



PUB/24

Beacon resource: Performance of rental housing v3

A report prepared for Beacon Pathway Incorporated

October 2014

About This Report

Title

Beacon resource: Performance of rental housing v3

Authors

Vicki Cowan, Lisa Burrough, Lois Easton (Beacon Pathway Incorporated)

Reviewer

Abstract

This document is Beacon's repository of core facts and knowledge about the performance of rental housing and the issues around how this can be improved. It is a living document; readers are encouraged to send updates or corrections to inform any reissue in the future. The document covers sources of evidence for the quality of rental housing stock, the impact of poor quality rental housing on tenants, supply and demand in the rental housing market, current interventions, characteristics of landlords and tenants, and the policy and legislative context. The discussion segments the rental housing market and makes recommendations to improve rental housing.

Reference

Cowan, V., Burrough, L. and Easton, L (2014). Beacon resource: Performance of rental housing v3. Report PUB/24 for Beacon Pathway Incorporated.

Rights

Beacon Pathway Incorporated reserves all rights in the Report. The Report is entitled to the full protection given by the New Zealand Copyright Act 1994 to Beacon Pathway Incorporated.

Disclaimer

The opinions provided in the Report have been provided in good faith and on the basis that every endeavour has been made to be accurate and not misleading and to exercise reasonable care, skill and judgment in providing such opinions. Neither Beacon Pathway Incorporated nor any of its employees, subcontractors, agents or other persons acting on its behalf or under its control accept any responsibility or liability in respect of any opinion provided in this Report.

Contents

1	Executive summary	1
1.1	The rental dynamic	1
1.2	Rental housing market	2
1.3	Policy and legislative context	3
1.4	Barriers and solutions	4
2	Purpose	7
3	Problem statement	7
4	Quality of rental housing stock	8
4.1	Evidence of rental housing condition	8
4.2	Maintenance and improvements	12
4.3	Beacon’s ‘retrofit for performance’ research insights	13
5	Impact of poor quality housing on health and wellbeing	16
5.1	Physical health	16
5.2	Mental health impacts	18
5.3	Fuel poverty	19
5.4	Cost benefits of insulating and better heating through health savings	20
5.5	Home injuries	21
6	Rental housing market	23
6.1	Supply and demand	23
6.2	Interventions in the housing market related to quality	28
7	New Zealand’s landlords and tenants	31
7.1	Who lives in rental housing?	31
7.2	Who owns rental housing?	37
8	Policy and legislative context of rental housing	44
8.1	New Zealand legislation	44
8.2	Policy context	45
8.3	Central government agencies with a stake in rental housing	47
8.4	Local government / territorial authority roles	53
8.5	Registered Community Housing Providers (CHPs)	57
9	Discussion	59
9.1	Problem synthesis	59
9.2	Defining a rental dynamic	60
9.3	Segmenting rental housing	61
9.4	Recommendations to improve rental housing	65
9.5	Summary	69
10	Annex A: Summary of legislation	70
10.1	The Residential Tenancies Act 1986	70
10.2	The Building Act 2004	70
10.3	The Health Act 1956	72
10.4	The Housing Corporation Act 1974	73
10.5	The Housing Improvement Regulations 1947	73

11	Annex B: Rental home performance resources.....	75
11.1	Beacon’s home performance advice for landlords and tenants v1	76
11.2	NZGBC and Otago University Medical School WoF, as per media release 15 th May 2014. 77	
11.3	Working model: Criteria based on Building and Health Acts.....	78
12	References.....	80

List of Tables

Table 1:	BRANZ house condition rating scale	8
Table 2:	Results of comparison of rental and owner occupied houses in BRANZ House Condition Survey 2010	9
Table 3:	Comparison of occupant perceptions and BRANZ assessments of house condition.....	10
Table 4:	Fuel poverty estimates by region	19
Table 5:	Present value of total costs and benefits (\$ million).....	21
Table 6:	Investment objectives for landlords seeking additional rental properties in the next 12 months	39
Table 7:	Top ten landlord renovations in excess of \$2000 in the previous year.....	42
Table 8:	Landlord attitude to retrofit.....	43
Table 9:	Key legislation governing rental housing (@ October 2014).....	44
Table 10:	Government investment in Rental Housing.....	52
Table 11:	Key provisions of Auckland Council Dangerous and Insanitary Buildings Policy	54
Table 12:	Registered CHPs as at 12 June 2014	57

List of Figures

Figure 1:	House Condition Survey values of repairs to tenure to bring houses to 'as new' standard	12
Figure 2:	Total domestic consumer disconnections for non-payment	20
Figure 3:	Home and community falls entitlement claims - monthly	21
Figure 4:	Cost of building a standard house	23
Figure 5:	Massey University Housing Affordability Index March 2014	24
Figure 6:	Average weekly rents to April 2014.....	24
Figure 7:	Rental affordability index March 2014	25
Figure 8:	New bonds lodged as a percentage of total bonds held per year	25
Figure 9:	HNZ waiting list as of January 2014.....	26
Figure 10:	Change in New Zealand’s Housing Tenure.....	31
Figure 11:	Housing Continuum	33
Figure 12:	CHA Housing Continuum	34
Figure 13:	Central government housing spending (\$m) March 2014	41

Acronyms

ACC	Accident Compensation Corporation (govt agency)
AS	Accommodation Supplement (govt subsidy)
CDHB	Canterbury District Health Board
CHA	Community Housing Aotearoa (umbrella organisation Community Housing Organisations)
CHO	Community Housing Organisations (provide social housing)
CHP	Community Housing Providers (MBIE registered housing providers)
CHRA	Community Housing Regulatory Authority (inside MBIE)
DBH	Department of Building and Housing (now MBIE)
DHB	District Health Board
EDA	Eco-Design Advisors (council scheme for independent advice)
EECA	Energy and Efficiency Conservation Authority
HNZ	Housing New Zealand Corporation
HPA	Home Performance Advisor (certification scheme)
IRRS	Income related Rent Subsidy (govt subsidy)
MBIE	Ministry of Business Innovation and Employment
MSD	Ministry of Social Development
NGO	Non Governmental Organisation
NZGBC	New Zealand Green Building Council
SHU	Special Housing Unit (inside MBIE)
SNZ	Statistics New Zealand
WUNZ	Warm Up New Zealand (national insulation scheme)
WoF	Warrant of Fitness
WHO	World Health Organisation

1 Executive summary

This resource brings together the core facts and knowledge, drawn from a range of publications and research, about the performance of rental housing in New Zealand, legislative, policy and social factors affecting it, and how it can be improved.

1.1 The rental dynamic

Any consideration of rental housing needs to take account of the rental dynamic, i.e. the interplay between house quality, the tenant and the landlord. Each is interdependent: actions and changes in one will determine outcomes for the other two

1.1.1 House quality

A substantial body of research shows that New Zealand housing is cold and damp, with temperatures and humidity regularly falling below the World Health Organisation's recommendations. House condition surveys indicate that, overall, rental stock is in the poorest state. At the same time, there is increasing evidence of the adverse impact of poor housing on health, wellbeing, education, welfare and employment. Cold, damp and inefficient housing has been linked to a range of physical symptoms, diseases and injuries, and with a high excess winter mortality rate. Aside from physical health impacts, poor housing has been shown to impact mental health and even educational attainment and lower social status. The links between poor house quality and New Zealand's high incidence of child poverty are well recognised. Alongside this, home heating, energy costs and fuel poverty are key housing issues with implications for health.

The quality of our indoor environment results from the interplay among four parameters: temperature, ventilation, relative humidity and sources of pollution. Beacon research indicates that significant upgrade of our housing stock is required to truly reach the indoor environment quality that supports health, i.e. occupants enjoy WHO temperature and humidity recommendations. House quality to achieve these outcomes includes: a good thermal envelope; no dampness; mechanical ventilation; and efficient heating (no unflued gas heaters). This demands a range of interventions determined by a whole-of-house perspective. House quality also takes into account typology, size and location - when mismatched with tenants, these characteristics can result in overcrowding and additional health needs.

1.1.2 Tenants

Increasing numbers of New Zealanders rely on rental accommodation. This affects households with working parents and children as well as our most vulnerable citizens (impoverished families, children, elderly and the infirm). The make-up of tenants has changed with a new 'intermediate housing segment' of older households, with at least one member in paid employment, including those with children, who cannot afford to buy their home

Approximately half of New Zealand's children under five years of age and 21% of adults over 65 live in rented houses; both are more vulnerable age populations due to their susceptibility to illness and health issues caused by environmental factors. In addition, fifty percent of households in the private rental sector are financially stressed, i.e. they spend more than 30% of their household income on housing. Council stock (1%) primarily houses elderly and disabled tenants. Central and local government and the third sector invest heavily in these families: directly with financial assistance

such as Income-Related Rent Subsidy or Accommodation Supplement, or through health and education.

The Housing Shortage Action Group has compiled a housing continuum ranging from extreme need (300 urban, 1000 rural homeless) to substandard/temporary housing (20,000) to state housing (67,700) to private sector rentals (467,700) to home ownership (1,082,200). From this, Community Housing Aotearoa has developed a housing continuum which offers a view of the whole housing market and examines who is involved in which aspects of the market. CHA would argue that all segments of the Housing Continuum must be functioning for a healthy housing market. If a household's journey along their pathway is to be supported then policies and programmes have to be coordinated to avoid creating barriers. Security of tenure and resident choice is valued – a household can remain connected and engaged within a community rather than moving as their needs change.

The recently published Māori Housing Strategy identifies the distribution of Māori across housing with 22,184 HNZ tenants (34.5% of all HNZ), 57,098 Māori receiving the Accommodation Supplement (28.2% of all recipients) and 87,768 Māori households in private rental (19.5% of all private rental households).

1.1.3 Landlords

85% of the country's rental housing stock is in private ownership with the remainder in social housing (i.e. landlords are government, council, third sector). The main owners of rented housing are:

- Private landlords (480,000 units). The majority of people with one or more dwellings in the rental market are largely passive investors in property and do not see themselves as running a rental business in a service industry. They have a low investment in management and the acquisition of the skills necessary to manage tenants or property.
- Housing New Zealand (67,700 units)
- Councils (14,000 units, with Christchurch the biggest holder at 3,000)
- Community organisations not-for profit, third sector (5,000 units, with IHC largest provider at 1,105 units and other 50-100 providers each typically managing 20 units).

New Zealand homes are chronically under-maintained and perform poorly, and rental housing is no exception: few landlords invest in regular maintenance and undertake whole-of-house upgrading.

1.2 Rental housing market

New Zealand's rental market can be categorised as:

- Social housing: where the landlord is central/local government or “proxies” (e.g. the developing third sector); tenants are recognised as vulnerable and are supported by a range of government agencies; the house quality is managed by landlord asset management programmes (generally of a consistent standard, unclear if high enough to support health outcomes as advocated here).
- Private market: where the landlord is private person; tenants pay market rent with no government assistance; and quality of homes may be actively managed (and achieve very high standard, e.g. new apartments built to code) or not managed at all (with resultant range of quality down to the very poorest accommodation options).
- Mixed rental: where the landlord is a private person; tenants pay market rent but receive government accommodation assistance or support because of very high health needs (so not tied

to the house, but may be adversely affected by the quality of the home); and the house ranges in quality as per the private rental stock.

The rental housing market is impacted by challenges faced by the housing market: affordability and supply. Some parts of New Zealand have a shortage of homes as new house construction is below demand from population growth, household size change and migration. Demand for new housing is estimated to rise by more than 20,000 households per year: most of that growth is predicted for the Auckland region. Christchurch is also under severe pressure with loss of stock from the earthquakes and increased demand for rental housing over the repair process. New Zealand has seen a significant decline in housing affordability; real house prices are accelerating faster than income. These high costs make it harder for the renters that were hoping to rent only for a short time while saving to buy a home. Rental housing markets vary across the country, with Auckland and Christchurch under considerable pressure.

A number of interventions have been launched in recent years:

- Five councils (Auckland, Tauranga, Wellington, Christchurch and Dunedin) have trialled a Warrant of Fitness developed by University of Otago, Wellington (UoOW), alongside the New Zealand Green Building Council (NZGBC) in 2014. The aim of the pre-test was to analyse the practicalities, utility and cost of a draft rental WoF scheme. Items on the WoF are recorded as either a pass or fail: a home fails the WoF if 31 criteria are not met. Of the 144 houses assessed, only 6% passed.
- In 2014 HNZ trialled a Warrant of Fitness scheme designed to ensure all houses are meeting a minimum health and safety standard. If the trial is successful, the intention was to complete a Warrant of Fitness for every state house every three years. The Warrant of Fitness is being developed by the Ministry of Building, Innovation and Employment with a Technical Advisory Group.
- A new programme certifies Home Performance Advisors to provide a full assessment, diagnosis and recommendation to homeowners, landlords and tenants suffering from cold, damp or resource-hungry homes. Advice provided is independent and based on best practice, ensuring New Zealanders get the information they need in order to move towards a warmer, drier, healthier and more energy efficient home.
- Rate My Flat is a new enterprise started by Otago University graduates to support the upgrade of Dunedin student rental accommodation. In its pilot stage, the team is currently asking students to rate their flats via an online questionnaire. The aim is to share information about flats within the student community and engage with landlords.
- Homestar™ is New Zealand's only residential rating tool, and while not just for rental housing, it is a housing intervention that could help landlords and tenants share information about housing quality.

1.3 Policy and legislative context

Despite the critical role housing plays in supporting New Zealand families, particularly our most vulnerable communities who have no choice but to rent, the rental housing market is unregulated and fragmented. Institutionally, the rental housing sector is complex: no single central government agency is responsible for housing quality; multiple Ministers have a role in rental housing; formal

rules governing rental housing are spread across different pieces of legislation; and, roles are played by several agencies within central and local government. Rental housing is subject to a range of key pieces of legislation, with an associated complex picture of responsibilities divided among four Cabinet Ministers, two Ministries and one Crown Agency as well as Local Authorities and District Health Boards. A summary of the main aspects of each is available in Annex A: Summary of Legislation. In addition, local government has several important responsibilities for rental housing and acts as both legislator and landlord. The rental housing sector is the subject of significant new policy direction as the government seeks to grow the third sector of Community Housing Organisations. The result is lots of change and uncertainty as new relationships and responsibilities are playing out.

In addition, existing information is scattered: BRANZ and Statistics NZ hold some rental house condition survey data; MSD holds information on tenants receiving Accommodation Supplement; and MBIE holds bond information. Central government agencies are not allowed, due to privacy rules, to align their datasets. The outcome is that no one agency holds all the parts of the jigsaw: home, tenant and landlord. This undermines the development of a good evidence base from which to make policy decisions.

1.4 Barriers and solutions

At first glance, improving outcomes for **social housing** is straightforward as government is active in all parts of the dynamic. In theory the government sets the rules for itself, so it could implement high housing quality requirements, and some would argue, given this market is responsible for our most vulnerable citizens, it should. The Warrant of Fitness is a start in clearing out the houses that are not fit for healthy living. Ideally this is the first step in an asset management programme that builds on good maintenance and progressively intervenes to improve housing outcomes with performance upgrades. The social housing sector would be the easiest place to establish robust knowledge, gather data, and understand how to optimise the parts of the rental dynamic to improve outcomes. In reality, it is more complex. There is not one central government agency managing the dynamic: tenants fall under MSD; HNZ is both landlord and manager of house quality

The **private market** is complex and informal: Anyone who owns a house can be a landlord and the role is sometimes, but not always, backed up by property management. While house quality should meet council safe and sanitary regulations, these rules are rarely invoked and only in desperate situations. Tenants operate in the market with no formal information to underpin their decisions to rent one house over another. Tenants in Auckland and Christchurch have little choice due to the housing shortages in these cities: this will relegate home quality down the decision-making process. Tenants have little easy redress in the private market: they can go to the Tenancy Tribunal or vote with their feet.

The retrofit market is immature: landlords have very low awareness of requirements to maintain the asset, let alone performance upgrade interventions. There is low landlord engagement with independent advice and low capacity to fund interventions. The majority of landlords own rental properties for capital gain. This means few make budget allowance for maintenance and upgrades of their rentals. The New Zealand market does not value home performance; land price dominates sale

price, which reduces a landlord's financial incentive to invest in upgrades (true for all New Zealand stock).

A Warrant of Fitness is the most often cited solution to rental housing performance. The public debate surrounding the current trials has arguably raised awareness of housing quality among both landlords and tenants. Beacon would argue that while the WoF is an important step to catch the truly appalling accommodation offered for rent, it is a bare minimum. Houses that pass the WoF may still be cold and damp and deliver poor outcomes for tenants. Ideally, a WoF would be the first step on a longer maintenance and upgrade journey for landlords and their rental houses.

Several issues remain to be resolved in the fledgling WoF initiatives. These need informed public debate and political engagement:

- What is the optimal status for a NZ WoF – voluntary or mandatory?
- Independence – the WoF should be independent of any product or solution.
- Whether mandatory or voluntary, what might a landlord do who fails a WoF?
- What are the potential unintended consequences?

The **mixed rental** segment has an added layer of complexity; the private rental market houses tenants who receive government support. This means government has a real stake in this housing, tenants while not in the social housing sector are still considered vulnerable, and while landlords are managing tenants who may have high needs, they do have some security of rent. While sharing elements of both the private market (technically landlords and house quality are private) and the social housing segment (tenants), this is quite a unique dynamic when considering how to improve housing outcomes.

1.4.1 Recommendations

Beacon recommends that health and well-being outcomes be considered alongside any Warrant of Fitness. Warrants of Fitness proposed to date are a very low standard, designed to capture the worst stock, which we acknowledge is important. However, homes that pass such a WoF may still be cold and damp, so the health and well-being outcomes sought will not be met.

If a WoF is under serious consideration Beacon strongly recommends there is only one measure for all New Zealand homes. We would also advocate that the WoF is only the first step for New Zealand homes that should all be on a longer pathway towards the warm, dry, efficient homes all residents need. A first step would be to share the Warrant of Fitness developed for HNZ to inform the market and provide leadership that prevents multiple schemes being developed.

A New Zealand Rental Housing Strategy for social housing would improve planning and management of this critical national asset. This would provide essential structure to address the fragmentation of rental housing across ministers, ministries, Acts of Parliament, councils, policies, Community Housing Organisations.

Beacon recommends that all New Zealand rental housing must meet the Building Code by 2025 with a pathway that requires social housing meet the Code, followed by all rental properties in the mixed market (tenant receives a government subsidy) and finally all rental properties (and perhaps all houses!). The trigger could be the sale of the home.

Councils could explore how they might engage with rental housing from within their existing safe and sanitary obligations. Councils could start by interpreting the rules to develop a checklist, trial it on their own properties before engaging with the private sector landlords. Central government could share its insight from decades of providing and maintaining social housing stock with other stakeholders who provide social housing (and ultimately the mixed rental and private market). Government could use the information and insight it has from managing its own stock and understanding the links between home performance and health, to raise national awareness of warm, dry, well-maintained homes as a means of improving housing outcomes.

Further research is recommended into the best models for improving housing outcomes and a comprehensive analysis of the true costs of New Zealand's poor housing on taxpayer funds, particularly on health, well-being, productivity, resource efficiency (water and energy), affordability.

Greater connectedness is suggested particularly in ensuring information across government, and Beacon recommends that Government considers developing a single agency which holds all parts of jigsaw together: health, building standards, social housing, liaison and support to Community Housing Organisations and tenant support.

Beacon recommends that any upgrade scheme is based on independent whole-of-house advice, so any taxpayer-funded intervention programme that changes performance of homes relies on appropriately trained providers. Certified Home Performance Advisors and Eco-design Advisors in Council provide this type of input to optimise asset management.

In relation to the mixed rental segment, Beacon recommends that central government undertakes research lead some joint initiatives to improve understanding of who in this mixed rental segment is supplying houses to vulnerable tenants and the quality of the homes, with a view to engaging with landlords and transferring the learning from social housing intervention to this market. Given mixed rental tenants are vulnerable, we would recommend government trials an improved mechanism for these tenants to engage with officialdom regarding quality of their home: the current Tenancy Tribunal is recognised as a barrier for tenants

2 Purpose

This document is Beacon's repository of core facts and knowledge about the performance of rental housing and the issues around how this can be improved. It is drawn from a range of publications and research, and was developed by Beacon to underpin efforts to encourage action among central government, local government and landlords to develop policy and act to improve the quality of rental housing and thus outcomes for tenants. We recognise the situation is fluid and so consider this a living document; readers are encouraged to send updates or corrections to inform any reissue in the future.

3 Problem statement

- New Zealand housing can be characterised as cold and damp; overall, rental stock is in the poorest state.
- Poor quality stock results in poor housing outcomes that affect health, wellbeing, education, welfare and employment outcomes for tenants. The relationship between poor housing quality and NZ's appalling child poverty situation are widely acknowledged.
- Tenants of rental housing often have lower incomes and are often most vulnerable members of society: central and local government provide social housing along with a small third sector (Community Housing Organisations, CHO) and many households receiving government support via the Accommodation Supplement are housed in the private sector.
- The rental conditions in New Zealand are restrictive when compared internationally: we have shorter lease terms; tenants can be given notice in 30 days on almost any condition; and tenants have low ability to make minor alterations to the home.
- An increasing proportion of New Zealanders are unable to afford their housing costs.
- The majority of rental homes are privately owned and are small investors. Their key focus is capital gain; there are very few landlords who consider this their profession
- There is a shortage of housing in parts of New Zealand (most notably Auckland and Christchurch); therefore, the rental sector is also short on supply in these areas.
- Evidence about the state of rental housing, and impacts on tenants and landlords is incomplete and scattered: this undermines the ability of government to make good evidence based policy.
- Institutionally, the rental housing sector is complex: no single central government agency is responsible for housing quality; formal rules governing rental housing are spread across different pieces of legislation; responsibility for rental housing is shared across more than one Minister; and, roles are played by several agencies within central and local government.

4 Quality of rental housing stock

This section deals specifically with the quality of housing stock and implications for health. It is important to note that New Zealand houses “move” in and out of the rental sector: for example, a family may buy a second home and choose to rent their first home rather than sell it. So the quality of rental housing reflects the (poor) state of the country’s housing stock.

4.1 Evidence of rental housing condition

Robust information on the quality of rental housing is scarce. The main source of New Zealand data on house condition comes from the BRANZ House Condition Survey, which has only recently been extended to include rental housing. The recent (Jan-Feb 2014) WoF pre-test (Section 6.2.3), carried out in five councils, gives some insight to housing condition, although the houses assessed were volunteered rather than randomly chosen. Anecdotal and personal records of individual rented homes are available from a range of agencies, e.g. Christchurch’s Tenants’ Protection Agency. A Warrant of Fitness for Housing New Zealand Corporation houses has been trialled with full results expected late 2014. More information on the trial is given in Section 8.3.1.4.

4.1.1 BRANZ House Condition Survey

The BRANZ 2010 House Condition Survey looked at the differences in condition and maintenance of rental and owner – occupied housing (Buckett et al., 2012).

Table 1: BRANZ house condition rating scale

Condition	Description	Rating
Serious	Health & safety implications, needs immediate attention	1
Poor	Needs attention shortly – within the next three months	2
Moderate	Will need attention within the next two years	3
Good	Very few defects, near new condition	4
Excellent	No defects – as new condition	5

The survey, which had a sample size of 491 houses, of which 108 were rental houses, found that rental housing is generally less well maintained than owner-occupied housing. The sample is considered to be representative of New Zealand houses. Table 2 summarises the key findings. Of particular note is that, in rental housing, a greater proportion of houses had exterior, envelope, interior and wet area components in poor or serious condition than in owner-occupied housing.

When insulation levels are looked at in rental housing:

- Twice as many rentals had no ceiling insulation compared to owner occupied houses.
- A third more rentals had no underfloor insulation compared to owner occupied houses.
- Rentals were twice as likely to have uninsulated walls as owner occupied houses.

Table 2: Results of comparison of rental and owner occupied houses in BRANZ House Condition Survey 2010
(owner occupied houses n=383, rental houses n=108)

Parameter	Rental Houses	Owner-Occupied Houses
Assessed as Good Condition	22%	42%
Assessed as Poor Condition	44%	25%
Windows Assessed in Poor/Serious Condition	31%	19%
Roofs Assessed in Poor/Serious Condition	19%	11%
Bathroom and Laundry Linings in Poor/Serious Condition	30%	14%
Bathroom Fittings in Poor/Serious Condition	28%	10%
Kitchen Fittings in Poor/Serious Condition	31%	10%
Presence of Unflued Gas Heater	25%	17%
Presence of Dampness	34%	24%
Presence of Mould	73%	53%
Moderate to High Levels of Mould	43%	25%

The survey also found

- Forty-six percent of rented houses are less than 100m² in size, compared to 17% of owner occupied houses.
- Rented houses have an average 2.9 bedrooms compared to 3.3 for owner occupied houses
- Seventeen percent of households in rented houses had been living there for less than a year, compared with 3% of owner-occupied houses
- Thirty-eight percent of households in rented houses had been living there for more than seven years, compared with 59% of owner occupied houses.
- Nineteen percent of rental households intended to move in the next 12 months compared with 6% of owner-occupied houses.

