Waikato Region Housing Initiative – 2018 Housing Stocktake

Prepared by Nifa Limited in collaboration with the Waikato Plan – Waikato Region Housing Initiative Working Group

Reviewed by Deloitte

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Acknowledgements

The Author, Lui Brame of Nifa Limited, thanks the Waikato Plan - Waikato Region Housing Initiative Working Group for its feedback and contribution to this report.

Disclaimer

The views and findings expressed by the Author in this report do not necessarily represent those of the Waikato Plan partners or the Waikato Region Housing Initiative Working Group members.

The assumptions and projections discussed in this report provide a plausible and indicative view on the existing housing stock, future supply, upcoming demand, and any surplus or shortfall in housing at a given point in time based on assumptions. However, the reported numbers cannot be considered and relied upon as precise projections. Every effort has been made to ensure that the information contained in this report is reliable, but its accuracy and completeness cannot be guaranteed. Nifa Limited and the Waikato Region Housing Initiative Working Group will not be held liable for any loss suffered through the direct or indirect use of information in this report.

Deloitte review

Independent Peer Review completed by Deloitte

Independent Peer Review

WRC engaged Deloitte Limited (Deloitte, we or us) to conduct an independent peer review of the Housing Stocktake Report prepared by Nifa Limited on behalf of the Waikato Plan Regional Housing Initiative working group.

The scope of our engagement was limited to peer reviewing the source data and methodology applied in the Housing Stocktake Report in determining the current housing stock estimates, current housing shortfall, and the future supply and demand of housing.

The following components of the Nifa report were outside the scope of our work:

- The completeness and accuracy of data sources;
- Providing an opinion on the outputs and conclusions presented within the Housing Stocktake Report (including housing affordability, homelessness supply constraints, housing types); and
- Performing a cell by cell review of the underlying projection model to check the mechanical accuracy of the outputs.

In our view, the Housing Stocktake Report is a comprehensive study of housing in the Waikato Region, covering a variety of aspects from current housing stock to homelessness and affordability. The availability of such a study should be useful to a wide range of stakeholders.

We are satisfied that a reasonable and logical approach has been followed in determining the:

- Current housing shortfall (including the estimation of the current housing stock and current housing demand); and
- Future housing demand.

The assumptions and data sources underpinning the current and future housing shortfall are reasonable in the absence of 2018 census data. In general, we found that data sources were applied appropriately in determining the current and future housing shortfall.

Subsequent to our initial review, WRC and Nifa Limited addressed the recommendations arising from the peer review process. The table on the next page summarises the peer review recommendations we made and how each recommendation has been addressed in the final Housing Stocktake report.

Deloitte Disclaimer

- The summary on the left provides an overview of our engagement, the approach we took and our observations in respect of the peer review. For a full understanding of our peer review including the limitations of our work, refer to our report titled "Peer Review of Waikato Plan Housing Stocktake Report", dated September 2019.
- Our peer review was prepared at the request of Waikato Regional Council under the terms of our engagement letter and was based on information provided by Waikato Regional Council as of 8 August 2019. We did not update our work for any events or circumstances arising after that date.
- Our report and our work may not be sufficient or appropriate for any third party's purpose and is not intended to contemplate matters in which any third party may be interested or which may be material to any third party. No third party who accesses or is provided with our peer review report or our work may rely on its contents. Deloitte accepts no liability whatsoever to any third party who relies on our peer review report and/or our work.

Yours faithfully,

Doug Wilson
Partner
Deloitte Limited (as trustee for the Deloitte Trading Trust)

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Peer review recommendations and responses

Recommendation	WRC Response
The basis for selecting a 5 year average consenting period in determining the current housing shortfall should be disclosed within the Housing Stocktake Report.	Additional commentary has been inserted on pages 14 and 15 of the final Housing Stocktake Report outlining the basis of using a 5 year period to derive average annual consenting rates.
Sensitivity analysis for the 5 year average consenting period for both the determination of the current and future housing shortfall estimates should be included within the Housing Stocktake Report.	The sensitivity of consenting period for the purpose of deriving an annual consenting rate has been included on pages 15 and 20 of the final Housing Stocktake Report.
Consider adjusting base data (and in particular Rotorua data) when 2018 census data becomes available for current dwelling and non-private dwelling estimates as the current approach is premised on residents in non-private dwellings growing proportionally with the overall regional population since the 2013 census.	Duly noted. Additional narrative has been included on page 21 of the final Housing Stocktake report.
The assumptions applied in backfilling Rotorua data gaps should be disclosed within the Housing Stocktake Report.	Assumptions applied in backfilling Rotorua data have been disclosed on page 21 of the final Housing Stocktake Report.
You should consider highlighting the basis for assuming residents in non-private dwellings will grow proportionally with population growth in the region since the 2013 census.	Additional commentary has been inserted on page 17 of the final Housing Stocktake Report outlining assumptions applied in determining non-private dwelling growth between 2013 and 2018.
The basis and rationale for the adjustments made to consenting data in estimating the 2018 dwelling stock to reflect the time lag between consents being issued to a dwelling being constructed and the proportion of consents that lapse should be disclosed within the Housing Stocktake Report.	Commentary has been inserted on page 12 of the final Housing Stocktake Report explaining the adjustments that have been made to reflect the time lag between a consent being issued and a dwelling being constructed.
As the future housing demand estimates are premised on consenting rates remaining static, the basis for applying a historical 5 year average consenting rate for determining future housing shortfall should be disclosed within the Housing Stocktake Report.	Commentary has been inserted on page 20 to justify the application of a historical 5 year average consenting rate. Sensitivity analysis results are also provided to further support the use of the 5 year average.
You should consider disclosing the methodology and approach followed in estimating future cumulative dwelling requirements and the future time equivalent backlog to 2023 within the future housing demand section of the Housing Stocktake Report.	Commentary has been inserted on pages 17 and 18 to explain the process for estimating the future cumulative dwelling requirement and time equivalent backlog. An example is given to aid in the understanding of the methodology and approach.
You should amend MSD data presented for social housing to reflect the social housing register and disclose the date at which data was obtained to highlight that the MSD register is updated on a retrospective basis. Furthermore you should present MSD social housing data for the Matamata-Piako district.	Changes have been made to table 12 on page 22 to account for the Matamata-Piako district, and retrospective changes have been made to figures from December 2014, December 2015 and December 2016. Reference 36 update has been updated accordingly, to refer to the most up-to-date data from the MSD social housing register.

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1 Executive summary

The *Waikato Region Housing Initiative – 2018 Housing Stocktake* report outlines why housing is important. One reason was put simply by the Housing and Urban Development Minister Phil Twyford when he said, "approximately 1,600 mostly older New Zealanders die premature deaths every winter" and "that is in large part caused by cold damp housing".

The delay of the 2018 Census resulted in several estimates being used to quantify the population and housing stock. There is now a need for ~8,000 houses in specific locations in the Waikato region (~4,000 houses in Hamilton). All territorial authorities in the Waikato region, with the exception of Taupō, have a housing shortfall. If Taupō was included, the net regional shortfall would be ~7,500. Taupō has a housing surplus of ~500. Looking further out to 2043 (~25 years away) and using the medium projection from Statistics New Zealand, an additional ~51,000 houses are required in the Waikato region. Under the high projection scenario, the number of houses needed is ~75,000. In the short term there is the challenge of closing the estimated shortfall gap.

Initial analyses comparing Future Proof supply capacity to housing demand showed that there is largely sufficient supply capacity in the near future. To help close the shortfall, there is one KiwiBuild programme in the Te Kauwhata (Waikato) with the intention of building 175 homes at ~$480,000 each. Under Special Housing Areas (SHA), designed to fast track housing and include affordable housing options, only one plan for 80 houses has been approved in the Waikato. If the three recommended SHA from Hamilton city to the Minister of Housing and Urban Development were to be approved, an additional 2,465 houses could eventually become available. This would mean that the number of new dwellings approved under the SHA would be similar to those achieved in Tauranga of ~3,200 homes over two Housing Accord periods. The government is set to repeal legislation for SHA in September 2019.

In an indicative analysis of varying income levels and mean household expenditure, it is apparent that it would be a challenge to purchase a $529,000 house (the Waikato region median house price) with a 20 per cent deposit and a mortgage if the gross annual household income is $100,000. The household would need to reduce average household expenditure by ~$2,000 per annum. Additionally, it should be noted that the median household income for New Zealand is ~$85,000, which suggests that the median house price is not attainable for many people. Further to this, Hamilton is the third (after Auckland and Tauranga) least affordable housing market in New Zealand, with a median house price to median household income of 6.8 times (three times is considered affordable). Related to affordability is social housing, where recent demand for the social housing register has grown dramatically in the Waikato region, from 381 in December 2017 to 896 in December 2018 (an increase of 135 per cent).

The future demographics of the Waikato region will likely include more individuals over the age of 40 years (e.g. 47 per cent in 2018 to 53 per cent in 2038) along with growing Māori (e.g. 20 per cent in 2018 to 23 per cent in 2038), Asian (7 per cent to 12 per cent) and Pacific (4 per cent to 6 per cent) populations. Both Māori and Pacific peoples will have younger populations. It is also worth noting that the 2013 Census indicated that owner occupied dwellings occur less frequently in Māori (~43 per cent) and Pacific (~33 per cent) populations compared with the general population (~63 per cent).

There is limited information on the quality of housing in the Waikato region but what is available indicates that the Waikato has an ageing stock profile (~54 per cent of housing stock was built after 1980), with 53 per cent of households potentially benefitting from retrofitted roof space and/or subfloor insulation.

Looking to the future, one person households are expected to rise from 25 per cent in 2018 to 28 per cent in 2038. It is also projected that the average household size in the Waikato region will decline from 2.6 people in 2018 to 2.4 people in 2038. Past trends show a growing movement towards 'townhouse, flats, units and other dwellings' as a consent dwelling type (e.g. 236 in 2015, 397 in 2016, 679 in 2017 and 858 in 2018) in the Waikato region. This compares to 'houses' having a fairly static consent rate (e.g. 2,421 in 2015, 2,986 in 2016, 2,595 in 2017 and 2,541 in 2018).

In 2014, ~80 chronically homeless people were living on the streets in and around central Hamilton. Another homelessness count is expected in 2019. In this report, we discuss two examples of groups working with homelessness in the Waikato. First, the People's Project applies the Housing First approach that recognises that it is easier for issues such as mental health and substance use disorders to be addressed once people are housed, and so wrap around services are quickly provided after housing is sorted. Second, the Hamilton Christian Night Shelter provides emergency accommodation (~30 beds) with 60 per cent of requests being from Māori. The shelter is used for a range of reasons including mental health and addiction issues, broken relationships, poverty, and simply the unavailability of houses.

Housing accessibility is of importance to those with disabilities and/or advanced age as these members of our communities are likely to spend more time at home. Having suitable and accessible homes is important so that health and safety is not compromised. A Statistics New Zealand survey indicated that disabled people are more likely to live in a rental home, find it harder to keep their homes warm, and to live alone or as part of a couple (relative to non-disabled people). With the expected increase in the ageing population improving accessibility will become more of a focus.

When reading this report it must be remembered that the housing system is dynamic and is influenced by many factors. This report should be considered current at the publication date.

1.1 Key findings – housing spectrum

Table 1: Key findings – housing spectrum

<table>
<tr><th></th><th>Social</th><th>Affordable</th><th>Market</th></tr>
<tr><td>Benefits</td><td colspan="3">Enabling strong healthy vibrant communities with affordable and quality homes.</td></tr>
<tr><td rowspan="2">Stocktake</td><td colspan="3">• 171,465 dwellings are estimated to be available in the Waikato (2018).
• Potential shortfall right now of ~8,000 houses for the region (excluding Taupō, which has a surplus), including ~4000 houses in Hamilton (average consenting rate is ~1,200 per year in Hamilton).
• Potential time equivalent supply backlog for Hamilton is ~4 years, and for South Waikato (as a complete territorial authority) is ~16 years.
• 13.5% of Waikato region dwellings are empty, perhaps due to use as holiday homes (compares with NZ 8%, Thames-Coromandel 47%, Taupō 25%, Waitomo 17%) (2013 Census).
• Approximately 29% of the Waikato region private occupied dwellings are rental accommodation (Census 2013).</td></tr>
<tr><td colspan="2">4,424 public houses in the Waikato region, with 4,315 of these having income-related rent subsidies in place.</td><td>75 market renters</td></tr>
<tr><td rowspan="2">Demand</td><td colspan="3">Waikato estimated demand – medium profile: ~17,000 houses required over ~5 years, ~51,000 in 25 years; high profile: ~22,000 over ~5 years, ~75,000 in ~25 years.</td></tr>
<tr><td>• The Waikato region housing register had 896 qualifying applicants in December 2018 (135% increase from 381 in December 2017).
• Emergency housing Special Needs Grant paid ~$3.2m year-end September 2018 supporting 785 households in the Waikato region.</td><td>Accommodation Supplements paid $9.8m year-end September 2018 supporting ~32,000 applicants in the Waikato region.</td><td></td></tr>
<tr><td rowspan="2">Supply</td><td colspan="3">Supply capacity – initial indication there is capacity to supply in Hamilton city, and the Waikato and Waipā districts. Waipā slightly constrained in the long term.</td></tr>
<tr><td>Ministry of Social Development increased housing supply targets to 4,853 (+462) houses by 2020.</td><td colspan="2">• KiwiBuild – Lakeside, Te Kauwhata: 175 houses at ~$480,000.
• Special Housing Areas – Waikato-Tainui, Te Kārearea, Hamilton East: 80 houses.
• Three other Special Housing Area applications (2,465 houses) were recommended to Ministry of Housing and Urban Development (awaiting feedback as at June 2019).
• Waikato had ~3,700 dwelling consents in 2018 (~3,500 in 2017).</td></tr>
<tr><td rowspan="2">Affordability</td><td colspan="3">• Demographia International Housing Affordability Survey – Hamilton, median house price/median household income 6.8 times (3 times is affordable).
• Hamilton is the third least affordable housing market behind Auckland and Tauranga.
• Three times multiple on median household income implies a house price of $255,000 (assuming $85,000 household income).
• Over the last five years, the mean rent for a three-bedroom house increased ~25% while wages rose ~14% nationally. Over the last three years, rents in Hamilton and South Waikato have increased 19% and 25%, respectively.</td></tr>
<tr><td></td><td>• KiwiBuild Lakeside, Te Kauwhata: 175 houses at $480,000.
• Above affordable house price of $255,000 (at three times median household income).</td><td>• Waikato region median house price $529,000.
• Above affordable house price of $255,000 (at three times median household income).</td></tr>
</table>

<table>
<tr><th></th><th>Social</th><th>Affordable</th><th>Market</th></tr>
<tr><td rowspan="2">Quality</td><td colspan="3">Approximately 54% of Waikato region housing stock was built after 1980. In 1978, thermal insulation was legislated by NZ law.</td></tr>
<tr><td colspan="2">• 53% of houses could benefit from retrofitted roof space and/or subfloor insulation.
• There is more mould in rented (56%) than owned homes (44%).</td><td></td></tr>
<tr><td>Demographics</td><td colspan="3">• In the future, the Waikato region will have more senior citizens (> 65 years of old), extending from 16% in 2018 to 24% in 2038.
• With the ageing demographic, the proportion of the New Zealand disabled population living in private households is expected to increase from 24% in 2018 to 27% in 2038.
• By 2038 the Waikato region ethnicity distribution is expected to be 59% European (67% in 2018), 23% Māori (20%), 12% Asian (9%) and Pacific peoples 6% (4%).
• In the Waikato region, Māori, Asian and Pacific peoples have younger populations compared to Europeans (e.g. ~71% under the age of 40 years versus ~50%, respectively).
• 70% of Europeans own and occupy homes compared with 43% of Māori and 33% of Pacific peoples (2013 Census).
• 46% of social housing register applicants are Māori.</td></tr>
<tr><td>Housing types /descriptors</td><td colspan="3">• In the Waikato region, the mean number of residents per household is 2.6 in 2018 and is expected to decline to 2.4 in 2038. Consistently, one person households are expected to increase from 25% in 2018 to 28% in 2038.
• The mean number of bedrooms per house is 3.2, and 83% of houses are standalone.
• There is a growing trend in the Waikato region for ‘townhouse, flats, units and other dwellings’ as a consent dwelling type (e.g. 236 in 2015, 397 in 2016, 679 in 2017 and 858 in 2018). This compares to 'houses’ as a consent type which have been fairly static (e.g. 2,421 in 2015, 2,986 in 2016, 2,595 in 2017 and 2,541 in 2018).</td></tr>
</table>

1.2 Introduction

A broad spectrum of community leaders attended the initial meeting for the Waikato Plan – Waikato Region Housing Initiative Working Group (the working group). These included representatives from Hamilton City Council, Ministry of Social Development (MSD), Waikato-Tainui, Habitat for Humanity, Waikato District Health Board, WEL Energy Trust, Whaingaroa-Raglan Affordable Housing Project and Lodge Real Estate (refer to Appendix 1 for the *Terms of Reference for the Waikato Region Housing Initiative Working Group*). The individual participants all offered a different perspective of the housing issues from their various organisational lenses.

During initial discussions there was a strong sense of the interconnectedness of social wellbeing and housing from the various perspectives of the working group membership. The conversations were wide and varied, and included the National Science Challenge for housing design, regional migration, affordability, new models to improve connectedness of health services for those living in unhealthy living conditions, developers and those most affected by the housing situation (e.g. individuals with a disability, lower income families, youth, elderly and tenants).

One of the main conclusions of the meeting was to acknowledge that there were gaps in provision of housing across all sectors. One of the main aims for the working group is for local communities to have sufficient, timely, appropriate and affordable housing located within well-structured, serviced and integrated settlements. A working group of individuals involved with housing in the Waikato has been formed to better understand housing in the area.

An outcome sought by the working group is to have regional housing data that clearly represents stock, demand, supply, cost and location of housing across the spectrum over a long period (current, 3, 10 and 30 years) and for different groups in the community. Additionally, the information obtained should span across three broad areas, namely social, affordable and market housing. For more information, see the *Terms of Reference for the Waikato Region Housing Initiative Working Group* (Appendix 1).

Methodology
The approach to achieve the stocktake of existing housing, and future supply and demand, was to use existing information that is readily available from sources such as Statistics New Zealand, Ministry of Social Development (MSD), Future Proof, Ministry for Housing and Urban Development (MHUD), local councils (e.g. ratings databases, reports) and other reports. This approach was preferred as there is a significant amount of housing information already available in different locations that would benefit from consolidation.

There have been a number of challenges in producing this report including sourcing relevant data across the housing spectrum framework, gaining access to datasets, and in one instance, data reliability. All efforts have been undertaken to ensure the information contained in this report is as reliable and accurate as possible.

Scope of the report
The following items have been considered in the scope of this report:

- existing stock and housing shortfall or surplus
- potential supply and demand with any shortfall or surplus
- affordability of housing
- quality of housing
- regional demographics (a descriptor of supply and demand)
- housing descriptors (a descriptor of supply and demand).

Due to the regional focus and prioritisation being placed on the stocktake, not all housing subjects have been considered although it is recognised that they also impact housing. The following items are examples that have been excluded from the scope of this report:

- tiny houses
- specific areas within territorial authorities needing housing
- funding housing programmes
- various types of housing ownership programmes
- anticipated capacity (additional supply beyond the capacity that is currently plan-enabled).

As much as possible the report has tried to accommodate the requests of the working group but, in some instances, due to time, data and focus of the report, some of the requests have not been completed or have not been addressed fully.

1.3 Conclusion

There is a need now for ~8,000 houses in specific locations in the Waikato region (~4,000 houses in Hamilton). All territorial authorities in the Waikato region, with the exception of Taupō, have a housing shortfall. If Taupō was included, the net regional shortfall would be ~7,500. Taupō has a housing surplus of ~500. Identification of this need is not new, as shown when the Ministry of Business, Innovation and Employment (MBIE) released its own estimate that Hamilton needed ~5,900 houses in June 2017. The supply of new housing is being done with an emphasis on a certain type of housing noting the increased supply of townhouses and flats, for example. Addressing the underlying housing shortfall with more affordable options should be the immediate focus to alleviate some of the strains felt across the housing spectrum.

In addressing the housing shortfall, programmes like the Special Housing Areas (SHA) and KiwiBuild should continue to be supported provided they are appropriately addressing areas in need of housing or alleviating housing stress. The SHA and KiwiBuild programmes are unique in that affordability is a criterion for their housing builds. If, for example, houses under the SHA that were recommended to MHUD were to go ahead an additional ~2,500 houses would be built.

Looking to the future, it is wise to plan for suitable housing for a larger proportion of individuals who are senior citizens, living with a disability or residing in a single person household. It is also important to acknowledge that Māori are over represented in social statistics. An example of this is that Māori represent ~20 per cent of the Waikato population, but 46 per cent of MSD's social housing waiting list and ~60 per cent of Hamilton Christian Night Shelter guests. Furthermore, Māori and Pacific peoples have lower household ownership relative to the general population. The scope of this report did not include understanding some of the social dynamics related to housing but acknowledges that through time the prominence of other cultures (e.g. Māori, Asian and Pacific peoples with younger populations) will have a large bearing on our community. If the desire is to develop strong, healthy and vibrant communities with affordable and quality homes, initiatives like the Waikato Plan – Waikato Region Housing Initiative should be supported to assist and improve housing for these sub-communities and the community as a whole.

1.4 Recommendations

Taking into account the dynamic nature of the housing system the key recommendations from this report are to:

- Establish a housing database with a suitable dashboard that can, among other things, model housing stock, supply, demand and affordability with measures across the housing spectrum.

