being apartments or attached dwellings.

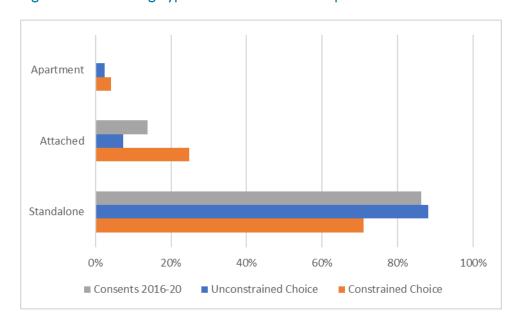


Figure 4.16: Dwelling Type - Current vs Choice Experiment - Tasman Urban

4.3.3 Choice Option Match

Finally, the respondents were asked if their most preferred constrained option reflected the choice they would make. For respondents who could afford to buy a house, just over half (66%) answered 'Yes', 20% answered 'No' and the balance were unsure. For respondents in the rent section approximately three quarters (79%) answered 'Yes', 25% answered 'No' and a small share were unsure.

We suggest there are a few explanations which account for the differences in responses between the buy and rent respondents. All housing options presented in this survey were newbuilds, given that is what Council policy going forward will influence. For households looking to rent, a new build is likely to be more desirable compared to an older house (i.e. better insulation, warmer, dryer, more energy efficient). However, newbuilds can sometimes lack character that older houses possess which was a negating factor for a number of respondents within the buy section.

Although the answers to this particular question provide some level of accuracy/validation to the survey and overall research, the survey has been specifically designed to incorporate households purchasing ability and reflect the housing market at present. For cases where respondents answered no or did not know, we suspect they would end up selecting something close to the survey results – i.e. their constrained housing choice.

The respondents were also asked to rank four factors in terms of their choice, being location, house type, dwelling features and dwelling value. Almost half of the respondents ranked location as the most important factor, while house type was most important for approximately a quarter of respondents. Dwelling features (20%) and Dwelling value (5%) were less important.

4.4 Findings of Demand Preference Survey

The following are the key findings of the demand preference survey:

- Respondents consider that the most important feature of a dwelling are Safe from crime, followed by Freehold Title and Sunny. Other important features of housing includes Safe from natural hazards and Standalone.
- In terms of location choice, there is difference between unconstrained and constrained choice. The difference between the choices shows that financial constraints meant that respondents did not pick popular urban fringe areas (Stoke and Motueka), the survey indicates that respondents traded-off location for price, rather than potentially choosing different typology in the same location for lesser cost.
- The choice date showed that some respondents that live in stand-alone dwellings would be willing to live within higher density dwelling types, mostly attached dwellings and some apartments.

5 Conclusion

The purpose of this report was to investigate housing preferences in the Nelson and Tasman regions, in order to identify what housing typologies will be needed in the future. To do this, a survey of residents in the regions indicated their housing preferences, which when taken with income constraints, provides some clear conclusions about the types of housing most needed by the community currently and into the future.

It is clear from this study that residents in the Nelson and Tasman regions are generally willing to trade off, both the type of dwelling and its location, with dwelling price being a critical consideration - and is the main driver for residents changing dwelling preferences.

Overall, the demand for stand-alone dwellings remains significant. However, demand for attached dwelling, such as apartments, terraces and duplexes, grows significantly. There is a growing appetite for attached dwellings and these types of dwellings become more and more accepted over time.

The following are the key findings of the demand preference survey:

- Respondents consider that the most important feature of a dwelling are Safe from crime, followed by Freehold Title and Sunny. Other important features of housing includes Safe from natural hazards and Standalone.
- In terms of location choice, there is difference between unconstrained and constrained choice. The difference between the choices shows that financial constraints meant that respondents were constrained from selecting popular urban fringe areas (Stoke and Motueka), it would seem that respondents traded-off these locations for other parts of the regions that are cheaper, e.g. rural locations located further from Nelson City and Richmond.
- The choice date showed that some respondents that live in stand-alone dwellings would be willing to live within higher density dwelling types, mostly attached dwellings and some apartments.

Appendix A – Survey Technical Report

Appendix B – Survey sample

The survey sample was derived from Research First's database of land line and mobile phone numbers, which contains several hundred thousand household records.

Distribution of the final survey sample by household type, household income, respondent ethnicity and age are discussed below. The characteristics of the final survey sample are compared to the results from the 2018 Census for households living in the Nelson City and Tasman District regions.

All results were stated based upon the survey sample results. The survey results can be weighted to correct for over- and under-representation.

Household type

Market Economics used 2018 Census data to design a representative sample of household types within each sector (Table A.O.1), and Research First applied all efforts to ensure that the final sample reflected this spread (see Table A.O.2 for final sample)¹⁷. This was achieved by the inclusion of questions in the initial telephone contact to ascertain the individual's household composition and the part of Nelson or Tasman region they lived in.

Table A.O.1: Distribution of household type by catchment area, 2018 Census (%)

| | One-person households | Couples without children | Couple/ single with children | Other multi- person household | TOTAL |
|------------------------|-----------------------|--------------------------------|------------------------------------|----------------------------------|-------|
| | | | | | |
| Nelson Urban | 8% | 9% | 11% | 1% | 29% |
| Stoke | 5% | 6% | 7% | 0% | 19% |
| Nelson Rural | 0% | 1% | 1% | 0% | 2% |
| Total Nelson City | 14% | 16% | 19% | 1% | 50% |
| Richmond | 3% | 5% | 6% | 0% | 14% |
| Motueka | 2% | 3% | 3% | 0% | 8% |
| Wakefield -Brightwater | 1% | 2% | 2% | 0% | 4% |
| Mapua | 0% | 1% | 1% | 0% | 3% |
| Tasman Rural | 5% | 8% | 8% | 1% | 21% |
| Total Tasman District | 11% | 19% | 19% | 1% | 50% |
| TOTAL | 25% | 35% | 38% | 2% | 100% |

¹⁷ Through the survey selection process, the focus was on drawing in respondents from urban areas and minimising the presence of respondents from rural areas. As such, rural areas will be underrepresented in the same by design. Also of note, due to error, Waimea Plains respondents may have been included in Tasman Rural. Therefore, in the presentation of distribution by area, Waimea Plains and Tasman Rural has been combined.

The final sample is broadly similar to the segments required to produce a representative sample. The main differences between the final survey sample and the distribution of household types across the Nelson and Tasman regions population are as follows:

- Nelson is slightly over-represented, where Tasman is under-represented (50% for each in the population, whereas 53:47 split favouring Nelson in the sample).
- Under-representation of couple/single person with children households (36% in the population and 29% in the survey sample).
- Over-representation of couple without children households (34% in the population compared to 40% in the survey sample).
- Under-representation of smaller one person households in Tasman, with 8% of households in the sample being one-person (compared with 11% in the population).
- Over-representation of other multi-person household in Nelson (2% in population and 6% in the survey sample)¹⁸.

Table A.O.2: Distribution of household type by sector, survey sample (%)

| | One-person households | Couples without children | Couple/ single with children | Other multi- person household | TOTAL |
|------------------------|-----------------------|--------------------------------|------------------------------------|----------------------------------|-------|
| Nelson | 10% | 11% | 9% | 3% | 33% |
| Stoke | 3% | 7% | 5% | 3% | 18% |
| Nelson Rural | 0% | 1% | 1% | 0% | 3% |
| Total Nelson City | 13% | 19% | 15% | 6% | 53% |
| Richmond | 2% | 6% | 5% | 1% | 15% |
| Motueka | 3% | 5% | 3% | 1% | 11% |
| Wakefield -Brightwater | 1% | 2% | 3% | 0% | 6% |
| Mapua | 0% | 2% | 0% | 0% | 4% |
| Tasman Rural | 2% | 5% | 3% | 1% | 11% |
| Total Tasman District | 8% | 21% | 14% | 3% | 47% |
| Total | 22% | 40% | 29% | 9% | 100% |

¹⁸ In the sample this type includes respondents whose household was classified as other or other multi-person. In the population data, this includes multi-family, non-family households, and unidentifiable household composition. The difference between the sample and the population is likely from respondents choosing other and when their situation is specified, the response fits one of the set categories.

Household income

The household income distribution of respondents in the final survey sample when to the overall population is fairly similar for Nelson and Tasman (see Table A.O.3). The distribution in the sample (blue bars) for the highest and lowest income groups (less than \$30,000 and more than \$100,000) is lower than the population (blue bars) showing under-representation in Nelson and Tasman. This is offset in both regions by over-representation in the income groups of \$30,000 to \$50,000 and \$70,000-\$100,000.

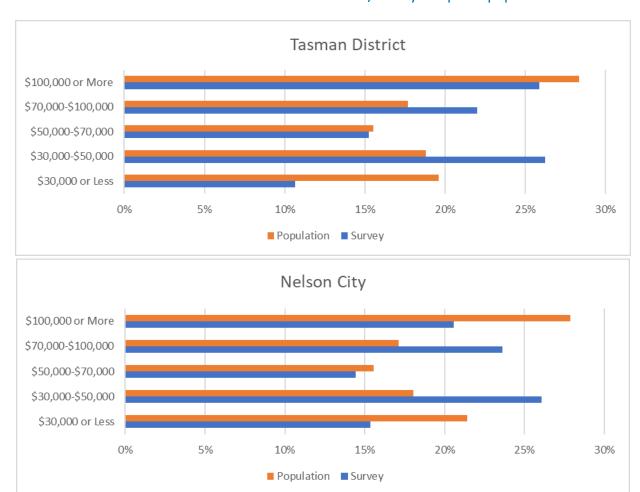


Table A.O.3: Household income distribution, survey sample vs population

Tenure

In both Nelson and Tasman, the survey sample also included a significantly larger proportion of respondents who own their house (own their own or jointly) either outright or with a mortgage than in the general population. This means that the sample has captured fewer households in rental properties than exists in the rest of the population.

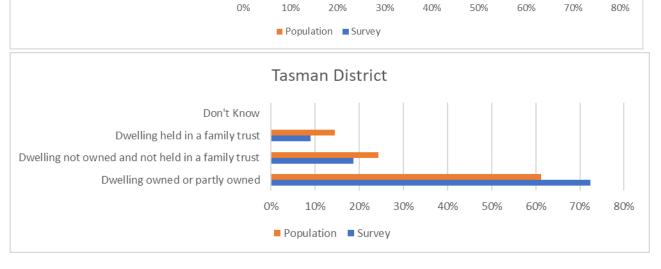
Don't Know

Dwelling held in a family trust

Dwelling not owned and not held in a family trust

Dwelling owned or partly owned

Table A.O.4: Dwelling tenure, survey sample compared to population



Ethnicity

Overall, the ethnicity distribution of the final survey samples for Nelson and Tasman are close to the overall. For both regions, the proportion of respondents in the survey sample who selected other ethnicity is over-represented. This means that the survey sample under-represents all ethnicity groups to some degree, notably including smaller proportions of Maori, Pacific Peoples and Asian than is present in the Nelson and Tasman populations. Upon a casual inspection of the specified response for the respondents which chose other, it appears that the majority of these are people of European ethnicity from foreign countries.

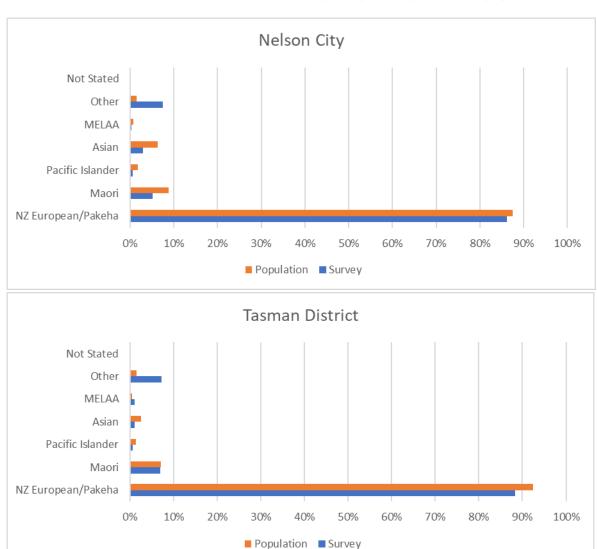


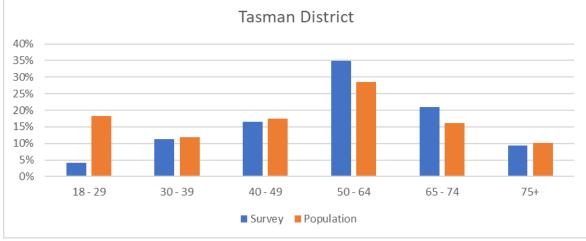
Table A.O.5: Ethnic distribution, survey sample compared with population

Age

The age distribution of the final survey samples for Nelson and Tasman, compared to the general population is shown in Table A.O.6. For Nelson, there was an over-representation of people in older age groups (>40 years) in the final survey sample compared to the general population, and a corresponding under-representation of people in younger age groups (<40 years), with a significantly lower proportion in the 15-29 years age group. The distribution of the Tasman sample was similar. It also had a significant under-representation of the 15-29 years age group, with an over-representation of respondents between 50 and 74 years.



Table A.O.6: Age distribution, survey sample compared with population





Tasman District and Nelson City Councils

HOUSING PREFERENCES STUDY

Technical Report | May 2021





| 1 | Research Overview | 3 |
|---|-------------------------------------|----|
| 2 | The Survey Components | 5 |
| 3 | Appendix One: Questionnaire | 12 |
| 4 | Annendix Two: Housing Ontion Slides | 35 |

Disclaimer:

Research First notes that the views presented in the report do not necessarily represent the views of Tasman District and Nelson City Councils. In addition, the information in this report is accurate to the best of the knowledge and belief of Research First Ltd. While Research First Ltd has exercised all reasonable skill and care in the preparation of information in this report, Research First Ltd accepts no liability in contract, tort, or otherwise for any loss, damage, injury or expense, whether direct, indirect, or consequential, arising out of the provision of information in this report.



Section 1

RESEARCH OVERVIEW



Tasman District Council and Nelson City Council commissioned Research First and Market Economics to complete a study to understand housing preferences in Tasman and Nelson in 2021.

Research First was responsible for the data collection and this report outlines how that study was completed. It is an adjunct to the report prepared by Market Economics.

This research project was based on a 2011 Australian study conducted by the Grattan Institute, entitled The Housing We'd Choose. Research First and Market Economics have worked in partnership to complete similar projects for Auckland City Council, Dunedin City Council, and Hamilton City Council, Waikato District Council and Waipa District Council.

Research First surveyed a representative sample of 622 respondents from Nelson and Tasman districts between 25 March and 25 April 2021 and quotas were set to ensure life stage and geographic coverage.

The sample of Nelson and Tasman residents was obtained from an online panel and by ringing households in the region and inviting them to take part in the online survey.

This survey covered what respondents look for when choosing a place to live and asked for feedback on a range of housing options and designs. It was conducted online in order to give respondents the time they needed to make decisions, and to properly conduct the choice experiment, including accounting for financial limitations and presenting visuals.

The available sample contained 14,309 records. Of these, 891 indicated that they were interested in taking part in the survey. This equates to a response rate of 6%. Out of the 891 individuals who started the online survey, 622 completed the questionnaire. This equates to a completion rate of 70%. With an achieved sample size of 622, the results have a margin of error of +/-3.9% at a 95% confidence level.



Section 2

THE SURVEY COMPONENTS



2.1 Method

Design of the research took into account two major requirements:

- The total sample needed to be representative of the region's population, so the results could be extrapolated; and
- The survey would need to involve a discrete-choice experiment where participants were shown a range of housing choices (but where the choices available to them were constrained by their personal circumstances).

Consequently, an online survey was required because it can filter choices and show visual material. The benefits of this method include:

- **Cost-effective data collection.** Online data collection is cost-effective as there is no interviewer present (and labour costs are minimised);
- **Asynchronous completion.** Online data collection allows for respondents to complete the survey in their own time, to maximise response rates; and
- **Sophisticated questionnaire programming.** Modern online survey technology allows options to be presented, and a discrete choice experiment to be conducted.

2.2 Sample Design

Quota-based sampling was used to ensure the results are representative of the region's population.

The sample framework was designed to encompass different household types and different areas of the region.

Table 2.2.1: Locations - Population, Quotas and Completed Surveys

| Location | Household Estimates | Quota | Surveys Complete | % of Population | % of Survey Respondents |
|---------------------------|------------------------|-------|---------------------|-----------------|----------------------------|
| Nelson | | | | | |
| Nelson Urban | 19,112 | 289 | 315 | 96% | 95% |
| Nelson Rural | 710 | 11 | 17 | 4% | 5% |
| Subtotal | 19,822 | 300 | 332 | 100% | 100% |
| Tasman | | | | | |
| Tasman Urban ¹ | 11,017 | 240 | 219 | 56% | 76% |
| Tasman Rural | 8,535 | 60 | 71 | 44% | 24% |
| Subtotal | 19,552 | 300 | 290 | 100% | 100% |
| Total | 39,374 | 600 | 622 | | |

¹ At the request of the client, the quota for individuals in the Tasman Urban area was increased. Rather than aim for 56% Urban and 44% Rural, we aimed for 80% Urban and 20% Rural.



Table 2.2.2: Household type - Population, Quotas and Completed Surveys

| Household type | Household Estimates | Quota | Surveys Completed | % of Population | % of Survey Respondents |
|---|------------------------|-------|----------------------|-----------------|----------------------------|
| Nelson | | | | | |
| One-person households (aged <65 years) | 2,471 | 37 | 34 | 12% | 10% |
| One-person households (aged >65 years) | 2,732 | 41 | 48 | 14% | 14% |
| Couples without children (aged <65 years) | 3,733 | 56 | 60 | 19% | 18% |
| Couples without children (aged >65 years) | 2,424 | 37 | 60 | 12% | 18% |
| Couple/single with children | 7,209 | 109 | 94 | 36% | 28% |
| Other multi-person household | 1,253 | 20 | 36 | 6% | 11% |
| Subtotal | 19,822 | 300 | 332 | 100% | 100% |
| Tasman | | | | | |
| One-person households (aged <65 years) | 1,952 | 30 | 27 | 10% | 9% |
| One-person households (aged >65 years) | 2,318 | 36 | 25 | 12% | 9% |
| Couples without children (aged <65 years) | 3,886 | 60 | 68 | 20% | 23% |
| Couples without children (aged >65 years) | 3,233 | 50 | 62 | 17% | 21% |
| Couple/single with children | 7,163 | 109 | 88 | 37% | 30% |
| Other multi-person household | 1,000 | 15 | 20 | 5% | 7% |
| Subtotal | 19,552 | 300 | 290 | 100% | 100% |
| Total | 39,374 | 600 | 622 | | |



2.3 Questionnaire Design

Research First's experience with online surveying demonstrates that questionnaire design is the key to successful research outcomes. There is considerable evidence that both participation and completion rates for surveys are negatively correlated with questionnaire difficulty in general and length in particular.

When introducing the survey, Research First ensured that the participant was provided with a credible expectation of the duration of the survey. Research First worked with the Councils and Market Economics to ensure the survey questions were concise, free from misinterpretation, and provided a credible opportunity for the generation of effective data.

The full questionnaire is available in Appendix One.

2.4 Questionnaire Programming

The survey was programmed in Voxco, the online survey software used by Research First. Voxco is a robust quantitative survey platform, which allows researchers to program questionnaires in complex ways.

The data form used by the research team ensured participants could not simply 'skip' through fields of relevant information.

The use of a software system like Voxco is instrumental in delivering high quality data because it limits the opportunity for invalid or erroneous data in the datafile.

2.5 Questionnaire Pilot

All surveys undertaken by Research First are subject to a pilot phase. For this project, the online survey was initially piloted internally in 'test' mode by Research First staff and Council Staff. A second pilot was then conducted during the "soft launch" phase. The first 20 responses to the online survey were analysed to ensure individuals were able to complete the survey with ease.

This extensive testing process aimed to make sure the questionnaire was fit for purpose, and the resulting data would best meet the Councils' needs. Research First believes that high quality data collection relies on maximising response rates through a simple, clear questionnaire.



2.6 Housing Preferences

The first part of the survey aimed to identify the relative importance of different housing attributes (when unconstrained by income or assets). It first gathered some additional demographic details, including home ownership, current location of home, and tenure. It then explored residents' motivations to move, and locations under consideration.

To explore preferences for housing attributes, respondents were shown a list of 50 different housing attributes (see the questionnaire in Appendix One). These attributes were organised into four categories. Respondents were shown one category at a time, and asked to rate each attribute as 'not important', 'of some importance' or 'very important'.

Respondents were then shown the items they had selected as being 'very important', and asked to rank the top five. These were presented as their set of top five preferences for housing attributes.

2.7 Housing Trade-Offs: A Discrete Choice Experiment

The second part of the survey aimed to develop an understanding of the actual trade-offs that residents make when choosing a house. This stage of the project explored how residents considered housing type, size and location within the constraints of their incomes and assets.

The method chosen for this was a discrete choice experiment. This is a rigorous research method which can be used to assess the trade-offs residents would make when choosing a house. The experiment aimed to determine the relative importance the population places on location, housing type, and housing size. It also aimed to assist in the creation of a choice model based on the hypothetical choices made in the study. Through statistical analysis of choices between different housing options, the experiment can help determine what choices the population would make in a real-world scenario.