Other points of interest from the BRANZ 2010 House Condition Survey were the age profile of rental vs. owner-occupied housing. The majority of houses in their rental house sample were built between 1940 and 1990, with owner-occupied households more likely to live in houses built before 1940 or after 1990 than renting households (Buckett et al., 2012).

The BRANZ report suggests renters may be ‘more optimistic about the condition of the home they are residing in and have lower expectations surrounding the condition of the home, particularly as in most cases the upkeep of the home is not the tenant’s responsibility.’

Table 3: Comparison of occupant perceptions and BRANZ assessments of house condition (Buckett et al., 2012)

Condition	Rented		Owner Occupied	
	Occupant perception	BRANZ assessment	Occupant perception	BRANZ assessment
Good condition	80%	22%	73%	42%
Moderate condition	18%	34%	23%	33%
Poor condition	2%	44%	4%	25%

4.1.2 Quotable Value

Quotable Value provides information to local councils on valuations, which are used to set rates. This information may also be used by landlords in their decision making around tenancies and maintenance.

The BRANZ House Condition Survey 2010 compared the assessed condition of each property with the Quotable Value (QV) valuation data. QV bases their assessment on a very brief visual external assessment, location, floor area and comparable recent sales in the neighbourhood: unless a valuation is appealed and the inside is inspected. BRANZ assessments cover the condition of the house as a whole (Buckett et al., 2012). As a result of the survey method, there is a large disparity between the BRANZ-assessed conditions and the QV-assessed conditions.

In the 2010 House Condition Survey:

- BRANZ assessed 22% of rental properties as in good condition, compared with 45% of rental properties assessed by QV.
- BRANZ assessed 44% of rental properties as in poor condition, compared with 5% of rental properties assessed by QV.

A similar disparity exists with owner-occupied properties.

4.1.3 Resident perceptions of rental housing

The Statistics NZ General Social Survey, undertaken in 2010 (Statistics NZ, 2013a), asked questions about housing satisfaction, focussing on the following housing issues:

- Too cold or difficult to heat/keep warm
- Too small
- Dampness
- Has pests, such as mice or insects
- In poor condition
- Too expensive
- Hard to get to from the street.

It found that “renters were considerably more likely than owner-occupiers to report living in a cold, damp or small house” (the top three problems identified overall). From the survey, one quarter of renters found their house cold, compared to 11% of owner –occupiers. Nineteen percent of renters

reported a damp house, compared to 6% of owner-occupiers. Seventeen percent of renters found their house too small, compared to 9% of owner-occupiers.

Within the Statistics NZ survey, perceptions of housing quality were most closely related to their material standard of living, followed by their age and life stage, and then their dwelling tenure (with renters having lower perceptions of their housing quality, as is evident above).

It should be noted that people have a tendency to rate their perceptions of housing quality higher than physical surveys of housing condition do. In the BRANZ study, resident perceptions were generally more positive than the physical assessments of house condition. Renters' perceptions were found to be even more overly positive than owner-occupiers, when compared to the dwellings' technical assessments.

4.1.4 Housing New Zealand portfolio

Housing Shareholders Advisory Group (2010) interviewed an HNZ tenancy manager who characterised the Corporation's stock as "old, cold and mouldy". The age of the stock varies: 73% built before 1983 and only 11% built in the last 20 years. Beacon research would indicate that some of those older houses are perfect candidates for retrofitting for performance upgrading, due to their typology which enables insulation and damp proofing. Ironically, it is easier to apply energy retrofits to these than more recent typologies. The report notes that the Corporation's energy upgrade programme had only reached 20% of the stock.

4.1.5 Christchurch Tenants' Protection Association survey of tenants

The Christchurch Tenants' Protection Association (TPA) recently undertook a survey of 365 tenants looking at the issues of increasing rents and housing conditions in the greater Christchurch area (Gartner, 2013). Key findings from that report are outlined below:

- 70% of tenants reported having one or more rent increases in the two years post-earthquakes with an average rent increase per week of \$42.90.
- 57.8% of tenants reported paying over 40% of their annual income in rent (the threshold set by MBIE for housing affordability).
- 85.3% of tenants who reported having a rent increase, had negative effects, including:
 - inability to afford/find more suitable or appropriate housing
 - feeling stress, worry, depression, fear of the future
 - inability to afford food
 - inability to afford heating/power bills
 - needing to get extra flatmates
 - inability to afford doctor's visits and medicine.
- A small percentage of tenants identified that very basic standards of housing were not being met:
 - 2.6% did not have a working toilet
 - 0.9% did not have hot and cold running water
 - 5.5% did not have a working oven/stove
 - 1.5% did not have an adequate water supply.

- In addition, a number of key housing quality issues were identified in a larger number of rental dwellings:
 - 25.6% had problems with wastewater drainage
 - 48% had mould
 - 33.1% were un-insulated and, in a further 26.9%, the tenant didn't know if the house was insulated or not
 - 60% of houses had earthquake damage, ranging from minor cracks to major structural issues.

4.2 Maintenance and improvements

The underlying cause of poor quality housing is the lack of maintenance and improvements. The majority of housing in New Zealand was built before 1979 when the first insulation standard came into effect; therefore, they are not required to insulate unless they do additions and even then it is only in the new section of the house. This is the same for any other building elements; unless they are updating and need a consent no requirements are made to improve the house.

Figure 1 shows the amounts required to bring houses in the 2010 House Condition Survey up to 'as new' or excellent standard. Due to rentals being smaller than owner-occupied houses, the cost per square meter on average is \$86 for rentals and \$74 for owner-occupied (Buckett et al, 2012). Ideally, regular maintenance should be carried out to avoid having to spend large amounts of money bringing the house back up to an excellent standard.

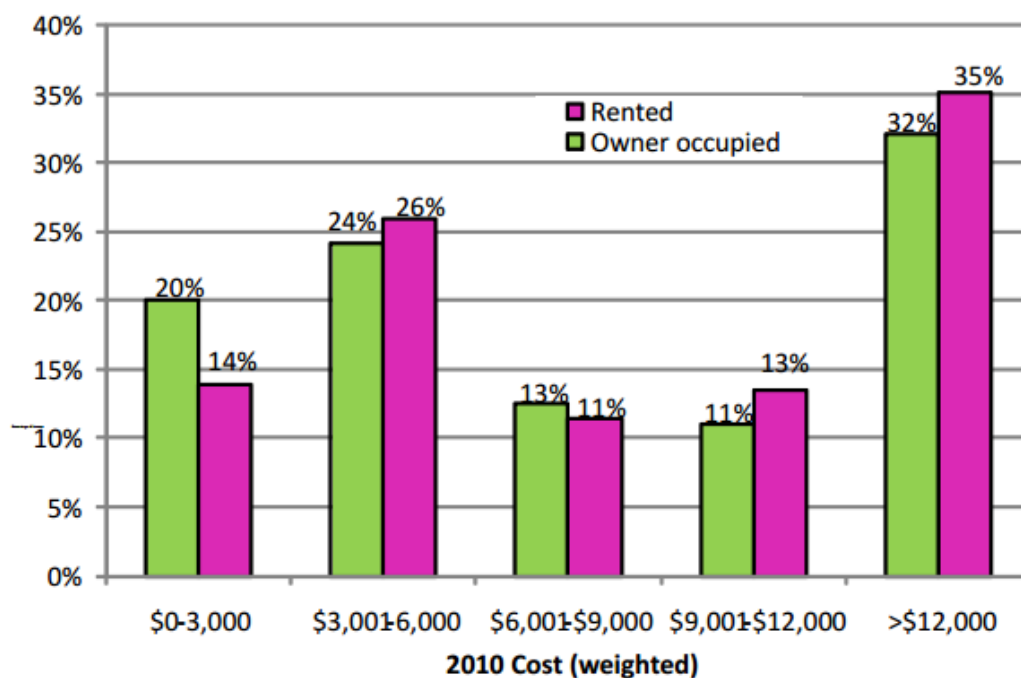


Figure 1: House Condition Survey values of repairs to tenure to bring houses to 'as new' standard (Buckett et al, 2012)

Tools are available to help with maintenance planning such as:

- <http://www.maintainingmyhome.org.nz/> a BRANZ web resource that has free guides, maintenance schedule, information based on the era of the house and more.

- DBH checklist¹
- Home Owners and Buyers Association NZ (HOBANZ) information and checklist²
- Multiple free and low cost apps for iPhone and android (although some are based on overseas housing)

This lack of maintenance and improvement has the greatest effect on the tenant as they are living in the house and paying the energy bills to try and keep it warm. The owner has to pay the maintenance and improvements bills but, unless they are selling the house, it is likely it will be some time before they recoup any expenditure if at all.

4.3 Beacon's 'retrofit for performance' research insights

Beacon Pathway's research has shown that a whole-of-house approach, with a detailed and individualised retrofit plan which forms a pathway to improving performance, will mean that, as improvements are made, a wide range of holistic benefits will occur. The benefits of improved home performance are multifaceted, with financial considerations being part of a wider set of outcomes that are valued by homeowners.

Beacon has undertaken a series of retrofit demonstration projects³. These established firstly what retrofits were necessary to bring homeowners warmth / health gains and energy saving gains. Secondly the projects developed, tested and showed the importance of providing homeowners with a plan which acts as a means to prioritise the steps toward a warmer healthier home. Of particular importance is the finding (Easton, 2009) that standard retrofit packages (ceiling and underfloor insulation + efficient heating) are unlikely to deliver both energy efficiency gains and temperatures which bring homes up to World Health Organisation minimums. This is largely because New Zealand homes tend to be very under-heated, and so the energy efficiency gains from these standard retrofit measures are usually taken back in the form of improved temperatures within the home. In most cases, under-heating behaviour (particularly in bedrooms) means that the temperature gains are still smaller than desirable. Beacon considers that full thermal envelope insulation is a key component to gaining both warm and thermally efficient homes.

Two homes in Papakowhai, for example, received the full treatment: the ceiling, walls and floors were fully insulated; double glazing was fitted; a layer of polythene spread on the ground beneath the house to inhibit rising damp; and an energy efficient heating source was installed. Pre- versus post-

¹ <http://www.dbh.govt.nz/UserFiles/File/Publications/Building/consumer/home-maintenance.pdf>

² <http://www.hobanz.org.nz/maintaining-your-home.html>

³ *Papakowhai Renovations: nine houses retrofitted with different combinations of energy, waste and indoor environment quality improvements and monitored for energy and water use, temperature and humidity before and after renovation.*

HomeSmart Renovations: 530 homeowners from across New Zealand were given an individualised retrofit plan based on an assessment by a trained assessor, and their implementation of the plans, and effect on the home's performance was monitored.

Build Back Smarter: seven homes damaged in Christchurch earthquakes were retrofitted to improve performance alongside earthquake repairs.

monitoring revealed that homeowners enjoyed substantial savings on their energy bills as a result of the retrofits - between 23% (2480kWh) and 33% (930kWh). As well as cost savings, there was a dramatic shift in the mean winter temperatures in both the family areas and bedrooms, in one case rising 3.3°C and 5.5°C respectively, in the other rising 2.5°C and 2.9°C (Burgess et al, 2009).

Other homes received a more modest thermal makeover, with efforts centred largely on ceiling and under-floor insulation. While these upgrades did result in energy savings and temperature improvements, not one of these homes had a healthy mean minimum temperature in the depths of winter.

Results from Beacon research confirms other research findings that insulation improvements must be complemented by an efficient heating source. When coupled with good levels of insulation, the potential exists to experience good temperature and energy efficiency gains. But to enjoy the full benefits, the technology must be used properly - success often comes down to education.

Homeowners in the Papakowhai Renovation project were given no special training in how to maximise the benefits of their sustainable renovations. This lack of knowledge was reflected by several homeowners' decisions not to increase their heating. As a result, although they noticed some energy savings, it was at the expense of temperature which, in these homes, fell below the recommended minimums to maintain good health.

Bedrooms are important too – the World Health Organisation recommends a minimum of 16C in bedrooms overnight for good health; however, New Zealand homes are often unheated in the bedrooms. Often a central heat source does not warm beyond the main living area. Heat transfer systems for wood or pellet burners, or ducted heat pump systems push the warm air through to bedrooms and bathrooms ensuring an even heat through the house. Homeowners in both studies report finding that a wood burner combined with a heat transfer system heats the whole house.

The effectiveness of such systems depends on installing correctly-located heat transfer ducts and sufficiently-sized fans. Often these are mistakenly installed in hallways with resultant minimum effect – the heat needs to be moved to the place where it is required, ideally with short duct lengths and few outlets.

Beacon's demonstration projects have also shown the potential for other relatively simple steps to save energy. Hot water cylinder wraps and pipe lagging are a great energy efficiency measure in terms of value for money. While cylinders ranged in age (1970s -2005), wrapping proved worthwhile in all cases, boosting efficiency between 11% and 30%. In fact, the cylinder wraps appear to be worthwhile even on modern A-grade cylinders, particularly if only low volumes of hot water are used. Low-flow shower heads and flow restrictors should be included alongside solar/instant gas hot water systems. With the seemingly endless supply of hot water that these systems promise, householders often begin taking longer showers. Low flow devices combat this effect. In the case of instant gas hot water systems, these seem to generally be a fuel switching measure – as the increased hot water use that seems to go with an unlimited supply, negates the energy conservation of using the more efficient system.

Large numbers of downlights substantially undermine ceiling insulation performance. Where large numbers of downlights puncture the thermal envelope, the gaps in the insulation substantially reduce the effectiveness of ceiling insulation. Downlights should be replaced with ceiling mounted lighting or IC rated LED downlights if ceiling insulation is being installed.

The demonstration projects have enabled Beacon to prioritise the steps toward improving home performance:

- 1) Thermal envelope: Priority insulation order: ceiling, under-floor, south walls, south windows and rest of the walls and windows.
- 2) Ventilation and moisture control: First priority: drainage and/or maintenance. Then vapour barrier, bathroom ventilation, kitchen ventilation, dryer and clothes/laundry.
- 3) Efficient heating: First priority - living space. Second priority - bedrooms.
- 4) Water efficiency (showerheads, taps, toilets)
- 5) Efficient water heating: First priority is efficient cylinder and wrap. Then solar/heat pump hot water replacement
- 6) Energy efficiency (if high energy users)
- 7) Supplementary water supply: Rainwater tanks for garden, toilet and laundry. Greywater systems in areas with appropriate soils
- 8) Waste
- 9) Energy efficiency (if not high energy users)

Beacon's research has identified the importance of having a clear plan of where to get to, which addresses the identified problems of the house, and enables homeowners to implement change over a long period of time. Simple "quick fix" solutions for most performance problems do not usually live up to their promise – instead making step by step cumulative improvements, and taking a whole of house approach, is more effective. For example, when dealing with the problems of dampness, often a combination of getting rid of moisture sources (bathroom, kitchen, and underfloor dampness) and improvements in thermal envelope and heating are needed to address the problem. Of course these sorts of improvements have a lot of co-benefits (such as a home which is easier to keep warm, is quieter and cheaper to run) at the same time, compared to installation of an appliance which might address the symptoms, but not solve the underlying problem.

Beacon's extensive work with homeowners in demonstration projects has also shown that it is important to look beyond the simple cost benefit. Homeowners have told us (Trotman, 2009; Saville Smith, 2009) that cost savings are not the main reason they are getting into sustainable retrofitting. Homes play a crucial role in people's wellbeing, and they are looking for homes which are warm, comfortable and healthy, as well as those with a lighter environmental footprint.

Interviews with householders post-retrofit tell an even stronger story about the importance of non-financial factors. While savings on utility bills are always appreciated, homeowners involved in Beacon's Papakowhai Renovation project identified that the improvements to the comfort and wellbeing of their homes were what was valued most. In particular, less easily quantifiable benefits such as being able to use the whole house in winter, arguing less, having less noise, being able to walk on the floor in bare feet in winter and kids being able to do their homework in their bedrooms made a huge difference to people's lives.

5 Impact of poor quality housing on health and wellbeing

The housing environment is a key setting with impacts on human health. Surveys indicate that New Zealanders spend about 70% of their lives in the indoor home environment (CDHB, 2012). Housing factors which contribute significantly to health outcomes include temperature, humidity and ventilation, overcrowding, affordability, fuel poverty and hazards in the home. Information given here is relevant for both owner-occupied and rental properties.

The World Health Organisation has recommended a minimum indoor temperature of 21°C in living rooms and 18°C in all other rooms (WHO, 2007). Temperatures below 16°C, particularly in the presence of high humidity, are associated with adverse health consequences and temperatures. Cold homes have both direct and indirect effects on health.

Direct effects of cold homes on health include excess winter mortality (people dying sooner) from cardiovascular and respiratory disease amongst the elderly, increased respiratory problems in children, increased illnesses such as colds and flu, mental health problems, and the exacerbation of conditions such as arthritis (for example, CDHB, 2012; Marmont Review Team, 2011; Liddell and Morris, 2010). In a study that reviewed 39 housing and health studies they came to this conclusion (Thomson et al, 2013):

“An overview of the best available research evidence suggests that housing which promotes good health needs to be an appropriate size to meet household needs, and be affordable to maintain a comfortable indoor temperature.

Indirect effects include: social isolation (reluctant to invite people around or go out because they do not want to come back to a cold house and often people just go to bed early); lack of privacy within a household (everyone is staying in the ‘warm’ room); absences from school/work (due to illness); increased health costs; reduction in expenditure on food, clothes etc due to high energy bills (Marmont Review Team, 2011); and domestic violence.

There is a substantial body of research (Saville-Smith, 2010; Howden-Chapman et al., 2008; French et al., 2007) that shows that New Zealand homes are cold, with temperatures regularly falling below the World Health Organisation’s recommendations.

Alongside this, home heating, energy costs and fuel poverty are key housing issues with implications for health.

5.1 Physical health

The physical effects of cold and high humidity on health have been well researched and are well accepted. According to the World Health Organisation (WHO, 2013), these are common effects of exposure to cold temperatures:

Cold-related symptoms and complaints:

- Respiratory: increased mucus secretion, shortness of breath, wheezing, cough
- Cardiovascular: chest pain, arrhythmia, shortness of breath
- Peripheral circulation: colour change on fingers and toes, pain, numbness, tickling sensation
- Musculoskeletal: pain, stiffness, swelling, restricted movement, paraesthesia, muscle weakness
- Dermatological: itching, skin eruption, pale skin, erythema, oedema

And cold-related diseases and injuries:

- Respiratory: asthma, chronic obstructive pulmonary disease, infections
- Cardiovascular: coronary and other heart disease, myocardial infarction, cerebrovascular accidents
- Peripheral circulation: Raynaud's phenomenon, hand–arm vibration syndrome
- Musculoskeletal: carpal tunnel syndrome, tension neck syndrome, tenosynovitis, peritendinitis
- Dermatological: cold, urticaria (hives), pernio (chilblains), psoriasis, atopic dermatitis
- Injuries, such as frostbite, trench foot, hypothermia and falls

In New Zealand, one in six adults and one in four children suffer from asthma. For children it is one of the most common causes of hospital admissions. The Housing, Heating and Health Study and the Housing, Insulation and Health Study have both found there are significant respiratory health improvements with even a small temperature rise (1-2°C) in the home. Health improvements included fewer hospital admissions and doctor's visits, fewer days off school or work and improved occupants' self-rated health (Howden-Chapman et al., 2007; Howden-Chapman et al., 2008).

Clear health savings are made when a house is improved with insulation and has an efficient heater (see section 5.4).

5.1.1 Longer term impacts of poor childhood health

Children with poor health were found to have significantly lower educational attainment, poor health and lower social status as adults (Case et al, 2005), controlling for parental income (which is also known to affect childhood health), education and social class. Currie (2008) also finds there is a strong link relating child health to future educational and labour market outcomes.

Few studies look at housing condition but Frijters et al (2007) found that poor housing conditions (adequately ventilated seen as a proxy for general health and quality) in childhood is associated with reduced longevity.

5.1.2 Excess winter mortality

Excess winter mortality, or cold-related deaths, is mostly due to changes in blood pressure and blood chemistry when cold. This, in turn, increases the risk of strokes, myocardial infarctions or pulmonary embolisms (Crawford et al., 2003). The immune system is also suppressed, thus increasing the risk of infections (Howieson and Hogan, 2005).

Excess winter mortality is a known issue in New Zealand (Hales et al., 2012; Isaacs and Donn, 1993).

“There was an increased risk of dying in winter for most New Zealanders, but more so among low-income people, those living in rented accommodation and those living in cities. Exact casual mechanisms are not known but possibly include correlated poorer health status, low indoor temperatures and household” (Hales et al., 2012)

5.1.3 Overcrowding

From a health perspective, high rates of household crowding lead to extraordinary rates of childhood infectious diseases such as rheumatic fever (Hale and Sharpe, 2011). Overcrowding is dealt with through the Housing Improvement Regulations, 1947; however, little, if any, enforcement of these regulations appears to be occurring. In September 2013 the Government announced changes to help reduce the incidences of rheumatic fever occurring by fast-tracking families with high risk children to the top of Housing New Zealand’s waiting list (HNZ, 2013a). The Ministry of Health has a prevention programme in place which includes: offering house intervention package to at risk families (Auckland only); school swabbing programmes in areas of high incidences; communication campaign; and developing resources for professionals (Ministry of Health, 2014).

5.2 Mental health impacts

A number of studies have found an improvement in mental health after the thermal properties of the house have been improved. The reason for the improvement depends on the circumstances of the occupants before the study.

A UK study called Warm Front found that adults living in warmer houses post-intervention had lower levels of anxiety and depression. About 300 out of 1000 occupants were found to have anxiety or depression and this halved after intervention to about 150 out of 1000 (Liddell and Morris, 2010). The data collected suggested this is due to the relief of stress associated with perceived financial strain (‘perceived’ because often post-intervention they were paying for more fuel but their houses were more comfortable). The Warm Front researchers suggest it could also be from having better control over their heating and the increased house value (Green and Gilbertson, 2008). They also found that there is a strong association with improvements in physical health after improvements in mental health due to the house improvements. This was looked at because the Whitehall studies found poor mental health can lead to poor physical health in the long term (Green and Gilbertson, 2008)

Also in the UK, NATCEN found the lack of affordable health affected children and young people significantly. Ten percent compared to 2% of children said they were unhappy at home. Complementary studies suggest that young people try to find respite and privacy outside of the home and where there are more exposed to mental health risks (Marmot Review Team, 2011).

In New Zealand, the Housing, Insulation and Health Study (HIHS) also found significant improvements in mental health (Howden-Chapman et al, 2007). Financial savings were made by the households after their intervention. However, all households in the study had at least one occupant who had a diagnosed respiratory problem, so the focus for the occupants was different and the improvement in health of the occupant could be the reason for the improvement in mental health.

A study done by Auckland University with Pacifica families in New Zealand on postnatal depression and asthma found (Butler et al, 2003):

“Multivariate analyses revealed that mothers who reported problems with dampness/mould and cold were at greater risk of having asthma and of having postnatal depression.”

5.3 Fuel poverty

Definition –

“A household is in fuel poverty if it would need to spend more than 10% of the total household income on all household fuels to achieve a satisfactory indoor environment. A satisfactory indoor environment is defined as being at temperatures of at least 21°C in the living areas and 18°C in other parts of the house.” (Lloyd, 2006)

About a quarter of households are estimated to be in fuel poverty in New Zealand. This does vary greatly by climate as suggested by the modelled estimates in Table 4 (Lloyd, 2008). This work has not been updated since 2008. Although improvements have been made to some houses fuel costs have also increased since then.

Table 4: Fuel poverty estimates by region
(Lloyd, 2008)

City	Heating energy needed kWh/y	Other electricity kWh/y*	Total energy cost @ 21c/kWh	Income thresholds	% of city population in potential fuel poverty
Auckland	4000-6000	5,500	\$2000-\$2400	\$20,000 \$24,000	12%-15%
Wellington	8000-13,000	5,900	\$2900-\$3900	\$29,000 \$39,000	20%-28%
Christchurch	11,000-15,000	6,200	\$3600-\$4400	\$36,000 \$44,000	36%-44%
Dunedin	13,000-16,000	6,600	\$4100-\$4750	\$41,000 \$47,500	44%-51%
Total					24%

Fuel poverty has been looked at by the Electricity Commission in 2008 which resulted in a project with EECA in 2010. No further work has been done to update fuel poverty work completed in 2008 by Lloyd. MSD and EECA have looked at fuel affordability defined as ‘the relative affordability of household access to energy services’ (MSD and EECA, 2010). The Electricity Authority currently collects the number of electricity disconnections for MBIE each quarter from all the main electricity retailers (see Figure 2). There has been a steady rise in the number of disconnections since the first quarter in 2008 (Electricity Authority, 2014) suggesting households (at least at the lowest income levels) cannot afford to heat adequately.