- The Waikato Plan – Waikato Region Housing Initiative continue to provide a platform for collaboration for Waikato and provide the consolidated 'many voices saying the same thing' to central government on addressing immediate housing needs and mechanisms/tools that the Government can provide to assist the community.
- The Waikato Plan – develop strategies in response to this report.

1.5 Housing spectrum (homelessness to market products)

To better understand the housing environment in the Waikato region, the Working Group considered the spectrum of housing as shown in Table 2. This spectrum ranges from homelessness and emergency housing to market rental and full market housing. Table 2 also shows agencies within the Waikato region that work in each of these spaces.

Table 2: Spectrum of housing

	SOCIAL		AFFORDABLE			MARKET	
	← Increasing subsidy			Increasing independence →			
	Homelessness and emergency housing	**State and other social housing**	**Assisted rental**	**Affordable assisted ownership**	**Market affordable**	**Market rental**	**Full market**
Challenges	Significant rise in the level of homelessness	Number of households seeking social housing has risen significantly	Rents rising at a faster rate than wages Rental market is very tight 45% increase in house prices in the Waikato in the last five years Home ownership rates are declining				
Key players	• The People's Project • Hamilton Christian Nightshelter Trust • Ministry of Social Development • Ministry of Housing and Urban Development • Women's Refuge • Salvation Army • Community Housing Aotearoa	• Ministry of Social Development • Ministry of Housing and Urban Development • Housing NZ • Waikato-Tainui • Accessible Properties • Perry's Foundation (pensioner housing) • Te Rūnanga Ō Kirikiriroa • Councils (e.g. pensioner housing)	• Habitat for Humanity • NZ Housing Foundation • Ministry of Social Development • Ministry of Housing and Urban Development	• Habitat for Humanity • Community Housing Aotearoa • Waikato-Tainui • Gallagher Charitable Trust	• Waikato-Tainui • Gallagher Charitable Trust • Te Rūnanga Ō Kirikiriroa • Developers and councils through Special Housing Areas • Te Mata Pihi • Future Proof • Ministry of Housing and Urban Development – KiwiBuild, Urban Growth Agenda • The Housing Accord and Special Housing Areas	• Developers • Councils through zoning land • The Housing Accord and Special Housing Areas • Waikato-Tainui • Future Proof	
Programmes	• The People's Project – Housing First – Government programme • LinkPeople (part of Wise Group) • Special Housing Areas (40% required to be affordable homes) • WEL Energy Trust Vital Impact Grants – Housing • KiwiBuild • The Government's Urban Growth Agenda • Healthy Homes – Ministry of Health and Whare Ora – Waikato District Health Board • Universal Design (Lifemark) • Papakāinga Housing • Housing Infrastructure Fund			**Strategies and plans**	• Waikato Plan • Future Proof Strategy • Hamilton Urban Growth Strategy • Waipā 2050 • Waikato District Development Strategy • Hamilton Central City Transformation Plan • Hamilton Age Friendly Plan • Taupō District 2050 • Matamata-Piako Town Strategies • National Policy Statement on Urban Development Capacity – Housing and Business Development Capacity Assessment; Future Development Strategy • Waikato Māori Housing Toolkit		

2 Why is housing important for health?

- Minister Phil Twyford stated "approximately 1600 mostly older New Zealanders die premature deaths every winter" and "that is in large part caused by cold damp housing".
- Quality affordable housing is important for healthy families. Families and communities can have better outcomes when suitable quality housing is available to all.

We know appropriate and quality housing is important because it helps protect against some avoidable poor health outcomes (1):

- Cold and damp housing can worsen asthma symptoms, as well as contribute to development of asthma and respiratory tract infections. Cold housing may also contribute to excess winter deaths (2). Recently, the Housing and Urban Development Minister Phil Twyford stated "approximately 1600 mostly older New Zealanders die premature deaths every winter" and "that is in large part caused by cold damp housing" (3). Further, young children and older people are more vulnerable to the effects of poor housing, as they spend more time indoors. In the Waikato, ~16 per cent of the population are over 65 years of age, and this is expected to increase to 24 per cent by 2038. Around 21 per cent of the population is currently under 14 years of age (4).
- Household crowding increases the risk of infectious diseases including lower respiratory tract infections, meningococcal disease (5) and gastroenteritis. In 2013, Pacific (40 per cent) and Māori (20 per cent) people were more affected by overcrowding than European/other ethnicities (5 per cent). Māori represent ~20 per cent (6) of Waikato's population of ~450,000 people (7).
- Poor housing conditions have a damaging impact on childhood learning, with children living in overcrowded or damp accommodation more likely to miss school due to being unwell (5).
- The economic impact of using substandard residential building designs and materials is evidenced by the estimated $11.3 billion cost (2008 value) of the 'leaky homes crisis' that occurred in New Zealand during the 1990s and 2000s (8).

We also know affordable housing is important because (9):

- Children in stable housing do better in school and are less likely to experience disruption from unwanted house moves.
- Affordable housing can allow families to spend more on health care and food as opposed to a continued poverty cycle state (10).
- Affordable housing can also mean reduced stress from managing financial commitments and the threat of a forced sale of a house. This in turn leads to fewer physical and mental health problems, and reduced absenteeism from work.

For a region, housing is important because:

- Affordable and quality homes drive the local economy.
- A happy community is facilitated by having families who are invested in the area with the security of tenure over their homes.
- Healthy homes help kids go to school and develop, and lessen negative health and social impacts on senior citizens. In general, healthy homes create a healthy, productive community that are less affected by illness, either from themselves or due to caring for others.

Some of these points are further emphasised in a Statistics New Zealand consultation document that states "numerous New Zealand and international studies link poor housing quality with poor physical and mental health. Poor health, in turn, leads to increased hospitalisation and absences from school and work, which have implications for the economy" [8]. More information about housing quality can be found in Appendix 2.

3 What housing stock does the Waikato region have?

- The Waikato region has the fourth largest dwelling numbers in New Zealand at ~180,000 of ~1.8 million dwellings in 2013.
- There are an estimated 171,000 dwellings available in the Waikato region, adjusted for unoccupied empty dwellings (this was 13.5 per cent in the 2013 Census).

In 2013, the Waikato region had the fourth largest number of dwellings with ~180,000 houses out of a total of ~1.8 million.

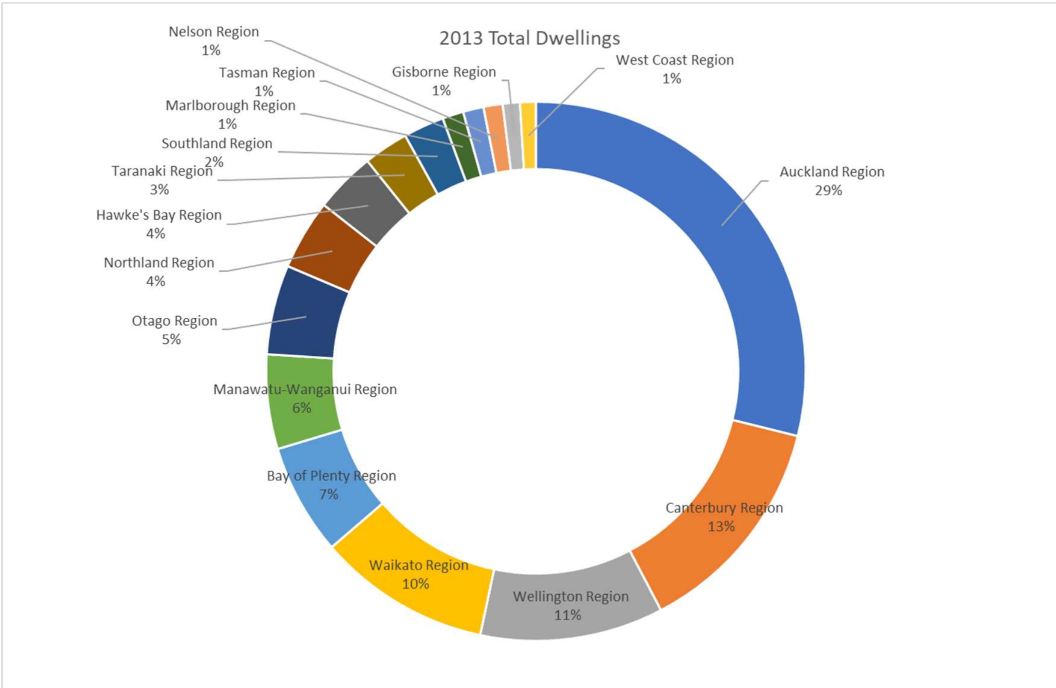


Figure 1: 2013 Total Dwellings [11]

3.1 2018 Dwelling estimate

- Data from the 2018 Census will be available later in 2019.
- The 2018 dwellings estimate has been derived from 2013 Census statistics:
    - Adding new consents for private dwellings.
    - Removing non-private dwellings (e.g. prisons, student halls of residence and residential care facilities).
    - Removing unoccupied empty dwellings (e.g. holiday homes) to derive the number of dwellings ordinarily available to the local population.

Data from the 2018 Census is expected to be published in late 2019, and was not available for this report. Accordingly, the updated population numbers will almost certainly have an impact on the dwelling figures presented below. However, to understand what housing is currently available we have made an estimate of the number of dwellings based on 2013 Census data and new consents.

There have been several adjustments in order to arrive at the 'estimated dwellings available' figures in the Waikato region. The two main adjustments are:

1. Removing non-private dwellings from the estimate. This includes, for example, prisons, student halls of residence and residential care facilities. This adjustment is to allow for the calculation of private dwellings and therefore private dwelling demand.

2. Consenting data has been used as it is readily available from Statistics NZ as opposed to code of completion certificates (actual dwellings constructed). A six-month lag on consenting data has been applied to reflect the time lag between consent being granted and dwelling being constructed. The six-month lag is based upon the Hamilton City Council data, with Hamilton being the largest territorial authority in the Waikato region. A further adjustment was made to reduce consents volume by two percent based on observable data from Auckland City Council and from conversations with Hamilton City Council. As part of the peer review of this report, it was found that consenting volumes and code of completion certificates were within one percent of volume estimated for Hamilton city.
3. Removing unoccupied empty dwellings, which represent a portion of housing stock that is unavailable to the general public at any point in time. For example, holiday homes are typically owned by individuals who are not residents in the local area. For the Waikato region, the proportion of unoccupied empty dwellings has been consistent at 11.5 per cent (2001), 11.7 per cent (2006) and 13.5 per cent (2013). This is an important feature in regions where holiday homes make up a material portion of the total housing stock. For example, in the Thames-Coromandel district 46.9 per cent of dwellings were unoccupied and empty in 2013 whereas in Taupō this figure was 24.9 per cent [11].

Table 3: 2018 Dwelling estimate

Territorial authority	2013 Census total dwellings (excluding non-private [11][12])	New consents [13–15]	December 2018 dwelling estimate (2013 plus consents)	Estimated dwellings available (adjusted for unoccupied empty dwellings [16] [17])
Hamilton city	53,520	5,973	59,493	57,315
Waikato district	24,558	3,424	27,982	26,003
Waipā district	18,750	2,759	21,509	20,635
Taupō district [18]	19,290	1,224	20,514	15,374
Matamata-Piako district	13,191	809	14,000	13,335
Thames-Coromandel district	23,949	1,471	25,420	13,406
South Waikato district	9,459	240	9,699	8,921
Hauraki district	8,727	509	9,236	8,115
Ōtorohanga district	4,059	176	4,235	3,600
Waitomo district [19]	4,200	79	4,279	3,543
Rotorua district [20]	1,443	28	1,471	1,218
Waikato region	181,146	16,693	197,839	171,465

3.2 Waikato population – non-private/private dwellings

Waikato's population can be divided between those that are living in private dwellings [21][22][i] (these are generally not available to the public) and non-private dwellings (e.g. residential care for older people, prisons and educational facilities' halls of residence). In 2018, it was estimated that the number of people living in non-private dwellings was 15,969 (an increase from 14,338 in 2013 [7][23]). The 2018 estimate for people living in non-private dwellings assumes similar growth rates in the Waikato population from 2013 to 2018. It is necessary and reasonable to separate non-private and private dwellings populations because the attributes of where these populations live, or dwell, are very different. This is more evident when comparing a private family dwelling to a residential care facility or a prison.

Table 4: Non-private/private dwellings

Territorial authority	December 2018 population estimate from Statistics New Zealand (June 2018 [24]) plus six months estimate [25]	Population estimate for ordinary residents living in non-private dwellings in 2018	Population for housing based estimate (excludes non-private dwelling ordinary residents)
Hamilton city	171,340	5,777	165,563
Waikato district	76,189	2,286	73,903
Waipā district	54,523	1,535	52,988
Taupō district	37,282	2,146	35,136
Matamata-Piako district	35,463	673	34,790
Thames-Coromandel district	30,066	1,622	28,444
South Waikato district	24,507	358	24,149
Hauraki district	20,005	303	19,702
Ōtorohanga district	10,303	851	9,452
Waitomo district	9,558	213	9,345
Rotorua district	3,946	205	3,741
Waikato region	**473,183**	**15,969**	**457,214**

3.3 2018 Population based housing numbers estimate

- Population based housing estimate equals the population divided by the mean household members.
- The average household size in the Waikato region is expected to decrease to 2.4 people in 2038 from the current level of 2.6 people per household.

The equation to calculate a population-based housing estimate is:

Population based housing estimate = population/mean household members

This approach is similar to that applied on the MBIE dashboard [26] in deriving a proxy for demand for their 'new dwelling consents compared to household growth' chart.

Table 5: Population based housing estimate

Territorial authority	Population for housing based estimate (excludes non-private dwelling ordinary residents)	2018 Projections Statistics NZ mean household size	Population based private dwelling estimate
Hamilton city	165,563	2.7	61,320
Waikato district	73,903	2.7	27,372
Waipā district	52,988	2.5	21,195
Taupō district	35,136	2.4	14,640
Matamata-Piako district	34,790	2.5	13,916
Thames-Coromandel district	28,444	2.1	13,545
South Waikato district	24,149	2.5	9,660
Hauraki district	19,702	2.3	8,566
Ōtorohanga district	9,452	2.6	3,635
Waitomo district	9,345	2.6	3,594
Rotorua district	3,741	2.5	1,496
Waikato region	**457,214**	**2.6**	**178,939**

Table 5 estimates the need for ~179,000 houses based on the mean household size for each Territorial Authority. Table 6 shows a Sensitivity table using a general rate that is applied to the Waikato population.

Table 6: Sensitivity table

Waikato region population	Sensitivity (mean household members)	Estimated housing	Movement
457,214	2.5	182,886	7,034
457,214	2.6	175,851	0
457,214	2.7	169,338	(6,513)

The table above shows that, on average, if more people are in a house fewer houses are needed and if fewer people are in a house more houses are needed. Further consideration would need to be given to issues of overcrowding.

Statistics New Zealand's subnational household projections [27] suggest the average household size in the Waikato region will decrease to 2.4 people in 2038 from the current level of 2.6 people per household. This is consistent with Statistics New Zealand projection of one person households increasing from 25 per cent in 2018 to 28 per cent in 2038.

3.4 2018 December estimated housing numbers (shortfall)/surplus

- Based on assumptions outlined it is estimated that there is a potential shortfall of ~8,000 houses in the Waikato region. Most of this is in Hamilton City with an estimated shortfall of ~4,000 houses.

Table 7: 2018 December estimated housing numbers (shortfall/surplus)

Territorial authority	Estimated dwellings available (adjusted for unoccupied empty dwellings)	Population based private dwelling estimate	Estimated housing (shortfall) /surplus	5-year average consenting rate	Potential shortfall – time equivalent
Hamilton city	57,315	61,320	(4,004)	1,158	3.5 Years
Waikato district	26,003	27,372	(1,369)	654	2.1 Years
Waipa district	20,635	21,195	(561)	531	1.1 Years
Taupō district	15,374	14,640	735	246	
Matamata-Piako district	13,335	13,916	(581)	157	3.7 Years
Thames-Coromandel district	13,406	13,545	(139)	283	0.5 Years
South Waikato district	8,921	9,660	(739)	47	15.7 Years
Hauraki district	8,115	8,566	(451)	99	4.5 Years
Otorohanga district	3,600	3,635	(36)	37	1.0 Years
Waitomo district	3,543	3,594	(51)	14	3.5 Years
Rotorua district	1,218	1,496	(278)	7	37.6 Years
Waikato region	**171,465**	**178,939**	**(7,474)**	**3,234**	**2.3 Years**
Estimated new housing requirement, location specific			**(8,208)**		

All territorial authorities in the Waikato region, with the exception of Taupō, have a housing shortfall. If Taupō was included, the net regional shortfall would be ~7,500. Taupō has a housing surplus of ~500. As another reference point for understanding the housing shortfall, a time equivalent shortfall has been derived by using the past 5-year average consenting rate (5-years being reflective of the most recent housing activity). The estimated housing shortfall has then been divided by the average consenting rate to derive a time equivalent shortfall (i.e. the amount of time to bridge a housing shortfall based on the observable 5-year average consenting rate). To demonstrate the sensitivity of this assumption the 3-year and 7-year average consenting rates were applied for the Waikato region with the following time equivalent results:

- 2.1 years shortfall using the 3-year average consenting rate
- 2.6 years shortfall using the 7-year average consenting rate
- This compares to 2.3 years shortfall using the 5-year average consenting rate

This report estimated a shortfall of ~4,000 houses for Hamilton at 31 December 2018, which is lower than the ~5,900 shortfall estimate from MBIE for 1 June 2017 [28]. The approach taken by MBIE is slightly different to that undertaken for this report. MBIE used population increase and new houses completed (as opposed to consented houses) from a starting position of 2006 (the cumulative difference between supply and demand being the shortfall in this instance). The full details of the methods used by MBIE are not able to be reported on here, as they were only described in a partial release from the MHUD to Stuff news website [28]. Although both estimates involve different points in time and methodological approaches, the MBIE work offers a further reference point.

3.5 Public housing in the Waikato region

Housing New Zealand (HNZ) and community housing providers (CHP) are the main providers of social housing in the Waikato region. The criteria to qualify for social housing are shown in the demand section of this report. For more detail on HNZ stock see Appendix 4.

Table 8: Public housing in the Waikato region [29–32]

Housing Support	Dec-17	Mar-18	Jun-18	Sept 18
HNZ IRRS Places	4,079	4,153	4,184	4,215
Registered CHP IRRS Places	80	85	91	100
HNZ Market Renters	80	74	73	75
Registered CHP Market Renters	2	2	3	1
HNZ Short-term Vacants	29	33	37	20
HNZ Long-term Vacants	37	26	22	13
Public houses in Waikato Region	**4,307**	**4,373**	**4,410**	**4,424**

The CHP in the Waikato region are listed below. They include from Table 8, 100 CHP Income Related Rent Subsidy (IRRS) places and 1 registered CHP Market Renters.

Table 9: Waikato community housing providers September 2018 [29–32]

Community housing providers (CHP)	Housing count
LinkPeople Limited	53
Accessible Properties New Zealand Limited	27
Ngā Rau Tatangi	11
The Salvation Army New Zealand Trust	5
Habitat for Humanity New Zealand Limited	3
Coromandel Independent Living Trust	2
Total	**101**

Accessibility

For the HNZ stock, we requested information to understand how many houses were considered accessible from a disability perspective. We were given some indication that ~284 properties in the Waikato region (excluding the Rotorua district completely) included modifications for disability. At the time, HNZ was unable to summarise specific modifications or confirm if the modifications were for accessibility as the information was not held centrally. The full extent of the request was refused on the basis that substantial collation or research would be required.

3.6 Rental stock

In 2013, ~29 per cent of the Waikato region's private occupied dwellings were rental accommodation. Hamilton has the highest percentage of rentals at ~37 per cent. Private rentals include those owned by a private person, trust or business. See Appendix 5 for more detail including territorial authority rental stocks.

4 Housing Demand

- Population based housing demand is based on population/mean number of residents per household.
- Using the medium projection scenario from Statistics New Zealand, it is expected that the population will grow by ~89,000 people, and that ~51,000 houses are needed over ~25 years (including ~26,000 in Hamilton).

Population projections have three scenarios as shown in the top of the table for the Waikato region. The more detailed part of the table below shows a breakdown by territorial authority. Statistics New Zealand advises that at the time of the release in 2017 the medium projection was most suitable for assessing future population change. 2018D represents 2018 December and is the starting point for the projection.

Table 10: Waikato population projections [33]

Waikato population projections	2018D	2023	2028	2033	2038	2043	Additional population over ~25 years
Low	473,183	473,460	482,630	488,130	490,430	490,090	16,907
Medium	473,183	493,500	514,600	533,000	548,620	562,240	89,057
High	473,183	513,270	546,380	577,430	606,580	634,890	161,707

Waikato population projections – medium	2018D	2023	2028	2033	2038	2043	Additional population over ~25 years
Hamilton city	171,340	182,100	193,500	204,400	214,700	224,800	53,460
Waikato district	76,189	81,700	87,200	92,400	97,200	101,700	25,511
Waipā district	54,523	57,200	59,900	62,300	64,300	65,900	11,377
Taupō district	37,282	37,870	38,460	38,750	38,850	38,770	1,488
Matamata-Piako district	35,463	35,900	36,500	36,900	37,100	37,000	1,537
Thames-Coromandel district	30,066	29,400	29,600	29,500	29,000	28,400	-1,666
South Waikato district	24,507	24,000	23,800	23,300	22,600	21,700	-2,807
Hauraki district	20,005	20,700	20,900	20,900	20,700	20,300	295
Ōtorohanga district	10,303	10,850	11,000	11,000	10,950	10,850	547
Waitomo district	9,558	9,700	9,590	9,360	9,050	8,690	-868
Rotorua district	3,946	4,080	4,150	4,190	4,170	4,130	184
Waikato region	**473,183**	**493,500**	**514,600**	**533,000**	**548,620**	**562,240**	**89,057**

When calculating the population living in private dwellings going forward, an adjustment is made for those living in non-private dwellings (e.g. residential care units and prisons), the non-private dwelling population is removed from the housing population as this population is not housed in ordinary private dwellings. It is assumed for modelling purposes that this population grows at the same rate as the overall population on the basis that there is a growing senior population The starting point for the number of people living in non-private dwellings is ~14,000 from the 2013 Census, growing to ~19,000 in 2043. Once the 2018 Census data is available it is envisioned the data set will be recalibrated.