Research First worked with Market Economics and the Councils to determine the different housing options. These options took into consideration the types of dwelling, number of bedrooms, number of bathrooms, land area, floorspace, and locations. In total 102 different housing options were constructed.

Market Economics then determined realistic costs for each housing option, in order to be able to incorporate budgetary constraints in the model. Housing cost estimates were generated by location, by typology based on a standard development feasibility model.

Housing costs were pre-estimated for each location/typology option as an input into the trade-off questions. Market Economics also used detailed rental information from MBIE (which shows rental levels by property type and size, by location) to establish the key patterns and parameters of the rental sector. It was important for the study to determine rental prices and buying prices, and treat each separately (as the rental and buying markets may make choices in different ways).

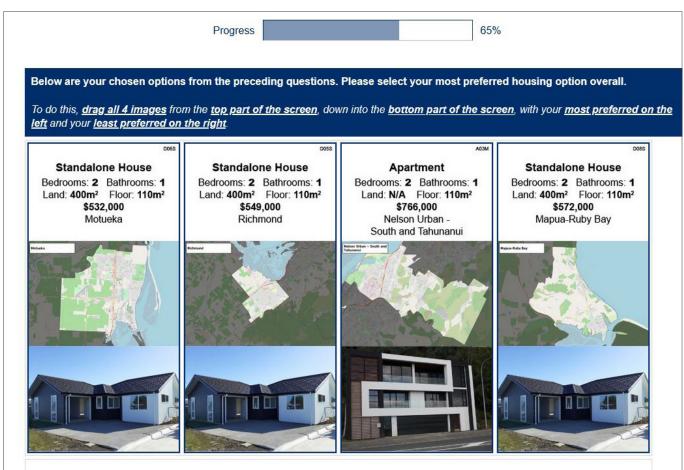
In this choice experiment, a full-factorial model was not appropriate (because of the number of potential choice sets and the need for real-world application). Hence, the experiment first determined each respondents' budgetary



constraints. This was done by developing a simple budget calculator, similar to a mortgage calculator. The budget calculator defined the maximum mortgage a household could afford, based on key factors such as income, dependents, credit limits, fixed expenses, and equity. The maximum rent that households could afford was simply based on their income.

The Grattan study employed conditional logit modelling to determine the degree to which respondents valued one option over another. For this model to be reproduced, it was necessary to reduce the total potential combination of housing options presented to any one respondent. Each respondent therefore received four sets of four choices, each within their budgetary constraints. An example is shown in Figure 2.7.1. They were finally presented the four options they had chosen, and asked which was their most preferred. A full list of the housing option slides can be found in Appendix 2.

Figure 2.7.1: Example Choice Set





2.8 Quality Control

Research First has a commitment to good quality data. To this end, Research First included quality control processes, such as:

- Pre-testing the questionnaire;
- Using appropriate software to ensure data collection is managed in an efficient manner;
- Back-up of all data to an offsite location on a regular basis to ensure there
 is no accidental loss of response due to system failure; and

Research First reviewed the final data set to ensure that it was as clear and concise as possible.



Section 3

APPENDIX ONE: QUESTIONNAIRE





PART ONE: Telephone Invitation

CATI introduction text

INITIAL INTRODUCTION: Good <%~_DayPart_%> my name is <%~_IterName_%> from Research First, an independent research company.

I'm calling today on behalf of Nelson City and Tasman District Councils to carry out research about housing in Neslon and Tasman.

Housing is an important issue the Councils wish to better understand people's housing choices and preferences.

Slight pause

Would you be interested in taking part?

Pause for response - continue if yes, if no ask if anyone else in the household would like to take part.

Thanks so much, I will explain a bit more about the survey.

It is in two parts:

First, we'll gather a few details over the phone, which will only take a few minutes.

Then I'll send you a link to an online survey, which should take around 20-25 minutes to complete and you can do in your own time over the next week.

Everyone who takes part is also entered into a prize draw for a chance to win \$500 cash, or a donation to a charity of their choice.

Do you have time available now to help out?

Screening Questions

Single Response

SC1. Are you employed in the market research industry?

Code Description Routing

1 No

2 Yes End2Screening

Single Response

SC2. Are you over 18 years of age?

Code Description Routing

1 Yes

2 No End2Screening

Information

Before we begin, please note that:





Research First will never pass on information to the client or any other company, which might identify you personally;

You have the right to have your personal data corrected or removed from our database;

You have the right to decline, or withdraw from the research at any time;

This call is recorded for training and auditing purposes.

Single Response

<u>READ OUT:</u> I'd like to start by asking a few questions about you and your household. The information will be used for ensuring that we talk to a wide and representative cross section of Nelson and Tasman residents.

SC3. Which of the following types best describes your household make up: Read out.

Quotas Description Open category
One person households (aged under 65 years old)

One person households (aged 65 years and over) Couple without children (aged under 65 years old) Couple without children (aged 65 years and over)

Parent(s) or caregiver(s) with children

Other multi-person household (e.g., flatting/ student flat etc)

Other (please specify)

Current Suburb or Town Living

Single Response

SC4. To ensure that we include people from all over the Nelson and Tasman areas, can you please tell me which suburb or town you currently live in?

Interviewer- Type the first 3 letters of the suburb description and select "show list". From the list you can select the suburb

| <u>Code</u> | <u>Description</u> | Routing |
|-------------|-------------------------|---------------|
| 1 | Nelson | |
| 2 | Tahunanui | |
| 3 | Stoke | |
| 4 | Nelson Rural | |
| 5 | Richmond | |
| 6 | Motueka | |
| 7 | Wakefield -Brightwater | |
| 8 | Mapua | |
| 9 | Waimea Plains | |
| 10 | Tasman Rural | |
| 11 | Not in Nelson or Tasman | End2Screening |





First Name

Text

SC5. Can you please provide me with your first name? We will only use this for internal auditing purposes, and to personalise our emails to you.

Write first name ONLY even if they give you surname.

<#Question>

Email Address

Text

SC6. As I mentioned at the start of this call, the research involves an online survey. This is because it's easier for you to understand what we are asking you to do if you can see the questions on a screen.

Can I please take your email address so I can send you through a unique link to the online survey?

IMPORTANT- Please check and confirm the spelling of the email - read it back to them.

The link to the questionnaire will be sent to the respondents email address when you select "next".

Farewell

Info Page

SC7. Ok. that concludes this call.

The link will be sent immediately, so if you don't receive it, please check your spam folder - it will be sent from 'survey@researchfirst.co.nz'.

Thanks so much for your time and assistance, just to remind you my name is <%~_IterName_%> from Research First, have a great day.





PART TWO: Online Survey

Email invite

Thanks for taking the time to speak with us on the phone, and for your interest in taking part in the Tasman District and Nelson City Councils' Housing We'd Choose survey.

Here is the link to the online survey: [insert link]

As our interviewer explained on the phone, we are interested in the types of choices that people from the Nelson and Tasman areas make and the preferences they have when choosing a home.

The online survey will ask you about your current situation and the things that are important to you when choosing a home, and then present you with various options of types of housing in the Nelson and Tasman areas.

The survey should take around 20-25 minutes to complete. You don't have to finish it all in one sitting - you can close your browser, and it will remember where you go up to. Just click on the link in this email when you are ready to take part.

Everyone who takes part is also entered into a prize draw to win \$500 cash, or a donation to a charity of their choice.

You will not be personally identified by this research, and we take your confidentiality seriously. For your information, we have included a link to our privacy policy.

If you have any questions about the research, please contact the project manager, James Maguire, on 0800 734 778.

Web Introduction

Info Page

Welcome to the Tasman District and Nelson City Councils "Housing We'd Choose" survey!

We are interested in the types of choices that people from Nelson and Tasman make and the preferences they have when choosing a home. The survey will ask you about your current situation and the things that are important to you when choosing a home, and then present you with various options of types of housing in the Nelson and Tasman areas.

It should take around 20-25 minutes, and you don't have to finish it all in one sitting - if you close your browser, it will remember where you got up to if you click the link in your invite email again.

Everyone who takes part is also entered into a prize draw to win \$500 cash, or a donation to a charity of their choice.

If you have any questions about the research, please contact Research First on 0800 734 778.

You will not be personally identified by this research, and we take your confidentiality seriously. For your information, we have included a link to our privacy policy (please click here).

Please click below to begin.



SECTION 1: About your Current Situation

Single Response

The first part of the questionnaire asks about your current housing situation, such as the type of dwelling you live in, how long you have lived there, and your future housing requirements.

Q1. What type of dwelling do you currently live in?

| <u>Code</u> | <u>Description</u> | Open category |
|-------------|--|---------------|
| 1 | A stand-alone dwelling | |
| 2 | A unit or attached dwelling (e.g. duplexes or flats) | |
| 3 | Terraced housing or unit in a building up to 2 storeys | |
| 4 | An apartment or unit in a building 3 storeys or more | |
| 98 | Other dwelling (e.g. caravan, cabin, houseboat) | |
| | | |

Single Response

Q1a. How many bedrooms are in your current dwelling?

| <u>Code</u> | <u>Description</u> |
|-------------|--------------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6+ |
| | |

Single Response

Q2. Who owns the dwelling that you currently live in?

| Code | <u>Description</u> | <u>Open</u> category |
|------|--|-------------------------|
| 1 | I own this dwelling with a mortgage | |
| 2 | I own this dwelling without a mortgage | |
| 3 | I jointly own this dwelling with other people with a mortgage | |
| 4 | I jointly own this dwelling with other people without a mortgage | |
| 5 | A family trust owns this dwelling | |
| 6 | Parents / other family members or a partner owns this dwelling | |
| 7 | A private landlord who is not related to me owns this dwelling | |
| 8 | A local authority or council owns this dwelling | |
| 9 | Housing New Zealand/Kāinga Ora owns this dwelling | |
| 98 | Other landlord (such as Department of Conservation, Ministry of Education, Iwi, Nelson Tasman Housing Trust, Habitat for Humanity, Abbeyfield, Golden Bay Housing Trust) | |
| 99 | Don't know | |

Single Response

Q3. How long have you lived in your current dwelling?

| <u>Code</u> | <u>Description</u> |
|-------------|--------------------------------|
| 1 | Less than one year |
| 2 | 1 year to just under 2 years |
| 3 | 2 years to just under 5 years |
| 4 | 5 years to just under 10 years |
| 5 | 10 years or more |



Single Response

Q4. Do you plan on moving in the next five years?

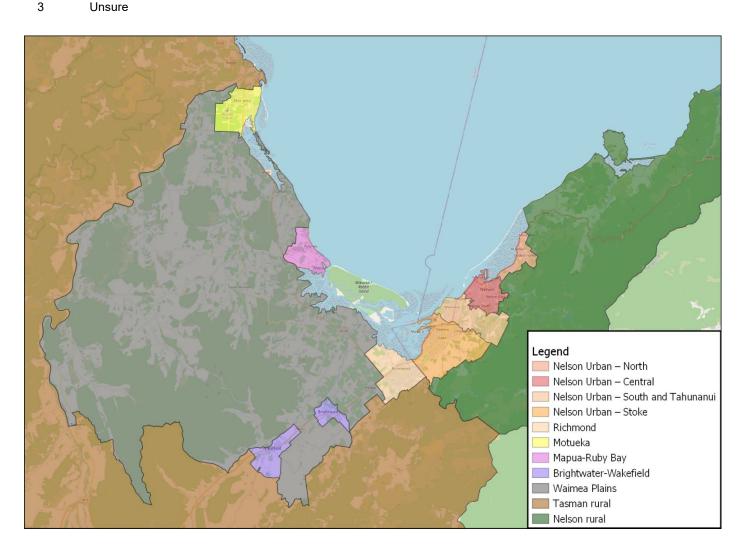
Code Description1 Yes2 No3 Unsure

ASK IF Q4 = 1, ELSE SKIP

Single Response

Q5(a). Where are you thinking of moving to?

| <u>Code</u> | <u>Description</u> |
|-------------|--|
| <u>1</u> | Within the one of the areas highlighted on the map |
| 2 | Outside of the areas highlighted on the map |
| _ | |







ASK IF Q5a = 1, ELSE SKIP

Single Response

Q5(b). What part of the Nelson / Tasman areas are you considering moving to?

Please click on 'select an answer' below and choose from the dropdown menu. If your chosen suburb does not appear, please type it in the space provided at 'Other' list.



| Code | Description |
|------|------------------------------------|
| 1 | Nelson Urban – Central |
| 2 | Nelson Urban – North |
| 3 | Nelson Urban – South and Tahunanui |
| 4 | Nelson Urban – Stoke |
| 5 | Richmond |
| 6 | Motueka |
| 7 | Wakefield -Brightwater |
| 8 | Mapua |
| 9 | Waimea Plains |
| 10 | Tasman Rural |
| 11 | Nelson Rural |
| 96 | Other (please specify) |

Single Response

Q6. What would be the main factor that would motivate you to move? [Randomise answering options]

<u>Description</u> <u>Open category</u>

To change to a better location, (e.g. closer to work or study, family or amenities)

To get into a particular school zone or catchment

To have a bigger home

To have a smaller home

To move from renting to buying a home

To live in a more affordable home

If there was a change in my personal circumstances (e.g. who I would live with)

Other (please specify)





SECTION 2: About your Preferred Housing Features

The next part of the survey examines how important various features are to you when you think about choosing a place to live. This includes features related to general location, proximity to local facilities, the local environment, the property, and the dwelling itself.

Please provide an answer for each individual item and be as honest as you can in your responses.

Even if you are not intending to move in the near future, you can still complete this section. Please consider how important each of them would be to you, in your current circumstance, if you were to think about choosing a place to live.

If any of the features are not applicable to your current situation, please select "Not important".

Single Grid

Q7. Please rate the importance of the following general location features. Please provide an answer for each individual item below. [Randomise answering options]

| <u>Code</u> | <u>Description</u> | |
|-------------|--------------------|--|
| 1 | Not important | |
| 2 | Of some importance | |
| 3 | Very important | |

General location features

Description Condition

Near family and friends

Easy access to places of work

Easy access to City or town centre

Easy access to centre amenities

Easy access to shops

Easy access to the airport

Easy access to bars, pubs, nightlife, restaurants and cafes

Easy access to place of study

Ability to walk / cycle to work or study

Easy walking/cycling distance to centre

Easy access to public transport

In a familiar area





Single Grid

Q8. Please rate the importance of the proximity to the following facilities. Please provide an answer for each individual item below. [Randomise answering options]

Code Description
Not important
Of some importance
Very important

Proximity to facilities

List definition

Description Condition

Near a sports club/fields

Near a recreation activities involving, walking, running, cycling tracks, kayaking

Near a park or reserve

Near a community centre

Near a gym

Near a library

Near to a place of worship

Near the coast or beach

Near a GP/healthcare provider

Near a hospital

Near a preferred school

Single Grid

Q9. Please rate the importance of the following aspects of the local environment. Please provide an answer for each individual item below. [Randomise answering options]

Code Description
1 Not important
2 Of some importance
3 Very important

Aspects of the local environment

List definition

Description Condition

Sea view

Landscape view

City view

Presence of trees

A physically attractive neighbourhood

Safe from crime

Away from busy roads

Away from industrial areas

Sense of community

Lack of noise

Safe from natural hazards (e.g. flooding, landslide, earthquake)

Vibrancy

Rural/semi-rural character





Single Grid

Q10. Please rate the importance of the following property features. Please provide an answer for each individual item below. [Randomise answering options]

Code Description
Not important
Of some importance
Very important

Property features

List definition

Description Condition

Freehold title
Is on a flat section

No stairs

Standalone dwelling

Attached dwelling (e.g. duplexes, townhouses or terraced housing)

North facing

Section easy to maintain

Large section Has a lawn

Balcony/courtyard/outdoor dining space

Adequate garaging/off-street parking

Fully fenced

Sunny

Has a second dwelling

ONLY SHOW ITEMS RATED VERY IMPORTANT IN Q7 TO Q10

Q11. The table below includes all the items you have rated as being very important. Can you now please rank your top 5 preferences, in order of importance?

Please record your preferred order by typing 1 (most important preference), 2, 3, 4 and 5 in the boxes below. You may only enter one of each ranking.

PropertyValueRandomise listYesRandomise0Maximum5

Possible VALUES 1,2,3,4,5

Minimum total 1
Maximum total 15
Whole numbers only Yes
All numbers unique Yes
Empty allowed Yes



SECTION 3: Living and Working

Living and Working Suburbs SHOW Q12 AND Q13 ON THE SAME SCREEN

Next, we need to know which suburbs you live and work in.

Q12. You have told us you are currently living in (FILL FROM SC4)

Single Response

Q13. Which suburb are you currently working in?

Please click on 'select an answer' below and choose from the dropdown menu. If your chosen suburb does not appear, please type it in the space provided at 'Other'

If you are not currently employed or you work in more than one area, please choose the relevant option at the bottom of the list.



DROPDOWN LIST

997 I am a student998 I work from home

Description

Code

| |
|---------------------------------------|
| Nelson Urban – Central |
| Nelson Urban – North |
| Nelson Urban – South and Tahunanui |
| Nelson Urban – Stoke |
| Richmond |
| Motueka |
| Wakefield -Brightwater |
| Mapua |
| Waimea Plains |
| Tasman Rural |
| Nelson Rural |
| |
| Other (please specify) |
| I work outside Nelson or Tasman |
| I am not currently working |
| I am retired |
| |

999 I work in more than one part of Nelson or Tasman

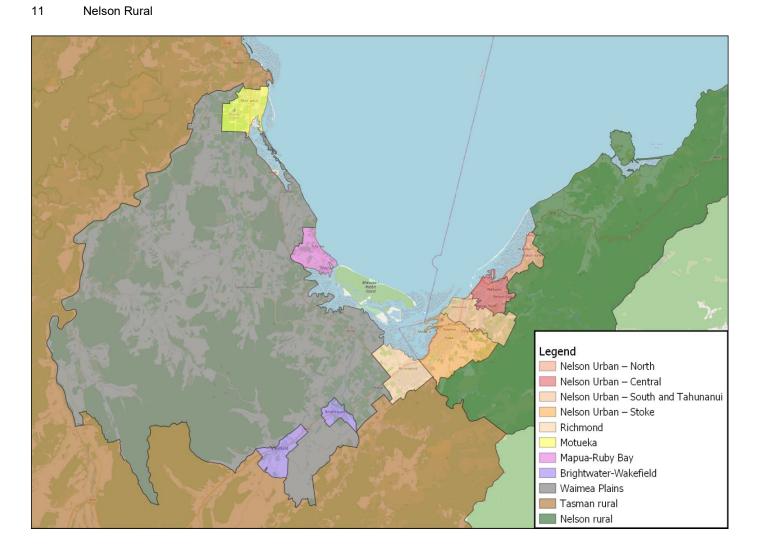


Preference Map

Single Grid

Q14. Please look at the map below. Given your financial situation and your knowledge of house prices and rents in Nelson and Tasman, please select the two areas where you would most like to live. Please use the grid below the map to indicate your first and second choices.

| | <u>Code</u> | <u>Description</u> | |
|-------------|------------------------------------|--------------------|--|
| Q14_A1 | 1 | First choice: | |
| Q14_A2 | 2 | Second choice: | |
| <u>Code</u> | Description | <u>1</u> | |
| 1 | Nelson Urb | oan – Central | |
| 2 | Nelson Urb | oan – North | |
| 3 | Nelson Urban - South and Tahunanui | | |
| 4 | Nelson Urb | oan – Stoke | |
| 5 | Richmond | | |
| 6 | Motueka | | |
| 7 | Wakefield - | -Brightwater | |
| 8 | Mapua | | |
| 9 | Waimea Pl | ains | |
| 10 | Tasman Ru | ural | |







Financial Description

The rest of the survey focuses on the housing you would choose to buy, or to rent, within the Nelson and Tasman areas. In order to do this, we need to first ask some questions relating to your current financial situation.

The following questions are designed to calculate a maximum amount for your household to buy, or to rent, within your preferred parts of the Nelson and Tasman areas.

Please answer the questions as honestly and accurately as you can.

The information you provide will remain confidential and will only be used for the purposes of this survey.

Click below to continue.

Household Composition

Q15. To factor in the typical living costs (e.g. food, utilities, rates, insurance etc.) of running a household of your size, please indicate the number of dependents that would be living with you.

Composition Adult

Numerical

Q15 ADULT Description

To start with, please can you tell us how many adults are currently living in your household, including yourself? By adults we mean people aged 18 years and over.

Composition Child

Numerical

Q15_CHILD Description

And how many children aged up to 18 are living with you? By that we mean on a full-time basis (more than five days a week) Please enter '0' if children do not reside with you

HOUSEHOLD SIZE = (Q15 ADULT) + (Q15 CHILD)

Presence of a Second Income Earner

Single Response

Q15a. Is the household income earned by one person, or more than one person?

