



Housing affordability inquiry

March 2012

The Productivity Commission aims to provide insightful, well-informed and accessible advice that leads to the best possible improvement in the wellbeing of New Zealanders.

Housing Affordability

March 2012

The New Zealand Productivity Commission

The Commission – an independent Crown Entity – completes in-depth inquiry reports on topics selected by the Government, carries out productivity related research, and promotes understanding of productivity issues. The Commission’s work is guided by the *New Zealand Productivity Commission Act 2010*.

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Foreword

There are few things more important to New Zealanders than the homes we live in. Housing is a fundamental determinant of wellbeing, central to health, family stability, and social cohesion. Affordable, quality housing is also important for the New Zealand economy – it is a big and complex sector.

For most New Zealanders, buying a house is their single biggest purchase, and the cost of owning or renting a home takes a large share of household income. If housing is more expensive than it needs to be, then the cost to individuals and families, and the New Zealand economy overall, is significant. Volatility in house prices also has wide-ranging impacts. Finding ways of making the housing market work better for all is therefore critically important. I cannot think of a better first inquiry topic for the Commission.

This inquiry follows a house price boom in New Zealand (and many other countries) over the early 2000s, leading to widespread concern that housing has become unaffordable, particularly for low income earners and those trying to get into their first home.

While the recent house price cycle was significant, home ownership in New Zealand has been declining for many years. At the same time, low income households have been facing serious affordability issues in the housing rental market. This suggests that something more structural has happened in the New Zealand housing market and that there are many dimensions to the affordability problem. Seen in that light, our inquiry has investigated the underlying factors that contribute to the high cost of housing in New Zealand and poor access to appropriate housing for those on lower incomes.

The inquiry has found many obstacles getting in the way of affordable housing. A number of factors are small though cumulatively important. Other factors are more significant, such as land supply restrictions, the problems with achieving scale in new house construction and inefficiencies, costs and delays in regulatory processes. The inquiry has also identified that the current approach to social housing in New Zealand will not provide sufficient support for many New Zealanders in need.

Having identified the underlying problems, we have set out a number of ways to improve housing affordability. There are, unfortunately, no quick fixes. Rather, a coherent and determined push across multiple policy areas is required in order to meaningfully improve housing affordability. We have also identified excessive costs and impediments in almost every aspect of government's interaction in the housing sector. This report poses a challenge for central and local government agencies to address the issues we have identified.

In forming its views, the Commission has met with a large number of people, which has been invaluable. Across our issues paper and draft report, we also received a large number of submissions helping us to understand key issues and concerns and ways to potentially address them. We are very grateful for the high level of interest and involvement. In addition, we have also undertaken extensive research and analysis ourselves to help inform our recommendations.

Preparation of the report was overseen by all of our Commissioners, Professor Sally Davenport, Dr Graham Scott and myself. We would particularly like to acknowledge the work and commitment of the inquiry team – Steven Bailey (Inquiry Director), Judy Kavanagh, Terry Genet and Paul Miller – and a number of other Commission staff and external providers that made important contributions to the work.



MURRAY SHERWIN

Chair

March 2012

Terms of reference

The Government has asked the Productivity Commission to undertake an inquiry into housing affordability.

New Zealand Productivity Commission Inquiry into Housing Affordability

Issued by the Minister of Finance, the Minister for the Environment, the Minister of Housing, the Minister for Building and Construction, and the Minister for Regulatory Reform ('the referring Ministers').

Pursuant to sections 9 and 11 of the New Zealand Productivity Commission Act 2010, we hereby request that the New Zealand Productivity Commission ('the Commission') undertake an inquiry into housing affordability.

Context

Stability of the home environment is widely considered to be important for social cohesion and family stability. Real house prices in New Zealand are markedly higher than they were a decade ago. The rise in real house prices has been associated with general declines in housing affordability, as indicated by a number of different measures, and in the rate of home ownership. These declines have contributed to increased demand for rental accommodation and additional pressure on the social housing sector. The debt accumulation and wealth effects associated with the rise in house prices may have also exacerbated New Zealand's last economic cycle. Interest rates and exchange rates were arguably higher than they otherwise would have been during the upturn and there has been greater contraction in demand during the recession. Debt accumulation may also be a factor in ongoing economic risks.

Scope

Having regard to the context outlined above, the Commission is requested to undertake an inquiry to evaluate the factors influencing the affordability of housing (both rental and owner-occupied housing), and to examine potential opportunities to increase housing affordability. For the purposes of this evaluation the Commission should:

- Identify and analyse all components of the cost and price of housing.
- Identify mechanisms to improve the affordability of housing, with respect to both the demand and supply of housing and associated infrastructure.
- Identify any significant impediments to home ownership, and assess the feasibility and implications of reducing or removing such impediments.

Particular attention should be given, without limitation, to the following matters:

- a) factors influencing the supply of land and basic infrastructure for residential construction;
- b) factors influencing the cost of residential construction, including the effect of standards, specifications, approval and title requirements on the cost of new housing construction;
- c) the level and growth of productivity in the land development and residential construction industries, and the effect of government regulations on productivity in these industries;
- d) the efficiency of taxes, levies and charges imposed at all stages of the housing supply chain;
- e) the efficiency of the tax treatment of owner-occupied and rental housing;
- f) the influence of changing consumer housing preferences, willingness to pay, and financing costs on housing affordability; and

- g) the operation of the overall housing market, with specific reference to the availability of a range of public and private housing types, the demand for housing, and the efficiency of use of the existing residential housing stock.

Consultation Requirements

In undertaking this review, the Commission should consult with key interest groups and affected parties.

Timeframe

The Commission must publish a draft report and/or discussion paper(s) on the inquiry for public comment, followed by a final report, which must be submitted to each of the referring Ministers by 1 February 2012.

BILL ENGLISH, MINISTER OF FINANCE
NICK SMITH, MINISTER FOR THE ENVIRONMENT
PHIL HEATLEY, MINISTER OF HOUSING
MAURICE WILLIAMSON, MINISTER FOR BUILDING AND CONSTRUCTION
RODNEY HIDE, MINISTER FOR REGULATORY REFORM

30 MARCH 2011

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Overview

Why is this inquiry important?

The Government has asked the Commission to evaluate the factors influencing the affordability of housing in New Zealand (both rental and owner-occupied) and to examine potential opportunities to increase affordability.

The context of this inquiry is the recognition that stability of the home environment is important for social cohesion and family stability. There is a concern that real (inflation-adjusted) house prices in New Zealand are markedly higher than they were a decade ago and that this has been associated with general declines in housing affordability and home ownership rates. These declines have contributed to increased demand for rental accommodation and additional pressure on the social housing sector.

The aim of this report is to suggest policy improvements that could enhance the performance of the housing market and the effectiveness with which it meets the needs of New Zealanders. This would be important at any time, but is particularly so in the aftermath of a house price boom between 2001 and 2007 that was unprecedented in recent history and one of the longest and steepest since data began (Figure 0.1). Real house prices almost doubled over this period, which equates to an average increase of 12% per year. The boom has started to unwind but house prices remain above long-term levels.

Figure 0.1 House prices, real and nominal



Source: Quotable Value and Statistics New Zealand

Notes:

1. Real house prices are measured as the ratio of actual house prices to the CPI.

Although unprecedented in history, New Zealand's recent house price boom occurred more or less at the same time as rapid house price expansions in a majority of OECD countries. Indeed, co-movements in real house prices have been unusually strong internationally over the 2000s, suggesting a significant role for global factors in propagating this period of real house appreciation (Box 1).

Box 1 What drove the surge in New Zealand house prices in the 2000s?

The sharp rise in house prices in New Zealand during the 2000s reflected a number of cumulative demand-side factors against a degree of stickiness in housing supply. Internationally, a range of influences came together to encourage a strong increase in credit growth, much of which increased effective demand for housing in a number of OECD countries:

- In conjunction with loose monetary policy in the United States, high savings from some Asian and

oil exporting countries worked to lower interest rates in global credit markets.

- A move from an 'originate' strategy to 'distribute' strategy (securitisation) reduced the quality of the loan books in the United States without a commensurate increase in capital requirements for relatively risky loans.
- A progressive relaxation of credit standards in originating banks also led to a reduction in the quality of banks' mortgage portfolios.

Although these global factors increased credit availability in New Zealand, the impact on the mortgage market was less pronounced than in the United States. In particular, securitisation was nowhere near as prevalent as in the United States and there was not the same disassociation between lenders and borrowers. Intermediation continued to be the dominant model in New Zealand, implying little incentive for banks to expand loan volumes without paying adequate regard to risk.

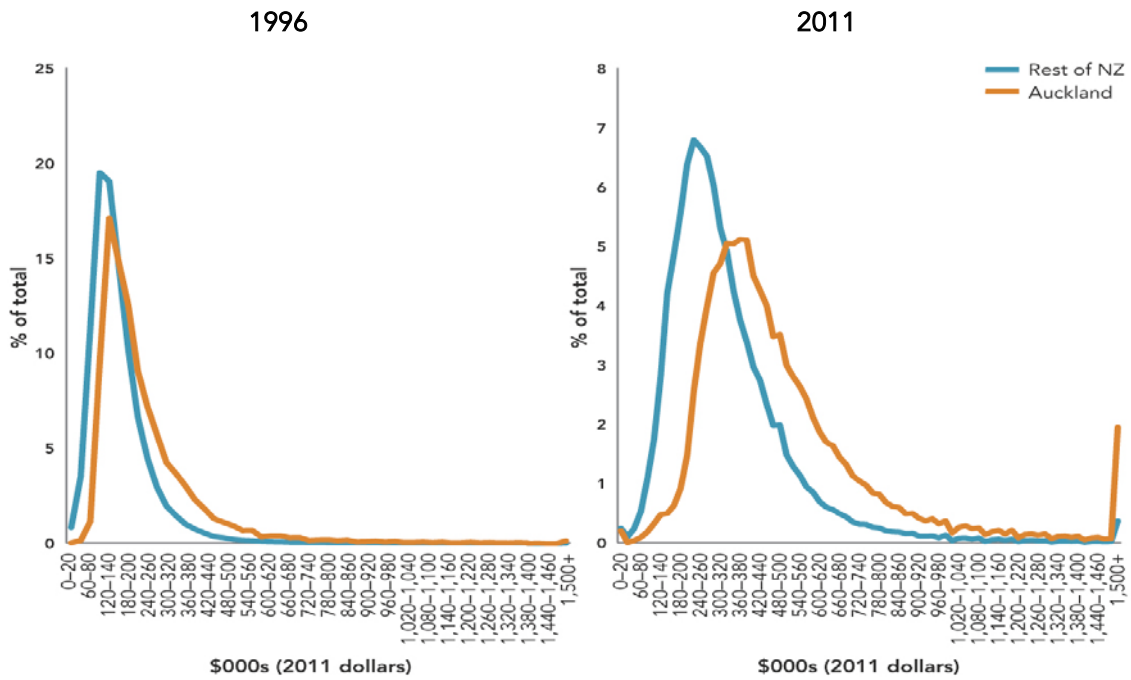
On top of these global developments, a number of New Zealand-specific factors also worked to increase housing demand:

- Strong natural population growth over the last 30 years.
- Net migration flows turned from losses of around 10 000 people per year in 1999-2001 to strongly positive, peaking at over 40 000 people in 2003.
- Partly reflecting a higher terms of trade, real GDP per capita increased by around 14% between December 2000 and June 2007. Rising household incomes increased effective demand for house ownership and for 'trading-up' to a larger, higher quality or better-located house.
- Interest rates were relatively low in 2002 and 2003 when the OCR ranged around 5%.¹ This partly reflected subdued inflationary pressure due in part to the falling price of a wide variety of imported goods as low-cost Asian manufacturing increased in scale and scope (Bollard and Smith, 2005). Lower interest rates also saw an adjustment in loan servicing capacity occur.
- The New Zealand exchange rate was relatively low up to 2003 but began to increase thereafter as interest rates increased. A lower exchange rate may have increased the attractiveness of New Zealand residential property to overseas buyers.
- As a result of house price inflation and financial market innovation, households felt wealthier and found it easier to 'borrow on the house' in the form of increased withdrawal of housing equity (Figure 2.5). The released funds were used for housing purposes (upgrading existing homes, 'trading up' to better ones and purchasing investment properties) that further fuelled the housing boom and also for spending on consumer goods and services.

The house price boom was more widely dispersed across the country than previous house price expansions. However, there were important exceptions to this trend – in the Queenstown Lakes District and metropolitan areas in Auckland and Wellington, houses were among the most expensive in the country in the early 2000s, but these regions still experienced strong real house price appreciations over the boom. In Auckland – home to around one third of New Zealand's population and 31% and 41% of its housing stock by number and value respectively – this continued a well-established trend of strong real house price increases relative to the rest of the country. As a consequence, the distribution of house prices in Auckland is now markedly different to that in the rest of New Zealand, particularly at the lower end of the Auckland housing market. For example, between 1995 and 2011, the gap between lower-quartile house prices in Auckland vis-à-vis the rest of the country increased by over 260% in real terms. The analogous figures for median and upper-quartile house prices are 230% and 150% respectively (Figure 0.2).

¹ The OCR troughed at 4.75% at the beginning of 2002, but rates were under 6.00% from May 2001 to July 2004.

Figure 0.2 Distribution of house prices in Auckland and the rest of New Zealand



Source: Productivity Commission calculation based on QV data

Notes:

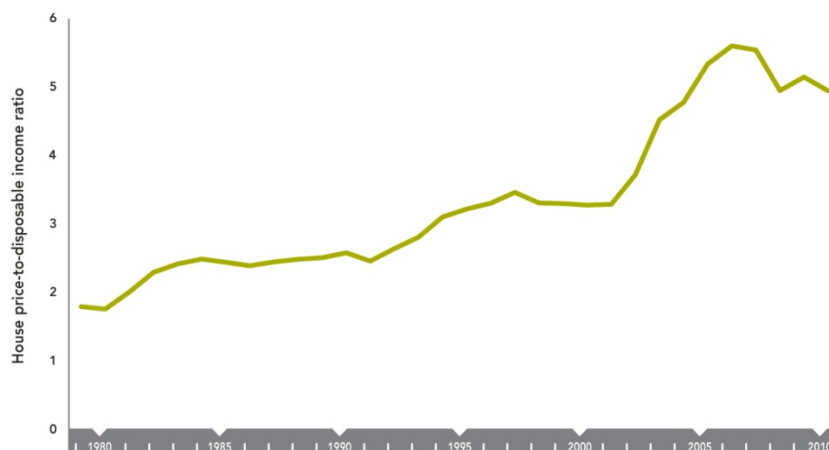
1. House price distributions are shown in constant (2011) dollars (deflated by the CPI).

What has happened to housing affordability?

House buyers

Ten years after the surge in house prices began, national measures of house price-to-disposable income ratios remain elevated and would require sharp falls in house prices to return to long-term averages (Figure 0.3). Affordability measures that include financing costs are currently closer to longer-term averages, owing to interest rates that are low compared with earlier times (Figure 0.4). This is often over-looked.

Figure 0.3 House price to disposable income ratio



Source: Productivity Commission calculations using Reserve Bank of New Zealand data.

Figure 0.4 Massey home affordability index

Source: Massey University Real Estate Analysis Unit.

Notes:

1. A low index indicates improved affordability.

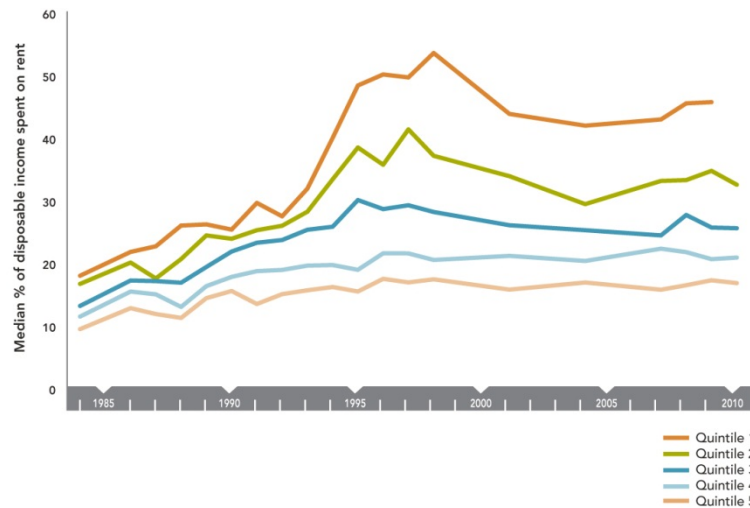
These aggregate measures do not necessarily indicate what is happening to affordability for different types of households. Disaggregated measures indicate that:

- Affordability pressures are particularly evident in Auckland, reflecting that city's higher house prices.
- Housing affordability is lowest among those who are younger, single, have lower income and wealth, or belong to an ethnic group other than New Zealand European.
- During the last house price boom, housing affordability became a constraint for some middle-income groups, whereas it had previously mainly been an issue for those on lower incomes. It is not yet clear if this is a cyclical phenomenon or a structural trend.

Renters

During the house price boom, rents increased at around the same rate as generalised inflation. Across territorial authorities, rents grew in a relatively tight range of 2.3% per year (in Dunedin City) to 8.2% per year (in Buller District). In all cases, rent increases were significantly less than real house price inflation and the ratio of house prices to rents increased markedly, a departure from the long-term broadly stable relationship.

This apparently benign aggregate situation disguises a more difficult position for renters on lower incomes. In particular, people in the lowest two income quintiles spend a much higher proportion of their income on rent than people on higher incomes (Figure 0.5). Even though the situation appears to have improved since the late 1990s, those in the two lower income quintiles still spend, on average, more than 30% of their disposable income on rent, after allowing for government assistance.

Figure 0.5 Median rent-to-household disposable income by disposable income quintile

Source: Productivity Commission and Treasury calculations using Statistics New Zealand Household Economic Survey (HES) data.

Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.
2. Income quintiles are based on the entire HES sample.
3. The 2010 quintile 1 figure is excluded because there is some uncertainty about its reliability (Perry, 2011).

When house prices increase, households that have to spend a large proportion of their income on rents will find it hard to save for a deposit for a house. Between 2001 and 2006, as rising house prices pushed the affordability constraint further up the income distribution, the number of 'intermediate renters' – households with at least one person in employment who cannot afford to buy a dwelling at the lower quartile price assuming standard bank lending criteria – increased by over 150% to 187,400 households or 58% of all private renters. Driven in part by declining interest rates, the share of intermediate renters is estimated to have declined since 2006. One in three renters – and a large proportion of intermediate renters – lives in Auckland.

What are the key features of the housing landscape?

Many features of the housing landscape influence housing affordability, which implies that opportunities for improving housing outcomes are likely to be found in many places. A number of factors are small though cumulatively important, other factors are more significant. As a backdrop to the Commission's suggestions for improving housing affordability, the report outlines key features of the landscape that influence the demand for housing, the supply of housing and the institutional framework within which it operates.

Housing is a house/land package

Housing is a house/land package, as land has to be developed and serviced with infrastructure before it is usable for housing. This inquiry therefore examines the determinants of the cost of land, of the infrastructure needed to service that land, of building materials, and of the costs of assembling those materials to build a house.

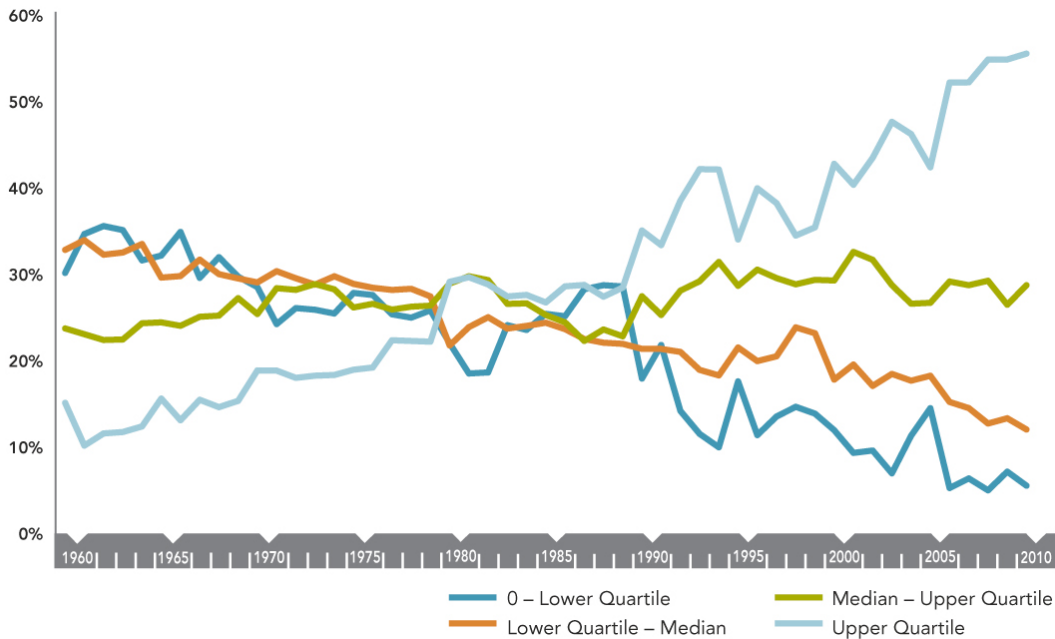
Section prices have grown more quickly than house prices over the last 20 years, indicating that appreciating land prices have been a key driver of house price inflation in New Zealand. This suggests a shortage of residential land in places where people want to live. Land price pressures have been particularly acute in Auckland, where section prices now account for around 60% of the cost of a new dwelling, compared with 40% in the rest of New Zealand.

Although much of New Zealand's land area is unsuitable for residential development, the country's low population density is such that the potential supply of raw land is relatively abundant. While pressure on land prices in the biggest and fastest growing centres is expected, the movements in recent years seem excessive. This implies that policy and planning practices may be constraining the supply of residential land. For example, strong land price pressures in Auckland raise questions about the impact of policies aimed at

increasing density – such as the Metropolitan Urban Limit (MUL) and other planning restrictions – on housing affordability. A major challenge ahead is to improve land release and planning approval processes so that affordability considerations are integrated fully into spatial planning.

A distinctive feature of residential investment in New Zealand, which may be linked to rising land prices, is that new supply has tended to come in the form of large and relatively expensive houses or, to a lesser extent, apartments that are targeted at the top end of the market (Figure 0.6). As such, the majority of new dwellings are currently not targeted at the affordable end of the market, adding to the difficulties faced by intermediate renters seeking to buy a ‘starter’ home.

Figure 0.6 New housing investment, value distribution



Source: Productivity Commission calculation using QV data

Notes:

1. For each year, the data show the share of new houses that are valued within each quartile of the value distribution for the existing housing stock.

Underlying demand has been strong and is projected to continue increasing

Responsive land release and planning processes are likely to be particularly important given projections that underlying demand for housing will be strong, driven by household formation, which depends, in part, on population growth and factors that determine household size. New Zealand’s natural population growth has been strong, while migration flows have been highly variable and often focused on Auckland. Population growth has been unequally distributed across the country, largely as a result of internal migration patterns and the regional preferences of international migrants.

Demographic changes – such as population ageing, cultural and ethnic diversification and a radical transformation in family structures – have also been a feature of recent years and have tended to segment housing markets. Changes in New Zealand’s ethnic structure have increased average household size in some areas while the ageing population structure has tended to reduce it elsewhere. The net effect has been an overall fall in average household size and an associated increase in household formation.

Looking to the future, net household formation in New Zealand is expected to continue to increase as the population continues to grow and households become yet smaller. While the extent to which this underlying demand for housing becomes effective depends on whether households have the capacity to pay for housing, demographic projections suggest a need for home construction volumes to increase.

The housing market is segmented

Housing growth will not, however, be uniform across the country. There are stark regional differences between housing markets. Statistics New Zealand's projections suggest that Auckland will have the largest increase, accounting for 60% of New Zealand's population growth and for almost half the number of new households, followed by Wellington and Canterbury. Auckland is also expected to have the highest growth rate in household formation.

One consequence of this segmentation is that adjustments to changing housing needs and preferences will create market and price pressures that are likely to differ across New Zealand. While a complex web of demographic influences are at work in New Zealand, the outcome overall is that household formation is concentrated in and near Auckland and is likely to remain so for the next few decades. For that reason, the challenge of providing adequate housing is largely an Auckland one. A small number of regional centres will also face challenges, albeit to a lesser degree.

The rental market is important

The stability of rents while house prices were rising over the 2000s boom allowed the rental market to act as a 'safety valve' in the face of rising house prices. As house prices increased rapidly, the rental market expanded to accommodate an increasing number of households that favoured renting over home ownership, given its relative affordability compared to home ownership.

This exacerbated a trend that had been under way for some time (Figure 0.7). Home ownership peaked in the late 1980s/early 1990s, when around 75% of private dwellings were owned by their occupants. Since then, ownership levels have dropped to around 65% – which is about average for the group of OECD countries for which data is available. Currently, around 408 000 households are estimated to live in private residential rental accommodation. The decrease in home ownership since the end of the 1990s has been particularly marked in Auckland, where around 40% of households now rent (Figure 0.8).

Figure 0.7 Tenure choice in New Zealand

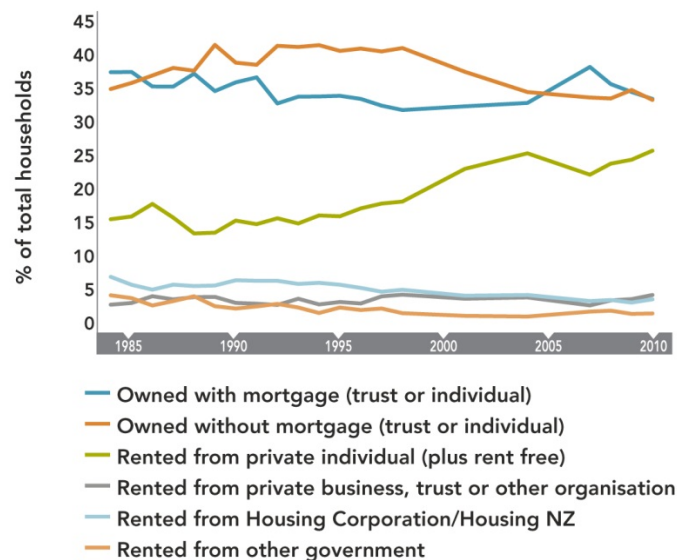


Figure 0.8 Regional profile of tenure type

Source: HES, OECD, NZ Census

Investment in the rental market

Most investors in New Zealand's rental market are relatively small scale. Landlords have been prepared to accept low yields on their rental properties, in part because of expected capital gains in housing and lack of confidence in other investment markets. Although estimates vary, the net cash yield on rental properties over the 2000s house price boom is estimated to be well below 4%. In contrast, capital gains have been relatively strong until recently and New Zealand home owners have, on average over the 2000s, enjoyed superior returns compared to investing in the share market.

However, since the end of the 2000s boom, capital gains on rental properties have diminished significantly. Although difficult to judge, demand pressure may already be working to increase rents in the bigger cities, with recent data indicating that rental households on middle incomes are spending an increasing share of disposable income on rent.

Outside of student accommodation and retirement villages, large-scale landlords have a very limited presence in the New Zealand market. A low cash yield is likely to be one reason why institutions have been reluctant to enter the rental property market. In effect, they have been crowded out by small scale private investors. The large scale of investment required to assemble a suitably diverse portfolio of rental properties in different locations with different demographic exposures is also often cited as a barrier to institutional investment in the sector. Challenges around capturing any construction scale economies in the sector may also be inhibiting large-scale involvements. Reflecting these barriers, the share of people living in rental properties owned by private businesses, trusts or other organisations has remained low at under 5%, indicative of a very low level of institutional involvement in the sector.

The residential building industry is fragmented with low productivity growth

In a typical year, the residential building industry builds about 24,000 new homes and renovates about 32,000 homes. The industry is essentially a fragmented 'cottage industry' dominated by very small independent builders constructing bespoke homes. Sole traders (with no employees) are the most common firm size and businesses employing more than 20 employees constitute only 9% of total sector employment. Most builders construct one house at a time: in the year to May 2010, 4,604 firms built just one house during the year. In contrast, only 30 firms built more than 30 homes, while just 5 firms built more than 100 houses. As noted earlier, most new homes are being built for the upper end of the market.