Cumulative housing demand

Table 11 shows the cumulative population-based housing demand estimate. To arrive at this population based housing estimate the general approach is to start with:

1. December 2018 population (and other population estimates over the period of time).
2. *Less* - the population living in non-private dwellings.
3. *Equals* - population requiring housing.

4. *The resultant figure is then divided by* the *average household size.*
5. *To equal the population based housing requirement.*

It is worth nothing the December 2018 starting shortfall in Table 7, ~8,000 houses is the same as '2018D' in Table 11.

Table 11 highlights that the Waikato region needs to build ~3,700 houses in each of the next ~5 years (4.5 years, 2018D to June 2023) to meet the population based demand estimate. From a regional perspective the level of housing requirement has only been achieved in 2018 with 3,742 consents. It is important to remember that there are territorial differences. An example of this is Hamilton city which had 1,487 dwelling consents in 2018 compared with the estimated yearly requirement of ~1,700 houses over the next ~5 years.

Table 11 shows the '2023 yearly average' which represents the number of houses needed each year to meet demand. It shows the '5-year average consenting rate' based on the past. And lastly, the potential time equivalent backlog in 2023 if consenting is only done at the '5 year average consenting rate'. An example of how this is explained is shown with Hamilton, it is estimated that at 2023 there could potentially still be a backlog of ~2 years if consenting each year is only ~1,200.

As a further example in understanding the calculations for Table 11 and the time equivalent backlog, the cumulative housing requirement for Hamilton city by 2023 is expected to be 7,855 dwellings. Between December 2018 and June 2023 an estimated 5,211 dwellings will be constructed (using the 5 year average consenting rate for Hamilton of 1,158 per year). The resultant housing shortfall is therefore estimated to be 2,644 dwellings (being the 7,855 dwellings required less the 5,211 dwellings constructed). The time equivalent backlog has then been estimated to be 2.3 years (being 2,644 dwellings divided by the 5-year average annual consenting rate of 1,158 dwellings).

Table 11: Cumulative housing demand

Waikato cumulative dwelling requirement	2018D	2023	2028	2033	2038	2043	2023 yearly mean	5-year mean consenting rate	Potential backlog to 2023
Low	8,208	14,180	19,710	25,108	31,213	33,922	3,151	3,234	
Medium	**8,208**	**16,578**	**28,866**	**37,572**	**44,783**	**50,863**	**3,684**	**3,234**	**0.6 Years**
High	8,208	22,320	35,059	52,808	64,678	75,400	4,960	3,234	2.4 Years

Waikato cumulative dwelling requirement – **medium**	2018D	2023	2028	2033	2038	2043	2023 yearly mean	5 year mean consenting rate	Potential backlog to 2023
Hamilton City	4,004	7,855	14,598	18,649	22,477	26,231	1,746	1,158	2.3 Years
Waikato District	1,369	3,349	6,529	8,469	10,260	11,939	744	654	0.6 Years
Waipā District	561	1,601	2,651	4,593	5,403	6,051	356	531	
Taupō District	0	0	385	503	544	544	0	246	
Matamata-Piako District	581	1,340	1,585	1,748	2,489	2,489	298	157	4.0 Years
Thames-Coromandel District	139	139	139	548	548	548	31	283	
South Waikato District	739	739	851	851	851	851	164	47	11.2 Years
Hauraki District	451	749	1,241	1,241	1,241	1,241	166	99	3.0 Years
Ōtorohanga District	36	229	281	281	281	281	51	37	1.7 Years
Waitomo District	51	250	250	250	250	250	56	14	12.9 Years
Rotorua District	278	329	355	437	437	437	73	7	39.9 Years
Waikato Region	**8,208**	**16,578**	**28,866**	**37,572**	**44,783**	**50,863**	**3,684**	**3,234**	0.6 Years

Waikato cumulative dwelling requirement – **high**	2018D	2023	2028	2033	2038	2043	2023 yearly mean	5 year mean consenting rate	Potential backlog to 2023
Hamilton City	4,004	10,289	15,836	24,373	30,059	35,745	2,286	1,158	4.4 Years
Waikato District	1,369	4,462	7,121	11,118	13,767	16,379	992	654	2.3 Years
Waipā District	561	2,573	4,206	5,722	7,121	8,482	572	531	0.3 Years
Taupō District	0	74	655	1,876	2,323	2,687	16	246	
Matamata-Piako District	581	1,341	2,607	3,179	3,629	4,037	298	157	4.1 Years
Thames-Coromandel District	139	379	785	1,010	1,873	1,920	84	283	
South Waikato District	739	972	1,130	1,631	1,631	1,631	216	47	16.1 Years
Hauraki District	451	1,091	1,434	2,092	2,226	2,315	242	99	6.5 Years
Ōtorohanga District	36	423	426	687	793	899	94	37	7.0 Years
Waitomo District	51	307	379	579	590	590	68	14	16.8 Years
Rotorua District	278	408	480	541	666	713	91	7	50.7 Years
Waikato Region	**8,208**	**22,320**	**35,059**	**52,808**	**64,678**	**75,400**	**4,960**	**3,234**	2.4 Years

To assist with the understanding of the sensitivity related to the housing shortfall a time equivalent has been prepared (i.e. that is based off the past 5-year average consenting rate). A sensitivity analysis has been applied to the Waikato 'Medium - cumulative dwelling requirement' potential backlog to 2023. Applying the three year and seven-year average volume consenting rates to the Waikato region has indicated the following time equivalent (i.e. the amount of time to bridge the housing shortfall) results:

- 0.1 years housing shortfall using the 3-year average consenting rate.
- 1.2 years housing shortfall using the 7-year average consenting rate.
- This compares to 0.6 years housing shortfall for 5-year consenting rate.

Comparisons to Future Proof [(34)]

Future Proof [(35)] is a 30 year growth strategy specific to Hamilton city, Waipā district and Waikato district sub-region. Within Future Proof there is demand dwelling estimates [(34)] for this sub region of Hamilton city, Waipā district and Waikato district over the period June 2016 to June 2046. While the estimates are similar to those provided in Table 11 after rebasing the estimates for the same time period (i.e. reducing Future Proof estimates by 5.5 years to reflect Table 11 starts in December 2018 to June 2043). It is not the intent of the report to reconcile Table 11 to Future Proof projections noting that the Future Proof work is likely to have be done with a different set of assumptions and data.

Rotorua District

Within this report and in Table 11 there have been limitations with the Rotorua district data as it represents only a small part of the Rotorua district. Where the data is available it has been used (e.g. 2013 dwellings) and where data has not been readily available an assumption has been made (e.g. an approximation for the number of consents, based off the ratio of new consents to 2013 dwellings from Waitomo ~2%). With Rotorua representing less than one percent of the Waikato regional stock (i.e. ~1,200 of ~179,000 for the Waikato Region, noting that only a portion of Rotorua is within the Waikato region), the territorial authority is important. However resourcing to extract data has been prioritised in other areas of the report. It is envisioned that any revision of the 2018 Housing Stocktake report would include a refresh using 2018 census data including the portion of Rotorua that is included as part of the Waikato region. Due to these limitations the data quality for the Rotorua district cannot be assured.

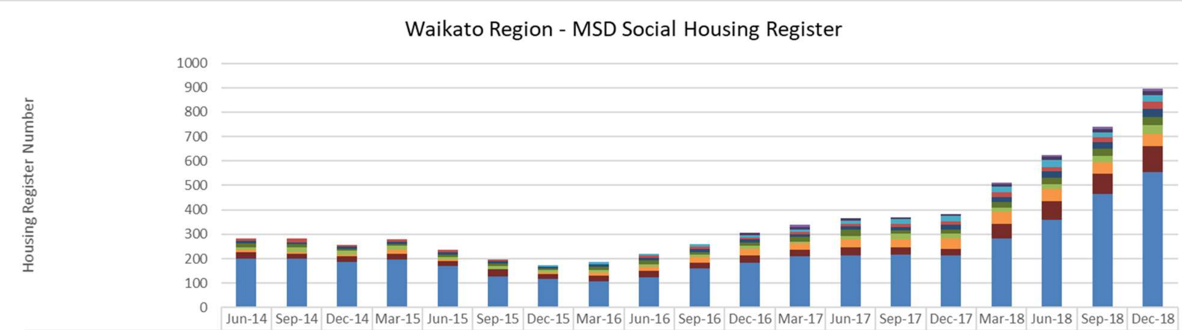
4.1 Demand for social housing

- The Waikato region had a 135 per cent increase in demand on the social housing register from December 2017 (381) to December 2018 (896).
- To qualify for the register the application is classified as:
    - priority A ‘at risk’
    - priority B ‘serious housing need’

Demand for MSD social housing in the Waikato region has grown dramatically in 2018, from 381 in December 2017 to 896 in December 2018. This is an increase of 135 per cent.

Table 12: Demand for social housing (36)

Territorial authority (37)	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
Hamilton city	186	118	184	212	553
Hauraki district	6	S	7	13	31
Matamata-Piako district	16	11	13	20	36
Ōtorohanga district	S	S	S	S	9
South Waikato district	S	7	9	23	25
Taupō district	7	6	27	43	51
Thames-Coromandel district	10	7	13	20	32
Waikato district	23	18	28	29	107
Waipā district	8	7	14	14	33
Waitomo district	S	S	10	7	19
Waikato region (38)	**256**	**174**	**305**	**381**	**896**
Year on year growth		**-32%**	**79%**	**24%**	**135%**



	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
Otorohanga district	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	6	6	10	9
Waitomo district	0	0	0	0	0	0	0	0	0	0	10	11	11	8	7	10	13	13	19
South Waikato district	0	0	0	0	0	0	7	9	7	12	9	11	13	18	23	24	29	20	25
Hauraki district	10	16	6	10	8	7	0	0	9	8	7	9	10	15	13	19	17	20	31
Thames-Coromandel district	10	9	10	9	9	9	7	12	11	12	13	11	14	13	20	20	27	29	32
Waipa district	16	11	8	9	13	12	7	11	14	10	14	17	24	12	14	21	25	28	33
Matamata-Piako district	12	19	16	17	7	11	11	11	12	13	13	9	14	22	20	19	20	28	36
Taupo district	8	8	7	14	9	0	6	14	16	21	27	24	33	34	43	49	51	45	51
Waikato district	26	19	23	26	19	31	18	23	25	25	28	29	33	32	29	58	76	83	107
Hamilton city	201	201	186	195	170	127	118	107	125	159	184	209	214	215	212	284	359	465	553

Figure 2: Waikato Region – Social Housing Register (36)

The social housing register as shown in Figure 2 can be compared to the available existing public housing tenancies is shown in the Table 13. The ratio of social housing register applicants to public housing tenancies shows that in Hamilton, for example, that there was excess demand for social housing of ~15 per cent (465 applicants/2,979 social housing) in September and ~19 per cent (553/2,979) in December (assuming public housing tenancy numbers are the same as September).

Table 13: Existing social housing (32)

Territorial authority	September 2018 Existing housing
Hamilton city	2,979
Hauraki district	108
Ōtorohanga district	37
Taupō district	164
Waikato district	382
Waitomo district	90
Matamata-Piako district	170
South Waikato district	36
Thames-Coromandel district	210
Waipā district	215
Waikato region	**4,391**

The social housing register includes applicants assessed as eligible for social housing who are ready to be matched to a suitable property.

Some of the qualifying criteria are (39):

- aged 16 years or over
- ordinarily resident in New Zealand
- income under:
  - $601.31 a week (after tax) for people who have no partner and no dependent children
  - $925.08 a week (after tax) for people who have a partner and/or dependent children
- cash assets worth less than $42,700.

The assessment (40) is then based on:

- adequacy e.g. consideration of current living situation
- suitability e.g. disability, medical, personal needs, violence
- affordability e.g. ability to afford alternative, suitable housing in the private market
- accessibility e.g. disadvantaged because of discrimination
- sustainability e.g. financial management difficulties, social functioning challenges.

To qualify for the register the application is classified as:

- priority A 'at risk'
- priority B 'serious housing need'.

The housing demanded is largely one to two bedrooms, which accounts for 74 per cent of the waiting list. This compares to an average 3.2 bedrooms for Waikato's housing stock.

As at December 2018, Māori accounted for 46 per cent of the registered social housing applicants.

4.2 Housing support in the Waikato region – Ministry of Social Development

- There is significant expenditure from MSD in housing support. The Waikato region full year cost includes:
  - Accommodation Supplements of $9.8m
  - Temporary Additional Support of $1.5m
  - Emergency Housing Grants of $3.2m.

The following table provides examples of how MSD supports housing in the Waikato (not exhaustive).

Table 14: Ministry of Social Development housing support (29–32)

Housing support (quarterly)	**Dec-17**	**Mar-18**	**Jun-18**	**Sept-18**	**Full year**
Accommodation Supplement (number)	31,836	31,604	31,881	32,636	**31,989**
Weekly total AS amount	1,817,937	2,579,308	2,633,990	2,726,925	**9,758,160**
Temporary Additional Support (number)	7,933	6,817	6,298	6,285	**27,333**
Weekly total TAS amount	514,408	325,518	328,575	330,567	**1,499,068**

Accommodation Supplement (AS) is a weekly payment to assist people who are not in public housing, with rent, board or the cost of owning a home.

Temporary Additional Support (TAS) is a weekly payment that helps with essential living costs that cannot be met from income or through other resources. It is paid for a maximum of 13 weeks.

In addition to the above, MHUD also pays income-related rent subsidy (IRRS) to registered housing providers to cover the balance between the tenant's rental payment and the market rent for the property.

The Emergency Housing Special Needs Grant pays for short term accommodation for up to seven days at a time and is provided by commercial and community providers who are not contracted by MSD to deliver accommodation services.

Table 15: Emergency housing (29–32)

Emergency housing special needs grant	**Dec-17**	**Mar-18**	**Jun-18**	**Sept-18**	**Full year**
Grants	253	356	610	1,382	2,601
Households	97	138	217	333	785
Amount	236,674	398,126	675,763	1,938,087	3,248,650

5 Supply of housing

5.1 Future Proof

- In the sub-region of Hamilton city, Waikato district and Waipā district, initial indications are that there is enough capacity to meet demand requirements with the exception of Waipā with a shortfall of ~800 houses in 2046.

Future Proof [35] is a 30 year growth strategy specific to the Hamilton city, Waipā district and Waikato district sub-region. The Future Proof analysis provides an indication of supply capacity for the sub-region.

Current capacity, as defined in the *Housing and Business Development Capacity Assessment 2017* [34], has been assessed as:

- either zoned (or is planned to be zoned) for residential activity
- enabled by rules allowing residential activity in the relative district plan
- supplied or likely to be supplied by infrastructure and feasible for housing development.

For the purposes of this report, anticipated capacity (additional supply beyond the capacity that is currently plan enabled) has not been considered. As in most instances current supply capacity exceeds demand.

Table 16 provide extracts from the Housing Capacity Table (current supply from Future Proof tables, demand estimated from prior analysis).

Table 16: Housing Capacity [34]

Hamilton City Council	**Capacity – future projections (excluding redevelopment potential)**	
	Short term 2021	**Long term 2046**
Cumulative current supply capacity	11,477	49,037
Cumulative anticipated demand (Table 11)	~4,000 – ~8,000	~26,000

Waikato District Council	**Capacity – future projections (excluding redevelopment potential)**	
	Short term 2021	**Long term 2046**
Cumulative current supply capacity	6,987	13,062
Anticipated demand (Table 11)	1,400 – 3,300	~12,000

Waipā District Council	**Capacity – future projections (excluding redevelopment potential)**	
	Short term 2021	**Long term 2046**
Cumulative current supply capacity	3,305	5,186
Cumulative anticipated demand (Table 11)	~600 – ~1,600	~6,000

5.2 KiwiBuild

- In the Waikato, there is one KiwiBuild development project called Lakeside, which is in Te Kauwhata. It plans to sell 175 two bedroom homes at $480,000 each.

KiwiBuild is a central government programme aiming to provide 100,000 houses for first home buyers over the next decade. It has three core aims (41):

1. Increase home ownership.
2. Increase the supply of affordable houses.
3. Use government procurement to reduce the cost of procurement.

KiwiBuild achieves its objectives by several ways including:

- Purchasing land for government-led developments.
- Integrating affordable housing into major urban development or regeneration projects.
- Purchasing or underwriting homes (this can include buying off plans).
- Connecting developers with eligible KiwiBuild buyers.

Eligibility

In brief, qualification requirements for a KiwiBuild home are (42):

- First home buyer or a similar position
- New Zealand citizen
- Annual income up to $120,000 for a single purchaser, or up to $180,000 for more than one purchaser
- Intend to own and live in the home for at least three years.

KiwiBuild pricing

KiwiBuild houses are sold at market prices. Pricing is arranged so that the levels below are not exceeded:

- In Auckland and Queenstown-Lakes, a KiwiBuild home cannot exceed $650,000.
- In all other regions, the maximum price for a KiwiBuild home is $500,000.

Table 17 outlines the KiwiBuild houses available at the time of producing this report.

Table 17: Kiwibuild pricing levels (43)

Development name	New Zealand location	Type	Price or price range
Lakeside 1,600 homes 175 KiwiBuild homes	Te Kauwhata, Waikato	2 bedroom homes under construction	$480,000
Mason Square	Otahuhu, Auckland	2 bedroom completed apartments	$580,000 – $600,000
Northlake	Wanaka	2 and 3 bedroom completed homes	$575,000 – $650,000
Tuatahi	Mt Albert, Auckland	Studio and 1 bedroom apartments under construction	$435,000 – $500,000
340 Onehunga	Onehunga, Auckland	Studio and 1 bedroom apartments under construction	$380,000 – $500,000
Battalion Drive	McLennan, Papakura	2 bedroom completed terraced homes	$525,000
Alliance Lane	McLennan, Papakura	2 bedroom terraced homes under construction	$570,000
Dignity Street	McLennan, Papakura	2 bedroom terraced homes under construction	$560,000 – $565,000
Studholme Street	Rangiora, Christchurch	2 bedroom completed homes	$470,000

Development name	New Zealand location	Type	Price or price range
Chatsworth Avenue	Rangiora, Christchurch	2 and 3 bedroom completed homes	$470,000 – $480,000
Te Rito Street	Marshland, Christchurch	2 bedroom completed homes	$459,000
Dida Park Drive	Huapai, Northwest Auckland	2 bedroom completed terraced homes	$600,000
Belmont Village	Pukekohe	2 and 3 bedroom homes under construction	$575,000 – $635,000

Table 18: KiwiBuild statistics for all of New Zealand as at 12 February 2019

Contracted and committed to build	10,355
Building	279
Homes complete	62
Registered interest	47,853
Prequalified	313
Homeowners	54

5.3 Special housing areas

- There is one Special Housing Area of 80 units in the Waikato, which is 'Te Kārearea' by Waikato-Tainui in Hamilton East.
- Three others with a potential of 2,465 homes have been recommended to MHUD.

The Housing Accord and Special Housing Area (SHA) legislation streamlines new housing developments and allows SHAs to be designated under accords between central government and councils. The Hamilton Housing Accord (44) was signed in December 2016 with the intent of increasing housing supply and improving affordability. SHA are areas of land suitable but not currently zoned for new housing. If land is suitable, Hamilton City Council (HCC) can recommend to the Minister of HUD that a special housing area is established. Resource consenting may be fast tracked for qualifying SHAs.

HCCs affordability requirement is "at least 10% of dwellings must be sold at or below 90% of the Hamilton average house value" (45).

Under the Housing Accord, HCC and the government have agreed to achieve the following targets outlined in Table 19.

Table 19: Hamilton City Council special housing targets (44)

	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)
Agreed targets Number of sections and dwellings consented (46)	1,300	1,400	1,500
Actual Hamilton dwelling consents (refer to Table 37)	1,139	1,487	

Under the Housing Accord, HCC and the government commit to working together collaboratively with social housing providers to improve the supply of affordable housing.

Table 20: Round 1 Special Housing Area applications [45]

Development	Applicant	Minimum # houses	Status
Te Kārearea, Hamilton East	Housing New Zealand and Tainui Group Holdings Limited	80	Government approved – under development
Rotokauri North	Green Seed Consultants Ltd	1,450	Recommended to MHUD for a decision
Gilbass Ave, Hamilton Lake	Fosters	15	Recommended to MHUD for a decision
Te Awa Lakes, North Hamilton	Perry group	1,000	Recommended to MHUD for a decision – has been declined
Tawa Street	Habitat for Humanity and the Gallagher Charitable Trust	42	Withdrawn
Eagle Way, Te Rapa	Porter Group	150	On hold

With reference to other Housing Accords [47], Tauranga have had the following results:

- Tauranga Housing Accord (2014 Accord) valid for ~29 months;
  - eleven SHAs approved across Tauranga
  - total yield of 2,790 dwellings.
- Tauranga Accord (2016 Accord) signed December 2016, set to expire on 16 September 2019;
  - two SHAs approved providing for 403 dwellings.

The government recently confirmed that the Housing Accords and SHA Act would not be extended beyond September 2019 [48]. Tauranga City Council has been advocating for the extension of the SHA legislation to increase the capacity of Tauranga housing.

5.4 Ministry of Social Development social housing targets

The Ministry of Social Development (MSD) released its *Public Housing Plan 2018–2022* in August 2018, which outlines social housing supply targets. Below are the targets for the Waikato region. It shows an additional 462 houses will be acquired over the next two years.