Key interventions relating to fuel poverty have been the home insulation retrofit programmes and WUNZ (see section 8.3.3).

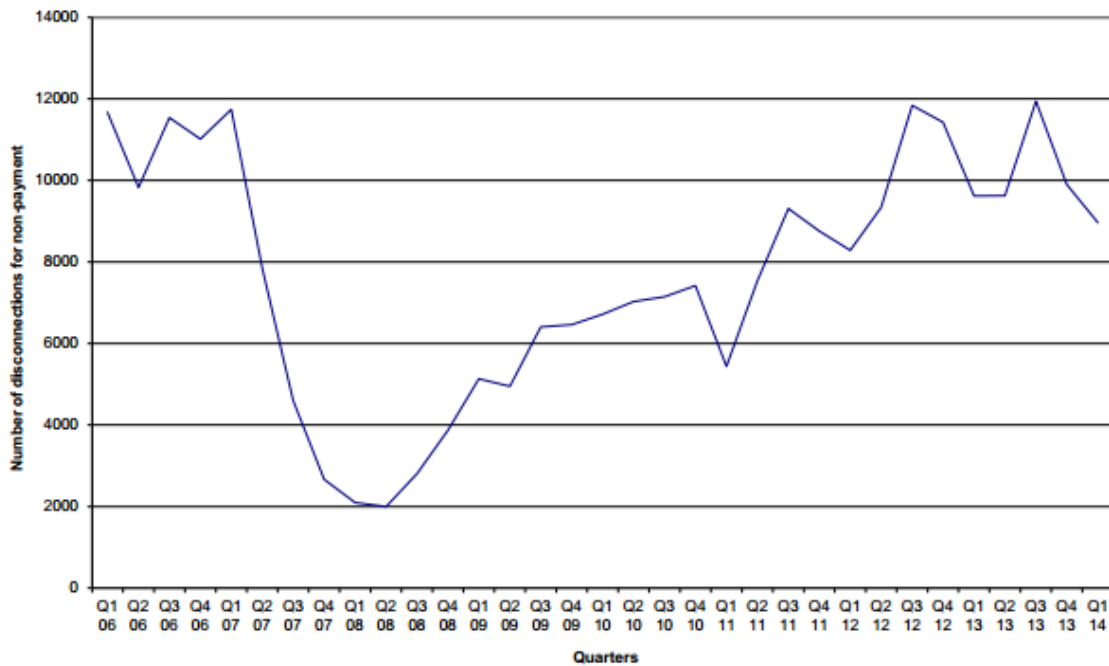


Figure 2: Total domestic consumer disconnections for non-payment
(Electricity Authority, 2014)

5.4 Cost benefits of insulating and better heating through health savings

Cost benefit analysis has been carried out on the Warm Up New Zealand (WUNZ): Heat Smart Programme (see section 8.3.3 for more information on WUNZ). The programme independently measured health costs (prescriptions, hospitalisations and benefits of reduced mortality) (Grimes et al, 2012).

Table 5 shows both the costs associated with the WUNZ programme and the energy and health benefits in money terms. The benefits greatly outweigh the costs in all scenarios. The benefits are dominated by the health benefits (approximately 99% of the total benefits). The authors note that there are additional benefits that were not able to be included in the analysis such as comfort and savings in fuels that weren't measured (coal, wood and LPG). The authors conclude that the dominant benefits of the programme are attributable to the insulation installed rather than the clean heating component of the programme (Grimes et al, 2012).

Table 5: Present value of total costs and benefits (\$ million)
(Grimes et al, 2012)

Additionality:		Central		Low	High
Discount rate:	4%	2.5%	8%	4%	4%
Costs					
Admin costs	23	24	22	23	23
Deadweight costs of tax	51	52	49	58	44
Installations - insulation	173	176	165	83	263
Installations - clean heat	85	87	81	41	130
Sub-total	332	339	317	205	460
Benefits					
Energy	17	21	10	8	25
Health	1,266	1,541	816	608	1,926
Sub-total	1,283	1,562	827	616	1,951
Net Benefits	951	1,224	510	411	1,492

It should also be noted that some of the health benefits of improved housing may not be fully realised until significantly after the length of the project (e.g. improving a child’s health may mean improved health in old age) or it is possible some benefits are not realised until the next generation. International reviews have not found any studies that look at economic benefits greater than three years from the time of intervention (Thomson et al, 2013). Thomson et al (2013) also found there were limited studies that collected all the necessary data for a full economic analysis of the health improvements and costs associated with housing improvements.

5.5 Home injuries

More than a third of fall-related injury hospitalisations happen in the home (Keall, 2009). A number of studies both internationally and in New Zealand have been completed looking at home interventions and the reduction in accidents (mainly falls) in homes. The exact costs of these falls are not known but, in the 2012/13 year, there were 1,088,850 ACC claims for injuries in the home and community. This is more than work, road or sport claims combined (ACC, 2014a). Figure 3 illustrates the number of claims is increasing slightly rather than decreasing.



Figure 3: Home and community falls entitlement claims - monthly
(ACC, 2014b)

A New Zealand study looked at the number of potential hazards in a home and the rate of injury and found a strong relationship, suggesting that reducing hazards in the home may be effective in reducing home injury (Keall et al, 2008). Keall found that the three most common home hazards could be fixed at a very low cost: working smoke alarms; hot water cylinder turned up dangerously high; and a low windows or ranch slider without a visibility strip. Keall also looked at ACC data fall/slip/trip data and found for each fall/slip/trip hazard the chance of a fall/slip/trip increased by 14%.

A Cochrane Review that looked at 28 studies concluded there is insufficient evidence to determine if interventions reduced injuries; however, it did note that few studies focused specifically on physical adaptations to the home environment and their effectiveness (Turner et al, 2011).

Another Cochrane Review (Kendrick et al, 2012), which covers 98 studies, found safety education along with safety equipment is effective in increasing a range of safety practices for under 19 year olds (such as working smoke alarms, safe water temperatures, keeping poisons out of reach). They also found that there was some evidence that this reduced injuries, but again say more research is needed that specifically looks at interventions and injury reduction.

Tools are available to assess a property's hazards for example:

- ACC have brochures and checklists. These are available on ACC's website⁴.
- The UK Government has a document and online calculator called the Housing Health and Safety Rating System (HHSRS)⁵.

⁴ <http://www.acc.co.nz/preventing-injuries/at-home/index.htm>

⁵ <https://www.gov.uk/government/publications/housing-health-and-safety-rating-system-guidance-for-landlords-and-property-related-professionals>

6 Rental housing market

6.1 Supply and demand

Some parts of New Zealand have a shortage of homes as new house construction is below demand from population growth, change in household size and immigration. Demand for new housing is estimated to rise by more than 20,000 households per year: most of that growth is predicted for the Auckland region (shortfall projected to be 90,000 homes in 20 years to 2031) with additional pressure from the Canterbury earthquake rebuild (estimated need for over 7,000 homes in next four years) (DBH, 2010; SNZ, 2013b) (also see section 6.1.1). This pressure on the housing stock will affect households reliant on rental housing.

As well as numbers, the market is not supplying new homes that meet household needs. The 2006 census reported a decline in the proportion of one-, two- and three-bedroom homes (most commonly occupied dwelling) by 4.8 percentage points. While the proportion of four-, five- and six-bedroom homes increased by 5.3 percentage points. This is supported by statistics from building consents which show that the average floor area of new homes increased between 1974 and 2008 from ~110m² to ~200m². This is attributed to changes in preference (built-in garages, en-suite bathrooms and bigger homes) and increasing land costs and developers maximising profit by building larger and higher-end dwellings (DBH, 2010).

New Zealand has seen a decline in housing affordability; real house prices are accelerating faster than income. The increase in construction costs over time can be seen in Figure 4 and housing affordability in Figure 5. In New Zealand's main centres, the median household income is no longer enough to enable the purchase of a home at an affordable price (ratio of price to gross income higher than 3.5). Also the costs of borrowing have increased: in 2007 the cost of financing a home purchase was ~40% higher than average level in 1990 (Colman, 2008).

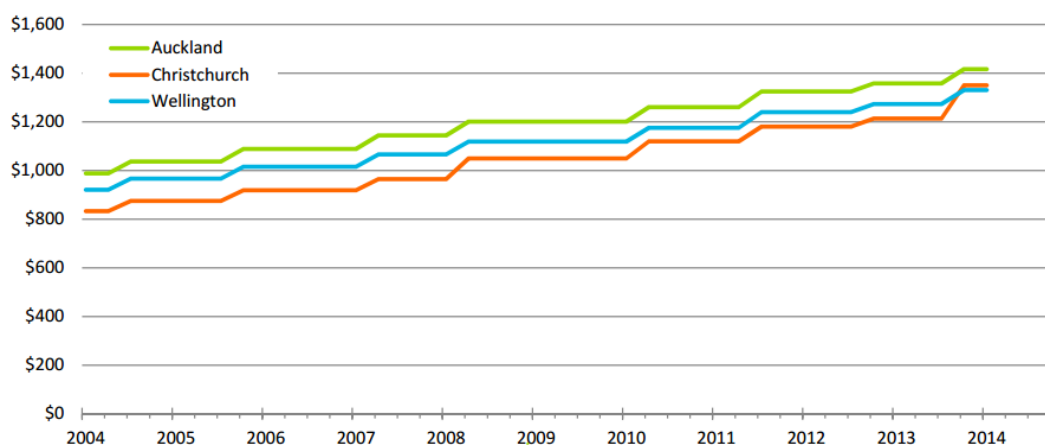


Figure 4: Cost of building a standard house
(NZ Housing and Construction Quarterly, 2014)

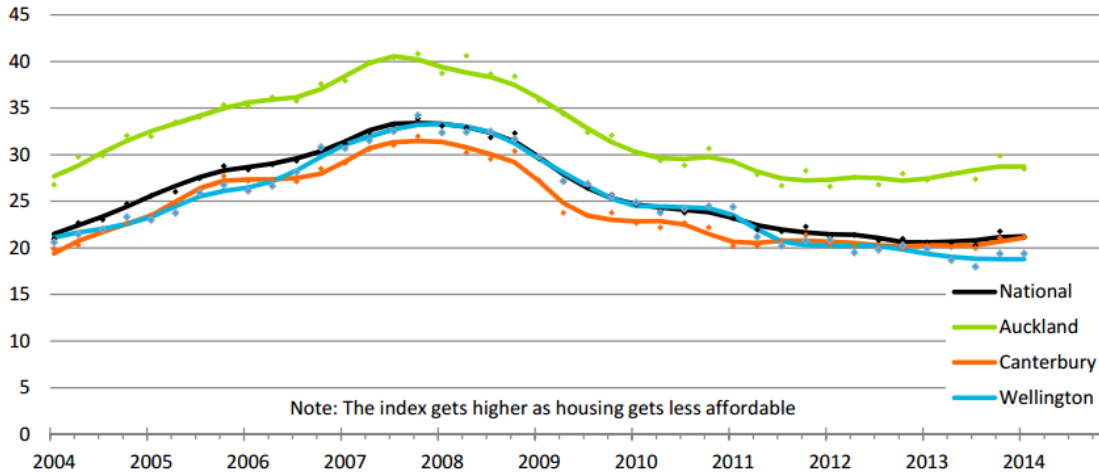


Figure 5: Massey University Housing Affordability Index March 2014
(NZ Housing and Construction Quarterly, 2014)

These high costs make it harder for the renters that were hoping to rent only for a short time while saving to buy a home (or rent during repair process) especially in Christchurch where rents are rising rapidly (Figure 6 and Figure 7).

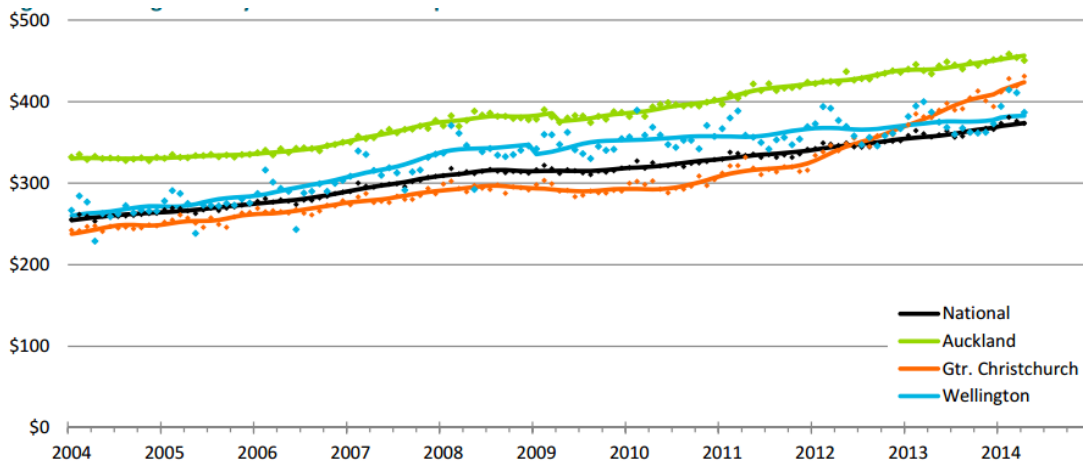


Figure 6: Average weekly rents to April 2014
(NZ Housing and Construction Quarterly, 2014)

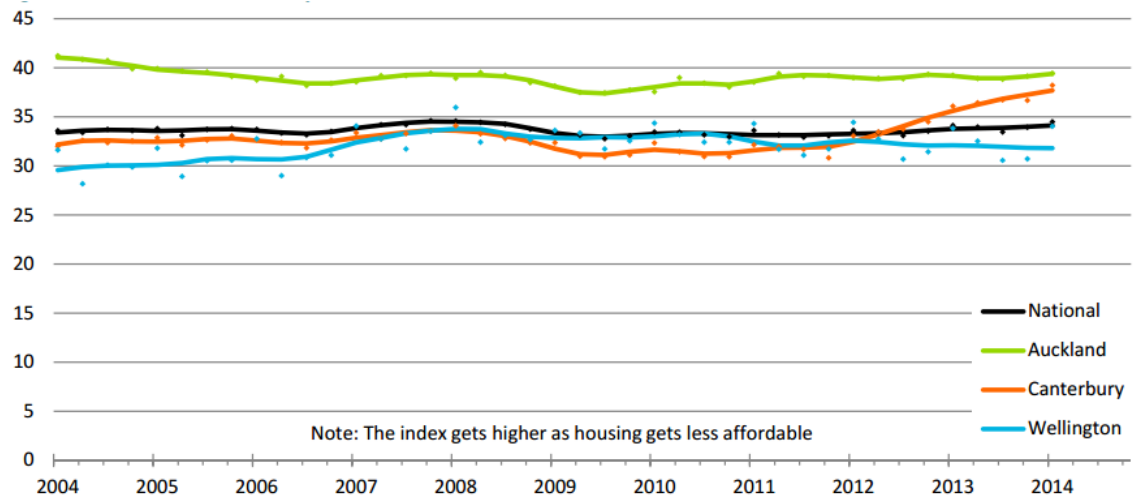


Figure 7: Rental affordability index March 2014
(NZ Housing and Construction Quarterly, 2014)

Figure 8 uses bond data (a proxy for private market tenancies) and effectively shows the churn rate of tenants in rental houses per year. Since the late 1990's there has been a decrease in the churn rate. With home ownership rates falling the overall number of people renting is also increasing.

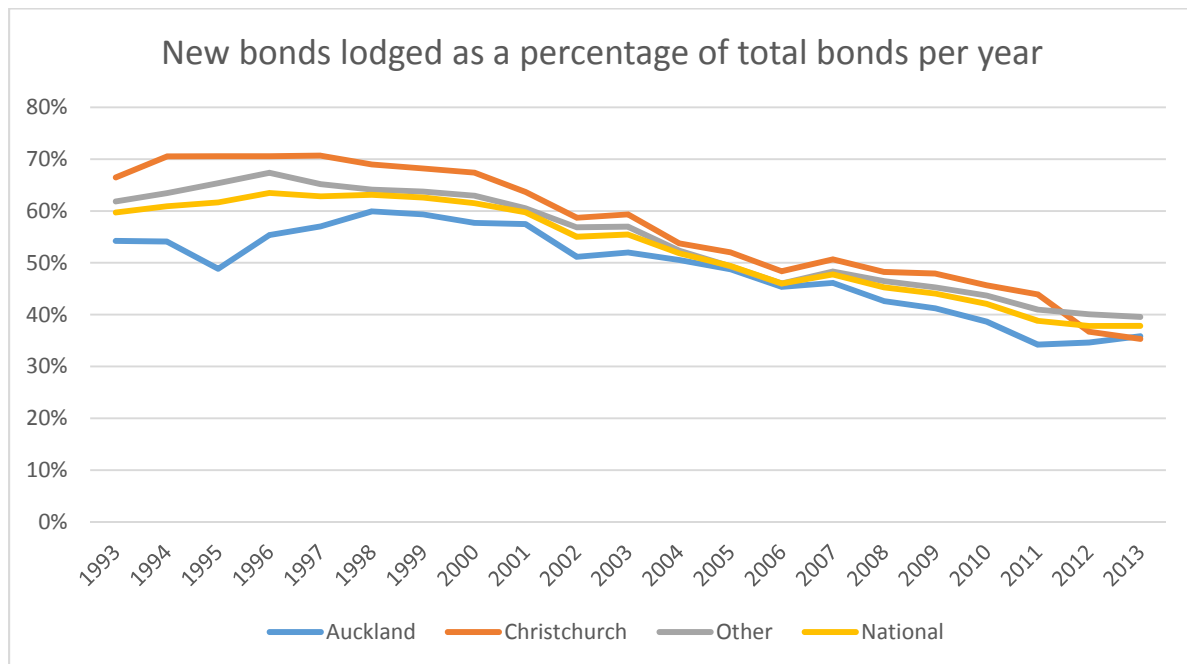


Figure 8: New bonds lodged as a percentage of total bonds held per year
(from MBIE bonds data)

The need for low income rental homes for households is illustrated by the HNZ waiting list increasing over the last couple of years especially for the high priority families (see Figure 9).

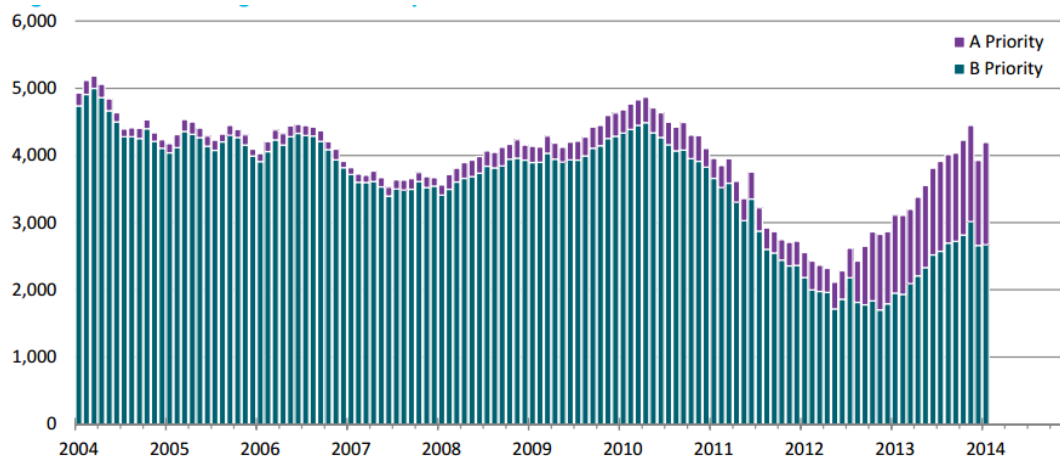


Figure 9: HNZ waiting list as of January 2014
(NZ Housing and Construction Quarterly, 2014)

The Housing Accord Legislation aims to increase the supply of affordable housing – in both ownership and rental sectors (See Section 8.2.2).

NZIER (2014) provides an excellent summary of the complexity of home affordability in New Zealand. The paper is centred on the issue of high house prices, it identifies why this matters, looks into the causes and offers a suite of complimentary issues to mitigate the economic and social risks high house prices cause for the country.

Demographia published its 10th Annual International Housing Affordability Survey in 2014. The Survey uses median house price divided by gross annual median household incomes (Median Multiple) to compare prices worldwide. This survey relies on data from the 2013 census. It categorises markets into: severely unaffordable, seriously unaffordable, moderately unaffordable and affordable. This most recent survey notes a sharp deterioration in NZ’s housing affordability over the past decade. Auckland, classified as the country’s only major market (>1m population), is severely unaffordable, ranking as the seventh most unaffordable among the 85 major markets in the world. The survey looks at eight NZ markets, none were affordable: six are severely unaffordable (with these centres topping the charts - Auckland, Tauranga-Western Bay of Plenty, Christchurch and Wellington) and two are seriously unaffordable (Palmerston North-Manawatu and Hamilton-Waikato). New Zealand ranks third in surveyed countries for average new house size (behind USA and Australia) coming in just under 200m².

6.1.1 Christchurch rental housing

The Ministry of Business, Innovation and Employment (MBIE) has recently released a report into housing pressures in Christchurch (MBIE, 2013). This identifies the following key issues:

- The loss of population from Christchurch post-earthquakes is less than the loss of housing creating an increase in housing demand.
- An estimated 16,960 houses have been removed from the stock – 7860 due to being “red zoned” and a further 9100 due to damage being so severe they are uninhabitable.
- Taking into account new houses built (in the wider Canterbury area – not just Christchurch), a net reduction of 11,500 houses has occurred since the earthquakes.

- The number of rentals in the private market, as measured by the number of active tenancy bonds (bonds deposited but not refunded), held static at 39,000 during 2011 and 2012. This is against an estimated average increasing trend of 1,500 rentals per annum before 2010.
- Since the earthquakes the total number of rental bonds lodged with MBIE has fallen by 19% to 16,600 in the year to December 2012, the number of new bonds lodged in 2012 was the lowest annual number since 1998.
- Most of the decrease in available rentals was driven by the loss of two- and three-bedroom rentals, which traditionally make up the majority of the Christchurch rental market
- The number of rental units available at affordable prices for low-income earners has decreased significantly since the earthquakes – in the order of 60%.
- The post-earthquake initial assessment of people in Christchurch suffering housing insecurity provided a low estimate, 5510, and a high estimate 7405 (reflecting the high level of uncertainty).

6.1.2 Auckland rental housing

Beacon's research into 20-39 year old housing in Auckland provides another snapshot of the region's housing challenges. This research was completed before the Auckland super city was established). The data suggest:

- There are problems with the condition and thermal performance of Auckland's housing stock and Auckland has been affected by leaky building syndrome including stigmatisation of non-leaky stock.
- Most Auckland housing is in low density, non-mixed use neighbourhoods. Only Auckland City has any appreciable stock in high density mixed-use neighbourhoods.
- There is an aggregate under supply of dwellings in Auckland, and evidence of a lack of housing supply in the lower priced segments of the housing market.
- The territorial authorities with the largest under supply of dwellings are Auckland City, Manukau City and North Shore City.
- An estimated additional 56,000 rental properties will be needed in the region over the next 10 years.
- Across New Zealand, Auckland region has the highest proportion of the population living in crowded conditions. Within the region, Manukau City has the highest proportion of its residents in crowded housing. Pacific, Maori and Asian ethnic groups are most affected by crowded housing.

6.1.3 Rental conditions

An NZIER public discussion paper (2014) notes New Zealand's restrictive rental conditions when compared internationally. Tenure arrangements such as typical lease term, notice period for landlord, reasons a lease can be terminated, pet ownership and minor alterations (putting up pictures, painting, laying carpet) are more restrictive than Germany, France, Netherlands and UK. This paper highlights that these aspects of New Zealand's market makes rental housing a poor substitute for home ownership. The paper concludes with a recommendation to make renting more attractive by introducing some balanced tenure and tenants' rights, suggesting New Zealand draw on international examples to inform this work.

Insecurity of tenure is a clear barrier for tenants who might want to improve the condition of their rental home: it undermines renters approaching landlords to ask for repairs and maintenance, let alone performance upgrades (e.g. extractor fans, insulation)

6.2 Interventions in the housing market related to quality

This section aims to capture market-based initiatives, i.e. not government or council policy, which could have an impact on rental housing quality.

6.2.1 Home Performance Advisor Training Programme

The Home Performance Advisor (HPA) training programme is a new initiative aimed at developing a trusted brand and improving the quality and effectiveness of whole of house resource efficiency advice to New Zealanders, improving house performance and the quality of life of New Zealanders. The programme is underpinned by three principles: advice and recommendations are independent; based on science and best practice; and are in the best interests of the client.

Homeowners, landlords and tenants suffering from cold, damp or resource-hungry homes can expect a full assessment, diagnosis and recommendation based on their needs from a Home Performance Advisor. Advice provided is independent and based on best practice, ensuring Kiwi's get the information they need in order to move towards a warmer, drier, healthier and more energy efficient home.