Code DescriptionOne person

1 More than one person

SECOND_EARNER = IF(Q15b='More than one person',1,0)





Income

Single Response

Q16. Please select your annual household income range (before tax) from the list below: If you don't know, please give your best estimate.

| • | , . |
|-------------|-----------------------|
| <u>Code</u> | <u>Description</u> |
| 1 | less than \$30,000 |
| 2 | \$30,000 - \$34,999 |
| 3 | \$35,000 - \$39,999 |
| 4 | \$40,000 - \$44,999 |
| 5 | \$45,000 - \$49,999 |
| 6 | \$50,000 - \$59,999 |
| 7 | \$60,000 - \$69,999 |
| 8 | \$70,000 - \$79,999 |
| 9 | \$80,000 - \$89,999 |
| 10 | \$90,000 - \$99,999 |
| 11 | \$100,000 - \$109,999 |
| 12 | \$110,000 - \$119,999 |
| 13 | \$120,000 - \$129,999 |
| 14 | \$130,000 - \$139,999 |
| 15 | \$140,000 - \$149,999 |
| 16 | \$150,000 - \$174,999 |
| 17 | \$175,000 - \$199,999 |
| 18 | \$200,000 - \$224,999 |
| 19 | \$225,000 - \$249,999 |
| 20 | \$250,000 - \$274,999 |
| 21 | \$275,000 - \$299,999 |
| 22 | \$300,000 - \$324,999 |
| 23 | \$325,000 - \$349,999 |
| 24 | \$350,000 - \$374,999 |
| 25 | \$375,000 - \$399,999 |
| 26 | \$400,000 or more |
| | |

INCOMEVAL = PRJ(Q16, 30000, 30000, 35000, 40000, 45000, 50000, 60000, 70000, 80000, 90000, 100000, 110000, 120000, 130000, 140000, 150000, 175000, 200000, 225000, 250000, 275000, 300000, 325000, 350000, 375000, 400000)

Credit Limits

Numerical

Q17. What are your credit limits on the following?

Please type the amount in the appropriate boxes below Please enter '0' if an item doesn't apply. Please do not include commas or decimal points.

| | <u>Code</u> | <u>Description</u> |
|--------|-------------|--------------------|
| Q17_CC | 1 | Credit card/s: |
| Q17_OD | 2 | Overdraft: |



Grouped Expenses

Fixed Expenses

Q18. Fixed Expenses are expenses that you are committed to regularly paying (such as hire purchase payments, child support, personal loans or student loans). This does not include typical household living costs such as groceries, power, rent and mortgage.

Please calculate a combined amount for your household and type it in the box below:

Please enter '0' if an item doesn't apply.

Please do not include commas or decimal points.

Please also indicate whether this combined amount is on a weekly, fortnightly, monthly or annual basis:

Expenses

Numerical

Q18 A1 Description

Total expenses or outgoings:

Expenses Timing

Single Grid

Frequency of payment:

| Q18_B1 | <u>Code</u> | <u>Description</u> |
|--------|-------------|--------------------|
| | 0 | No expenses |
| | 1 | Weekly |
| | 2 | Fortnightly |
| | 3 | Monthly |
| | 4 | Yearly |

EXPENSES_NORMAL = ([Q18_A1]) *

IF((Q18_B1=0),0,(IF((Q18_B1=1),4.25,(IF((Q18_B1=2),2.125,(IF((Q18_B1=3),1,(IF((Q18_B1=4),0.083,0))))))))

Equity

Code

Single Response

Q19. Please select the amount of money you could realistically raise for a deposit on a home. It could include equity on an existing property, savings, help from family or other assets/ investments you may choose to sell.

Please remember to include any grants you may be entitled to such as FirstHome or money from your KiwiSaver Investments. If you don't know, please give your best estimate.

| 0000 | Doddription |
|------|-----------------------|
| 1 | less than \$50,000 |
| 2 | \$50,000 - \$99,999 |
| 3 | \$100,000 - \$149,999 |
| 4 | \$150,000 - \$199,999 |
| 5 | \$200,000 - \$249,999 |
| 6 | \$250,000 - \$299,999 |
| 7 | \$300,000 - \$349,999 |
| 8 | \$350,000 - \$399,999 |
| 9 | \$400,000 - \$449,999 |
| 10 | \$450,000 - \$499,999 |
| 11 | \$500,000 - \$599,999 |
| 12 | \$600,000 - \$699,999 |
| 13 | \$700,000 - \$799,999 |

Description





```
$800,000 - $899,999
14
         $900,000 - $999,999
15
16
         $1,000,000 - $1,099,999
         $1,100,000 - $1,199,999
17
         $1,200,000 - $1,299,999
18
19
         $1,300,000 - $1,399,999
20
         $1,400,000 - $1,499,999
21
         $1,500,000 or more
```

EQUITYVAL = PRJ(Q19, 50000, 50000, 100000, 150000, 200000, 250000, 300000, 350000, 400000, 450000, 500000, 600000, 700000, 800000, 900000, 1000000, 1100000, 1200000, 1300000, 1400000, 1500000)

Calculation

(See Market Economics' Mortgage Calculotar Spreadsheet dated 19-02-21)

```
INCOME_CALC = ((([INCOMEVAL])/10000) * 64867)

ADDITIONAL_INC = (([SECOND_EARNER])*51000)

ADULT_CALC = IF((Q15A=1),([Q15_ADULT]-2) * 57000,([Q15_ADULT]-1) * 57000)

CHILDREN_CALC = ((([Q15_CHILD]) * 12000)

OVERDR_CALC = ((([Q17_OD]) / 1000) * 7000)

CC_CALC = ((([Q17_CC]) / 100) * 400)

IF [EXPENSES_NORMAL] > 2000, THEN FIX_CALC = ((([EXPENSES_NORMAL] - 2000) / 10) * 1500).

IF EXPENSES_NORMAL] < 2000, THEN FIX_CALC = 0.

TOTAL_CALC = ((((([INCOME_CALC]) + ([ADDITIONAL_INC]) - ([ADULT_CALC])) - ([CHILDREN_CALC]))

- ([OVERDR_CALC])) - ([CC_CALC])) - ([FIX_CALC]))

TOTALMORT_INCLEQ = ([TOTAL_CALC]) + ([EQUITYVAL])
```

RENT_CALC = (([INCOMEVAL]) / 100) * 30 MONTHLY_RENT = ([RENT_CALC]) / 12 WEEKLY_RENT = TRC (([RENT_CALC]) / 52)

BUY SKIP (GO TO RENT) IF:

(TOTALMORT_INCLEQ_NUM < 403000) OR (TOTALMORT_INCLEQ_NUM<418000 AND HOUSEHOLD_SIZE>=4) OR (TOTALMORT_INCLEQ_NUM<562000 AND HOUSEHOLD_SIZE>=5)

RENT SKIP (GO TO Q22) IF:

(WEEKLY_RENT < 300) OR (WEEKLY_RENT<300 AND HOUSEHOLD_SIZE>=4) OR (WEEKLY_RENT<330 AND HOUSEHOLD_SIZE>=5)

If more than one Buy option available, go to Buy Section.
If not, check that more than one Rent option is available, then go to Rent Section.
If less than one Buy or Rent options available, go to Q22





Text for BUY SECTION

In this part of the survey you will be presented with various housing options that would potentially be available to you.

Given the details you provided previously, our calculator suggests that you could potentially afford to buy a house worth: TOTALMORT INCLEQ

Consider the options in each set carefully before moving forward to the next set. There will be a maximum of four sets and a final decision set.

Please note that the same housing options may be presented under multiple sectors. Your preferred sectors have been considered, but some options may be excluded due to affordability. Also it may be possible that you are shown housing that you feel is impractical for your household or family type. Please make a selection based on the most attractive and best fit in other respects as you will be given the opportunity to explain this after your final selection.

Please assume that all the housing options presented are new and of medium standard quality.

Click below to continue.

.

Text for RENT SECTION

In this part of the survey you will be presented with various housing rental options that would potentially be available to you.

Given the details you provided previously, our calculator suggests that you could potentially afford a rental of: **WEEKLY RENT** per week.

Consider the options in each set carefully before moving forward to the next set. There will be a maximum of four sets and a final decision set.

Please note that the same housing options may be presented under multiple sectors. Your preferred sectors have been considered, but some options may be excluded due to affordability. Also it may be possible that you are shown housing that you feel is impractical for your household or family type. Please make a selection based on the most attractive and best fit in other respects as you will be given the opportunity to explain this after your final selection.

Please assume that all the housing options presented are new and of medium standard quality.

Click below to continue.





Buy Set 1 or Rent Set 1

Single Response

Please select your preferred [housing / rental] option from the following options (Set 1).

To make your choice, click on the image of your preferred option until the frame changes from yellow to black, then click the arrow at the bottom of the page to advance to the next set.

Please choose carefully as you will not be able to alter your selection by going back.

Please assume that all the housing options presented are new and of medium standard quality.

Buy Set 2 or Rent Set 2

Single Response

Please select your preferred [housing / rental] option from the following options (Set 2).

To make your choice, click on the image of your preferred option until the frame changes from yellow to black, then click the arrow at the bottom of the page to advance to the next set.

Please choose carefully as you will not be able to alter your selection by going back.

Please assume that all the housing options presented are new and of medium standard quality.

Buy Set 3 or Rent Set 3

Single Response

Please select your preferred [housing / rental] option from the following options (Set 3).

To make your choice, click on the image of your preferred option until the frame changes from yellow to black, then click the arrow at the bottom of the page to advance to the next set.

Please choose carefully as you will not be able to alter your selection by going back.

Please assume that all the housing options presented are new and of medium standard quality..

Buy Set 4 or Rent Set 4

Single Response

Please select your preferred [housing / rental] option from the following options (Set 4).

To make your choice, click on the image of your preferred option until the frame changes from yellow to black, then click the arrow at the bottom of the page to advance to the next set.

Please choose carefully as you will not be able to alter your selection by going back.

Please assume that all the housing options presented are new and of medium standard quality..





Buy Decide on One or Rent Decide on One

Single Response

Final Set1

Below are your chosen options from the preceding questions. Please select your most preferred housing option overall.

To do this, <u>drag the all 4 images</u> from the <u>top part of the screen</u>, down into the <u>bottom part of the screen</u>, with your <u>most</u> preferred on the left and your least preferred on the right.

Decisions Making Factors

Single Response

Q20. If you planned to move tomorrow, does the housing option you ranked as your most preferred reflect the housing you would choose given your current financial situation?

Show image of most preferred option

| <u>Code</u> | Description |
|-------------|------------------------|
| 1 | Yes [GOTO Q21] |
| 2 | No [GOTO Q20b] |
| 3 | Don't know [GOTO Q20b] |

Why?

Open Ended

20b. What would you have preferred and why?

Top 3

Numerical

Q21. In order to understand how you chose your preferred housing option please rank the following factors in order of importance where 1 is most important and 4 is least important.

Please record your preferred order by typing 1, 2, 3 or 4 in the boxes below. You may only enter one of each ranking.

| Code | <u>Description</u> |
|------|--|
| 1 | Location (the area you chose) |
| 2 | House type (If the house is a specific type e.g. detached, semi-detached or an apartment) |
| 3 | Dwelling features (size of lot, number of parking spaces, presence of garden, number of bedrooms and living areas) |
| 4 | Dwelling value (perceived value for money of the housing option) |

¹ If they are only shown one set, then they don't need to be asked the final rank question. However, can you record their selection to Set 1 as their Most Preferred option in the final rank question? Then can you go to Q20 and show this image?





Rent Option

(RentSet1 is not asked) and (MonthlyRent > 1200)

Single Response

Now that you have looked at the purchase options, would you be interested in seeing what would be available as a rental?

| <u>Code</u> | <u>Description</u> | Routing |
|-------------|--------------------|--------------------|
| 1 | Yes | [GOTO RentSection] |
| 2 | No | |



SECTION 4: About you

Lastly a few questions about you. This is so we can compare the results for different groups of people who live in the Nelson and Tasman areas.

Single Response

Q22. In which of the following age groups do you belong?

| <u>Code</u> | <u>Description</u> |
|-------------|--------------------|
| 1 | 18 - 24 |
| 2 | 25 - 29 |
| 3 | 30 - 34 |
| 4 | 35 - 39 |
| 5 | 40 - 44 |
| 6 | 45 - 49 |
| 7 | 50 - 54 |
| 8 | 55 - 59 |
| 9 | 60 - 64 |
| 10 | 65 - 69 |
| 11 | 70 - 74 |
| 12 | 75+ |
| | |

Single Response

Q23. How many years in total have you lived in Nelson/Tasman?

| <u>Code</u> | <u>Description</u> |
|-------------|--------------------------------|
| 1 | Less than one year |
| 2 | 1 year to just under 2 years |
| 3 | 2 years to just under 5 years |
| 4 | 5 years to just under 10 years |
| 5 | 10 years or more |

ASK IF Q23 = 1, 2 or 3, ELSE SKIP

Single Response

Q23a. Where did you move from?

| <u>Code</u> | <u>Description</u> |
|-------------|-----------------------|
| 1 | Auckland |
| 2 | Waikato/Bay of Plenty |
| 3 | Wellington |
| 4 | Rest of North Island |
| 5 | Marlborough |
| 6 | Canterbury |
| 7 | Rest of South Island |
| 8 | Overseas |





Multiple Response

| | 224. Which ethnic | aroup or | groups do | vou identif | v with? You may | y choose more than one |
|--|-------------------|----------|-----------|-------------|-----------------|------------------------|
|--|-------------------|----------|-----------|-------------|-----------------|------------------------|

| $\boldsymbol{\Gamma}$ | _ | | | | - | |
|-----------------------|---|-----|---|---|----|--|
| | r | rti | m | - | rı | |
| $\mathbf{}$ | v | | | • | | |
| | | | | | | |

| \sim | | _ | | ı |
|--------|----------|----|-----|---|
| () | pen | ⊢n | an | ١ |
| \sim | σ | | ucc | į |

| Q | 25. Are there any additional comments you would like to make in respect of this survey? |
|---|---|
| | |
| | |
| | |

End 1

Thank you for completing the survey, your efforts are greatly appreciated.

Your name will be entered into the prize draw. If you win, you will have the choice of \$500 cash, or a donation to a charity of our choice.

Please remember that the answers you provide will remain confidential.

If you have any questions about the research please contact James Maguire on 0800 734 778.

Good luck with the prize draw.

You may close your browser window now, or this page will direct to the Research First website shortly.



Section 4

APPENDIX TWO: HOUSING OPTION SLIDES



J3003_Buy_set2-4.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$636,000 Nelson Urban - Central





J3003 Buy set2-8.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m2 Floor: 180m2 \$905,000 Nelson Urban - Central





J3003_Buy_set2-3.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$725,000 Nelson Urban - Central





J3003_Buy_set2-2.jpg

Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m2 \$832,000 Nelson Urban - Central

Apartment



J3003 Buy set2-11.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$796,000 Nelson Urban - Central



J3003_Buy_set2-6.jpg

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m2 \$454,000 Nelson Urban - Central



Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$634,000 Nelson Urban - Central



J3003_Buy_set2-5.jpg

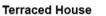
Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$802,000 Nelson Urban - Central





J3003 Buy set2-9.jpg



Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$503,000 Nelson Urban - Central



J3003 Buy set2-7.jpg

Apartment

J3003 Buy_set2-10.jpg

Standalone House

Land: 400m² Floor: 110m² \$535,000 Nelson Urban - North

Bedrooms: 2 Bathrooms: 1





J3003_Buy_set2-13.jpg



Semi-detached (Duplex) Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$616,000 Nelson Urban - North



J3003 Buy set2-17.jpg

Apartment

Bedrooms: 3 Bathrooms: 2 Land: N/A Floor: 140m² \$1,060,000 Nelson Urban - Central



J3003 Buy_set2-12.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1

Land: 300m² Floor: 80m²

\$459,000

Nelson Urban - North

J3003 Buy set2-16.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$843,000 Nelson Urban - North



J3003_Buy_set2-15.jpg





Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$638,000 Nelson Urban - North





J3003 Buy set2-20.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$675,000 Nelson Urban - North



J3003_Buy_set2-14.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$505,000



J3003 Buy set2-19.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$773,000 Nelson Urban - North



J3003_Buy_set2-18.jpg

Apartment

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m2 \$437,000 Nelson Urban - North



J3003 Buy set2-22.jpg

8020

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$803,000 Nelson Urban - North





J3003_Buy_set2-21.jpg

Terraced House

Apartment
Bedrooms: 3 Bathrooms: 2
Land: N/A Floor: 140m²

\$1,020,000 Nelson Urban - North



J3003_Buy_set2-24.jpg

Apartment

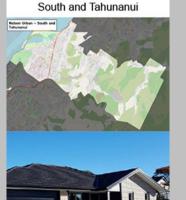
Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m² \$802,000 Nelson Urban - North



J3003_Buy_set2-23.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$641,000 Nelson Urban -



J3003_Buy_set2-26.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1
Land: 400m² Floor: 110m²
\$508,000
Nelson Urban South and Tahunanui





J3003 Buy set2-25.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$580,000

Nelson Urban -South and Tahunanui



J3003_Buy_set2-29.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1
Land: 300m² Floor: 80m²
\$431,000

Nelson Urban -South and Tahunanui



J3003_Buy_set2-28.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3
Land: 600m² Floor: 180m²
\$802,000

Nelson Urban -South and Tahunanui





J3003_Buy_set2-27.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$480,000

Nelson Urban -



J3003_Buy_set2-31.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$728,000

Nelson Urban -South and Tahunanui



J3003_Buy_set2-30.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$763,000 Nelson Urban -South and Tahunanui





J3003_Buy_set2-33.jpg

House Terraced House

Bedrooms: **3** Bathrooms: **2** Land: **250m**² Floor: **140m**² **\$607,000**

Nelson Urban -South and Tahunanui





J3003_Buy_set2-32.jpg

Apartment

Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m² \$766,000

Nelson Urban -South and Tahunanui



J3003_Buy_set2-35.jpg

Apartment

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m² \$418,000 Nelson Urban -



J3003_Buy_set2-34.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$521,000 Nelson Urban - Stoke





J3003_Buy_set2-37.jpg

Apartment

Bedrooms: 3 Bathrooms: 2
Land: N/A Floor: 140m²
\$976,000
Nelson Urban South and Tahunanui



J3003 Buy set2-36.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$822,000 Nelson Urban - Stoke





J3003_Buy_set2-39.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$659,000 Nelson Urban - Stoke



J3003_Buy_set2-38.jpg

Semi-detached (Duplex)

Bedrooms: **3** Bathrooms: **2** Land: **350m²** Floor: **120m² \$589,000**

Nelson Urban - Stoke



J3003_Buy_set2-41.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$439,000 Nelson Urban - Stoke



J3003_Buy_set2-40.jpg

50 55 55

Terraced House Bedrooms: 2 Bathrooms: 1

Land: 200m² Floor: 110m² \$487,000 Nelson Urban - Stoke



J3003 Buy set2-43.jpg Apartment Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m2 \$418,000

Nelson Urban - Stoke

J3003 Buy set2-46.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m2 Floor: 160m2 \$738,000 Nelson Urban - Stoke



J3003_Buy_set2-42.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$773,000 Nelson Urban - Stoke





J3003_Buy_set2-45.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$616,000

Nelson Urban - Stoke





J3003 Buy_set2-44.jpg



Apartment

Bedrooms: 2 Bathrooms: 1

Land: N/A Floor: 110m2

\$767,000

Nelson Urban - Stoke

J3003_Buy_set2-47.jpg

Rural Residential

Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$898,000 Richmond





J3003 Buy set2-49.jpg

Apartment

Bedrooms: 3 Bathrooms: 2 Land: N/A Floor: 140m² \$977,000 Nelson Urban - Stoke



J3003 Buy set2-48.jpg

Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$1,089,000 Richmond





J3003 Buy set2-51.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$1,007,000 Richmond





J3003 Buy set2-50.jpg

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$693,000 Richmond



J3003_Buy_set2-53.jpg

Standalone House
Bedrooms: 2 Bathrooms: 1
Land: 400m² Floor: 110m²
\$549,000
Richmond





J3003_Buy_set2-52.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$862,000 Richmond





J3003_Buy_set2-54.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$616,000 Richmond



J3003_Buy_set2-56.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$465,000 Richmond



J3003_Buy_set2-55.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$488,000 Richmond



J3003_Buy_set2-58.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$767,000 Richmond



J3003_Buy_set2-57.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$774,000 Richmond





J3003_Buy_set2-60.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$617,000 Richmond





J3003_Buy_set2-59.jpg

Apartment

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m² \$403,000 Richmond



J3003_Buy_set2-61.jpg

Apartment

Bedrooms: 3 Bathrooms: 2 Land: N/A Floor: 140m² \$941,000 Richmond



J3003_Buy_set2-63.jpg

rtment Apartment

Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m² \$739,000 Richmond



J3003_Buy_set2-62.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$672,000 Motueka



J3003_Buy_set2-65.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$532,000 Motueka



J3003_Buy_set2-64.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$837,000 Motueka



J3003_Buy_set2-66.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2
Land: 350m² Floor: 120m²
\$619,000
Motueka



J3003 Buy set2-68.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$467,000 Motueka



J3003_Buy_set2-67.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$493,000 Motueka



J3003_Buy_set2-70.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$770,000 Motueka



J3003_Buy_set2-69.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$623,000 Motueka



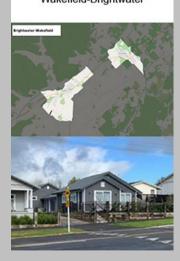
J3003 Buy set2-71.jpg





J3003_Buy_set2-73.jpg

Semi-detached (Duplex)
Bedrooms: 3 Bathrooms: 2
Land: 350m² Floor: 120m²
\$562,000
Wakefield-Brightwater



J3003_Buy_set2-77.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$781,000 Motueka

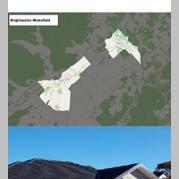




J3003_Buy_set2-72.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$658,000 Wakefield-Brightwater