Table 21: Ministry of Social Development existing social housing against supply targets [29, 32]

Territorial authority	Existing housing supply, Sep-18	Housing supply targets 2020, Dec-17	Implied additional houses
Hamilton city	2,979	3,412	433
Hauraki district	108	105	Nil [49]
Ōtorohanga district	37	38	1
Taupō district	164	193	29
Waikato district	382	347	Nil
Waitomo district	90	95	5
Matamata-Piako district	170	179	9
South Waikato district	36	38	2
Thames-Coromandel district	210	215	5
Waipā district	215	231	16
Waikato region	**4,391**	**4,853**	**462**

6 Housing affordability

There is no universally agreed measure of affordability. However, some of the options available are highlighted in the Table 22. Further detail on the Median Multiple (Tables 27, 28 and 29) and the Ministry of Business, Innovation and Employment's (MBIE) Housing Affordability Measure (HAM, section 6.3) are shown following this table.

Table 22: Affordability measures

Affordability measure	Comments
A home that a household could occupy for less than 30 per cent of its income whether purchasing or renting	Used by the Community and Social Policy Team in the Auckland Council [50].
Median multiple Median house price/median household income	• Economists use this as a 'rule of thumb' as reported in Stuff.co.nz [51, 52]. A value under three times is considered affordable (in New Zealand this was the case from 1957 to ~1980). • Used by *Demographia International Housing Affordability Survey* [53]. • When the ratio is greater than 5:1 it is said to be 'severely unaffordable' [54].
MBIE	• The HAM shows a trend, which supports central and local government to identify and respond to affordability challenges that are specific to each housing market.
The Housing Affordability Measure (HAM) for potential **first home buyers** [55]	• Total household income minus mortgage, home insurance and rates equals income after housing costs compared to income after housing costs for all households in New Zealand.
The Housing Affordability Measure for **renters**	• Total household income minus rent, home insurance and rates equals income after housing costs compared to income after housing costs for all households in New Zealand.

6.1 Affordability with increasing income (practical example)

As part of the discussions with the Waikato Region Housing Initiative Working Group, there was a request to understand the impact of household income and options for housing choice. Table 23 has been prepared on an indicative basis and with several assumptions made.

Table 23: Affordability of owning the median house price in the Waikato region

Income $	→→→→ Increasing Income Levels →→→→						
Gross Income	20,000	40,000	60,000	80,000	100,000	120,000	140,000
Tax	2,520	6,020	11,020	17,320	23,920	30,520	37,120
Income after tax	17,480	33,980	48,980	62,680	76,080	89,480	102,880
Outgoings $							
Mortgage Repayments	28,485	28,485	28,485	28,485	28,485	28,485	28,485
Waikato Median House Price Dec 18 $529,000							
20% deposit, $423,200 loan, 30 years, interest rate 5yr 5.39%							
Household Annual Expenditure	49,858	49,858	49,858	49,858	49,858	49,858	49,858
Surplus / (Deficit)	**(60,863)**	**(44,363)**	**(29,363)**	**(15,663)**	**(2,263)**	**11,137**	**24,537**

Table 23 shows that, as income increases, there is more money left over to use for other things. The income is first applied to mortgage payments and then to average household expenditure

[56]. The table shows that buying a house at the Waikato median house price is very challenging for a household earning less than $100,000 of gross income per year. The take-home pay would be ~$76,000 [57], with ~$28,000 [58] going to mortgage repayments and ~$50,000 going to various types of household expenditure. The result is a shortfall of ~$2,000.

It is worth pointing out that the 2018 median household income in New Zealand was $85,041 [59]. This means for many, with limited equity behind them, buying at the Waikato median house price is unattainable in the short term.

Affordability of renting in Hamilton at the average rent

The same indicative exercise for household ownership can be applied to renting. Table 24 uses Hamilton's 12 month average rolling rent [26]. Renting looks more affordable than household ownership, but a house is not owned at the end of the rental agreement. The table shows that, at an annual income of $80,000, it would be challenging to make income meet the average household expenditure. On a practical basis this would be achieved by going without some expenditure which could be, in some instances, detrimental to family wellbeing.

Table 24: Hamilton's 12 month average rolling rent

Income $	→→→→	**Increasing**	**Income**	**Levels**	→→→→		
Gross Income	20,000	40,000	60,000	80,000	100,000	120,000	140,000
Tax	2,520	6,020	11,020	17,320	23,920	30,520	37,120
Income after tax	17,480	33,980	48,980	62,680	76,080	89,480	102,880
Outgoings $							
Annual Rental Payments	20,020	20,020	20,020	20,020	20,020	20,020	20,020
Hamilton 12m rolling average $385 per week.							
Household Annual Expenditure	46,202	46,202	46,202	46,202	46,202	46,202	46,202
Surplus / (Deficit)	**(48,742)**	**(32,242)**	**(17,242)**	**(3,542)**	**9,858**	**23,258**	**36,658**

House prices

- In the last five years median house prices have increased 9 per cent, on average, in the Waikato region.
- It is unlikely that median household incomes have increased by the same amount. The 2018 Census is due out in 2019.

Median house prices across the region have increased rapidly.

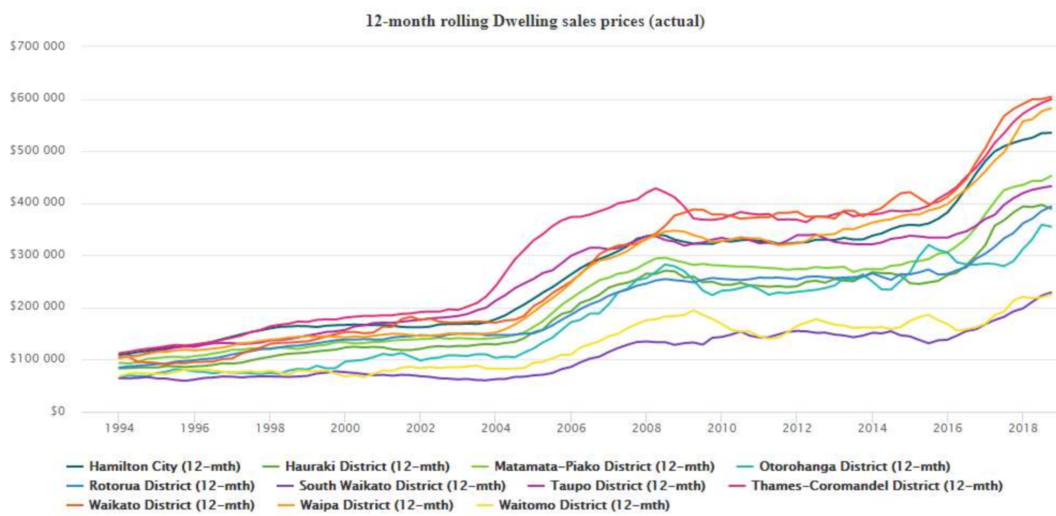
- From March 2001 to March 2006, the Waikato region median house prices increased 12 per cent per annum (compounding annual growth rate, CACG).
- During the period April 2006 to March 2013, prices slowed off the back of the global financial crisis increasing at around ~2 per cent per annum in the Waikato region.
- House prices increased again from April 2013 to December 2018 at a rate of 9 per cent per annum.

Table 25: Waikato Region median house prices (60)

Territorial authority median house prices	Mar-01	Mar-06	Mar-13	Dec-18	Apr 01 to Mar 06 GAGR	Apr 06 to Mar 13 GAGR	Apr 13 to Dec 18 GAGR
Waipā district	$147,500	$278,000	$360,000	$610,000	14%	4%	10%
Thames-Coromandel district	$195,000	$340,000	$365,000	$590,000	12%	1%	9%
Hamilton city	$169,000	$300,000	$342,000	$559,000	12%	2%	9%
Waikato district	$136,889	$239,000	$315,000	$520,000	12%	4%	9%
Taupō district	$173,000	$302,000	$310,000	$500,000	12%	0%	9%
Matamata-Piako district	$120,000	$243,000	$270,000	$471,000	15%	2%	10%
Rotorua district	$147,000	$210,000	$256,000	$430,000	7%	3%	9%
Ōtorohanga district	Not Available	$180,000	$225,000	$310,000	0%	3%	6%
South Waikato district	$71,000	$120,000	$132,500	$310,000	11%	1%	16%
Waitomo district	$40,000	$125,000	$110,000	$280,000	26%	-2%	18%
Hauraki district	Not Available						
Waikato region	**$159,000**	**$280,000**	**$325,000**	**$529,000**	**12%**	**2%**	**9%**

Figure 3 illustrates the rising cost of dwellings. It shows the median prices of residential dwellings sold in each quarter.

Figure 3: Median prices of residential dwellings (26)



Median household incomes have not increased at the same rates as median house prices:

- During the period April 2001 to March 2006, the median household income increased by 5 per cent in the Waikato region. This compares to 12 per cent annual growth for the median house price.

Table 26: Median household income – March 2001 – March 2013 (61)

Territorial authority Median household income	Mar 2001	Mar 2006	Mar 2013	Apr 2001 to Mar 2006 GAGR	Apr 2006 to Mar 2013 GAGR
Waipā district	$42,100	$54,100	$67,700	5%	3%
Thames-Coromandel district	$27,800	$36,100	$41,400	5%	2%
Hamilton city	$40,300	$52,800	$64,000	6%	3%
Waikato district	$42,400	$57,100	$69,400	6%	3%
Taupō district	$36,900	$47,900	$56,600	5%	2%
Matamata-Piako district	$40,700	$49,100	$59,200	4%	3%
Rotorua district	$38,200	$47,600	$55,500	4%	2%
Ōtorohanga district	$38,400	$47,500	$58,700	0%	3%
South Waikato district	$37,800	$41,800	$49,200	2%	2%
Waitomo district	$35,300	$43,300	$51,600	4%	3%
Hauraki district	$29,600	$36,900	$43,100	5%	2%
Waikato region	**$38,400**	**$49,400**	**$59,600**	**5%**	**3%**

Median multiple

- Waitomo and Waikato districts were relatively affordable in the last three census years.
- Hamilton is the third (of eight) least affordable house market in New Zealand with a median multiple of 6.8 times (3 times is considered affordable).
- Tauranga ranks in the 10 least affordable housing markets in the world sample with a median multiple of 9.1 times.
- In Hamilton, an assumed household income of ~$85,000 in 2018, would imply an affordable house price of $255,000 (3 times multiple being considered affordable). Currently the median house price is greater than ~$530,000.

The median multiple as used by *Demographia International Housing Affordability Survey* (53) shows the level of affordability based on a multiple. The median multiple is:

Median multiple = median house price/median household income

The levels of affordability are shown in Table 27:

Table 27: International Housing Affordability Ratings (53)

Table ES-1
Demographia International Housing Affordability Survey
Housing Affordability Ratings

Housing Affordability Rating	Median Multiple
Affordable	3.0 & Under
Moderately Unaffordable	3.1 to 4.0
Seriously Unaffordable	4.1 to 5.0
Severely Unaffordable	5.1 & Over

Median multiple: Median house price divided by median household income

As shown in Table 28, affordability was at its best in March 2001. In subsequent years it has been less affordable. South Waikato and Waitomo districts appear to be affordable based on the dataset with multiples less than three.

Table 28: Regional median house price/median household income

Territorial authority **Median multiple = house median house price/median household income**[ii]	Mar 2001	Mar 2006	Mar 2013
Waipā district	3.5	5.1	5.3
Thames-Coromandel district	7.0	9.4	8.8
Hamilton city	4.2	5.7	5.3
Waikato district	3.2	4.2	4.5
Taupō district	4.7	6.3	5.5
Matamata-Piako district	2.9	4.9	4.6
Rotorua district	3.8	4.4	4.6
Ōtorohanga district	NA	3.8	3.8
South Waikato district	1.9	2.9	2.7
Waitomo district	1.1	2.9	2.1
Hauraki district	Not available		
Waikato region	**4.1**	**5.7**	**5.5**

In Hamilton, an assumed household income of $85,000 in 2018, would imply an affordable house price of $255,000 (3 times multiple being considered affordable). Currently the median house price is greater than $530,000.

6.2 Demographia International Housing Affordability Survey: 2019

Figure 4 below highlights New Zealand's relative position for the least affordable markets. Table 8 shows the 10 least affordable listings. The information in this section has been sourced from the *15th Annual Demographia International Housing Affordability Survey: 2019* (53).

Figure 4: 2018 National Housing Affordability

(Table 8) All housing markets: 10 least affordable			
Rank	**Nation**	**Metropolitan Market**	**Median Multiple**
300	U.S.	San Francisco, CA	8.8
301	N.Z.	Auckland	9.0
302	N.Z.	Tauanga-Wester Bay of Plenty	9.1
303	U.S.	Los Angeles, CA	9.2
304	U.S.	San Jose, CA	9.4
305	U.S.	Santa Cruz, CA	9.6
306	Australia	Melbourne, VIC	9.7
307	Australia	Sydney, NSW	11.7
308	Canada	Vancouver, BC	12.6
309	China	Hong Kong	20.9

Table 29 below shows Hamilton median house price over median income is 6.8 times.

Table 29: Hamilton median house price over median income

All housing markets by Nation: 2018 Third quarter 15th Annual Demographia International Housing Affordability Survey							
International Affordability Rank	**Major Market Rank**	**National Rank**	**Nation**	**Housing market**	**Median Multiple**	**Median Price**	**Median Household Income**
301	85	7	N.Z.	Auckland	9.0	$845,000	$94,400
240		2	N.Z.	Christchurch	5.4	$477,000	$83,300
264		3	N.Z.	Dunedin	6.1	$412,000	$67,100
278		6	N.Z.	Hamilton-Waikato	6.8	$551,000	$81,400
274		5	N.Z.	Napier-Hastings	6.7	$449n000	$66,700
224		1	N.Z.	Palmerston North-Manawatu	5.0	$310,000	$61,700
302		8	N.Z.	Tauranga-Western Bay of Plenty	9.1	$623,000	$68,800
268		4	N.Z.	Wellington	6.3	$577,000	$91,700
				Median Market	6.5		

6.3 Housing affordability measures

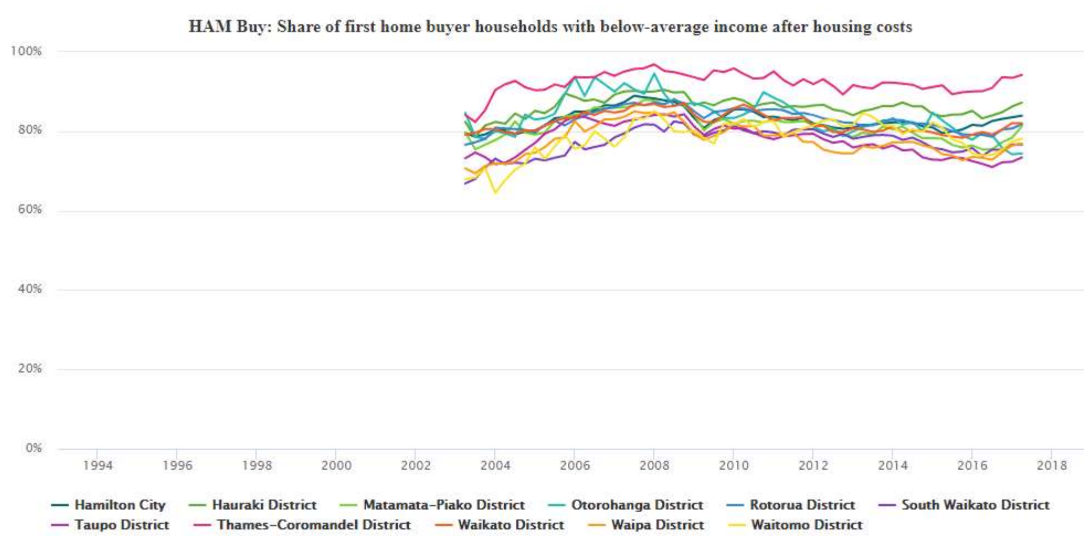
- In the Housing Affordability Measure charts, a higher number indicates more households are below the average and have a lower level of affordability.

For the Housing Affordability Measure (HAM), average income is determined using the average New Zealand household, both homeowners and renters, nation-wide, in June 2013.

Housing Affordability Measure Buy

HAM Buy measures trends in housing affordability for the first home buyer. It is the share of first home buyer households with below average income after housing costs. A higher number on the chart indicates more households are below the average and have a lower level of affordability. HAM Buy calculates what the residual income would be after housing costs (purchase of a modest home in the local area). Affordability is affected by dwelling prices, mortgage interest rates and the incomes of rental households.

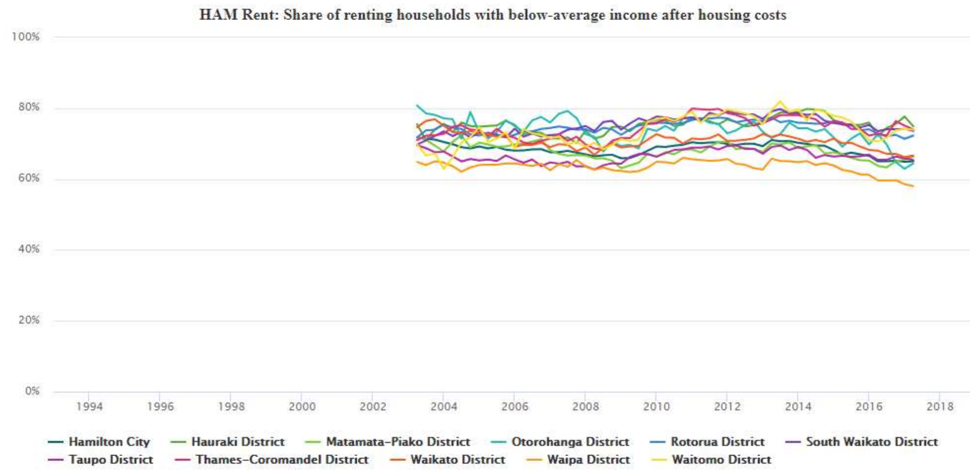
Figure 5: Trends in housing affordability for the first home buyer (26)



HAM Rent

HAM Rent measures trends in housing affordability for renting households. It is the share of households with below average income after housing. A higher number on the chart indicates more households are below the average and have a lower level of affordability.

Figure 6: Share of renting households with below average income after housing costs (26)

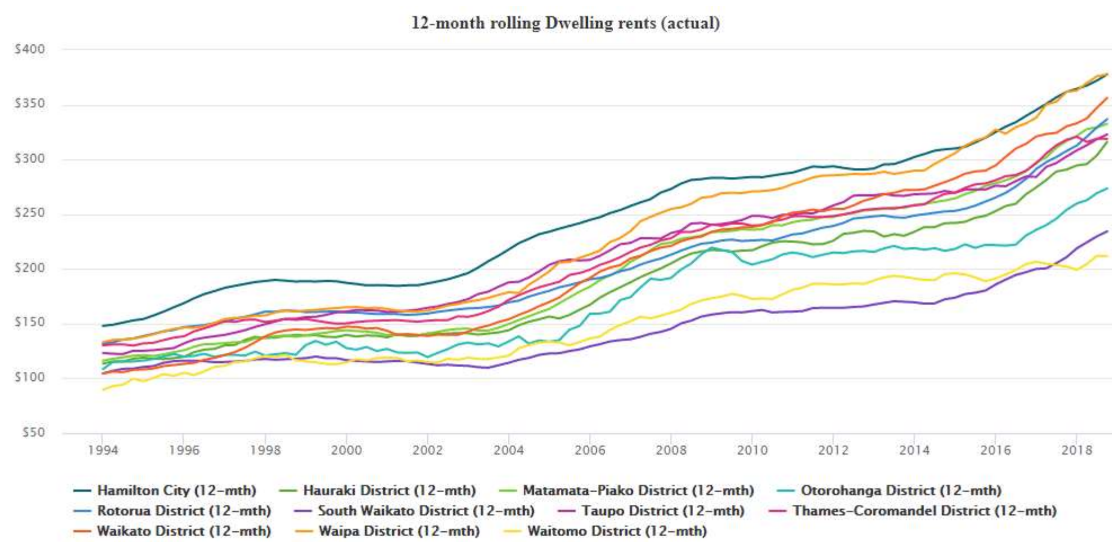


6.4 Renting

Johnson et al. (62) showed that "between late 2012 and late 2017 average rents for three-bedroom houses rose around 25% while wages rose only about 14%". This group also noted that, more recently, rent increases were greatest in the Waikato region.

In recent years, there have been substantial changes in cost to rent with rising rental prices. For example, Figure 7 and 8 show, South Waikato rents have increased by ~25 per cent and Hamilton by ~19 per cent over the three years to December 2018. The trend is largely reflective of the rest of Waikato.