Developed by Beacon Pathway, The EnviroSchools Foundation and Community Energy Network, through a uniquely collaborative initiative, the HPA certification programme delivers to two major outcomes:

- A pathway for practitioners to develop competency as effective residential energy and resource efficiency advisors, with a specific focus on existing housing stock.
- The resulting certification provides a foundation of expertise and ethics to assist New Zealand householders, tenants and landlords to know who to trust for high quality, independent, personalised advice to help them improve the performance of their homes and investments and as well as quality of life for those residing.

See: <http://www.communityenergy.org.nz/training/>

6.2.2 Homestar™

Homestar™ is a residential rating tool, the only one in New Zealand. It is not a mandatory tool, but offers households the means to generate environmental and energy efficiency ratings for new and existing homes. Homestar was developed by the New Zealand Green Building Council (NZGBC) in partnership with BRANZ, Beacon Pathway and various experts in sustainability and building science. Homestar (<http://www.homestar.org.nz/>) is a Joint Venture between BRANZ and NZGBC (which administers the tool).

The tool is offered to the market at several levels:

- The Home Check is a 20 minute online questionnaire offered for free
- Membership programme via a subscription to myHomestar (\$15/year): provides the home check with personalised recommendation check, regular newsletters, deals with Homestar partners, access to technical information.
- Certified rating undertaken by a Homestar assessor (NZGBC trained in the use of the tool).

6.2.3 UoOW / NZGBC Warrant of Fitness

A team of researchers from University of Otago, Wellington (UoOW), alongside the New Zealand Green Building Council (NZGBC) developed a Warrant of Fitness in 2013 (see Section 11). During 2014 this was trialled in collaboration with five councils: Auckland, Tauranga, Wellington, Christchurch and Dunedin. The results of the pre-test are reported by Bennett et al. (2014).

The aim of the pre-test was to analyse the practicalities, utility and cost of a draft rental WoF scheme. Items on the WoF are recorded as either a pass or fail: a home fails the WoF if 31 criteria are not met. Of the 144 houses assessed, only 6% passed. The top five reasons for failing the rental housing WOF checklist (according to Bennett et al, 2014) were:

- 40% of houses did not pass the water temperature check.
- 38% of houses did not pass the security stays check.
- 37% of houses did not pass the check for having a fixed form of heating.
- 31% of houses did not pass the check for having handrails or balustrades that meet the Building Code Standards.
- 30% of houses did not pass the check for having working smoke alarms.

The pass rate would increase to 36% if the homes in this trial fixed low cost items (e.g. smoke alarms, security stays, hot water temperature). The future of this initiative is yet to be determined.

6.2.4 Eco Design Advisors

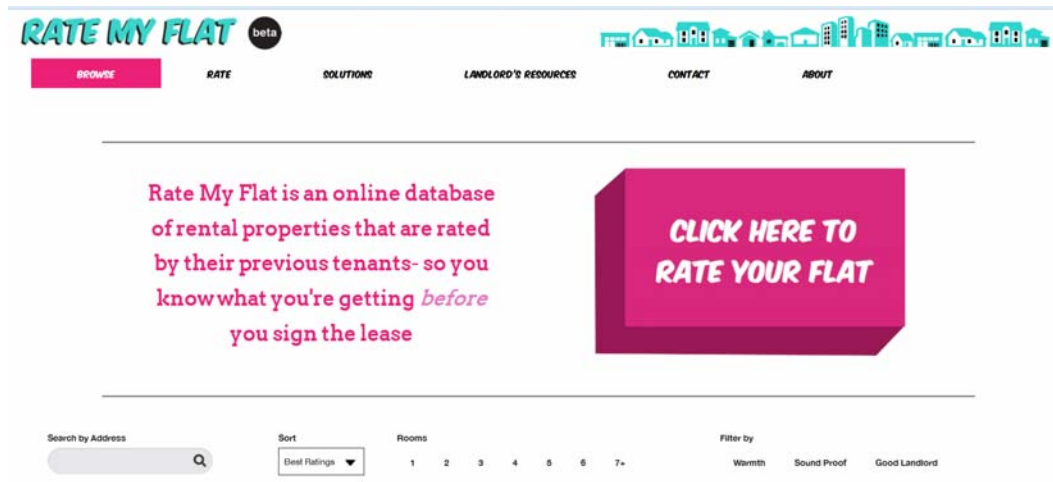
The Eco Design Advisor (EDA) service is offered free by councils in seven centres: Auckland, Hamilton, Palmerston North, Kapiti Coast, Hutt Valley, Nelson and Invercargill. The service provides independent advice on how best to use energy, water and materials in home improvements building and renovation projects. The EDAs provide a two hour visit to provide their advice to home owners, including landlords. An informal survey by the authors of the EDA's indicate between 10 and 20% of their work relates to rental housing, i.e. responding to tenants and landlords. The EDAs report that they respond to referrals of tenants from other agencies (their council, local health agencies as well as budgeting and citizens' advice) and also support migrant communities with housing matters, running (often translated) workshops and media sessions to help new citizens navigate their housing needs.

6.2.5 Rate My Flat

Rate My Flat is a new enterprise started by Otago University graduates to support the upgrade of Dunedin student rental accommodation. In its pilot stage, the team is currently asking students to rate their flats via an online questionnaire (at June 2014, 600 flats have been rated). The aim is to share information about flats within the student community. Rated flats help future tenants and, if the

landlord responds as is hoped, may help current tenants if upgrades are completed. Landlords with 'well-rated' flats will benefit as they will stand out in this competitive market.

The Rate My Flat team are developing their business model to be scaleable. If the concept is proved in the Dunedin student community, Rate My Flat could support student communities in other towns or extend within Dunedin to support other tenant communities.



7 New Zealand’s landlords and tenants

Within New Zealand’s housing stock, tenanted houses differ from owner-occupied homes as two distinct groups have a stake in the house – the owner and the tenant. Housing outcomes (e.g. occupant health and wellbeing, home warm and dry, efficient to heat to avoid fuel poverty, and for the landlord maintaining their asset) are directly affected by the relationship between the two stakeholders. As expected, both are impacted directly by those housing outcomes. This section seeks to document what is known about New Zealand landlords and tenants.

Statistics New Zealand data (SNZ, 2008; SNZ 2013b) shows that, over the past four censuses, New Zealand home ownership is declining, i.e. there is a trend toward more rental housing. In 1996 home ownership was 70.7%; in 2001 it was 67.8%; in 2006 the national average was 66.9%; and in 2013 it was 64.8%. Auckland Council showed the highest percentage of rented housing (i.e. only 59.3% owner occupied in 2006 and 57.3% in 2013). Caution is required due to a change in statistics used in 2006 (a change to categorise dwellings owned by family trust as owner-occupied). Statistics New Zealand offer these causes as explanation for the trend: “increasing participation in alternative forms of long-term investment, a high level of student debt, higher house prices relative to incomes and people forming families later in life”. They identify household income, age and ethnicity as variables related to home ownership.

7.1 Who lives in rental housing?

Increasing number of New Zealanders live in rental accommodation, the following graph was re-created from a figure in DBH (2011). HSAG (2010) notes that home ownership decline is unusual among Western nations: national statistics from 1991-2006 censuses in Australia, Canada, USA, UK, France and Netherlands all show a rise in home ownership.

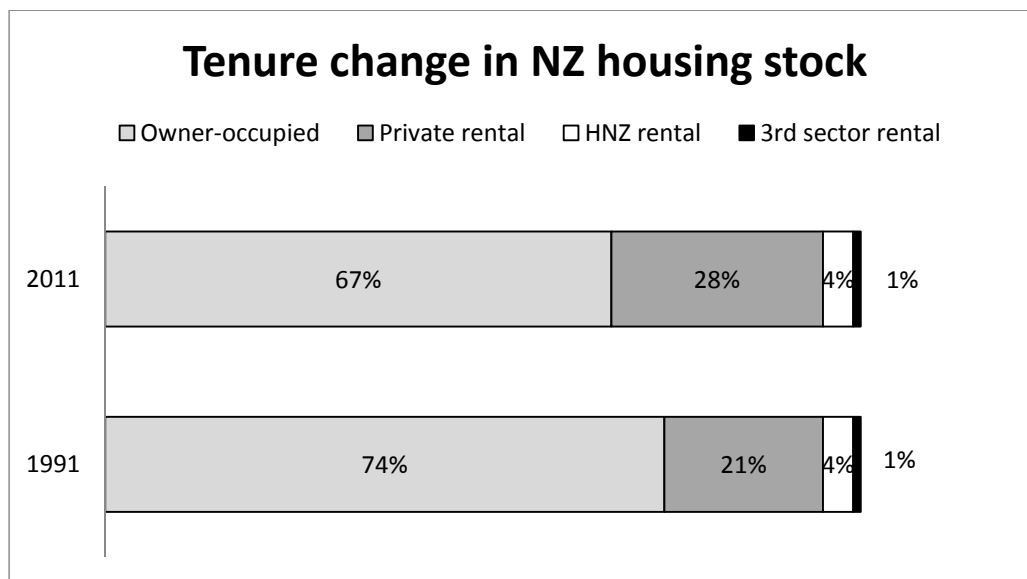


Figure 10: Change in New Zealand's housing tenure

The make-up of tenants has changed over time in New Zealand. In the past young mobile flatters dominated, but now a new ‘intermediate housing segment’ has emerged. These households rent in the private market, have at least one member in paid employment, and are characterised by older households, including those with children. These households can’t afford to buy a house at the lower quartile house prices using standard bank lending criteria. The proportion of intermediate renters in the private rental market more than doubled at in the five years to 2006 the DBH report (2010) forecast a continuing upward trend. HSAG (2010) report the geographical variation in proportion of New Zealand’s intermediate market: 36% in Auckland; 14% in Canterbury and 12% in Wellington.

The 2010 BRANZ House Condition Survey (Buckett et al., 2012) found that, despite representing 33% of the houses in New Zealand, approximately half of New Zealand’s children under five years of age and 21% of adults over 65 live in rented houses – the more vulnerable age populations due to their susceptibility to illness and health issues caused by environmental factors.

Poor people rely on rental housing, Barton (2013) reports that 65% of people aged under 65 who live in poverty live in rental housing (private and HNZ). The 2012 Children’s Commissioner Report on Child Poverty highlights the housing crisis for children. In 2011, 70% of NZ children in poverty live in rental housing this statistic is split with only 20% of these children being housed by HNZ while 50% rely on the private market.

Fifty percent of households in the private sector are financially stressed, i.e. they spend more than 30% of their household income on housing⁶. Council stock (1%) primarily houses elderly and disabled tenants.

CHRANZ research shows that New Zealand housing consumption has been marked by a general decline in home ownership rates, with a particular fall among younger households. Between 1986 and 2006, the largest falls in home ownership nationally have been among younger age groups:

- 17.9% among 25-29 year olds
- 17.7% among 30-34 years olds
- 15.5% among 35-39 year olds. (DPMC, 2008)

7.1.1 A New Zealand housing continuum

The *Home and Housed* report from the Housing Shareholders Advisory Group, HSAG (2010) identifies categories of tenant in the state housing portfolio (i.e. housed by HNZ):

- 1) Those unable to manage in the private sector (30-37,000 households, 45-55%)
- 2) Those who cannot afford to manage in the private sector (19-26,000 households, 28-38%)
- 3) Those who may be able to afford to live in the private sector (two subcategories noted – those who are paying at least 60% of market rent (6,500 households, 10%) those who are paying full market rent for properties (5,000 households, 7%).

⁶ *From a presentation by Philippa Howden-Chapman - Establishing public/private/community partnerships for social housing in New Zealand at the Australasian Housing Institute Workshop Auckland, 6 March 2013*

The report notes the number with highest level of need is increasing. Two reasons are noted, increasing gap between rich and poor and the de-institutionalisation of 1990s increasing numbers of people in the community managing mental illness.

There are increasing numbers of homeless and those living in accommodation with little or no regulation or tenancy rights such as boarding houses, camping grounds or couch surfing (causing overcrowding). Using 2006 census data (before Christchurch earthquake) an estimated 12,900–21,100 dwellings throughout New Zealand are required to house the severely housing deprived.⁷

Overcrowding is recorded as an issue for 10% of New Zealand’s residents (in 2006), i.e. they were living in conditions needing one or more bedrooms. This problem is acute among Pacific people, 40% of whom live in crowded conditions and in Auckland.

Home and Housed (HSAG, 2010) compiled a housing continuum for New Zealand. This illustrated the full range of shelter and ownership arrangements (extreme need, state housing, private sector) and provided 2009 housing data:

The housing continuum ranges from those without a roof through to those who own their own homes

	Extreme needs		State housing	Private sector	
Definition	Sleeping rough or in improvised dwellings	Living in caravans, campgrounds, substandard housing, boarding houses	Inhabitants of state houses	Renting a private dwelling	Owning a private dwelling
Number	~300 urban homeless ~500-1,000 in rural improvised housing	~8,000-20,000 in temporary accommodation • 1,500 HNCC houses rented to community groups	~67,700 households	467,300 households • 280,000 renters on Accommodation Supplement	1,082,200 households • 42,822 owners on Accommodation Supplement

Note: Showing housing data as at 30 June 2009
 Source: HNCC Tenancy Managers; HNCC database; MSD; Interview with City Missioners; NZ Council of Christian Social Services; HNCC HIF Information; CHRANZ Community Housing Report 2004; Census 2006

Figure 11: Housing continuum
 (Source: *Home and Housed*, 2010)

⁷ *The University of Otago did a study of homelessness using the 2001 and 2006 census data (Amore et al, 2013)*

Community Housing Aotearoa (CHA) has built off this and developed a more detailed picture of the steps New Zealand tenants may move through (Figure 12).

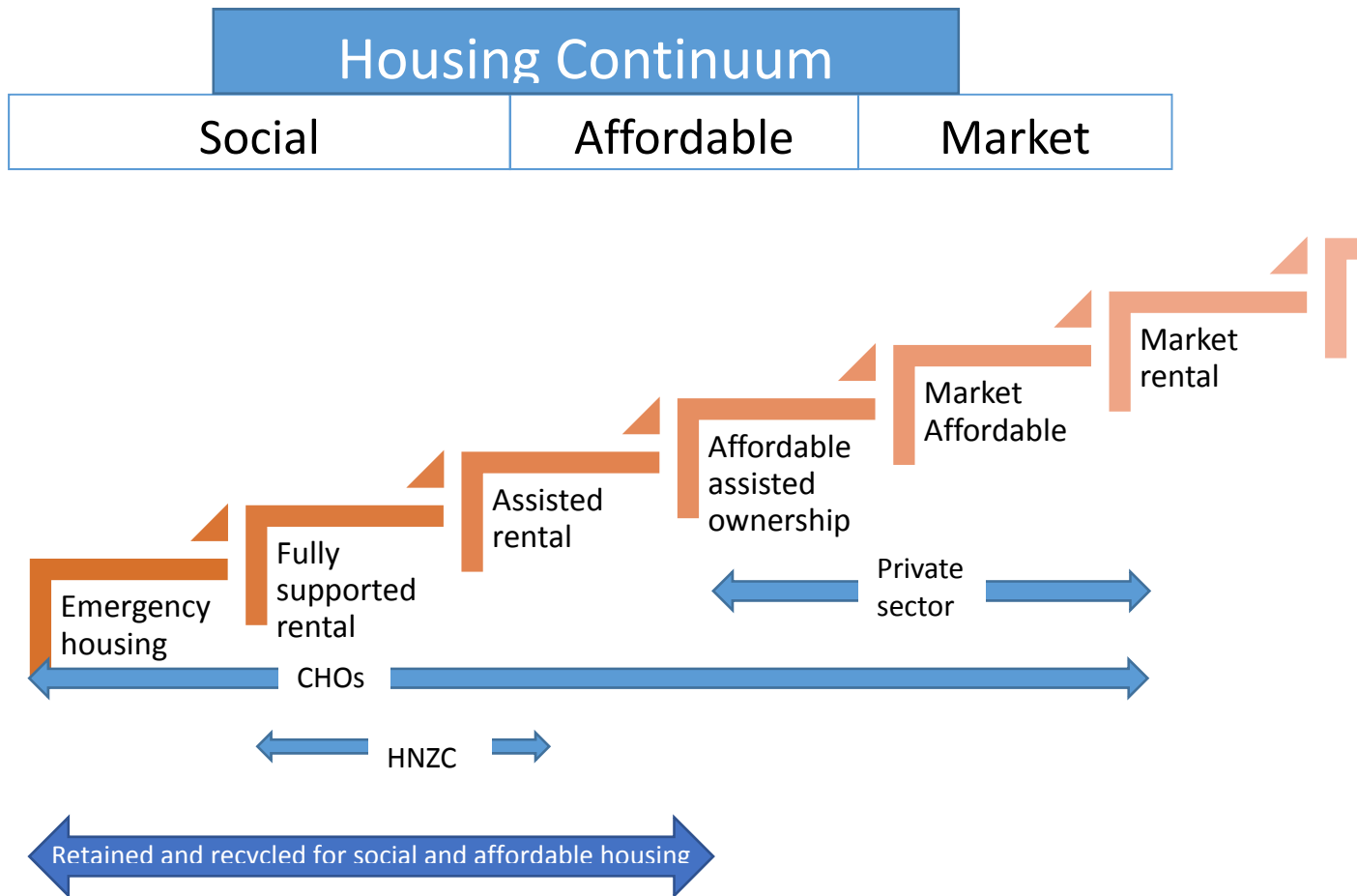


Figure 12: CHA Housing Continuum
(Source: *Community Housing Aotearoa, 2014*)

This housing continuum offers an aspirational model for New Zealand, putting the home in the centre of family and community well-being. The continuum takes a view of the whole housing market and examines who is involved in which aspects of the market. CHA would argue that all segments of the Housing Continuum must be functioning for a healthy housing market. If a household’s journey along their pathway is to be supported then policies and programmes have to be coordinated to avoid creating barriers. Security of tenure and resident choice is valued – a household can remain connected and engaged within a community rather than moving as their needs change. The continuum makes explicit the reality that some households require a range of services to support them in sustaining their housing choice. CHA regards educational achievement, economic engagement, improved health and community participation as evidence of healthy communities.

Beacon’s Neighbourhood Sustainability Framework (NSF) offers a comprehensive insight into outcomes at the scale of a neighbourhood. The neighbourhood scale is important because this is the scale at which most people live their daily lives and where communal everyday life also takes place. The neighbourhood is the space residents, business owners and visitors collectively experience and

influence and it contributes to the sustainability and resilience of the wider settlement too – both physically and socially. Interested readers are directed to:

www.beaconpathway.co.nz/neighbourhoods.

The community housing sector is by providing housing for those on low or below median incomes. Its role in the continuum is an increasingly broad one – hence the evolving continuum. Community Housing Organisations provide affordable rented housing with or without support. They also provide a range of affordable home ownership options including rent to buy, sweat equity, shared ownership. CHO's support tenants by offering a sustained tenancy when household have serious support needs (e.g. disabilities, financial problems or challenges holding a private sector tenancy)

In this model, a household might stay in the same house as they journey through this continuum. This opportunity is very significant when considering the quality of the home: the roles and responsibilities of landlord and tenant change as they both have 'skin in the game'. This offers a unique opportunity to overcome the usual barriers to rental house quality as landlord and tenant can jointly engage in maintenance and upgrade (particularly as tenant equity increases). While there is no reason why this tenant transition in the same house couldn't happen with private sector landlords or indeed other social housing landlords (e.g. councils, HNZ), it is currently most likely to occur when Community Housing Organisations are engaged.

7.1.2 Māori tenants

The recently published *He Whare Āhuru He Oranga Tāngata – The Māori Housing Strategy: Directions 2015 to 2025*, identifies the distribution of Māori across a housing continuum (drawn from a range of sources).

- Severe deprivation 11,730 (i.e. 34.5% of all 34,000)
- Social Housing: 22,184 Māori are HNZ tenants (34.5% of all HNZ) and IRRS was paid to 20,790 tenants in Feb-14.
- Assisted private rental: 57,098 Māori received AS (28.2% of all recipients)
- Private rental: 87,768 Māori households are in private rental (19.5% of all private rental households).
- Private ownership: 228,648 Māori households live in owner occupied homes (43.5%, this compares to 64.8% of all NZ households owning their own home))

The strategy is particularly significant contribution to this resource on rental housing as it too makes explicit the link between better housing and better lives. It's all in the title: He Whare Āhuru He Oranga Tangata. The Strategy sets six directions for the period 2014-2025, the first two reflect the emphasis promoted here for rental housing:

- 1) Ensure the most vulnerable Māori have secure tenure and access to safe, quality housing with integrated support services. (See Section 5 in this document)
- 2) Improve the quality of housing for Māori communities (See Section 4)
- 3) Support Māori and their whānau to transition to preferred housing choices
- 4) Increase the amount of social housing provided by Māori organisations
- 5) Increase Housing on Māori-owned land
- 6) Increase large scale housing developments involving Māori organisations.

7.1.3 Characteristics of Auckland's young tenants, 20-39 years

Beacon's research for CHRANZ (Beacon, 2010) provides a description of the characteristics of households with a 20-39 year old reference person and the 20-39 year old population in Auckland. It shows that:

- Auckland has the largest concentration of 20-39 year olds in New Zealand. There were almost 152,000 younger households in the region with a 20-39 year old reference person. The HMA with the highest concentration of younger households is Auckland City CBD.
- The 20-39 year old population is ethnically diverse: by territorial authority Manukau City, Auckland City and Waitakere City have the most ethnically diverse 20-39 year old populations.
- Forty-four percent of younger households have a non-European ethnic identification.
- The HMAs with the greatest ethnic diversity among younger households are Auckland City CBD, Manukau City North West, Auckland City South East and Waitakere City.
- Younger households have a relatively low proportion of one person households and a relatively high proportion of multi person (non-related people) households.
- North Shore City and Waitakere City have the highest numbers of younger households composed only of parents and their children.
- Younger households tend to be slightly better off in terms of household incomes compared to all households in the region.

7.1.4 Independent organisations which support tenants

Tenants' Protection Associations provide a distinct service to inform tenants and provide advocacy: particularly where tenants experience problems with their landlord of the Residential Tenancy Act. These independent organisations have a key stake in rental housing and are part of the solution.

Tenants' Protection Association (Christchurch) Inc. Te Tōpū Tiaki-ā-Kainoho (TPA) provides a free and confidential advisory service and tenancy education for tenants and agencies in the Christchurch region. TPA aims to:

- Provide tenancy advice, advocacy and education for the Christchurch area.
- Protect, promote and advance generally the rights interests and welfare of tenants in the Christchurch region.

There is also a Tenants' Protections Association in Auckland and Housing Advice Centre in Palmerston North.

Student Unions such as the Otago University Students Association (OUSA) also support students through advice and support. OUSA are currently supporting the Rate my Flat initiative (see section 6.2.5).

Community Housing Organisations primarily provide affordable housing (either rental or home ownership) options. Many CHOs also provide pathways to support and other services to assist tenants in sustaining their tenancies. These services assist the tenant in sustaining their tenancy, are tailored on the needs of the tenant. These are commonly referred to as 'wrap-around services'. They include practical support in sustaining the tenancy such as:

- help accessing benefit entitlements

- budgeting advice
- finding ways to manage rental payments
- setting up automatic payments for bills
- getting the power and phone connected
- help finding furniture and household goods
- sorting out tenancy issues, including mediation and dispute resolution
- keeping the property up to standard

CHOs may also co-ordinate or contract for services such as caseworker and crisis support from appropriate agencies - District Health Boards, Home Care agencies and Community Mental Health teams.

7.2 Who owns rental housing?

Within the rented stock the main categories of owners of rented housing are as follows with estimates of number of units taken from 2008/2009 housing stock composition (HSAG, 2010):

- Private landlords (480,000 units)
- Housing New Zealand (67,700 units)
- Councils (14,000 units, with Christchurch the biggest holder at 3,000)
- Community organisations not-for profit, third sector (5,000 units, with IHC largest provider at 1,105 units and other 50-100 providers each typically managing 20 units).

There is no single body or entity of landlords in New Zealand, making it challenging to work with landlords as a group.

7.2.1 Private landlords

The National Landlords Survey (Saville-Smith and Fraser, 2004) looked in detail at who are private landlords. This survey concluded that the majority of people with one or more dwellings in the rental market are largely passive investors in property and do not see themselves as running a rental business in a service industry. They have a low investment in management and the acquisition of the skills necessary to manage tenants or property.

Some specific findings include:

- The population of landlords is dominated by those with a shorter rather than longer career in the sector – 21.9% reported they had been landlords for less than a year and 55.9% had been landlords for less than eight years.
- 42% of landlords were renting out one dwelling and 20.6% were renting out two dwellings.
- 70% of landlords own their rental properties as a personal asset.
- 14.4% of landlords owned their rental properties in a family trust.
- 12.5% of landlords had their rental property in a company structure.

Table 6 shows that of the landlords intending to increase their holdings in the coming year only 10% identified “provide housing” as an objective.