Productivity growth is below that of other New Zealand industries and below that of building industries in other countries. Submissions also pointed to problems such as projects exceeding budget and agreed timeframes, non-compliant or defective work, and reliance on lower quality materials which have a shorter life-span and require higher levels of maintenance.

The building materials industry is concentrated but still small scale

Manufacture and distribution of building materials is relatively concentrated in New Zealand, which has prompted claims that the market suffers from a lack of competition. The firms concerned nevertheless appear unable to reach the scale necessary to match international product prices.

Materials account for around half of all residential construction costs. Material costs for a standard home (excluding those installed by sub-contractors) increased by 19% in real terms between 2002 and 2011. However, around one third of this increase is due to changes in the nature of materials used (for example, the introduction of double glazing to meet revised thermal efficiency guidelines in the Building Code) rather than the cost of specific materials. As such, real price increases for individual materials appear to have been relatively modest. Nevertheless, the cost of building materials in New Zealand is significantly higher than in Australia, and is one reason for the higher cost of building construction in this country, with adverse implications for housing affordability.

Councils perform key roles in the housing market

Councils have a major influence on all stages of house construction, as they are responsible for urban planning, including the release of land for development and zoning decisions; providing or arranging for the provision of infrastructure to land that is to be developed; issuing building consents that are required before buildings are demolished, removed, constructed or altered; and ensuring compliance with the Building Code.

The construction and land development sectors are more responsive to changes in housing demand in some parts of the country compared to others. There is also some evidence that, in areas of the country where housing supply is more responsive, an increase in housing demand results in relatively more houses and smaller increases in real house prices, with beneficial implications for housing affordability. Although difficult to show conclusively, differences in supply responsiveness at the territorial authority level may, in part, reflect the efficiency with which local councils implement and enforce regulations governing the land development and building sectors.

Where has the Commission found opportunities to improve affordability?

The Commission has reviewed these features of the housing landscape in order to identify opportunities to improve the housing sector's capacity to meet consumers' preferences for housing that is safe, comfortable and affordable. While housing is largely a private market, the way in which the market operates is heavily influenced by its regulatory and institutional framework. Hence the Commission has focused on ways to improve this framework. While many of the Commission's proposals apply nationally, there is a particular focus on Auckland, given that the challenge of providing adequate housing for a rapidly growing population is largely one for Auckland, although a small number of regional centres will also struggle. The Commission has also concentrated on ways to increase affordability for those on lower incomes, where the biggest social issues are found.

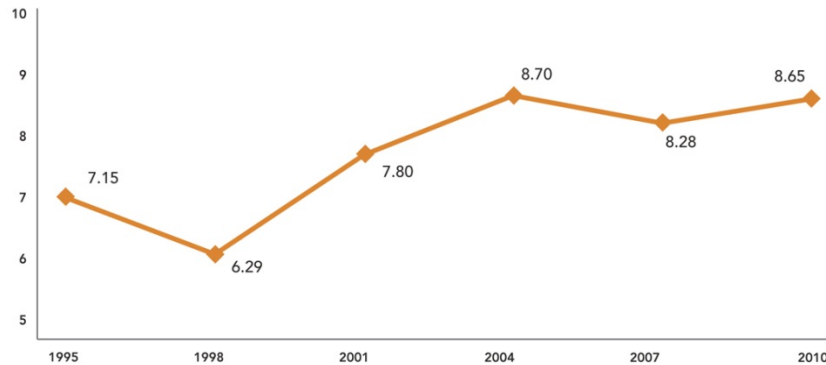
Planning

Urban planning requires consideration of a wide range of objectives, including environmental management and economic development goals. Planning practices have not adapted to be able to adequately manage and balance these multiple objectives.

The prevailing approach to urban planning in New Zealand reduces housing affordability in our faster growing cities. The widespread planning preference for increasing residential density, while at the same time imposing restrictions such as minimum lot size and height restrictions, and limiting greenfield development, places upward pressure on house prices across the board. Constraints on the release of new residential land create scarcity, limit housing choice, and increase house prices. These impacts may be disproportionately felt in particular areas. In Auckland the MUL is a binding constraint on the supply of land for urban growth and has increased section prices within the city. This is indicated by the large differential between land prices 2 kilometres inside and 2 kilometres outside the MUL (Figure 0.9), which suggests that

Auckland Council's proposed compact city approach, based on containment of the city, undermines the aspiration of affordable housing. An immediate release of land for residential development would ease supply constraints and reduce the pressure on prices. This could be achieved by a combination of bringing significant tracts of greenfield *and* brownfield land to the market. Auckland Council should show in its final Auckland Plan how it has considered and reconciled affordable housing with its other priorities. Christchurch Council should also increase the supply of land and councils in other high-growth centres should explore the options for doing so.

Figure 0.9 The price multiple of land 2km within the Auckland MUL to land 2km outside the MUL



Source: Productivity Commission modelling

More generally, a shift in philosophy may be called for, based perhaps on zoning areas from which development is to be *excluded* and then allowing market forces to determine appropriate land uses on the balance (subject to complying with environmental standards), with councils using their infrastructure planning as a means to signal where development will take place and under what time-frame.

In New Zealand, the slow pace at which land for housing is planned, zoned, and released contributes to the high price of sections and thereby house prices. Long development lead times have been identified as a problem, taking between two and ten years because of regulatory complexities. Councils should review their regulatory processes with the aim of providing simplified, speedier and less costly consent processes and formalities, to expedite the supply, and reduce the cost, of housing.

However, while councils' time planning and consenting processes are part of the problem, the regulatory system itself is a factor. Inquiry participants consider that the Resource Management Act (RMA) in particular is overly complex, giving rise to unnecessary costs, duplication, delays, and uncertainty, which may deter new development. The RMA also has limited capacity to adequately consider the benefits of urban development that would lead to affordable housing.

Planning must take account of the RMA, the Local Government Act (LGA) and the Land Transport Management Act (LTMA). These statutes have different legal purposes, timeframes, processes and criteria. With multiple participants and decision-makers, there is no single mechanism for facilitating engagement, securing agreement among participants and providing information for robust decision-making. The Government should consider the case for reviewing planning-related legislation.

A consequence of local government planning policies is the spillover effects for central government. Unaffordable housing increases the requirement for state-sponsored or subsidised housing while high rentals and house prices increase the need for welfare assistance by way of the Accommodation Supplement to meet housing costs. The other manifestation of housing shortages – overcrowding and dependence on poor quality housing stock – impacts adversely on health, education and community outcomes. This stores up long-term fiscal liabilities and potentially undermines productivity and national wealth. There appears to be an absence of a balanced framework in which the impacts of local government decisions – in this case relating to urban land use – on wider government policies, programmes and objectives can be examined.

Resolving the issues surrounding the legal, institutional and decision-making frameworks in which urban planning occurs will take time. However, there are a number of measures that councils should progress that

will remove impediments to the supply of housing. Specifically, a more balanced approach to urban planning is required in the interests of housing affordability. Land for housing can come from the development of brownfields sites, by infill development in existing suburbs and by making suitable greenfields sites available, ideally in a complementary manner and in a way that provides for substantial short, medium and long-term capacity.

The Commission recommends that territorial authorities:

- take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge;
- adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them;
- investigate barriers to densification and consider more flexible approaches to achieve a balance between neighbourhood amenity and new development in existing suburbs;
- develop strategies that promote adequate competition between developers for the sale of construction-ready sections.

Paying for infrastructure development

There are two forms of infrastructure charge against new developments in New Zealand: financial and development contributions. The former focuses on the environmental effects of particular developments; the latter are intended to compensate councils for incremental capital expenditure associated with development on such facilities as reserves, networks and community infrastructure.

These charges are applied widely across New Zealand and collected \$267m in 2008 (June year), amounting to 4.5% of total local government income (equivalent to 7.5% of rates income). Water supply and waste water infrastructure are funded through development contributions by more councils than other types of infrastructure, and tend to attract the highest charges.

The level of charges varies considerably between councils and between types of infrastructure, but can be significant. While some councils do not apply these charges, in other cases they can exceed \$40,000 per developed section; charges of \$20,000 per section are not uncommon. Overall, the increase in development charges is not enough to explain the surge in house prices in the early 2000s (for example, one survey of 10 regions suggested that development contributions made up between about 1% and 10% of median section prices, whereas prices doubled during the boom, as noted earlier), but they affect affordability and because they are charged upfront they oblige households to take on larger mortgages.

Charging for infrastructure, if implemented well, encourages efficient locational choices in the development of housing. It requires considerable skill and information, however, to design and implement charges that accurately reflect costs. The Commission has been made aware of concerns about the way in which these charges are applied in New Zealand and suggests some ideas for addressing them.

A strategy for taking advantage of the potential efficiency and equity benefits of development and financial contributions, while reducing current problems, could involve three elements.

- The development of a set of best practice development contribution guidelines that would cover when development contributions should be used, how they should be calculated, and how costs should be recovered. The principles in such guidelines should be incorporated into Schedule 13 of the Local Government Act.
- A range of measures would help councils to implement the guidelines. These include training about how to implement the guidelines and establishing a quality assurance process to help councils to implement them effectively and share the lessons from experience.
- Strengthening the incentives for good practice by increasing the scope to challenge the way in which councils set and administer development contributions. There is a range of options, with differing

degrees of costs and formality. The Commission favours improving the scope for mediation as an initial step, with the scope to challenge in the District or Environment Court a future option that could be implemented if mediation does not deliver sufficient benefits.

Greater discipline around infrastructure charging will put downward pressure on the cost of new residential development, and improve the quality of decision-making around infrastructure funding. They are, however, a small part of the governance framework within which councils operate, and would not fully address issues around how councils arrive at the overall level, composition and timing of infrastructure that they seek to fund through infrastructure charges. Effective governance of infrastructure assets is critical. Analysis of these broader issues would include matters such as:

- the appropriate role for councils in planning and providing infrastructure such as the three waters (which in some jurisdictions are not provided by councils);
- the appropriate corporate form for the entities that provide infrastructure when this remains within councils; and
- reporting and accountability arrangements.

Building regulation

Many inquiry participants raised concerns about quality, timeliness, cost and consistency in their interactions with the building control system. Regulations relating to building construction can affect the cost of building or renovating a house in six main ways.

- Imposing standards that buildings must meet with respect, for example, to durability and safety, which exceed levels that consumers would otherwise choose.
- There are costs to administer regulation, some of which are passed on to homebuyers.
- Inconsistent or slow enforcement of regulatory requirements can delay project completion or otherwise increase project costs.
- Regulation can affect the incentives to innovate with new materials or processes.
- Regulation can influence how risks are shared between different parties – home owners, architects and engineers, builders and subcontractors, material suppliers and regulators.
- The structure of the building consenting and inspection service can influence costs. Small building consent authorities (BCAs) may suffer from diseconomies of scale or be unable to take advantage of efficiency-enhancing technology, adding to the costs of administering building regulations.

The Commission cannot be sure that the benefits justify the costs generated by the building control framework:

- There is evidence that the regulatory framework, and its interaction with legal rules, impedes innovation in the building industry and efficiency in the building consents process.
- There are strong incentives for BCAs to be risk averse, and this can add to building costs.
- There is a widespread perception in the building industry that the building consent process takes too much time, and requires too much documentation and too many building inspections, all adding to the cost of building.
- There are opportunities to drive greater consistency and efficiency in the building regulatory system through shared use of technology and consolidation of building consent functions.
- Little is known about the quality of New Zealand housing. The information gap compromises efforts to assess whether building outcomes are improving, due to the efforts of the building industry and its interactions with the regulatory framework.

The Government intends to change the industry's regulatory arrangements, in part to alter the allocation of risks in the building sector. Overall, it is difficult to predict whether the costs the reforms will impose on industry participants will be justified. The Department of Building and Housing (DBH) should report on its evaluation of the reforms five years after introduction.

The Commission has eight suggestions for additional reforms.

- To encourage housing standards to be set at a level that maximises their net benefits, the Treasury Regulatory Quality Team should review the quality and robustness of the DBH's use of Regulatory Impact Statements for changes to the Building Code.
- To reduce delay costs with issuing building consents, DBH should publish, for each BCA, the total time taken between receiving applications and finally granting consents, and the number of times each BCA has used the provision to 'stop the clock' when it seeks more information. DBH should audit the 'stop the clock' information from a sample of BCAs.
- Territorial authorities should find ways to expedite the building consent process and improve communication between building practitioners and BCAs.
- The joint and several liability rule that applies in the building industry is likely to make BCAs more risk averse, because it potentially exposes them to the full costs of remediating defective building. The Law Commission should consider in its review of joint and several liability **the interaction between liability rules and the structure of industries and industry practices**, and the impact of joint and several liability incentives faced by regulators.
- To reduce the costs faced by builders seeking approval for an innovation as an 'alternative solution', DBH should provide more support to assist designers and BCAs about what is required for an alternative solution to comply with the Building Code. DBH should also investigate pathways through which alternative solutions can evolve into mainstream practice.
- There has been low uptake of the 'Multi-proof Building Consent' – a scheme introduced in 2010 to produce time and cost savings for volume builders by removing the need for the same or similar building designs to be repeatedly assessed for compliance by individual BCAs. DBH should identify the barriers to using this form of consent, and suggest ways to overcome them.
- DBH should report on the ways in which the building control system can improve the diffusion of knowledge and information in the building sector, including rapid dissemination of information about defects in materials, designs or building methods.
- Urgency should be given to DBH's programme to lift the performance of BCAs and promote greater consistency and efficiency in the building regulatory system.

The building industry

There is scope to improve the productivity of the residential building sector and so reduce construction costs. Key barriers to productivity growth are the industry's small scale, low levels of innovation, skill issues and the 'bespoke' nature of our homes. Little can be done about market characteristics which reflect consumer preferences and the small size of the New Zealand market. As such, the Commission advocates a multi-faceted approach which includes greater innovation and measures to raise skills levels.

First, the small size of most firms prevents them from taking advantage of scale economies that could lower their costs. Some barriers to expansion, such as the small size of some regional markets and consumers' preferences for bespoke designs, are inherent in the New Zealand market. Little evidence has been presented to the inquiry about regulatory impediments to the growth of firms, although the Commission's proposals for freeing up land supply and the consent process may enable new housing developments on a greater scale.

Second, the industry is fragmented vertically and relies on an increasing number of different sub-trades. Sub-contracting, or outsourcing services is common. Houses are often built using a staged step-by-step

approach, with individual trades working sequentially in isolation from each other. This can result in time delays and associated holding expenses caused by sub-contractors not being on site when required, as well as the need for re-work. Improved management skills and practice, together with greater uptake and implementation of collaborative working principles, could help increase the efficiency of building processes and improve industry productivity.

Third, industry procurement practices exacerbate the disconnection between main contractors and sub-contractors. The establishment of best practice guidelines, appropriate to the New Zealand context, would be beneficial. The Building and Construction Sector Productivity Partnership is an appropriate organisation to undertake this work.

Fourth, inquiry participants raised a number of issues relating to low skill levels in the industry. The Building and Construction Sector Productivity Partnership has developed a skills strategy document for the industry that matches closely the issues raised by inquiry participants in this inquiry. Addressing these skills issues will play an important role in lifting industry productivity, along with the phased implementation of occupational licensing – the Licensed Building Practitioner (LBP) scheme – covering designers, builders, site supervisors and trades-people such as carpenters, roofers, plasterers and bricklayers.

Taxation

Taxation affects the attractiveness of investing in housing and its affordability, although the impacts are difficult to quantify and depend on factors such as tax design and key features of housing markets. In New Zealand, as in many countries, whether housing is 'tax-favoured' was debated during the recent upswing in the housing market. Although there have been several reviews of the taxation of housing, significant questions remain unanswered. These include, for example, whether capital gains, and the benefit derived by owner-occupiers from living in their own home, should be included as taxable income.

The current taxation of housing is not ideal:

- The tax system favours investment in owner-occupied housing to the extent that these houses are financed by owner-equity, although property taxes (rates) levied by territorial governments and the shift from income taxes to GST act to level up the playing field. Also, to the extent that owner-occupied housing is financed by debt, that debt is taxed heavily, given that tax is applied to the full amount of nominal, not just real, interest in the hands of savers.
- Investment properties are subject to GST and local government taxes and returns to equity are taxed. However, the ability of the investor to claim a nominal deduction for borrowing costs, which exceeds real borrowing costs, is a potential tax subsidy.
- Capital gains on housing generally fall outside the tax net. These gains were substantial during the recent boom, but it is difficult to predict how large they will be in the future.
- House price inflation and leveraging up of rental investments in the early 2000s created opportunities for rental investors to achieve positive economic returns, including capital gains, whilst reporting tax losses. It is likely that there will have been some downward pressure on rental income as a result of the expanding supply of rental properties and landlords seeing less need to maximise rental income, given the perceived capital gains and 'tax breaks'. In effect, investors may have traded away some portion of those gains by accepting lower rents. It is also possible that, over the longer run, the capital gains and 'tax breaks' may come in below what was being anticipated (particularly now that depreciation deductions have been eliminated). If that proves to be the case, the economics of the rental market ahead could look quite different from in the 2000s, resulting in both less investment and higher rents than in the last decade.

Notwithstanding these features of current tax arrangements, there is not a pressing case for changing the taxation of housing in isolation. Suggestions for reform need to strike a balance between taking the existing tax system as it is and considering how the taxation of housing can be best made to fit within that, and a more 'first principles' approach. For example, the current income tax system is a 'nominal' system – it taxes 'nominal' rather than a measure of 'real' (inflation-adjusted) income. Yet a key issue in relation to the

taxation of housing concerns interactions amongst inflation, house prices (capital gains), and interest rates. This issue cannot be addressed in the context of housing alone, since it also, unavoidably, involves aspects of the taxation of personal interest income, business interest expense, and capital gains/losses across all asset classes.

Addressing particular anomalies in isolation from a broad review of the tax system would further complicate the system and could have unintended effects on housing markets and housing affordability.

The private rental market

During the recent house price boom, the private rental market expanded rapidly, and the number of intermediate renters, who might have expected to have transitioned into home ownership, has doubled. While lower income renting households (the two lowest quintiles) spend on average more than 30% of their income on housing, and have done so for a long time, rental affordability has become an issue further up the income distribution – in the \$50k-\$70K income range – particularly in Auckland.

Importantly, any increase in rents would be felt most acutely in Auckland, where 42% of households rent (including those who rent state houses), as opposed to 32% for the rest of New Zealand.

The Accommodation Supplement – weekly payments administered by the Ministry of Social Development – helps people to pay their accommodation costs. The total annual cost of this programme is just under \$1.2 billion. While this programme reduces the pressure on low income households, the bottom 20% of households still pay more than 40% of their disposable income on rent.

There is evidence that housing quality issues such as dampness, poor sanitation and thermal inefficiency are more prominent in rental housing, and inquiry participants raised concerns about the short duration of tenancy agreements. People who enter retirement while renting may face financial hardship.

There are no obvious policy options that would significantly improve outcomes in rental markets.

- Setting minimum standards for rental accommodation, or requiring disclosure about the quality of rental accommodation, could impose large costs. There is a stronger case for voluntary disclosure, although this is more likely to be taken up by landlords at the upper end of the market.
- Increasing the Accommodation Supplement would involve a significant cost and the extent to which the Accommodation Supplement works its way into rental prices is unclear.
- Assistance programmes designed to help facilitate the transition to home ownership have generally proved ineffective. Better targeting of these programmes may improve their effectiveness.

With policy options such as these unlikely to have a significant effect on outcomes, a more viable strategy is to:

- focus on the options intended to improve the affordability of housing across the board, which would make it easier for renters to become homeowners while also mitigating the pressures for rent increases;
- have a targeted social housing programme to assist those in the greatest need.

Social housing

Government owns 69,000 state houses with a total value of about \$15 billion. Most are rented to tenants who pay a subsidised rent which is capped at a certain proportion of their income (income-related rent). The difference between market rents and income-related rents (the income-related rent subsidy) was \$564 million in 2010/11. Additionally, Government invests significant amounts in maintaining, upgrading and managing state houses. HNZA returned a \$71 million dividend to the Crown in 2010/11.

State housing is not always matched to those individuals or areas where there is the greatest need, and the stock is old and needs upgrading. HNZA's role has been refocused to providing accommodation "for those who need it for the duration of that need".

The community housing sector, made up of non-government, not-for-profit organisations, is being called upon to deliver an increased supply of affordable housing. The Housing Shareholders Advisory Group suggested that the sector provide “opportunity for those who are ready to move on [from state housing]”. The Government has funded community housing providers through a range of mechanisms since 2003 with \$35.35 million budgeted for the 2011/12 year. Currently, community housing comprises 1.2% of the total housing stock in New Zealand.

This emphasis on moving people through state houses (managing ‘throughput’) undervalues the stability needed for sustainable improvements in social outcomes. The current reform programme is based on making the best use of limited government capital. It presumes that people and families can be reallocated amongst the housing stock relatively flexibly. However, social housing is best thought of as a contribution to a complex set of social needs that typically occur in clusters. The current approach to reform is not always in harmony with the desires of communities for stability and continuity, which are often essential for addressing the needs of families requiring social assistance. It may disturb the social relationships that underpin families and local communities in areas of high state housing concentrations and undermine the social objectives of providing state housing (especially where families have multiple needs besides housing).

A stronger focus on community might deliver better social outcomes. Transferring housing stock to the community housing sector might better align incentives to balance the interests of current and future residents. Community housing organisations in other countries have shown that they can deliver better outcomes to tenants than governments, council housing departments, or private landlords. They can offer a complete ‘wrap around’ package of support that extends beyond the provision of housing into other needs of the client households. In many countries this has been achieved through the large-scale transfer of council or state housing to housing associations.

This increased role for the community sector needs to be supported by the measures outlined elsewhere in this report that would increase the supply of more affordable housing, and reduce the risk that those who are reviewed out of state housing have to accept inadequate housing alternatives, or are placed in a situation that leaves them vulnerable.

Both the throughput model underpinning the reforms and greater focus on community development are only viable if the community sector is capable of expanding. It has limited financial capacity, and the current funding package appears insufficient for it to expand as is needed. If the community sector is not funded properly for this transition, there is a risk that trust between it and its clients will break down, undermining service delivery.

The Social Housing Unit (SHU) has been established as a semi-autonomous body operating within DBH as an interim measure to fund the expansion of social housing providers for 2011/12 while other options for the final institutional arrangement are considered. Although the formal objectives of the SHU are clear, its structure as a semi-autonomous body leaves room for unclear priorities, mixed purposes and misaligned accountabilities. Some inquiry participants observed that there were mixed messages or tension about the role and priorities of the SHU. To be effective, the SHU will need clear accountabilities, and a clear mandate. The Commission considers there is potential for greater effectiveness and efficiency through closer integration with other social policy agencies and services.

Some inquiry participants suggested that the Accommodation Supplement (AS) could be better used to fund the community housing sector. The Commission has found that the way the accommodation supplement abates hinders the ability of community housing organisations to improve housing affordability for their clients. For example, a \$48 reduction in rent per week for a family moving into community housing might leave the family only \$14 per week better off. Regardless of the need to fund community housing organisations further, the Accommodation Supplement needs to be adjusted so that rent reductions in community housing create meaningful financial benefits to their clients.

Māori housing

For many Māori communities, housing is valued more for keeping whānau connected to land, tradition, tūpuna, and their whanaunga, than as a financial investment. It is “about building communities, rather than

building houses.” This is not to say that Māori are never interested in housing for financial reasons. Housing solutions for Māori will sometimes need to be different, particularly in areas of traditional settlement.

Māori housing aspirations face challenges related to lower household incomes. Māori as a group experience disproportionately poorer housing situations compared with the rest of the population. Compared with other New Zealanders, Māori are:

- more likely to be on state housing waiting lists (31.3% of applicants in 2010, compared to being approximately 13.9% of New Zealand’s population);
- more likely to live in housing that is in poor condition;
- less likely to own their own house (43.3% of Māori were owner-occupiers in 2006, compared to 69.7% of Europeans);
- more likely to be in lower income brackets.

Māori are heavily overrepresented amongst those with the lowest financial knowledge, and heavily underrepresented amongst those with the highest financial knowledge. Financial literacy education was emphasised to the Commission as an important part of any solution to Māori housing needs, especially if a community development approach is taken.

Māori in general have a strong preference to have their whānau network living nearby. Māori tend to place a greater reliance than European cultures on extended whānau for support. Isolation from these networks can place pressure on whānau, and make them more vulnerable to social ills associated with poverty. This also means that assumptions about people trading up from entry level homes in ‘undesirable’ areas once they can afford to do not hold so readily for at least some urban Māori.

Māori inquiry participants identified that the social and cultural resources they have could enable them to overcome the other barriers they faced to affordable housing solutions. They had solutions to their housing difficulties that they could pursue. The social and cultural resources that whānau and communities can bring to bear are essential for resolving the housing and other social issues they face.

This is a realistic approach, and there is a real need to make policies and decisions about how public resources will be used and delivered that are better integrated with the realities and aspirations of the people and the communities they are intended to benefit. Providing funding and some autonomy to Māori organisations that have accountability to their local communities means those who are best placed and best motivated to find housing solutions are better empowered to do so. In turn, this aligns with Māori aspirations to have more control over their own futures and the way government influences them. It also aligns closely with the developing Whānau Ora approach.

Whānau Ora is the government response best placed to address Māori housing aspirations, through helping whānau plan and coordinating local public services. The Commission received a range of views about Whānau Ora as a vehicle for progressing the housing aspirations of Māori: some sceptical, some supportive. Chapter 13 identifies the role it could play, and what it would have to do to be successful.

Current government funding assistance through the SHU focuses on building new social housing. The focus on building new houses and organisations that will provide ‘scale’ takes a very narrow view of Māori housing needs, particularly for rural Māori. For example, there is a significant need to address the quality of the existing housing stock in areas where there are many rural Māori communities. The Pūtea Taiwhenua (rural fund) should be used to provide seed funding to organisations, using a microfinance lending approach, to address the quality of the rural housing stock.

The challenges of building homes on Māori land are well documented. Difficulties in using land as security for finance, zoning restrictions, getting agreement from shareholders in land blocks, poorly coordinated or communicated government responses, all feature prominently. Most of these challenges are not insurmountable. To resolve these issues, three groups of people and institutions would need to take action:

- public services at the local level – local authorities, Māori Land Court district offices, local Te Puni Kōkiri offices, and in some cases national organisations like the SHU and Kiwibank;
- whānau and shareholders in Māori land; and
- private finance institutions.

There has been no lasting and effective response to housing on Māori land because the three groups or institutions (local public services, whānau, and finance providers) would all need to take action, and each has plausible reasons to leave it to someone else to move first.

Whānau Ora is best placed to lead a lasting response to the challenges of building homes on Māori land. At an operational level, Whānau Ora can address Māori housing aspirations through helping whānau plan and through coordinating local public services:

- A team of Māori housing expert advisors, housed in a national agency like Te Puni Kōkiri or the proposed Whānau Ora commissioning agency, should be made available to Māori landowners with aspirations to build housing on their whenua.
- Whānau Ora facilitators should be trained to educate whānau about the options for management structures for their Māori land, and to play a role in developing plans for the use of Māori land for housing (where this is what the whānau wants).

As well, Te Puni Kōkiri, working with the Māori Land Court and private finance institutes, should develop options to adapt existing lending policies and precedents for private finance institutes to lend for building homes on Māori land. Private finance may become more readily available if accurate advice about the risks of lending on Māori land (and appropriate ways to manage those risks) was more readily available.

To start the conversation, the Commission has reviewed three models to see whether they could provide the necessary security for banks to lend: trust guarantees, a financial options system, and mutual insurance schemes. Under the right circumstances, each of these shows some promise. As well, the Commission has reviewed two models of housing where there is an element of common ownership. These are licences to occupy (as used by retirement villages) and unit titles, under the Unit Titles Act 2010. Each of these models could form robust ways to manage housing on Māori land.

Concluding comments

The entry costs of home ownership increased over the course of the 2000s house price boom for some groups in society. This has had an important impact on the journey of some households up the housing ladder, particularly those living in Auckland.

It is difficult to predict the likely balance between the fundamental drivers of demand, the supply responsiveness of the land development and construction sectors, and the associated house price and tenure dynamics. One plausible scenario is that in the absence of improvements in land delivery and the performance of the construction sector, land prices and the costs of new houses continue to increase; with rapid household formation, especially in the upper North Island, outstripping the construction of new houses.