Figure 7: 12-month rolling dwelling rents (actual) (26)

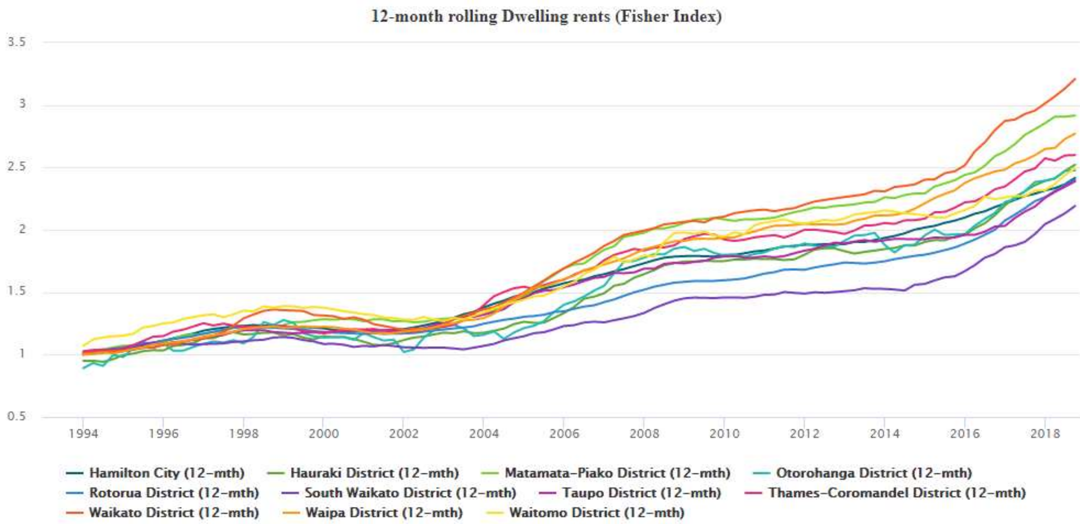


12-month rolling dwelling rents (Fisher index)

- Figure 8 shows the rising cost of rent using an index.
- Since 1993 rents have increased between 200 and 325 per cent.

The Fisher index uses mean lodged rents, which are presented as an index to show the percentage change relative to a common base year of 1993.

Figure 8: 12-month rolling dwelling rents (26)



See Appendix 6 for a range of MBIE dashboard charts showing individual territorial authorities.

7 Housing quality in the Waikato region

- Approximately 54 per cent of Waikato housing stock was built after 1980.
- In 1978, thermal insulation was legislated in New Zealand.
- Around 53 per cent of homes could benefit from retrofitted roof space and/or subfloor insulation.
- There is more mould in rented (56 per cent) than owned homes (44 per cent).

Approximately 54 per cent of housing stock was built after 1980. It was not until 1978 that thermal insulation in housing was required by law (64). Using the Waikato Regional Council rates database (63) a profile was created showing the ageing of housing stock in the Waikato (Figure 9). While not an accurate measure of housing quality it does give some sense of the current stock available in the Waikato region.

Figure 9: Ageing of housing stock in the Waikato region

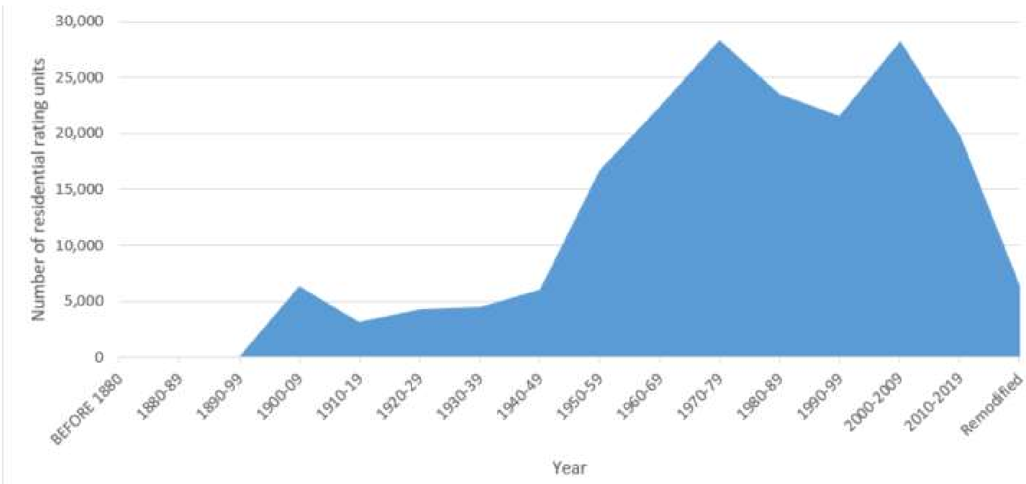


Figure 10: Waikato regional ageing profile (65)

Ageing profile	Hamilton city	Waikato	Thames-Coromandel	Waipā	Matamata-Piako	Hauraki	South Waikato	Waitomo	Ōtorohanga	Rotorua	Total
Before 1880	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1880-89	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1890-99	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1900-09	1%	0%	0%	1%	3%	6%	1%	1%	2%	9%	1%
1910-19	1%	2%	2%	2%	2%	6%	0%	7%	2%	0%	2%
1920-29	2%	3%	1%	2%	5%	3%	1%	6%	3%	0%	3%
1930-39	1%	4%	1%	3%	5%	4%	2%	5%	5%	2%	3%
1940-49	3%	4%	1%	3%	5%	3%	3%	8%	6%	2%	3%
1950-59	7%	9%	6%	9%	14%	9%	22%	16%	15%	18%	9%
1960-69	14%	8%	7%	8%	12%	9%	26%	15%	13%	13%	11%
1970-79	17%	11%	17%	12%	12%	13%	26%	11%	11%	11%	15%
1980-89	11%	11%	18%	12%	11%	13%	7%	10%	9%	10%	12%
1990-99	11%	11%	16%	11%	8%	12%	2%	6%	7%	9%	11%
2000-09	15%	19%	19%	16%	13%	14%	3%	8%	13%	14%	16%
2010-19	13%	15%	9%	16%	9%	7%	2%	3%	7%	3%	12%
Remodified	5%	3%	3%	4%	2%	1%	3%	5%	7%	8%	4%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Housing built after 1980	**54%**	**60%**	**65%**	**58%**	**42%**	**47%**	**17%**	**31%**	**43%**	**44%**	**54%**

South Waikato appears to have some of the oldest stock with 17 per cent of stock produced after 1980. A follow-on action from this report could be to validate this and other findings with institutional knowledge at the respective councils.

BRANZ survey

BRANZ performs a house condition survey every five years, commencing in 1994 [66]. A one-page infographic can be found on their website [67]. Some key points from the *5th House Condition Survey* are:

- 560 stand-alone owned (65 per cent) and rented (35 per cent) houses were assessed across New Zealand in 2015/2016.
- 53 per cent could benefit from retrofitted roof space and/or subfloor insulation.
- 51 per cent of children's bedrooms were not heated in winter.
- There was more mould in rented (56 per cent) versus owned (44 per cent) homes.
- Maintenance scores were better for owned (48 per cent) versus rented (24 per cent) homes.
- Portable unflued gas heaters were less common in owned (4 per cent) versus rented (15 per cent) homes.

Although the survey was not specific to the Waikato region, it does provide insight into housing stock and probable house conditions applicable to the region.

8 Demographics

- The Waikato region is the fourth most populous region in New Zealand (~468,000 people).
- In the future, a larger portion of the population will be over 65 years of age (16 per cent in 2018, 24 per cent in 2038). A larger ageing demographic indicates that the proportion of the New Zealand disabled population living in private households will likely increase (24 per cent in 2018, 27 per cent in 2038).
- High growth areas include Hamilton city, Waikato and Waipā districts.
- By 2038, it is expected that 23 per cent of Waikato will identify as Māori (20 per cent in 2018), 12 per cent as Asian (9 per cent in 2018), and 6 per cent as Pacific peoples (4 per cent in 2018). European or 'other' will comprise 59 per cent of the population (67 per cent in 2018).
- More Europeans (70 per cent) own and occupy homes compared with Māori (43 per cent) and Pacific peoples (33 per cent).

The Waikato region is the fourth most populous region in New Zealand, accounting for 10 per cent of the total population.

Table 30: New Zealand regional population (68)

Regional Population			
Region	2018	Rank	% of NZ Population
Auckland region	1,695,900	1	35%
Canterbury region	624,200	2	13%
Wellington region	521,500	3	11%
Waikato region	468,800	4	10%
Bay of Plenty region	305,700	5	6%
Manawatu-Wanganui region	243,700	6	5%
Otago region	229,200	7	5%
Northland region	179,100	8	4%
Hawke's Bay region	165,900	9	3%
Taranaki region	119,600	10	2%
Southland region	99,100	11	2%
Tasman region	52,100	12	1%
Nelson region	51,900	13	1%
Gisborne region	49,100	14	1%
Marlborough region	46,600	15	1%
West Coast region	32,600	16	1%
Area outside region	650	17	0%
Total, New Zealand	4,885,500		100%

Forecast population – age brackets

Population is a key component to assessing housing demand and needs. Table 31 outlines the age bracket changes that are forecast. The population composition of the Waikato region changes over time with an increasingly older population. For example, the population over 65 years will increase from 16 per cent in 2018 to 24 per cent in 2038.

Table 31: The Waikato region forecast age bracket changes (4)

Waikato Region	2018	2023	2028	2033	2038
0-14 years	21%	21%	20%	19%	18%
15-39 years	33%	32%	32%	30%	29%
40-64 years	31%	29%	29%	29%	29%
65 years and over	16%	18%	20%	22%	24%
	100%	100%	100%	100%	100%

Population forecast

High growth areas with larger increases in population include Hamilton city, Waikato, and Waipā districts.

The green shading in the tables represents relative change; darker green showing increasing change and lighter green showing decreasing change.

Table 32: The Waikato region population medium projections (33)

Waikato Population Projections - Medium	2018D	2023	2028	2033	2038	2043
Hamilton City	171,340	182,100	193,500	204,400	214,700	224,800
Waikato District	76,189	81,700	87,200	92,400	97,200	101,700
Waipa District	54,523	57,200	59,900	62,300	64,300	65,900
Taupo District	37,282	37,870	38,460	38,750	38,850	38,770
Matamata-Piako District	35,463	35,900	36,500	36,900	37,100	37,000
Thames-Coromandel District	30,066	29,400	29,600	29,500	29,000	28,400
South Waikato District	24,507	24,000	23,800	23,300	22,600	21,700
Hauraki District	20,005	20,700	20,900	20,900	20,700	20,300
Otorohanga District	10,303	10,850	11,000	11,000	10,950	10,850
Waitomo District	9,558	9,700	9,590	9,360	9,050	8,690
Rotorua District	3,946	4,080	4,150	4,190	4,170	4,130
Waikato Region	**473,183**	**493,500**	**514,600**	**533,000**	**548,620**	**562,240**

Population ethnicity (69)

By 2038, it is expected that 23 per cent of people in the Waikato region, will identify as Māori (20 per cent in 2018), 12 per cent as Asian (9 per cent in 2018), and 6 per cent as Pacific peoples (4 per cent in 2018). European or 'other' will comprise 59 per cent of the Waikato population (67 per cent in 2018).

Table 33: Demographic by ethnicity (4)

Area	Ethnicity	2018	2023	2028	2033	2038
New Zealand	European or Other (including New Zealander)	65%	62%	60%	58%	56%
	Maori	14%	14%	15%	15%	16%
	Asian	14%	16%	17%	18%	19%
	Pacific	7%	8%	8%	8%	9%
	Total population	100%	100%	100%	100%	100%
Waikato region	European or Other (including New Zealander)	67%	65%	63%	61%	59%
	Maori	20%	21%	21%	22%	23%
	Asian	9%	10%	11%	11%	12%
	Pacific	4%	5%	5%	5%	6%
	Total population	100%	100%	100%	100%	100%
Thames-Coromandel district	European or Other (including New Zealander)	79%	77%	76%	74%	72%
	Maori	16%	16%	17%	18%	19%
	Asian	4%	5%	6%	6%	7%
	Pacific	2%	2%	2%	2%	2%
	Total population	100%	100%	100%	100%	100%
Hauraki district	European or Other (including New Zealander)	73%	71%	69%	67%	65%
	Maori	20%	21%	22%	23%	24%
	Asian	4%	5%	6%	6%	7%
	Pacific	3%	3%	3%	4%	5%
	Total population	100%	100%	100%	100%	100%
Waikato district	European or Other (including New Zealander)	70%	69%	68%	67%	65%
	Maori	22%	22%	22%	23%	23%
	Asian	5%	5%	6%	6%	6%
	Pacific	4%	4%	5%	5%	5%
	Total population	100%	100%	100%	100%	100%
Matamata-Piako district	European or Other (including New Zealander)	77%	75%	73%	71%	69%
	Maori	15%	16%	17%	18%	19%
	Asian	6%	7%	7%	8%	8%
	Pacific	2%	2%	2%	3%	3%
	Total population	100%	100%	100%	100%	100%
Hamilton city	European or Other (including New Zealander)	58%	55%	53%	51%	48%
	Maori	20%	21%	21%	22%	23%
	Asian	16%	18%	19%	20%	21%
	Pacific	5%	6%	7%	7%	8%
	Total population	100%	100%	100%	100%	100%
Waipa district	European or Other (including New Zealander)	81%	80%	79%	78%	76%
	Maori	13%	14%	14%	15%	15%
	Asian	4%	5%	5%	6%	6%
	Pacific	1%	2%	2%	2%	2%
	Total population	100%	100%	100%	100%	100%
Otorohanga district	European or Other (including New Zealander)	70%	68%	67%	66%	64%
	Maori	24%	25%	25%	27%	28%
	Asian	4%	5%	4%	4%	3%
	Pacific	2%	3%	3%	3%	4%
	Total population	100%	100%	100%	100%	100%
South Waikato district	European or Other (including New Zealander)	57%	56%	54%	53%	51%
	Maori	28%	28%	29%	29%	30%
	Asian	4%	5%	6%	6%	6%
	Pacific	11%	11%	11%	11%	12%
	Total population	100%	100%	100%	100%	100%
Waitomo district	European or Other (including New Zealander)	55%	52%	49%	46%	43%
	Maori	36%	36%	37%	38%	39%
	Asian	4%	5%	5%	6%	6%
	Pacific	6%	7%	8%	10%	12%
	Total population	100%	100%	100%	100%	100%
Taupo district	European or Other (including New Zealander)	65%	64%	62%	61%	59%
	Maori	26%	26%	27%	28%	29%
	Asian	6%	7%	8%	9%	10%
	Pacific	3%	3%	3%	3%	3%
	Total population	100%	100%	100%	100%	100%
Rotorua district	European or Other (including New Zealander)	56%	54%	52%	51%	49%
	Maori	31%	31%	32%	32%	33%
	Asian	8%	10%	10%	11%	12%
	Pacific	5%	5%	5%	6%	6%
	Total population	100%	100%	100%	100%	100%

In 2018, Māori, Asian and Pacific peoples have a greater proportion of people less than 40 years of age compared with Europeans. For example, individuals under 40 years of age comprise 70 per cent of Māori, 66 per cent of Asian and 76 per cent of Pacific peoples compared with 50 per cent of Europeans.

The darker green shading in Table 34 shows higher percentages and lighter green shading shows smaller percentages.

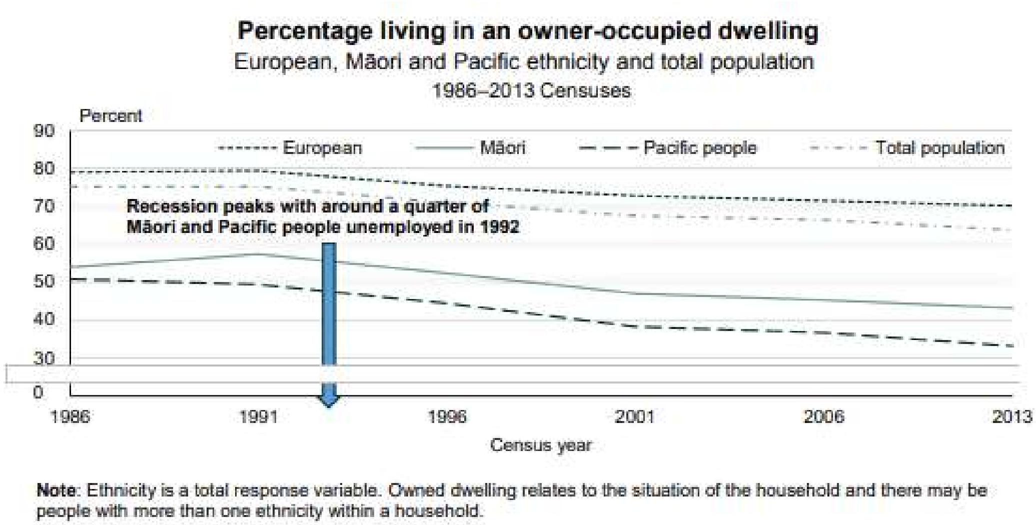
Table 34: Ageing demographic by ethnicity [4]

	European or Other (including New Zealander)	Maori	Asian	Pacific	Total
0-14 years	20%	33%	23%	39%	21%
15-39 years	30%	37%	43%	37%	33%
40-64 years	31%	24%	27%	19%	31%
65 years and over	19%	6%	7%	5%	16%
Waikato Region	**100%**	**100%**	**100%**	**100%**	**100%**

Percentage of people living in an owner-occupied dwelling

The proportion of Māori and Pacific people living in owner-occupied dwellings is relatively low at ~43 per cent and ~33 per cent, respectively. This compares with a total population percentage of 63 per cent.

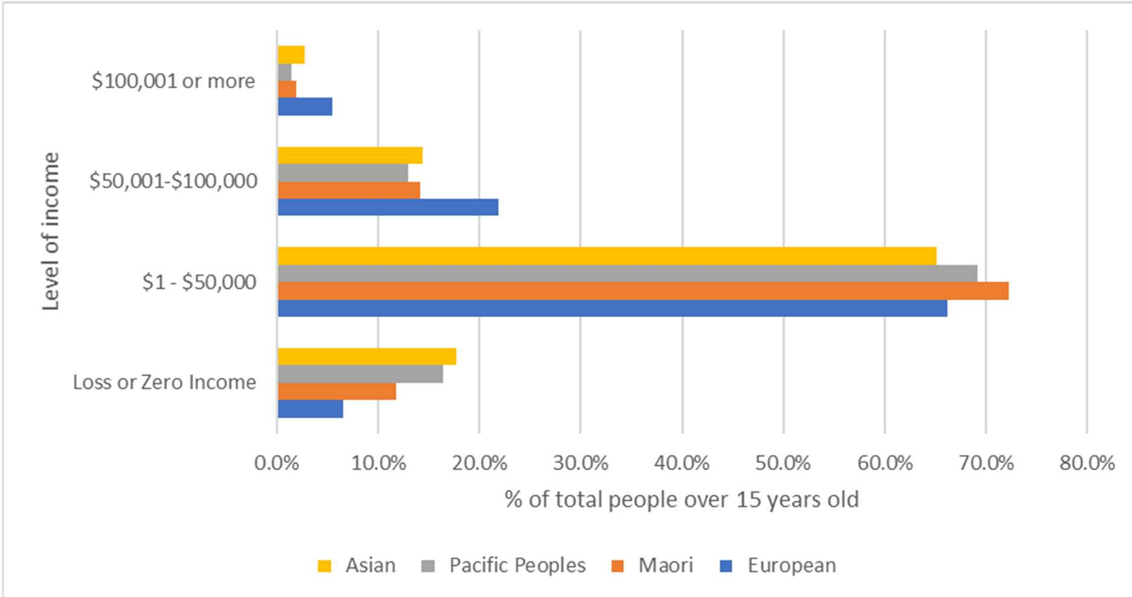
Figure 11: Percentage of people living in an owner-occupied dwelling [70]



Income ethnicity profiles

In the Waikato region, 2013 Census figures suggested that 84 per cent of Māori aged 15 years and older earned $50,000 per year or less. This compares to 73 per cent of Europeans, 86 per cent of Pacific peoples and 83 per cent of Asians who earned $50,000 or less.

Figure 12: 2013 Waikato region income ethnicity profiles (71)



9 Housing type in the Waikato region

- The mean number of usual household members was 2.6 in 2013, and is expected to be a mean of 2.4 in 2038.
- The mean number of bedrooms per house is 3.2.
- 83 per cent of houses are standalone.
- One person households are expected to increase from 25 per cent in 2018 to 29 per cent in 2038.

The type of housing in the Waikato region can be described as:

- 75 per cent of Waikato households have one to three usual residents (mean 2.6).
- 67 per cent of Waikato households are one family households and 23 per cent are one person households.

Figure 13: 2013 Waikato region households' usual residents (61)

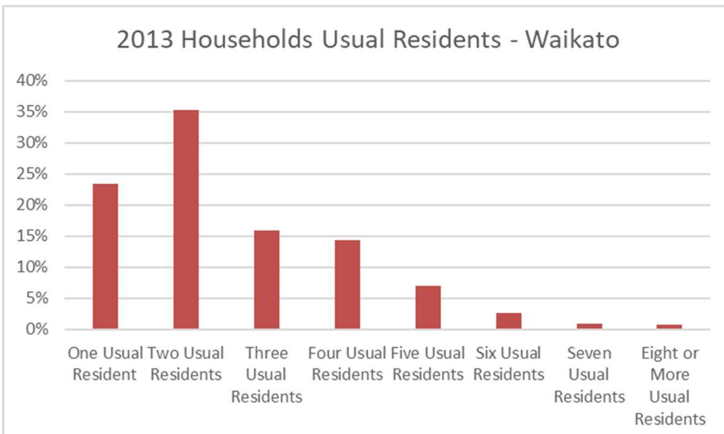
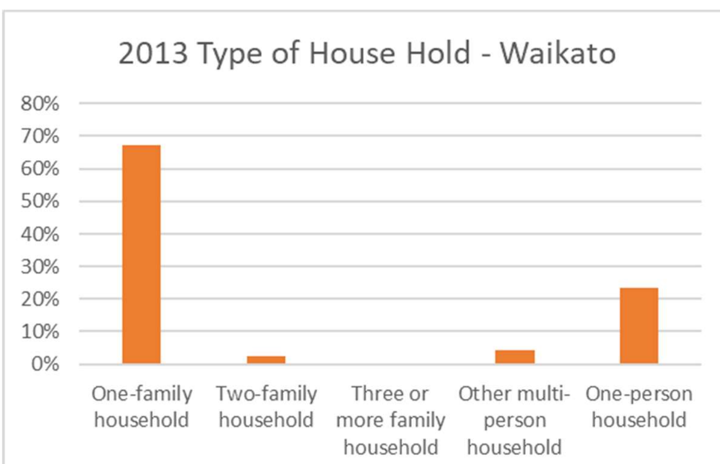


Figure 14: 2013 Waikato region - type of household (61)



It is forecast that in 2038, one person households will be more common at 28 per cent for the Waikato region, compared to 24 per cent in 2013.