J3003 Buy set2-74.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$418,000

Wakefield-Brightwater



J3003_Buy_set2-76.jpg

Standalone House

Bedrooms; 4 Bathrooms; 3 Land: 600m² Floor: 180m² \$820,000 Wakefield-Brightwater





J3003_Buy_set2-75.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$453,000 Wakefield-Brightwater



J3003_Buy_set2-79.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$705,000 Wakefield-Brightwater





J3003_Buy_set2-78.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$721,000 Wakefield-Brightwater





J3003_Buy_set2-81.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$573,000 Wakefield-Brightwater





J3003_Buy_set2-80.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$722,000 Mapua-Ruby Bay



J3003 Buy set2-83.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$572,000 Mapua-Ruby Bay



J3003_Buy_set2-82.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$897,000 Mapua-Ruby Bay



J3003_Buy_set2-84.jpg

Semi-detached (Duplex)

Bedrooms: **3** Bathrooms: **2** Land: **350m²** Floor: **120m² \$640,000** Mapua-Ruby Bay



J3003_Buy_set2-86.jpg

Semi-detached (Duplex) Bedrooms: 2 Bathrooms: 1

Land: 300m² Floor: 80m² \$485,000 Mapua-Ruby Bay



J3003_Buy_set2-85.jpg

Rural Residential

Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$762,000 Waimea Plains





J3003_Buy_set2-88.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$794,000 Mapua-Ruby Bay



J3003_Buy_set2-87.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$871,000 Waimea Plains





J3003_Buy_set2-89.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$536,000 Waimea Plains





J3003_Buy_set2-91.jpg

Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$953,000 Waimea Plains





J3003_Buy_set2-90.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$842,000

Waimea Plains





J3003_Buy_set2-93.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m2 Floor: 140m2 \$677,000 Waimea Plains





J3003_Buy_set2-92.jpg

Rural Residential

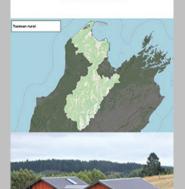
Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$743,000 Tasman Rural



J3003_Buy_set2-94.jpg

Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$934,000 Tasman Rural



J3003_Buy_set2-96.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$852,000 Tasman Rural



J3003 Buy_set2-95.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$615,000 Tasman Rural



J3003 Buy set2-98.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$487,000 Tasman Rural





J3003 Buy set2-97.jpg

Rural Residential

Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$660,000 Nelson Rural





J3003 Buy set2-100.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$769,000 Tasman Rural



J3003 Buy set2-99.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$769,000 Nelson Rural





J3003 Buy set2-101.jpg

Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$851,000 Nelson Rural





J3003_Buy_set2-102.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$574,000

Nelson Urban - Central





J3003_Buy_set2-1.jpg

Land: 600m² Floor: 180m² \$640 Nelson Urban - Central





J3003 Rent set2-3.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$350



J3003_Rent_set2-7.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$530

Nelson Urban - Central



J3003_Rent_set2-2.jpg

R-C01

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2
Land: 400m² Floor: 160m²
\$480
Nelson Urban - Central



J3003_Rent_set2-6.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$460

Nelson Urban - Central





J3003_Rent_set2-1.jpg

Apartment

Bedrooms: 1 Bathrooms: 1
Land: N/A Floor: 60m²
\$380



J3003_Rent_set2-10.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$360

Nelson Urban - Central



J3003 Rent set2-5.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$490

Nelson Urban - Central





J3003_Rent_set2-9.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$320 Nelson Urban - Central



J3003_Rent_set2-4.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$360

Nelson Urban - Central





J3003_Rent_set2-8.jpg

Apartment

Bedrooms: 3 Bathrooms: 2
Land: N/A Floor: 140m²
\$620

Nelson Urban - Central



J3003_Rent_set2-12.jpg



Bedrooms: 2 Bathrooms: 1
Land: N/A Floor: 110m²
\$530
Nelson Urban - Central



J3003_Rent_set2-11.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$480 Nelson Urban - North



J3003 Rent set2-14.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$410

Nelson Urban - North



J3003 Rent set2-13.jpg

Semi-detached (Duplex) Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m²

\$340 Nelson Urban - North



J3003_Rent_set2-17.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1
Land: 300m² Floor: 80m²
\$310
Nelson Urban - North



J3003_Rent_set2-16.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$640 Nelson Urban - North



J3003_Rent_set2-15.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$340 Nelson Urban - North



J3003_Rent_set2-19.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$470

Nelson Urban - North



J3003_Rent_set2-18.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$490

Nelson Urban - North



J3003_Rent_set2-21.jpg

R-802M

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$360 Nelson Urban - North

Terraced House





J3003 Rent set2-20.jpg

Apartment

Bedrooms: 2 Bathrooms: 1
Land: N/A Floor: 110m²
\$500
Nelson Urban - North



J3003 Rent set2-23.jpg

Apartment

Bedrooms: 1 Bathrooms: 1
Land: N/A Floor: 60m²
\$360
Nelson Urban - North



J3003 Rent set2-22.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$490

Nelson Urban -South and Tahunanui



J3003 Rent set2-26.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$430

Nelson Urban -South and Tahunanui





J3003 Rent set2-25.jpg

Apartment

Bedrooms: 3 Bathrooms: 2
Land: N/A Floor: 140m²
\$590
Nelson Urban - North



J3003 Rent set2-24.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1
Land: 300m² Floor: 80m²
\$300

Nelson Urban -South and Tahunanui



J3003_Rent_set2-28.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$600

Nelson Urban -South and Tahunanui



J3003_Rent_set2-27.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$490

Nelson Urban -South and Tahunanui



J3003_Rent_set2-30.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$360

Nelson Urban -South and Tahunanui

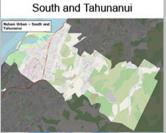


J3003_Rent_set2-29.jpg

R-803M

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$380 Nelson Urban -





J3003_Rent_set2-32.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$330 Nelson Urban -



J3003_Rent_set2-31.jpg

Apartment

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m² \$360

Nelson Urban -South and Tahunanui



J3003 Rent set2-34.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$520

Nelson Urban -South and Tahunanui





J3003 Rent set2-33.jpg

Apartment

Bedrooms: 3 Bathrooms: 2
Land: N/A Floor: 140m²
\$590
Nelson Urban -



J3003_Rent_set2-36.jpg

Apartment

Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m² \$500

> Nelson Urban -South and Tahunanui



J3003_Rent_set2-35.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$480



J3003_Rent_set2-38.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$460 Nelson Urban - Stoke





J3003_Rent_set2-37.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$300

Nelson Urban - Stoke



J3003_Rent_set2-40.jpg

Standalone House

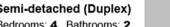
Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$630

Nelson Urban - Stoke



J3003 Rent set2-39.jpg

J3003_Rent_set2-42.jpg



Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$330 Nelson Urban - Stoke

Semi-detached (Duplex)



J3003_Rent_set2-41.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$340

Nelson Urban - Stoke





J3003 Rent_set2-44.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$330

Nelson Urban - Stoke



J3003 Rent set2-43.jpg



Apartment

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m²

\$350

Nelson Urban - Stoke

J3003 Rent set2-46.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$470

Nelson Urban - Stoke





J3003 Rent set2-45.jpg

Apartment

Bedrooms: 3 Bathrooms: 2 Land: N/A Floor: 140m2 \$590 Nelson Urban - Stoke



J3003 Rent set2-48.jpg

Apartment

Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m2 \$480 Nelson Urban - Stoke



J3003 Rent_set2-47.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$670 Richmond





J3003 Rent_set2-50.jpg

Rural Residential

Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$590 Richmond





J3003 Rent set2-49.jpg





J3003 Rent_set2-52.jpg





Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$760 Richmond





J3003 Rent set2-51.jpg

Terraced House

\$410

Richmond

J3003 Rent set2-58.jpg



Standalone House

Bedrooms: 4 Bathrooms: 3

Land: 600m² Floor: 180m²

\$630



J3003 Rent set2-54.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m2 Floor: 160m2 \$510 Richmond





J3003 Rent set2-57.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$550 Richmond



J3003_Rent_set2-53.jpg

J3003 Rent set2-56.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2

Land: 350m² Floor: 120m²

\$470

Richmond

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$470 Richmond





J3003 Rent set2-59.jpg

Apartment

Bedrooms: 1 Bathrooms: 1 Land: N/A Floor: 60m² \$350 Richmond



J3003 Rent_set2-61.jpg







J3003_Rent_set2-60.jpg

Apartment

Bedrooms: 3 Bathrooms: 2 Land: N/A Floor: 140m² \$550 Richmond



J3003 Rent set2-63.jpg

Apartment

Bedrooms: 2 Bathrooms: 1 Land: N/A Floor: 110m² \$460 Richmond



J3003 Rent set2-62.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$430 Motueka



J3003_Rent_set2-65.jpg

Standalone House Bedrooms: 2 Bathrooms: 1

Land: 400m² Floor: 110m² \$400 Motueka



J3003 Rent set2-64.jpg

Semi-detached (Duplex)

Bedrooms: 2 Bathrooms: 1
Land: 300m² Floor: 80m²
\$390
Motueka



J3003 Rent set2-67.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$630 Motueka



J3003_Rent_set2-66.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$450 Motueka



J3003_Rent_set2-68.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$410 Motueka



J3003_Rent_set2-70.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$510 Motueka

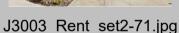


J3003_Rent_set2-69.jpg

Motueka



J3003_Rent_set2-72.jpg



Motueka

Terraced House

Bedrooms: 3 Bathrooms: 2

Land: 250m² Floor: 140m²

\$490

J3003_Rent_set2-71.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$450 Wakefield-Brightwater



J3003_Rent_set2-74.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$430 Wakefield-Brightwater





J3003 Rent set2-73.jpg

Semi-detached (Duplex) Bedrooms: 2 Bathrooms: 1

Land: 300m² Floor: 80m² \$420 Wakefield-Brightwater



J3003 Rent set2-76.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$620 Wakefield-Brightwater





J3003 Rent set2-75.jpg

Semi-detached (Duplex)

Bedrooms: 3 Bathrooms: 2 Land: 350m² Floor: 120m² \$490 Wakefield-Brightwater



J3003 Rent set2-77.jpg

Terraced House

Bedrooms: 2 Bathrooms: 1 Land: 200m² Floor: 110m² \$450 Wakefield-Brightwater



J3003 Rent set2-79.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m² Floor: 160m² \$560 Wakefield-Brightwater



J3003 Rent set2-78.jpg

Terraced House

Bedrooms: 3 Bathrooms: 2 Land: 250m² Floor: 140m² \$500 Wakefield-Brightwater





J3003 Rent set2-80.jpg

Standalone House Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$490 Mapua-Ruby Bay



J3003 Rent_set2-82.jpg

Semi-detached (Duplex) Bedrooms: 3 Bathrooms: 2

Land: 350m² Floor: 120m²



J3003 Rent set2-86.jpg

Terraced House

Bedrooms: 4 Bathrooms: 2 Land: 300m² Floor: 180m² \$570 Wakefield-Brightwater





J3003 Rent set2-81.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$540 Mapua-Ruby Bay



J3003_Rent_set2-83.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$620 Mapua-Ruby Bay



J3003 Rent set2-84.jpg

Semi-detached (Duplex) Bedrooms: 2 Bathrooms: 1 Land: 300m² Floor: 80m² \$480 Mapua-Ruby Bay



J3003 Rent set2-85.jpg

Rural Residential

Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$500 Waimea Plains





J3003 Rent set2-88.jpg

Semi-detached (Duplex)

Bedrooms: 4 Bathrooms: 2 Land: 400m2 Floor: 160m2 \$640 Mapua-Ruby Bay





J3003 Rent_set2-87.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$630

Waimea Plains



J3003 Rent_set2-89.jpg

Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$720 Waimea Plains





J3003 Rent set2-90.jpg







J3003_Rent_set2-91.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$500 Waimea Plains



J3003_Rent_set2-92.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$620 Waimea Plains

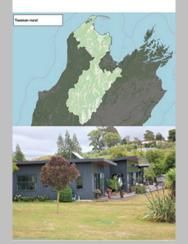




J3003 Rent set2-93.jpg

Rural Residential

Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$420 Tasman Rural



J3003 Rent set2-94.jpg

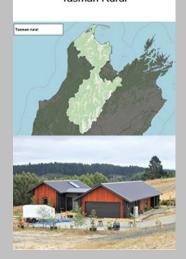
Rural Residential Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$560 Tasman Rural



J3003 Rent set2-95.jpg

Rural Residential

Bedrooms: 5 Bathrooms: 3 Land: 3000m² Floor: 260m² \$640 Tasman Rural



J3003_Rent_set2-96.jpg

Standalone House

Bedrooms: 2 Bathrooms: 1 Land: 400m² Floor: 110m² \$390 Tasman Rural



J3003_Rent_set2-97.jpg

Standalone House

Bedrooms: 3 Bathrooms: 2 Land: 500m² Floor: 140m² \$460 Tasman Rural



J3003_Rent_set2-98.jpg

Standalone House

Bedrooms: 4 Bathrooms: 3 Land: 600m² Floor: 180m² \$530 Tasman Rural



J3003_Rent_set2-99.jpg

Rural Residential

Bedrooms: 4 Bathrooms: 3 Land: 3000m² Floor: 230m² \$670 Nelson Rural



J3003_Rent_set2-101.jpg

Rural Residential Bedrooms: 3 Bathrooms: 2 Land: 3000m² Floor: 190m² \$580 Nelson Rural

J3003_Rent_set2-100.jpg



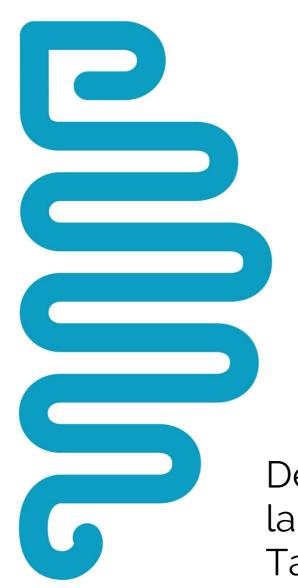
J3003_Rent_set2-102.jpg



Research First Ltd Level 1, 23 Carlyle Street Sydenham, Christchurch 8023 New Zealand

0800 101 275 www.researchfirst.co.nz





Demand for business land in the Nelson and Tasman shared urban environment

From today's economy to future needs

June 2020





Key points

The Nelson-Tasman shared urban area is set to grow

Nelson-Tasman shared area continues to grow creating demand for business land to 2050

- The Nelson and Tasman urban environment is closely integrated. Commuting flows define the region as a single labour market that jointly determines growth for each local council.
- Expect this shared urban environment to continue to grow at medium growth rates, contingent on population drivers and the underlying export-orientated economy.
- Recent growth has been rapid the region's population grew 9.7 percent in the last five years. Our analysis expects the shared urban environment to now require about 40.6 hectares of additional business land to enable future growth.

The economy is changing slowly from industrial activity to commercial enterprises

• Like elsewhere in New Zealand, the economic shape of the Nelson-Tasman shared urban area is changing over time. Expect more commercial and service activities to develop and industrial activity to be increase a little (see Figure 1).

FIGURE 1 DEMAND FOR LAND IS SHIFTING WITHIN THE NELSON-TASMAN URBAN AREA

| | Short run | Medium run | Long run | Total |
|------------|----------------|---------------|---------------|---------------|
| | 1-3 years | 4-9 years | 10-30 years | 1-30 years |
| Commercial | 3.6 hectares | 6.5 hectares | 19.7 hectares | 29.7 hectares |
| Industrial | -10.2 hectares | 8.0 hectares | 13.0 hectares | 10.8 hectares |
| Total | -6.6 hectares | 14.5 hectares | 32.7 hectares | 40.6 hectares |

- But the pace of growth is uncertain and timeframe long. Demand could range from 16.7 hectares to 69.8 hectares an 80 percent confidence interval by 2050.
- Both councils have a role to play in best accommodating growth within the shared urban environment.
- Planning is crucial for example we show an alternative for accommodating commercial growth by intensifying and show that applying the buffer recommended in the NPS-UD to demand suggests accommodating 49.1 hectares of demand (see Appendix 3).

Population growth will continue to drive economic growth in the region

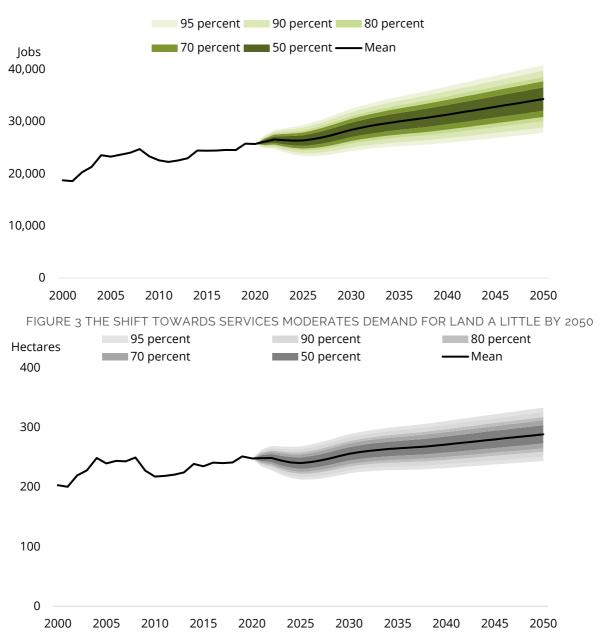
- Our estimates for demand for business land assume population growth reflected in the Long-Term Plans of Nelson and Tasman councils.
- There is considerable uncertainty around population growth, not just for Nelson and Tasman but for New Zealand's regions in general.
- The population forecasts have a different profile to Statistics New Zealand's latest subregional population forecasts but the endpoint by 2050 is very similar.

Demand for business land reflects the composition of employment growth

- We forecast demand for business land by assessing how many people will be employed in broad sectors of the economy. Then we assess demand for floorspace per worker and translate this to demand for business land.
- Employment growth (see Figure 2) will outpace growth in land demand (see Figure 3). The footprint of the fast-growing commercial sector is smaller than for industrial activity that is flat or falling.







Our estimates use trends in economic activity to assess likely future demand.

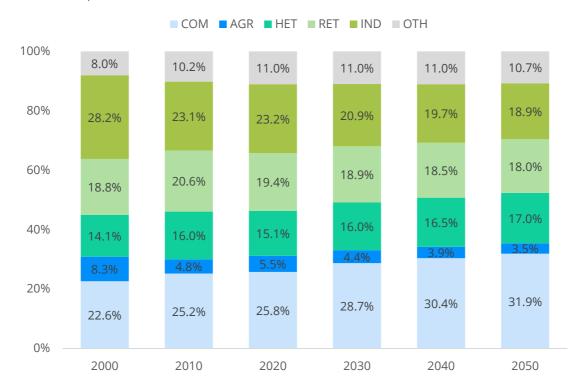
- Our modelling uses trends in the shape of the economy to understand how the economy is likely to evolve over time and to estimate the location of demand across the region.
- But there are many structural changes in the economy such as the impact of the ageing population, working from home, the impact of an emerging tech sector and other trends in rural and urban land uses that have uncertain employment impacts.
- When these emerging trends are already impacting on the economy (such as population ageing)
 our methods indirectly pick-up some of these impacts. Where the data is yet to show impacts (such
 as working from home) our methods will not pick up these changes. So, we present a range to
 show some of the uncertainties and discuss some of the main influences of uncertainty in the
 report.



Shift towards commercial activity reduces demand for business land

- Over time, the Nelson-Tasman shared urban environment has been slowly shifting towards commercial and services activity over the past twenty years (see Figure 4).
- We expect this trend to intensify with reductions in industrial activity and demand for business land from agricultural employment also set to decline as a share of the economy.

FIGURE 4 COMMERCIAL AN INCREASING SHARE OF NELSON-TASMAN SHARED URBAN AREA





Contents

| Ke | y po | oints | 1 |
|-----|---|--|----|
| Cc | nte | ents | 4 |
| Cc | nte | ext | 5 |
| Fi٤ | gure | es | 6 |
| 1. | | Overview | 8 |
| 2. | | Nelson-Tasman economy | 9 |
| | 2.1 | l An integrated economy | 9 |
| | 2.2 | 2 Drivers of growth | 10 |
| | 2.3 | 3 Sectoral composition | 11 |
| | Вох | x A: A closer look at the tech research sector | 12 |
| 3. | | The future economy | 13 |
| | 3.1 | Our modelling approach | 13 |
| | 3.2 | Population growth matters | 14 |
| | Box B: The impact of the region's ageing population | | 17 |
| | 3.3 | 3 Future economic activity | 20 |
| | Вох | x C: Trends in rural industrial land use | 21 |
| 4. | | Business land demand | 26 |
| | 4.1 | Mapping Activity to Floorspace | 26 |
| | Вох | x D: Trends in urban industrial land use | 28 |
| | 4.2 | 2 From floorspace to land | 32 |
| 5. | | Nelson City | 39 |
| 6. | | Tasman District | 42 |
| | 6.1 | l Urban Tasman | 42 |
| | 6.2 | 2 Rural Tasman | 45 |
| Re | fere | ences | 48 |
| | Apı | pendix 1: The activity model | 49 |
| | Apı | pendix 2: Bridge St case study | 51 |
| | Δnı | anendix 3: NPS-LID Ruffer | 52 |



Context

This report helps both Nelson City Council and Tasman District Council assesses demand for business land 3, 10 and 30 years from today, responding to the requirements of the National Policy Statement on Urban Development. The report is intended to enable both councils to plan.