In this scenario, the size of the rental market would increase further as the proportion of families owning their own homes continues to decline, particularly in Auckland. Compromises in housing provision would become more pressing, especially with respect to overcrowding for low-income households, as the available housing stock is utilised more intensively. Indicative of missing rungs on the housing ladder, intermediate renters would find it ever more difficult to make the transition into home ownership. In addition, a growing shortage of both private rental and affordable housing would expose the Government to increasing fiscal risk in the form of an escalating Accommodation Supplement and growing state house rental subsidies. This risk would grow significantly if rents move back into line with still elevated house prices, ending the recent and historically unusual period of disconnect and increasing the level of financial distress for many low-income renters.

An alternative scenario is that the housing market continues to be subdued. To date, New Zealand's house price correction post the Global Financial Crisis has been modest in international comparison. Given the prospect of a volatile global economy with considerable recessionary risks, there may be more price falls to come. In this scenario, supply constraints in the construction and land development sectors bite to a lesser extent and real house prices continue to fall. The market would settle at lower house prices and the affordability issue would recede. However, the continuing pressure from increasing numbers of households seeking accommodation is likely to moderate future reductions in house prices, even in the setting of a weak economy.

Although the future direction of the New Zealand housing market is difficult to predict, the policy recommendations outlined in this report are not contingent on a particular outlook. These recommendations converge around three themes for improving housing affordability, removing impediments to home ownership, and providing appropriate rental accommodation.

- An increase in the supply of land for housing, and a less constrained approach to urban planning more generally, in the interest of improving housing affordability.
- Pursuing opportunities to achieve scale and reduce costs in land development and building and construction.
- A regulatory framework that facilitates and encourages cost-reducing and quality-enhancing innovation, and where the benefits of regulation are achieved at least cost.

These three themes are mutually dependent. Getting the necessary scale economies in land development and home construction will not happen unless there are sufficient amounts of land released in the right areas and at the right price. At the same time, planning and building regulation needs to work in a way that facilitate rather than impedes development and construction. It is only when these three core elements work together in a self-reinforcing way that we are likely achieve any real impact on housing affordability.

The policy improvements outlined in this report are aimed at improving the performance of the housing market and the effectiveness with which it provides housing for New Zealanders. The ultimate objective is a housing market capable of meeting changing demands for housing in a cost-effective and affordable way over the long term and well beyond the length of a typical house price cycle.

1 The housing affordability inquiry

Key points

- The Government has asked the Commission to evaluate the factors influencing the affordability of housing and identify potential opportunities to improve affordability and reduce impediments to home ownership.
- Housing plays a central role in individual and community health, family stability and social wellbeing, in the operation of the labour market, productivity and development. As such, the issue of housing affordability is at the core of the Commission's mandate.
- Sitting behind the level of house prices is a complex set of supply and demand forces that ultimately determine the level of affordability in the housing market.
 - At its simplest, housing affordability is a function of income, house prices and the day-to-day costs of home ownership, or rents and income in the case of rental affordability. Change in any of these factors has a direct impact on affordability.
- Housing affordability needs to be understood and examined from a holistic perspective. Therefore:
 - Housing affordability, even at entry level ('starter homes'), cannot be understood without considering how the entire housing market works.
 - Affordability is relative: the experience of affordability is very different between existing home owners, first home buyers, rental tenants, and across different localities and household types. Different segments have quite different housing needs and ability to pay.
 - There are multiple impacts on housing costs that suggest that issues around land, construction, labour, and capital and their regulation contribute individually and jointly to affordability problems – resolving one in a way which compounds another may not enhance affordability.
 - It is desirable that the housing market work in such a way as to maximise the options available for quality housing for all New Zealanders regardless of income or tenure choice. This means a housing market that has both depth and diversity.
 - Affordability is influenced by the costs of accessibility – to work, schools, friends and family, recreation and entertainment.

The context of this inquiry is a recognition that stability of the home environment is important for social cohesion and family stability. There is a concern that real house prices in New Zealand are markedly higher than they were a decade ago, and that this has been associated with general declines in housing affordability and home ownership rates. These declines have contributed to increased demand for rental accommodation and additional pressure on the social housing sector. The debt accumulation and wealth effects associated with the rise in house prices may also have exacerbated New Zealand's last economic cycle, with interest rates and exchange rates higher than they otherwise would have been during the upturn and with consequently greater contractions in demand during the downturn.

1.1 What has the Commission been asked to do?

The Government has asked the Commission to evaluate the factors influencing housing affordability (both rental and owner-occupied housing) and examine potential opportunities to increase housing affordability. Specifically the Government has asked the Commission to:

- identify and analyse all components of the cost and price of housing;

- identify mechanisms to improve the affordability of housing, with respect to both the demand and supply of housing and associated infrastructure;
- identify any significant impediments to home ownership, and assess the feasibility and implications of reducing or removing such impediments.

These tasks can be synthesised into three questions:

- What are the key (demand and supply) components of housing affordability?
- How can the housing market work better to improve housing affordability?
- What can be done to remove impediments to home ownership?

The Government has asked the Commission to give particular attention to a number of specific factors (Box 1.1).

Box 1.1 **Specific issues for investigation**

- Factors influencing the supply of land and basic infrastructure for residential construction
- Factors influencing the cost of residential construction, including the effect of standards, specifications, approval and title requirements on the cost of new housing construction
- The level and growth of productivity in the land development and residential construction industries, and the effect of government regulations on productivity in these industries
- The efficiency of taxes, levies and charges imposed at all stages of the housing supply chain
- The efficiency of the tax treatment of owner-occupied and rental housing
- The influence of changing consumer housing preferences, willingness to pay, and financing costs on housing affordability
- The operation of the overall housing market, with specific reference to the availability of a range of public and private housing types, the demand for housing, and the efficiency of use of the existing residential housing stock

Housing affordability is important any time, but it is given added weight by the fact that this inquiry takes place in the context of a house price boom between 2001 and 2007 that was unprecedented in recent history (Chapter 2).

1.2 Housing and wellbeing

Housing is a basic human need and fundamental to our economic and social well-being. Housing plays a central role in individual and community health, family stability and social wellbeing, in the operation of the labour market, productivity and development. As such, the issue of housing affordability is at the core of the Commission's mandate.²

Economic wellbeing

The housing sector is big (Box 1.2). Housing market outcomes can therefore have significant ramifications for the stability of the wider economy as evidenced by the recent global financial and economic crisis. Conversely, the macro-economy matters for how effectively the housing sector meets the needs of the community (Chapter 3).

² See section 7 of the New Zealand Productivity Commission Act 2010.

Instability in the housing market can be transmitted to wider economic volatility due to the links between house prices, credit availability, and household consumption and indebtedness. Not surprisingly, this macroeconomic instability can have damaging effects on levels of business investment and long-term growth prospects. A well-performing housing market can play a part in reducing economic volatility.

Box 1.2 The housing sector is big

- Housing is the single biggest expense for most New Zealand households and comprises the main share of both household assets and debt. In total, the stock of residential housing in New Zealand is currently valued at \$625 billion and lending by banks and non-bank financial institutions is around \$171 billion for housing (Chapter 0). This means that swings and volatility in the housing market have a big impact on the wider economy.
- In a typical year, the building and construction sector typically builds about 24,000 new homes and renovates approximately 32,000 existing homes; builds \$4 billion worth of non-residential building; employs about 178,000 people (as at December 2008); and contributes approximately 4% to New Zealand's GDP (about the same as the agriculture, on-farm, sector), with spillover (multiplier) productivity effects to other sectors and industries (Building and Construction Sector Productivity Taskforce, 2009). So improvements in the building and construction sector productivity, and through that, housing affordability, will have large aggregate benefits (Chapter 8).
- The government invests and spends a significant amount on housing in the form of social housing provision, including: \$15 billion investment in state housing accommodation; \$219 million on state housing maintenance (year to June 2010); income support for accommodation (Accommodation Supplement) \$1.2 billion (year to June 2011); Income Related Rents, \$564 million (year to June 2010); and many other housing programmes. See Appendix F for a full list of government spending on housing assistance. Notably, over the past 9 years, government housing expenditure has grown at an annual rate of around 7% per year.
- Aggregate rental flows for residential housing amount to approximately \$7.5 billion per year.

The significance of the housing sector, and its associated interdependencies with the wider economy, underlines the importance of ensuring housing markets are efficient – in the sense of meeting the needs of the wider community at best value.

A well-functioning and responsive housing market can improve the flexibility and performance of the labour market through greater mobility of the labour force within and between regions and work locations. This has a wider impact on economic performance and efficiency as prohibitive housing costs hamper the movement of skills to where they are valued most. Access to affordable housing can therefore play an important role in avoiding labour market skills shortages (see for example Yates, Randolph and Holloway, 2006).

High house prices can also impact on the competitiveness of New Zealand as an attractive business destination for overseas business and skilled workers. High New Zealand housing costs could become a disincentive to locate here, thereby potentially forgoing opportunities for growth. Conversely, it is just as likely that firms and skilled workers that are priced out of particular regions of New Zealand will move internationally.

Finally, an inadequate housing sector constitutes a long-term fiscal liability for government. Ultimately, government bears part of the cost where unaffordable or inadequate housing leads to higher demands on the welfare system to meet their housing needs (for example, state-sponsored social housing), and health and education consequences.

Social wellbeing

A well-performing housing market that provides affordable high quality housing contributes to positive social outcomes in society. For example, there is a strong link between home ownership and better educational outcomes and future income prospects for resident children (eg, Haurin, Parcel and Haurin, 2001), more civic engagement, higher trust in others and a positive sense of community (Roskrug, Grimes, McCann, and Pool, 2011), family and social stability (eg, Glaeser and Shapirio, 2002), and higher average living standards in retirement (Ministry of Social Development, 2006).

The quality and affordability of housing is also closely linked to health outcomes (eg, Maani, Vaithianathan and Wolf, 2006; and Howden-Chapman et al, 2007; Auckland Regional Public Health Service, sub. 10), particularly for children's health and wellbeing and their transition to adulthood (Families Commission, sub. 9, James and Saville-Smith, 2010). Put simply, declining affordability falls unduly on young families (DTZ, 2008)

Affordable, high-quality rental housing could also be expected to provide such social benefits, although there is evidence that home ownership provides greater benefits (eg, Rohe, McCarthy and Van Zandt, 2000; Glaeser and Shapiro, 2002).

High housing costs can exacerbate wealth differences in society. Because housing wealth is a significant proportion of overall wealth, obstacles or impediments to housing equity have the potential to further increase differentials in wealth between those who own a house and those who don't.

New Zealand has always had a strong culture of home ownership, and it is an important aspiration for many New Zealanders. Apart from meeting the basic need for shelter, the desire to own a home is commonly linked to benefits such as greater security, flexibility to adapt the dwelling as needs or preferences change, and as a store of wealth. A house is therefore both a home and an investment.

1.3 The Commission's approach

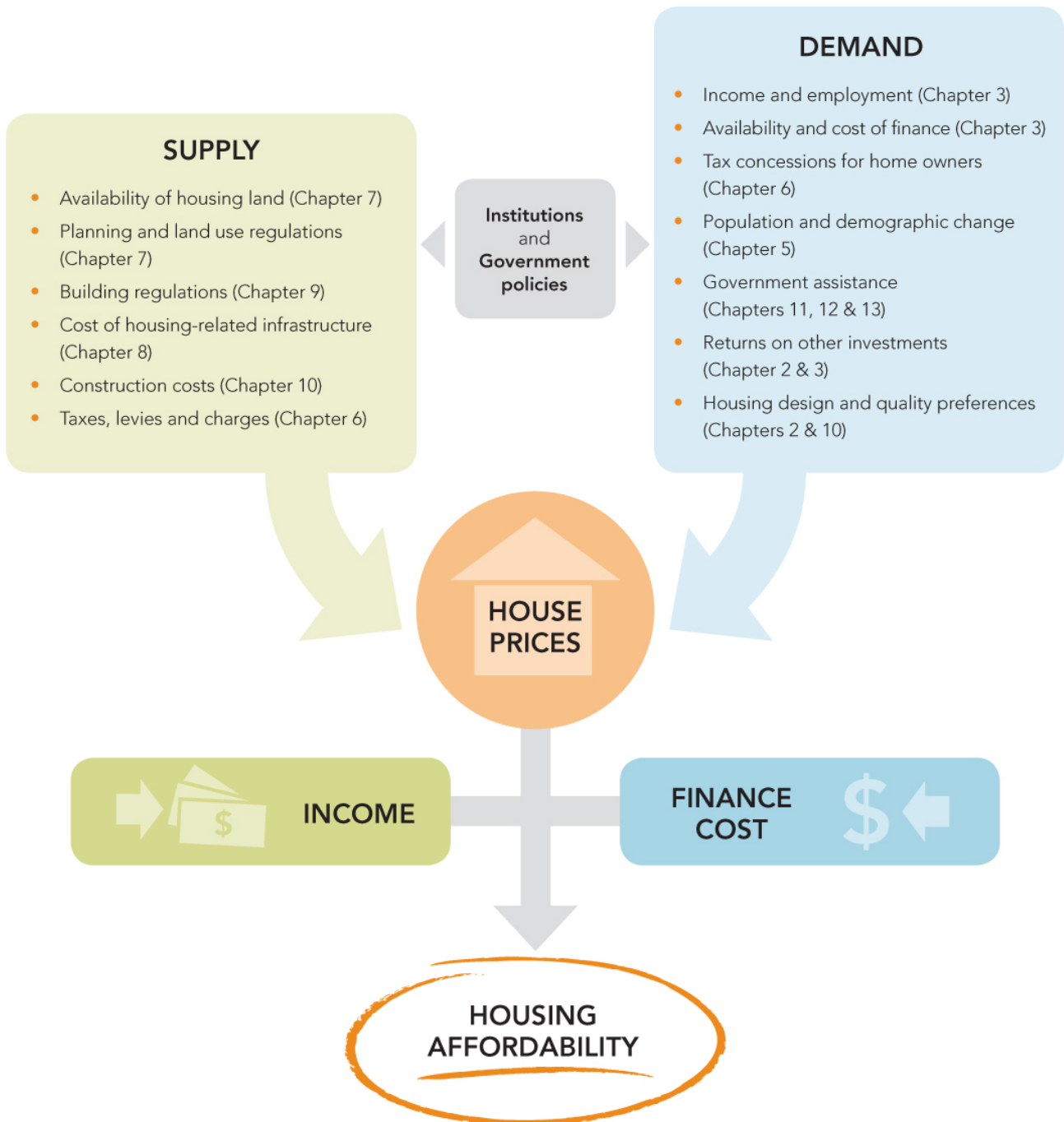
The context of this inquiry is a concern about distortions in the New Zealand housing market that have led to rising house prices and declining housing affordability. While there is widespread use of the term 'housing affordability', there are different ways to think about what affordability means in practice and what are the underlying drivers of affordability.

At its simplest, housing affordability is a function of income, house prices and the day-to-day costs of home ownership (including financing, rates, insurances and general maintenance costs), or rents and income in the case of rental affordability. Change in any of these factors has a direct impact on affordability. An important affordability hurdle for home ownership is the upfront cost (deposit) of purchasing a home which, in turn, also depends on income and house prices.

Sitting behind the level of house prices is a complex set of supply and demand forces that ultimately determine the level of affordability in the housing market. A stylised illustration of the multiple determinants of housing affordability is provided in Figure 1.1. The Commission's task is concerned with identifying and analysing any factors that may be distorting demand and supply with adverse effects on the efficiency of the housing market, and recommending ways to remove such distortions.

It can be seen that house prices and affordability are the outcome of numerous influences on the demand for housing and the cost of supply. Some demand and supply factors are cyclical in nature, with their effects felt primarily in the short term. Others are structural and influence prices over the medium to longer term. Demand and supply factors can also vary from cycle to cycle and between different regional markets. For example, the Auckland housing market dynamic is distinctly different to the rest of New Zealand.

Figure 1.1 Multiple determinants of housing affordability



The ultimate effect on housing affordability will depend on how demand and supply interact – for example, the less responsive is supply, the greater the price increases arising from increased demand for housing. However, housing markets may not deliver efficient or appropriate outcomes for the following reasons:

- Demand may become excessive if people develop unrealistic expectations about the returns from housing relative to other investments. Although people eventually adjust their expectations to market realities, such adjustment can be very disruptive and can take a long time with long-lasting effects.
- The demand for housing may be inflated or distorted by government policy settings – for example, poorly designed and targeted housing support or the taxation treatment afforded to housing compared to other assets or services.
- A demand for housing may spike as a result of strong population growth and demographic change leading to an increase in household formation.

- The supply of new housing may be unduly slow to adjust to increases in demand due to, for example, any inefficiencies in the building and construction industry or any deficiencies in government regulation (or its administration) such as insufficient and delayed land release for housing, or planning and consenting constraints.

1.4 Analysing housing markets

The housing sector can usefully be thought of as a large complex system characterised by market and non-market sectors, local boundaries and global drivers, and significant links to markets for land, labour and finance (Maclennan, 2008). The housing market has some distinctive features which are relevant to the analysis of price trends and affordability (APC, 2004).

- *The nature of the asset* – Houses are assets that provide a stream of consumption (a place to live) and investment services (an asset that can be treated as a store of value and can be sold for a subsequent gain or loss). This dual function adds considerable complexity to the analysis of housing markets. Formally, the price of a house will implicitly reflect the discounted 'present value' of that stream of services and depend on expectations about future demand and supply, as well as current market conditions. The value of a house represents the combined value of the dwelling and the land on which it is sited.
- *Price volatility* – In most countries, there has been much fluctuation in real house prices, such that, at its extreme, it has resulted in booms or busts. The cyclical nature of housing demand is responsible for much of this price fluctuation. Because most house purchases are financed by debt, this makes demand sensitive to the accessibility of finance and movements in interest rates, as well as to income and employment trends. Investment in rental housing is influenced by the returns available on alternative investments such as equities, which similarly fluctuate over time.
- *Supply lags* – Short-term constraints on the responsiveness of supply make it difficult to accommodate cyclical surges in demand. It can take several years to transform basic housing land to a construction-ready state (including the supporting infrastructure). At the same time, there are high search and other transaction costs (such as legal, commission and administrative costs) associated with buying and selling houses that make them much less liquid assets than, say, equities. This can delay and thereby accentuate adjustments to changing market conditions. Likewise, depending on circumstances, households may take years to modify their housing requirements in response to changes in prices, incomes and borrowing costs.
- *Segmentation of the market* – There are multiple segments making up the housing market. The market is split geographically, by dwelling type and by price/quality bands. It can also be divided into owner-occupied, rental, and social housing. These submarkets are not unconnected, with substitution occurring across them in response to changes in relative prices and rental yields. The linkages and flow-on effects between market segments in turn mean that prices in each segment (and therefore affordability) are influenced by broader market trends. It also means that the analysis of any policy intervention should consider not only its expected impact on the targeted submarket but also its ripple effects to other submarkets.
- *Government housing assistance* – There is through the provision of social housing, income support (such as the Accommodation Supplement and income-related rents) and other housing assistance programmes, a high level of government involvement in the housing market. Such government involvement can have an important impact on incentives, house prices and overall affordability. Most developed countries have some form of government housing assistance. Approaches range from housing subsidies to direct provision of housing.

1.5 A holistic approach to housing affordability

A strong theme from inquiry participants was the need to take a holistic approach to understanding and examining housing affordability. The Commission endorses this approach (Box 1.3).

Box 1.3 A holistic approach to housing affordability

A holistic approach to housing affordability recognises that:

- Housing affordability, even at entry level ('starter homes'), cannot be understood without considering how the entire housing market works, which includes the quality and turnover of existing stock.
- Accessible and affordable housing is implicated in a wide range of social issues relating to health, family stability, community development, and education. These social issues need to be taken into account in considering the efficiency of the housing market and role of government.
- Affordability should be considered in terms of lifecycle costs, with building standards that, for example, ensure safety and durability and, importantly, lower ongoing costs (such as maintenance needs, and power, lighting and heating demands).
- Affordability is relative: the experience of affordability is very different between existing home owners, first home buyers, rental tenants, and across different localities and household types. Different segments (defined in part by demographics) have quite different housing needs and ability to pay.
- Affordability is influenced by the costs of accessibility – to work, schools, friends and family, recreation and entertainment – both by way of the trade-offs households might have to make between dwelling location and transport costs and in terms of the total demands housing and transport jointly make on household incomes.
- There are multiple impacts on housing costs that suggest that issues around land, construction, labour, and capital and their regulation contribute individually and jointly to affordability problems – resolving one in a way which compounds another may not enhance affordability.
- It is desirable that the housing market work in such a way as to maximise the options available for quality housing for all New Zealanders, regardless of income or tenure choice. This means a housing market that has both depth and diversity.

1.6 Guide to this report

The next chapter (Chapter 2) provides an in-depth look at the New Zealand housing market, including an examination of the last house price cycle, key features of the New Zealand housing stock, the key supply and demand drivers in the New Zealand housing market and, finally, the key issues for the New Zealand housing market and housing affordability looking forward. Housing also matters for the macro economy. The housing market is both an important driver of, and is importantly influenced by, developments in the wider economy. This is examined in Chapter 3.

How broad house price trends have affected the affordability of housing for both home buyers and renters is examined, along with the key differences in affordability across regions and income levels (Chapter 4). Chapter 5 then investigates more closely the underlying demand for housing and considers how national and regional trends in population growth and demographic change affect household formation and the demand for housing. The taxation system has an important influence on the housing market, primarily through affecting the returns to housing vis-à-vis other assets. The impacts of the tax system on housing and affordability are considered in Chapter 6.

The report then moves to the supply side of the housing market and examines the impediments and distortions impacting on home ownership and housing affordability from urban planning regulation (Chapter 7), infrastructure charges on new developments (Chapter 8), and building regulation (Chapter 9). Recommendations are made to remove impediments that may be keeping house prices elevated and

reducing affordability. An important driver of housing is the productivity and performance of the building industry, which is examined in Chapter 10.

Chapter 11 examines the affordability challenges in the private rental market and suggests a long-term strategy to improve affordability. For those that struggle in the private rental market there are state and community housing providers that provide housing at below market price. Currently this sector is undergoing significant reform. Chapter 12 examines progress to date with regard to the wider social outcomes sought through social housing and identifies a number of risks and areas of emphasis. The specific housing issues facing Māori are considered in Chapter 13. The Commission suggests potential ways to address the difficulties of building homes on Māori land and reviews a number of models that could help facilitate bank lending for Māori housing.

2 The New Zealand housing market

Key points

- Reflecting a confluence of global and domestic drivers, New Zealand experienced a house price boom over the 2000s that was widely dispersed across the country. Although unprecedented in recent history, this boom was not out of line with the experience of a number of other OECD countries.
- Over the course of the 2000s boom, house price increases tended to be stronger in areas with relatively low house prices initially. However, despite houses being among the most expensive in the country, the Auckland market continued a well-established trend of relatively strong house price increases. This 'divergence' in Auckland house prices compared to the rest of the country was especially pronounced at the lower end of the Auckland housing market.
- The responsiveness of housing supply in New Zealand is around average in international comparison, but about half as effective as in a number of better-performing OECD countries. As such, demand increases are estimated to lead to proportionately larger increases in house prices than in new house construction.
- Supply responsiveness varies across the country, with implications for house price dynamics in regional housing markets. This may be related to the efficiency with which local councils implement and enforce regulations governing the land development and construction sectors.
- Land prices are a large and increasing share of the price of dwellings – particularly in Auckland, where the Metropolitan Urban Limit has constrained land development and put upward pressure on land prices. Available evidence suggests that construction costs have increased and are high in international comparison. This highlights land release and other regulatory hurdles, along with a poor performance in the construction sector, as impediments to a more effective supply response.
- Reflecting a number of factors including high land prices, most new housing supply is directed at the top end of the market, with very little new supply aimed at affordable housing.
- The available evidence suggests that the quality of the New Zealand housing stock is poor, particularly for rental dwellings.
- Over the 2000s boom, rents increased by significantly less than house prices, allowing the rental market to act as a 'safety valve'. This exacerbated a tenure shift away from owner-occupied dwellings to rental. Indicative of missing rungs on the housing ladder, the share of 'intermediate renters' – who have at least one member in paid employment but still can't afford to buy a house – increased markedly, particularly in Auckland.
- Barriers to the efficient functioning of the housing market have a negative effect on affordability that accumulates over the decades and goes well beyond the impact of house price cycles, including the house price boom over the 2000s. By the same token, even if supply responsiveness can be significantly improved, the New Zealand housing market will still experience house price cycles to some extent, with attendant implications for affordability.

The housing sector is a very large part of the New Zealand economy. The stock of residential housing, which is currently valued at around \$625 billion, is the largest component of the wealth of New Zealanders and housing is of central importance to the workings of the economy as a whole. In addition, households spend a significant and growing share of their income on housing and the quality of the home environment is a central element of family stability and social cohesion. As such, access to affordable housing is a key policy issue for New Zealand.

As well as being of central importance, the housing market has a number of distinctive characteristics. In particular, houses are durable and are owned for both consumption and investment purposes. The time lags involved in construction can be long and new houses are a small share of the total stock – new supply in a given year is usually only 1 to 2% of the housing stock. For these reasons, adjusting to changing housing needs and preferences can be slow and lead to significant periods of disequilibrium with attendant price pressures.

Against this background, this chapter sketches out the key characteristics of the New Zealand housing market within the context of the supply and demand framework described in Chapter 1.

2.1 The New Zealand house price cycle

In aggregate

From the beginning of the 1970s to the early-2000s, real house prices cycled around a slightly increasing trend (Figure 2.1). Over this period, real price cycles in the New Zealand housing market looked a lot like cycles in a number of other OECD countries.³ In particular, the number, duration and amplitudes of New Zealand's real house price cycles were broadly similar to other countries, with upturns generally lasting longer and being slightly larger than downturns (Girouard et al., 2006). Over this period, although cycles looked more or less the same across countries, the timing of peaks and troughs were quite different, suggesting that the underlying drivers of real house price cycles were country-specific to a large extent.

Figure 2.1 House prices, real and nominal



Source: Quotable Value (QV) and Statistics New Zealand

Notes: Real house prices are measured as the ratio of actual house prices to the CPI.

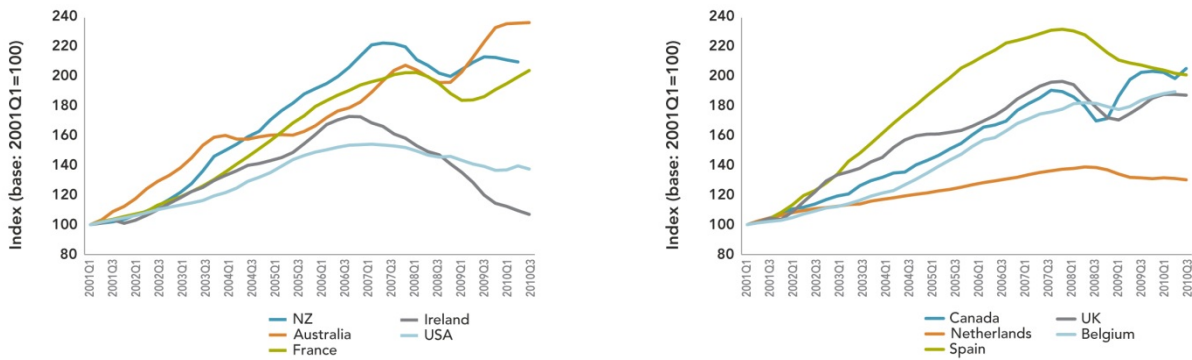
Between 2001 and 2007, New Zealand experienced a house price boom that was unprecedented in recent history. Real house prices almost doubled over this period, which equates to an average increase of around 12% per year. The New Zealand housing market has not experienced such rapid real house price appreciation since a short sharp expansion in the early 1970s. The duration of the 2000s upswing was also around two years longer than the average expansion since the 1970s, making it one of the longest and steepest since the data began.