Table 6: Investment objectives for landlords seeking additional rental properties in the next 12 months (National Landlord Survey, 2003, source Saville-Smith and Fraser, 2004)

Investment objective	Responses (multiple response question)	% landlords intending to buy (n=271)
Capital investment	173	63.8
Income for retirement	151	55.7
Regular income stream	144	53.1
Taxation benefits	74	27.3
Low risk investment	65	24.0
Provide housing	26	10.0

In terms of annual maintenance:

- 69.1% of landlords had no ‘known budget’ for their property, 11.6% allocated less than \$1000 per annum, and 9.4% \$1000 -\$2500 per annum.
- 99.2% of landlords managed their own maintenance.
- 4.2% said they never did maintenance with a further 12.9% maintaining the property ‘as required’.
- 36.4% didn’t undertake regular property inspection.

The National Landlord Survey identified “considerable fluidity” in the private rental market, with investors entering the sector focussed on capital gain and often exiting within a few years of their entry. There was little use of business structures to own and manage assets, or systemic management of properties and tenants.

7.2.1.1 Property management companies

Property management is an unregulated activity. In addition to private landlords managing their properties directly, some professional businesses play this role. The Real Estate Agents Authority (REAA) is the independent government regulatory body for the real estate industry in New Zealand. The REAA is a Crown entity, established under the Real Estate Agents Act 2008. However, property management is not covered by this body; the REAA licence agents to buy and sell, not manage, residential properties. Other businesses provide property management services; for example, Quinovic is a national franchise with 27 owner operators. No data is publicly available on the number of properties managed by this company or others like it.

MBIE career data show relatively small numbers engaged in property management (4,119 in 2012); the majority of these will manage commercial buildings with fewer managing residential property. (MBIE, 2012)

7.2.2 Social housing landlords

Social housing means housing provided for people on low incomes or with particular needs by government agencies and non-profit organisations.

Landlords who provide social housing are central government (HNZ), local government (territorial authorities/councils), and a growing third sector of Community Housing Organisations.

Of these, HNZ is the dominant provider, with 80% of the total number of social housing units and 15% of all rental houses. Further information on HNZ housing is given in section 8.3.1.4.

HNZ has a complex mix of functions and activities. They write policy, provide new equity products they manage single houses right through to urban renewal projects (e.g. the Tāmaki regeneration). HSAG (2010) note the costs they bear as a landlord, beyond any private landlord: time with difficult tenants (\$13m); waiting list management (\$15m); neighbourhood renewal (\$33m); water rates (\$24m)

Community Housing Organisations is the name given to community-based organisations that focus on “meeting the needs of low and moderate income groups” (<http://communityhousing.org.nz/>). These providers include Māori organisations, charitable trusts, incorporated societies, and not for profit companies (all reinvest profits into providing services). These groups deliver to tenants (provision of affordable rentals) and aspiring home owners (building new homes, assisting households into ownership).

7.2.2.1 Government subsidies

The main financial housing subsidy provided by Government is the Accommodation Supplement (AS), which is paid to individuals (a household may include more than one recipient). The AS subsidises the cost of private market housing costs. The rate of AS paid is set as 70% of the sum of weekly costs minus an entry threshold. The supplement is capped on basis of a matrix of household size and area. The numbers reported by Housing Shareholders Advisory Group (2010) for 2009 indicate that, within 467,300 homes rented in the private sector, 280,000 received the AS (60% of rented homes).

On 14 April 2014 changes were made to the Income-Related Rent Subsidy (IRRS); previously it was only available to tenants in HNZ houses but now it is available to tenants in a Registered Community Housing Provider. The IRRS means tenants are charged no more than 25% of their income and the Government tops up the difference.

Figure 13 shows the cost of the IRRS and AS to central government.

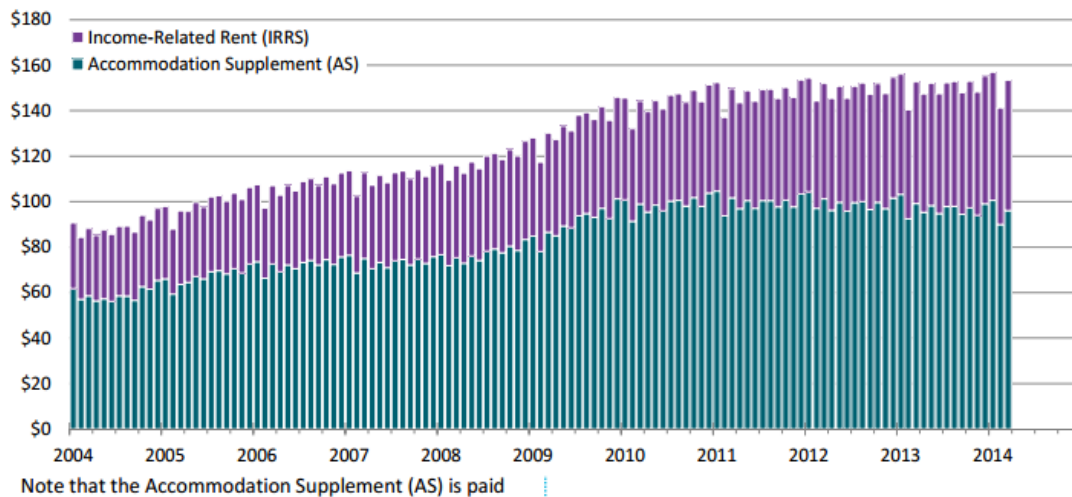


Figure 13: Central government housing spending (\$m) March 2014
(NZ Housing and Construction Quarterly, 2014)

7.2.3 Characteristics of Auckland rental landlords (Beacon Pathway Ltd, 2010)

Auckland region’s rental stock is provided predominantly through the private rental market. There is social housing stock which is provided primarily through Housing New Zealand (HNZ). Housing New Zealand currently provides more than 30,000 rental dwellings in the Auckland region. Most HNZ dwellings are targeted to families with children. In the 2006 Census, dwellings with HNZ as the landlord were distributed across the Auckland region but concentrated in Manukau City.

The provision of housing by way of territorial authorities has fluctuated in Auckland. Research on territorial authority housing provision in 2007 found that 97% of council stock is used for pensioner housing (CRESA/Public Policy & Research, 2007). The research found that numbers of dwellings were relatively small with:

- Rodney District – 59 dwellings
- North Shore City – 495 dwellings
- Waitakere City – 336 dwellings
- Manukau City – 565 dwellings
- Papakura District – 72 dwellings
- Franklin District – 113 dwellings.

In 2009, the Royal Commission on Auckland Governance estimated that there were a total of 1,196 territorial authority dwellings in the region and those dwellings were used almost exclusively by older people.

There are a number of community-based housing providers in the Auckland region that provide a range of specialised housing services including some long term rental provision. Much of this community-based provision is, however, directed to emergency housing, transitional housing, and supported housing.

The largest single proportion of landlords provide dwellings in Auckland City (41%) followed by North Shore City (19.8% of private landlords), Manukau City (14.6% of private landlords), and then Waitakere City (11.9% of private landlords).

7.2.4 Landlord attitudes to retrofitting houses

In 2008, Beacon Pathway undertook surveying into landlord attitudes to retrofitting houses with 491 landlords surveyed (Saville-Smith, 2008). Landlords were asked to report on any renovations costing in excess of \$2000 they had undertaken in the past year. Sixty-one percent of the landlords had undertaken work at this scale. The vast majority of this involved painting/wallpapering or carpeting (Table 7): i.e. cosmetic changes which have little to no impact on performance).

Table 7: Top ten landlord renovations in excess of \$2000 in the previous year (Saville-Smith, 2008)

Activity	Number of Dwellings	% Landlord Renovators	% All Landlords Surveyed
Interior repainting/wallpapering	128	42.8	26.1
Carpeting	91	30.4	18.5
Full exterior re-paint	68	22.7	13.8
Replace kitchen or laundry appliances	62	20.7	12.6
Replace bathroom whiteware	53	17.7	10.8
Replace bathroom cabinetry	48	16.1	9.8
Replace kitchen cabinetry	39	13	7.9
Install heat pump	38	12.7	7.7
Re-plumbing/gas work	32	10.7	6.5
Roof replacement	27	9	5.5

When asked about specific repairs, maintenance or renovations undertaken to address cold, damp or mould in any of their stock, 84.1% of landlords reported that they had done so at some point in time. The three most common interventions were: the installation of an HRV/DVS or similar ventilation system (19.6%); installing a heat pump (17.4%); and installing ceiling insulation (13.1%). Despite very low rates of wall and underfloor insulation in the houses, very few landlords had undertaken interventions to address these issues.

When asked about willingness to undertake future retrofit work, appetite was low without government assistance (Table 8). The main barrier cited was expense (43.4%). In terms of willingness to fund retrofit measures 72.87% of landlords said they would spend \$5000 or less, and 28.2% were willing to spend up to \$500 only.

**Table 8: Landlord attitude to retrofit
(Saville-Smith, 2008)**

Attitude to Retrofit	Number of Landlords	% of Landlords
Did not want to retrofit	114	23.2%
Believed all rentals already retrofitted	25	5.1%
Some rentals already retrofitted – would retrofit more if tenants would stay longer	53	10.8%
Some rentals already retrofitted – would retrofit more if could charge higher rent	40	8.1%
Would retrofit if government assistance	228	46.4%

8 Policy and legislative context of rental housing

Current laws and policy drive rental housing outcomes. Therefore any consideration of improving rental housing must include a review of the formal rules (as set out in legislation) and current practice (as directed by policy).

8.1 New Zealand legislation

Rental housing is subject to a range of key pieces of legislation, with an associated complex picture of responsibilities divided among four Cabinet Ministers, two Ministries and one Crown Agency as well as Local Authorities and District Health Boards. We provide a summary of the main aspects of each at the end of this report (Annex A: Summary of legislation, page 70).

Table 9: Key legislation governing rental housing (October 2014)

Legislation	Responsible Minister	Administering Organisation
Residential Tenancies Act 1986 and the Residential Tenancies Amendment Act 2010.	Minister of Building and Construction (From Oct-14 Nick Smith, as previous)	Ministry of Business Innovation and Employment (MBIE)
Building Act 2004	Minister of Building and Construction (From Oct-14 Nick Smith, as previous)	MBIE – and at a local level by District and City Councils
Health Act 1956	Minister of Health (From Oct-14 Jonathan Coleman, previously Tony Ryall)	Ministry of Health and at a local level by District Health Boards
Housing Improvement Regulations 1947	Minister of Housing/Minister of Health (Nick Smith/ Jonathan Coleman)	MBIE – and at a local level by District and City Councils
Housing Corporation Act 1974	From Oct-14, Minister Responsible for HNZ Finance (Bill English, also Finance Minister) Previously under Minister of Housing (Nick Smith)	Housing New Zealand Corporation
Social Housing Reform (Housing Restructuring and Tenancy Matters Amendment) Act 2013	From Oct-14 Minister of Social Housing (Paula Bennett) Previously: under Minister of Housing (Nick Smith)	Ministry of Business Innovation and Employment (MBIE)

The use of the legislation in relation to rental housing has been the subject of two recent publications, which interested readers are referred to:

- Barton (2013) identifies the Housing Improvement Regulations as the closest New Zealand law comes to protecting tenants from cold housing. Barton also raises the potential for the Consumer

Guarantees Act, but notes that progress relies on an “enterprising and receptive court” to interpret acceptable quality, reasonable care and reasonable fitness for purpose being applied to rental housing.

- *Paper Walls* (Rogers, 2013), provides a detailed analysis of the legislation in relation to rental housing and opportunities to improve outcomes; interested readers are referred to that report.

8.1.1 Courts

Involvement of the courts is a potential remedy for tenants and tenant advocacy groups. Significant barriers are cost and time for this not-for-profit sector. The advantages are that it raises the issue of poor quality housing in a very public way and creates legal precedent. The routes to the District Court are:

- An appeal of the Tenancy Tribunal
- Health Act prosecution, Rogers (2013) advocates adding Residential Tenancies Act Claim.
- Building Act prosecution
- Local Authority warrants to repair.

8.2 Policy context

Homes are widely recognised as the hub in a complex set of relationships that provide stability and well-being to households. Stable housing means households can develop strong relationships with other services such as health, education, employment and welfare. In New Zealand home ownership rates have dropped to 64.8% of 1.7 m houses from the peak of 75% in 1990 (SNZ, 2013b).

New Zealand is currently experiencing significant policy change in social housing (the segment of the rental market that houses our most vulnerable citizens). Other authors have documented the history of social housing in New Zealand; readers are directed to Salvation Army’s 2007 report, *Rebuilding the Kiwi dream*.

Politically the lack of affordable housing is a growing political concern. Beacon notes that there is no agreed New Zealand definition or measure of affordability. The most common international benchmark is that households should not spend more than 30% of gross household income on housing costs. Beacon is currently synthesising current knowledge on affordability and will publish as a separate ‘fact bank.

8.2.1 Central government policy

The current government is addressing rental housing as follows:

- Reform of Social Housing (See 8.3.1) and Housing Accord partnerships with Council (See 8.2.2)
- In 2012, jointly with Auckland Council, established a new entity (Tāmaki Redevelopment Company) that is charged with urban regeneration of Tāmaki, an area in Auckland. The area is 56% HNZ owned homes and is challenged by high levels of deprivation, low education achievement, low employment, low incomes and high social security dependency. The outcomes of this Tāmaki regeneration programme are significant; it is the biggest place-based intervention in New Zealand addressing the complex issues of rental housing.
- Convened a Ministerial Committee on Poverty: MBIE is working with other Government agencies to develop a WoF for rental housing, as announced through Budget 2013, and will

initially implement it in Housing New Zealand properties. Government has not made any decision on regulating standards of rental properties in the private market.

- Making 2013 budget provisions – extended income-related rental (IRR) subsidies to new tenants of registered Community Housing Organisations, who have been through a ‘government housing needs assessment’. The calculation mechanism for a tenant’s IRR will be the same as currently prescribed in schedule 2 of the Housing Restructuring and Tenancy Matters Act. This means low-income tenants moving into community housing after the policy takes effect will pay rents of only 25% of their incomes, typically around \$100 a week for a beneficiary family, while neighbours who move in before the rules change will keep paying existing rents (Collins, 2013). It should be noted that this process of registering CHP’s and their consideration of taking up the IRR is underway: interested readers are directed to the Community Housing Aotearoa website for current status and a review of the issues: <http://communityhousing.org.nz/>

Several documents recommend government intervention in the rental stock: these are those considered the most significant publications calling for rental housing intervention.

- Housing Shareholders Advisory Group (HSAG), 2010. *Home and Housed. A Vision for Social Housing in New Zealand* April 2010. HSAG was established in 2010 by Ministers of Finance and Housing. The resultant report informed structural changes currently taking place in HNZ, MSD and the relationship between government and the third sector of social housing providers. The vision developed is as follows:

We envision a future in which the public, private, non-governmental sectors and iwi all work in concert to ensure that every New Zealand has decent, affordable housing. It is a future where help for people with the highest level of need goes hand in hand with opportunity for those who are ready to move on. It is a future in which all providers of social housing play to their natural strengths, concentrating on the core activities that they do best.

- Children’s Commissioner’s Expert Advisory Group on Solutions to Child Poverty (2012). *Solutions to Child Poverty in New Zealand: Evidence for Action*
- Productivity Commission, 2012, *Housing Affordability Inquiry*.

8.2.2 Local government policy

Local governments are increasingly taking an interest in the issue of the quality and performance of rental housing and this is an active area of policy development in many councils.

Some councils have developed specific Housing Strategies and Action Plans and, in some instances, these have identified rental housing and its quality as a specific policy concern. In early 2014, five councils trialled a WoF: Auckland, Tauranga, Wellington, Christchurch and Dunedin. The WoF was developed by The University of Otago Housing and Health team in Wellington with the New Zealand Green Building Council (NZGBC) with feedback from the five councils and the Accident Compensation Corporation (ACC) (Bennett et al, 2014).

In 2013 Auckland Council and the Crown entered the Auckland Housing Accord. This identifies special housing areas (SHAs) for fast track development. This may change the dynamics and availability of rental housing in Auckland (improving supply and 10% of homes are to be

‘affordable’). Significantly AC has put quality of homes into the Accord: The Auckland Unitary Plan makes 6 Homestar rating mandatory for five or more homes in one development. It should be noted that subsequently more regions were added to the Housing Accord legislation: Christchurch City, Wellington City, Hutt City, Upper Hutt City, Porirua, Kapiti, Tauranga and Western Bay of Plenty.

Other councils have decided to set in place policies and take specific action around local housing issues of importance. For example, in 2009 Dunedin City Council partnered with the University of Otago and the Otago Polytechnic to develop STARS (Student Tenancy Accommodation Rating Scheme). This voluntary scheme is managed by the University Accommodation Office (STARS, 2014). Christchurch City Council has explored the issue in relation to earthquake-damaged/insanitary/unsafe rental housing.

8.3 Central government agencies with a stake in rental housing

8.3.1 Ministry of Business Innovation and Employment (MBIE)

MBIE provides advice, information and education services around the Residential Tenancies Act. They also provide a mediation service and access to the Tenancy Tribunal run by the Ministry of Justice.

MBIE administers the bonds paid by tenants in rental housing. In that role, MBIE collects information including: the number of bonds lodged in each region; rent; number of bedrooms; basic house typology (e.g. flat apartment house); landlord sector (e.g. HNZ, council, private); and location (to census area level).

With regard to house performance and maintenance, MBIE provides information through the ConsumerBuild website⁸ and a number of general information sheets aimed at both landlords and tenants. They also provide an advice and information line 0800 TENANCY (0800 83 62 62) that aims to provide assistance on a range of tenancy issues.

MBIE recently released He Whare Āhuru He Oranga Tangata – The Māori Housing Strategy (July 2014). In addition the following four units are housed under the MBIE umbrella: SHU, EU, CHRA, HNZ. This document is particularly significant as it explicitly recognises the link between better housing and better lives (He Whare Āhuru He Oranga Tangata).

8.3.1.1 Social Housing Unit (SHU)

The Social Housing Unit, Te Wāhanga Kāinga Pāpori, is a semi-autonomous body within MBIE. The SHU works with organisations that provide social and affordable housing, including not-for-profit, iwi, and private sector providers. It allocates funding and facilitates partnerships, including land transfers and sale or lease of surplus state housing stock. The SHU was developed as a result of the publication of the Housing Shareholders Advisory Group report, *Home and Housed: a Vision for Social Housing in New Zealand* in August 2010 (HSAG, 2010).

⁸ <http://www.consumerbuild.org.nz/publish/>

The SHU's purpose is to

“advise on the use and allocation of all resources that the Government invests in the supply-side of social and affordable housing provision, with the aim of growing the total quantum of social housing and maximising the effectiveness and efficiency of provision over time through greater innovation, diversity and scale. The Unit will also be responsible for implementing decisions where it is the appropriate body.

Cabinet has noted that in growing third party provision, there is a potential future role for both niche and specialist providers and additional scale providers”

(Social Housing Unit, 2011)

8.3.1.2 Establishment Unit (EU)

This unit, EU, is newly established (agreed at May 2014 Cabinet). Its aim is to work on behalf of the Crown to investigate options to build the social housing market. It is anticipated that a second unit, an Independent Transactions Unit (ITU) will implement what options are selected.

(source: <http://www.mbie.govt.nz/what-we-do/housing/social-housing-reform/eu-itu>)

8.3.1.3 Community Housing Regulatory Authority (CHRA)

The Community Housing Regulatory Authority (CHRA) is the new regulatory body for Community Housing Providers (CHPs). CHRA was established within MBIE on the 14th of April 2014.

The three main objectives of CHRA are:

- 1) Ensuring tenants of registered CHPs are appropriately housed
- 2) Protecting investment in community housing
- 3) Supporting the growth of a fair, efficient and transparent social housing sector

(CHRA, 2014a)

The registered CHPs providers are listed in Table 12.

CHRA works with registered CHPs and those wishing to become registered. Once registered they will monitor performance and intervene if need be to maintain the standard required. Performance Standards (of the organisation) are required to be met by CHPs who wish to register. These are accompanied by guidelines to demonstrate how the standards are to be met. The Performance Standards are designed to:

- Ensure that protections are in place for community housing tenants, and that community housing tenants have housing for the duration of their need.
- Enable the growth of a transparent, fair and efficient CHP sector by ensuring that CHPs are well governed, managed and financially viable over the long-term.
- Protect Government investment in the community housing sector and ensure probity in the management of that investment over the long-term.
- Encourage non-Government investment in community housing, by providing greater certainty to those considering investing (CHRA, 2014b).

It is noted that the performance of the rental homes (e.g. warm, dry, and efficient) is not a high requirement in this relationship.

Again, it is not the intention of CHRA to be prescriptive as to what property condition and amenity standards are used. However, CHPs may find it useful to reference existing best practice standards. For example, CHPs could include Universal Design principles or similar (BRANZ also provides a number of design standards publications on its website), as well as applicable legislation, such as the Health Act 1956, and the Building Regulations 1992.

(extract from Performance Standards and Guidelines,
<http://www.shu.govt.nz/chra-home/about-chra/#perf>)

8.3.1.4 Housing New Zealand Corporation

Housing New Zealand Corporation is a Crown entity with \$15.1 billion in assets and infrastructure. They currently have a housing portfolio of 69,000 houses of which 6,000 are located in Christchurch (97% of which were damaged in the earthquakes). Over 90% of state house rentals are supported by the income related rent subsidy.

Of the housing portfolio managed by Housing New Zealand, 43% of homes are 3 bedrooms, yet make up 16% of their priority demand. Ten percent are one bedroom units, but these make up 33% of their priority demand. Essentially, HNZ has a housing stock which is not well suited to the needs of their priority tenants (“those in greatest need”) which is mainly larger families and single person households. HNZ estimate that ~42,000 of their stock are matched to demand and are in the right condition, while 27,000 (39%) are not well matched or in good condition (HNZ, 2011). Of that stock 1,300 – 1,400 are considered “beyond repair” and will be replaced over a 10 year period.

HNZ has been actively involved in upgrading and insulating its housing portfolio for more than a decade. Their Energy Efficiency Retrofit Programme has insulated all state houses (with ceiling and underfloor insulation) where practical (completed in 2013). Approximately 46,200 of its properties have been insulated and 10,000 have had efficient heating (usually heat pumps) installed. The Corporation is also a participant in the Ministry of Health Rheumatic Fever Reduction Programme and has been working to reduce overcrowding in their housing.

About 50% of the HNZ housing stock is older than 40 years and HNZ aims to reduce the average of its assets to 50 years, by targeting a churn rate of 1 in 50 homes/year to enable upgrading or replacement.

Upgrade programmes include a general upgrade programme with a focus on whole-of-house upgrades, as well as the Energy Efficiency Retrofit and Heaters programme. Work carried out in the general upgrade programme includes:

- Refurbishing bathrooms and kitchens (extract ventilation is usually installed)
- Improving car parking, security and fencing
- Interior painting and work to improve living space
- Some insulation and heating work.

Maintenance programmes are focused on:

- Urgent health and safety repairs
- Tenants maintenance requests (e.g. plumbing)
- Planned maintenance (e.g. exterior painting).

HNZ undertakes 1,000-3,000 general upgrades a year funded from its revenues. A whole-of house upgrade approach was initiated in 2012 with a focus on bringing properties to meet defined standards. These standards, known as Property Quality Standards, have been set by the HNZ to define safe, healthy, fit for purpose and sustainable housing from its perspective. A baseline assessment of property condition was recorded in August 2012 and new property condition assessments of all HNZ properties commence, on a rolling basis, in 2013.

HNZ is currently trialling a Warrant of Fitness scheme that is designed to ensure all houses are meeting a minimum health and safety standard. If the trial is successful, the intention is to complete a Warrant of Fitness for every state house every three years. The Warrant of Fitness is being developed by the Ministry of Building Innovation and Employment with a Technical Advisory Group.

The Warrant of Fitness will cover the following (Smith, 2014):

- 1) Insulated and dry: including ceiling and under floor insulation, ventilation and no obvious leaks in the roof or cladding.
- 2) Safe and secure: including for example smoke alarms, handrails on stairs.
- 3) Essential amenities: including for example functioning power points, food preparation facilities, and a functioning bath/shower and toilet.

In April 2014 MSD took over the role of managing applications for social housing. HNZ will continue to:

- Be the landlord to all state housing tenants and manage their nationwide portfolio of 69,000 properties.
- Provide housing to people referred to them by MSD.
- Manage tenancies, including organising repairs.

8.3.2 Ministry of Social Development

As of April 2014 MSD has taken over management of applications for social housing from HNZ. This is a change for tenants needing housing assistance. In particular, MSD is responsible for:

- Assessing people's eligibility for social housing
- Assessing people's need for a house
- Managing the waitlist for social housing
- Referring people to social housing providers
- Calculating and administering income-related rent subsidy (IRRS) and Accommodation Supplement (AS).
- Paying income-related rent subsidies to housing providers.