Our assessment focuses on the shared Nelson-Tasman urban environment that comprises Nelson City –the city itself and all suburbs extending to Hira and Cable Bay and the urban areas within Tasman District – Richmond including Hope, Brightwater, Wakefield, Mapua and Motueka. We provide additional separate discussion of (i) Nelson City, (ii) Tasman's urban area and (iii) the remaining areas in the Tasman District – such that the whole of Tasman's business land needs is assessed.



Figures

| Figure 1 Demand for land is shifting within the Neison-Tasman urban area | |
|--|------------|
| Figure 2 Expect steady employment growth across the shared urban area | 2 |
| Figure 3 The shift towards services moderates demand for land a little by 2050 | |
| Figure 4 Commercial an increasing share of Nelson-Tasman shared urban area | |
| Figure 5: Commuter trips show Nelson-Tasman is an integrated labour market area | |
| Figure 6: Population growth outpacing long-term New Zealand average | 10 |
| Figure 7: Nelson-Tasman region growing faster than national average | 10 |
| Figure 8: Cawthron Institue bringing revenue and jobs to the economy | 12 |
| Figure 9: We use a staged approach to forecast business land demand | 13 |
| Figure 10 Nelson's LTP forecast is close to Statistics New Zealand by 2050 | 14 |
| Figure 11 Tasman's LTP forecast is very close to Statistics New Zealand's | 15 |
| Figure 12 Tasman-Nelson area's Participation rate close to New Zealand's | 15 |
| Figure 13 Fertility rates are close to New Zealand average | 17 |
| Figure 14 Life expectancy relatively high for the Tasman region | |
| Figure 15 Ageing flattens Nelson's population pyramids | 18 |
| Figure 16 Expect many more people at older cohorts in Tasman District | 19 |
| Figure 17 Expect a small decline in agricultural employment by 2050 | |
| Figure 18 Exports of chilled produce like apples are growing | |
| Figure 19 Waimea Community Dam should increase yields in the region | |
| Figure 20 Waimea Community Dam boosts primary sector and the wider economy | |
| Figure 21 Commercial sector set for strong growth in shared urban area | |
| Figure 22 Health, Education and Training to add jobs by 2050 | 23 |
| Figure 23 Industrial sector posts slow growth to 2050 | 24 |
| Figure 24 The collection of 'Other' jobs 'set to grow to 2050 | 24 |
| Figure 25 Retail employment to grow 0.7 percent to 2050 | 25 |
| Figure 26 Nelson-Tasman shared area Employment growth about 1% a year to 2050 | 25 |
| Figure 27 We use consent data as one guide to floorspace per worker | 27 |
| Figure 28 Our benchmarks to translate employment to floorspace | 27 |
| Figure 29 Manufacturing shrinking as a share of Nelson-Tasman economy | 28 |
| Figure 30 Agriculture worker space declines by 0.6% on average each year | |
| Figure 31 The lowest element of the range suggests strong commerical growth | |
| Figure 32 Health, Education and training generates demand for floorspace | 30 |
| Figure 33 Industrial demand flat for several years | |
| Figure 34 Other looking set for moderate-strong growth | 31 |
| Figure 35 Retail never really recovers from the GFC and faces headwinds | 31 |
| Figure 36 Structural shift moderates floorspace demand | |
| Figure 37 Our benchmarks to translate floorspace to business land | 33 |
| Figure 38 Intensity of site use and vacant land matters for assessing capacity | 33 |
| Figure 39 Business land Demand for agriculture declines a little each year | 34 |
| Figure 40 ExpEct demand for land for commercial activity to expand | 34 |
| Figure 41 Health, Education and training pushes business land demand higher | |
| Figure 42 Industrial demand flat for years then lifts a little from Tasman growth | 35 |
| Figure 43 'Other' catch-all lifts demand for business land | 36 |
| Figure 44 Recent trends suggest sluggish retail demand for business land | 36 |
| Figure 45 Structural shift moderates land demand | |
| Figure 46 Our scenario intensifies business land to a floor-to-area ratio of 2 | |
| Figure 47 Intensifying land use would reduce demand for commerial land a little | |
| Figure 48 Nelson City set to see strong growth in commercial activity | |
| Figure 49 Nelson City's land demand a modest share of the shared urban environment | |
| Figure 50 Job growth for nelson will likely persist at about 0.60 percent a year | 40 |
| Figure 51 Shift to services moderates growth for floorspace | 40 |
| Figure 52 Expect moderate growth in demand for husiness land in Nelson City | 4 1 |





| Figure 53 Tasman's urban and rural areas expect to grow stronglyly | 42 |
|--|----|
| Figure 54 Shift from agriculture to commerical jobs clear for Urban Tasman | 43 |
| Figure 55 Expect a fast pace of Job growth in urban Tasman of about 1.7% each year | 43 |
| Figure 56 Demand for floorspace in the urban Tasman area will persist | 44 |
| Figure 57 Growth for business land to grow at about 1.2% for urban Tasman area | 44 |
| Figure 58 Rural Tasman also shifting towards commercial jobs | 45 |
| Figure 59 Total jobs in Rural Tasman grow at about 1% each year | 46 |
| Figure 60 Expect Modest growth in demand for floorspace in rural Tasman | 46 |
| Figure 61 Demand for business land in the rural Tasman will grow | 47 |
| Figure 62: Map from ANZSIC 2006 to our industry categories | 50 |
| Figure 63 We use Nelson's Bridge St to inform our floor-to-area-ratio | 51 |
| Figure 64 Summary statistics for Bridge St. Case study | 52 |
| Figure 65: Estimated Business land demand with NPS-LID Buffer | 53 |



1.Overview

Our aims

The purpose of this report is to quantify demand for business land for Nelson and Tasman local councils to provide the evidence base for planning with and across the region. Both regions are closely integrated, and act as a single economy. Therefore, our analysis uses the joint Nelson-Tasman urban environment as the basis for our analysis.

To quantify business land demand, our approach focuses on firms and the land demands of different sectors of the economy. So that our forecasts our consistent with the population forecasts used in the Long Term Plans for each council, we synch our estimates of economic activity to these underlying population forecasts. Our methods support assessment of business land demand for Housing and Business Assessments as required under the National Policy Statement on Urban Development.

The report begins with a brief outline of the local economy, the key drivers and sectoral composition before assessing the future shape of the economy in section 3. Then we translate future economic activity to demand for business floorspace across the region before translating this floorspace estimate to demand for business land.

Structural change and economic uncertainty

There are many structural changes to the economy that affect the Nelson-Tasman urban-environment and in some cases the New Zealand economy more broadly. Where these trends are already impacting on the economy (the ageing of the labour force for example or the shift away from industrial activity towards services) our method implicitly picks up much of these trends.

But some factors that are impacting on the economy, such as working from home and the rapidly growing technology sector, are not so easily embedded in our analysis. Other known features of the future local economy, such as the Waimea Community Dam, need to be considered so our report picks out the key features and provides a qualitative discussion as well as presenting a range of key forecasts that incorporates these uncertainties about the future shape of the economy.

The location of business demand

Our analysis treats the Nelson-Tasman urban environment as the growth engine – allowing firms to move to locations that best supports their operations. The extent of integration makes a strong case for councils to collaborate to work out how best to enable growth within the shared urban environment.

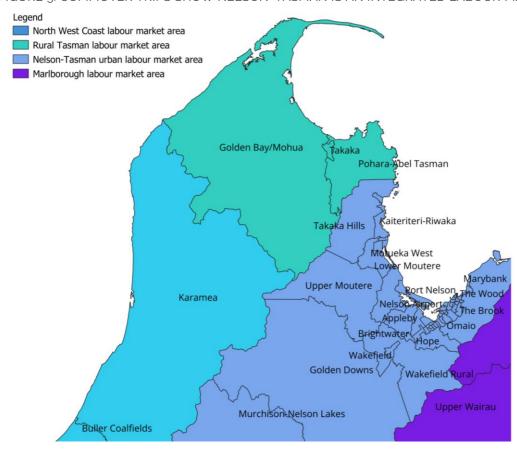
We also provide discussion of the development of the two areas within the shared urban environment: - Nelson City and Tasman's urban area – before discussing the remaining areas in the Tasman District, such that the whole of Tasman's business land needs is assessed. We provide a breakdown of likely growth – if policy is left unchanged – for each local council and then separate out the rural Tasman area from the urban Tasman area. More granular spatial analysis is contingent on the decisions of individual businesses and the role of planners and councils within local communities.



2. Nelson-Tasman economy 2.1An integrated economy

Nelson-Tasman is well-integrated. Using origin-destination flows from the 2018 census we confirm the region forms a contiguous labour market area, where firms and workers move across council boundaries relatively easily. Figure 5 shows the outputs from this analysis identified labour market areas based on the commuter data.¹





Rather than conducting analysis at a local council level, we need to assess employee activity and demand for business land growth across the shared Nelson-Tasman urban environment before digging into the spatial characteristics of where that demand might fall.

So we base our analysis on the shared Nelson-Tasman urban environment that combines the Nelson City – including the city itself and all suburbs extending to Hira and Cable Bay, as well as the urban areas within Tasman District – Richmond including Hope, Brightwater, Wakefield, Mapua and Motueka.

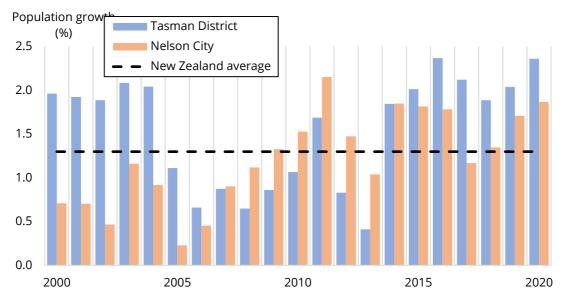
¹ We use the method of Davies and Maré (2020) who use the Louvain algorithm, ¹ - that allocates origindestination travel flows to labour market areas that have common features.



2.2 Drivers of growth

Population growth has been critical to recent economic growth in the region (see Figure 6).

FIGURE 6: POPULATION GROWTH OUTPACING LONG-TERM NEW ZEALAND AVERAGE



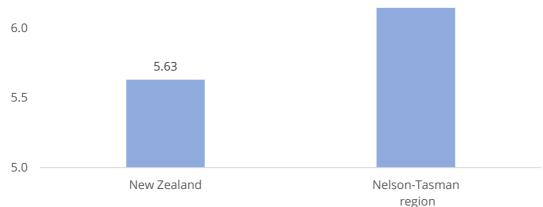
Like elsewhere, COVID and associated public health response has impacted on economic growth. More recent data points to better employment outcomes than expected in the second quarter of 2020. Wage growth is modest with many still seeking a larger number of hours than are on offer from employers.

Supply chains are also fragile and shipping costs are accelerating. The region's reliance on exports could still be affected. The recovery is also uneven. For some exporters and commodities that can reach international markets, returns can prove high although prices for inputs to production are rising.

Nelson-Tasman has posted strong growth. Over the five years to March 2020, the region outstripped growth in the national economy (see Figure 7).

FIGURE 7: NELSON-TASMAN REGION GROWING FASTER THAN NATIONAL AVERAGE







2.3 Sectoral composition

Particularly for the urban environment of Tasman , construction activity has added to the traditional agricultural base that includes forestry, horticulture exports, wine, and food manufacturing. Hop-growing and honey have further expanded the mix of high value goods for export and domestic consumption. For most New Zealand regions manufacturing activity has been declining, but the urban environment of Tasman has added over 450 manufacturing jobs over the 20 years between 2000 and 2020.

Much of this activity has been in dairy and food manufacturing rather than hard manufacturing. To support population growth in the Tasman urban environment, construction employment has been strong over the past five years. Heavy and civil engineering has also supported employment growth.

For Nelson City, the port and fishing activity continue to provide over 1,300 employment opportunities and a boost to local incomes. Manufacturing and food manufacturing has declined despite many new business start-ups developing in recent years.

Nelson continues to grow its services sector with commercial activity up 8 percent over the past four years. Local administration in the region has doubled over the past twenty years and health care and social assistance have grown modestly.

In recent years, the research and tech sector has further diversified Nelson City's economic profile. Demand for education and scientific research services is strong (see Box A). In 2015, NZIER estimated the ICT sector alone provided \$123 million to the Nelson economy.



Box A: A closer look at the tech research sector

One of the big success stories of the region has been the growth of the Cawthron Institute, that provides research science services for primary industries and aquaculture. The Institute has a long history and in recent years has brought many jobs to the region (see Figure 8). The Institute is a large employee and now has about 200 staff.

\$Millions Jobs 50 250 Revenue 45 Employees 40 200 200 150 30 20 100 10 50 \cap

FIGURE 8: CAWTHRON INSTITUE BRINGING REVENUE AND JOBS TO THE ECONOMY

When a region can bring highly-skilled and specialised staff, two things happen. First, the number of workers and average wages of those workers increase. These workers demand local goods and services that support additional employment in the region. Second, knowledge spillovers can occur, increasing the productivity of other workers in the region.

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

With the Cawthron Institute, both effects are true. Additional workers are increasing demand for goods and services (including housing). Even in 2015, NZIER estimated the impact of the Institute brought \$14 million in value to the local economy and created 91 additional jobs through supporting jobs.

Moreover, the Institute appears to be creating additional benefits in terms of spillovers. Institute staff have helped establish the development of two local high-tech companies and learning and training programmes at the Nelson Marlborough Institute of Technology.

But tech success in the region extends beyond the Cawthron Institute. In 2019, there were 1,119 high tech jobs in the Nelson-Tasman region. These are fast-growing firms that bring incomes and jobs to the region. In 2019 the sector grew revenues by 10.2 percent, and 271 new jobs were created in the region. Expect the sector to continue to drive growth in coming years. These high-tech jobs typically have lower demand for floorspace than other industrial and manufacturing jobs.

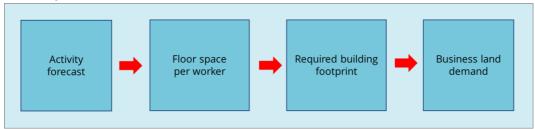


3. The future economy 3.10ur modelling approach

To understand future demand for business land in the Nelson-Tasman urban environment, we build a picture from the supply-side of the economy. We start by projecting economic activity across the region. Rather than work with aggregate economic activity like GDP, we prefer to use employee demand as the base unit that generates demand for business land.

With estimates of the future employee demand in hand, we then generate demand for floorspace based on benchmarks for floorspace needs by each sector of the economy. Finally, we turn demand for floorspace into demand for business land by thinking about the likely shape of how floorspace translates into land demand for different sectors of the economy. Figure 9 shows the staged method we adopt to forecast business land demand.

FIGURE 9: WE USE A STAGED APPROACH TO FORECAST BUSINESS LAND DEMAND



Our forecasts should be interpreted as potentials for economic activity. There are several structural changes that the forecasts do not directly consider. These include:

- Direct changes to the structure of the economy that are partially captured in our model such as the impacts of longer commute times and other productivity shifts across the shared urban environment.
- Indirect changes in economic structure that have already occurred and are implicitly incorporated in our model, such as population ageing.
- Future structural changes that are yet to impact on the forecasts, for example, the Waimea Community Dam.

So rather than produce forecasts with just a single number, we display confidence intervals or ranges for economic activity, floorspace and demand for business land and examine future structural changes qualitatively (see box C for example).



3.2 Population growth matters

Underlying population projections

Our business land forecasts should align with the population projections used by Nelson and Tasman in their Long Term Plans to ensure a consistent basis across planning decisions.

We show Nelson's population forecasts against Statistics New Zealand's subnational forecasts in Figure 10 and Tasman's population forecast against Statistics New Zealand's subnational forecasts in Figure 11. Towards the end of the projection in 2050, both sets of LTP forecasts are close to Statistics New Zealand's 'High' projection, albeit with stronger growth anticipated in the Tasman District relative to Statistics New Zealand's forecasts. These LTP projections will be used to underpin the business land demand forecasts.

Statistics New Zealand's medium-term population projections have tended to under-predict the national population in recent years. Among other factors, Statistics New Zealand's population projections miss a structural trend in inward migration that suggests Statistics New Zealand will continue to under-predict the population. So, it makes sense to at adopt a population track close to the 'High' projection rather than the 'Medium' projection.

It is worth noting the LTP forecast for Nelson includes an extended period where population growth is low because of the impact of COVID-19. The impacts of COVID-19 are yet to play out. New Zealand's low prevalence of COVID-19 could spur migration to New Zealand with flow on impacts to the Nelson-Tasman region, however, opening of the borders could also result in additional migration out of the region.

But New Zealand's fiscal position has been hit by the need to provide support to firms and households. Policies choices to shore up the balance sheet might make New Zealand less attractive than elsewhere, easing population growth in New Zealand's regions.

FIGURE 10 NELSON'S LTP FORECAST IS CLOSE TO STATISTICS NEW ZEALAND BY 2050 Population forecast comparison Statistics New Zealand vs Long Term Plan: Nelson

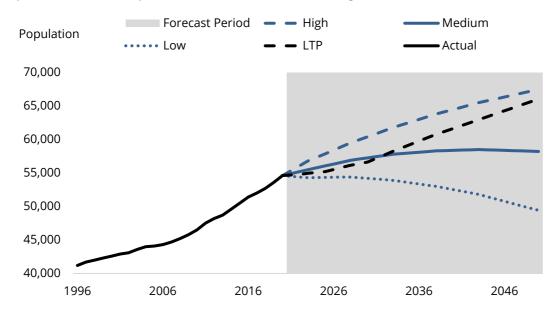
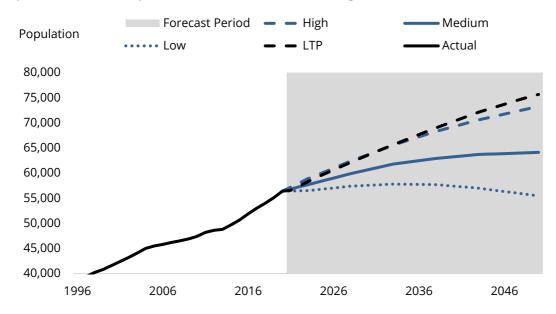




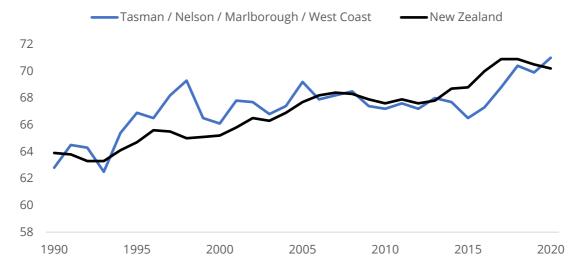
FIGURE 11 TASMAN'S LTP FORECAST IS VERY CLOSE TO STATISTICS NEW ZEALAND'S Population forecast comparison Statistics New Zealand vs Long-Term Plan: Tasman



Labour force participation matters

As the Nelson-Tasman population ages, we expect a modest decline in the labour force that will reduce demand for business land. Rather than simply using the population forecasts within the Long Term Plans to underpin employee growth we adjust for the decline in labour force participation, using New Zealand Treasury's estimates of labour force participation that are laid out in the 2020 BEFU.² Figure 12 shows that labour force participation in Nelson-Tasman region is likely to be close to labour force participation in New Zealand based on available data estimates for the joint Tasman-Nelson-Marlborough-West Coast region.

FIGURE 12 TASMAN-NELSON AREA'S PARTICIPATION RATE CLOSE TO NEW ZEALAND'S Labour force participation rate (%)



Source: Statistics New Zealand

² See https://www.treasury.govt.nz/publications/efu/budget-economic-and-fiscal-update-2020



Population ageing could reduce the pace of population growth

The forecasts show growth rates to 2050 that are lower than the rates of growth Nelson and Tasman have experienced in recent years. These high rates of growth, from firms with high demand for land to support booming businesses, are juxtaposed with slow growth in future years. Population growth, and thus our land demand forecasts, slow for two factors.

First, Statistics New Zealand forecasts use a much lower forecast for international and domestic migration than the region has experienced in recent years. This suggests upside risk and the possibility the regional population could be higher than expected.

Second, like elsewhere, an ageing population (see Box B) is reducing the size of the labour force. This means demand for business land is lower than otherwise required.



Box B: The impact of the region's ageing population

Economic impacts

That New Zealand is ageing should come as no surprise. The fraction of people over 65 is becoming a large share of the population as a whole – a trend that is expected to continue to about 2050. Although the pace of change is occurring relatively slowly, the scale of change in unprecedented and is expected to lead to deep and profound changes to the economy and society.

Three separate factors underpin the ageing of New Zealand population: (i) increases in longevity and (ii) a declining fertility rate and (iii) large cohort effects from the baby boom that occurred after WWII. The impacts will be far fewer young people for every person over 65.

With fewer people in the work force expect workers to be able to command higher wages. Higher wages will temper the extent to which labour force participation declines with older workers tempted to continue to work for higher returns. With many more people trying to save, expect real interest rates to reduce a little. This also incentivizes older workers to remain the labour force for longer.

Regional impacts

New Zealand is also ageing unevenly. Regional differences (see Figure 13 and Figure 14) help determine how Nelson and Tasman will age.