Although unprecedented in history, New Zealand's recent house price boom occurred more or less at the same time as rapid house price expansions in a number of other OECD countries. Indeed, co-movements in real house prices have been unusually strong internationally over the 2000s, suggesting a significant role for global factors in propagating this period of real house price appreciation (Box 1 in the overview). As discussed in Chapter 3, a rapid expansion in global credit and financial market innovations – some of which turned out to be highly destabilising – are prime candidates for explaining the coordinated nature of strong house price appreciations over the 2000s. However, it is notable that over this period, New Zealand's real

³ Real house price cycles referred to in this section are calculated using the Bry-Boschan method of dating turning points. A description of this technique, in the context of house price cycles in New Zealand, is given in Hall et al. (2006).

house price appreciation exceeded that of most other OECD countries, suggesting that domestic factors may have also played a role in propagating the house price boom (Figure 2.2).

Figure 2.2 The real house price boom in international comparison

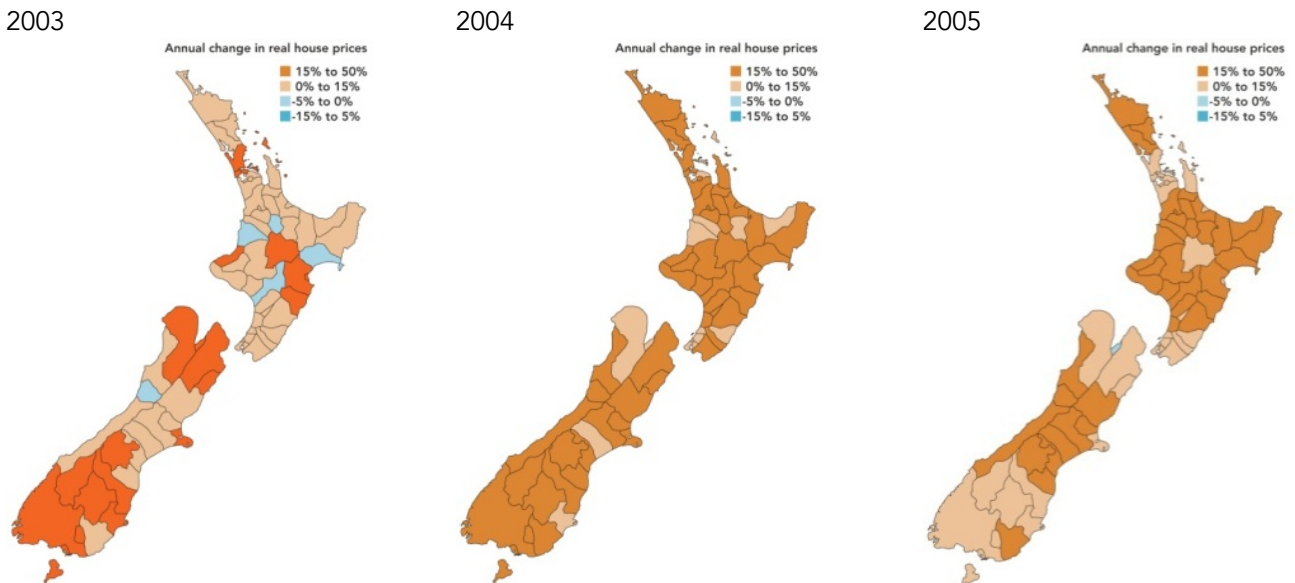


Source: OECD

In the regions

A distinctive feature of New Zealand’s house price boom over the 2000s is that it was more widely dispersed across the country than previous house price expansions. In its early stages, the boom began in Auckland and a few high-growth tourism areas (Central Otago, Kaikoura and Tasman) (Figure 2.3). However, by 2004, it had spread across the country with 55 of the 72 Territorial Authorities (TAs) for which data exists recording real house price increases in excess of 15% per year. By 2005, house prices were slowing in Auckland and the other areas that initially led the boom, but still growing strongly in other parts of the country. By 2006, the slowdown had become more generalised across the country.

Figure 2.3 Annual change in real house price by Territorial Authority

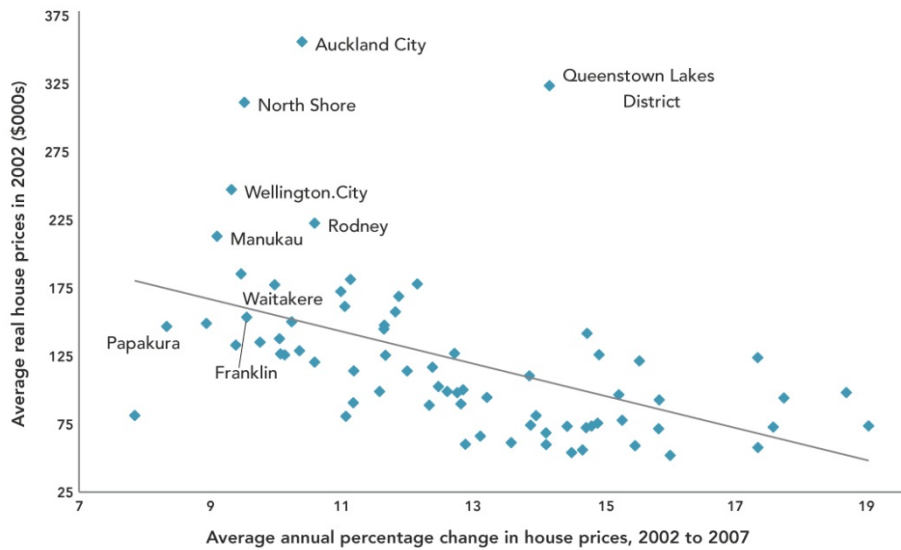


Source: Productivity Commission calculations based on QV data

Although widespread, the extent of real house price increases varied markedly across the country, ranging between 70% to 240% across the TAs. With some key exceptions, regional house price dynamics over the boom displayed a ‘convergence pattern’ whereby price increases were larger in TAs where houses were initially relatively inexpensive (Figure 2.4). Compared to previous house price expansions, this suggests that households were more prepared to relocate or invest further afield in search of affordable housing.⁴ As a consequence, the (normalised) distribution in real house prices is now flatter across the country than it was prior to the 2000s boom.

⁴ For example, and as discussed in Chapter 5, internal migration in Auckland, where houses are typically among the most expensive in the country, turned sharply negative in the mid-2000s.

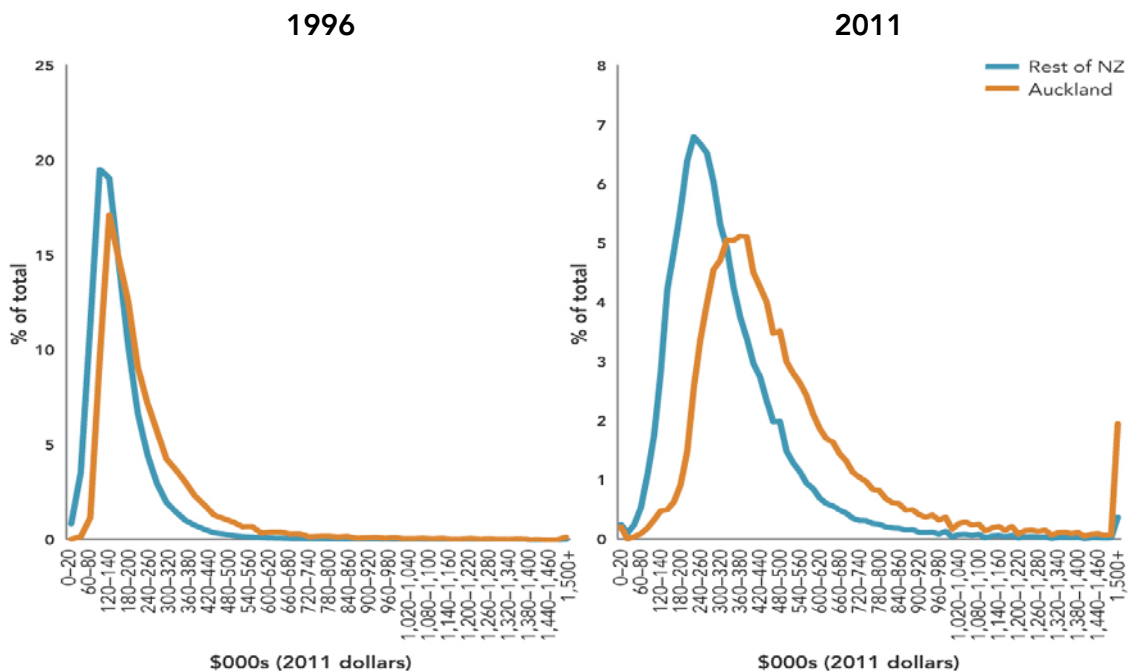
Figure 2.4 Convergence in real house prices over the 2000s boom



Source: Productivity Commission calculation based on QV data

As noted, there were some important exceptions to this trend – in the Queenstown Lakes District and metropolitan areas in Auckland and Wellington, houses were among the most expensive in the country in the early 2000s, but these regions still experienced strong real house price appreciations over the boom (Figure 2.4). In Auckland – home to around one third of New Zealand’s population and around 30% and 40% of its housing stock by number and value respectively – this continued a well-established trend of strong real price increases for already expensive houses. As a consequence, the gap between house prices in Auckland and the rest of the country continued to widen and the distribution of Auckland house prices is now markedly different to that in the rest of New Zealand (Figure 2.5).

Figure 2.5 House price distribution in Auckland and rest of New Zealand



Source: Productivity Commission calculation based on QV data

Notes:

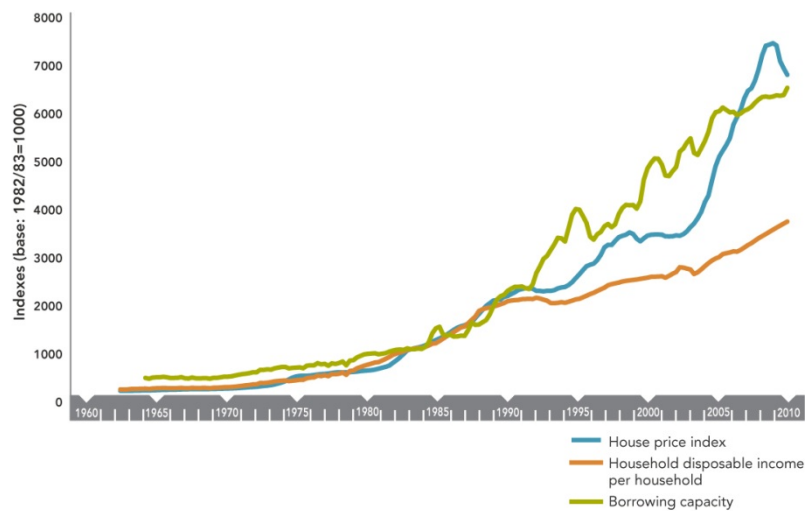
1. House price distributions are shown in constant (2011) dollars (deflated by the CPI).

This divergence between house prices in Auckland and the rest of the country has been particularly pronounced at the lower end of the housing market. Between 1995 and 2011, the difference between lower quartile house prices in Auckland and the rest of the country increased by over 260% in real terms. Over the same time period, the difference between median and upper quartile house prices in Auckland and the rest of the country widened by 230% and 150% respectively.

Impact on housing affordability

As discussed in detail in Chapter 4, New Zealand's house price boom over the 2000s exacerbated a steadily increasing trend in the number of years of median incomes needed to buy a median-priced house. On the face of it, this simple measure indicates decreased housing affordability. However, housing affordability is influenced by a much broader range of factors than just the level of house prices relative to income. For example, low interest rates and strong credit growth over the initial phase of the boom increased the borrowing capacity of households and, to some extent, offset the negative impact of increased house prices on the general level of affordability (Figure 2.6).⁵

Figure 2.6 House prices, household disposable income and borrowing capacity¹



Source: Briggs & Ng (2009)

Notes:

1. For each year, borrowing capacity is calculated as the amount a household on the average income could borrow via a table mortgage at the effective mortgage interest rate. This amount is determined by the household's monthly payments, which are set at 35% of monthly income. It is assumed that the term of the mortgage is 25 years.

It is clear, however, that for some groups in New Zealand society, the steep increase in real house prices over the 2000s has decreased the likelihood of them being able to purchase their own home and begin the climb up the property ladder. As discussed in Chapter 4, this tends to be the case for younger people and others on lower incomes, particularly those living in Auckland.

2.2 Housing market drivers

Rapid house price escalations, and house price volatility more generally, are particularly concerning if prices deviate from long-run fundamentals for significant periods of time. In this case, investment decisions in the economy may not reflect underlying resource costs, with negative implications for productivity and incomes. Of course, unpicking the drivers of the New Zealand housing market and the extent of any imbalance between supply and demand is not straightforward. Notwithstanding this caveat, this section sketches out a framework for assessing the key drivers of house price dynamics from a New Zealand perspective.

⁵ Of course, as discussed in Chapter 3, these factors also contributed to real house price inflation over this period, highlighting the complex interdependencies between the underlying drivers of housing market activity.

Demand side

On the demand side, it is useful to distinguish between *underlying* and *effective* demand for housing:

- *Underlying* demand is driven by household formation, which reflects population growth and changes in household size. In turn, population growth is a function of natural increases (births minus deaths) and net migration. Household size is essentially determined by demographic factors.
- *Effective* housing demand reflects the combined effect of consumer and investor aspirations to rent or buy a dwelling and their financial ability to do so. As such, it is influenced by the prevailing set of economic factors, including incomes, availability of finance and the economic situation more generally.

Previous empirical work indicates that both *underlying* and *effective* demand-side drivers have, to varying degrees, played a role in the New Zealand housing market.⁶ In particular, the evidence outlined in Chapter 5 indicates that population and demographic influences have been important drivers of household formation, with implications for the quantity and type of dwelling required in the New Zealand market. Population growth has been relatively strong in international comparison and migration flows have been volatile and mostly focused on Auckland. Further, demographic changes – such as population ageing, cultural and ethnic diversification and a radical transformation in family structures – have also been pronounced over recent years. Although there is some debate in the New Zealand literature on the significance of migration for house prices (discussed in Chapter 5), across OECD countries, higher population growth is associated with real house price appreciation (Sánchez and Johansson, 2011).

Changes in *effective* demand have also been significant in the New Zealand housing market. Although income growth has been relatively weak in international comparison, as outlined in Chapter 3, it has still led to some upward demand pressures in the housing market as households seek to ‘trade up’ and improve the quality of their living environment. However, perhaps more importantly over the course of the recent house price boom, increased access to credit, low interest rates and innovations in financial instruments have increased the ‘borrowing capacity’ of households and have been a key source of increased *effective* demand for housing (Figure 2.6 above). As mentioned above, these changes in financial markets, which have occurred across most OECD countries, are commonly cited as a predominant reason why the last house price boom was so synchronised across countries (for example, André, 2010).

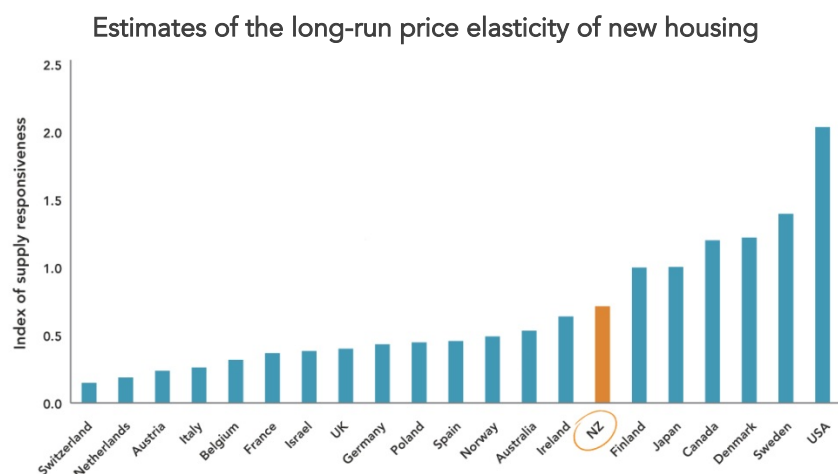
Supply side

The extent to which new housing construction responds to changes in demand is perhaps the most important factor for the effective functioning of the housing market. This reflects a collection of determinants, including the time taken to acquire land and complete construction. As such, the responsiveness of housing supply depends not only on geographic and urban characteristics, but also on policies – such as land use and planning regulations – that directly impact on housing supply.

The supply responsiveness of the housing market influences the extent to which an increase in housing demand leads to more housing construction or to higher house prices. As such, it is a key determinant of housing affordability. The international evidence indicates that if the supply of housing is constrained in some way, then increased demand will tend to feed into higher house prices, rather than an expansion in housing supply (Glaser, Gyourko and Saiz, 2008; Gyourko, 2009). Conversely, if housing supply is relatively responsive, then the impact of demand shocks will tend to show up as changes in housing investment.

The empirical evidence for New Zealand suggests that the responsiveness of housing supply to changes in demand is around average across the countries for which data is available, but almost half as effective as in a number of the better-performing OECD countries (Figure 2.7). With a long-run supply elasticity that is less than one, an increase in the demand for houses in New Zealand is estimated to lead to a proportionately larger increase in house prices than in new house construction. In some of the better-performing countries, with supply responsiveness that is more than twice as vigorous as in New Zealand, much less of the adjustment to a positive demand shock ends up coming through as higher house prices.

⁶ Models of the New Zealand housing market include: O’Donovan and Rae (1997), Grimes, Aitken and Kerr (2003) and Briggs and Ng (2009).

Figure 2.7 Price responsiveness of housing supply, selected countries¹

Source: Sánchez and Johansson (2011)

Notes:

1. Estimates of the long-run price-elasticity of new housing supply are derived from a stock-flow model of the housing market that is estimated with an error correction framework. The estimation period is from the early 1980s to the mid-2000s.

Supply responsiveness at the local level

Some of the regulations that influence the supply side of the housing market are set and/or administered by local councils. As such, the extent to which housing supply responds to changes in demand, and the associated price dynamics, may vary across the country to some extent. In areas where council policies and practices allow for rapid expansions in new house construction, house prices should be less volatile than in areas where new supply is more constrained. This type of dynamic has been detected across cities in the United States. For instance, Green et al. (2005) find that housing supply is highly-responsive to demand pressures in cities with 'pro-development' regulatory environments and readily available land. In contrast, supply responsiveness is low in cities with high regulatory barriers to expansion and cities with declining populations.⁷

Empirical work by Grimes and Aitken (2010) indicates that the responsiveness of housing supply does indeed differ across TAs. This indicates that the construction and land development sectors are more responsive to changes in housing demand in some parts of the country compared to others. There is also evidence that in areas of the country where housing supply is more responsive, an increase in housing demand results in relatively more houses and smaller increases in real house prices, with potentially beneficial implications for housing affordability. In technical terms, there is a negative correlation across TAs between the extent of supply responsiveness and the speed with which house prices adjust to their new equilibrium.

Although difficult to show conclusively, differences in supply responsiveness at the TA level may, in part, reflect the efficiency with which local councils implement and enforce regulations governing the land development and building sectors.

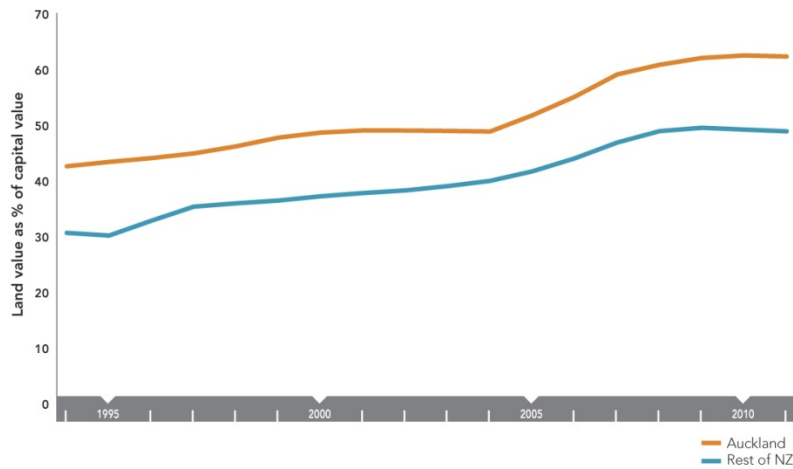
Land availability and the Metropolitan Urban Limit

Supply-side rigidities in New Zealand's housing market are apparent in relative price pressures for the various inputs into the house building process. Section prices have grown more quickly than house prices over the last 20 years, indicating that land supply has become less responsive to increases in housing demand (Figure 2.8). Steadily increasing section prices as a share of the cost of new dwellings indicates a shortage of residential land in places where people want to live. Land price pressures have been particularly acute in Auckland where section prices have increased by significantly more than in the rest of New

⁷ Arguments about the role of regulatory and geographical constraints have subsequently been strengthened Gyourko, Saiz and Summers (2008) and Saiz (2010).

Zealand. Land now accounts for around 60% and 40% of the cost of a new dwelling in Auckland and the rest of New Zealand respectively. As a result, appreciating land prices have been a key driver of house price inflation in New Zealand over recent years.⁸

Figure 2.8 Land prices as a share of house values



Source: Productivity Commission calculations using QV data

In Auckland, the Metropolitan Urban Limit (MUL) is a key zoning restriction that defines “the boundary of the urban area with the rural part of the region” (Auckland Regional Growth Forum, 1999). The Commission has estimated a model of land values in the greater Auckland region to assess the impact of the MUL.

The results from estimating this model indicate that the MUL is a binding constraint on the supply of land. The value of this land price differential has increased since the late-1990s, suggesting that the MUL has become increasingly binding as housing demand pressures have intensified within Auckland city.

Much of New Zealand’s land area is unsuitable for residential development. However, a very low population density suggests that raw land is potentially relatively abundant. Although data on the quantity of land at various points of the development process is not collected in New Zealand (House Prices Unit, 2008), this suggests that policy and planning practices are constraining the supply of residential land. For example, strong land price pressures in Auckland raises questions about the impact of policies aimed at increasing density – such as the Metropolitan Urban Limit and other planning restrictions – on housing affordability. As discussed in Chapter 7, the challenge is to improve land release and planning approval processes so that affordability considerations are taken into consideration.

Construction costs

As outlined in Chapter 10, construction materials are more expensive in New Zealand than in Australia. This reflects a number of factors including the small size of the New Zealand market, and corresponding small scale of New Zealand material manufacturers, and high domestic transport costs. Also, there are only two major materials manufacturers in New Zealand and some inquiry participants raised questions about the extent of competition in the market. From 2002 to 2011, the cost of building materials increased by almost 20% in real terms, although about one third of that reflects the introduction of new materials (such as double-glazed windows).

More generally, the costs of all the major inputs into housing construction have typically increased more quickly than both generalised inflation and the costs for other forms of construction (Briggs and Ng, 2009). The available evidence suggests that the construction industry is populated by a large number of small businesses that predominantly operate on a cost-plus basis. As such, productivity growth in the sector has, at best, been flat over recent years and lower than in the economy in general. This indicates limited scope for the sector to respond to demand increases without upward pressure on relative prices.

⁸ Work by Grimes and Aitken (2010) indicates that increases in the price of land may actually lessen supply responses in the housing market and exacerbate price spikes.

Reflecting these issues, total construction costs have increased by 30% in real terms in the nine years to 2011, with large increases recorded over the 2000s house price boom. The cost of residential construction in New Zealand is significantly higher than in Australia, with negative implications for housing affordability. For example, per square metre building costs are estimated to be around 15% to 25% lower in various Australian cities than they are in Auckland.

Lowering construction costs to improve affordability calls for productivity improvements driven by a range of factors, including improvements in government procurement and technological and regulatory changes that allow a greater use of internationally traded house components and building supplies.

Charging for infrastructure and the cost of building regulation

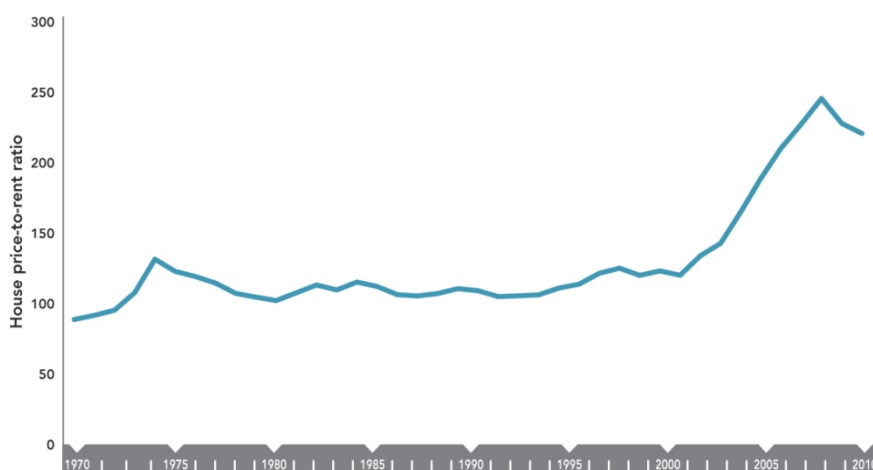
Infrastructure charges vary across the TAs and can be significant – a survey conducted across ten regions found that development contributions account for between about 1% and 10% of median section prices and can influence housing affordability (Chapter 8). There is no reliable data available on the impact of building regulations on construction costs.

It is clear that regulations governing residential building construction increase the cost of building a house. However, the benefits of these regulations, which include increased safety and amenity, also need to be taken into consideration. The challenge is to develop, administer and enforce regulation in the sector so as to maximise its net benefits. The impact of land release policies, infrastructure charges and building regulations are discussed in Chapters 7, 8 and 9 respectively.

2.3 The rise of the private rental market

The sharp increase in house prices over the 2000s, driven by a confluence of increased housing demand in the context of some stickiness in housing supply, contributed to a marked change in tenure patterns in New Zealand.⁹ Over this period, rents in aggregate increased at around the same rate as generalised inflation. Across the TAs, private rents grew in a range of 2.3% per year (in Dunedin City) to 8.2% per year (in Buller District). In all cases, rent increases were significantly less than real house price inflation and the ratio of rents to house prices increased markedly (Figure 2.9). This was unusual historically – from the 1970s to the end of the 1990s the ratio of house prices to rent was basically flat, indicating that rents moved broadly in line with house prices up until the 2000s house price boom.

Figure 2.9 House price to rent ratio



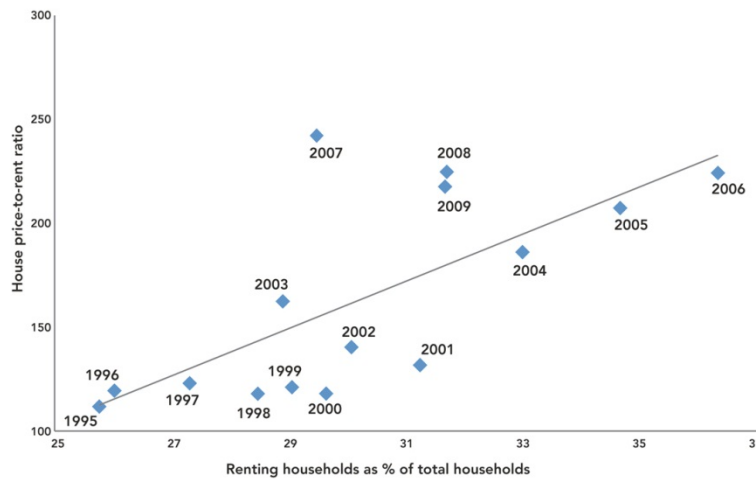
Source: Productivity Commission

This insensitivity of rents to rising house prices over the 2000s boom allowed the rental market to act as a 'safety valve' in the face of rising house prices. As the housing market boomed, the shift from owner occupancy into the private rental market intensified – there is a significant link between the ratio of house

⁹ This is consistent with a theoretical model of the New Zealand housing market, which shows that homeownership rates are affected by changes in housing costs relative to incomes, especially if the availability of credit is constrained. See Coleman (2007). Other underlying factors that have been linked to the decrease in home ownership include a marked increase in the distribution of household income from the late 1980s (Perry, 2010) and changing housing preferences, especially amongst younger people (Beacon Pathway, 2010).

prices-to-rents and tenure patterns from the mid-1990s (Figure 2.10). In broad terms, this indicates that the affordability of renting relative to home ownership has had an important influence on tenure patterns.