MSD also refers people on the waitlist to social housing providers. At April 2014 the government opened up the income-related rent subsidy to more housing providers (i.e. the third sector of Community Housing Organisations). So MSD may refer waitlisted tenants to either Housing New Zealand or to a registered community housing organisation (see section 8.5). At June 2014, 33 organisations (excluding Housing New Zealand) are listed on the register.

The Accommodation Supplement is a grant administered by the Ministry of Social Development (MSD) and helps around 320,000 people outside of the state housing system with the cost of their housing. In 2012/2013 it cost the government around \$1.3 billion. The supplement is paid directly to the eligible household, and is based on income, assets, accommodation costs, family circumstances and housing location. Low income owner-occupiers may receive the supplement as well as people in private rental accommodation. There are no requirements at the moment on the dwelling for which the supplement is provided to meet any standards; however, this is one mechanism which has been suggested by various stakeholders from time to time.

8.3.3 EECA

The Energy Efficiency and Conservation Authority (EECA) has run a range of programmes over the past decade aimed at improving the energy efficiency of housing and, in particular, insulation levels. Prior to the launch of the WUNZ programme, this was primarily aimed at low income households, including rentals. Since WUNZ was launched, EECA has retained a low income and rental housing component of the programme. To date, 26,000 rental households have participated in the programme. Prior to the launch of WUNZ, however, retrofits involved a lower specification of insulation (thinner ceiling insulation and only foil underfloor) than is currently the case.

Past EECA programmes have also included subsidies for solar and heat pump hot water systems. These programmes were very poorly subscribed, however, with few participants (few hundred maximum). It is not known if any rental households participated in these.

8.3.4 Central government agencies financial stake in rental housing

Central government invests considerable amount to support the rental housing sector. Social housing HNZ figures sourced from the HNZ Briefing for the Incoming Minister (2013b).

Table 10: Government investment in Rental Housing

Agency	Form of investment	Period	Amount
HNZ	Holds asset and infrastructure to this value (NZ's second largest asset behind NZ Superannuation Fund at \$26.1b).	Asset value 2013	\$15.1 billion
HNZ	Asset management – investment in upgrades – investment in maintenance – deferred maintenance	Annual 2012/2013 2012/2013 2010 estimate	\$45 million \$183.5million (\$1-1.5billion)
HNZ	Income related rent subsidy (paid to 90% of HNZ households)	Annual 2012/2013	\$626 million
HNZ	Pays tenants water costs	Annual 2013	\$30 million
MSD	Accommodation Supplement (AS)	Annual 12/13	\$1.3 billion
Social Housing Unit	Social housing fund action plan Also administers Māori housing programmes which to varying degrees might impact on rental housing (Kāinga Whēnua, Māori Fund, Rural Fund, Niche Fund, and Pūtea Māori).	2011-2012 2012-2015 Annual Māori Housing budgets (some run for four years)	\$37.35 million \$134.1 million \$22.1 million
EECA	Warm Up New Zealand: Heat Smart. Subsidy for insulation and heating. Programme ran 2009 - 2013. Intervened in 235,000 homes, of which 26,000 were rental houses (11%)	Five years 2009-2013	\$347 million (total) \$38.2 million (11% rental)
EECA	Warm Up New Zealand: Healthy Homes. Operating funding over three years, target 46,000 homes, if 30% rental reached that's 13,800 tenanted homes with improved insulation.	2013-2016	\$100 million (total) \$30million (30% rental)

Agency	Form of investment	Period	Amount
Tāmaki Regeneration	Transformation Programme initial investment	2009-2011	\$52m
	Tāmaki Redevelopment Company shared investment Crown and AC (\$8.5m). <i>All elements of the vision estimated to cost around \$1.9 billion over 20 years, and with potential to create as many as 45,000 jobs over 30 years</i>	2012-20..	\$5m
Ministry of Health	??	?	Is there an estimate of costs of health due to poor housing??

Sources: 2010 HSAG (Home and Housed), 2013 Briefing for incoming Ministers, Māori Housing Strategy.

8.4 Local government / territorial authority roles

8.4.1 Councils as enforcers

Both the Building Act 2004 and the Health Act 1956 give councils responsibility in relation to housing. Councils can develop bylaws and policies in relation to these regulations. The Paper Walls report (Rogers, 2013) identifies the additional potential for councils to interpret key provisions of the Housing Improvement Regulations 1947. The authors identify this kind of approach paving the way for local authorities to only approve certain types of heating (e.g. could not approve unflued gas heaters).

The Building Act (S131) requires all councils to adopt a policy on dangerous, earthquake-prone and insanitary buildings. The policy must outline the approach the council will take and its priorities in performing these functions. So councils have some power to identify if housing is safe and sanitary and this could be used to ensure, in particular, that rental housing is not damp, unsanitary or physically unsafe due to disrepair, and that it has an adequate potable water supply and adequate sanitary facilities for its intended use.

In the first instance, the role an individual council will take is identified in their Insanitary Buildings policy. A brief review of the Dangerous and Insanitary Buildings Policies of the Auckland, and Dunedin City Councils has been undertaken. Christchurch and Wellington's policies are under review (because of the earthquake issues in the same policy) and were not available on their websites. Both the Dunedin and Auckland policies have very similar provisions. The example below is that used by Auckland Council.

Table 11: Key provisions of Auckland Council Dangerous and Insanitary Buildings Policy

Key Provisions
<p>Dangerous buildings policy</p> <ul style="list-style-type: none"> ■ respond to and investigate all building complaints received; ■ identify from these investigations any buildings that are dangerous; ■ inform the owner(s) and occupier(s) of the building to take action to reduce or remove the danger ■ liaise with the New Zealand Fire Service when deemed appropriate <p>In implementing this policy it will employ the range of mechanisms available in the Building Act (e.g. attaching notices to the building, using Notices to Fix, undertaking direct action if immediately dangerous)</p>
<p>Insanitary buildings policy</p> <ul style="list-style-type: none"> ■ investigate all building complaints received; ■ identify from these investigations any buildings considered to be insanitary; ■ inform the owner(s) of the action necessary to prevent the building from remaining insanitary; ■ liaise with the Auckland Regional Public Health Service (Medical Officer of Health) where occupants may be neglected or infirm. <p>In implementing the policy the council will assess insanitary buildings in accordance with s123 of the Building Act 2004, established case law, the Building Code and advice from the Medical Officer of Health.</p> <p>The council will determine:</p> <ul style="list-style-type: none"> ■ if the building is occupied; ■ what the building is being used for; and ■ whether the insanitary conditions pose a reasonable probability of being potentially dangerous to the health of any occupants. <p>Where a building is occupied considerations may include:</p> <ul style="list-style-type: none"> ■ adequacy of available sanitary facilities; ■ adequacy and availability of drinking water; ■ the separation of kitchen and other sanitary facilities; ■ potential for moisture penetration taking into account construction materials and any defects in roof and walls; and ■ the extent to which the building is offensive to adjacent and nearby properties. <p>In accordance with the Building Code, the following clauses are relevant:</p> <ul style="list-style-type: none"> ■ E2 (External Moisture) ■ G1 (Water Supplies) ■ G1 (Personal Hygiene)

It is notable, therefore, that in relation to dangerous and insanitary buildings, councils have the power and policies to address some issues but, to date, have taken a reactive rather than proactive approach.

In effect, this then relies on the tenant to complain to the council about the insanitary or dangerous state of their rental accommodation – to be a whistle blower against their landlord.

Auckland Council receives approximately 400 advisories of dangerous buildings per year, of which about 20 receive dangerous building notices. No information is provided with regard to how many complaints of insanitary buildings they face every year.

Using the Building and Health Acts, a checklist could be created giving the councils a way to check houses are complying. For example Section 123 of the Building Act says

“A building is insanitary for the purposes of this Act if the building—

(a) is offensive or likely to be injurious to health because—

(i) of how it is situated or constructed; or

(ii) it is in a state of disrepair; or

(b) has insufficient or defective provisions against moisture penetration so as to cause dampness in the building or in any adjoining building; or

(c) does not have a supply of potable water that is adequate for its intended use; or

(d) does not have sanitary facilities that are adequate for its intended use.”

:

An example of items to check for defence against moisture causing dampness would be:

- Weathertight roof, walls, doors, windows, gutters and spouting/downpipes
- At least one opening window in each living and bedroom
- Bathroom and kitchen vented to outside (mechanical / opening window)
- Ground layer moisture barrier (if possible)
- Adequate sub-floor ventilation (if in place)
- Clothes dryer vented outside (if present / provided)
- External clothesline (if available space).

8.4.2 Councils as landlords

As well as having a regulatory role around housing, many councils around New Zealand also have a portfolio of housing stock – most built for older adults, although some also provide some level of affordable housing for households in need.

Over the years this housing stock has often become substantially degraded, as councils, like private homeowners, have deferred maintenance. Now, mostly, this housing is operated by business units of the councils and is not subsidised substantially by rates. This means that upgrades have to be funded from the revenue earned from rentals, which means the housing can be of a poorer standard than that provided by HNZ.

In recent times, some councils with larger portfolios have embarked on substantial upgrade and redevelopment programmes, often in conjunction with HNZ and, through redevelopment, increasing the number of units provided. Wellington City Council’s programme is probably the most comprehensive and advanced in that respect: their 20 year programme (from 2008) attracted \$220m from central government to upgrade social housing. The council has won awards for architectural excellence, excellent and creative use of colour, sustainable architecture, tenant-led initiatives, community programmes and housing solutions.

Christchurch City Council has the largest portfolio of housing of any of the local councils with 2649 of units (prior to the earthquake). About 97% of the units needed to be repaired or replaced after the Canterbury earthquakes. By June 2014 the council had repaired 311 units and built 12 new units. They are aiming to repair or replace another 280 units before the end of 2014 (3 News, 2014)

8.4.3 Council assistance with retrofit

Some councils have provided assistance, mainly through rates-funded loan type mechanisms, for insulation and/or heating upgrades. In the early programmes (e.g. Environment Canterbury, Nelson City Council) these were primarily focussed around improving air quality and removing high emission heating devices from households. Since the launch of Warm Up New Zealand (WUNZ), a greater number of councils (both regional councils and district/city councils) have rolled out these mechanisms to support Warm Up New Zealand insulation and heating upgrades. These include:

- Auckland Council (Retrofit Your Home)
- Greater Wellington Regional Council
- New Plymouth District Council
- Tasman District Council
- South Taranaki District Council
- Hawkes Bay Regional Council
- Chatham Islands Council
- Dunedin City Council (Cosy Homes initiative)
- Marlborough District Council
- South Waikato District Council.

Some councils also provide **free** advice e.g. through the Eco Design Advisor Programme in seven councils and Wellington City Council's Home Energy Saver programme. This assistance is equally available to landlords as owner-occupiers but, in practice, it appears that landlords only represent a very small proportion of participants compared to their ownership proportion of the housing stock. The low level of engagement is a significant barrier when considering options available to councils.

8.4.4 District Health Boards and the Medical Officer of Health

DHBs have taken an increasing role in the last 10 years in the investigation of housing impacts on health and in running healthy housing programmes primarily aimed at low income households, including rentals. These commonly aim to:

- Reduce the risk of housing-related health problems
- Improve access to health and social services
- Increase awareness of healthy living
- Reducing overcrowding
- They can involve insulation and heating retrofits and commonly include a public health nurse out in the community working on the issues.

Where a local authority fails to act on overcrowding and insanitary issues, the Medical Officer of Health at a DHB is able to take action, although their powers are not commonly used.

8.5 Registered Community Housing Providers (CHPs)

Community Housing Providers (CHPs) are providers of social rental housing or affordable rental housing or both, other than HNZ or the Corporation (CHRA, 2014b).

Registered Housing Providers (CHRA, 2014c):

- Have been assessed as meeting the eligibility criteria and Performance Standards for registration.
- If registered as class 1 – social landlords, be eligible for income-related rent subsidies for tenants on entering into a contract with the Social Housing Agency- Ministry of Social Development.
- Come within our monitoring oversight because of their registration status.
- At least annually, be assessed by us to determine whether they continue to meet the eligibility criteria and performance standards for registration.
- Remain registered unless their registration is suspended or revoked.

In addition, there is a category of CHPs who are automatically registered up until 14 April 2015. These CHPs are deemed registered CHPs, unless they opt out of their registration or CHRA revokes their registration.

Registered CHPs are shown in Table 12.

**Table 12: Registered CHPs as at 12 June 2014
(CHRA, 2014d)**

Abbeyfield New Zealand Inc	Auckland, Canterbury, Golden Bay, Masterton, Motueka, Nelson, Palmerston North, Wakatipu, Dunedin, Whangarei, Hamilton
Accessible Properties NZ Ltd	Auckland, Canterbury, Hamilton, Bay of Plenty, Wellington
Airedale Property Trust	Auckland
Bays Community Housing Trust	North Auckland
Chinese New Settlers Services Trust	Auckland
Christchurch Methodist Central Mission	Canterbury
Comcare Charitable Trust	Canterbury
Coromandel Independent Living Trust	Coromandel
Community of Refuge Trust	Auckland
Dwell Housing Trust	Wellington City, Porirua, Kapiti, Hutt Valley
Habitat for Humanity New Zealand Ltd	Greater Auckland, Northland, Tauranga, Taranaki, Eastern Bay of Plenty, Central North Island, Lower North Island, Nelson, Marlborough, West Coast, Canterbury, Southland, Dunedin, Invercargill
He Korowai Trust	Northland
Kahungunu Executive ki te Wairoa Charitable Trust	Wairoa
Keys Social Housing Ltd	Auckland, Hamilton, Whanganui, Taranaki,

	Wellington
Mangatawa Papamoa Blocks Inc	Tauranga
Monte Cecilia Housing Trust	Auckland
The Nelson Tasman Housing Trust	Nelson, Tasman, Golden Bay
Te Ngati Hinewera Trust	Hawkes Bay
New Zealand Housing Foundation	Auckland, Canterbury, Kaikohe, Northland
Queenstown Lakes Community Housing Trust	Queenstown, Wanaka
Tauranga Community Housing Trust	Tauranga, Bay of Plenty
Te Kotuku ki te Rangi Charitable Trust	Glen Eden
Te Runanga O Kirikiriroa Charitable Trust	Hamilton, Waikato
Te Urumingi Whanau (Ahu Whenua) Trust	Gisborne, Ruatoria
Te Ahikaa Roa Trust	Northland
VisionWest Community Trust	Auckland, Canterbury
Whangarei Accessible Housing Trust	Auckland, Northland
Whatever It Takes Trust Inc	Hawkes Bay
Aupouri Property Ltd	Te Kao
Nga Potiki A Tamapahore Trust	Tauranga
Te Runanga O Ngati Kahu (ki Tauranga) Inc	Tauranga
Auckland and Onehunga Hostels Endowment Trust	Auckland

As noted elsewhere, this report coincides with enormous change in this sector. There may be organisations that provide housing who may opt out, or not go through the process of registration to receive IRRS. It is beyond this report to research the models they are considering offering housing services and the impact those arrangements have on quality of homes. The transfer of HNZ stock to other providers is another space Beacon will watch with interest: the quality of this stock has huge implications for the eventual landlords and tenants and the price paid should reflect the deferred maintenance as well as costs to upgrade to provide good quality homes for vulnerable tenants. Interested readers are directed to Cadman’s recent report on social housing (2014).

9 Discussion

9.1 Problem synthesis

New Zealand has a clear problem: we have poor housing outcomes (i.e. health, well-being, fuel poverty and injuries) resulting from our low quality housing stock. Significant investment is required to upgrade our homes so they deliver health benefits: research shows New Zealanders under-maintain their homes and that the level of intervention needed to upgrade performance so a home meets WHO minimums (temperature and humidity) is considerable. Beacon considers those WHO minimums an important guideline; you don't get real health benefits until a home is truly warm and dry. Beacon research also found that upgrading homes to this level is too much for the majority of homes, so the key is to get households on a retrofit journey (Section 4.3).

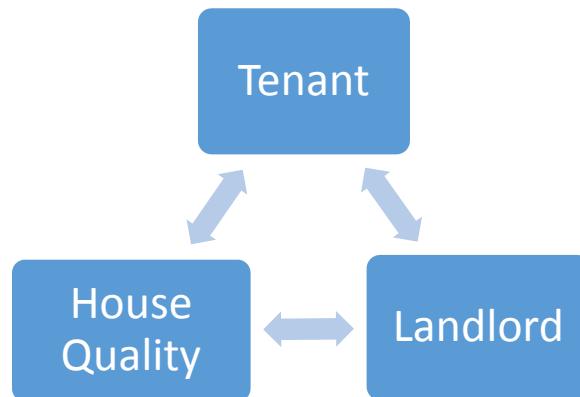
While the issues raised in Sections 4 and 5 apply across the country's homes and are a matter of national concern, rental housing stock presents a particular set of challenges when considering potential responses to the problem.

Despite the critical role housing plays in supporting New Zealand families, particularly our most vulnerable communities who have no choice but to rent, the rental housing market is unregulated and fragmented. The legislation governing rental housing is spread across several Acts (and Ministers), and there is a long list of central government agencies with a stake in the rental housing market. In addition, local government has several important responsibilities for rental housing. The market is split between social housing (HNZ and third sector social housing providers) and private landlords who dominate, owning 85% of the stock. Rental housing markets vary across the country, with Auckland and Christchurch under considerable pressure. Crucially, the majority of rental houses are owned by 'mum and dad' investors with few properties. Tenants rent homes under a more restrictive regime than other countries, with shorter typical lease terms and landlord notice periods and more 'open' reasons for lease termination.

Unfortunately there is a paucity of robust data about the rental housing sector. In addition, existing information is scattered: BRANZ and Statistics NZ hold some rental house condition survey data; MSD holds information on tenants receiving Accommodation Supplement; and MBIE holds bond information. Central government agencies are not allowed, due to privacy rules, to align their datasets. The outcome is that no one agency holds all the parts of the jigsaw: home, tenant and landlord. This undermines the development of a good evidence base from which to make policy decisions.

9.2 Defining a rental dynamic

We suggest that options to improve housing outcomes in the rental sector need to take account of the “rental dynamic”, i.e. the interplay among the house quality, the tenant and the landlord. Each is interdependent: actions and changes in one will determine outcomes for the other two.



It is important to recognise that this rental dynamic operates inside both formal rules (e.g. those laid out in government regulation and policy) and informal market rules (what tenants accept willingly or unwillingly and what landlords offer and the quality of the nation’s housing stock that moves in and out of the rental sector). It is useful to take each component in the rental dynamic in turn and briefly characterise the situation in New Zealand.

House quality: Evidence shows rental housing in New Zealand is old and can be characterised as cold and damp: i.e. most will not yield good housing outcomes (i.e. residents healthy and well, can afford to heat their homes). The quality of our indoor environment results from the interplay among four parameters: temperature, ventilation, relative humidity and sources of pollution. Beacon research indicates that significant upgrade of our housing stock is required to truly reach the indoor environment quality that supports health, i.e. occupants enjoy WHO temperature and humidity recommendations. House quality to achieve these outcomes includes a good thermal envelope, no damp, mechanical ventilation and efficient heating (no unflued gas heaters). This demands a range of interventions determined by a whole-of-house perspective. House quality also takes into account typology, size (e.g. number of bedrooms) and location. These characteristics should be matched to the tenant household, but, when mismatched, can result in overcrowding and additional health needs. The quality of the home is also affected by occupant behaviour, for example, airing the house, heating.

Tenants: Increasing numbers of New Zealanders rely on rental accommodation. This affects households with working parents and children as well as our most vulnerable citizens (impoverished families, children, elderly and the infirm). Central and local government and the third sector invest heavily in these families: directly with financial assistance such as IRRS, AS, and, in addition, health and education).

Landlords: 85% of the country’s rental housing stock is in private ownership with the remainder in social housing (i.e. landlords are government, council, third sector). Private landlords are primarily mum and dad investors with few properties who don’t see themselves as ‘landlords’ per se. New Zealand homes are chronically under-maintained and perform poorly, and rental housing is no exception: few landlords invest in regular maintenance and undertake whole-of-house upgrading.

9.3 Segmenting rental housing

To consider potential options to improve housing outcomes for this sector, we have used the rental dynamic to segment New Zealand’s rental housing by stakeholder into three, as follows:

- **“Social housing”⁹:** where the landlord is central/local government or their proxy, i.e. the developing third sector of Community Housing Organisations; tenants are recognised as vulnerable and are supported by a range of government agencies; the house quality is managed by landlord asset management programmes (generally of a consistent standard, although it is unclear if high enough to support health outcomes as advocated here).
- **“Private market”:** where the landlord is private person; tenants pay market rent with no government assistance; and quality of homes may be actively managed (and achieve very high standard, e.g. new apartments built to code) or not managed at all (with resultant range of quality down to the very poorest accommodation options).
- **“Mixed rental”:** where the landlord is a private person; tenants pay market rent but receive government accommodation assistance or support because of very high health needs (so not tied to the house, but may be adversely affected by the quality of the home); and the house ranges in quality as per the private rental stock.

It is recognised that, while we have segmented the rental housing market to consider improvements, individual households have a ‘housing career’ which may see them move along a continuum from fully supported/assisted tenancies to market rental and potentially through to private ownership. Similarly, it is important to recognise that the houses also ‘move’ across these three segments as well as in and out of the rental market. For example: HNZ may sell some stock to the private market; homes in the private market may be bought by Community Housing Organisations to add to their social housing portfolio; homes in the private market may be sold and lived in by the new owner or vice versa.

The next sections take social housing, private market and mixed rental in turn, to briefly consider options to improve housing outcomes.

9 Note Social housing as defined by SHAG (2010) is provision of assistance with housing to those who cannot otherwise meet their own housing need. This definition would then include homeowners who receive the Accommodation Supplement. HNZ and the Ministry of Social Development (MSD) use the term ‘social housing’ to refer specifically to that which is provided by HNZ and housing providers registered to receive the IRRS. Our “social housing” category is structured on the participants and the support they receive: so is confined to rental housing and includes both IRRS and AS.

9.3.1 *Social housing*

At first glance, improving outcomes for **social housing** is straightforward as government (central and local) is active in all parts of the dynamic.

- ‘Who is a **landlord**’ is clear and formal, i.e. all organisations engaged have a clear remit, roles and responsibilities mostly laid out in legislation.
- The majority of the housing stock is subject to an asset management programme so this implies a level of **quality** or at least a process to improve quality. Anecdotally, HNZ stock is higher quality than many homes in the private rental sector. The recent trial of a Warrant of Fitness for HNZ houses is an interesting test of the Corporation’s asset management programme’s delivery of housing quality. The new relationship between government and Community Housing Providers doesn’t define housing quality as part of their increasing role in housing provision.
- **Tenants** are reliant on government support (housing, IRRS, AS) and there is a system for their needs to be matched to a suitable house (new MSD role).

In theory the government sets its the rules for itself, so it could implement high housing quality requirements, and some would argue, given this market is responsible for our most vulnerable citizens, it should. The MBIE Warrant of Fitness is a start in identifying and remedying the houses that are not fit for healthy living. Ideally, this is the first step in an asset management programme that builds on good maintenance and progressively intervenes to improve housing outcomes with performance upgrades. The social housing sector would be the easiest place to establish robust knowledge, gather data, and understand how to optimise the parts of the rental dynamic to improve outcomes. The new knowledge has spill-over implications for the other two rental segments. Certainly demand for these houses will increase!

In reality, it is more complex. There is not one central government agency managing the dynamic: tenants fall under MSD; HNZ is both landlord and manager of quality of its housing stock; Treasury is considering the asset; and, MBIE, via the SHU, is concerned with growing the Community Housing Providers.

9.3.2 *Private market*

The **private market** is complex and informal (i.e. few rules govern it and are infrequently enforced):

- Anyone who owns a house can be a landlord (minimum requirement is lodging of bonds with MBIE). Landlord role is sometimes backed up by property management; it is unclear how many private rentals make use of these professional services (which are also unregulated).
- While house quality should meet council safe and sanitary regulations, these rules are rarely invoked and only in desperate situations. The main intervention in this market has been EECA’s subsidy programmes. Few landlords took up the WUNZ: Heat Smart programme (insulation + heating) and are now a target where tenants hold a community services card in the new WUNZ: Healthy Homes programme (just insulation). It is not clear that Homestar (the non-mandatory rating tool) has penetrated the private rental market.
- Tenants operate in the market with no formal information to underpin their decisions to rent one house over another. They make their own judgement call, and it is assumed here that there is little awareness of features that will determine their housing outcomes (insulation perhaps being an

exception). Tenants in Auckland and Christchurch have little choice due to the housing shortages in these cities: this will relegate home quality down the decision-making process.