3



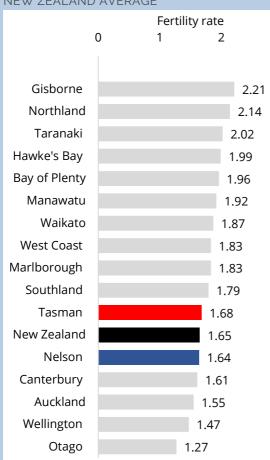
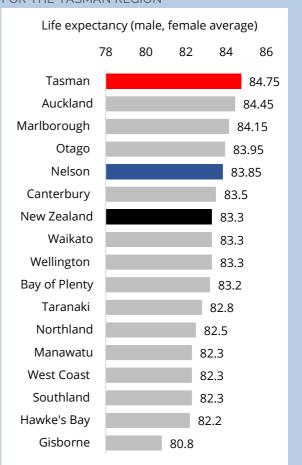


FIGURE 14 LIFE EXPECTANCY RELATIVELY HIGH FOR THE TASMAN REGION





But a smaller labour force requires less business land. To give a sense of the extent of population ageing, Figure 15 shows the change in the number of people by sex across 2018-2048 for Nelson City. Figure 16 shows the scale of change for Tasman District.

FIGURE 15 AGEING FLATTENS NELSON'S POPULATION PYRAMIDS



Some regions show the impact of in-flows of older cohorts at the same time as opportunities in urban areas offshore are hollowing out younger cohorts. This amplifies the impact on regional labour markets and will shift regional patterns of demand.

But demographic projections are not a life sentence. Policy will also impact on demographic outcomes for New Zealand. The extent to which migration policy, and New Zealand's migration settings relative to other countries, will help determine the rate at which New Zealand ages. Support for parents will also influence the extent to which declines in fertility are arrested over time.





Social impacts

One of the benefits of longevity is better health as New Zealanders age. New Zealanders report overall health and mental health are not limiting factors as we age. Instead, physical health limits the roles that New Zealanders can undertake.

So, one of the key challenges is redesigning roles and workplaces to continue to support older New Zealanders to work if they choose. Modelling suggests that we should expect later retirement decisions – workers enjoying more years in retirement in absolute terms, but we are likely to keep the fraction of our life spent working roughly the same over time. So, for every additional year of life expectancy, expect an additional 7-8 months spent working.

Demand for goods and services will change

Some trends are obvious. While health is improving as we age, the fertility shock or baby-boom lifts the fraction of older New Zealanders over the next thirty years. This will lift demand for health care workers, a trend that will only rise as incomes grow over time. Expect the cost of health care to rise and insurance costs to move up too.

But some changes will be nuanced. People retiring today are much different to not just the previous generation, but differences in technology adoption and access to wealth help shape differences in preferences across cohorts rather than generations.



3.3 Future economic activity

We break down our estimates of economic activity into six key categories – (i) Agriculture, (ii) Commercial, (iii) Health, Education and Training, (iv) Industrial, (v) Other and (vi) Retail.

We show each forecast of future economic activity alongside a range of confidence intervals that can be used if councils want to use an approach to zoning that allows for above average growth in business land demand.

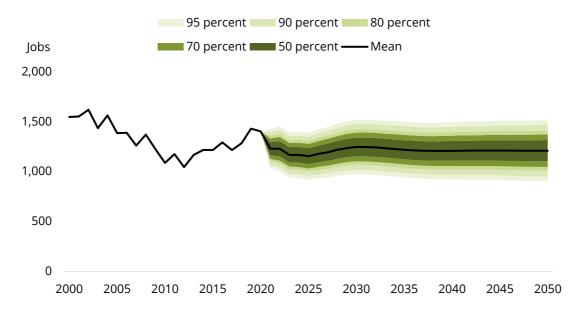
Agriculture

Figure 17 shows that our modelling suggests to expect a small decline in the total number of agricultural sector jobs by 2050 in the shared Nelson-Tasman urban environment.³ Total jobs fall by 194 over the forecast period. Driven by the pick-up in agriculture sector employment since 2012, our analysis suggests a very small lift in agricultural sector growth in Nelson –jobs growth averages 0.1 percent a year to 2050.

Tasman has shed about 675 jobs or 20 percent of the jobs that were in the agriculture sector in 2000 in the twenty years to 2020. Our modelling suggests this trend moderates a little over the forecast period. but the total number of jobs falls by the same amount over the thirty years we forecast to 2050.

There is some upside risk to our quantitative model-based forecasts that rely on the trends in the shape of the economy to persist over time. The impact of Waimea Community Dam should lift the number of agricultural jobs in the region. Recent resource consent applications for cool stores could also suggest a little more agricultural activity in the region than our central forecast suggests (see Box B).

FIGURE 17 EXPECT A SMALL DECLINE IN AGRICULTURAL EMPLOYMENT BY 2050



³ This is the shared Nelson-Tasman urban environment that comprises Nelson City –the city itself and all suburbs extending to Hira and Cable Bay and the urban areas within Tasman District – Richmond including Hope, Brightwater, Wakefield, Mapua and Motueka.



Box C: Trends in rural industrial land use

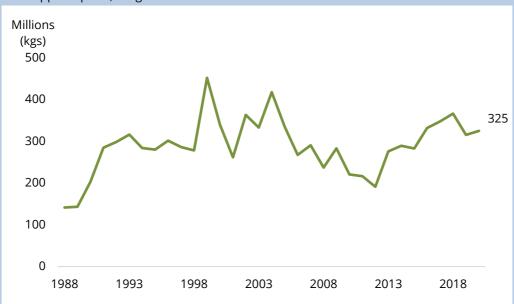
We construct our forecasts from observed trends in economic activity. We refrain from making ad-hoc adjustments to reflect likely changes to the structure of the economy but instead discuss specific factors and present ranges that pick up future changes to the underlying structure of the economy,

Since industrial activity typically requires a large footprint for each worker, small changes in industrial activity can have large impacts on overall requirements for business land. Two changes in economic structure that are yet to have much impact on employment data, are the growing demand for cool stores and the future impact of the Waimea Community Dam.

Growing demand for coolhouses

The majority of New Zealand's fruit and vegetables are exported chilled.⁴ Demand for fruit has been strong over the past eight years, growing 7 percent on average each year (Figure 18).

FIGURE 18 EXPORTS OF CHILLED PRODUCE LIKE APPLES ARE GROWING New Zealand Apple exports, kilograms



And this demand has translated to increased capacity in terms of cool stores. Rising standards associated with the storage of food for human consumption and the premium placed on quality also push up capital investment.

The Tasman economy base relies heavily on the export of food and food products. So perhaps not unsurprisingly, several applications for resource consent have been made to council recently, including from the hops industry (New Zealand Hops Ltd, for example), apples and pears (Wratten Orchards) and kiwifruit (Inglis Packers Limited).

Our forecasts allow for demand from the agricultural sector to boost demand for land. We assume that about half the workers in the agriculture sector are associated with business land while half the workforce

⁴ About 45 percent of New Zealand's exports are food or food products and about 60 percent of food exports are refrigerated.



is associated with rural land. We include cool stores as part of our assessment of industrial land that includes warehousing activity.

Potential impacts of the Waimea Community Dam

The Waimea Community Dam should be expected to have both direct and indirect impacts on the Nelson-Tasman economy. The dam will increase yields (see Figure 19), so expect the need for greater capacity to process an increased volume of product. This increases demand for business land.

FIGURE 19 WAIMEA COMMUNITY DAM SHOULD INCREASE YIELDS IN THE REGION

| | | Without dam | | | | With dam | |
|-----------|--------|-------------|---------|--------|----------|----------|--------|
| | Units | Yield/ha | Price | Gross | Yield/ha | Price | Gross |
| | UTIILS | | \$/unit | margin | rieiu/na | \$/unit | margin |
| Pasture | Stock | 6.5 | 10 | 663 | 12 | 102 | 1,225 |
| Apples | TCE | 3,500 | 23 | 27,898 | 3,750 | 23 | 33,523 |
| Kiwifruit | Trays | 11,500 | 9 | 24,575 | 12,000 | 9 | 28,975 |
| Grapes | Tonnes | 8.5 | 1,700 | 487 | 9 | 1,800 | 1,337 |
| Berries | Tonnes | 18 | 1,200 | 12,800 | 20 | 2,000 | 16,800 |

Source: NZIER (2014),

The Waimea Community Dam will also have indirect impacts that increase output for not just the primary sector, but supporting sectors such as the food processing sector that benefit from the better availability of input goods in the region.

These indirect impacts are substantial and amount to a little under half the \$923 million boost to the regional economy (see Figure 20). This matters since the dam provides some upside risk to the business land forecasts that do not include any explicit account of the Waimea Community Dam.

FIGURE 20 WAIMEA COMMUNITY DAM BOOSTS PRIMARY SECTOR AND THE WIDER ECONOMY NZ\$ in 2013 terms; and present values over 25 years on 2013 base.

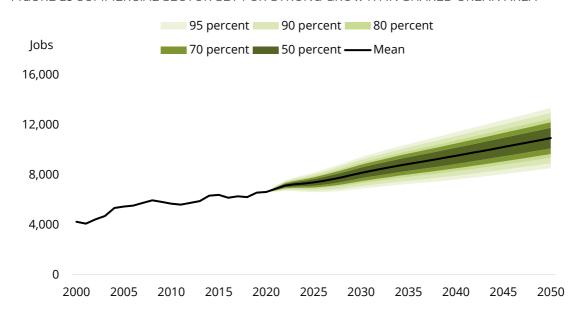




Commercial

Expect the commercial sector to post strong growth over the next thirty years, creating over 6,700 new jobs in the shared urban environment (see Figure 21). We expect the commercial sector to outpace every other sector we examine and grow at 1.7 percent (CAGR) to 2050. This pace of growth is a little more moderate than the 2.3 percent growth the sector has enjoyed over the past twenty years.

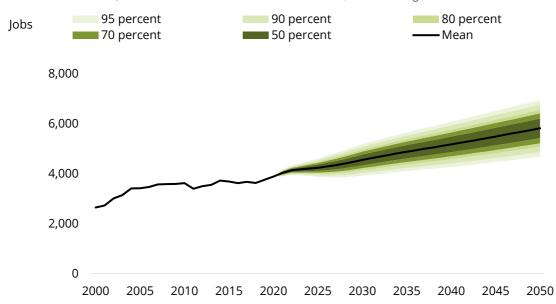
FIGURE 21 COMMERCIAL SECTOR SET FOR STRONG GROWTH IN SHARED URBAN AREA



Health, Education and Training

Our central forecasts suggest a growth rate of 1.35% but by 2050 a range of outputs are possible. Health, Education and Training jobs could lie between 5,223 and 6,563 by 2050 (see Figure 22). The Health, Education and Training sector covers a broad range of public and private sector job types. Even within the health sector jobs have different profiles from in-home aged care workers to hospital and emergency staff.

FIGURE 22 HEALTH, EDUCATION AND TRAINING TO ADD JOBS BY 2050

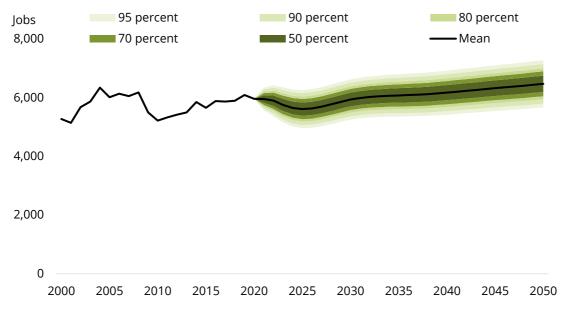




Industrial

Industrial activity is expected to slow in the near-term with jobs numbers flat for the next ten years. Industrial activity is declining for most New Zealand regions. The shared Nelson-Tasman urban environment grows at 0.23 percent a year between now and 2050.



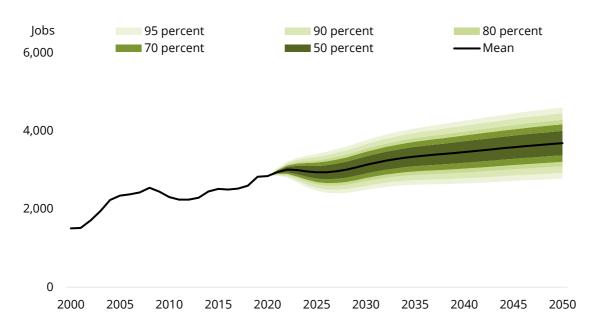


Other

To capture the full range of employment with the region, we need to capture other jobs that do not neatly fall into other categories. 'Other' includes, for example, local government, mining, and many artists.

While diverse, at an aggregate level, these jobs generate demand for business land, so we step through the same methods for other sectors and present the forecasts for the other sector in Figure 24. This grab bag sector grows by 0.9% a year to 2050.

FIGURE 24 THE COLLECTION OF 'OTHER' JOBS 'SET TO GROW TO 2050

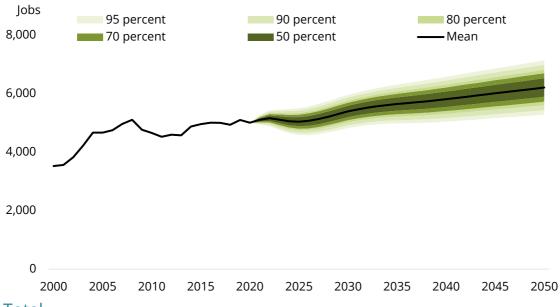




Retail

The retail sector provides a tale of two cities – no growth in Nelson City but strong growth in Tasman District – if past trends continue. In aggregate (see Figure 25), we expect retail jobs to grow 0.7 percent on average each year – much lower than the 1.97 percent growth experienced between 2000 and 2020.

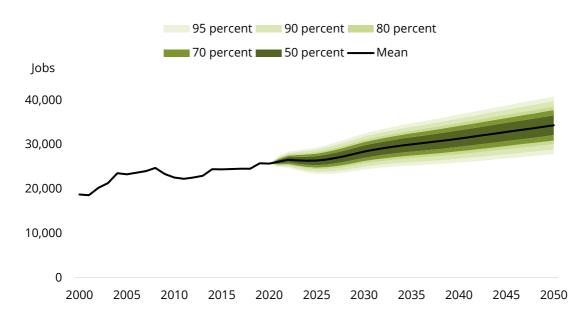
FIGURE 25 RETAIL EMPLOYMENT TO GROW 0.7 PERCENT TO 2050



Total

In aggregate, summing over each sector suggests jobs growth of about one percent on average each year to 2050, adding over 15,000 jobs. This is a little weaker than history. Over the past twenty years, employment in the shared urban area grew 1.6 percent each year to 2020.

FIGURE 26 NELSON-TASMAN SHARED AREA EMPLOYMENT GROWTH ABOUT 1% A YEAR TO 2050





4. Business land demand

4.1 Mapping Activity to Floorspace

Our approach

To project future business demand for land we need to connect our activity projections to business land use. As an intermediate step, we first map activity back to estimates of floor space demand and then map floor space demand to land demand.

Mapping economic activity to floor space demand means taking our forecasts of employment for the region and applying a forecast for the footprint, or floorspace, per worker. Since there is no consistent time series for footprint per worker, we use information from many sources to calibrate our projection. These include:

- over a specific period, the ratio of consents, by activity in the Nelson-Tasman urban environment, to the growth of employees a signal of the capacity required to house additional workers.
- explicit guidance on likely bounds from the National Policy Statement on Urban Development Capacity. These are expectations rather than standards.
- sector reports, for example the Government Property Group's Crown Office Estate Report and local commercial real estate reports.
- sense checking estimates against trends, where we do have consistent data over time, such as international trends in office space per worker.

Since there is limited data on footprint per worker, the assumptions we work with contain some uncertainty. However, the estimates are better than relying on the ranges supplied by the NPS-UDC, as these ranges miss local factors and trends over time.

Calibrating the footprint of economic activity

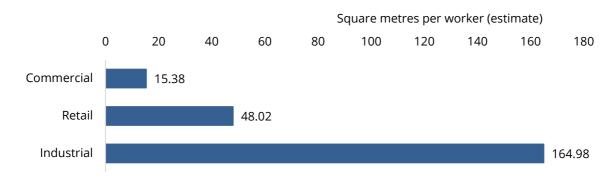
Recall we work with six categories of economic activity – agriculture, commercial, HET (Health, Education and Training), industrial, a catch-all 'other' category and retail. Since we have no lengthy time series data on office space per worker, we use several data sources to calibrate our assumptions.

We first look at the history of consented office floor space using data from Statistics New Zealand. We compare consented floorspace in selected sectors to growth in additional workers in each sector as a guide to the floorspace needed to accommodate each additional worker in the future. This is straight forward for commercial activity (that we match to consents for commercial buildings), industrial activity (that we match to consents for factories, industrial and storage buildings) and retail (that we match to consents for shops, restaurants and bars) but is difficult for Health, Education and Training, other activities and agriculture activity, since there is no clear match in terms of building consents.

Figure 27 shows that on this basis each commercial worker would use about 15 square metres of floorspace, retail workers 28 square metres and industrial workers 164 square metres.



FIGURE 27 WE USE CONSENT DATA AS ONE GUIDE TO FLOORSPACE PER WORKER



Source: Statistics New Zealand, Sense Partners calculations

But other guidance is possible. For example, the Government Property Group provides an estimate of office space per government worker as a target range of 12-16 square metres. That range is likely to be dominated by Wellington office workers who work at higher densities when space is at a premium. Government guidance suggests a range of 15 to 20 square metres for office workers. So we adopt the middle of the range of 17.5 square metres as our benchmark for commercial workers. Increased working from home and adoption of new communication technologies suggests downside risk to this benchmark.

The NPS-UDC also suggests a range of 100 to 170 square metres for industrial workers. Our consents data suggests 165 square metres but we lower this to 100 square metres – below the middle of the range suggested by the NPS-UDC. This adjustment reflects a belief that the underlying footprint of industrial land is shifting towards smaller lots as the nature of industrial activity is moving away from heavy industrial activities towards food manufacturing and other activities that require less floorspace (see box D). Land use is becoming more efficient over time for major users.

The NPS -UDC also suggests a range of 30 – 50 square metres for retail and we also use the central estimate of this measure as our benchmark for translating retail jobs to demand for retail floorspace. Many trends are changing in urban industrial land use and we discuss these trends in box D and summarise our benchmarks in Figure 28 below. Then we show floorspace demand by sector in Figure 30 to Figure 35.

FIGURE 28 OUR BENCHMARKS TO TRANSLATE EMPLOYMENT TO FLOORSPACE

| Sector | Floorspace | Comment |
|-----------------------------|------------|--|
| | per worker | |
| Agriculture | 50 | Every other Agricultural worker generates floorspace |
| | | demand of 100sqm |
| Commercial | 17.5 | Consistent with NPS-UDC guidance |
| | | |
| Health, Education, Training | 25 | A diverse sector – likely to be an average across a range of |
| | | numbers |
| Industrial | 100 | Consistent with NPS-UDC guidance and local consent |
| | | information |
| Other | 30 | A diverse sector – likely to be an average across a range of |
| | | numbers |
| Retail | 40 | Consistent with NPS-UDC guidance |
| | | |

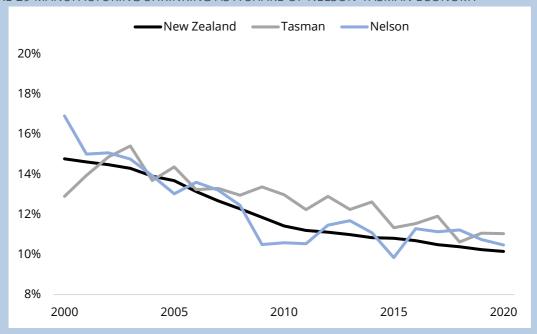


Box D: Trends in urban industrial land use

Shift away from Manufacturing towards a services economy

Trends are also driving the economic composition of urban activity. For decades, manufacturing activity has decreased (see Figure 29) as a share of the Nelson and Tasman economies along with the rest of New Zealand.

FIGURE 29 MANUFACTURING SHRINKING AS A SHARE OF NELSON-TASMAN ECONOMY



Since the footprint of manufacturing is larger than commercial activity, this shift reduces demand for business land overall. But there are limits. Not all industrial land is well-suited to commercial activity. Locations close to transport infrastructure and customer base continue to attract a premium. So, the type of business land that is needed remains important.

Retail disruption

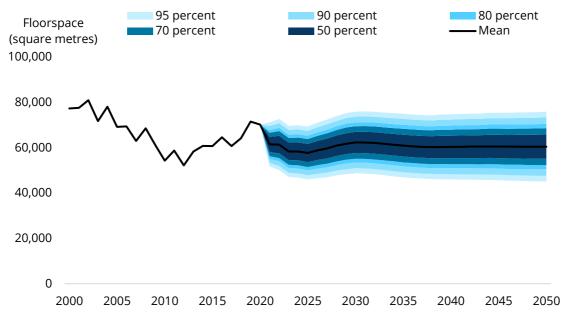
Right now, retail takes up a large footprint across the Nelson-Tasman region. But traditional in-store shopping is under pressure from on-line options. Many factors, including convenience, access to a wider range of products, the ease of comparing prices and improved logistics, challenge the value consumers derive from in-store experiences compared to on-line options.

On-line is a small fraction of total retail expenditure but is growing rapidly while bricks and mortar retail is flat or declining slightly. Growth in on-line might be expected to limit marginal growth in the retail sector, reducing overall demand for business land and transforming the type of land required, towards logistics and away from retail space *per se*. This suggests some downside risk to demand for traditional land for retail purposes offset by increasing needs for warehousing and logistics facilities.