Table 35: Waikato region projection household type (27)

Waikato region projection household type	Family households	Other multi-person households	One person households	Total
2013	72%	4%	24%	100%
2018	71%	4%	25%	100%
2023	71%	4%	26%	100%

2028	70%	3%	27%	100%
2033	69%	3%	27%	100%
2038	68%	3%	28%	100%

Other statistics

- In 2013, 83 per cent of Waikato housing stock was stand-alone houses (83 per cent in 2006).
- In 2013, the mean of bedrooms per house in Waikato was 3.2 (3.1 in 2006).

Dwelling consents by type (13)

- There is a growing trend in the Waikato region for 'townhouse, flats, units and other dwellings' as a consent dwelling type (e.g. 236 in 2015, 397 in 2016, 679 in 2017 and 858 in 2018).
- This compares to 'houses' as a consent type which have been fairly static (e.g. 2,421 in 2015, 2,986 in 2016, and 2,595 in 2017 and 2,541 in 2018).

The Waikato region has had ~27,000 residential dwelling consents in the previous 11 years (~3,500 per year).

Figure 15: Waikato region consents by type

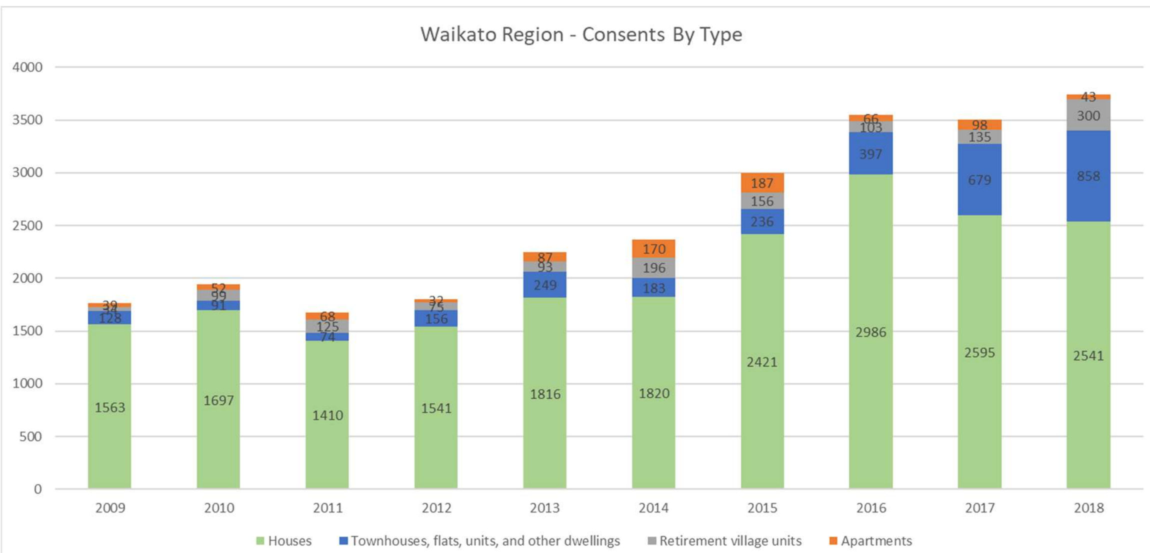


Table 36: Waikato region - consents type

Waikato Region - Consents Type %	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Apartments	2%	3%	4%	2%	4%	7%	6%	2%	3%	1%
Houses	89%	88%	84%	85%	81%	77%	81%	84%	74%	68%
Retirement village units	2%	5%	7%	4%	4%	8%	5%	3%	4%	8%
Townhouses, flats, units, and other dwellings	7%	5%	4%	9%	11%	8%	8%	11%	19%	23%
Grand Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Dwelling consents by territorial authority

Hamilton city has the highest level of dwelling consents as shown in Table 37, followed by Waikato district and Waipā district. For consent types see Appendix 3.

Table 37: Waikato region - territorial authority dwelling consents

Waikato Region – territorial authority dwelling consents [72]	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Hamilton City	544	614	651	685	895	780	1205	1179	1139	1487
Waikato District	194	297	247	319	466	508	576	842	676	670
Waipā District	287	297	234	261	356	470	468	514	619	583
Thames-Coromandel District	201	233	207	179	182	226	218	307	350	315
Taupō District	170	167	114	133	131	153	226	280	285	284
Matamata-Piako District	120	103	88	105	107	95	117	208	187	177
Hauraki District	73	65	65	55	47	62	79	132	123	101
South Waikato District	37	30	26	20	30	25	52	53	56	50
Ōtorohanga District	36	30	25	25	20	31	29	28	47	49
Waitomo District	17	17	13	15	12	10	20	3	19	20
Grand Total	**1679**	**1853**	**1670**	**1797**	**2246**	**2360**	**2990**	**3546**	**3501**	**3736**

10 Homelessness

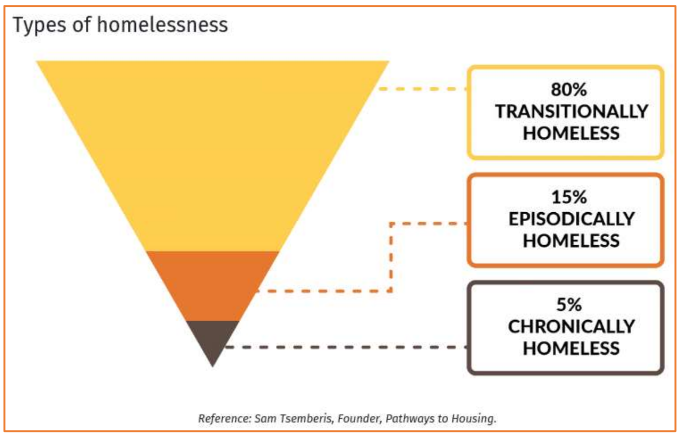
- Homelessness is defined in this report as people with no other options for safe and secure housing.
- Examples of organisations working with homelessness in Hamilton include:
  - The People's Project
  - Hamilton Christian Nightshelter Trust
- There are also several larger organisations working within the Waikato community to assist with homelessness (e.g. The Salvation Army and Women's Refuge).

Statistics New Zealand [73] defines homelessness as:

> "a living situation where people with no other options to acquire safe and secure housing are: without shelter, in temporary accommodation, sharing accommodation with a household, or living in uninhabitable housing".

Statistics New Zealand's definition of homelessness is widely recognised across the country as it encompasses a range of situations from people who are in unsheltered homelessness, such as living on the streets or in cars, to people who are temporarily displaced but not unsheltered such as couch surfing, in over-crowded homes or in garages or sheds.

Figure 16: Types of homelessness



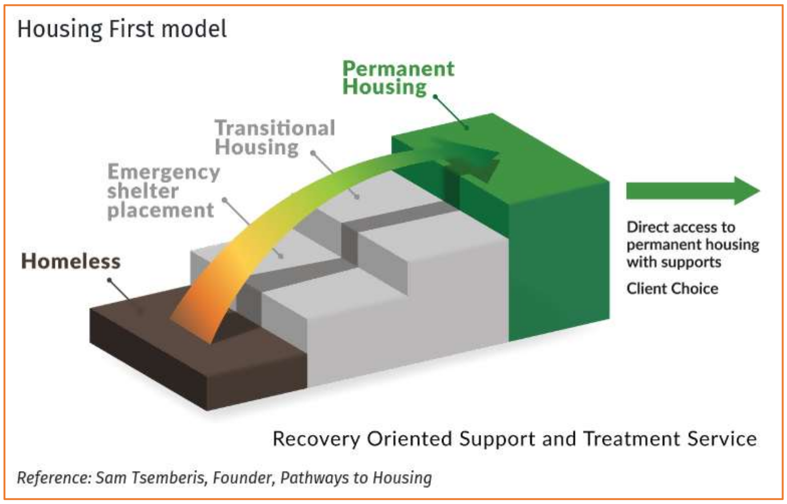
Research from the United States of America (USA) by Dr Sam Tsemberis, the founder of the internationally evidenced Housing First approach, identified that while most people think of homeless people as those living on the streets, the number of people sleeping rough on a regular basis is relatively small compared with the entire homeless population [74]. Under Tsemberis' model, the number of people considered to be chronically homeless (living on the streets for more than one year combined with multiple and complex issues such as mental health and addiction) is as little as five per cent (refer to Figure 16) of the entire homeless population. There is, therefore, a much wider range of individuals who require housing support.

In the Waikato region, ~$3 million was spent on emergency housing Special Needs Grants for the full year ended September 2018. However, there is no systematic recording or monitoring of homelessness in New Zealand i.e. no data on the 'floating population' (those who cannot access government housing assistance), or data on those who are turned away from community agencies that have no capacity to provide help [62].

The People's Project

The People's Project is a non-government service that uses the Housing First model to assist people experiencing chronic and episodic homelessness. This approach has been successful in Canada, the USA, Europe and the United Kingdom. It recognises that it is easier for people to address issues such as mental health and substance use disorder, once they are housed. The priority is to quickly move people into appropriate housing and then immediately provide wrap-around services to support their success. Permanent, secure, appropriate and safe housing is recognised as a basic human right. The goal of Housing First is to end homelessness, not to manage it. Figure 17 outlines the Housing First approach.

Figure 17: Housing first model



The People's Project is an initiative of the Wise Group, a family of non-government organisations (NGO) and one of the largest NGO providers of mental health and wellbeing services in New Zealand. It uses a collective impact approach, bringing together local and central government agencies and businesses to work collaboratively on the complex issue of homelessness. These agencies include, but are not limited to, MSD, MHUD, HCC, Hamilton Central Business Association, Waikato-Tainui, Pinnacles Midlands Health Network, HNZ, Oranga Tamariki, Corrections, Police and Waikato District Health Board.

The People's Project has been operating in Hamilton since 2014 when there were ~80 chronically homeless individuals living on the streets in and around central Hamilton. Today, almost all of these people are in homes of their own and are no longer homeless (74). Since the People's Project was initiated in Hamilton, the service has supported 616 people into homes of their own (as of January 2018).

Between August 2014 and December 2018, The People's Project was largely privately funded by Wise Group. In late 2018, The People's Project in Hamilton partnered with central government to deliver Housing First services in Hamilton. It is now funded by central government to operate.

The intent now is to undertake another count in 2019 of those people sleeping rough in Hamilton city in order to provide the most effective responses.

The People's Project website notes that countries that have successfully used Housing First to end street homelessness, such as Finland, have determined that developing a stock of affordable, appropriately located and suitably sized housing has been a key to success.

Hamilton Christian Nightshelter Trust

The Hamilton Christian Nightshelter Trust is a community organisation initially created to provide emergency accommodation with ~30 beds. However, issues in obtaining more permanent housing meant that the shelter is becoming more of a long-term solution to housing for some individuals. Typical rooms contain two to four beds, with a communal lounge and kitchen area. Manager Peter Humphreys estimated that 60 per cent of requests are from Māori and the reasons for needing accommodation ranged from mental health and addiction issues, to broken relationships, poverty and simply the unavailability of houses (75).

11 Accessibility

For people with disabilities and for the ageing members of our communities, houses have a special importance as these individuals are likely to spend more time at home. However, physical barriers and poor design can often make these homes inaccessible and ultimately compromise safety and health.

Essentially, accessibility means adapting homes, if required, so that they are safe for all users, permit easy movement by a variety of individuals, and allow for disabled or elderly people to stay and visit. BRANZ noted that it made sound economic and emotional sense to design and adapt houses so they are accessible, as this will lessen dependency, lower accident risk, reduce societal costs, and potentially increase the resale value [(76)].

Disability and an ageing population in New Zealand mean that accessibility issues will undoubtedly become more prevalent in the future. A disability survey by Statistics New Zealand [(77)] indicated that, compared with non-disabled people, disabled people were more likely to:

- be older
- live in rental accommodation
- live alone or in a couple only household
- report having difficulty warming their home (25 per cent compared with 18 per cent of non-disabled people).

Additionally:

- 32 per cent of disabled people with physical impairment used building modifications to improve accessibility to, or within, their home
- 17 per cent of disabled people with a physical impairment needed home modifications to improve accessibility disabled individuals, particularly children, are more likely than non-disabled people to live in a house that is too small for the number of people present.

Further, evidence shows that for disabled people (with either visual or physical limitations), modifications to their entranceways and bathrooms are necessary for comfortable living. In the Waikato region, ~25 per cent of the region's population are disabled people living in private households [(78)]. The cost of home modification is expensive, and some people will go without. Projections show that there will be an increase in the disabled population in New Zealand from 24 per cent in 2013 to 27 per cent in 2038. It is critical that accessibility is considered when examining overall housing needs in New Zealand. This includes evaluating how many existing homes can be modified to become more accessible and how future homes can be built with accessibility in mind.

References

1. Massey University. (2019). Environmental Health Indicators New Zealand. Available at: http://www.ehinz.ac.nz/indicators/indoor-environment/about-the-indoor-environment-and-health/#Coldanddamphousesaffecthealth.

2. Nichol R. (2017). 1600 deaths attributed to cold houses each winter in New Zealand - The Listener. Available at: https://www.noted.co.nz/currently/social-issues/1600-deaths-attributed-to-cold-houses-each-winter-in-new-zealand/.

3. Prendergast E, Palmer S, Macdonald L. (2019). Government toughens healthy home standards | Newshub. Available at: https://www.newshub.co.nz/home/politics/2019/02/government-toughens-healthy-home-standards.html.

4. Statistics New Zealand. (2019). Subnational ethnic population projections, by age and sex, 2013(base)-2038 update. Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-281517295.1534190543#.

5. Harker L. (2006). *Chance of a lifetime: The impact of bad housing on children's lives* Available at: https://england.shelter.org.uk/__data/assets/pdf_file/0016/39202/Chance_of_a_Lifetime.pdf.

6. Statistics New Zealand. (2013). 2013 Census QuickStats about a place: Waikato Region. Available at: http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=13631&tabname=.

7. Cameron MP, Cochrane W, University of Waikato. (2016). *2016 Update of Population, Family and Household, and Labour Force Projections for the Waikato Region, 2013-2063* Available at: http://www.futureproof.org.nz/file/nidea_ta-report-2016_final.pdf.

8. Statistics New Zealand. (2018). *Developing a definition and conceptual framework for housing quality: Consultation* Available at: https://www.stats.govt.nz/assets/Uploads/Consultations/Developing-a-definition-for-housing-quality-Consultation/developing-a-definition-and-conceptual-framework-for-housing-quality-consultation.pdf.

9. Housing Virginia. (2019). Why is affordable housing important? Is rental or homeownership more important? | Housing Virginia - A Statewide Partnership of Public & Private Organizations and Individuals Committed to Affordable Housing. Available at: http://www.housingvirginia.org/housing-virginia-toolkit/why-is-affordable-housing-important-is-rental-or-homeownership-more-important/.

10. Habitat for Humanity. (2019). The Need in New Zealand - Habitat for Humanity New Zealand. Available at: https://habitat.org.nz/about/the-need-in-new-zealand/.

11. Statistics New Zealand. (2013). Dataset: Occupied dwellings, unoccupied dwellings, and dwellings under construction, 2001, 2006, and 2013 Censuses (RC, TA, AU). Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-281517295.1534190543#.

12. Non-private dwellings provide short or long term communal or transitory type accommodation. They are generally available to the public. Examples in the Waikato include residential care units, prisons and educational institutions e.g. student halls of resi.

13. Statistics New Zealand. (2019). Building consents issued: December 2018. Available at: https://www.stats.govt.nz/information-releases/building-consents-issued-december-2018.

14. Ninness G. (2018). Auckland Council figures suggest around 98% of new dwellings consented in the region actually get built - Stuff. Available at: https://www.interest.co.nz/property/95188/auckland-council-figures-suggest-around-98-new-dwellings-consented-region-actually.

15. Consents were counted with a six month lag (adjustment for time from consent to completion) from September 2012 to June 2018 (70 months). A reduction of 2% has been applied to reflect consents that do not progress to completion.

16. A reduction was made to reflect unoccupied empty dwellings. An unoccupied dwelling was classified as “empty” if it clearly had no current occupants. Further infomation about classification can be found in note following this reference.

17. Statistics New Zealand. (2019). Stats NZ Home > Methods > Classifications and standards > Classifications and related statistical standards > Dwelling occupancy status. Available at: http://archive.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/dwelling-occupancy-status/definition.aspx.

18. Taupo district consents may include the areas of Rangitaiki, Te More and Taharua which are not part of the Waikato Regional Council catchment area.

19. Waitomo district may include consents from Tiroa, which is not part of the Waikato Regional Council catchment area.

20. Rotorua district consents are an estimate of consents based on 2% of dwelling stock. Specific data was not available at the time of this report.

21. Private dwelling accommodates a person or group of people and is not generally available for public use. The main purpose of a private dwelling is as a place of habitation. It is usually built (or converted) to function as a self-contained housing unit.

22. Statistics New Zealand. (2013). 2013 Census definitions and forms - occupied non-private dwelling & Occupied private dwelling. Available at: http://archive.stats.govt.nz/Census/2013-census/info-about-2013-census-data/2013-census-definitions-forms/definitions/o.aspx.

23. Note that this total has a estimate for Waikato Region portion of Rotorua of 199 because within the report by Cameron et al. only the complete territorial number is given.

24. Statistics New Zealand. (2018). Dataset: Subnational population estimates (TA, AU), by age and sex, at 30 June 1996, 2001, 2006-18 (2017 boundaries). Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-281517295.1534190543#.

25. Growth estimate based on the prior year on year growth prorated for six months.

26. Ministry of Business Innovation & Employment. (2019). Urban Development Capacity Dashboard. Available at: https://mbienz.shinyapps.io/urban-development-capacity/#.

27. Statistics New Zealand. (2019). Subnational household projections 2013(base)-2038 update. Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-281517295.1534190543#.

28. Cooke H. (2017). “We’ve inherited a disaster”: Official figures show 45,000 home shortfall in Auckland | Stuff.co.nz. Available at: https://www.stuff.co.nz/national/politics/98519361/weve-inherited-a-disaster-official-figures-show-45000-home-shortfall-in-auckland.

29. Ministry of Social Development. (2018). *Public housing in Waikato Region - quarterly fact sheets (December 2017)* Available at: https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/statistics/housing/quarterly-factsheets/housing-regional-factsheet-december-2017-waikato.pdf.

30. Ministry of Social Development. (2018). Public housing in Waikato Region - quarterly fact sheets (March 2018). Available at: https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/statistics/housing/quarterly-factsheets/2018/waikato-hrf-march-2018.pdf.

31. Ministry of Social Development. (2018). Public housing in Waikato Region - quarterly fact sheets (June 2018). Available at: https://www.hud.govt.nz/assets/Community-and-Public-Housing/Follow-our-progress/June-2018/Waikato-Public-Housing-Factsheet-June-2018.pdf.

32. Ministry of Social Development. (2018). Public housing in Waikato Region - quarterly fact sheets (September 2018). Available at: https://www.hud.govt.nz/assets/Community-and-Public-Housing/Follow-our-progress/September-2018/MSD-Public-Housing-factsheet-September-Quarter-update-Waikato.pdf.

33. Statistics New Zealand. (2019). Dataset: Area unit population projections, by age and sex, 2013(base)-2043 update. Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-281517295.1534190543#.

34. Future Proof. (2017). *Housing and Business Development Capacity Assessment 2017 Summary Report* Available at: http://www.futureproof.org.nz/file/future-proof-hba-summary-report-2017_10-august-2018-final.pdf.

35. Future Proof. (2019). What is Future Proof? | Future Proof - Knowing our future by planning today. Available at: http://www.futureproof.org.nz/page/46-what-is-future-proof.

36. Ministry of Social Development. (2018). MSD Social Housing Register (extracted July 2019, note data may be updated retrospectively). Available at: https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/housing/index.html.

37. S in the table denotes a small number which is not displayed for privacy reasons.

38. For the purposes of analysis Rotorua has been excluded from the sample set as the portion of Rotorua that relates to the Waikato region is relatively small when compared to Rotorua as a whole.

39. Ministry of Social Development. (2019). Housing Assessment: Who can get public housing? Available at: http://housing.msd.govt.nz/housing-options/social-housing/who-can-get-social-housing.html.

40. Ministry of Social Development. (2019). Housing Assessment: Apply for public housing. Available at: http://housing.msd.govt.nz/housing-options/social-housing/application-process.html.

41. Ministry of Housing and Urban Development. (2018). KiwiBuild. Available at: https://www.hud.govt.nz/residential-housing/kiwibuild/.

42. Ministry of Housing and Urban Development. (2018). Who is eligible. Available at: https://www.hud.govt.nz/residential-housing/kiwibuild/how-to-buy-a-kiwibuild-home/who-is-eligible/.

43. Ministry of Housing and Urban Development. (2018). Available homes. Available at: https://www.hud.govt.nz/residential-housing/kiwibuild/available-homes/.

44. Hamilton City Council. (2016). Hamilton Housing Accord. Available at: https://www.hud.govt.nz/assets/Residential-Housing/Housing-Affordability/Housing-Accord-and-Special-Housing-Areas/Hamilton-Housing-Accord/Hamilton-Housing-Accord.pdf.

45. Hamilton City Council. (2019). Hamilton Housing Accord: Special Housing Areas. Available at: https://www.hamilton.govt.nz/our-services/planningguidanceandresourceconsents/Pages/Hamilton-Housing-Accord.aspx.