In the private rental market, improvements to housing outcomes rely on landlord ability and willingness to act (and tenants' management of the house). Beacon takes a customer-centric view to housing retrofit that has been informed over past years in many conversations across the sector about how best to transform the housing stock. There are four key steps:

- **Awareness** – understanding of the issues for landlord (quality of their house, maintenance demands, impact of poor quality and on value of their asset) and tenants (their actions such as airing house, avoiding unflued heaters have an impact on costs and their health).
- **Decision making** – ability to make good choices on basis of independent advice to get the right intervention for the outcomes sought and capacity to pay.
- **Action** – ability to turn their decisions into reality, so landlords can find the right contractor to deliver a quality intervention, on time and for the agreed price (quoted) and have access to adequate funding and similarly tenants can change the way they run the house.
- **Review** – be able to assess that the intervention has delivered the right outcomes and continue to maintain and improve the quality of their asset.

The retrofit market is immature: landlords don't demand goods and services to improve housing outcomes. This is due to very low awareness of requirements to maintain the asset, let alone performance upgrade interventions. There is low landlord engagement with independent advice and low capacity to fund interventions. The majority of landlords own rental properties for capital gain. This means few make budget allowance for maintenance and upgrades of their rentals. The New Zealand market does not value home performance; land price dominates sale price, which reduces a landlord's financial incentive to invest in upgrades (true for all New Zealand stock). The value of a rating tool is that the market has an agreed framework of information that focuses on house performance (and ultimately leads to improved housing outcomes). Unfortunately, New Zealand's residential rating tool, Homestar, has not been a game changer in the housing market: elsewhere, rating tools have had an impact as they are mandatory.

The supply side of the market is also immature: business doesn't supply whole-of-house, comprehensive maintenance and performance upgrade services. The market is dominated by product solutions, which may not address problems in house and so won't deliver outcomes sought. EECA's subsidy programmes are similarly input-based rather than outcome-focussed: enormous effort/investment is expended to link a household with the approved contractor, who then simply installs insulation (perhaps moisture management is the priority). The insulation programmes have had a huge impact on changing perceptions about warmth at home, but landlords have been slow to take up.

Tenants have little easy redress in the private market: they can go to the Tenancy Tribunal or vote with their feet. While there is some potential to use the courts to interpret the relevant acts, it is largely untested and faces many barriers.

A Warrant of Fitness is the most often cited solution to rental housing performance. While the UoOW/NZGBC WoF has been trialled in this private market, the central government WoF has been

applied to HNZ homes. The current public debate surrounding these trials has arguably raised awareness of housing quality among both landlords and tenants. Beacon would argue that, while the WoF is an important step to catch the truly appalling accommodation offered for rent, it is a bare minimum. Houses that pass the WoF may still be cold and damp and deliver poor outcomes for tenants. Ideally, a WoF would be the first step on a longer maintenance and upgrade journey for landlords and their rental houses.

Several issues remain to be resolved in the fledgling WoF initiatives. These need informed public debate and political engagement:

- What is optimal status for a NZ WoF – voluntary or mandatory? If simply information for tenants and willing landlords, a voluntary scheme may be of value in unpressured markets. However, experience of voluntary interventions here and internationally shows very low take up and poor market penetration. In particular, a voluntary tool is unlikely to reach the homes really needing upgrade; it becomes a marketing tool for reasonable quality homes. Given the expense of development and implementation, this may be a costly experiment. Any decision to make a WoF mandatory would require a huge political process. We would argue considerably more evidence is needed to guide how a scheme would be implemented and mitigation of unintended consequences. The focus to date has been on what's in a WoF (e.g. heating provided or not).
- How would the scheme work – what constitutes a WoF fail? Are there criteria that mean the house should immediately vacated (e.g. hole in roof, broken sewer!)? How would the scheme manage failure on a criteria which the tenant could live with for X time to enable landlord remedy. Are some criteria worthy of longer time schedules than others? How could tenants be protected during this process?
- Independence – the WoF should be independent of any product or solution. It is about the standard of New Zealand housing and ensuring the property supports good housing outcomes for tenants. So how best to administer WoF implementation?
- Whether mandatory or voluntary, what might landlords do when their property fails a WoF? A landlord needs to decide what interventions will achieve a WoF (the WoF form and assessors do not provide advice here, if truly independent). This means the market needs whole-of-house advice, quality tradesmen who deliver on time, to spec and to budget (current market arguably not that mature). Many landlords would need financial mechanisms (e.g. bank mortgages, rate-rebates, government grants?) to enable investment in a programme of maintenance/upgrade. There is no clear data on the scale of this need for financial support; this is a critical gap when mitigating against unintended consequences.
- What are the potential unintended consequences? Our 'starter for 10': landlords opt out of any mandatory WoF, creating an "invisible" dynamic putting tenants at risk; tenants are evicted when WoF failed (real problem in pressured markets like Christchurch, which any scheme would have to address); scheme proves costly to administer and for landlords who pass onto tenants; and a WoF becomes the default New Zealand standard for existing homes - a minimum that doesn't deliver health and well-being.

9.3.3 Mixed rental

The **mixed rental** segment has an added layer of complexity; the private rental market houses tenants who receive government support. This means government has a real stake in this housing, tenants while not in the social housing sector are still considered vulnerable, and while landlords are

managing tenants who may have high needs, they do have some security of rent. While sharing elements of both the private market (technically landlords and house quality are private) and the social housing segment (tenants), this is quite a unique dynamic when considering how to improve housing outcomes.

9.4 Recommendations to improve rental housing

To start New Zealand on a journey to improve outcomes from rental housing, Beacon makes these recommendations in each rental housing market segment. Fundamental to these recommendations are the following core issues:

- The overall state of our nation's housing stock is poor and undermines the health and well-being of all residents, but in the context of this report, tenants are significantly New Zealand's most vulnerable citizens and housing is key infrastructure to support them.
- Health and well-being outcomes require homes that deliver World Health Organisation conditions (i.e. indoor temperatures and humidity); this demands very good quality housing stock (insulated, dry and heated).
- Few New Zealand landlords can afford the investment needed to improve housing outcomes in one hit; therefore a pathway of ongoing maintenance and performance upgrades is necessary. The Warrants of Fitness proposed to date is a very low standard, designed to capture the worst stock, which we acknowledge is important. However, homes that pass such a WoF may still be cold and damp, so the health and well-being outcomes sought will not be met.
- If a WoF is under serious consideration Beacon strongly recommends there is only one for all New Zealand homes. Just as we advocated that New Zealand have one residential rating tool (we are too small a market to cope with competing tools), we would caution the development of multiple WoFs. It is particularly significant as our housing stock moves between rental market and owner occupied, so one measure is needed across all New Zealand's homes. We would also advocate that the WoF is only the first step for New Zealand homes that should all be on a longer pathway towards the warm, dry efficient homes all residents need.
- Overall there is low level of awareness among New Zealanders of the link between a home's performance and housing outcomes (e.g. health, wellbeing, resource efficiency, running costs, maintenance bills). Similarly there is low awareness and limited capacity to undertake appropriate upgrades (e.g. extractor fans, damp proofing, insulation and heating) and behaviour changes to improve home performance. The WoF trials have started public debate, but this needs to be better informed and address more broadly the issues WoF's aim to address.

9.4.1 Social housing recommendations

- MBIE develops a New Zealand Rental Housing Strategy to improve planning and management of this critical national asset. This would provide essential structure to address the fragmentation of rental housing across ministers, ministries, Acts of Parliament, councils, policies, Community Housing Organisations. Cadman (2014) suggests the development of a whole of government working practice model, as is in place for another national asset – state highways.
- MBIE signals that all New Zealand rental housing must meet the Building Code by 2025: plot a pathway that requires social housing meet the Code, followed by all rental properties in the mixed market (tenant receives a government subsidy) and finally all rental properties (and perhaps all houses!). The trigger could be the sale of the home.

- MBIE actively shares the Warrant of Fitness developed for HNZ to inform the market and provide leadership that prevents multiple schemes being developed. This will support all other initiatives being developed and ensure they can contribute to a body of evidence from a consistent concept of “entry level” (i.e. the very basic level of quality to support home performance). This leadership may well reduce some of the concern in the market about just what is proposed in a WoF: many landlords may fear very high levels of intervention. Capitalise on the discussion surrounding the WoF to engage New Zealand in a public debate about all housing quality.
- Key players in this sector, government, councils and Community Housing Organisations, undertake action research to trial and demonstrate the best models for improving housing outcomes. The social housing sector offers a valid ‘trial space’ for pilots and demonstrations on potential business models to improve housing outcomes (Fawcett et al, 2014). If an action research framework is used, pro-active testing and evaluation will capture learning and share it. Lessons to broaden everyone’s understanding of the constraints and opportunities can be spread across social housing and out into private and mixed rental sectors. Partnerships between councils and district health boards to address health outcomes through housing intervention offer great opportunity for joint learning and improvements at a city scale (for example, Canterbury District Health Board works closely with Christchurch City Council in this way). The recent WoF trial by councils is a good example of initiatives that can pilot new ways of working, evaluate and lessons can be learned and shared.
- Councils could explore how they might engage with rental housing from within their existing safe and sanitary obligations. Councils could start by interpreting the rules to develop a checklist, trial it on their own properties before engaging with the private sector landlords. Signalling the work being done and sharing the standard may start some informed public debate about what quality New Zealanders expect from their homes (owned and tenanted!). See Annex B in Section 11 for a first break down of a house level interpretation of council’s safe and sanitary obligations.
- MBIE develops innovative models of procurement of new social housing to ensure good housing outcomes (and shares these models with other social housing providers who are ‘buying’ new houses from the market). For example, government purchase of bulk new housing via a “cost plus” contractual arrangement with the market is unlikely to deliver affordable quality housing. The “plus” undermines market innovation to deliver homes that perform well and don’t cost the earth.
- MBIE’s implementation of the Māori Housing strategy ensures that appropriate processes are in place (e.g. procurement and advice) to ensure that all homes built for Māori will provide the quality outcomes sought in the strategy.
- Central government shares its insight from decades of providing and maintaining social housing stock with other stakeholders who provide social housing (and ultimately the mixed rental and private market). For example: does the Corporation use innovative procurement to manage its asset that the private sector could learn from; what insights does HNZ have about maintaining its stock?
- Government undertakes (or commissions) a comprehensive analysis of the true costs of New Zealand’s poor housing on taxpayer funds, particularly on health, well-being, productivity, resource efficiency (water and energy), affordability. Share the results to help inform New Zealanders on the impact of their under maintained and poorly performing homes.
- MBIE ensures that funding on science, via the National Science Challenge, addresses rental housing research needs.

- Government ensures that any upgrade scheme is based on independent whole-of-house advice, so any taxpayer-funded intervention programme that changes performance of homes relies on appropriately trained providers. The market already offers an independent scheme, Certified Home Performance Advisors, which would ensure WoF inspectors or assessors for insulation programmes understood homes from a robust platform of independent knowledge.
- Government considers developing a single agency which holds all parts of jigsaw together: health, building standards, social housing, liaison and support to Community Housing Organisations and tenant support.
- On assumption that HNZ asset management has resulted in stock that meets/exceeds WoF minimums, we encourage MBIE to plot a pathway to warm dry homes, with the ultimate goal that all existing homes meet the Building Code. There is solid evidence and experience in NZ to support development of such a programme.
- Community Housing Organisations (e.g. via their umbrella organisation, Community Housing Aotearoa) continue to advocate for high quality stock and their tenants needs during the process of Government growth and development of this third sector.
- Community Housing Organisations develop a register of their housing stock and a common way (i.e. for all providers) to manage the asset (maintenance and repairs) and report on its quality (standardise the approach to measuring housing quality). This will contribute to the body of New Zealand evidence on improving housing outcomes through the provision of quality homes.
- Government (StatsNZ, MBIE?) considers its information needs (i.e. evidence for good policy development) in consultation (e.g. with CHA, organisations involved in housing research). The result may be agreement for NZ definitions to underpin research, programme outcomes: for example, what are categories of home ownership, management type, and tenant type. Identify opportunities for connecting central government held data sources (disparate across agencies) which make up the jigsaw of rental housing evidence. Key initiatives in New Zealand, such as the BRANZ House Condition Survey, provide an established robust basis on which evidence of rental housing quality could be built. Due to the fragmented nature of rental housing ownership and privacy issues, the sector is notoriously difficult to access – e.g. by central government (e.g. WUNZ subsidies) and by local initiatives such as the Dunedin-based Cosy Homes Programme. Exploring the issues around a register of landlords is strongly advocated (legally possible via Housing Improvement Regulations). The key value of this would be for communication: e.g. ability of agencies to directly raise awareness of subsidies/support, issues for landlords to consider (newsletters to NZ’s community of landlords?). It would be easiest to start this in the social housing segment, where there is a growing list of Community Housing Organisations (collected for a different purpose). Over time, this register could extend into the mixed market and perhaps be voluntary in the private sector, with a signal to become mandatory in 10 years? This could provide good foundations to encourage increased professionalism of the landlord sector to improve outcomes. It may be more appropriately trialled in a city, led by the council, with clear protocols around management of the data held.

9.4.2 Private market recommendations

- MBIE signals quality requirement with a forward target for rental homes reaching Building Code.
- Landlords with good quality stock make use of the market mechanisms available – e.g. Homestar to signal the quality to tenants.

- If MBIE releases its WoF, motivated landlords could check their homes, seek an independent verification, and advertise their property as meeting (ideally exceeding!) the WoF criteria.
- Landlords with a portfolio of homes consider upgrades across their stock to achieve economies of scale and do this work on the basis of good independent whole of house advice. Certified Home Performance Advisors and Eco-design Advisors in Council provide this type of input to optimise asset management. There are a range of applications (apps) in the market to support landlords, property managers to manage their maintenance schedules.
- Tenants understand the rental housing WoF and indicators of poor performance when assessing a house (e.g. damp, mould). Tenants could rate their rental home using the online Homestar option and share the result with the landlord.
- Tenants understand the role they play when living in a house to improve the performance and change their behaviour to reduce moisture and retain heat e.g. Annex B in Section 11.
- Landlords draw on existing information, to engage with their tenants on how they can jointly ensure the performance of homes meet both tenant needs (health wellbeing, resource efficiency and affordability) and landlords (durability, quality and maintenance/upgrade costs).
- Students and landlords engage in the performance of homes via supported interventions such as Rate My Flat (in Dunedin, but expansion plans indicated), which offers a constructive way for the two actors in the rental housing dynamic to improve housing outcomes via upgrade and behaviour changes.
- Government uses the information and insight it has from managing its own stock and understanding the links between home performance and health, to raise national awareness of warm, dry, well-maintained homes as a means of improving housing outcomes.

9.4.3 Mixed rental recommendations

- Central government undertakes research to improve understanding of who in this mixed rental segment is supplying houses to vulnerable tenants and the quality of the homes, with a view to engaging with landlords and transferring the learning from social housing intervention to this market. Link to recommendation about landlord register and building code signal in 9.4.1.
- Government could lead some joint initiatives to better understand this rental housing segment. For example, active engagement with landlords to identify what are the barriers to their engagement with home maintenance and performance upgrades.
- Given mixed rental tenants are vulnerable, we would recommend government trials an improved mechanism for these tenants to engage with officialdom regarding quality of their home: the current Tenancy Tribunal is recognised as a barrier for tenants. Any learning could inform upgrade of the Tribunal process for private market. Many not for profit agencies in the community housing sector support tenants in the private rental market, making them good partners in any trial.
- Central government could develop policy to address the issues raised by taxpayer funds supporting private landlord's provision of poorly performing stock and subsequent costs to the nation. It is not a new idea to link the provision of subsidy to housing quality: policy work would help inform this option or identify alternatives to achieve the goal of supporting vulnerable New Zealanders with good quality housing.

9.5 Summary

Beacon proposes that housing outcomes in the rental sector are the result of a rental housing dynamic: an interdependent relationship amongst landlords, tenants and the quality of the rented home. This recognises both players have a role in determining the performance of a home, thus the housing outcomes. Tenant outcomes are reliant on the actions of the landlord and the house quality; similarly the landlords' outcomes (a significant financial investment) are dependent on the tenant actions and the quality of the home.

Defining this rental dynamic led us to segment the market by stakeholder into three: social housing where landlord, tenant and housing quality are underpinned by tax payer funds; private market, where the government plays no fiscal role; and mixed rental, where tenants are supported by tax payers to rent in the private market. Recommendations to address issues of poor housing outcomes in New Zealand's rental housing market are made for each market segment.

10 Annex A: Summary of legislation

10.1 The Residential Tenancies Act 1986

The Residential Tenancies Act 1986 is the principal Act relating to residential tenancies and defines the rights and responsibilities of landlords and tenants of residential properties. As relates to home performance, the key requirements for landlords are:

- Make sure the property is clean and tidy before the tenant moves in
- Make sure all the locks work and the property is reasonably secure
- Maintain the property and do any necessary repairs (with regard to age and character of the home)
- Ensure the plumbing, electrical wiring and the structure of the building is safe and working
- Provide adequate water collection and storage for premises without reticulated water supply
- Write and tell the tenant at least 60 days before they put the rent up
- Give 48 hours' notice to inspect the property – but not more than once every four weeks and only between the hours of 8am and 7pm (the landlord can come onto the section without giving notice, but must respect the tenant's privacy)
- Give 24 hours' notice to do repairs and do them between the hours of 8am and 7pm.

There is nothing here requiring that the rental property will be warm or capable of being kept warm for example.

10.1.1 The Residential Tenancies Amendment Act 2010

This Act amended the Residential Tenancies Act in particular in relation to:

- Providing for letting fees for letting agents
- Landlord and tenant addresses
- Length and tenure of tenancies
- New rules around terminations
- Changing rules about how landlords deal with abandoned goods
- Adding additional unlawful acts including:
 - The landlord failing to comply with their obligations regarding cleanliness, maintenance, relevant building, health and safety regulations
- Including Boarding House tenancies under the Act

10.2 The Building Act 2004

Section 108 of the Act deals with annual building warrants of fitness. These are only required of buildings that have a compliance schedule e.g. apartments with specified systems such as fire sprinklers or emergency lighting, and residential buildings to which a cable car is attached to or servicing.

Section 121 of the Act defines dangerous buildings:

“A building is dangerous for the purposes of this Act if the building—

- a) In the ordinary course of events (excluding the occurrence of an earthquake) the building is likely to cause—*

- (i) injury or death (weather by collapse or otherwise) to any persons in it or to persons on other property; or*
- (ii) damage to other property; or*
- b) In the event of fire, injury or death to any person in the building, or to persons on other property is likely because of fire hazard or the occupancy of buildings.*

Section 123 of the Act defines insanitary buildings:

“A building is insanitary for the purposes of this Act if the building—

- (a) is offensive or likely to be injurious to health because—*
 - (i) of how it is situated or constructed; or*
 - (ii) it is in a state of disrepair; or*
- (b) has insufficient or defective provisions against moisture penetration so as to cause dampness in the building or in any adjoining building; or*
- (c) does not have a supply of potable water that is adequate for its intended use; or*
- (d) does not have sanitary facilities that are adequate for its intended use.”*

Section 124 of the Act outlines the powers of territorial authorities (councils) in respect of dangerous, earthquake-prone or insanitary buildings. They are able to:

- (a) put up a hoarding or fence to prevent people from approaching the building nearer than is safe;*
- (b) attach in a prominent place on, or adjacent to, the building a notice that warns people not to approach the building;*
- (c) give written notice requiring work to be carried out on the building, within a time stated in the notice (which must not be less than 10 days after the notice is given under section 125), to—*
 - (i) reduce or remove the danger; or*
 - (ii) prevent the building from remaining insanitary.*

Section 126 enables territorial authorities to carry out building work (to address dangerous, earthquake prone and insanitary issues) and recover the costs from the building owner. These mainly relate to immediate danger or if immediate action is necessary to fix insanitary conditions and the territorial authority must apply to the District Court ahead of taking action.

Section 131 requires all territorial authorities to adopt a policy on dangerous, earthquake-prone and insanitary buildings and outline the approach it will take and its priorities in performing those functions.

Section 164 outlines the mechanisms available around Notices to Fix. While these are normally in relation to unapproved building work, they are able to be issued in relation remedying the failure to comply with any aspect of the Building Act.

Part 3 of the Act sets out the responsibilities and powers of the chief executive of the Department of Building and Housing, territorial authorities, regional authorities, and building consent authorities.

Subpart 2 deals in particular with the responsibilities of territorial authorities. While this is mainly focused around building work, it allows inspections to ensure compliance with the Act.

10.3 The Health Act 1956

The Health Act has a range of requirements around dwellings as follows:

Section 39 deals with supply of water and sanitary conveniences and states:

It shall not be lawful for any person to erect or rebuild any building intended for use as a dwellinghouse, or for any person to sell, or let, or sublet, or permit to be occupied as a dwellinghouse, any building or part of a building, unless in every such case sufficient provision is made in accordance with the building code and the Building Act 2004 for the following matters, that is to say:

- (i) an adequate and convenient supply of water that is potable (as defined in section 69G), available for the inmates of the dwelling:*
- (ii) suitable appliances for the disposal of refuse water in a sanitary manner:*
- (iii) sufficient sanitary conveniences available for the inmates of the dwelling.*

Section 42 gives the power to local authorities to require repairs and issue closing orders:

This section shall apply in any case where the medical officer of health, or the engineer of any local authority, or any other officer of a local authority duly authorised in that behalf, gives to the local authority a certificate to the effect—

- (iv) that any dwellinghouse within that district is, by reason of its situation or insanitary condition, likely to cause injury to the health of any persons therein, or otherwise unfit for*
- (v) that any dwellinghouse within that district does not comply with any regulations made under section 120C.*

Section 120C relates to housing improvement and overcrowding and states:

Subject to the Building Act 2004, for the purpose of prescribing standards of fitness with which any dwellinghouse, whether erected before or after the commencement of this section, must comply, regulations made under this Act may make provision for or with respect to—

- (vi) the construction, condition, and situation of dwellinghouses, and the space about dwellinghouses:*
 - (vii) the drainage, sanitation, ventilation, lighting, and cleanliness of dwellinghouses and of the land on which dwellinghouses are situated:*
 - (viii) the repair of dwellinghouses:*
 - (ix) the provision in respect of dwellinghouses of a proper supply of potable water and hot water, of bathing, laundry, cooking, and food storage facilities, and of sanitary conveniences:*
 - (x) the protection of dwellinghouses from damp, excessive noise, and heat loss:*
 - (xi) the dimensions, cubical content, and height of rooms of dwellinghouses.*
- (2) Regulations may also be made under this Act for the purpose of preventing overcrowding in dwellinghouses.*
- (3) Without limiting the general power conferred by subsection (2), regulations may be made pursuant to that subsection for all or any of the following purposes:*

- (xii) prescribing the number of persons permitted to reside in dwellinghouses, having regard to the number of rooms, the amount of floor space, air space, or ventilation thereof, and the amenities provided:*
- (xiii) prescribing methods of calculating the number of persons, the number of rooms, and the amount of the floor space, air space, or ventilation thereof:*
- (xiv) prescribing offences in respect of the contravention of or non-compliance with any regulations made under that subsection, and the amounts of fines that may be imposed in respect of any such offences, which fines shall be an amount not exceeding \$500.*

10.4 The Housing Corporation Act 1974

Section 18 sets out the functions of the Corporation. These include:

- (i) providing rental housing, principally for those who need it most:*
- (ii) giving people (in particular people on low or modest incomes who wish to own their own homes) help and advice on matters relating to housing or services related to housing:*
- (iii) conducting research into, and monitoring trends in, housing and services related to housing:*
- (iv) advising the Minister of Housing on housing and services related to housing:*

10.5 The Housing Improvement Regulations 1947

These regulations are significant in that they refer to the quality of residential accommodation (setting minimum standards for occupied housing across New Zealand). These regulations are administered by Local Councils. Unfortunately, the regulations are dated, while they make provision for homes to be free of dampness and able to be ventilated they are silent on minimising heat loss.

Part 1 sets minimum standards of fitness for houses, with different sections detailing different standards:

Section 4 sets overall minimum standards of fitness for houses as follow:

- (a) an adequate room used, intended to be used, or capable of being used as a living room;*
- (b) a kitchen or kitchenette;*
- (c) a room used, intended to be used, or capable of being used as a bedroom;*
- (d) a bathroom;*
- (e) a water closet, or, if for any good reason that cannot be provided, some other form of privy, for the exclusive use of the occupants of the house; and*
- (f) if the house accommodates, is intended to accommodate, or is capable of accommodating more than 2 persons, adequate provision for washing clothes.*

(2) If 1 room having a floor area of not less than 9 sq m in the case of an existing house or 14 sq m in the case of a new house is used, intended to be used, or capable of being used as a kitchen and living room combined, it shall not be necessary for the house to have a separate living room and a separate kitchen.

(3) In any case where a house is being used to accommodate not more than 2 persons 1 room having an area of not less than 11 sq m if used by 1 person or not less than 14 sq m if used by 2 persons may be used as a bedroom and living room combined, but in that case there shall be a separate kitchen or kitchenette.

Sections 6 to 18 provide detailed standards. For example:

- Section 6 deals with heating and requires an approved form of heating in every living room.