Figure 2.10 Rental affordability and tenure patterns, 1995-2009



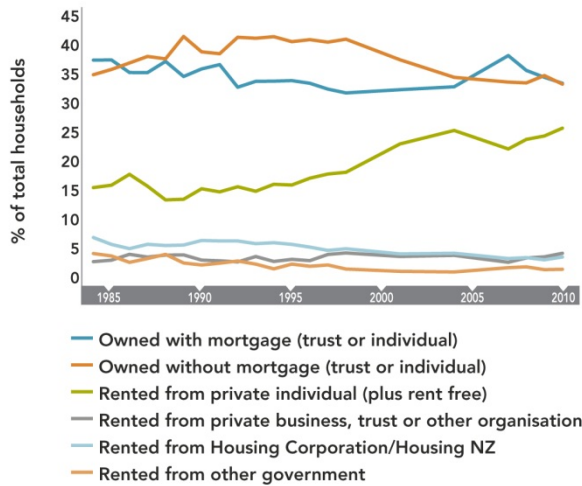
Source: Productivity Commission calculations based on OECD and Statistics New Zealand data

This large swing in tenure patterns exacerbated the growth of the rental sector and decline in the extent of home ownership that had been underway for some time (Figure 2.11). Home ownership peaked in the late-1980s to early-1990s when around 75% of private dwellings were owned by their occupants. Since then, ownership levels have dropped to around 65% – which is about average for the group of OECD countries for which data is available (Figure 2.11).

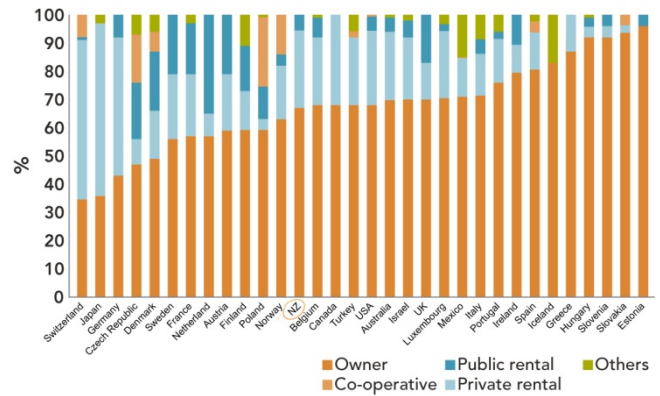
At the regional level, the decrease in home ownership since the end of the 1990s has been particularly marked in Auckland, where around 42% of households now rent their dwelling (Figure 2.11). Among the group of people who own their own home, the share that do so without a mortgage increased to peak at around 40% in the mid-1990s but has since fallen to around one third.

Figure 2.11 Tenure patterns in New Zealand

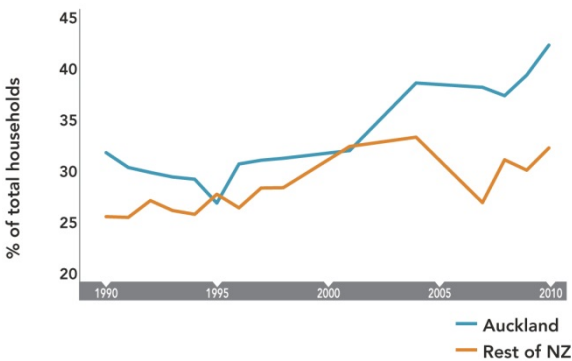
Tenure patterns¹



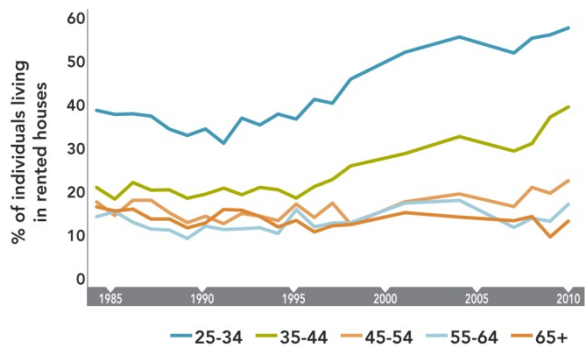
Homeownership in selected OECD countries



Share of rental households by region



Share of rental households by age



Source: Statistics New Zealand Household Economic Survey, OECD, NZ Census

Notes:

1. These data come from the Household Economic Survey and are consistent with census data for 2006. The 2006 Census (Statistics New Zealand, 2009) counted 451,965 dwellings 'not owned by usual resident(s)' representing 32% of the total dwelling stock (1,454,175). However, if the 90,333 dwellings 'Not Elsewhere Included' (NEI) are excluded from the count, the proportion rises to 33%. As well as the 388,275 'usual residents who make rent payments', the count also includes 57,378 'usual residents who do not make rent payments' and 6,315 where 'rental arrangements (could) not (be) further defined'.

Landlords

The apparent disconnect between house prices and rents suggests that increased demand for rental properties has, to date, been met in large part with increased supply. A large and growing share of New Zealand renters rent their homes from private individuals (Figure 2.11). For instance, between 1991 and 2007, the number of rental property investors rose from 75,000 to over 200,000 and the debt on rental properties increased from an estimated 21% of total mortgage debt in 1991 to around 33% in 2006 (House Prices Unit, 2008).

Most investors in the New Zealand rental market are relatively small scale and only work part-time in the sector – the annual ANZ Property Investment Survey indicates most landlords own 1-3 rental properties. As well as operating on a very small scale, the available evidence also suggests that New Zealand landlords are reasonably 'self-sufficient' in that they are disinclined to use professional property management services.¹⁰

Consistent with the steep increase in the ratio of house prices to rents outlined above, landlords have been prepared to accept low yields on their rental properties, given in part an expectation of capital gains.

¹⁰ For example, anecdotal evidence collected in engagement meetings suggests that only around 20% of rental properties in New Zealand are managed by a property manager compared with 80% in Australia.

Although estimates vary, the net cash yield on rental properties over the 2000s house price boom is estimated to be well below 4% (Department of Building and Housing, 2008). In contrast, capital gains have been relatively strong until recently and New Zealand home owners have, on average over the 2000s, enjoyed superior returns compared to investing in the share market (OECD, 2011).

However, since the end of the 2000s boom, capital gains on rental properties have diminished significantly, placing strain on the sector. Although difficult to judge, demand pressure may already be working to increase rents in the bigger cities, with recent data indicating that rental households are spending an increasing share of disposable income on rent (Statistics New Zealand, 2011). In addition, some rental agencies have adopted the 'open home' approach, which results in potential tenants making offers of increased rents to secure the tenancy.

Outside student accommodation and retirement villages, large-scale landlords have a very limited presence in the New Zealand market. A low cash yield is perhaps one important reason why institutions have been reluctant to enter the rental property market. The large scale of investment required to assemble a suitably diverse portfolio of rental properties in different locations with different demographic exposures is also often cited as a barrier to institutional investment in the sector. The share of people living in rental properties owned by private businesses, trusts or other organisations has remained low at under 5%, indicative of a very low level of institutional involvement in the sector (Figure 2.11).

Tenants

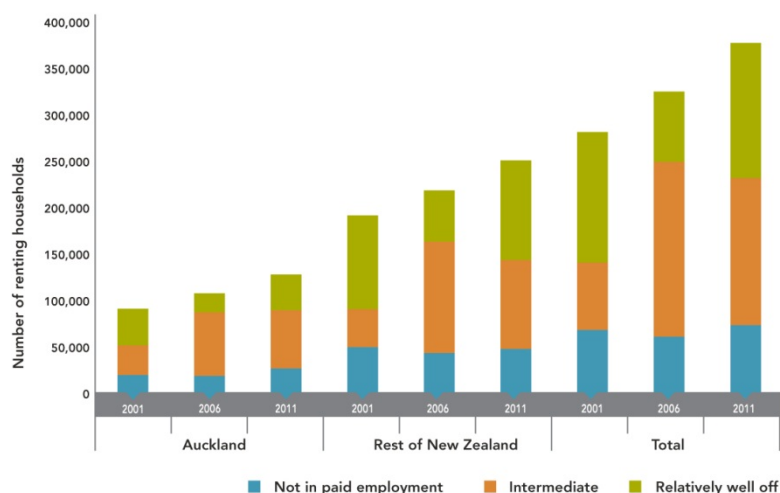
Declining home ownership is concentrated in age cohorts traditionally associated with the transition into home ownership (Figure 2.11). This is consistent with decreasing affordability for younger cohorts, discussed in detail in Chapter 4, and marks a distinct change in the function of the rental market. Up until the mid-1980s, when home ownership peaked, rental accommodation traditionally acted as a 'stepping stone' on the way to a preferable owner-occupied mode of housing. However, since then, affordability constraints have become more binding for a growing share of households, who tend to be young and/or with relatively low incomes.

This group of 'intermediate renters' typically has at least one member in paid employment but cannot afford to buy a dwelling at the lower quartile price, assuming standard bank lending criteria. Many intermediate renter households include "middle income couples and families and older households who would normally be expected to achieve stable housing through home ownership" (The New Zealand Housing Report, 2009/10). In effect, this group are at the margin of home ownership in that they are unable to bridge the deposit and/or mortgage-servicing gaps given the price of lower-quartile dwellings.¹¹ As such, the size of the intermediate rental market provides a good indicator of housing affordability.

Between 2001 and 2006, as rising house prices pushed the affordability constraint further up the income distribution, the number of intermediate renters more than doubled to over 187,000 households and 58% of all private renters (Figure 2.12). Between 2006 and 2011, driven in part by declining interest rates, the share of intermediate renters is estimated to have declined while the number of well-off renters increased. In aggregate, and consistent with the tenure results outlined above, the total number of renter households in New Zealand increased by almost 35% in the ten years to 2011. In Auckland over this period, the number of renter household increased by 40% and one in three of New Zealand's renter households now live in this part of the country.

¹¹ For example, if housing affordability improves, households at the top end of the intermediate renter group either move into home ownership or join the group of 'relatively well-off renters' who can afford to buy a house but choose not to. Conversely, a reduction in affordability will see households at the bottom end of the relatively well-off renters group become intermediate renters.

Figure 2.12 Growth in the rental market



Source: Productivity Commission

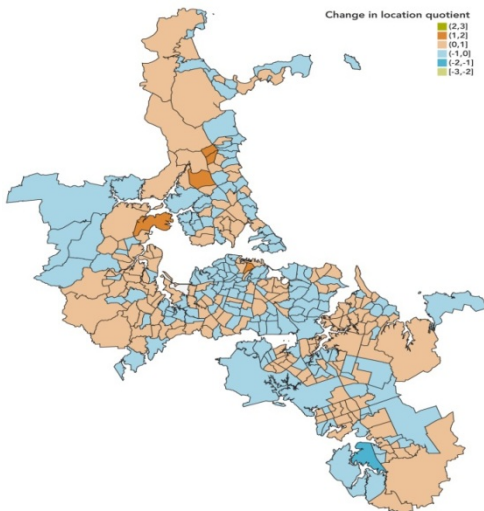
An important advantage of rental housing is that it is more flexible than home ownership, allowing tenants to relocate in response to changes in employment or other circumstance. On the other hand, increased flexibility can also be problematic for tenants who value the stability of tenure that home ownership provides. For instance, whereas home owners effectively lock on to the property ladder and thereby insulate themselves from future swings in the housing market, tenants are continuously exposed to market conditions through changing rents.¹²

Although rent increases have been modest over recent years, the location decisions of low-income households appear to be sensitive to rent changes. In particular, between 1996 and 2006, there was an exodus of low-income renters out of the Auckland isthmus as rents in these neighbourhoods increased more quickly than in other parts of the city (Figure 2.13). In contrast, in neighbourhoods on the city fringes, where rent increases have been lower, the concentration of low-income renters increased over the ten years to 2006. At least some of these relocations are likely to reflect tightening budget constraints, with negative consequences for local connections to schooling and other community-based networks.

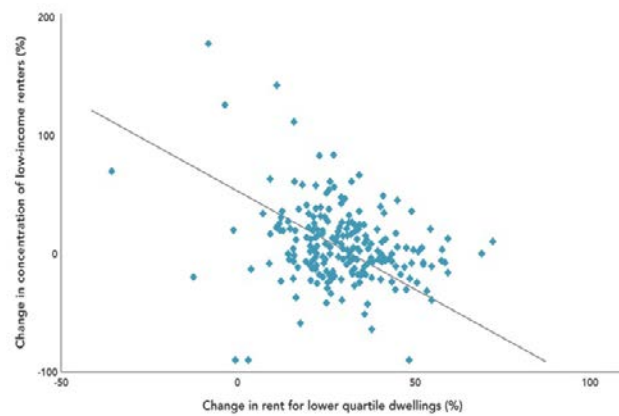
¹² By way of illustration, data from the 2006 Census on tenure length in the private rental market indicates the transitory nature of renting. Specifically, 44% of all renters reported having tenancies of less than one year, 39% rented for between one to four years, 10% rented for five to nine years and 5% for ten or more years (DTZ New Zealand, 2008b).

Figure 2.13 Clustering of low-income renters, 1996-2006

Change in the concentration of low-income renters¹



Rent changes and the concentration of low-income renters



Source: Productivity Commission calculation using Census and DBH Tenancy Bond Board data

Notes:

1. Location quotients measure the over or under representation low-income renters at the TA level relative to its proportionate share in the Auckland region. The figure shows the percentage point change in the location quotient over the period 1996-2006. A number greater (less) than zero indicates an increasing (decreasing) concentration of low-income renters.

In effect, large increases in the number of rental households and the average duration of rental tenure require the rental market to perform in a way that it has not done previously – that is, provide secure, long-term, quality, rental housing on a much larger scale than in the past. The challenges around this transformation are discussed in Chapter 11.

2.4 Housing investment

A distinctive feature of residential investment in New Zealand is that new supply has tended to come in the form of large and relatively expensive houses or, to a lesser extent, apartments that are targeted at the top end of the market. This represents the culmination of a distinctive trend that has been on going at least since the 1960s (Figure 2.14). Since then, in both Auckland and the rest of the country, the share of new dwellings with values greater than the upper quartile value of the existing dwelling stock has steadily increased from around 10% to around 50%. Conversely, the share of new dwellings in the lower quartile has fallen from around 30-35% to 5%. As such, the majority of new dwellings built in Auckland and the rest of the country are currently not targeted at the affordable end of the market.

Figure 2.14 New housing investment, value distribution



Source: Productivity Commission calculation using QV data

Notes:

1. For each year, the data show the share of new houses that are valued within each quartile of the value distribution for the existing housing stock.

There are a number of reasons why housing investment in New Zealand has moved firmly towards the high end of the market.¹³ First, up until the late 1970s, State Advances loans, which were advanced to first home buyers at reduced interest rates, could only be used to purchase new homes subject to size limits. This most likely encouraged the construction of relatively small houses at the lower end of the market. Once the system of State Advances was abolished in the late 1970s, new houses have typically been built to higher specifications and with larger floor areas than the existing stock, indicative of quality improvements (Box 2.1).

Box 2.1 New Zealand houses are big

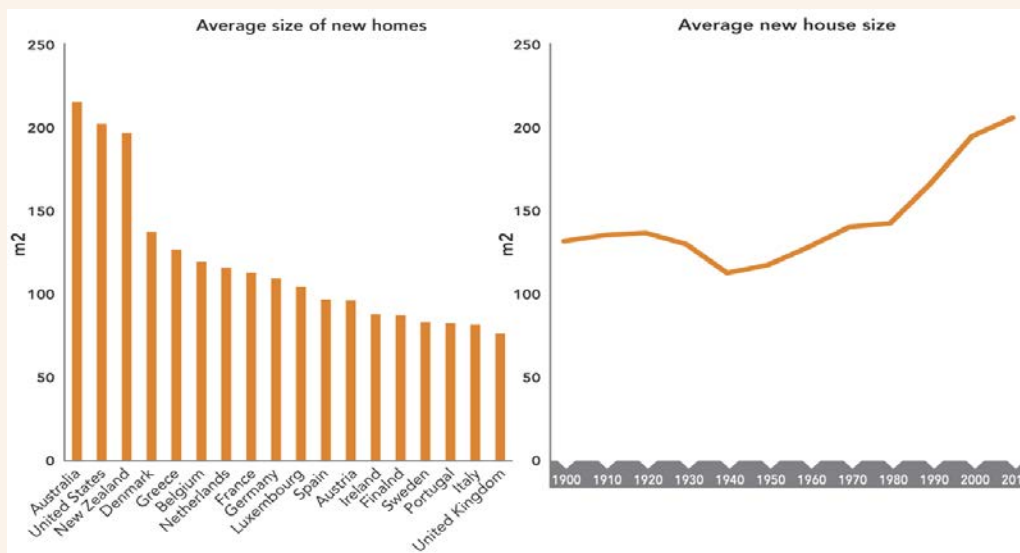
At the national level, New Zealand houses are, on average, among the largest in the world (Figure 2.15). This has not always been the case. Since the 1950s, the average size of a new house has steadily increased, with particularly rapid growth between 1980 and 2010 (Figure 2.15). By 2010, the average

¹³ In technical terms, the supply of more affordable housing largely depends on the relative profitability of constructing this type of housing compared to more expensive housing. In turn, this depends on the relative size of the selling price to construction cost ratio for dwellings at different price points in the market (Rosen, 1974).

new house was around 200m², a great deal larger than a standard 1960's three-bedroom bungalow. Indeed, in the 1960s, three-bedroom houses accounted for about 70% of all houses. But since 2000, new houses are more likely to have four rather than three bedrooms and five-bedroom houses have accounted for over 10% of new construction. In international comparison, the average size of a new house in New Zealand is now over double that in a number of European countries.

The areas of the country that have experienced the largest increases in house size have typically evolved from small rural areas into fringe areas attached to larger centres or from holiday destinations to substantial centres supporting local families or attracting larger holiday homes (Ingerson, 2011).

Figure 2.15 House size in New Zealand



Source: James (2009) and Ingerson (2011)

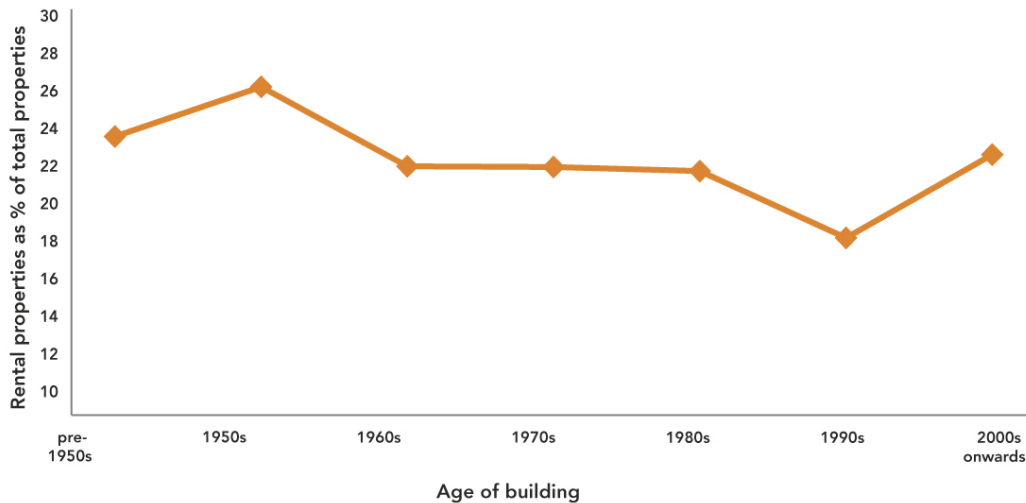
Second, with land prices constituting a large and increasing share of the value of a dwelling, particularly in Auckland, the incentive is to build high-spec houses so as not to under-capitalise the value of the land. Third, anecdotal evidence suggests that the margins available to builders on low-cost homes are typically lower than on high-priced homes.

Changing demographics may also play a role in encouraging investment into high-spec housing. A theoretical model suggests that population ageing increases the share of older households living in high-quality housing (Coleman, 2010). In contrast, this model predicts falling home ownership rates among younger people, who are squeezed out of the housing market by higher taxes and house prices. The empirical evidence in New Zealand is consistent with these predictions. In particular, as well as the increased rental tenure for younger cohorts outlined above, the share of older households living in houses with at least three bedrooms increased from 59% to 68% between 1996 and 2006 (Coleman, 2010).

With a strong tendency towards high-end new housing, the construction sector does not provide for low-to-middle income households and anecdotal evidence suggests that very few first-home buyers buy a new house. In addition, with the exception of multi-unit dwellings, there is very little purpose-built rental construction coming on stream (Page, 2007). Instead, the increase in the stock of rental dwellings has been met by 'filtering', through which newly constructed dwellings free up existing dwellings for use in the rental market. As a result, older dwellings are more likely to be part of the rental stock while newer dwellings are more likely to be owner occupied (Figure 2.16).¹⁴ However, this doesn't hold for dwellings constructed in the 2000s, reflecting an increase in the construction of multi-unit dwellings specifically for the rental market.

¹⁴ Moreover, survey evidence indicates a distinct preference amongst property investors for second-hand as opposed to new properties. In particular, SHORE, 2011 finds that 67% of the sample of landlords only bought existing dwellings.

Figure 2.16 The age distribution of rental and owner-occupied dwellings



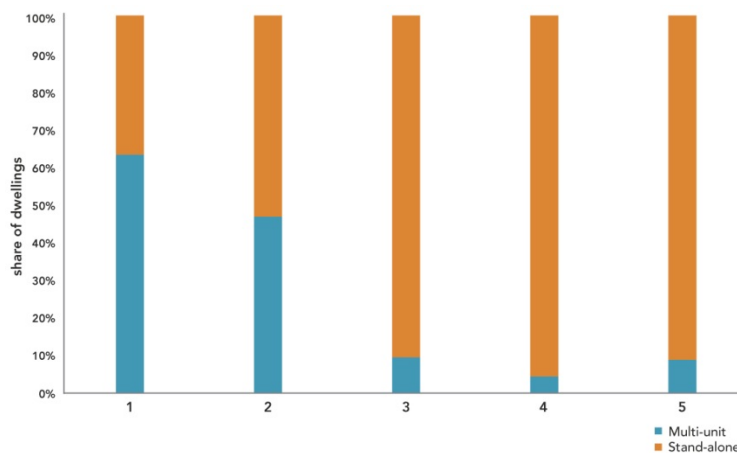
Source: Productivity Commission calculations based on QV data

Multi-unit dwellings

Increased construction of multi-unit dwellings has been an important driver of a modest increase in medium density housing in New Zealand over recent years. Across the country, multi-unit dwellings now account for around 18% of the number and 16% of the floor space of all privately occupied dwellings.¹⁵ Multi-unit dwellings typically have fewer bedrooms and are smaller than stand-alone dwellings (Figure 2.17).

As in most OECD countries, multi-unit dwellings in New Zealand typically cater for a large proportion of renters. In aggregate, the available data indicate that 55% of multi-unit dwellings are rented as compared to only 26% of stand-alone dwellings. In the urban centres, this distinction is even more pronounced. For example, in Auckland, Wellington and Christchurch only 27% of residents of inner city apartments own their homes, compared to the national ownership share of 65% (Statistics NZ, 2010).

Figure 2.17 Dwelling type by number of bedrooms



Source: Productivity Commission calculations using QV data

Notes:

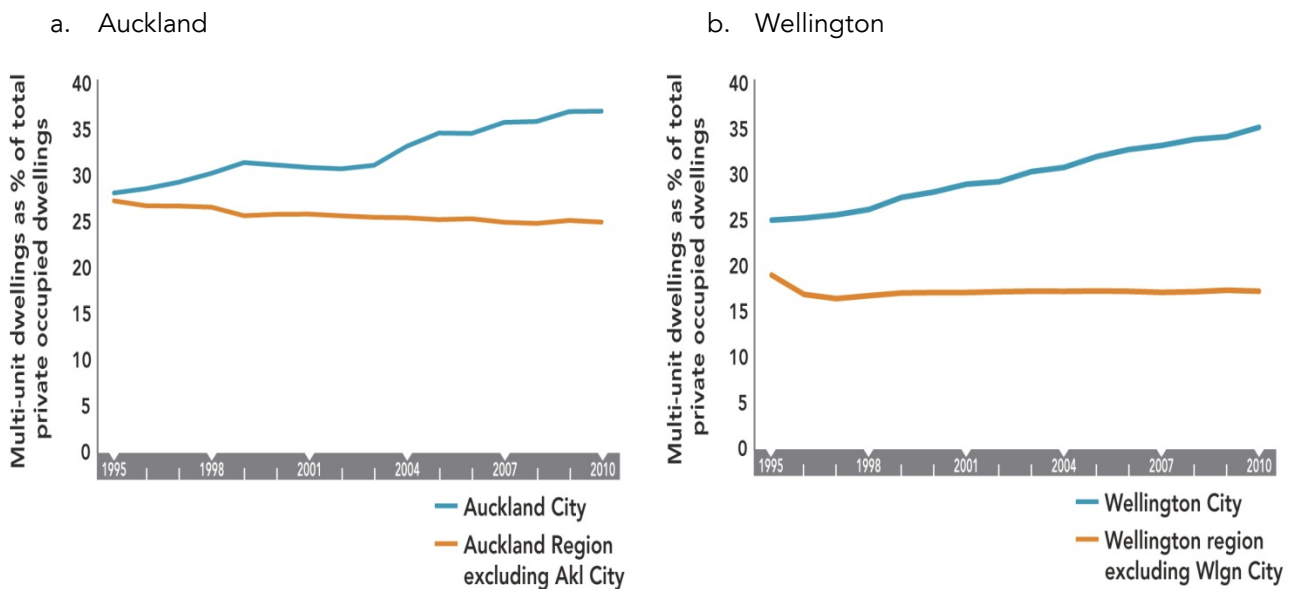
- Shows the split of multi-unit and stand-alone dwelling by number of bedrooms.

In broad terms, the construction of multi-unit dwellings was strong from the late-1990s, before declining noticeably over more recent years. The intensification of multi-unit dwellings has been particularly pronounced in Auckland and Wellington. In the Auckland region, the share of multi-unit dwellings has gradually increased by a couple of percentage points since the mid-1990s, and one in four dwellings are

¹⁵ Multi-unit housing covers everything from 'double units', flats, home units, row housing, townhouses, and apartments. Figures on the tenure split are based on provisional QV data on tenure type at the house level. These data currently do not cover the entire housing stock with around 15% of dwellings being of an unknown tenure type.

currently multi-unit (Figure 2.18). Much of this growth has been concentrated in the former Auckland City, where the number of multi-unit dwellings has almost doubled since 1995 and now accounts for over one third of total dwellings. In Wellington, the intensification of multi-unit dwellings has been one of the most rapid in the country and the share of multi-unit dwellings has converged to around the Auckland level of about one in four dwellings (Figure 2.18). The bulk of this growth has taken place in Wellington City, where, as in Auckland City, just over one third of dwellings are multi-unit.

Figure 2.18 The share of multi-unit dwellings in Auckland and Wellington



Source: Productivity Commission calculation using QV data

Reflecting their smaller size and inner-city locations, increased penetration of multi-unit dwellings in urban centres has, in large part, been driven by distinctive groups of people that favour inner city living – young people in education or early career stage, singles and couples and non-family households and frequent movers (Dunbar and McDermott, 2011). Notwithstanding increasing intensification, the public perception of multi-unit dwellings has tended to be negative in New Zealand (Dunbar and McDermott, 2011). However, this may be changing with improvements in the quality and functionality of multi-unit dwellings.¹⁶

2.5 The quality of the housing stock

The New Zealand housing stock is generally considered to be of poor quality. This perception has been reinforced over recent years by the leaky homes episode, which has seen a significant number of homes built between 1992 and 2005 suffer from failing weather tightness. The total cost of this crisis is estimated to be \$11.3 billion (2008 dollars).¹⁷

There is very little quantitative information available on the quality of New Zealand houses. Currently, the most comprehensive survey of housing quality is periodically conducted by BRANZ (Buckett, 2011).¹⁸ Consistent with the anecdotal evidence, all of the houses included in the 2010 BRANZ Survey were found to suffer from at least one component in a poor or serious condition. Overall, and accounting for changes in methodology, the BRANZ surveys have found that the condition of New Zealand houses has changed little since the mid-1990s. Consistent with this, previous surveys have found that the amount owners spent on

¹⁶ According to survey evidence in Dunbar and McDermott (2011), medium-density housing is often perceived to be characterless, drab, monotonous, cramped, leaky, subject to the complications of bodies corporate, lacking privacy, noisy, insecure, lacking an outlook, lacking hobby and storage space, having parking problems, not allowing pets and with poor prospects for capital gains. However, in the same study, residents in relatively new multi-unit dwellings were generally happy with their dwellings, indicating that the quality of multi-unit dwellings is improving.