46. Sections measured at the point of resource consent and dwellings measured at building consent.

47. Tauranga City Council. (2018). *Tauranga Housing Accord Monitoring Report #4 12 months to 31 August 2018* Available at: https://www.tauranga.govt.nz/Portals/0/data/future/growth/files/tauranga_monitoring_report 2018.pdf.

48. Tauranga City Council. (2019). Impending housing shortage: developers urge collaboration to lobby Government. Available at: https://www.tauranga.govt.nz/council/council-news-and-updates/latest-news/artmid/456/articleid/4347.

49. Nil is shown when the existing stock is higher than the target.

50. Auckland Council. (2018). *Affordable housing in Auckland* Available at: http://www.knowledgeauckland.org.nz/publication/?mid=2716&DocumentType=1&.

51. Harris C. (2018). Housing analyst says soaring land prices Auckland's key housing obstacle | Stuff.co.nz. Available at: https://www.stuff.co.nz/business/property/108676571/housing-analyst-says-soaring-land-prices-aucklands-key-housing-obstacle.

52. Eaqub, S. and Eaqub S. (2015). *Generation Rent: Rethinking New Zealand's Priorities.* (Bridget

Williams Books) doi:10.7810/9780908321032.

53. Demographia. (2019). *15th Annual Demographia International Housing Affordability Survey. Rating Middle-Income Housing Affordability* Available at: http://www.demographia.com/dhi.pdf.

54. PWC. (2018). *New Zealand's affordable housing dilemma* Available at: https://www.pwc.co.nz/pdfs/2018pdfs/affordable-housing-publication-nz-18.pdf.

55. Ministry of Business, Innovation and Employment. (2019). The Housing Affordability Measure for potential first home buyers. Available at: https://www.mbie.govt.nz/building-and-energy/tenancy-and-housing/housing-affordability-measure/the-housing-affordability-measure-for-potential-first-home-buyers/.

56. Statistics New Zealand. (2016). Household expenditure statistics: Year ended June 2016 – corrected | Stats NZ. Available at: https://www.stats.govt.nz/information-releases/household-expenditure-statistics-year-ended-june-2016.

57. Assumes one person is taxed at the Inland Revenue Department 2018 personal income tax rates. This calculation does not take into account Accident Compensation Corporation deductions.

58. Adjustments have been made to the average weekly household expenditure base data to exclude mortgage or rental related information.

59. Figure NZ. (2018). Mean and median annual household income in New Zealand. Available at: https://figure.nz/chart/yiJz6VUr64vQ68Du.

60. Source: Real-estate agency.

61. Statistics New Zealand. (2013). 2013 Census meshblock dataset - tables about households in the Waikato Region. Available at: http://archive.stats.govt.nz/Census/2013-census/data-tables/meshblock-dataset.aspx.

62. Johnson A, Howden-Chapman P, Eaqub S. (2018). *A Stocktake of New Zealand's Housing* Available at: https://www.beehive.govt.nz/sites/default/files/2018-02/A Stocktake Of New Zealand%27s Housing.pdf.

63. The accuracy of the rates database and the resultant data outputs cannot be guaranteed. These details have been provided for information purposes for the Waikato Plan – Regional Housing Initiative.

64. Ministry for Culture and Heritage. (2016). Thermal insulation required in NZ homes. Available at: https://nzhistory.govt.nz/page/thermal-insulation-required-nz-homes.

65. Data sources from Waikato Reional Council. Filter by VNZ category for residential type rating units. Taupo was excluded from the sample as ageing attributes were missing in recent years.

66. Branz. (2019). House condition survey. Available at: https://www.branz.co.nz/hcs.

67. Branz. (2016). 5th House condition survey results. Available at: https://www.branz.co.nz/5thhcs.

68. Statistics New Zealand. (2019). Subnational population estimates (RC, AU), by age and sex, at 30 June 1996, 2001, 2006-18 (2017 boundaries). Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx.

69. Population ethnicity percentages have been calculated by dividing the sub part by the total of all sub parts. The reason for this is that people have more than one ethnicity so the sub parts will add to a greater number than the total people.

70. Statistics New Zealand. (2016). *Changes in home-ownership patterns 1986-2013: Focus on Māori and Pacific people* Available at: https://www.stats.govt.nz/assets/Reports/Changes-in-home-ownership-patterns-19862013-Focus-on-Maori-and-Pacific-people/changes-home-ownership-maori-pacific-1986-2013.pdf.

71. Statistics New Zealand. (2013). Dataset: Total personal income and ethnic group (grouped total responses) by age group, for the census usually resident population count aged 15 years and over, 2013 Census. Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-

281517295.1534190543#.

72. Excludes Rotorua portion of the Waikato region. Data were not available at the time of this report. Taupo district consents may include the areas of Rangitaiki, Te More and Taharua, which are not part of the Waikato Regional Council catchment area. Waitom.

73. Statistics New Zealand. (2015). *New Zealand definition of homelessness: 2015 update* Available at: http://archive.stats.govt.nz/browse_for_stats/people_and_communities/housing/homelessness-defn-update-2015.aspx.

74. The People’s Project. (2019). Homelessness. Available at: https://www.thepeoplesproject.org.nz/homelessness.

75. Tantau K. (2017). Hamilton Nightshelter full up and turning people away | Stuff.co.nz. Available at: https://www.stuff.co.nz/national/93867449/hamilton-nightshelter-full-up-and-turning-people-away.

76. Branz. (2001). *homes without barriers... a guide to accessible houses* Available at: https://www.branz.co.nz/cms_show_download.php?id=f67d42b2b445fc3b2e2404c3e2539d90b76c97f1.

77. Statistics New Zealand. (2013). Disability and housing conditions: 2013. Available at: https://www.stats.govt.nz/reports/disability-and-housing-conditions-2013.

78. McIntosh J, Leah A. (2017). Mapping housing for the disabled in New Zealand - New Zealand Medical Journal. *N Z Med J* 130(1457). Available at: https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1457-16-june-2017/7282.

79. This initiative is related to the Waikato Plan through the People Priority and Focus area 1.4 – Enabling Housing Choice.

80. Statistics New Zealand. (2019). Measuring housing quality: Potential ways to improve data collection on housing quality in New Zealand. Available at: http://archive.stats.govt.nz/browse_for_stats/people_and_communities/housing/measuring-housing-quality/how-housing-measured-nz.

81. National Centre for Healthy Housing. (2019). Healthy Homes Principles. Available at: https://nchh.org/information-and-evidence/learn-about-healthy-housing/healthy-homes-principles/.

82. Auckland Council. (2019). Healthy homes. Available at: https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/homes-places/Pages/health-housing.aspx.

83. Statistics New Zealand. (2013). Dataset: Sector of landlord, for households in rented occupied private dwellings, 2001, 2006, and 2013 Censuses (RC, TA, AU). Available at: http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.259281802.1818590444.1544152779-281517295.1534190543#.

Appendix 1 – Waikato Region Housing Initiative Working Group - Terms of Reference

THE WAIKATO PLAN

Terms of Reference

Waikato Region Housing Initiative Working Group

Principles to underpin the group's activities and support the unique strengths of the Waikato region:

- **Unlocking powerful possibilities**
- **Mahia te mahi 'getting the job done'**
- **Working together, working smarter**
- **Celebrating success**
- **Backing those who positively shape the world**
- **A place where food for thought is abundant**

Our vision

Every person and every family in our region will be well housed.

The United Nations rights to adequate housing entitlements (United Nations, 2009) are included in our definition for 'well housed'. It means timely access to habitable, affordable, accessible, culturally appropriate and suitably located housing, with the security of tenure.

Context

The Waikato community has a strong history of working well together, sharing information, and of keeping the communities we serve at the heart of individual and collective efforts. This group aims to *work together efficiently* in terms of the housing continuum in this region, and to ultimately have more impact.

Opportunity

This initiative is a priority action under the Waikato Plan. Recently, several pieces of work, such as *Vital Signs* research and the *Waikato Story,* have been done and help define our regional priorities. Research must provide knowledge for change, and not just knowledge for knowledge's sake.

Housing is an identified priority for our region.

The 2016 *Vital Signs* research listened to over 400 Waikato voices, and identified solving problems with affordability, availability and quality of housing as one of the top priorities for action, along with a related goal of improving community connectedness.

The time for action is now. There is an opportunity for the Waikato community to work together more, to focus efforts on areas that have been identified as priorities for the communities in our region, and where synergies and alliances could emerge.

The Waikato Regional Housing Initiative is a priority action for the Waikato Plan. The aim is for local communities to have sufficient, timely, appropriate and affordable housing located within well structured, serviced and integrated settlements. (79)

Purpose of the Waikato Regional Initiative Working Group
The purpose of the Waikato Housing Initiative Working Group is to facilitate development of region-wide identification of housing needs and the response required to close the gaps.

Outcomes sought

- Coordinated regional housing data to clearly represent current demand, supply, cost and location of housing across the spectrum. This will result in a well-documented framework that identifies the gap between housing needs and supply, including affordability, in the short (0 to 3 years), medium (3 to 10 years) and longer term (10 to 30 years) of different community groups in three broad areas social, affordable and market.
- An appreciation of iwi housing needs and aspirations, including papakāinga.
- An accessible data platform for all interest groups to use.
- An understanding of the state of existing Waikato housing stock from a health and wellbeing perspective.
- An evidence base for housing funders,
- Clear opportunities for Waikato's philanthropic and trust capital to be used in a manner that pioneers new approaches to affordable housing.
- Sufficient knowledge for effective government engagement.

A collaborative framework overseen by the Waikato Plan to support those involved in future housing provision.

Waikato Plan – Regional Housing Initiative Working Group – Membership
Membership is selected based on knowledge of the housing sector and the need to have membership across both the housing spectrum and the Waikato region. It is not a closed group and membership is flexible. Alternates can be sent in the absence of the nominated representative.

Lale Ieremia is the Waikato Plan Leadership Group member with responsibility for this action and will co-chair this working group with Lindsay Cumberpatch (D.V Bryant Trust).

Name	Organisation	Title	Region / Area
Connie Ake	Kirikiriroa Affordable Housing and International Communities	President	Waikato
Fiona McNabb	Whaingaroa Raglan Affordable Housing Project	Project Lead	Raglan
Gemma Mayor	SEED		
Gerri Pomeroy	Disabled Person's Assembly	President	Waikato
Greg Morton	Waikato District Health Board	Senior Health Improvement Advisor	Waikato
Jeremy O'Rourke	Lodge Real Estate	Managing Director	Waikato
Joe Waterhouse	Ministry for Social Development	Community Liaison Advisor	Waikato
Justine Cummings	Martin Jenkins Auckland		
Karleen Turner-Puriri	Waikato-Tainui	Whanake Manager	Waikato
Kate Cosgriff	Enabling Good Lives Waikato	Director	Waikato

Name	Organisation	Title	Region / Area
Ken Tremaine	Waikato Plan and Future Proof	Waikato Plan Implementation Advisor and Future Proof Implementation Advisor	
Lale Ieremia	Waikato Plan Leadership Group Member	Regional Housing Initiative Sponsor	Waikato
Lindsay Cumberpatch	D.V. Bryant Trust	Chief Executive Officer	
Lisa Thomson	Waikato District Council	Raglan Ward Councillor	Raglan
Lui Brame	Consultant	Regional Housing Stocktake Report Author	Waikato
Michael Bassett-Foss	Te Waka	Chief Executive Officer	Waikato
Nic Greene	Habitat for Humanity	General Manager	Waikato/Bay of Plenty
Paul Bowden	South Waikato District Council	South Waikato Economic Development Manager	Waikato
Paul Bowman	Hamilton City Council	Team Leader Economic Growth & Planning	Hamilton
Keith Hornby	Hamilton City Council	Senior Policy Analyst | Economic Growth and Urban Policy	Hamilton
Paul Gilberd	NZ Housing Foundation Ltd	General Manager - Strategy and Development	Auckland
Raewyn Jones	WEL Energy Trust	Trust Manager	Waikato
Samantha Rose	Shama NZ	Community Development Worker	Waikato
Steve Knuckey	Martin Jenkins for Te Waka	Economic Development Lead	Undertaking work in the South Waikato
Tawa Campbell-Seymour	Bank of New Zealand	Partner – Commercial & Māori Sector	Hamilton
Te Rehia Papesch	Waikato Plan Leadership Committee Member	Regional Commissioner – Housing NZ	Waikato
Thomas Gibbons	McCaw Lewis		Hamilton
Wilson Paki	Ministry of Social Development	Senior Business Analyst	Waikato
Yvonne Wilson	Nga Rau Tatangi Maaori Housing Foundation	Project Manager	Waikato

How does the Working Group do business?

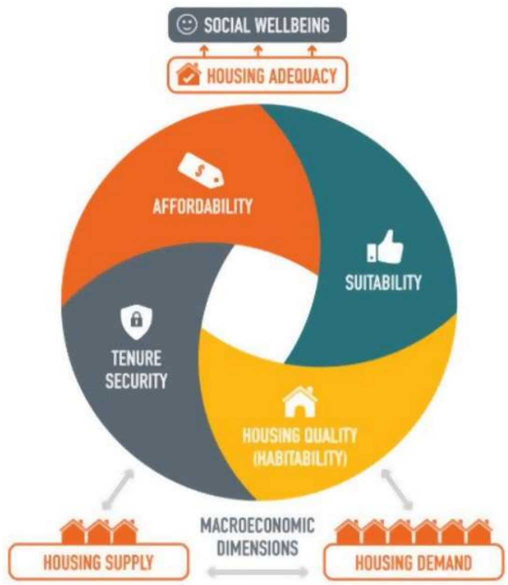
- It will be supported by the Waikato Plan Project Team.
- It does not have delegated decision-making from the Leadership Group. Instead the role of the Working Group is to help facilitate the development of a region-wide housing needs identification, and the responses required to close the gaps.
- Working Group meetings shall be held on an as required basis.
- Minutes of the meetings shall be kept and made available online after they have been approved by the Working Group.

Appendix 2 – Quality housing frameworks

> There are a wide range of factors to consider when looking at quality housing such as functionality. Housing quality includes elements past the physical structure.

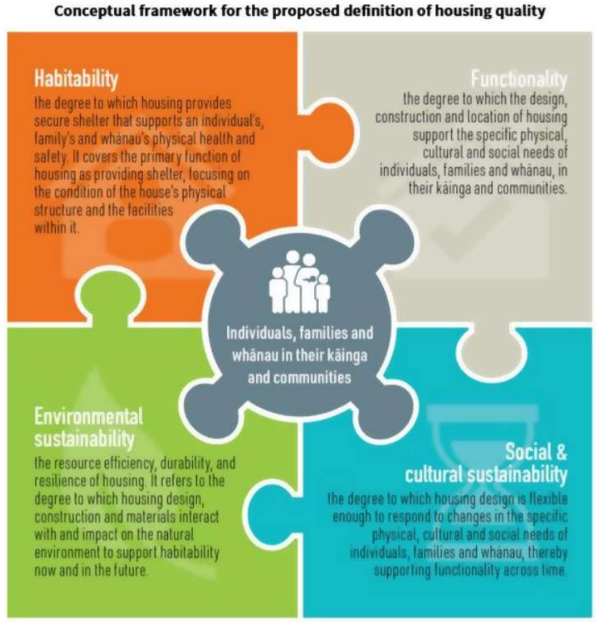
In defining housing quality Statistics New Zealand [8] works with the following housing statistics framework:

Four key concepts of housing adequacy

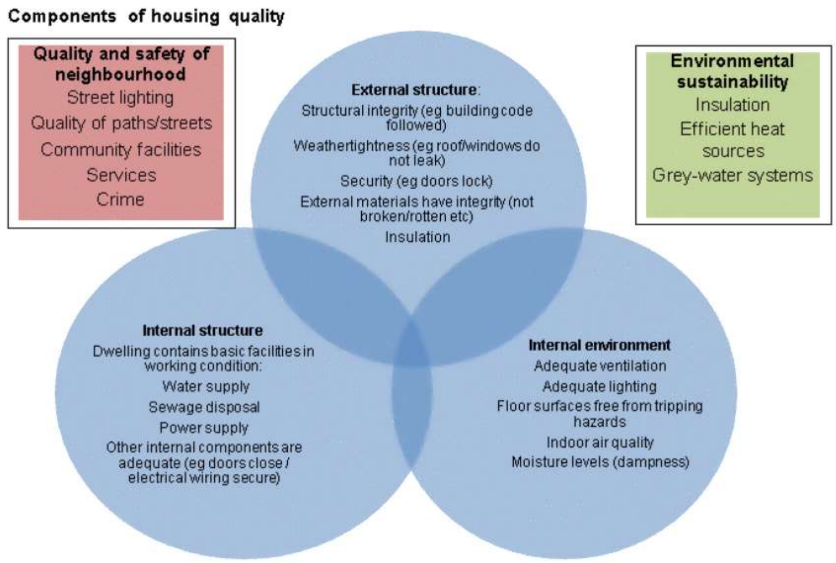


In November 2018 (now closed), Statistics New Zealand publicly consulted on proposed quality housing definitions. The consultation was on the following holistic definition of housing quality:

Conceptual framework for the proposed definition of housing quality



Previously, Statistics New Zealand [80] has described major components of housing quality as outlined in the diagram below.



The National Centre for Healthy Housing [81] also has the following principles that *Auckland Plan 2050* [82] has referred to when defining a healthy home:

- Dry – Damp houses provide a nurturing environment for mites, roaches, rodents, and moulds, all of which are associated with asthma.
- Clean – Clean homes help reduce pest infestations and exposure to contaminants.
- Pest free – Recent studies showed a causal relationship between exposure to mice and cockroaches, and asthma episodes in children. However, inappropriate treatment for pest infestations can exacerbate health problems, since pesticide residues in homes pose risks for neurological damage and cancer.
- Safe – The majority of childhood injuries occur in the home. Falls are the most frequent cause of residential injuries to children, followed by injuries from objects in the home, burns and poisonings.
- Contaminant free – Chemical exposures include lead, radon, pesticides, volatile organic compounds and environmental tobacco smoke. Exposure to asbestos particles, radon gas, carbon monoxide and second-hand tobacco smoke are far higher indoors than outside.
- Ventilated – Studies show that increasing fresh air supply in a home improves respiratory health.
- Maintained – Poorly maintained homes are at risk for moisture and pest problems. Deteriorated lead-based paint in older housing is the primary cause of lead poisoning, which affects some 535,000 children in the USA.
- Thermally Controlled – Tenants and homeowners are at risk of various health problems related to prolonged exposure to excessive heat or cold when their homes do not maintain adequate temperatures.

Appendix 3 – Territorial authority consents by type (13)

Territorial Authority	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Hamilton City	**544**	**614**	**651**	**685**	**895**	**780**	**1205**	**1179**	**1139**	**1487**
Townhouses, flats, units, and other dwellings	89	60	37	123	214	134	166	300	564	701
Houses	416	484	480	496	590	422	766	755	445	531
Retirement village units	0	19	69	38	4	62	86	60	51	215
Apartments	39	51	65	28	87	162	187	64	79	40
Waikato District	**194**	**297**	**247**	**319**	**466**	**508**	**576**	**842**	**676**	**670**
Houses	188	281	215	302	427	485	551	830	660	618
Townhouses, flats, units, and other dwellings	5	7	12	7	15	14	9	10	13	30
Retirement village units	1	9	20	10	24	9	16	2	3	19
Apartments	0	0	0	0	0	0	0	0	0	3
Waipa District	**287**	**297**	**234**	**261**	**356**	**470**	**468**	**514**	**619**	**583**
Houses	266	256	210	227	288	333	407	455	500	476
Townhouses, flats, units, and other dwellings	3	4	2	4	8	13	23	34	33	63
Retirement village units	18	37	22	26	60	120	38	25	69	44
Apartments	0	0	0	4	0	4	0	0	17	0
Thames-Coromandel District	**201**	**233**	**207**	**179**	**182**	**226**	**218**	**307**	**350**	**315**
Houses	192	225	191	165	181	211	208	279	317	276
Townhouses, flats, units, and other dwellings	0	8	6	13	1	8	6	12	27	21
Retirement village units	9	0	7	1	0	3	4	15	5	18
Apartments	0	0	3	0	0	4	0	1	1	0
Taupo District	**170**	**167**	**114**	**133**	**131**	**153**	**226**	**280**	**285**	**284**
Houses	166	145	112	131	131	142	202	269	271	269
Townhouses, flats, units, and other dwellings	4	1	2	2	0	11	13	10	10	15
Apartments	0	1	0	0	0	0	0	1	0	0
Retirement village units	0	20	0	0	0	0	11	0	4	0
Matamata-Piako District	**120**	**103**	**88**	**105**	**107**	**95**	**117**	**208**	**187**	**177**
Houses	105	83	69	101	97	93	110	186	165	158
Townhouses, flats, units, and other dwellings	9	6	12	4	5	0	6	21	19	15
Retirement village units	6	14	7	0	5	2	1	1	2	4
Apartments	0	0	0	0	0	0	0	0	1	0
Hauraki District	**73**	**65**	**65**	**55**	**47**	**62**	**79**	**132**	**123**	**101**
Houses	68	65	63	52	46	61	77	126	116	91
Townhouses, flats, units, and other dwellings	5	0	2	3	1	1	2	6	6	10
Apartments	0	0	0	0	0	0	0	0	0	0
Retirement village units	0	0	0	0	0	0	0	0	1	0
South Waikato District	**37**	**30**	**26**	**20**	**30**	**25**	**52**	**53**	**56**	**50**
Houses	36	30	26	20	27	25	49	49	54	49
Townhouses, flats, units, and other dwellings	1	0	0	0	3	0	3	4	2	1
Apartments	0	0	0	0	0	0	0	0	0	0
Retirement village units	0	0	0	0	0	0	0	0	0	0
Otorohanga District	**36**	**30**	**25**	**25**	**20**	**31**	**29**	**28**	**47**	**49**
Houses	36	29	24	25	20	30	29	28	44	49
Apartments	0	0	0	0	0	0	0	0	0	0
Townhouses, flats, units, and other dwellings	0	1	1	0	0	1	0	0	3	0
Retirement village units	0	0	0	0	0	0	0	0	0	0
Waitomo District	**17**	**17**	**13**	**15**	**12**	**10**	**20**	**3**	**19**	**20**
Houses	16	17	13	15	10	8	12	3	18	20
Apartments	0	0	0	0	0	0	0	0	0	0
Townhouses, flats, units, and other dwellings	1	0	0	0	2	2	8	0	1	0
Retirement village units	0	0	0	0	0	0	0	0	0	0
Grand Total	**1679**	**1853**	**1670**	**1797**	**2246**	**2360**	**2990**	**3546**	**3501**	**3736**

Appendix 4 - Housing New Zealand extract

- Māori comprise more than 50% of Housing New Zealand tenants.
- The mean house building age in the Waikato area is ~47 years.
- 66% of households are ‘one parent and child(ren)’ or ‘one person’ households.