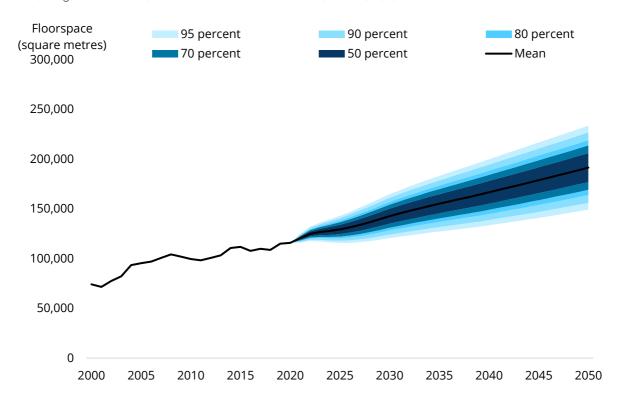
Agriculture

FIGURE 30 AGRICULTURE WORKER SPACE DECLINES BY 0.6% ON AVERAGE EACH YEAR



Commercial

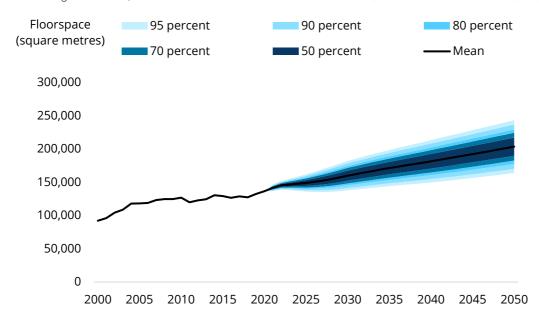
FIGURE 31 THE LOWEST ELEMENT OF THE RANGE SUGGESTS STRONG COMMERICAL GROWTH





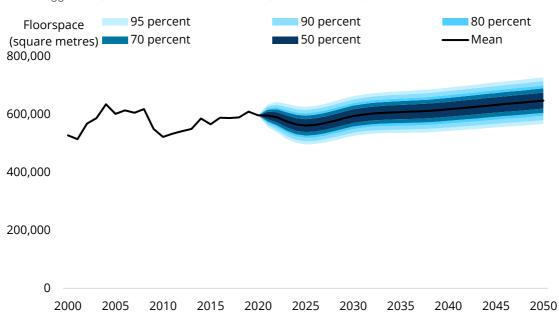
Health, Education and Training

FIGURE 32 HEALTH, EDUCATION AND TRAINING GENERATES DEMAND FOR FLOORSPACE



Industrial

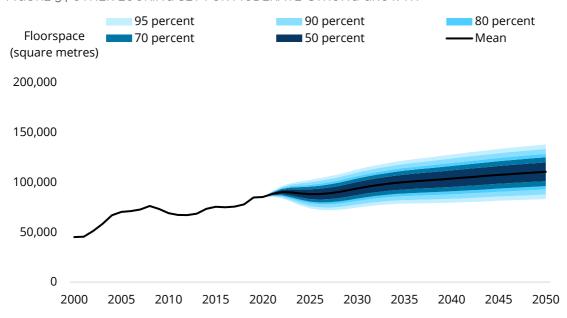
FIGURE 33 INDUSTRIAL DEMAND FLAT FOR SEVERAL YEARS





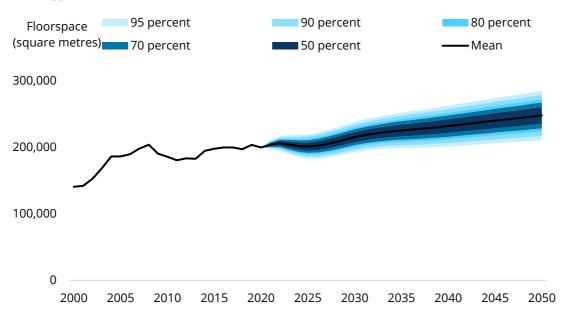
Other

FIGURE 34 OTHER LOOKING SET FOR MODERATE-STRONG GROWTH



Retail

FIGURE 35 RETAIL NEVER REALLY RECOVERS FROM THE GFC AND FACES HEADWINDS

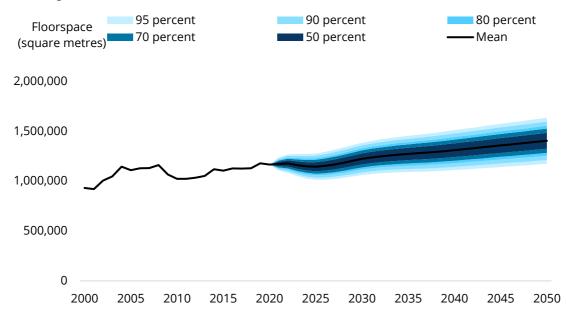




Total

We sum across the six sectors to show total demand for business floorspace in Figure 36. Floorspace demand reflects both the pace of growth and the shifts in the structure of the economy. In aggregate, we expect floorspace growth to average 0.5% to 2050, just slightly less than the underlying 0.6% increase in employment growth over the period.





4.2 From floorspace to land

To move from floorspace demand to demand for business land, we assess Floor-to-Area (FAR) ratios for each sector. We apply the same floor-to-area ratios for both Nelson City and the Tasman urban environment.

To make our assessment we examine typical footprints in sales data, the ratio of floor to land areas for Nelson businesses based on survey data, estimates of unused land area based on the same survey data and a cross-check of our estimates based on scrutiny of a small sample of properties in Nelson's Bridge Street (see Appendix 2).⁵

Figure 37 shows our assessment. We use a floor-to-area ratio of 0.5 for agriculture, health, education and training and the other category. This floor-to-area for agriculture is consistent with cross checks of business sales information. The estimate for other and health, education and training covers a range of heterogenous business models. It is likely to be too low for health services businesses operating in the city centre but a little high for larger health and training facilities.

Since demand for industrial floorspace comprises a large fraction of overall business floorspace demand in the region, total demand is sensitive to the choice of FAR for the industrial sector. We are also aware of under used space across businesses in Nelson and Tasman (see Figure 38). 22% of Tasman's zoned

⁵ We use this information as a cross check on the assumptions for Floor to Area ratios that we apply across the shared urban area rather than specifying differences for Tasman and Nelson.



business land is vacant. There is also some evidence of lower FARs based on looking at sales data but overtime, we expect intensity of land use to increase a little so work with a floor-to-area ratio of 0.4.

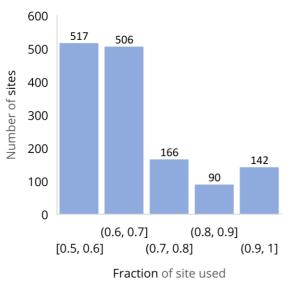
Finally, we adopt a FAR for retail of 0.5 which averages across retail operates in the city centre and large scale, big box retail. Figure 39 to Figure 40 show the floorspace estimates by sector for the shared urban environment.

FIGURE 37 OUR BENCHMARKS TO TRANSLATE FLOORSPACE TO BUSINESS LAND

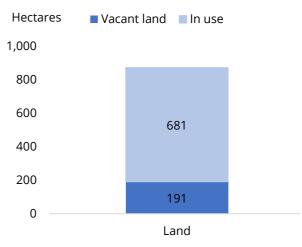
| Sector | FAR ratio | Comment |
|-----------------------------|-----------|--|
| Agriculture | 0.5 | Consistent with cross-checks of large warehouse facilities |
| Commercial | 1.4 | Consistent with our Bridge Street cross- check and estimates of unused land |
| Health, Education, Training | 0.5 | A diverse sector – likely to an average across a range of numbers |
| Industrial | 0.4 | Consistent with NPS-UDC guidance and local consent information |
| Other | 0.5 | A diverse sector – likely to an average across a range of numbers |
| Retail | 0.5 | Consistent with NPS-UDC guidance |

FIGURE 38 INTENSITY OF SITE USE AND VACANT LAND MATTERS FOR ASSESSING CAPACITY

Panel A: Nelson has sites that have spare land



Panel B: Tasman has some vacant land



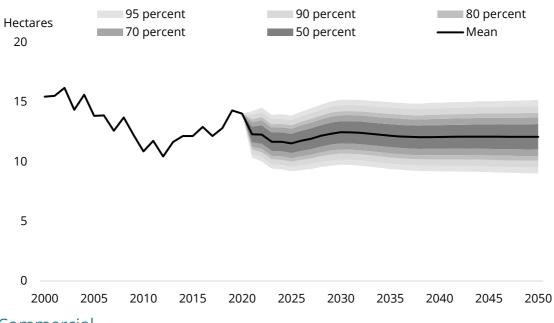
Source: Nelson city council study

Source: Tasman District study



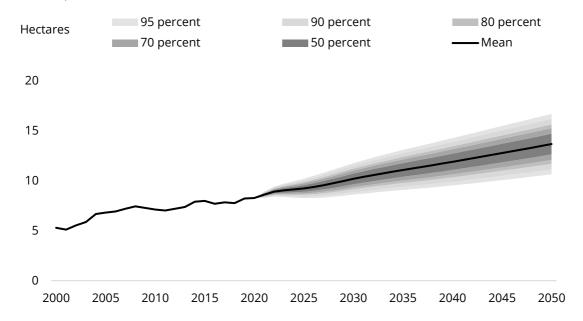
Agriculture

FIGURE 39 BUSINESS LAND DEMAND FOR AGRICULTURE DECLINES A LITTLE EACH YEAR



Commercial

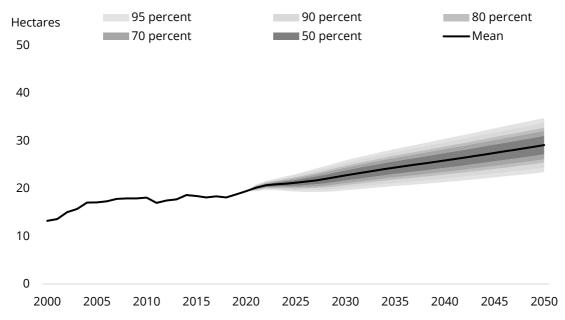
FIGURE 40 EXPECT DEMAND FOR LAND FOR COMMERCIAL ACTIVITY TO EXPAND





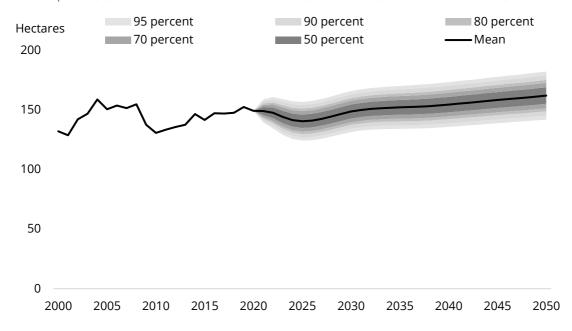
Health, Education and Training

FIGURE 41 HEALTH, EDUCATION AND TRAINING PUSHES BUSINESS LAND DEMAND HIGHER



Industrial

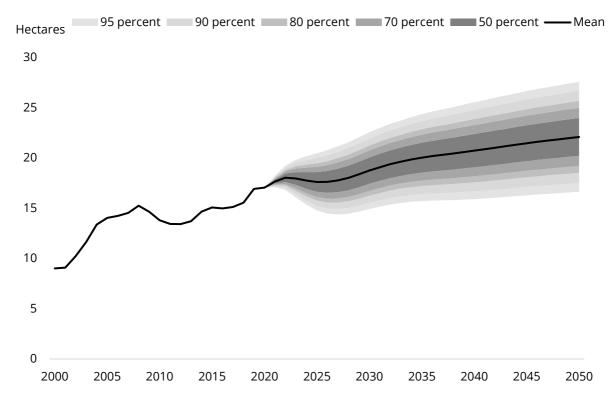
FIGURE 42 INDUSTRIAL DEMAND FLAT FOR YEARS THEN LIFTS A LITTLE FROM TASMAN GROWTH





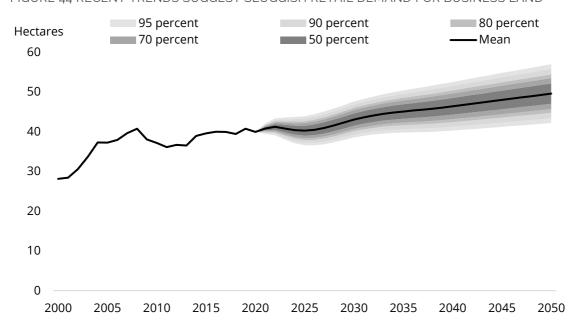
Other

FIGURE 43 'OTHER' CATCH-ALL LIFTS DEMAND FOR BUSINESS LAND



Retail

FIGURE 44 RECENT TRENDS SUGGEST SLUGGISH RETAIL DEMAND FOR BUSINESS LAND



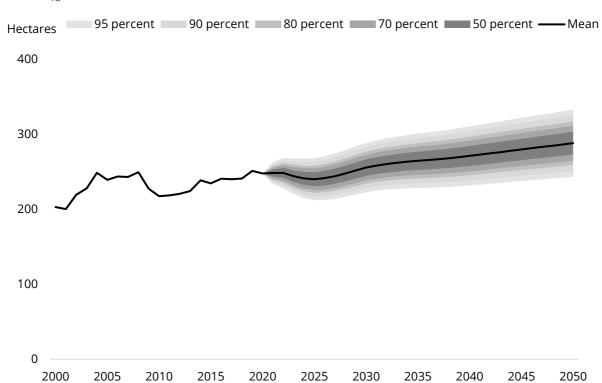


Total

Figure 45 shows total demand for business land over history implied by our modelling and the forecast to 2050. Business land demand is set to grow but a little more moderately compared with history. Demand for business land grows at 0.51% over the forecast horizon, a little lower than the 1.0% growth in demand for business land implied over history. Growth in demand for business land is a little slower than demand over history that has average 1.0% each year.

While our modelling suggests growth over 58 hectares of business land, it is important to consider the extent of vacant and under-utilised business land across the region. Our work with survey and sales data suggests some vacant areas that could be used more efficiently. Our estimates could also be combined with measures of relative land prices between business and residential activity to better understand where land will be most needed in the future.

FIGURE 45 STRUCTURAL SHIFT MODERATES LAND DEMAND





Commercial intensification scenario

The demand for business land we identify in the modelling suggests growth of 40.6 hectares of commercial land. But realised business land use will be contingent on plans, the form of developments and choice of individual developers. That means 40.6 hectares is far from set in stone. There are alternatives to meet our assessment of floorspace requirements from section 4.1.

To show this point, we specify an intensification scenario that gradually lifts the floor-to-area ratio across commercial land in Nelson City from an average or 1.4 to 2 over a thirty-year horizon. Figure 46 shows the assumption for the intensification scenario. Since the business stock evolves relatively slowly, the assumption shows a relatively aggressive shift in density, but we restrict the assumption to apply only to commercial sites in Nelson City, excluding retail and sites in the Tasman urban environment that might be less likely to support higher densities. Figure 47 shows the impacts on commercial land - a decrease of 2.4 hectares that reduces total demand for business land to about 38.2 hectares.

FIGURE 46 OUR SCENARIO INTENSIFIES BUSINESS LAND TO A FLOOR-TO-AREA RATIO OF 2

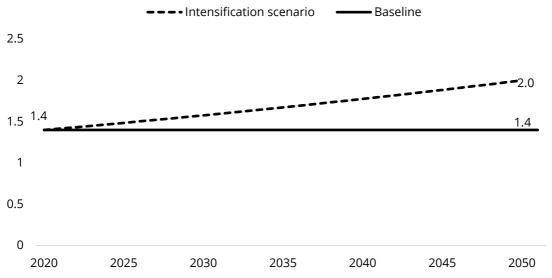
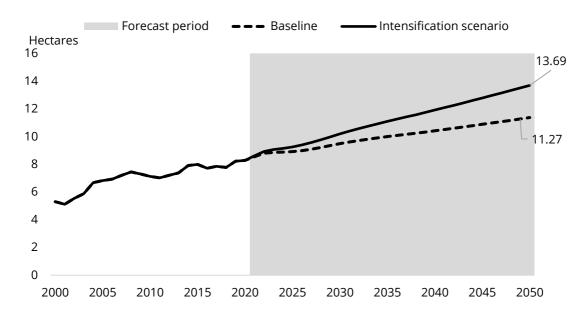


FIGURE 47 INTENSIFYING LAND USE WOULD REDUCE DEMAND FOR COMMERIAL LAND A LITTLE

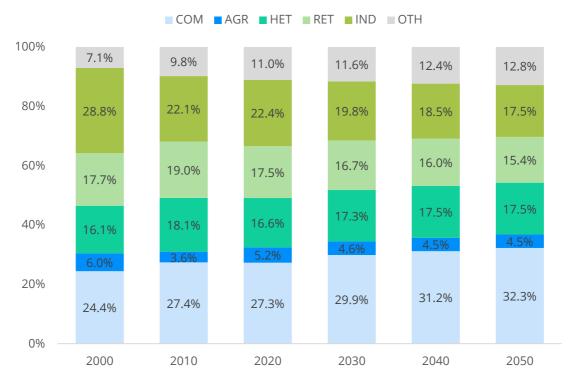




5. Nelson City

One of the key features of the forecasts is the continuing trend for demand for commercial land in Nelson City. Recent employment growth has been strong, and we expect demand for commercial activity to continue. Figure 48 shows commercial employment as a share of Nelson's economy.





But industrial activity is expected to wane. Many of these industrial activities no longer need to be situated so close to the Nelson City consumer base. Increases in demand for other land uses, including residential uses, has pushed up the opportunity cost of retaining land for industrial purposes. Based on our estimates of employment activity, we expect demand for industrial land within Nelson City to decrease over time, freeing up a little land for other uses.

Figure 49 suggests an additional 12.4 hectares of commercial land is required in Nelson City while industrial demand declines by 5.9 hectares. But these demands are no fait accompli. Councils need to work collaboratively to reach the best way of accommodating competing demand for land use across the region. Figure 50, Figure 51 and Figure 52 map how economic activity maps to floorspace demand to land demand for Nelson City.

FIGURE 49 NELSON CITY'S LAND DEMAND A MODEST SHARE OF THE SHARED URBAN ENVIRONMENT

| | Nelson City | Shared urban area |
|---|---------------|-------------------|
| Commercial (and retail) | 12.4 hectares | 29.7 hectares |
| Industrial (includes some agriculture activity) | -5.9 hectares | 10.8 hectares |
| Total | 6.6 hectares | 40.6 hectares |



FIGURE 50 JOB GROWTH FOR NELSON WILL LIKELY PERSIST AT ABOUT 0.60 PERCENT A YEAR

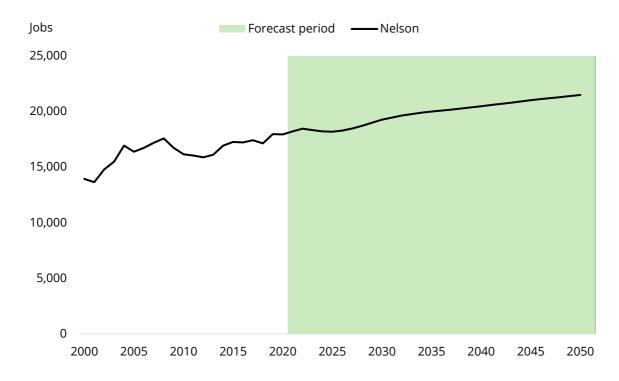


FIGURE 51 SHIFT TO SERVICES MODERATES GROWTH FOR FLOORSPACE

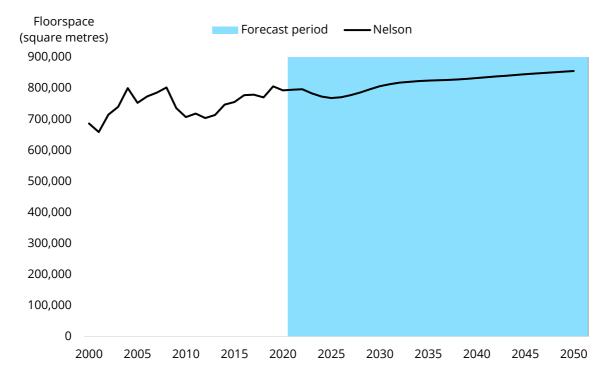
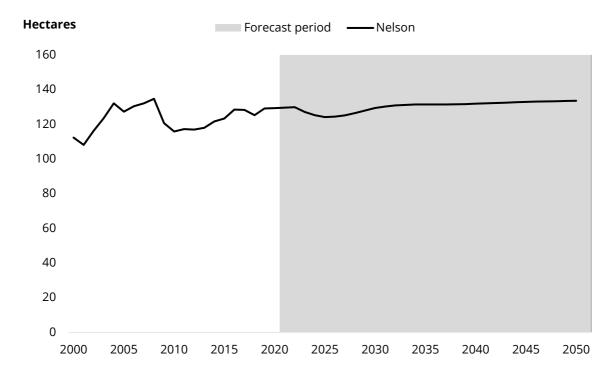




FIGURE 52 EXPECT MODERATE GROWTH IN DEMAND FOR BUSINESS LAND IN NELSON CITY





6. Tasman District

One of the key features of the forecasts is the continuing trend for demand for business land to likely be in Tasman District. Recent employment growth has been high, and we expect demand for activity to continue. Physical location, including close to the production base, customer base and connectivity, continues to make the location appeal to a wide range of businesses.