¹⁷ In May 2010, the Government announced its financial assistance package to help people get their leaky homes fixed, under which the Government and local authorities each contribute 25% of the agreed-upon repair costs, with the affected home-owners funding the remaining 50% backed by a government loan guarantee.

¹⁸ BRANZ has run its Housing Conditions Survey in 1994, 2000, 2005 and 2010. Although the sample size in the BRANZ Surveys, typically around 600 houses, is very small relative to the 1.6 million dwellings estimated to exist in the 2006 Censuses, it is by far the largest survey on the quality of the housing stock in New Zealand.

maintenance is lower than expected, suggesting that maintenance is inadequate to maintain the housing stock in a satisfactory condition.

Although objective measures of housing quality are not conducted on a comprehensive basis, there are a number of questions in Statistics New Zealand's *General Social Survey* that aim to assess the quality of the New Zealand housing stock from the perspective of its inhabitants.¹⁹ Overall, 51% of respondents report that they have a major problem with their house or neighbourhood (Table 2.1). The most commonly reported problem is that New Zealand houses suffer from cold and damp. Across all of the quality areas surveyed, people who rent their homes are more likely to be dissatisfied with the quality of their dwelling compared to owner occupiers, indicating that the quality of the rental stock is relatively poor.

Table 2.1 Proportion of individuals who have a major problem with their house or neighbourhood

	Rented	Owned with mortgage	Owned without mortgage	Total
Overall	66%	51%	37%	51%
Too small	18%	12%	6%	12%
Poor condition	12%	5%	3%	7%
Damp and/or cold	34%	16%	11%	20%
Too expensive	14%	6%	1%	7%
Too far from work and/or other amenities	12%	10%	6%	9%
Street/neighbourhood is unsafe	8%	4%	2%	4%

Source: Productivity Commission calculations using Statistics New Zealand, *General Social Survey*

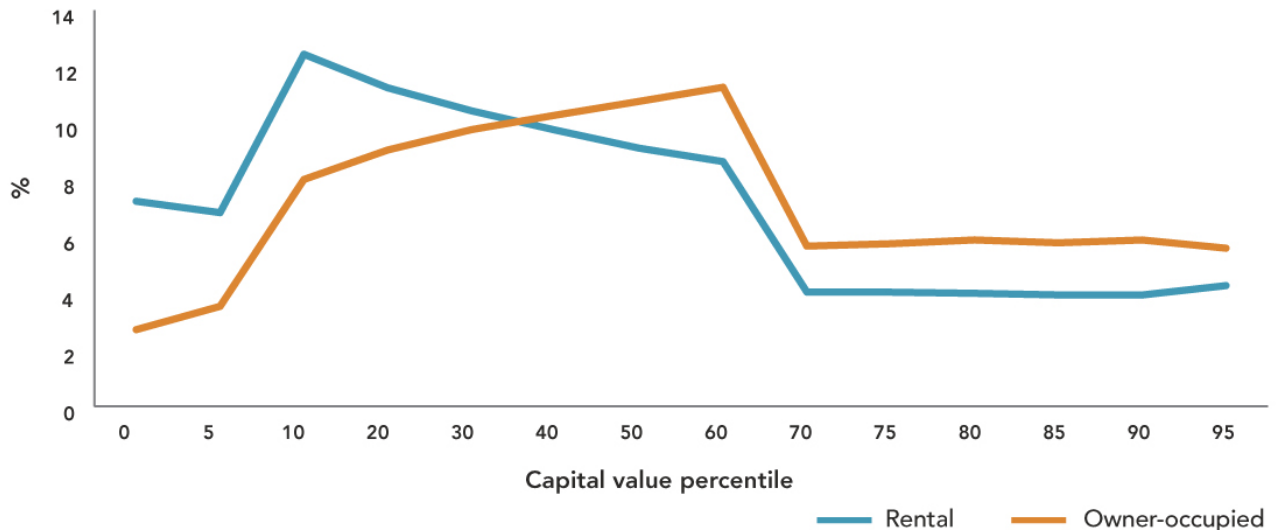
Notes:

1. Respondents aged 15+

Indicative of relatively poor quality, rental dwellings tend to be worth less than owner-occupied dwellings (Figure 2.19). For instance, around half of the rental dwellings in New Zealand are in the bottom 30% of dwellings by value, whereas only one third of owner-occupied dwellings fall below this threshold. Although part of this value difference reflects different characteristics, even when the number of bedrooms is controlled for, rented dwellings are still typically of lower value than owner-occupied dwellings. In addition, the tendency for rental dwellings to be older than owner-occupied dwellings (Figure 2.16 above) also suggests that they are typically of lower quality.

¹⁹ The GSS collects data on the well-being of New Zealanders aged 15 years and over. It covers a wide range of social and economic outcomes and how they are distributed across different groups within the New Zealand population.

Figure 2.19 Share of rental and owner-occupied dwellings by capital value



Source: Productivity Commission calculations based on QV data.

The generally poor condition of the New Zealand housing stock has been linked to poor health outcomes and is a key contributor to health inequalities (Howden-Chapman *et al.*, 2007). For instance, the New Zealand Nurses Organisation points to:

Aotearoa New Zealand's unprecedented levels of rheumatic fever, particularly for Māori and Pacific peoples, [as] just one indication of the overcrowded, cold and unsanitary conditions that many families are living in. (sub. 36, p. 2)²⁰

In response to the poor quality of New Zealand houses, the Building Code was amended in October 2007 to include more stringent requirements for insulating new houses and existing houses that undergo major renovations. Also, in July 2009 the Government introduced a new insulation and clean-heating programme with the aim of retrofitting more than 20% of homes with substandard insulation over the next four years.

2.6 Ongoing challenges for the housing market

The entry costs of home ownership increased over the course of the 2000s house price boom for some groups in society. This has had an important impact on the journey of some households up the housing ladder, particularly those living in Auckland. Affordable Housing New Zealand characterise the problem as "missing rungs on the housing ladder – homes in the \$320,000 to \$380,000 price bracket – that does not allow a natural progression into home ownership" (sub. 12, p. 16).

Going forward, it is difficult to predict the likely balance between the fundamental drivers of demand, the supply responsiveness of the land development and construction sectors and the associated house price and tenure dynamics.²¹ One plausible scenario is that, in conjunction with other demand-side drivers, the population and demographic pressures outlined in Chapter 4 continue to fuel housing demand over coming decades, particularly in Auckland. In the absence of improvements in land delivery and the performance of the construction sector, this would see land prices and the costs of new houses continuing to increase, with any volatility in the housing market appearing in volumes and, to a lesser extent, in the prices of older houses in cheaper suburbs.

In this scenario, the size of the rental market would increase further as the proportion of families owning their own homes continues to decline, particularly in Auckland. Indicative of missing rungs on the housing ladder, intermediate renters would make up the bulk of this increase. In addition, a growing shortage of

²⁰ The work underpinning this submission can be found in Jaine, Baker and Venugopal, 2008.

²¹ The relationships between each are complex and interdependent. For example, house price increases dampen household formation by encouraging young people to stay at home longer and increasing overcrowding, homelessness and the size of multi-family households beyond what would be expected given cultural considerations. Rental values influence the income accruing to investment interests, and hence their value. In turn, the value of investment interests is a major determinant of site values and activity in the development sector.

both private rental and affordable housing would expose the government to increasing fiscal risk in the form of an escalating Accommodation Supplement and growing state house rental subsidies. This risk would grow significantly if rents move back into line with house prices, ending the recent and historically unusual period of disconnect and increasing the level of financial distress for many low-income renters.

An alternative scenario is that the housing market continues to be subdued. To date, New Zealand's house price correction post the Global Financial Crisis has been modest in international comparison. As such, and given the prospect of an extended and volatile world near-recession, there may be more price falls to come.²² In this scenario, supply constraints in the construction and land development sectors bite to a lesser extent and real house prices continue to fall. The market would settle at lower house prices and the affordability issue would recede.

On top of the range of possible cyclical outcomes, the New Zealand housing market faces a number of additional challenges. The shift in tenure patterns outlined above indicates that the housing needs of New Zealanders are changing. The rental market needs to be able to provide secure long-term quality rental housing on a much larger scale than it has done previously. In addition, the generally poor quality of the housing stock indicates latent demand for housing renewal and refurbishment if incomes increase sufficiently. On top of all this, the fallout from the Christchurch earthquakes presents an additional major challenge for the construction sector.

Although the future direction of the New Zealand housing market is difficult to predict, the policy recommendations outlined in subsequent chapters of this report are not contingent on a particular outlook. These recommendations focus on improving the supply responsiveness of the land development and construction sectors and reducing, where possible, regulatory costs. These factors have had a negative effect on affordability that has accumulated over the years and goes well beyond the impact of house price cycles, including the house price boom over the 2000s. As such, these policy recommendations are welfare enhancing, even in a low-growth scenario, although perhaps less urgent.

By the same token, even if supply responsiveness can be significantly improved, the New Zealand housing market will still experience house price cycles, with attendant implications for affordability. Given its stock-flow nature and the time lags involved in construction, the housing market is invariably sticky to some extent and new houses cannot be built instantaneously in response to jumps in demand. For example, even with optimal regulatory settings, the construction sector would not have been able to supply enough houses over the 2000s to prevent significant price increases. However, improvements in the policy environment would most likely reduce the intensity of house price cycles in future (Glaeser and Gyourko, 2006; Glaeser, Gyourko and Saiz, 2008).

The policy improvements outlined in this report are aimed at improving the performance of the housing market and the effectiveness with which it provides housing for New Zealanders. The objective is a housing market capable of meeting changing demands for housing in a cost effective and affordable way over the long term and well beyond the length of a typical house price cycle.

Importantly, if the performance of the housing market can be improved, there will be a flow on effect for the social housing sector – allowing it to focus on providing housing for those whose incomes or other life circumstances make it impossible for them to access appropriate housing in private markets (Chapter 12).

²² For instance, in its 2011 Article IV report on New Zealand in April 2011, the IMF assessed New Zealand real house prices as being 15-25% overvalued. In its May 2011 Financial Stability Report, the Reserve Bank assessed the house price overvaluation to be probably no more than about 10%. A less official, but more recent (November 2011), cross-country survey of house prices in relation to both household disposable incomes and rents puts New Zealand house prices at about fair value in relation to the former, but substantially over-valued relative to the latter (The Economist, November 26, 2011).

3 Macro-economic factors

Key points

- The housing market affects, and is influenced by, developments in the wider economy. This interdependence has the potential to amplify significantly economic disturbances that originate both within and outside of the housing market.
- The housing market boom in the 2000s was not unique to New Zealand. Other OECD countries had a similar experience, pointing to a confluence of global influences as having been at play. These included the emergence of global economic and financial imbalances and innovations in financial policy frameworks (both monetary and prudential) that turned out to be destabilising.
- New Zealand-specific factors were also at work, some of which amplified the housing boom and others that helped to soften the subsequent 'bust'.
 - Housing dominates households' asset portfolios in New Zealand. At the start of the boom in the early 2000s, immigration increased sharply at the same time as the policy interest rate was comparatively low.
 - At the end of the boom, New Zealand experienced a softer correction relative to some other countries, because home loan defaults have been comparatively rare and because the economy has been helped by external influences such as the resilience of Asian economies.
- Housing markets that show large variations in prices can complicate macroeconomic and financial market management. Differences in housing supply regimes help to explain differences in cyclical house price movements. Hence finding ways to improve the supply responsiveness of the housing market can facilitate management of the macro-economy.

3.1 Introduction

The housing market is a large part of the economy and, as such, is both a driver of, and is influenced by, macroeconomic developments. A short-term disturbance to the economy – for example, a sharp shift in migration or changes in fiscal or monetary policy – can manifest prominently in the housing market and feedback to the wider economy in ways that amplify the impact of the initial disturbance.

This chapter considers these types of linkages between the housing market and the macro-economy against the backdrop of the 2000s house price boom.

3.2 A retrospective

As discussed in Chapter 2, the 2000s saw a housing boom, and bust, across a number of OECD countries. While by no means all of the story, that boom and bust was a large component of what came to be known as the Global Financial Crisis. As well as a range of global influences having been at work, regional and New Zealand-specific factors have also had a bearing on the course of events here.

The global context

At the global level, a confluence of circumstances in the early 2000s created the conditions for what was to follow. Outside the United States, these developments were mainly focused on the financial sector, rather than the housing sector. They included:

- an increase in Asian savings, particularly in China, looking for a home;

- exceptionally low policy interest rates in some of the main destinations for these savings (notably, but not only, the US) as a result of monetary policy easing in the wake of the 'dot.com' bust early in the 2000s. In turn, low interest rates fostered both an appetite for borrowing and a search by investors 'for yield'. In the context of housing, lower interest rates mean that home buyers are able to borrow more and purchase more expensive properties for the same outlay, creating upward pressure on house prices, particularly if the supply of housing was slow to respond;
- the emergence of innovative and opaque channels in some countries – not New Zealand – for intermediating savings to housing loans (eg, loans that were securitised and repackaged into products such as collateralised debt obligations). Combined with social policy goals and interventions aimed at increasing home ownership among low-income households, particularly in the US, this led to a marked drop in home loan underwriting standards (ie, sub-prime lending);
- the inherent difficulty for financial regulation and prudential supervision to keep up with financial innovations. In addition, financial market disciplines proved to be much less effective than policy-makers assumed;
- a view that for two reasons monetary policy was not well placed to address asset price 'bubbles', such as in house prices. The first reason is the intrinsic difficulty of identifying bubbles, given that the corresponding fundamental determinants of prices are difficult to identify, even after the fact. Second, even if bubbles can be identified, monetary policy was widely seen as too blunt an instrument for addressing them, without precipitating a sudden and damaging 'bust' cycle. In this scenario, the lower-risk policy approach was to let asset prices run their course.

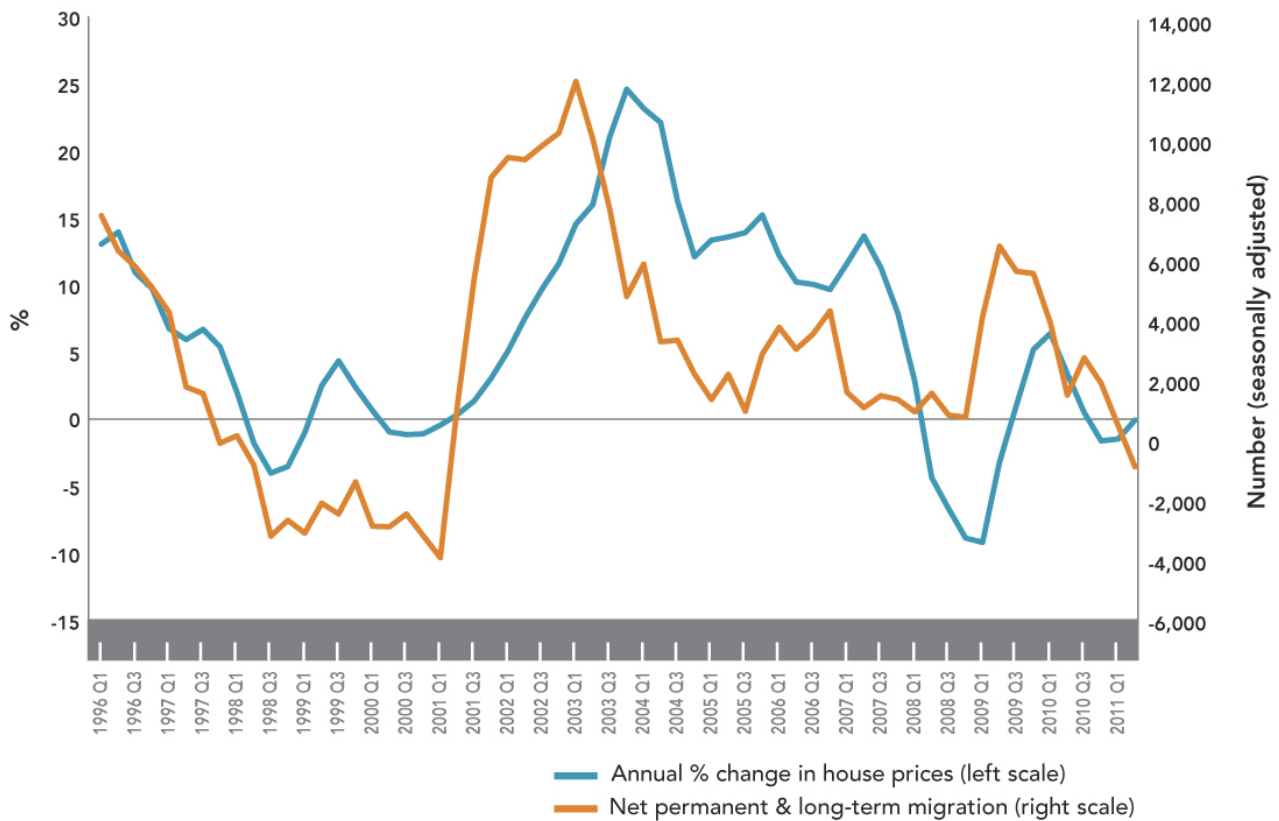
...and some New Zealand specifics

Over the 2000s, New Zealand's financial and housing markets followed many, but by no means all, of these international patterns. For instance, New Zealand was a destination market for Asian savings (uridashi bonds²³), maintained low and reasonably stable CPI inflation, and had strong house price inflation broadly in line with a number of the other OECD countries. New Zealand also experienced some stresses in the financial sector, albeit confined to the finance company sector, mainly stemming from property development rather than from housing *per se*.

New Zealand-specific factors that contributed to the house price boom included a sharp increase in immigration in the early 2000s at around the same time as consumer price inflation pressures, and hence the policy interest rate, were comparatively low (Figure 3.1). This combination of demand pressures most likely stimulated the housing sector under a set of conditions that allowed further momentum to take hold.

²³ For an account of how New Zealand banks were able to use the uridashi bond structure to access comparatively cheap offshore funding, see Drage, Munro and Sleeman (2005).

Figure 3.1 The beginnings of a housing boom

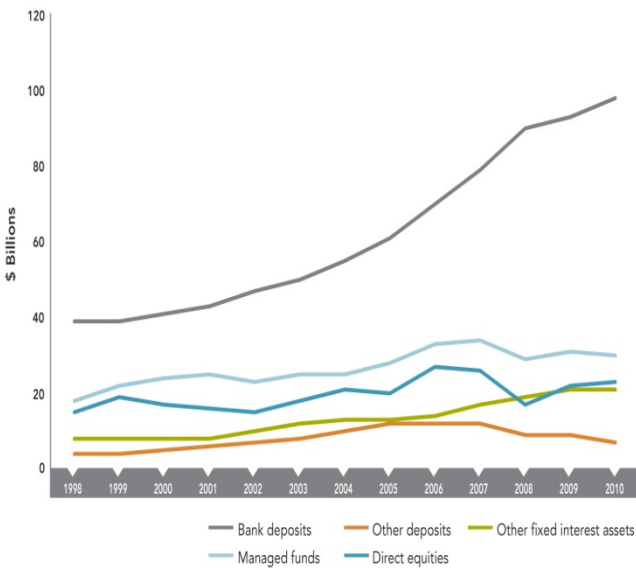


Source: Reserve Bank of New Zealand, Statistics New Zealand

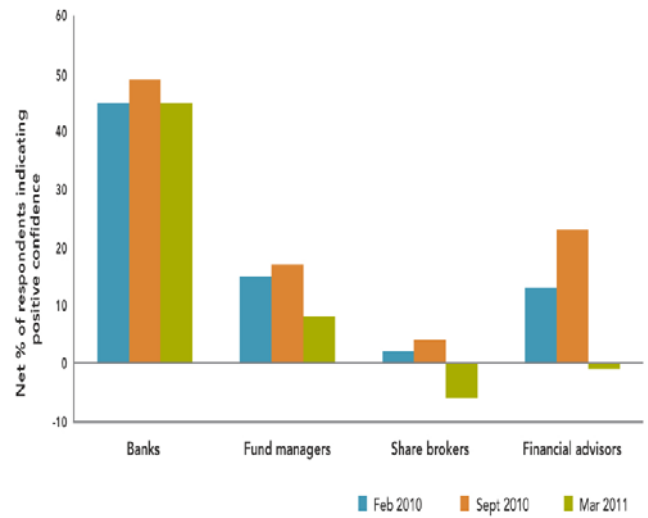
Another distinctive feature of the New Zealand economy was a financial system composed of a strong banking sector and a comparatively shallow investment services sector (ie, managed funds, investment advisors, the share market and share brokers). This picture remains largely unchanged and is apparent from the sizes of the respective sectors as savings repositories and the extent of public confidence in different segments of the financial system (Figure 3.2). Relatively weak public confidence in non-bank investment channels and with financial products as an asset class is an important reason why the investment behaviour of New Zealand households is tilted toward housing (OECD, 2011) (Figure 3.3). In addition, given that housing investments can be readily financed in a way that most other investments cannot, easy access to credit for housing also helps explain why, in a low-saving economy, housing dominates households' (gross) asset portfolios.

Figure 3.2 A bank dominant financial system

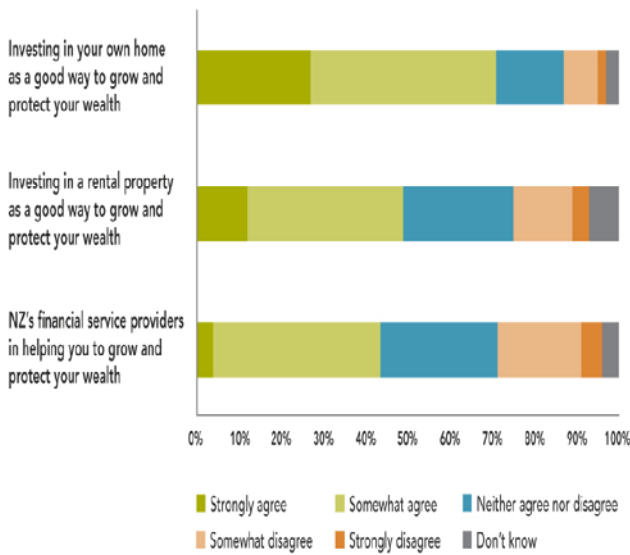
Household financial assets



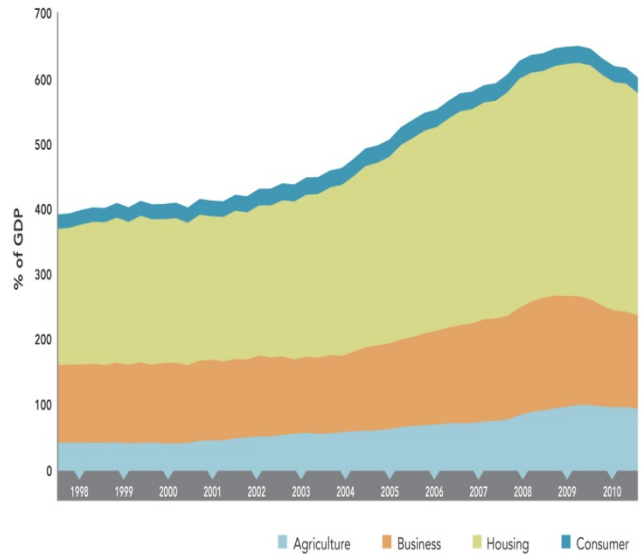
Public confidence in financial service providers



Confidence in financial service providers compared with housing

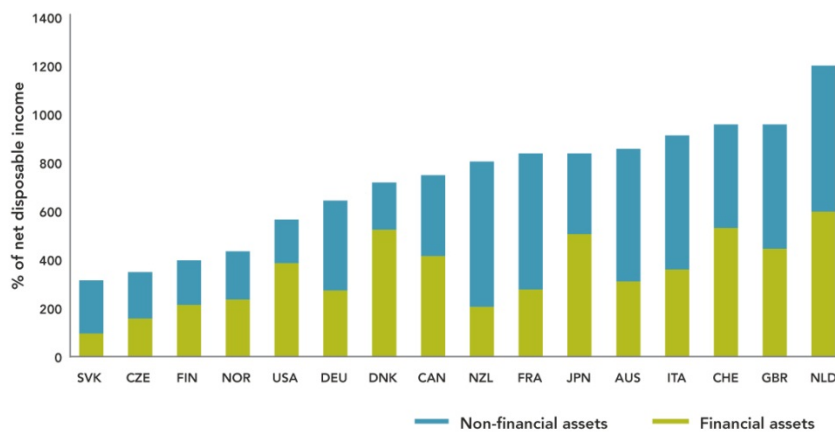


Composition of banks' assets



Source: Reserve Bank of New Zealand, RaboDirect

Figure 3.3 Financial and non-financial assets (as a percentage of net disposable income 2009 or latest available year)



Source: Reserve Bank of New Zealand; OECD National Accounts database and OECD Economic Outlook 88 database

These aspects of New Zealand's financial system need to be viewed in a longer-term context. The structure and focus of the New Zealand financial system, especially the banking sector, evolved considerably in the 1990s and 2000s. From around the beginning of the 1990s, banks began to shift their lending growth and the balance of their lending portfolios away from business loans secured over business assets towards household lending secured over houses. In part, this shift was driven by substantial losses incurred by New Zealand and Australian banks following a number of major corporate collapses in the early 1990s after the 1987 share market crash and subsequent crash in the commercial real estate sector. The Australian experience over this period, which closely paralleled the New Zealand experience, is particularly relevant given the close ownership links between the New Zealand and Australian banking systems.

In some respects, this episode of home-grown financial stress in Australasia 20 years ago, which was at least as big a financial crisis locally as the impact of the more recent Global Financial Crisis (GFC), has been a significant factor in shaping the development of the financial sector ever since. With deregulation in the early 1990s improving banks' access to an under-leveraged household sector and perceptions that mortgage lending is 'as safe as houses', the expansion of the banking sector into the home lending market was a natural development. In large part, this explains the ready availability of money for housing, which, in turn, most likely contributed to surges in house prices in the mid-1990s and mid-2000s. These house price booms were punctuated by macroeconomic slowdowns and financial uncertainties associated with the Asian Financial Crisis in the late 1990s and the bursting of the 'dot.com' bubble early the next decade.²⁴

The macro-economic impact

These developments in the New Zealand housing sector have been an important driver of, and have been significantly influenced by, developments in the wider economy over the past couple of decades. For instance, during a housing market upswing, home owners feel wealthier and increase their appetite for debt, while lenders become less risk averse given that borrowers' incomes and available collateral appear more assured.