Data sourced directly from Housing New Zealand (HNZ).

The darker red shading in the table ‘Housing New Zealand tenancy ethnicity’ shows higher percentages and lighter red shows smaller percentages.

Housing New Zealand tenancy ethnicity [1]

Territorial Authority	MAORI	EUROPEAN	PACIFIC_PEOPLE	ASIAN	MELAA	OTHER
Hamilton City	57%	35%	7%	4%	6%	2%
Hauraki district	50%	57%	2%	0%	0%	4%
Matamata-Piako district	65%	40%	2%	0%	0%	0%
Otorohanga district	74%	24%	3%	0%	0%	6%
Rotorua district	76%	29%	6%	0%	0%	0%
South Waikato district	66%	46%	11%	0%	0%	0%
Taupō district	72%	33%	8%	0%	0%	0%
Thames-Coromandel district	51%	56%	2%	0%	0%	2%
Waikato district	79%	22%	5%	0%	1%	1%
Waipā district	59%	50%	2%	0%	0%	1%

- Māori comprise more than 50% of HNZ tenants.
- The ethnicities may add up to more than 100% as tenants may identify with more than one ethnicity.
- “MELAA” is Middle Eastern/Latin American/African. The “Residual” category contains mostly people who did not state an ethnicity

Housing New Zealand mean building age and household composition (as at 31 October 2018)

Territorial Authority	2018
Hamilton City	37
Hauraki district	48
Matamata-Piako district	56
Otorohanga district	52
Rotorua district	49
South Waikato district	47
Taupō district	38
Thames-Coromandel district	48
Waikato district	48
Waipā district	49
Average House Building Age	**47**

Household Composition	2018
One parent with child(ren)	35%
One-person household	31%
Couple with child(ren)	9%
One parent with child(ren) and other person(s)	9%
Couple only	4%
Household of unrelated people	4%
Couple with child(ren) and other person(s)	2%
Household of related people	2%
Other multi-person household nfd	1%
Household of related and unrelated people	1%
Couple only and other person(s)	1%
Grand Total	**100%**

- The mean house building age in the Waikato area is ~47 years.
- The most common HNZ household composition is 'one parent and child(ren)' and 'one person'.
- ~85% of HNZ Waikato area stock is two to three-bedroom properties.

Time series of Housing New Zealand stock

Total rental houses (owned and leased by Housing New Zealand)

	30/06/2010	30/06/2011	30/06/2012	30/06/2013	30/06/2014	30/06/2015	30/06/2016	30/06/2017	30/06/2018
Hamilton City	2,801	2,850	2,844	2,828	2,813	2,814	2,837	2,877	2,908
Hauraki District	121	121	118	122	120	111	111	109	109
Matamata-Piako District	216	213	205	196	193	183	174	170	170
Otorohanga District	68	68	67	63	47	46	43	36	36
Rotorua District	694	693	686	668	665	661	652	647	645
South Waikato District	68	67	67	62	54	54	40	35	35
Taupo District	191	189	187	184	184	180	176	164	164
Thames-Coromandel District	221	220	217	216	218	217	213	210	210
Waikato District	441	434	424	459	439	425	398	380	387
Waipa District	266	262	261	250	249	241	232	218	217
National	**67,897**	**68,148**	**67,862**	**67,375**	**66,722**	**65,749**	**62,927**	**61,426**	**61,861**

Total owned and leased by Housing New Zealand - including Community Group Housing properties

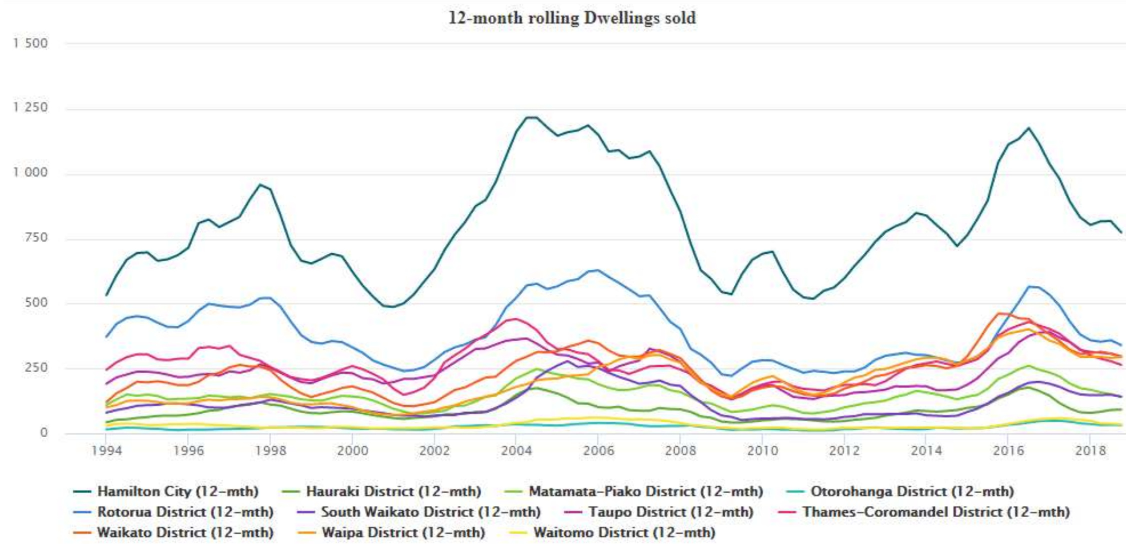
	30/06/2010	30/06/2011	30/06/2012	30/06/2013	30/06/2014	30/06/2015	30/06/2016	30/06/2017	30/06/2018
Hamilton City	2,999	3,046	3,040	3,023	3,007	3,015	3,044	3,087	3,128
Hauraki District	132	132	129	133	131	120	120	118	118
Matamata-Piako District	220	217	209	196	193	183	174	170	170
Otorohanga District	68	68	67	63	47	46	43	36	36
Rotorua District	708	707	699	681	677	673	664	659	657
South Waikato District	73	72	72	67	59	58	44	39	39
Taupo District	194	192	190	187	187	182	178	166	166
Thames-Coromandel District	233	232	229	228	230	229	225	222	222
Waikato District	441	434	424	459	439	425	398	380	387
Waipa District	279	275	274	263	262	254	245	231	230
National	**69,489**	**69,742**	**69,442**	**68,921**	**68,233**	**67,245**	**64,412**	**62,906**	**63,353**

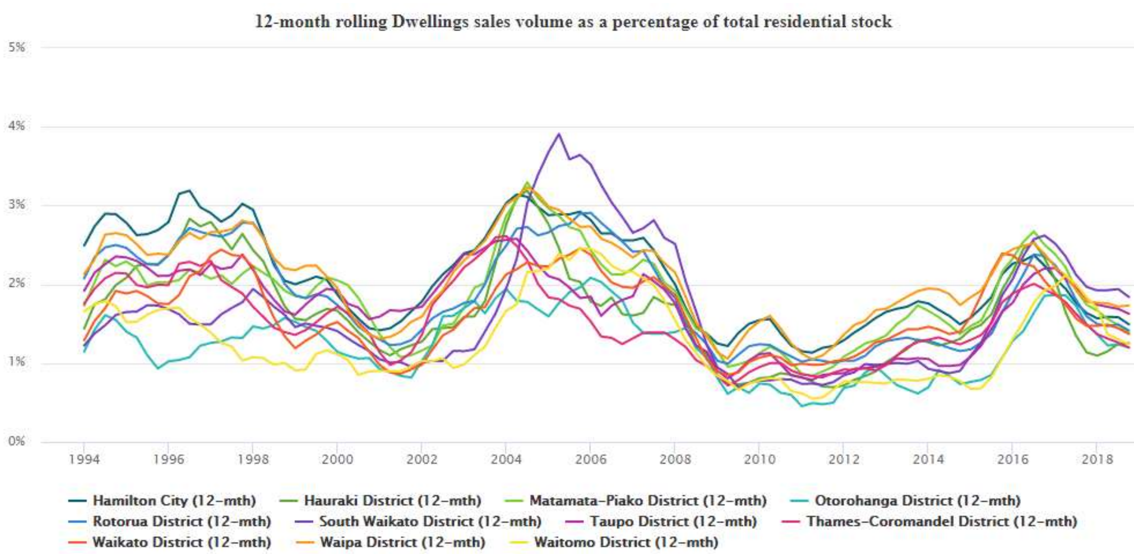
Appendix 5 – Renting [83],[11]

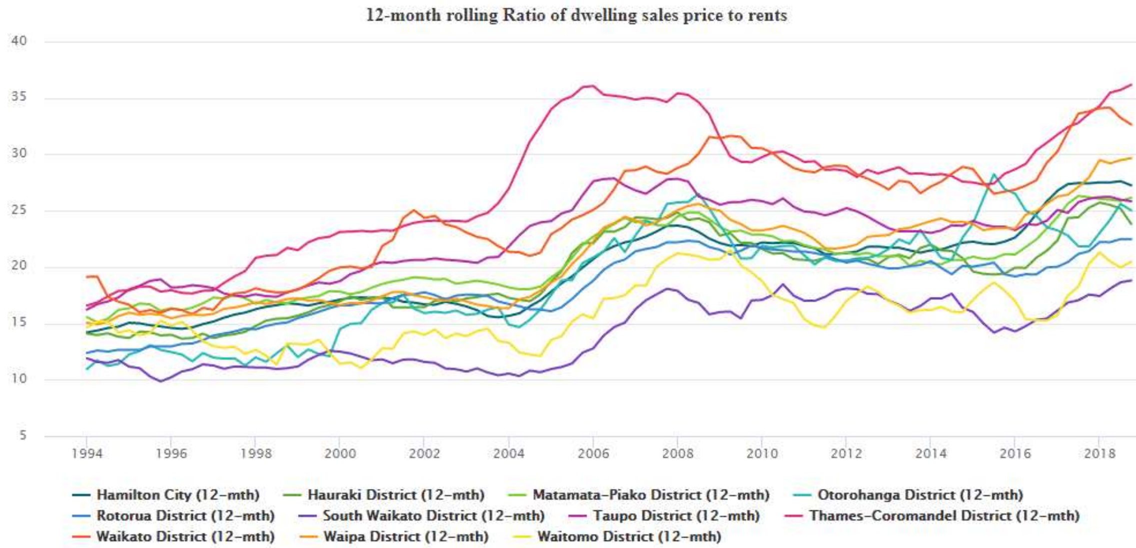
In 2013 ~29% of Waikato region housing stock was rental accommodation, with the highest percentage (37%) being in Hamilton. Private rentals include those owned by a private person, trust or business. The percentage of rental dwellings is calculated by dividing total households rented by total occupied private dwellings.

Area	Sector of landlord	2001	2006	2013
Waikato Region	Total households rented	33,798	36,297	44,589
	% of Dwellings rented	26%	26%	29%
	Private rentals	26,277	29,241	36,351
	Housing New Zealand Corporation	3,657	3,285	3,627
Thames-Coromandel District	Total households rented	2,262	2,523	2,799
	% of Dwellings rented	21%	22%	23%
	Private rentals	1,845	2,151	2,388
	Housing New Zealand Corporation	189	177	198
Hauraki District	Total households rented	1,377	1,416	1,839
	% of Dwellings rented	21%	20%	25%
	Private rentals	1,098	1,164	1,539
	Housing New Zealand Corporation	120	99	102
Waikato District	Total households rented	3,795	4,152	5,439
	% of Dwellings rented	22%	21%	25%
	Private rentals	2,922	3,417	4,575
	Housing New Zealand Corporation	453	342	360
Matamata-Piako District	Total households rented	2,271	2,445	3,042
	% of Dwellings rented	21%	21%	25%
	Private rentals	1,809	2,022	2,556
	Housing New Zealand Corporation	210	174	165
Hamilton City	Total households rented	14,481	15,423	18,885
	% of Dwellings rented	35%	33%	37%
	Private rentals	10,830	11,883	14,541
	Housing New Zealand Corporation	2,004	1,941	2,256
Waipa District	Total households rented	2,844	3,231	4,125
	% of Dwellings rented	20%	20%	23%
	Private rentals	2,331	2,724	3,564
	Housing New Zealand Corporation	225	198	216
Otorohanga District	Total households rented	606	663	816
	% of Dwellings rented	20%	22%	24%
	Private rentals	492	543	693
	Housing New Zealand Corporation	60	54	39
South Waikato District	Total households rented	1,986	1,986	2,403
	% of Dwellings rented	25%	24%	29%
	Private rentals	1,563	1,590	2,034
	Housing New Zealand Corporation	111	66	63
Waitomo District	Total households rented	894	918	1,065
	% of Dwellings rented	27%	27%	32%
	Private rentals	648	705	852
	Housing New Zealand Corporation	129	99	90
Taupo District	Total households rented	2,841	3,039	3,579
	% of Dwellings rented	25%	25%	27%
	Private rentals	2,373	2,592	3,057
	Housing New Zealand Corporation	159	135	135
Rotorua District	Total households rented	219	249	300
	% of Dwellings rented	20%	20%	23%
	Private rentals	183	228	276
	Housing New Zealand Corporation	-	-	-

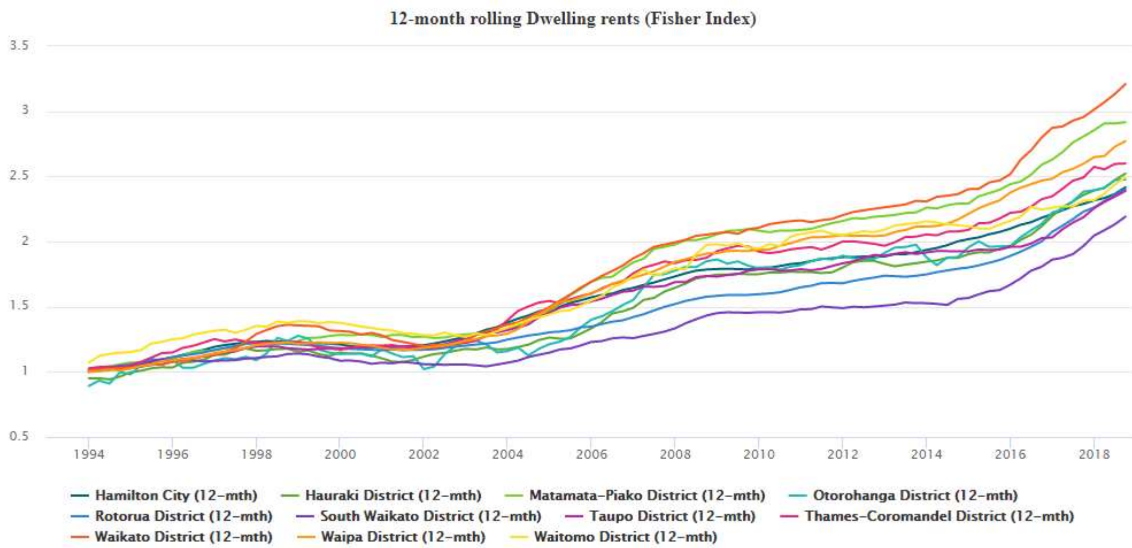
Appendix 6 - MBIE dashboard – various charts by territorial authority (26)



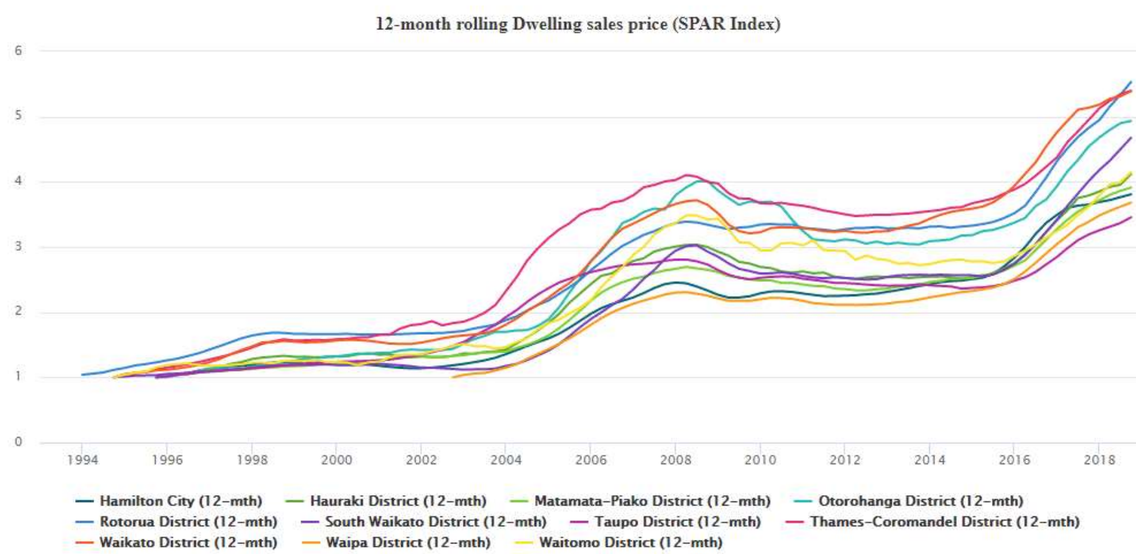




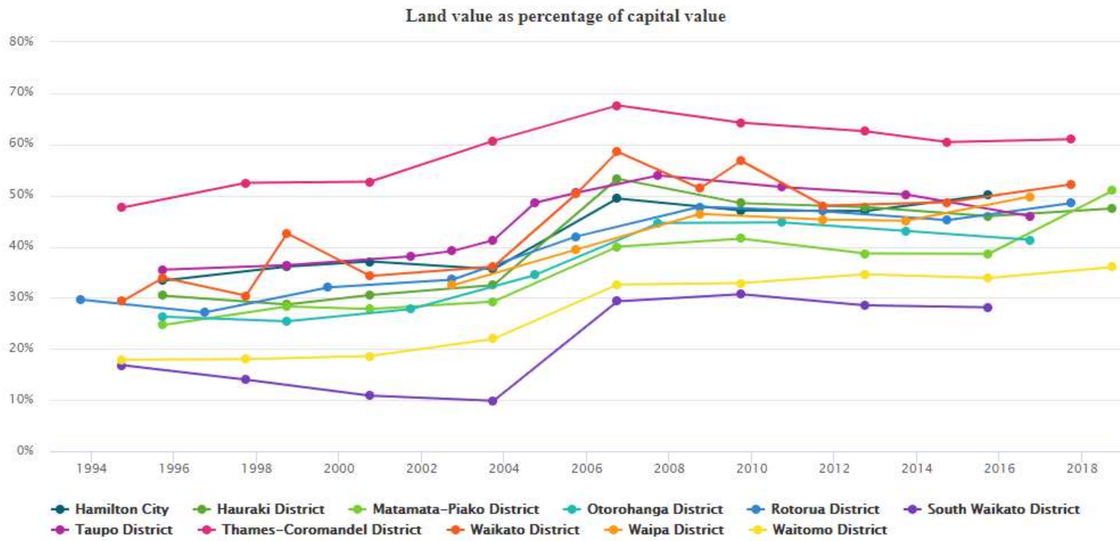
12-month rolling Ratio of dwelling sales price to rents
40
35
30
25
20
15
10
5
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
Hamilton City (12-mth)
Hauraki District (12-mth)
Matamata-Piako District (12-mth)
Otorohanga District (12-mth)
Rotorua District (12-mth)
South Waikato District (12-mth)
Taupo District (12-mth)
Thames-Coromandel District (12-mth)
Waikato District (12-mth)
Waipa District (12-mth)
Waitomo District (12-mth)



12-month rolling Dwelling rents (Fisher Index)
3.5
3
2.5
2
1.5
1
0.5
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
Hamilton City (12-mth)
Hauraki District (12-mth)
Matamata-Piako District (12-mth)
Otorohanga District (12-mth)
Rotorua District (12-mth)
South Waikato District (12-mth)
Taupo District (12-mth)
Thames-Coromandel District (12-mth)
Waikato District (12-mth)
Waipa District (12-mth)
Waitomo District (12-mth)



12-month rolling Dwelling sales price (SPAR Index)
6
5
4
3
2
1
0
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
Hamilton City (12-mth)
Hauraki District (12-mth)
Matamata-Piako District (12-mth)
Otorohanga District (12-mth)
Rotorua District (12-mth)
South Waikato District (12-mth)
Taupo District (12-mth)
Thames-Coromandel District (12-mth)
Waikato District (12-mth)
Waipa District (12-mth)
Waitomo District (12-mth)



Land value as percentage of capital value
80%
70%
60%
50%
40%
30%
20%
10%
0%
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
Hamilton City
Hauraki District
Matamata-Piako District
Otorohanga District
Rotorua District
South Waikato District
Taupo District
Thames-Coromandel District
Waikato District
Waipa District
Waitomo District