We separate out Tasman's urban environment – that includes Richmond including Hope, Brightwater, Wakefield, Mapua and Motueka, from separate forecasts for the remainder of Tasman District that we refer to as Tasman's rural area.

Figure 53 shows our assessment for Tasman's urban environment and the Tasman rural area alongside the forecasts for Nelson City and the shared urban area. We expect the Tasman urban area to demand an additional 34 hectares of land the rural Tasman area and an additional 18.1 hectares by 2050.

FIGURE 53 TASMAN'S URBAN AND RURAL AREAS EXPECT TO GROW STRONGLY

| | | Tasman | Shared urban | Tasman |
|---|---------------|---------------|----------------|---------------|
| | | urban | environment of | rural area |
| | Nelson City | environment | Nelson-Tasman | |
| Commercial (and retail) | 12.4 hectares | 17.3 hectares | 29.7 hectares | 15.1 hectares |
| Industrial (includes some agriculture activity) | -5.9 hectares | 16.7 hectares | 10.8 hectares | 3.0 hectares |
| Total | 6.6 hectares | 34.0 hectares | 40.6 hectares | 18.1 hectares |

6.1 Urban Tasman

Tasman's urban environment is undergoing significant change. The past twenty years have seen an increase in the share of the economy used for commercial and health, education, and training employment. Expect more health workers in the local economy. The share of employment devoted to industrial activities has declined a little. Agriculture's share of employment declines sharply by 2050.

These trends are expected to persist over the forecast period to 2050. Commercial activity is expected to increase to 3 in 10 jobs by 2050 (see Figure 54).

But Figure 54 shows the shape of the economy only. Since Tasman's urban environment is growing rapidly, within each sector declining shares can be consistent with modest increases in employment over the forecast period. Total job growth average 1.7 percent CAGR (compound average growth rate), each year to 2050. The combination of strong job growth and a shift toward services employment produces a robust outlook for demand for business floorspace in the area.

Figure 56 shows demand for floorspace persists, generating strong demand for business land in the Tasman urban environment.



FIGURE 54 SHIFT FROM AGRICULTURE TO COMMERICAL JOBS CLEAR FOR URBAN TASMAN

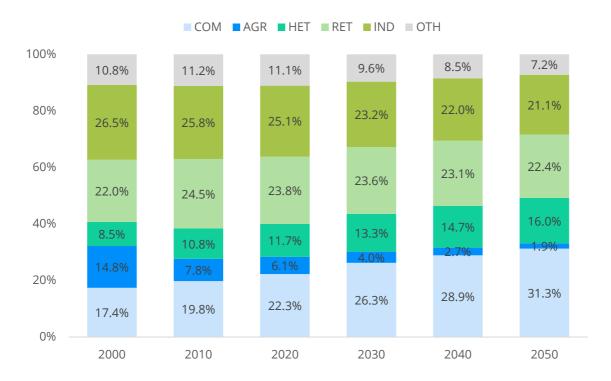


FIGURE 55 EXPECT A FAST PACE OF JOB GROWTH IN URBAN TASMAN OF ABOUT 1.7% EACH YEAR

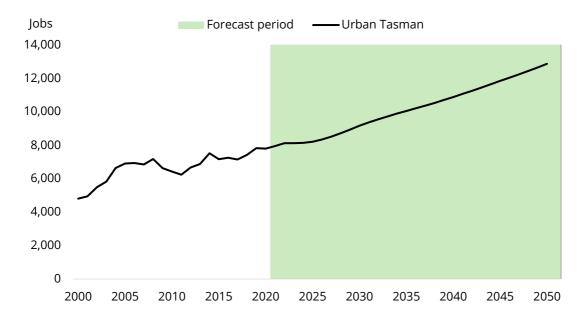




FIGURE 56 DEMAND FOR FLOORSPACE IN THE URBAN TASMAN AREA WILL PERSIST

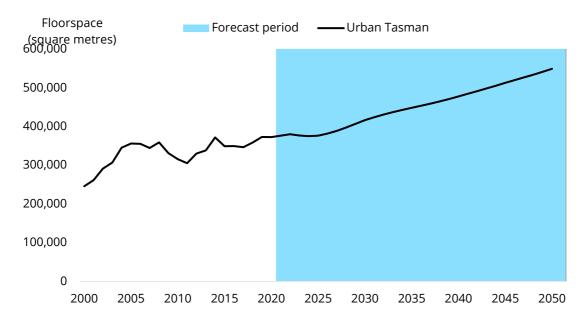
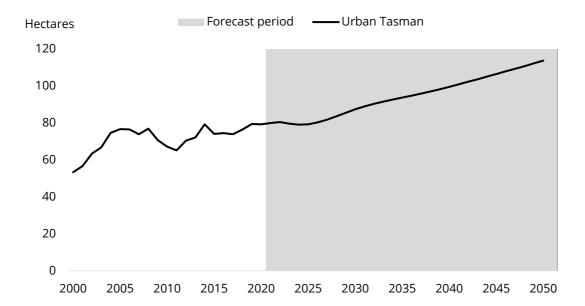


FIGURE 57 GROWTH FOR BUSINESS LAND TO GROW AT ABOUT 1.2% FOR URBAN TASMAN AREA





6.2 Rural Tasman

We separate out Tasman's rural area and produce separate employment forecasts for this region.

Figure 58 shows that the shape of Tasman's rural area is changing dramatically. Twenty years ago one-in-three jobs in this region were related to agriculture. By 2020 only on-in-five jobs were directly related to agriculture. Instead, commercial and health, education and training jobs have become a larger share of the economy.

We expect these trends to continue over time, with modest increases in services employment taking precedence over agricultural employment.

Total jobs growth in Tasman's rural area is expected to remain solid, increasing at about 1 percent CAGR (compound average growth rate) each year to 2050.

Since commercial employment requires less floor space, the shift towards services mitigates the growth in demand for floorspace. We expect total demand for floorspace to stand at about 442,000 square metres by the end of the forecast period.

This creates solid demand for business land – we anticipate demand for business land in Tasman's rural are to need an additional 18.1 hectares. The majority of that demand is from commercial activity rather than industrial activity.

FIGURE 58 RURAL TASMAN ALSO SHIFTING TOWARDS COMMERCIAL JOBS

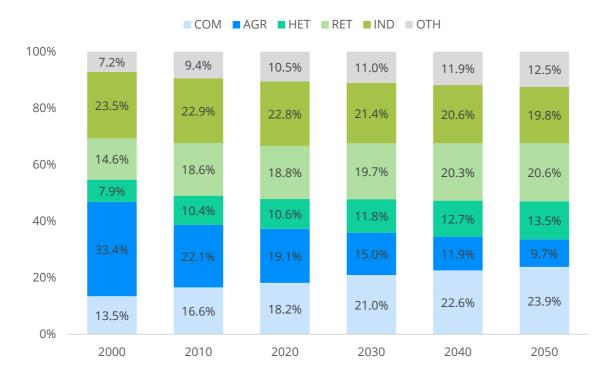




FIGURE 59 TOTAL JOBS IN RURAL TASMAN GROW AT ABOUT 1% EACH YEAR

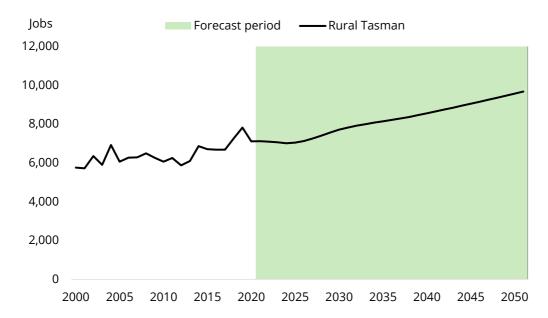


FIGURE 60 EXPECT MODEST GROWTH IN DEMAND FOR FLOORSPACE IN RURAL TASMAN

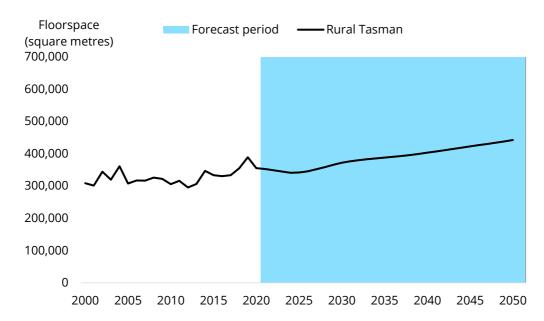
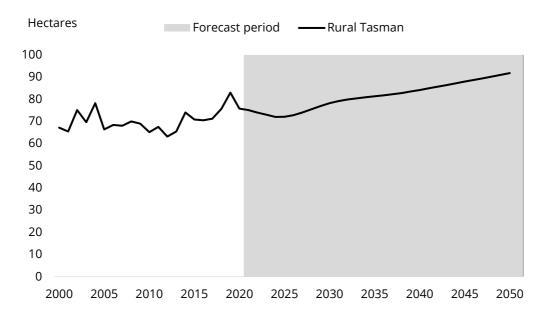




FIGURE 61 DEMAND FOR BUSINESS LAND IN THE RURAL TASMAN WILL GROW





References

Carson, James K. and Andrew R. East, (2017), "The cold chain in New Zealand – A review", *International Journal of Refrigeration*, https://doi.org/doi.10.1016/j.ijrefrig.2017.09.019.

Davies, B and D C Maré. 2020. "Delineating functional labour market areas with estimable classification stabilities" Motu Working Paper 20-08. Motu Economic and Public Policy Research. Wellington, New Zealand.

Moretti, Enrico (2010). "Local Multipliers", *American Economic Review*, American Economic Association, vol. 100(2), pages 373-377, May.

NZIER (2014), "Waimea Dam Economic Assessment Review and update of economic impact assessment of Waimea Community Dam", NZIER report to Nelson Economic Development Agency, October, available at: https://waimeawater.nz/wp-content/uploads/2017/07/NZIER-Waimea-Dam-Economic-Assessment-Report-21-October-2014.pdf

NZIER (2015), "Impact of the Cawthron Institute: Economic contribution to Nelson and New Zealand", NZIER report to the Cawthron Institute, October



Appendix 1: The activity model

VAR models are a standard economic model that typically work with a small number of variables to uncover the structure of the economy and to produce forecasts of key variables.

One of the key benefits of how we will use our VAR model is there is no need to impose restrictions on the model. Aside from assuming linear interactions, the dynamic interactions across variables are left unrestricted. More technically, we can represent the VAR as:

$$x_t = F_{x_{t-1}} + u_t$$

where x_t is a vector of industry share data derived from yearly employment count data from Statistics New Zealand's business demography database, so the t subscript represents a year.

More precisely, we bundle together health, education and training employment and then construct industrial, commercial, agriculture, and retail categories, grouping all remaining employment into an "other" category. Figure 62 shows the map from ANZSIC categories to our industry groupings. So for our VAR model, x_t includes the following variables:

$$x_t = [h_t, i_t, c_t, ag_t, r_t, o_t]$$

where h_t is health, education, and training, i_t is industrial employment, c_t is commercial, ag_t is government employment, r_t is retail employment and o_t is "other" employment.

In principle, x_t could be expanded to include lags of our employment variables such that our industry employment variables could be related to not just last year's values but values from two years ago. When we test the fit of using additional lags, we find that a model with a single lag provides the best trade-off between matching the data and overfitting the data. Moreover, we include a constant and a trend in our model.

Before including the variables in the model, we test the order of integration of each series to check the variables are stationary using Augmented Dickey-Fuller statistics.





FIGURE 62: MAP FROM ANZSIC 2006 TO OUR INDUSTRY CATEGORIES

| Industry | Health and Education | Industrial | Commercial | Agriculture | Retail | Other | FTEs 2020 |
|--|-------------------------|------------|------------|-------------|--------|-------|--------------|
| A Agriculture, Forestry and Fishing | | 0.1 | | 0.9 | | | 2,415 |
| B Mining | | 0.1 | | | | 0.9 | 12 |
| C Manufacturing | | 1 | | | | | 4,613 |
| D Electricity, Gas, Water & Waste | | 0.3 | | | | 0.7 | 127 |
| E Construction | | 0.3 | | | | 0.7 | 2,888 |
| F Wholesale Trade | | 1 | | | | | 1,737 |
| G Retail Trade | | | | | 1 | | 5,088 |
| H Accommodation and Food Services | | | 0.15 | | 0.85 | | 3,117 |
| l Transport, Postal and Warehousing | | 1 | | | | | 1,745 |
| J Information Media & Telecommunications | | | 1 | | | | 251 |
| K Financial and Insurance Services | | | 1 | | | | 490 |
| L Rental, Hiring and Real Estate Services | | | 1 | | | | 568 |
| M Professional Scientific & Tech | | | 1 | | | | 2,710 |
| N Administrative and Support Services | | | 1 | | | | 2,028 |
| O Public Admin. and Safety | | | | | | 1 | 1,549 |
| P Education and Training | 0.75 | | 0.25 | | | | 2,773 |
| Q Health Care and Social Assistance | 0.75 | | 0.25 | | | | 5,263 |
| R Arts and Recreation Services | | | 0.25 | | | 0.75 | 787 |
| S Other Services | | | | | | 1 | 1,691 |

Source: Statistics New Zealand, Sense Partners

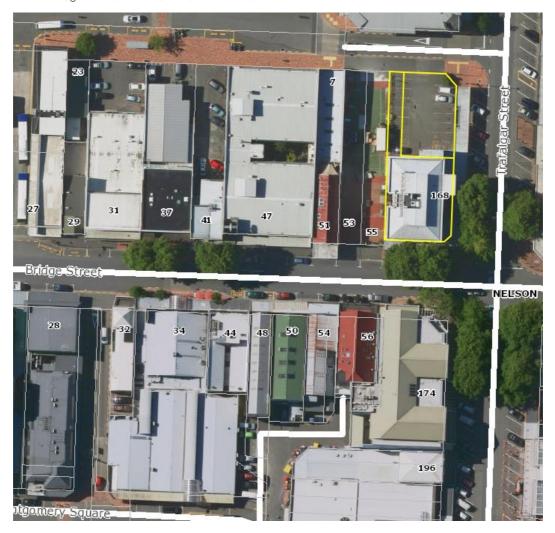


Appendix 2: Bridge St case study

To test our assumptions on how floorspace demand is transformed into demand for land space we took a closer look at a number of commercial properties in Bridge Street – a property in the heart of Nelson's central business district.

Figure 63 shows the difficulty in averaging across such as wide number of different property types. Many properties sill much of the plot area (number 47 for example), but others have large spaces of unused land or land used for car parking (number 41 for example). Moreover, upon investigation, many of the properties contain both residential and commercial activities (see Figure 64).

FIGURE 63 WE USE NELSON'S BRIDGE ST TO INFORM OUR FLOOR-TO-AREA-RATIO



To make an appropriate assumption we sum the implied commercial floorspace over the Bridget street properties based on a conservative estimate of the number of commercial floors and a generous estimate of the number of commercial floors. Then we compare these floorspace estimates to the land area of the parcels in Bridge St. Figure 64 shows these calculations.

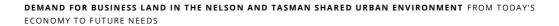




FIGURE 64 SUMMARY STATISTICS FOR BRIDGE ST. CASE STUDY

| | | | | Floors | | Square metres | | |
|---------------------|-------|-------|---------|----------|----------|---------------|----------|--------------------|
| Address | ha | Sqm | \$/sqm | Cautious | Generous | Cautious | Generous | \$sqm ² |
| 174 Trafalgar | 0.075 | 747 | \$5,301 | 3 | 3.5 | 2,241 | 2,615 | \$1,515 |
| 56 Bridge St | 0.021 | 212 | \$2,052 | 2 | 2.5 | 424 | 530 | \$821 |
| 52/54 Bridge | 0.023 | 229 | \$1,747 | 2 | 2 | 458 | 458 | \$873 |
| 50 Bridge St | 0.029 | 289 | \$1,592 | 2 | 2 | 578 | 578 | \$796 |
| 48 Bridge St | 0.020 | 197 | \$1,675 | 2 | 2 | 394 | 394 | \$838 |
| 44 Bridge St | 0.023 | 228 | \$1,952 | 1 | 1 | 228 | 228 | \$1,952 |
| 34 Bridge St | 0.144 | 1437 | \$995 | 1 | 1.5 | 1,437 | 2,156 | \$663 |
| 32 Bridge St | 0.017 | 173 | \$1,474 | 1 | 1 | 173 | 173 | \$1,474 |
| 168 Trafalgar | 0.078 | 783 | \$3,206 | 1.5 | 1.5 | 1,175 | 1,175 | \$2,137 |
| 51 Bridge St | 0.033 | 325 | \$1,123 | 1.5 | 1.5 | 488 | 488 | \$749 |
| 47 Bridge St | 0.106 | 1063 | \$1,223 | 2 | 2 | 2,126 | 2,126 | \$611 |
| 41 Bridge St | 0.037 | 374 | \$1,217 | 0.3 | 0.6 | 112 | 224 | \$2,028 |
| 37 Bridge St | 0.061 | 607 | \$1,137 | 1 | 2 | 607 | 1,214 | \$568 |
| 31 Bridge St | 0.067 | 670 | \$1,090 | 1 | 1 | 670 | 670 | \$1,090 |
| 29 Bridge St | 0.015 | 149 | \$1,107 | 1 | 1 | 149 | 149 | \$1,107 |
| 27 Bridge St | 0.070 | 697 | \$904 | 1 | 1.5 | 697 | 1,046 | \$603 |
| Total | | 8,180 | | | | 11,956 | 14,222 | |
| Floor-to-area ratio | | | | | | 1.46 | 1.74 | |

Our estimates for Bridge street support a floor-to-area ratio between 1.46 and 1.74 for Bridge Street. Given locations just outside the CBD are likely to support lower floor-to-area ratios, we work with 1.4 as a baseline estimate for the Nelson-Tasman shared urban area.



Appendix 3: NPS-UD Buffer

We show our estimates of business land demand alongside business land demand with the buffer recommended by the NPS-UD guidance. The buffer suggests accommodating 49.1 hectares of business land demand.

FIGURE 65: ESTIMATED BUSINESS LAND DEMAND WITH NPS-UD BUFFER

| | Short run | Medium run | Long run | Total |
|------------|----------------|------------------|---------------|---------------|
| | 1-3 years | 4-9 years | 10-30 years | 1-30 years |
| | Panel A: Est | timated business | demand | |
| Commercial | 3.6 hectares | 6.5 hectares | 19.7 hectares | 29.7 hectares |
| Industrial | -10.2 hectares | 8.0 hectares | 13.0 hectares | 10.8 hectares |
| Total | -6.6 hectares | 14.5 hectares | 32.7 hectares | 40.6 hectares |
| | Panel B: Bus | siness demand wi | th buffer | |
| Commercial | 4.3 hectares | 7.8 hectares | 22.7 hectares | 34.7 hectares |
| Industrial | -10.2 hectares | 9.6 hectares | 14.9 hectares | 14.4 hectares |
| Total | -5.9 hectares | 17.3 hectares | 37.6 hectares | 49.1 hectares |

We show our estimates of business land demand alongside business land demand with the buffer recommended by the NPS-UD guidance. The buffer suggests accommodating 49.1 hectares of business land demand.



FIGURE 66: ESTIMATED BUSINESS LAND DEMAND WITH NPS-UD BUFFER: NELSON

| | Short run | Medium run | Long run | Total |
|------------|---------------|-------------------|---------------|---------------|
| | 1-3 years | 4-9 years | 10-30 years | 1-30 years |
| | Panel A: Est | imated business o | demand | |
| Commercial | 2.0 hectares | 3.1 hectares | 7.4 hectares | 12.4 hectares |
| Industrial | -8.3 hectares | 3.0 hectares | -0.6 hectares | -5.9 hectares |
| Total | -6.4 hectares | 6.1 hectares | 6.8 hectares | 6.6 hectares |
| | Panel B: Bus | iness demand wit | th buffer | |
| Commercial | 2.4 hectares | 3.7 hectares | 8.5 hectares | 14.6 hectares |
| Industrial | -8.3 hectares | 3.7 hectares | -0.7 hectares | -5.4 hectares |
| Total | -6.0 hectares | 7.3 hectares | 7.9 hectares | 9.2 hectares |

FIGURE 67: ESTIMATED BUSINESS LAND DEMAND NPS-UD BUFFER: URBAN TASMAN

| | Short run | Medium run | Long run | Total |
|------------|---------------|------------------|---------------|---------------|
| | 1-3 years | 4-9 years | 10-30 years | 1-30 years |
| | Panel A: Est | timated business | demand | |
| Commercial | 1.6 hectares | 3.4 hectares | 12.3 hectares | 17.3 hectares |
| Industrial | -1.8 hectares | 4.9 hectares | 13.6 hectares | 16.7 hectares |
| Total | -0.2 hectares | 8.3 hectares | 25.9 hectares | 34.0 hectares |
| | Panel B: Bus | siness demand wi | th buffer | |
| Commercial | 1.9 hectares | 4.1 hectares | 14.1 hectares | 20.1 hectares |
| Industrial | -1.8 hectares | 5.9 hectares | 15.6 hectares | 19.7 hectares |
| Total | 0.1 hectares | 10.0 hectares | 29.7 hectares | 39.9 hectares |