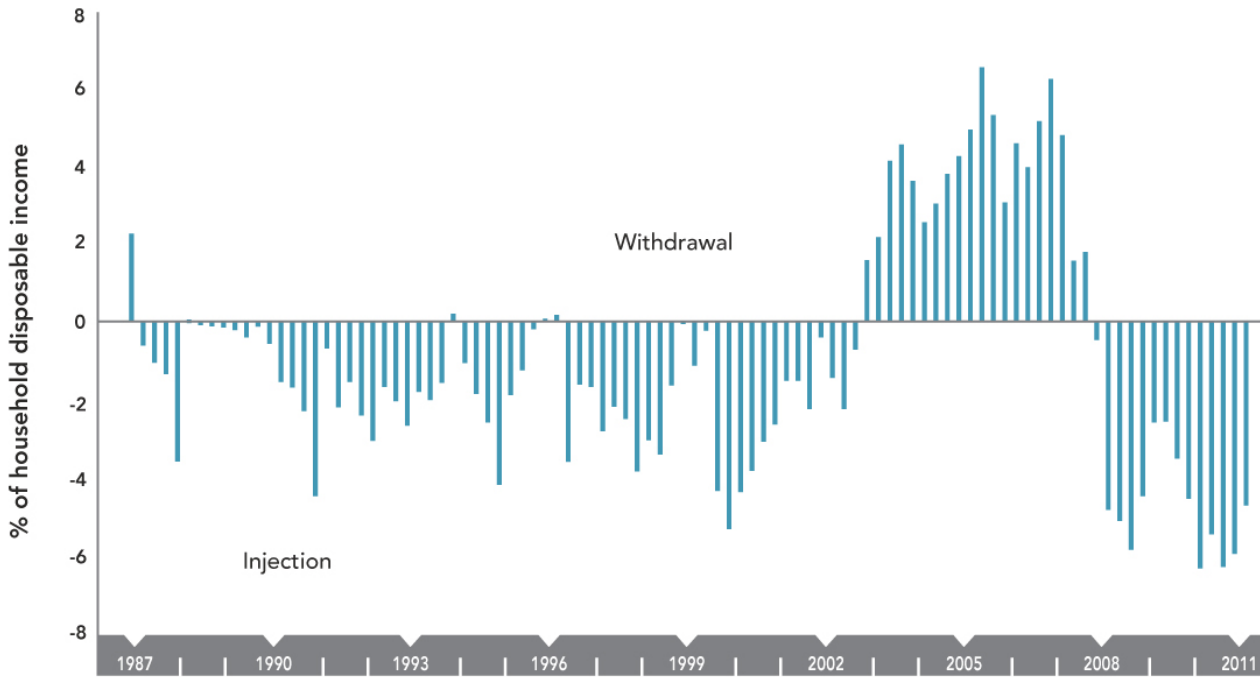
This dynamic in the credit cycle was particularly pronounced during the mid-2000s as home owners increased spending by increasing their borrowing, using the house as collateral, and consequently withdrawing equity from their homes (Figure 3.4).²⁵ During this episode, the share of disposable income committed to building housing equity swung by about 7 percentage points from around 3% in the ten years to 2002 to minus 4% during the middle part of the 2000s. This swing represents a large stimulatory impulse to the macro economy. Since the house price boom came to an end, housing equity accumulation has moved solidly back into positive territory, acting as a drag on the economy's momentum. Part of this surge in mortgage repayments may stem from home owners maintaining mortgage payments at previous levels to accelerate principal reductions given relatively low interest rates. An important issue is how long this trend continues. The Salvation Army suggests that the increase in housing debt:

... may act as a drag anchor on the housing market and on consumer spending for the next decade or more ... If households choose to pay down debt – as they appear now to be doing then consumer demand will be muted – as it appears to be at present. (sub. DR76, p.2)

²⁴ Prior to deregulation of the banking system, most housing finance was sourced from non-bank institutions, including a significant share via solicitor nominee companies. Banks maintained restrictive home lending policies, for example, lending only where the borrower had been a deposit customer of the bank for a number of years.

²⁵ Another explanation for the withdrawal in equity could be that new borrowers take on larger mortgages when house prices are rising, while existing borrowers keep up the same repayments.

Figure 3.4 Housing equity withdrawal



Source: Reserve Bank of New Zealand (unpublished, subject to change)

Weathering the Global Financial Crisis

Whereas the New Zealand housing market fully participated in the global housing boom over the 2000s, it has not experienced as sharp a correction subsequently as some other countries (for example, Ireland, the US and Spain). This has contributed to a less severe macro adjustment than faced by other economies and the avoidance of the very difficult recession, deflation and default dynamics that can develop if adjustment proceeds too quickly. Over the past decade, a significant number of New Zealand households took on more debt than they are now comfortable with. However, there are few signs of deleveraging occurring under conditions of debt stress.²⁶ Home mortgage arrears, while up slightly, remain low by international standards.

Two main factors have contributed to this softer correction in New Zealand relative to some other countries. First, home loan defaults have been comparatively rare. Home mortgagee sales have increased from less than 1% of all house sales in 2007, to between 4% and 5% of all sales in the year to May 2010 (Terralink, 2010). As a consequence, a relatively small number of homes have been put on the market under 'forced sale' terms. In large part, this reflects a more prudent approach to home lending by Australasian banks, which regulators have tended to bolster. For instance, in both New Zealand and Australia, when the Basel II capital standards came into effect, it was made clear that banks would not be permitted as much capital relief in respect of their home loan portfolios as the international standards allowed. The fact that the Reserve Banks of both Australia and New Zealand used monetary policy to 'lean into' the run up in housing markets a little more forcefully than in some other countries probably also helped.

Similarly, the prudential requirements applicable to securitisation of mortgage loans were also stricter and less conducive to imprudent conduct than in some other jurisdictions. In particular, securitisation never really got underway, thereby avoiding the conflict of incentives inherent in the 'originate-to-distribute' model for lending.²⁷ Indeed, to the extent that the 'originate to distribute' model took hold in New Zealand, it was mortgage brokers doing the origination and 'distributing' the resulting lending *onto* the balance sheets of the banks. This is contrary to the situation typical in some other countries, notably the US, where banks originated home loans and, by securitisation, moved them *off* their balance sheets.

²⁶ The March 2011 RaboDirect Financial Confidence Index survey recorded 70% of respondents as being uncomfortable with the amount of debt they had, and a further 21%, whilst comfortable, as still taking available opportunities to reduce debt.

²⁷ This reflects the incentive to lower lending standards to bolster origination fee income, with the increased risk passed to the ultimate securities investors being masked by the opacity of the final investment products.

Second, external influences may also help explain why the New Zealand housing market has proved to be comparatively resilient since the onset of the Global Financial Crisis (GFC). In particular, economic resilience in a number of Asian economies has kept demand for primary commodities strong, thereby mitigating the impact of GFC-induced recessions in the US and Europe on the New Zealand macro-economy. This effect has also been transmitted via Australia, which has benefited from strong Asian demand for mineral and energy commodities. With Australia being New Zealand's largest export market, primarily for non-commodity exports, this has complemented Asian demand for New Zealand's food and fibre commodity exports.

As a consequence of these factors, unemployment in New Zealand has risen by less than in the worst affected economies and has made smaller inroads into the 'mortgage belt', where job losses can result in otherwise sound housing loans quickly turning delinquent.

3.3 Implications

The GFC has been one of the largest macroeconomic events in the past 70 years. Policy lessons are now being drawn and policy paradigms adjusted as a result of that experience. While much of this remains a work-in-progress, some of the issues and new policy directions are already becoming reasonably clear.

House price inflation and leverage

One of the main lessons from the crisis has been that asset price inflation, including house price inflation, matters, particularly if financed by credit (ie, monetary) expansion. While the experiences of the last decade – both the 'dot.com' bubble and subsequent house price boom – are consistent with the view that asset price inflation cannot permanently stray from well-anchored CPI inflation, there is now a better appreciation of the macroeconomic consequences that can result if re-anchoring involves significant de-leveraging. Indeed, the fallout from the GFC has seen a number of OECD economies thrown into severe recessions as a result of banking failures and credit lines being cut.

This brings developments in credit markets, and asset prices, squarely back into the policy frame. While there is little policy desire for a return to the money and credit targeting regimes of the 1970s, there is renewed appreciation of how shifts in financial risk appetite can be a driver of credit expansion (and contraction) and a channel of influence on the macro-economy, particularly on asset prices.

Prior to the GFC, the incentives and disciplines imposed by stakeholders on financial institutions (shareholders, bondholders and depositors), combined with supervisory oversight, were considered sufficient to keep lending institutions' risk appetites reasonably well anchored. This did not mean that individual banks could not or would not over-reach, but it was thought that incentives were such that bank failures would be only isolated events, attributable to circumstances idiosyncratic to the individual banks involved.

This view, however, is now being re-evaluated, in the wake of the GFC. Greater recognition is now being given to how *systemic* shifts in lending risk appetites can under-cut, possibly at times even overwhelm, what the central bank is doing with its monetary policy rate. That is reflected in the reforms now emanating from the crisis, important elements of which involve strengthening the policy framework in ways that it is hoped will better anchor risk-taking, system-wide.

Against this backdrop, the boom and bust in housing markets in the 2000s can be seen more as a symptom than a cause of the ensuing macro-instability. The roots of the GFC crisis were mostly in the financial, rather than in the housing, market. While the effects on housing markets have been considerable, the effects mostly are cyclical in nature. House prices in many countries rose to unprecedented levels, but have since turned down.

In that sense, the effects on housing affordability of the financial turbulence of the 2000s – the run-up to the GFC and the subsequent collapse – can be viewed as temporary (although less so for those who bought near the peak, particularly if they over-stretched themselves). Nonetheless, 'temporary' can stretch to quite a long run of years. Whereas in some countries the adjustment in house prices back to more 'normal' levels has been quite rapid, in New Zealand house prices remain well above historic norms. By how much and

how quickly they adjust from here will depend on both macro-economic factors and the extent to which structural impediments to adjustment can be eased. The latter is discussed elsewhere in this report.

Global integration

A second feature of the GFC has been the extent to which it has been *global*. To be sure, different countries and regions have been affected in different ways. But it is no coincidence that housing booms and busts occurred more or less simultaneously across a number of OECD countries. As outlined in Chapter 2, a set of global influences, including both commonality in policy frameworks and global financial linkages, have played a role. This reflects a world that is becoming increasingly globally integrated. Even housing markets, which might have been thought of as falling on the 'non-tradable' side of the 'tradables/non-tradable' divide, are globally connected, particularly if global trade is taken to include trade in capital.

Housing and macro-stability: important interdependencies

Finally, the events of the past few years have highlighted important interdependencies between housing and the macro-economy. As discussed above, these run in both directions: macro-stability matters for how effectively the housing sector meets the housing needs of the community; and developments in the housing sector have an important influence on the economy as a whole.

With the benefit of hindsight, the macro conditions in the few years running up to the GFC, at least from the perspective of the housing sector, were not as 'moderate' as implied by the description of this period as 'the great moderation'. What does this imply about the way policy might have been managed differently, if policy makers could have known then what they know now? Such an examination needs to consider how the housing sector itself contributed to the ensuing instability. Specific points in that connection include:

- Home lending is not necessarily 'as safe as houses'. Prudential regulations and practices that assume otherwise can be, and in some countries were, more a source of instability than stability. There is a need for policy regimes to always be alert to how markets and practices are changing in ways that are not anticipated.
- Similarly, subsidies and assistance for housing may end up not helping, but instead hurting, those they are intended to help. If widely available, and therefore not well-targeted, subsidies tend to be capitalised into house prices and improve the welfare of people that already own houses as much, if not more, than new entrants.

It is also evident that the house sector more generally was one of the main engines of the pre-crisis expansion: credit was the fuel, and much of that fuel was channelled into, or via, the housing sector. The scale of housing equity withdrawal was one manifestation of the impetus that the housing sector was delivering to the macro-economy. That points to macro policy makers – monetary, prudential and/or fiscal – needing to keep a weather eye on the housing market, as much as a driver, as a potential casualty of macro-economic instability.

The role of housing supply

Housing markets that show large variations in prices can complicate macro-economic and financial management. The Reserve Bank of New Zealand suggests that it is well-established in the international literature that different housing supply regimes go a long way to explaining differences in cyclical house price behaviour, and that given that the demand for houses can change quickly:

...it is important that the supply of houses quickly responds to changes in demand. Supply response moderates potentially damaging swings in house prices. Policy can have an influence on housing market outcomes through a variety of channels, in particular over the longer-term, by helping ensure that the regulatory regime facilitates the ready adjustment of supply to demand. (sub. 37, p.1)

The Reserve Bank encourages the Commission to focus on a policy framework so that supply is more responsive to price signals.

This focus is supported by two recent studies that used US data to investigate the relationship between land supply and macroeconomic variables such as interest rates and income growth. Huang and Tang

(2011) in a study of 300 US cities showed that more restrictive residential land use regulations and geographic land constraints are linked to larger booms and busts in housing prices. Further, natural and man-made constraints also amplified price responses to the subprime mortgage credit expansion during the decade, leading to greater price increases in the boom and subsequently bigger losses.

Evans and Guthrie (forthcoming) in a study of 95 US cities show that in those cities that had an unconstrained supply of land, price movements can be explained by 'fundamentals' such as income, interest rates and construction costs. In cities where development opportunities are constrained, small changes in expectations regarding long-run average income growth rates and real interest rates can generate very large price movements.

These studies highlight the sensitivity of house prices and rents to incomes and interest rates where land is constrained. They imply that imposed limits on land use can accelerate price increases when there are changes in interest rates and income growth rates.

Concluding observation

Insights into house price cycles can be gained from analysing global as well as New Zealand-specific factors. It is difficult even with the benefit of hindsight to untangle the causes of movements in house prices and the relative contributions of the 'fundamentals' on the demand and supply-side of housing markets. Both, however, are likely to matter. Subsequent chapters move away from macroeconomics, to explore how urban land use planning, infrastructure charging and characteristics of the building industry affect the responsiveness of the supply side of housing markets (and hence the nature of house price cycles) and identify ways to improve responsiveness.

4 Housing affordability: distribution and trends

Key points

- House price increases have significantly reduced housing affordability over the past decade but, in recent years, this has been at least partially offset by lower mortgage interest rates.
- Housing affordability differs across New Zealand, with dwellings in Auckland typically the least affordable.
- Most indicators suggest that housing affordability has improved in recent years relative to the peak of the 2000s house price boom. However, house price-to-income ratios remain elevated and would require sharp falls in house prices to return to long-term averages. Affordability measures that include financing costs are currently around their longer term averages.
- Housing affordability is lowest among those who are younger, single, have lower income and wealth, live in Auckland, or belong to an ethnic group other than New Zealand European. Notably, during the last house price boom housing affordability became a constraint for some middle-income groups, whereas it had previously mainly been an issue for those on lower incomes.
- Over the last decade, rents have increased far less rapidly than house prices and the share of income that households spend on rent has fallen in most years since 1996. This apparently benign aggregate situation, however, disguises a more difficult situation for those on lower incomes who often spend over a third of their income on rent payments.
- The most recent data suggest that upward pressures on rents are beginning to emerge.
- The pockets of extreme unaffordability highlighted in the chapter suggest that there may be structural issues with some aspects of the housing market. These are examined in detail in subsequent chapters.

4.1 Introduction

This chapter considers how the broad price trends outlined in Chapter 2 have affected the affordability of housing for home buyers and renters. It also outlines differences in affordability across regions and income levels. The chapter considers four questions:

- Why does housing affordability matter?
- How has housing affordability changed for potential home buyers?
- How has affordability changed for renters?
- What conclusions can be drawn about affordability?

4.2 Why does housing affordability matter?

Something is 'affordable' if it can be paid for without financial difficulty. While housing affordability can be measured in a number of different ways, as will be outlined below, all measures effectively attempt to assess people's capacity to pay for their housing needs.

Housing affordability is particularly important because, whether renting or owning, accommodation services usually absorb a large proportion of household income. House buyers typically have to service their

mortgages on top of additional housing costs, such as rates and maintenance. For renters, affordability reflects their capacity to meet housing costs without going short on other essentials such as food and transport. Declining affordability is a particularly serious concern for low income earners, who may have difficulty meeting basic housing needs. Expensive rents may also make it difficult for renters to save for a deposit to enter the housing market.

Households choosing to spend a large proportion of their income on housing may not necessarily be evidence of an affordability problem. For example, some people will spend more on housing because they have a preference for high-quality housing or want to live in a certain suburb. Younger people, particularly those who anticipate higher future incomes, may also be willing to spend a relatively large proportion of their income on servicing a mortgage in order to enter the housing market.

As discussed elsewhere, government has a number of reasons for being interested in the affordability of housing. Given the size and reach of the housing sector, policy changes that increase affordability will have significant implications for welfare. Also, as discussed in Chapter 3, developments in the housing market have important implications for the macro economy (and vice versa).

4.3 Affordability for potential home owners

There is no agreed best measure of housing affordability. There are also several factors driving home ownership affordability, including house prices relative to incomes and financing costs. In turn, these are influenced by the availability of credit, interest rates, the inflation rate, and the terms and conditions of loan contracts. So this chapter presents a number of measures of affordability for would-be home owners, each of which has different strengths and weaknesses.²⁸

House price ratios

The ratio of house prices-to-income, which shows the number of years of household disposable income needed to cover the purchase price of a house, is the simplest measure of affordability. During the 1980s, house prices fluctuated between about 2 and 3 times annual disposable household income (Figure 4.1). Over the 1990s, house prices rose to more than 3 times annual disposable income before accelerating sharply to about 5.5 times household income by 2007. Since then, the number of years of income required to buy a house has declined slightly to just under 5 in 2010, but remains well above the long-term average.

Figure 4.1 House price ratio



Source: Productivity Commission calculations using Reserve Bank of New Zealand data

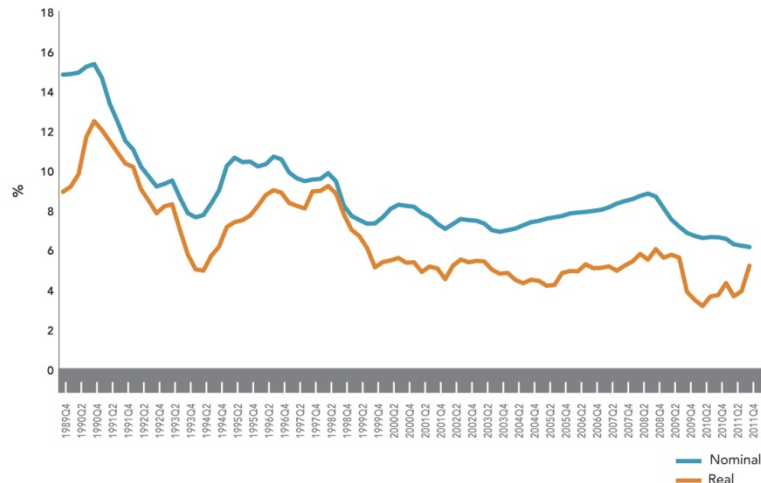
Affordability measures that include borrowing costs

The ratio of house prices-to-income does not account for the cost of housing finance, which is the largest ongoing cost for most home buyers. As well as being large, financing costs can fluctuate noticeably over the course of the business cycle and thereby have an important influence on changes in affordability (Figure

²⁸ For a discussion of strengths and weaknesses of different affordability measures, see Law and Meehan (2012).

4.2). This is apparent from the measure of 'borrowing capacity' developed by Briggs and Ng (2009) (Figure 2.6, Chapter 2). This measure reflects the amount a household earning the average income could borrow via a table mortgage at the effective mortgage rate.²⁹ This measure shows that although the ratio of house prices-to-income increased sharply during the 2000s, the borrowing capacity of households also increased strongly over this period. In effect, and as discussed in Chapter 3, lower mortgage rates enabled households to service larger home loans, and thereby reduced the impact of rising house prices on affordability. Of course, as discussed in Chapter 3 lower interest rates may have also contributed to the increase in house prices.³⁰

Figure 4.2 Effective mortgage interest rate, real and nominal



Source: Productivity Commission calculations using Reserve Bank of New Zealand and Statistics New Zealand data

Notes:

1. Real mortgage interest rates are calculated by deflating the nominal interest rate by the average of the previous four quarters' and the forthcoming four quarters' change in the CPI. Because forthcoming changes in the CPI for the 2011 calculations were unknown at the time of writing, the real interest rates for 2011 assume the CPI increases at 0.5% per quarter from 2011Q1 onwards.
2. GST was increased from 12.5% to 15% in 2010Q3, contributing to higher inflation rates around this time.

Other measures of housing affordability that account for the impact of financing costs confirm that interest rate changes can mitigate the impact of rising house prices. Massey University's housing affordability index is calculated using data on median house prices, average earnings and interest rates, and thereby also incorporates financing costs (Figure 4.3).³¹

The significant cycles in this index appear to have had different underlying causes. In the late 1980s, although house prices were relatively stable, high interest rates resulted in relatively low affordability levels. More recently, deteriorating affordability over the 2000s was driven by rising house prices, rather than by higher interest rates. According to this measure, affordability has improved since 2008 and is now around its average long-run level, given lower interest rates and softening house prices. Indicative of the regional supply constraints, according to this measure, housing is always less affordable in Auckland.

²⁹ The effective mortgage interest rate is the average rate of all the housing mortgages that are currently in place.

³⁰ Briggs and Ng (2009) conclude that the fall in interest rates and nominal inflation had an effect on house prices, although other factors (such as increases in section prices, construction costs, and access to credit) also contributed.

³¹ For more details see: <http://economics-finance.massey.ac.nz/homeaffordability.php>.

Figure 4.3 Massey home affordability index



Source: Massey University Real Estate Analysis Unit

Notes:

1. A low index indicates improved affordability.

Roost Mortgage Brokers also publish indicators of housing affordability that incorporate financing costs. These indicators are calculated as the proportion of weekly take-home pay that a 'typical' and 'first-home' buyer would need to spend to service their mortgages. A typical buyer is assumed to be purchasing at the median house price with a 20% deposit. The first-home buyer is assumed to be buying a house at the lower price quartile, with a deposit that is estimated as a function of savings.³² The time path of these indices is similar to the Massey index.

- The proportion of median income of an individual in the 30–34 age group required to service the mortgage on a median home rose from about 40% in 2002 to 83% in June 2008 and then fell to 52% by October 2011.³³
- The proportion of median income of an individual in the 25–29 age group required to service the mortgage on a house priced in the lower quartile increased from about 40% in 2004 to 73% in September 2007 and then fell to 44% by October 2011.³⁴

The Massey and Roost indices are nominal measures of housing affordability. Nominal measures reflect 'actual' affordability by highlighting the difficulties of meeting the terms and conditions of a mortgage contract for those who need to borrow to purchase a house. However, some of these difficulties are not caused by the purchase price of the house nor the real interest rate, but by inflation. As such, it is also useful to examine housing affordability in real terms by removing the effect of inflation and measuring 'underlying' affordability (Box 4.1).³⁵

Box 4.1 Inflation and the measurement of housing affordability

Inflation results in 'front-loading' of mortgage repayments since it leads to larger real principal repayments during the early stages of home ownership. Home loans in New Zealand are typically table mortgages, which require a series of monthly payments determined by the loan's maturity term and the nominal interest rate. For instance, if inflation is 2% per year, the real value of repayments on a 25

³² The first-home buyer deposit savings is equal to 20% of weekly income saved for four years, plus interest earned at a 90 day deposit rate.

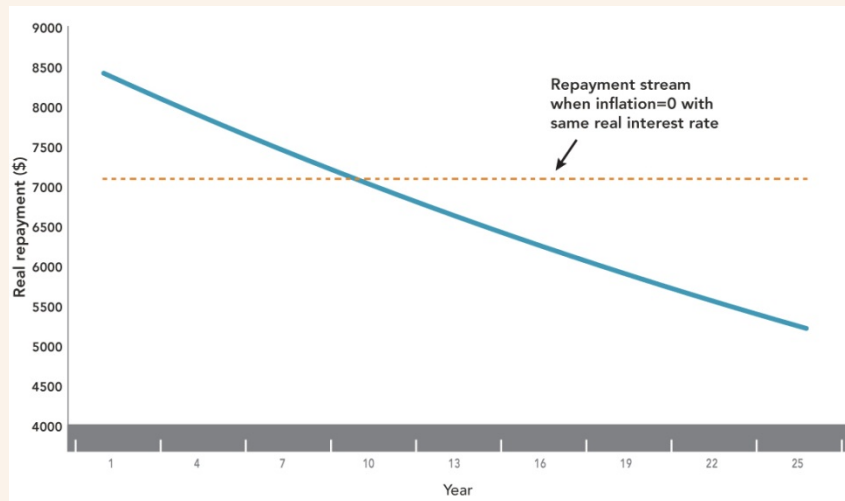
³³ Figures are from the Roost Home Loan Affordability Index: standard series.

³⁴ Figures are from the Roost Home Loan Affordability Index: first-home buyer series.

³⁵ See Coleman (2008) for a detailed discussion of inflation and the measurement of housing affordability.

year loan of \$100,000 with a 7% interest rate declines from about \$8,400 at the end of the first year to \$5,200 at the end of the 25th year. In contrast, if the inflation rate was zero, there would be a constant repayment of about \$7,100 a year over the life of the mortgage (Figure 4.4).

Figure 4.4 Real repayment stream of a 7% 25 year \$100,000 mortgage (inflation=2%)



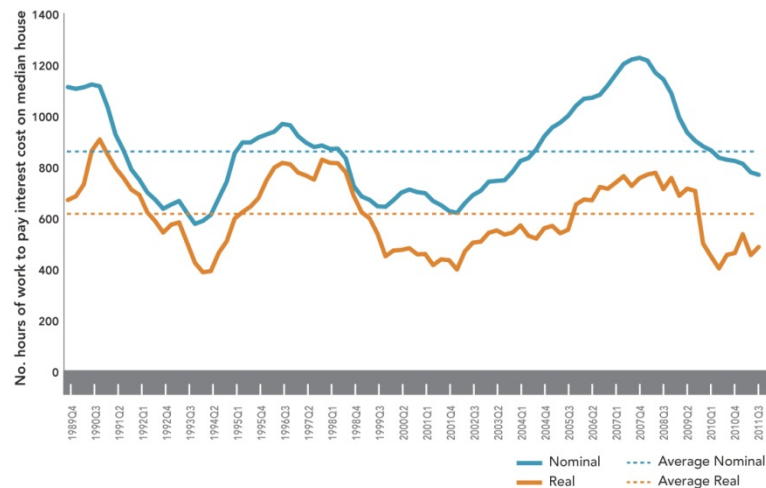
Source: Coleman (2008) modified.

Another way to view this is when nominal interest rates rise due to inflation, monthly mortgage payments also rise, but the increase reflects more rapid real principal repayment rather than a higher real cost of housing. For example, if someone takes out a \$100,000 loan at an interest rate of 7% per year when inflation is 2%, the \$7,000 interest payment comprises \$5,000 real interest payments and \$2,000 to compensate the lender for the erosion of the initial value of the capital due to inflation. This \$2,000 is effectively saving by the borrower because it reduces the *real* value of the remaining debt to \$98,000. So while nominal affordability indices provide useful information about the financing difficulties facing credit-constrained households, they overstate the *average* lifetime cost of the mortgage as they do not take into account the expected decline in the real value of the payment stream over the life of the mortgage. An index based on the real mortgage rate makes this adjustment.

Housing affordability measured in nominal terms is considerably worse than real affordability, and the gap increases with the inflation rate. The number of hours of work, paid at the average hourly rate, required to service the nominal interest payments on a median priced house is much higher than the number of hours work required to service the real interest cost (Figure 4.5). The nominal and real indices follow a similar trend, with both deteriorating during the recent house price boom, but improving more recently.³⁶ However, part of the deterioration in nominal housing affordability during the house price boom was due to high inflation rates. In fact, while nominal affordability was at its worst during this period, real affordability was better than in the mid-1990s.

³⁶ Nominal affordability has continued to improve recently while real affordability has worsened since late-2010. This is likely to be due to the 2010Q3 increase in GST and the resulting rise in the inflation rate. This higher inflation meant real affordability improved faster than nominal affordability, before worsening somewhat.

Figure 4.5 Real and nominal affordability indices



Source: Coleman (2008) updated.

Notes:

1. The nominal (real) index is calculated as:
$$\frac{\text{nominal (real) interest rate} \times \text{QV house price index}}{\text{Quarterly Employment Survey average hourly earnings}}$$
2. The QV house price index is rebased to equal the median house price in March 2006 (\$295,000).

While real affordability indices remove inflation and therefore better reflect the lifetime cost of a mortgage, this is no consolation for a would-be homeowner who faces high debt repayments, particularly during the early stages of homeownership. Higher inflation rates make it more difficult for households to meet the terms and conditions of a mortgage. This highlights that with standard mortgage contracts, even moderate levels of inflation can negatively impact on the ability of credit-constrained households to meet home loan borrowing costs.

Disaggregated measures of housing affordability

The aggregate indices discussed above are useful for tracking changes in affordability over time. However, they are based on average measures of household income and house prices and do not necessarily indicate what is happening to affordability for different types of households. In contrast, disaggregated measures track affordability for a range of different household types, including by income, age, ethnic background or location in New Zealand.