- Section 7 deals with kitchens and sets minimum sizes and the requirement for connection to potable water and adequate means of preparing, cooking and storing food.
- Section 8 deals with bedrooms and their size.
- Section 9 deals with bathrooms – and requires them either to have a window or other means of ventilation as well as requiring “wholesome water” to supply a shower or bath.
- Sections 10 and 11 set requirements for “habitable rooms”, including windows for the admission of air.
- Section 12 sets requirements for stairways.
- Section 13 sets minimum requirements for lighting.
- Section 14 sets requirements for storm water drainage and ventilation.
- Section 15 specifically requires that houses be free of dampness, this responsibility is shared between the landlord and the tenant.

Part 2 deals with defining overcrowding of houses and preventing this.

Part 3 enables Councils to keep a register of houses.

11 Annex B: Rental home performance resources

The following pages are included to document the kinds of information that currently exists around rental home performance.

Included are the following

1. Beacon's collation of information drawn up as a resource for the Rate My Flat team in October 2014
2. Otago University/NZGBC WoF
3. An interpretation of council safe and sanitary responsibilities – what would a house look like.

11.1 Beacon's home performance advice for landlords and tenants v1

TENANTS - moisture is bad for you and your home. Wet houses are harder to heat and makes mould grow. So get moisture out of the house: see condensation? Do this:

In the Bathroom:

- Turn on the fan or open the window as soon as you turn on the shower/bath
- Keep steam in the bathroom – during and after – shut the door until it is dry again.
- In the Kitchen:
- Put a lid on it (i.e. your bubbling pots!)
- When cooking, use extractor fan or open the window and shut doors to other rooms.

In the Living room/bedroom:

- Don't EVER dry washing inside – all the moisture from your clothes ends up in the room
- Avoid unflued gas heaters. They release 1litre of moisture an hour and lots of nasty chemicals.
- Remove condensation from windows (towel or scoopy, <http://www.scoopy.co.nz/>). Then dry the towel outside!
- Open window and doors when the weather is good: air the house when it's dry and sunny just like your nana and granddad do!
- Shut the curtains at sundown to keep the heat in and open them in the morning to let light and sun back in.
- Stop drafts in doors and windows (temporary solutions door sausage or towel in gap)
- Heat your home as much as you can afford to stay comfortable.

LANDLORDS – things you can do to protect your investment. If a house is cold, damp and draughty tenants won't heat (it's not worth it and can't afford the bill). This encourages mould and damages your property, so ensuring your house is dry and 'worth' heating will help you and your tenants.

- Fix broken doors and windows – keep the house weather-tight
- Install a moisture barrier on the ground – stop 35+L of moisture/day entering the house.
- Install security stays on a window in each room so they can be left open safely to air the house.
- Install extractor fans to kitchen and bathroom at least 150mm diameter.
- Vent any clothes drier to the outside
- Provide a (covered) clothesline for your tenants so they can dry washing outside
- Install good draft stopping
- Provide thermally lined curtains (floor length with pelmets)
- Take up financial support for insulation (ceiling, underfloor and wall insulation are all great investments in a property): check EECA, your council, your bank.
- Remove all unflued gas heaters (cabinet type and wall mounted) they are sources of moisture
- Install an efficient heater

Sources of information: Beacon's retrofit research, Eco Design Advisors:

<http://www.ecodesignadvisor.org.nz/factsheets/>

<http://www.eeca.govt.nz/>

11.2 NZGBC and Otago University Medical School WoF, as per media release 15th May 2014.

Housing Warrant of Fitness Assessment Checklist

Assessor Details		Assessment Date:	
Assessor Name:		Assessor ID:	
Organisation:		Phone:	
Property Contact Information		Property Contact Information	
Tenant Name:		Owner Name:	
Property Address:		Contact Address:	
Property Phone:		Owner Phone:	
Email:			
Property Information			
House Age (approx. yr.):		Approximate Size	m ²
Storeys		Number of bedrooms:	
Type	<input type="checkbox"/> detached <input type="checkbox"/> duplex <input type="checkbox"/> terrace <input type="checkbox"/> apartment		

Kitchen & Laundry	
Wall and ceiling linings, and floor intact	
Surfaces clear of mould	
Functioning stove and oven	
Effective ventilation to the outside	
Adequate food preparation and storage	
Working artificial lighting	
Potable water supply	
Hot water temperature at tap (55°C \pm 5°C) °C	
Waste water drainage with sound connection	
Visibly safe power outlets and light switches	
Secure storage (1.2 m high or child-safe lock)	
Bathroom & Toilet	
Wall and ceiling linings, and floor intact	
Surfaces clear of mould	
Operational toilet	
Sewage connection functional	
Functioning bath or shower	
Effective ventilation to the outside	
Waste water drain connected	
Working artificial lighting	
Visibly safe power outlets and light switches	
Living Areas	
Wall and ceiling linings, and floor intact	
Surfaces clear of mould	
Working artificial lighting:	
Living, lounge, dining	
Hallway	
Stairs (switch at each end)	
Other	
Visibly safe power outlets and light switches	
Heating, fixed, effective and safe	
Opening window (each area) with secure latch	
Window security stays (where required)	
Curtains/drapes present	

Bedrooms	
Opening window in each with secure latch	
Window security stays (where required)	
Wall/ceilings linings intact	
Surfaces clear of mould	
Working artificial lighting in each	
Visibly safe power outlets and light switches	
Working smoke alarm within 3 m	
Curtains/drapes present	
Entrance	
Address clearly labelled and identifiable	
Securely locking door(s)	
Working light	
Ceiling	
Insulation to requirements (120 mm)	
No gaps, tucks, or folds	
No dampness in insulation	
Clearance from lights, ducts and roof	
Thermoplastic insulated cabling	
Under Floor	
Insulation to requirements <input type="checkbox"/> Foil <input type="checkbox"/> Bulk	
Dry underfloor	
Ground vapour barrier	
No ponding	
General	
Envelope in reasonable repair and weather tight	
No cracks, holes in roof	
No cracks, holes in external cladding	
No cracks, holes or missing panes in windows	
Spouting and stormwater functioning and not leaking	
Two effective methods of egress	
Structurally sound	
Glass doors include visibility strips	
Handrails and balustrades to code	
Non-potable water labelled	
Paths, decks and surfaces non-slippery/free from moss	

Comments	Fail	Pass
Signed:	Date:	

11.3 Working model: Criteria based on Building and Health Acts

Red indicates wording in Health or Building Acts, bold indicates critical criteria from Beacon perspective

Reasonable **state of repair and cleanliness** (dwelling and surrounding land):

- **Structural soundness (buildings, fences, retaining walls)**
- **State of cleanliness (free of household or garden rubbish)**
- **Safe uninterrupted supply of electricity**
- Structures maintained (painted, rust free, moss or mould free)
- No leaking taps, pipes or surface flooding

Sanitation (**water supply and sanitary facilities**):

- **Supply of potable water**
- **Operational toilet and toilet door**
- **Operational bathing facilities**
- **Efficient hot water heating provided (at least first meter of pipes lagged)**
- **Functioning waste water and stormwater drainage**
- Laundry facilities (if provided)

Moisture management (**defence against moisture causing dampness**):

- **Weather tight roof, walls, doors, windows, gutters and spouting/downpipes**
- **At least one opening window in each living and bedroom**
- **Bathroom and kitchen vented outside (mechanical / opening window)**
- **Ground layer moisture barrier (if possible)**
- **Unblocked sub-floor ventilation (if in place)**
- **Clothes dryer vented outside (if present / provided)**
- External clothesline (if available space)

Warmth and comfort (**injurious to health**):

- **Insulation thickness in ceiling, under floor (and walls where possible) – according to building code climate zones.**
- **Draft protection around windows and doors**
- **Thermal curtains or blinds (if provided)**
- **Safe and efficient dry source of space heating (no unflued gas heaters, fires with guards) (if provided)**
- Heating appliance able to heat living spaces to 18 degrees and bedrooms to 15 degrees (minimum)
- Noise and light pollution minimised where possible (between dwellings or from busy streets)

Safety and security (**injurious to health**):

- **At least one light in each room and above steps or stairways**
- **Safely functioning power supply (no damaged switches or sockets with wires hidden)**
- **Operational cook top and oven**

- **Ceiling mounted smoke detectors within 3 meters of every bedroom door (with working batteries or main power supply)**
- **Securely locking doors and windows (ideally safety latches on ground floor)**
- Automatic external security lighting
- Slip-proof steps, ramps or pathways
- Securely laid carpet or floor linings
- Hot water and header tanks secured (against quakes)
- Fire extinguishers provided in the kitchen

Storage facilities (**injurious to health**):

- **Secure, child safe storage of household cleaners and chemicals**
- Efficient food storage - fridge, freezer (if provided)
- Sufficient space / receptacles for rubbish, recycling and organics
- Secure vehicle and cycle storage area

Overcrowding (**injurious to health**):

Area of bedroom Number of persons

- | | |
|---|---|
| ■ Under 4.5 sq m | = Nil |
| ■ 4.5 sq m or more but less than 6 sq m | = ½ in existing building; nil in new building |
| ■ 6 sq m or more but less than 8 sq m | = 1 |
| ■ 8 sq m or more but less than 10 sq m | = 1½ |
| ■ 10 sq m or more but less than 12 sq m | = 2 |
| ■ 12 sq m or more but less than 14 sq m | = 2½ |
| ■ 14 sq m or more but less than 17 sq m | = 3 |
| ■ 17 sq m or more but less than 20 sq m | = 3½ |
| ■ 20 sq m or more
additional complete 5 sq m | = 4 persons and 1 additional person for each |

12 References

- 3 News (2014). Chch Council gets \$15M social housing boost. Viewed 24 June 2014 at: www.3news.co.nz/Chch-Council-gets-15M-social-housing-boost/tabid/423/article
- ACC (2014a). Frequently requested facts and stats. Viewed on 26/6/14 at: www.acc.co.nz/about-acc/statistics/AB00053
- ACC (2014b). 2013/14 second quarterly report. 31 December 2013. Retrieved from: http://www.acc.co.nz/PRD_EXT_CSMP/groups/external_communications/documents/reports_results/wpc133763.pdf
- Amore, K., Viggers, H., Baker, M and Howden-Chapman, P. (2013). *Severe Housing Deprivation: The problem and its measurement*, Official Statistics Research Series, Statistics New Zealand
- Barton (2013). A Warm and Dry place to live: energy efficiency and rental accommodation. *The Canterbury Law Review*, 19: 1-25. Editor: W John Hopkins.
- Beacon Pathway Ltd. (2010). *The Determinants of Tenure and Location Choices of 20-40 year old Households in the Auckland Region*. A report for the Centre for Housing Research Aotearoa New Zealand (CHRANZ).
- Bennett, J., Chisholm, E., Hansen, R. and Howden-Chapman, P. (2014). *Results from a Rental Housing Warrant of Fitness Pre-Test*. University of Otago, Wellington.
- Buckett, N., Jones, M. and Marston, N.J. (2012). *BRANZ 2010 House Condition Survey – Condition Comparison by Tenure*. Wellington: BRANZ Study Report SR264
- Building Act 2004, New Zealand Government, Wellington, New Zealand
- Burgess, J.C. (Ed), Buckett, N.R., Camilleri, M.J.T., French, L.J., Pollard, A.R. & Hancock, P.J. (2009). *Final Monitoring Report from the Papakowhai Renovation project*. Report TE106/15 for Beacon Pathway Ltd.
- Butler, S., Williams, M., Tukuitonga, C., & Paterson, J. (2003). *Problems with damp and cold housing among Pacific families in New Zealand*.
- Cadman, A. (2014). *Unravelling housing: a report on a study tour supported by the Winston Churchill Memorial Trust*. (Accessed via: <http://dwell.org.nz/index.php/news-publications-3/news-blog/99-september-2014>)
- Canterbury District Health Board: Public Health Information Team, Community and Public Health (CDHB) (2012). *Housing, home heating and air quality: A public health perspective*. A briefing paper for the Canterbury District Health Board
- Case, A., Fertig, A., & Paxson, C. (2005). The lasting impact of childhood health and circumstance. *Journal of health economics*, 24(2), 365-389.
- Children’s Commissioner’s Expert Advisory Group on Solutions to Child Poverty (2012). *Solutions to Child Poverty in New Zealand: Evidence for Action*, 72pp.
- Collins, S (2013, May 23). Rent aid new tenants only. *The New Zealand Herald*. Retrieved from http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10885536

- Colman, A. (2008). *Inflation and the Measurement of Saving and Housing affordability*. Motu working paper 08-09. Retrieved from:
http://www.motu.org.nz/publications/detail/inflation_and_the_measurement_of_saving_and_housing_affordability
- Community Housing Regulatory Authority CHRA (2014a). CHRA Home. Viewed on 12/6/2014
<http://www.shu.govt.nz/chra-home/>
- Community Housing Regulatory Authority CHRA (2014b). About CHRA. Viewed on 12/6/2014
<http://www.shu.govt.nz/chra-home/about-chra/>
- Community Housing Regulatory Authority (CHAR). (2014c). Registration. Viewed on 12/6/2014
<http://www.shu.govt.nz/chra-home/ra-information-sheets/>
- Community Housing Regulatory Authority (CHRA) (2014d). CHRA Register. Viewed at 12/6/2014
<http://www.shu.govt.nz/chra-home/chra-register/>
- Crawford, V. L. S., McCann, M., & Stout, R. W. (2003). Changes in seasonal deaths from myocardial infarction. *Quarterly Journal of Medicine (qjm)*, 96(1), 45-52.
- CRESA/Public Policy & Research (2007). *Local Government and Affordable Housing*. Report prepared for the Centre for Housing Research, Aotearoa, New Zealand (CHRANZ).
- Currie, J. (2008). *Healthy, wealthy, and wise: Socioeconomic status, poor health in childhood, and human capital development*. Working Paper 13987 <http://www.nber.org/papers/w13987>
- Demographia (2014). *10th Annual Demographia International Housing Affordability Survey: 2014 Ratings for Metropolitan Markets*. Australia, Canada, Hong Kong, Ireland, Japan, New Zealand, Singapore, United Kingdom, United States. Retrieved from:
<http://www.demographia.com/dhi.pdf>
- Department of Building and Housing (DBH). (2010). *New Zealand Housing report 2009/2010: Structure, Pressures and Issues*. Retrieved from:
<http://www.dbh.govt.nz/UserFiles/File/Publications/Sector/pdf/2009-2010-nz-housing-report.pdf>.
- Department of Building and Housing (DBH). (2011). *Briefing for the Minister of Housing*. Retrieved from:
<http://www.dbh.govt.nz/UserFiles/File/Publications/Sector/briefing-incoming-minister/bim-housing-2011.pdf>
- Department of the Prime Minister and Cabinet (DPMC) (2008). *Final report of the House Prices Unit: House Price Increases and Housing in New Zealand*. 93pp. Retrieved from:
<http://www.dPMC.govt.nz/dPMC/publications>
- Easton, L. (2009). *Papakowhai Renovations: Project Summary and Case Studies*. Report TE106/18 for Beacon Pathway Ltd/
- Electricity Authority (2014). *Disconnections for non-payment*. Retrieved from:
<http://www.emi.ea.govt.nz/Datasets/Browse?directory=/Disconnections&parentDirectory=/Datasets/Retail>
- Electricity Commission (2008). *Market Design Review: Options Paper*. Wellington, New Zealand. Retrieved from: <http://www.ea.govt.nz/dmsdocument/445>

- Fawcett, T, Killip G and Janda, KB (2014). *Innovative practices in low carbon retrofit: time scale and business models*. BEHAVE 2014 (Behaviour and Energy Efficiency Conference).
- French, L.J., Camilleri, M.J., Isaacs, N.P. and Pollard, A.R. (2007) Temperatures and heating energy in New Zealand houses from a nationally representative study – HEEP. *Energy and Buildings*. Volume 39, Issue 7, July 2007, Pages 770-782.
- Frijters, P., Shields, M., Hatton, T., Martin, R. (2007). *Childhood Economic Conditions and Length of Life: Evidence from the Uk Boyd Orr Cohort, 1937-2005*. IZA Discussion papers 3042, Institute for the Study of Labor (IZA).
- Gartner, L. (2013) *Rental Survey 2013. A study of increasing rents and housing conditions in the Christchurch Area*. Prepared for the Tenants Protection Association (Christchurch) Inc. June 2013
- Green, G., and J. Gilbertson. (2008). *Warm front, better health: health impact evaluation of the warm front scheme*. Centre for Regional Economic and Social Research
- Grimes, A., Denne, T., Howden-Chapman, P., Arnold, R., Telfar-Barnard, L., Preval, N. and Young, C. (2012). *Cost Benefit Analysis of the Warm Up New Zealand: Heat Smart Programme*. Report for Ministry of Economic Development.
- Hale, M., & Sharpe, N. (2011). Persistent rheumatic fever in New Zealand: a shameful indicator of child health. *Journal of the New Zealand Medical*.
- Hales, S., Blakely, T., Foster, R. H., Baker, M. G., & Howden-Chapman, P. (2012). Seasonal patterns of mortality in relation to social factors. *Journal of epidemiology and community health*, 66(4), 379-384.
- Health Act 1956, New Zealand Government, Wellington, New Zealand
- Housing Corporation Act 1974, New Zealand Government. Wellington, New Zealand.
- Housing Improvement Regulations 1947, New Zealand Government. Wellington, New Zealand
- Housing New Zealand Corporation (HNZ). (2011). *Briefing for the Minister of Housing*. <http://www.HNZ.co.nz/our-publications/briefing-to-the-incoming-minister>
- Housing New Zealand Corporation (HNZ). (2013a). *Rheumatic Fever*. Viewed 12 June 2014 at <http://www.HNZ.co.nz/news/september-2013/rheumatic-fever-sas/?searchterm=rheumatic>
- Housing New Zealand Corporation (HNZ). (2013b). *Briefing for the Incoming Minister of Housing*. <http://www.HNZ.co.nz/our-publications/briefing-to-the-incoming-minister>, 39pp
- Housing Shareholders Advisory Group (HSAG) (2010). *Home and Housed: A vision for Social Housing in New Zealand*. Report for Minister of Finance and Minister of Housing. April 2010.
- Howden-Chapman, P., Matheson, A., Crane, J., Viggers, H., Cunningham, M., Blakely, T., Cunningham, C., Woodward, A., Saville-Smith, K., O’Dea, D., Kennedy, M., Baker, M., Waipara, N., Chapman, R. and Davie, G. (2007). Effect of insulating existing houses on health inequality: cluster randomised study in the community. *British Medical Journal*, 334, 460–464.

- Howden-Chapman, P., Pierse, N., Nicholls, S., Gillespie-Bennett, J. Viggers, H., Cunningham, M., Phipps, R., Boulic, M., Fjällström, P., Free, S., Chapman, R., Lloyd, B., Wickens, K., Shields, D., Baker, M., Cunningham, C., Woodward, A., Bullen, C. and Crane, J. (2008) Effects of improved home heating on asthma in community dwelling children: randomised controlled trial. *British Medical Journal* 2008;337:a1411
- Howieson and Hogan (2005). Multiple deprivation and excess winter deaths in Scotland. *Perspectives in Public Health*, 125, 18-22
- Isaacs, N and Donn, M. (1993). Health and housing – Seasonality in New Zealand mortality. *Australian Journal of Public Health*, 17(1), 68-70
- Keall, M.D., Baker, M., Howden-Chapman, P. and Cunningham, M. (2008) Association between the number of home injury hazards and home injury. *Accident Analysis & Prevention*, 50(3), 887-893.
- Keall, M., (2009). *Home Intervention Prevention Intervention (HIPI)*. Viewed on 26 June 2014 at: <http://www.healthyhousing.org.nz/research/current-research/home-injury-prevention-intervention-hipi/>
- Kendrick, D., Young, B., Mason-Jones, A.J., Ilyas, N., Achana, F.A., Cooper, N.J., Hubbard, S.J., Sutton, A.J., Smith, S., Wynn, P., Mulvaney, C., Watson, M.C. and Coupland, C. (2012). Home safety education and provision of safety equipment for injury prevention. *Cochrane Database of Systematic Reviews*, 2012, Issue 9. Art. No.:CD005014.
- Liddell, Christine, and Chris Morris. Fuel poverty and human health: a review of recent evidence. *Energy policy*, 38(6) (2010): 2987-2997.
- Lloyd, B. (2006). Fuel poverty in New Zealand. *Social Policy Journal of New Zealand*, 27:142.
- Lloyd, B. (2008). *Fuel Poverty in New Zealand*. NZ Home Energy Web. Viewed 10 June 2014: <http://www.physics.otago.ac.nz/eman/hew/econtacts/articlefuelpoverty.html>
- Marmont Review Team. (2011). *The Health Impacts of Cold Homes and Fuel Poverty*. Friends of the Earth. London.
- Ministry of Business, Innovation and Employment (2012). *2003-2012 Occupation Data* Prepared for Careers New Zealand. Retrieved from <http://www.careers.govt.nz/jobs/property-services/property-manager/>.
- Ministry of Business, Innovation and Employment (MBIE) (2013). *Housing Pressures in Christchurch: A summary of the Evidence*. Wellington: MBIE.
- Ministry of Health (2014). Rheumatic Fever. Viewed on 12 June 2014 at: <http://www.health.govt.nz/our-work/diseases-and-conditions/rheumatic-fever>
- Ministry of Social Development and Energy Efficiency and Conservation Authority (MSD and EECA). (2010). *Household Energy Affordability: A Literature Review*. Wellington, New Zealand. Retrieved from: <http://www.eeca.govt.nz/sites/all/files/household-energy-affordability-review-05-10.pdf>

- NZIER (2014). *The home affordability challenge: suite of policy reforms needed in New Zealand*. NZIER public discussion paper: working paper 2014/4, July 2014. Retrieved from: <http://nzier.org.nz/publication/the-home-affordability-challenge-nzier-working-paper-20144>
- Productivity Commission (2012). *Housing Affordability Inquiry*.
- Residential Tenancies Act 1986. New Zealand Government. Wellington, New Zealand).
- Rogers, L (2013). *Paper Walls: The Law that is meant to keep rental housing healthy*. A report for the Social Justice Unit of the Anglican Diocese of Christchurch
- Salvation Army (2007). *Rebuilding the Kiwi dream*. Auckland: Salvation Army Social Policy and Parliamentary Unit, 2007.
- Saville-Smith, K. and Fraser, R. (2004). *National Landlords Survey - Preliminary Analysis of Data*. Wellington: CRESA
- Saville-Smith, K. (2008). *House Owners and Energy – Retrofit, Renovation and Getting House Performance*. Report EN-6570 for Beacon Pathway Limited.
- Saville-Smith, K. (2009). *HomeSmart Renovations: Early Data from the Homeowner Interviews*. Report HR2420/9 for Beacon Pathway Limited.
- Saville-Smith, K., Fraser, R., Buckett, N. and Camilleri, M. (2010) *HomeSmart Renovations: Householder Actions and Responses to Dwelling Performance*. Report HR2420/13 for Beacon Pathway Limited.
- Smith, N. (2014). *Housing WOF trial gets underway*. Frequently asked questions retrieved from: <http://www.beehive.govt.nz/release/housing-wof-trial-gets-underway>
- Social Housing Unit. (2011). *Terms of Reference for the Social Housing Unit*. <http://www.socialhousingunit.govt.nz/the-shu-box/about/terms-of-reference#newshdirections>
- STARS. (2014). *The Scheme*. Viewed June 2014 <http://www.housingstars.co.nz/the-scheme>
- Statistics New Zealand (SNZ) (2008). *Housing Indicators - Ownership of dwellings tables*. Retrieved from: http://www.stats.govt.nz/browse_for_stats/people_and_communities/housing/housing-indicators.aspx
- Statistics New Zealand (SNZ). (2013a) *Perceptions of housing quality in 2010/2011: Exploratory Findings from the New Zealand General Social Survey*. Wellington: SNZ
- Statistics New Zealand (SNZ) (2013b). Census Regional Summary Tables: Part 1
- Thomson H, Thomas S, Sellstrom E, Petticrew M. (2013) Housing improvements for health and associated socio-economic outcomes. *Cochrane Database of Systematic Reviews*, 2013, Issue 2. Art. No.: CD008657. DOI: 10.1002/14651858.CD008657.pub
- Trotman, R. (2009). *Papakowhai Renovations: Householder Experiences and Perceptions*. Report TE106/17 for Beacon Pathway Ltd.
- Turner, S., Arthur, G., Lyons R.A., Weightman, A.L., Mann, M.K., Jones, S.J., John, A. and Lannon, S. (2011). Modification of the home environment for the reduction of injuries. *Cochrane Database of Systematic Reviews*, 2011, Issue 2. No.: CD003600.

World Health Organisation (WHO) (2007). *Housing, Energy and Thermal Comfort*. World Health Organisation, Copenhagen.

World Health Organisation (WHO). (2012). *Adverse health effects of exposure to cold*. Visited on 26/6/2014: <http://www.euro.who.int/en/health-topics/environment-and-health/Climate-change/news/news/2013/02/how-cold-weather-affects-health/adverse-health-effects-of-exposure-to-cold>