Differences between income levels

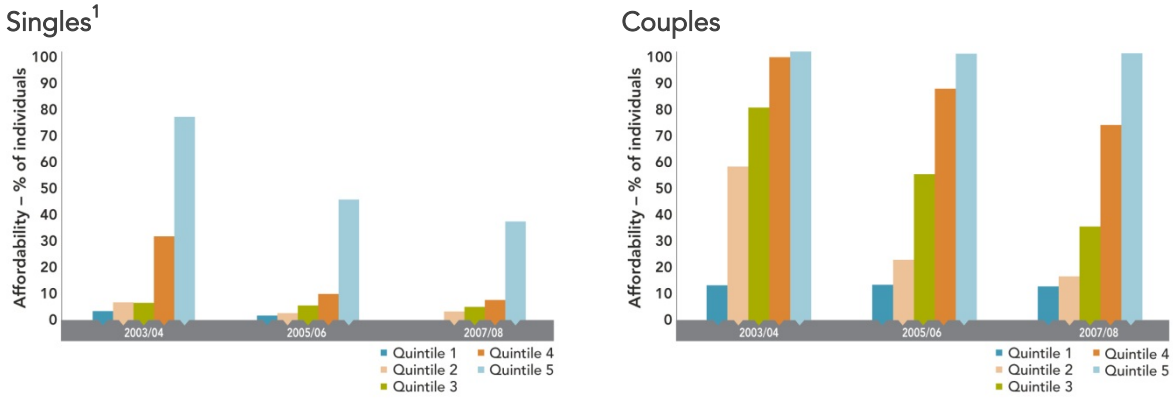
The affordability of housing for people on different incomes can be investigated with a model that uses data from the Survey of Family, Income and Employment (SoFIE).³⁷ This model examines nominal affordability for those who are aged 25 years and over and do not currently own the house they live in. It takes account of factors such as the net assets available for a deposit, income and the prevailing interest rate. For each household the model asks: could they afford to purchase a lower-quartile priced house in their region without mortgage payments exceeding 30% of their gross income?³⁸

The results of this model show that the proportion of individuals that could afford to buy a home is higher for couples – who often have higher (combined) incomes and wealth – than for individuals (Figure 4.6). According to this model, affordability fell between 2003/04 and 2007/08 for all except couples in the highest income quintile. However, as with the aggregate results discussed above, these trends may have reversed subsequently given that house prices and interest rates have fallen since 2008.

³⁷ A full description of the model, along with a richer set of empirical results, can be found in Law and Meehan (2012).

³⁸ The main disadvantage of SoFIE is that data on assets and liabilities is only available for three years - 2003/04, 2005/06 and 2007/08. The most recent data for 2009/10 will be available mid-2012.

Figure 4.6 Housing affordability by income



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

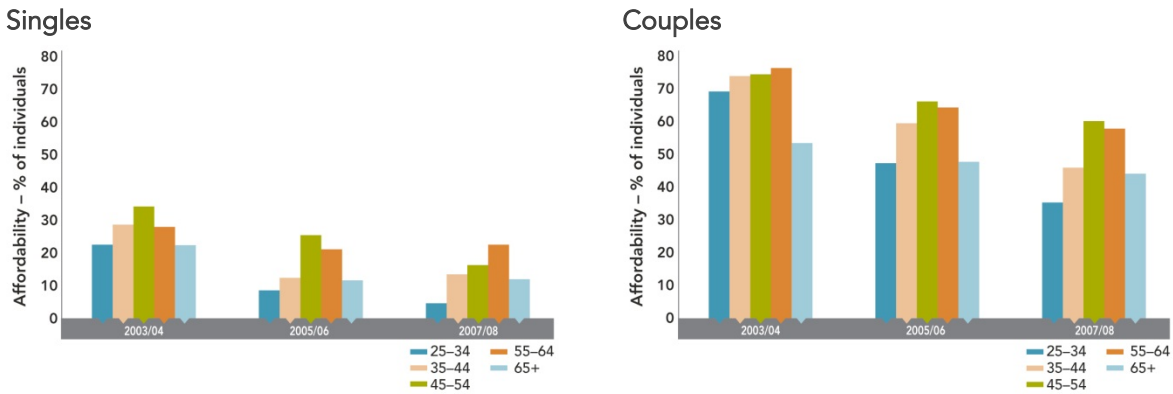
Notes:

1. The figure for quintile 1 in 2007/08 is not presented for confidentiality reasons since the number of those who could afford was very small. Income quintiles are based on non-home owners and are calculated separately for singles and couples.

Differences between age levels

Affordability generally increases with age, in large part reflecting the higher incomes that come with greater work experience (Figure 4.7). However, the oldest age groups buck this trend, perhaps reflecting that while most older people already own their home, some, such as the lifetime poor, cannot afford to buy a house. It also reflects that incomes tend to be lower in this age group due to retirement. Some older people may also have experienced adverse shocks such as marriage dissolution or financial issues late in life, leaving them little time to recover financially.

Figure 4.7 Housing affordability by age

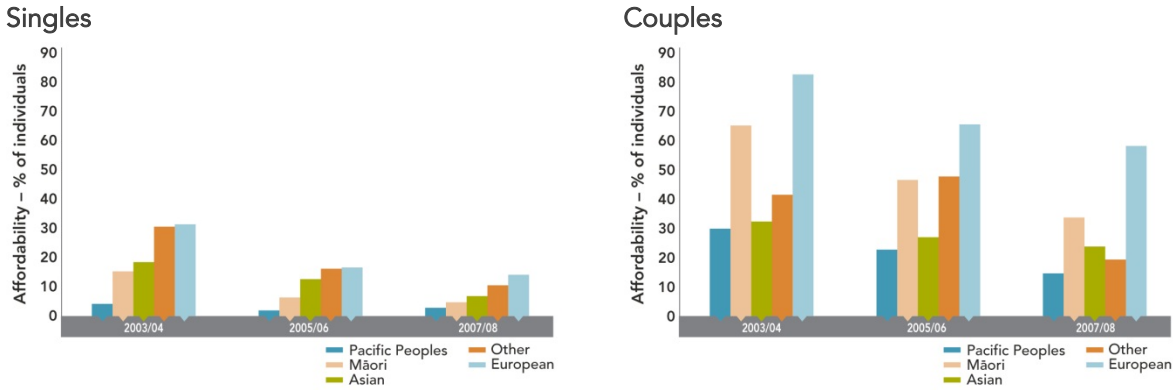


Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

Differences between ethnic groups

The capacity to buy a house varies across ethnic groups, and is highest for European New Zealanders and lowest for Pacific peoples (Figure 4.8). This may partly reflect location choices and disparities in average incomes and wealth, with some ethnic groups more likely to be concentrated in Auckland. Reflecting the aggregate results, affordability declined for all ethnic groups between 2003/04 and 2007/08.

Figure 4.8 Affordability by ethnicity



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

Notes:

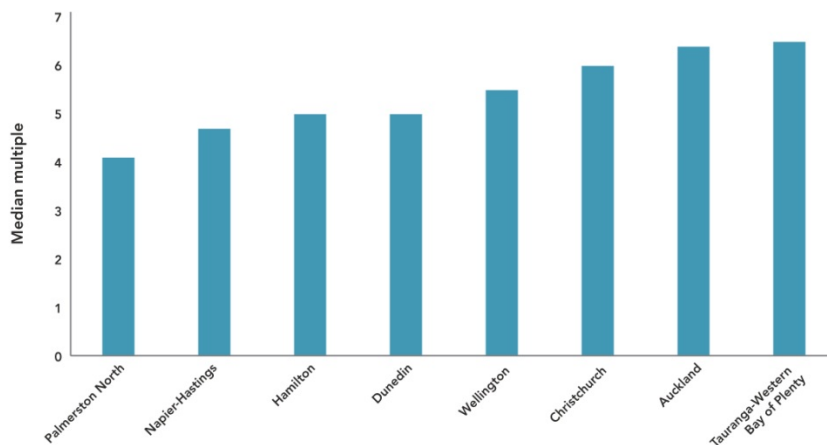
1. Ethnicity was prioritised using the old Statistics New Zealand hierarchy.

Differences between regions

While house prices in different regions converged to some extent during the recent boom (see Chapter 2), variations in house prices and household composition mean that there are still significant inter-regional affordability differences. The Commission has identified three approaches to measure regional differences in housing affordability, all of which show that such differences do indeed exist. In addition, all of these regional measures highlight low levels of affordability in Auckland relative to the rest of the country.

First, Demographia (2011) has calculated the ratio of median house prices to gross annual median household income for eight New Zealand submarkets in 2010 (Figure 4.9). According to these estimates, housing in four regions is deemed to be 'severely unaffordable', with a ratio exceeding five (Tauranga-Western Bay of Plenty, Auckland, Christchurch and Wellington). Housing in four other areas was classified as 'seriously unaffordable', with a house price-to-income ratio exceeding four (Hamilton, Dunedin, Palmerston North, and Napier-Hastings).

Figure 4.9 Housing affordability median multiple ratings for New Zealand regions, 2010



Source: Demographia (2011)

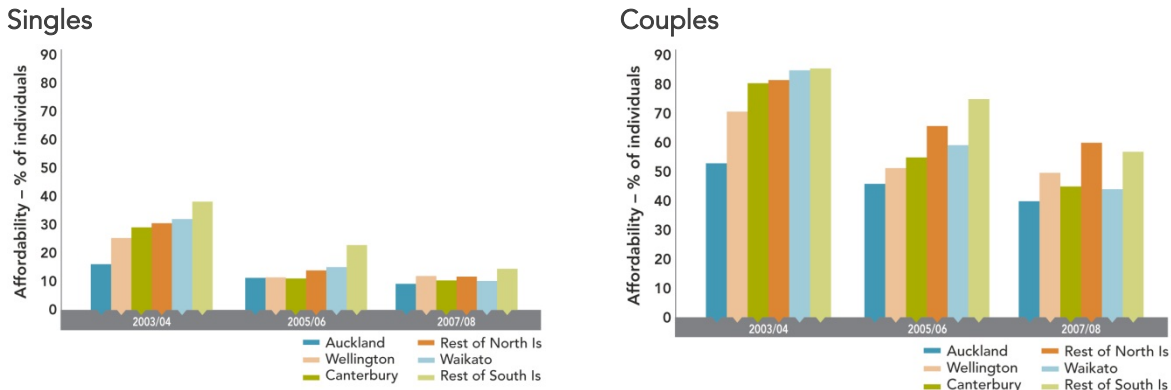
Notes:

1. This affordability measure is calculated using a 'median multiple' measure that divides median house prices by gross annual median income. A value between four and five is considered to be 'seriously unaffordable' and a value greater than five is considered to be 'severely unaffordable' (Demographia, 2011).

Second, as described above, Roost Mortgage Brokers publish indicators that measure the proportion of weekly take-home pay required to service a mortgage across different regions for 'typical' home buyers and 'first home' buyers.³⁹ In both cases there are large regional differences. For example, the ratios range from 26% in Whanganui to 74% in Queenstown for the typical buyer in October 2011 and from 22% in Whanganui to 78% in Auckland's North Shore for first time buyers. Auckland areas are always among the most unaffordable – in October 2011, the typical buyer ratio was 71% for the North Shore, 67% for central Auckland, 65% for south Auckland and 58% for west Auckland.

Third, data from SoFIE indicate that housing affordability is lowest for people living in Auckland, followed by Wellington, Canterbury and Waikato (Figure 4.10).

Figure 4.10 Affordability by region



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

4.4 Affordability for renters

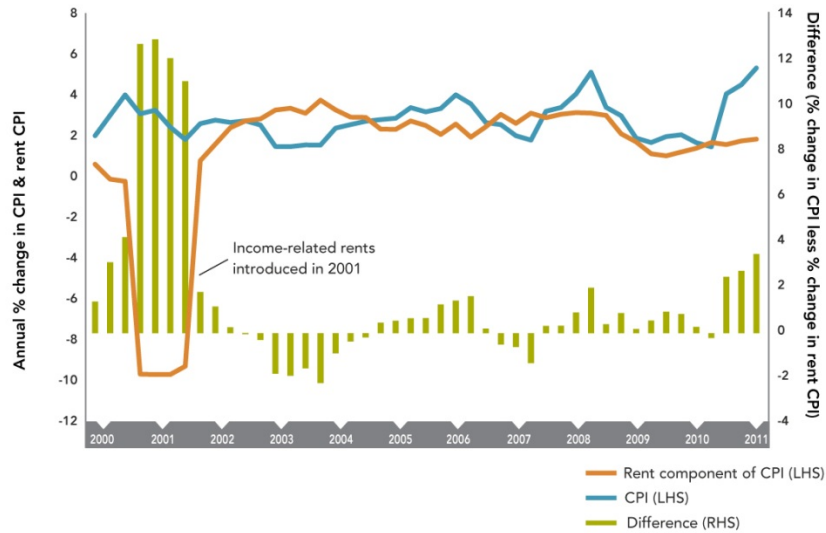
While aggregate measures indicate that home ownership affordability declined up until recently, rents have increased little in real terms (Figure 4.11) and far less rapidly than house prices (see Figure 2.9 in Chapter 2).⁴⁰ As a result, the rent-to-income ratio has fallen in most years since 1996 (Figure 4.12). This suggests that over the course of the last housing boom, home ownership affordability declined substantially relative to the cost of renting. As noted in Chapter 2, this allowed the rental market to act as a 'safety valve' in the face of rising house prices. However, recent data indicate that spending on rent increased faster than household incomes over the June 2011 year⁴¹ and, as discussed in Chapter 2, the current disconnect between rents and house prices may not persist.

³⁹ See <http://www.interest.co.nz/property/home-loan-affordability> and <http://www.interest.co.nz/property/first-home-buyer>.

⁴⁰ The rent component of the Consumer Price Index (CPI) is the official measure of changes in rent prices and is designed to control for changes in the composition and quality of rental accommodation. The dip in the rent component of the CPI in the early 2000s, coincided with the introduction of income-related rents in 2001.

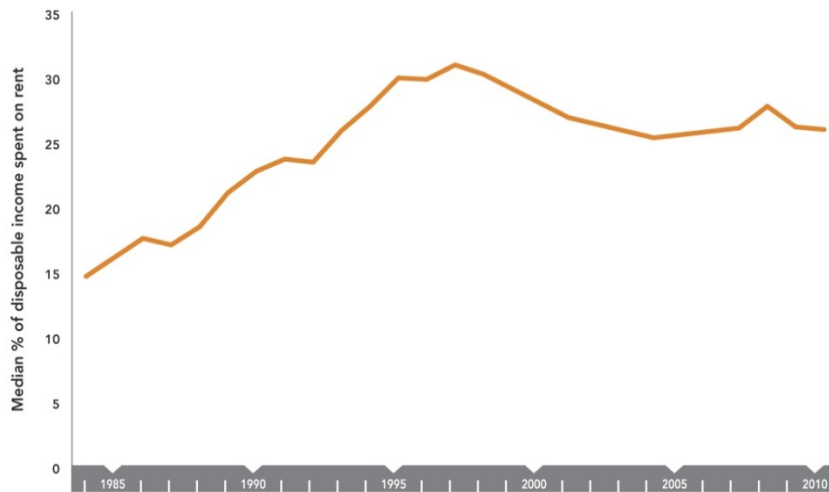
⁴¹ See http://www.stats.govt.nz/browse_for_stats/people_and_communities/Households/HouseholdEconomicSurvey_MRYeJun11.aspx.

Figure 4.11 Rent price component of CPI and overall CPI



Source: Statistics New Zealand

Figure 4.12 Median rent-to-household disposable income ratio

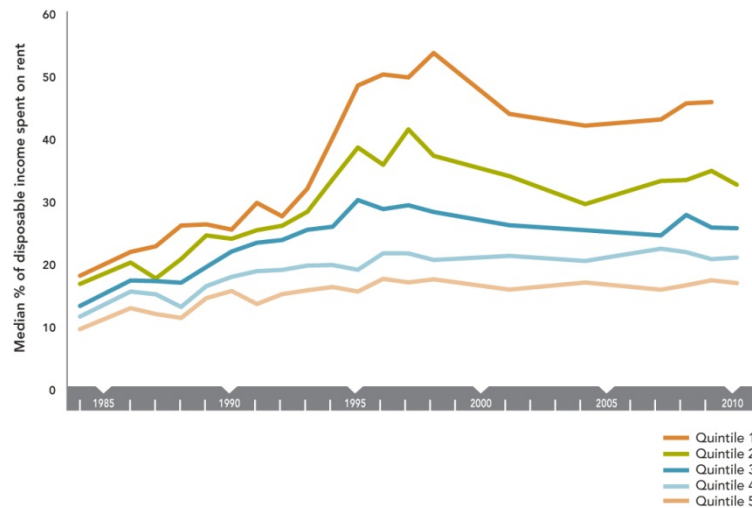


Source: Productivity Commission and Treasury calculations using Statistics New Zealand (HES) data

Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.

This apparently benign aggregate situation in the rental market disguises a more difficult situation for those on lower incomes. In particular, people in the lowest two income quintiles spend a much higher proportion of their income on rent than people on higher incomes (Figure 4.13). Even though the situation appears to have improved since the late 1990s, those in the two lower income quartiles still spend, on average, more than 30% of their disposable income on rent.

Figure 4.13 Median rent-to-household disposable income by disposable income quintile

Source: Productivity Commission and Treasury calculations using Statistics New Zealand (HES) data

Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.
2. Income quintiles are based on the entire HES sample.
3. The 2010 quintile 1 figure is excluded because there is some uncertainty about its reliability (Perry, 2011).

Of course, these measures do not tell us anything about the extent to which people resort to living in low quality houses, crowded conditions, or in peripheral locations in order to obtain affordable housing. It appears that many renters, especially those earning low incomes, not only face affordability issues, but also live in unsatisfactory dwellings. For instance, in 2010, two-thirds of renters indicated that they had major problems with their house or neighbourhood, such as being damp, too cold, too far from their work or other amenities, or too small (see Table 2.1 in Chapter 2).

4.5 What conclusions can be drawn about housing affordability?

Measures of affordability generally attract a degree of controversy, with much debate about the appropriateness of the measure, what it includes and who it is applied to. Many measures are comparative and examine affordability relative to what it previously was. While these measures are useful for tracking trends, they provide little information on the actual ability of households to pay for housing at a given time. Other measures will make a judgement on what proportion of a person's income can be spent on housing in order for it to remain affordable. While these measures provide an indication of a household's ability to meet their housing costs, they tend to rely on broad rules (such as 30% of income), the applicability of which often varies among different households.

A further limitation which applies to all of the affordability measures considered in this chapter is that they do not take into account housing quality and suitability. For example, housing may be inadequate in terms of size, location, heating and insulation. This means that by standard affordability measures a household may be able to afford their current accommodation, but they may not be able to afford healthy, quality, accommodation. Given that a large number of submissions raised concerns about housing quality, this limitation is particularly relevant in the New Zealand context.

Notwithstanding the methodological challenges that arise when measuring affordability, and that this can make it difficult to get a clear picture of housing affordability in New Zealand, a number of conclusions can be drawn.

First, affordability, particularly for prospective home buyers, has been subject to wide fluctuations. The recent housing boom saw rapid escalation in house prices with corresponding deteriorations in affordability. While price-to-income ratios remain elevated, aggregate measures indicate that over the past few years, a modest reduction in house prices relative to income, and low finance costs (interest rates are the lowest they have been for over 20 years) have seen housing affordability for prospective buyers returning to a longer run average.

Second, housing affordability differs across New Zealand, with affordability issues the most acute in faster growing urban centres, particularly Auckland.

Third, housing affordability is lowest among those who are younger, single, have lower income and wealth, live in Auckland, or belong to an ethnic group other than New Zealand European. Notably, during the last house price boom, housing affordability became a constraint for some middle-income groups, whereas it had previously mainly been an issue for those on lower incomes

Finally, in spite of improved affordability levels in recent years, home ownership remains beyond the reach of many households. For these households, rental accommodation from either private sector or social landlords is likely to be a long-term or permanent form of accommodation rather than a temporary stepping stone. While the affordability of renting did not deteriorate during the recent housing boom in the same way that it did for prospective buyers, rental affordability remains a pressing issue, particularly for those on lower incomes – many of whom spend more than 30% of their income on rent. Although a clear trend is yet to emerge, the most recent data indicate that rents are beginning to rise, placing further pressure on lower-income renting households.

It is clear that New Zealand experienced a house price boom over the 2000s that was widely dispersed across the country (Chapters 2 and 3). While the recent house price boom may have abated, the pockets of extreme unaffordability highlighted in the chapter suggest that there may be structural issues with some aspects of the housing market. These are examined in detail in subsequent chapters.

5 Population and demographic change

Key points

- Over the last 30 years New Zealand has experienced: population growth well above the OECD mean; volatile immigration; an ageing population; cultural and ethnic diversification; and a radical transformation of family structure. All these changes have driven a large increase in underlying demand for housing.
- Since 1971, population growth has resulted in roughly 450,000 new households and the decrease in average household size has created an additional 350,000. Between 2001 and 2006, an average of 22,000 additional households were formed each year.
- Demand pressures have differed markedly by region. This is driven by cross-regional differences in external and internal net migration and age, family and ethnic structures. Auckland has accounted for roughly 40% of New Zealand's net household formation over the last 10 years.
- As well as influencing underlying demand for dwellings, population growth and demographic changes have also influenced tenure choice, with some groups in New Zealand more likely to rent than own their homes.
- Looking to the future, in nearly all parts of the country the average household size is likely to continue falling, implying increased housing demand. New Zealand's population is also likely to continue growing strongly. Much of this growth will occur in the Auckland region, putting pressure on the regional housing market. For example, the Department of Building and Housing currently projects a shortfall of 90,500 dwellings in Auckland alone over the next 20 years (although a surplus is projected in other regions).
- The impact of underlying demand on house prices ultimately depends on the responsiveness of housing supply in the context of other demand drivers, such as income growth.

5.1 Introduction

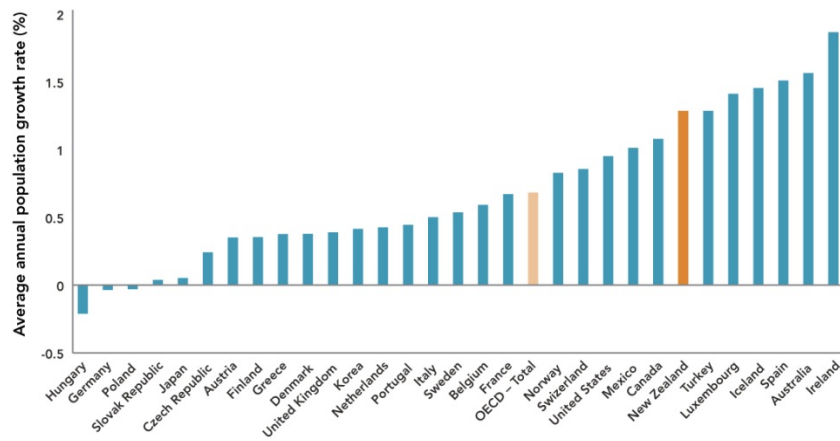
This chapter builds on the discussion in Chapter 2 on the extent of underlying demand for housing. It considers how national and regional trends in population growth and changes in the composition of the population affect household formation and the demand for housing. Projections suggest that ongoing population and demographic changes will continue to drive solid growth in underlying housing demand. As discussed in other chapters, the impact of these demand pressures on house prices will depend on the responsiveness of housing supply. As such, the demand pressures outlined in this chapter indicate ongoing challenges for the supply-side of the housing market.

5.2 Population growth

New Zealand's population has been growing strongly

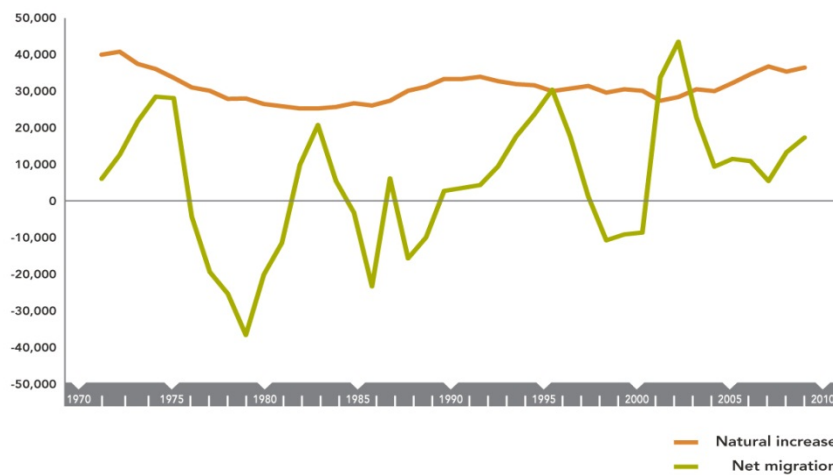
Over the last 40 years New Zealand has experienced a major increase in population that has driven a large expansion in net household formation. New Zealand's population increased from 2.9 million to 4.4 million people between 1971 and 2011 and has been among the fastest growing in the OECD since 2000 (Figure 5.1). The natural increase in population has steadily tracked within a range of about 30,000 to 40,000 people per year. In contrast, net permanent and long-term (PLT) migration has been highly volatile within a much broader range (although positive on average) (Figure 5.2).

Figure 5.1 Average annual population growth for OECD countries, 2000-2009



Source: OECD

Figure 5.2 Net migration and natural increase in New Zealand



Source: Statistics New Zealand

The 2003 peak in net migration – when just over (net) 40,000 people entered the country – is cited in a number of submissions as contributing to the 2000s house price boom. This peak reflected the lowest number of New Zealanders departing the country on a PLT basis since 1995 and the highest number of non-New Zealanders entering the country since citizenship began to be recorded in 1979. Many of these entrants were students or temporary workers.⁴² Since 2004, net migration has fallen back to well below the rate of natural population growth.

There are large regional differences in population growth

Population growth has been unequally distributed across the country, largely as a result of the regional preferences of international migrants and internal migration patterns. International migrants are generally attracted to urban areas (Maré and Stillman, 2008). Population growth tends to be particularly strong in Auckland, with the region absorbing around 40,000 people over two years in the early-2000s migration peak (Figure 5.3). However, Canterbury and, more recently, Wellington also tend to attract international migrants. For the rest of the country, net international migration is typically negative.

For some regions, such as Bay of Plenty, Gisborne, and Tasman, internal migration has had a greater impact on population growth than external migration. Trends in internal migration differ noticeably by age groups. In general, 20–24 year olds are more likely to move between regions, presumably to pursue tertiary

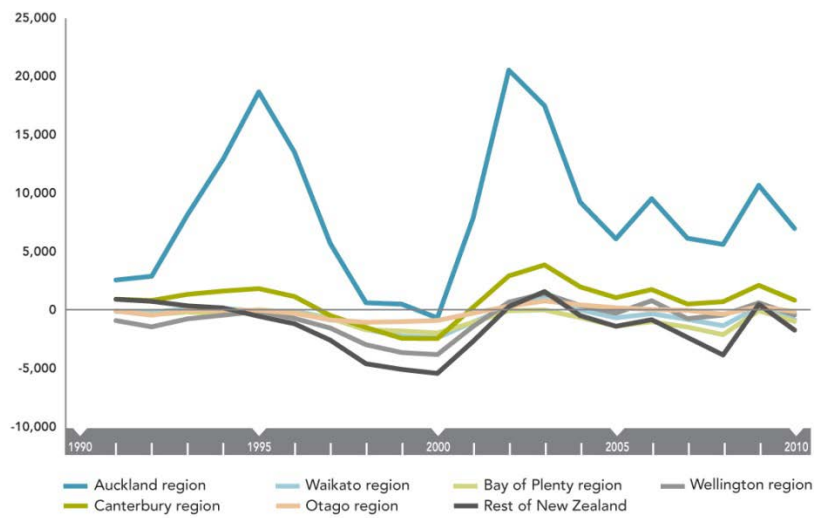
⁴² As indicated in the Department of Labour's submission: "The peak in PLT arrivals coincided with the highest number of international student approvals in the 2002/2003 year of 87,000 and over 68,000 temporary workers. Many of these would have been recorded as PLT arrivals" (sub 14, p. 2-3).

education and job opportunities (Statistics New Zealand, 2011d). People in the mid-30s and 60+ age groups also tend to have high internal migration rates, most likely as a result of moving to family and retirement-friendly locations.

Reflecting these and other factors, some regions – such as the Bay of Plenty and Canterbury – have consistently experienced positive net internal migration, while others have generally experienced net outflows (Figure 5.4). Notably, Auckland moved from being a net recipient of internal migrants to a large negative outflow in the mid-2000s. Although little work has been done on understanding internal migration flows, this may, at least in part, reflect an exodus of households in search of more affordable housing.⁴³

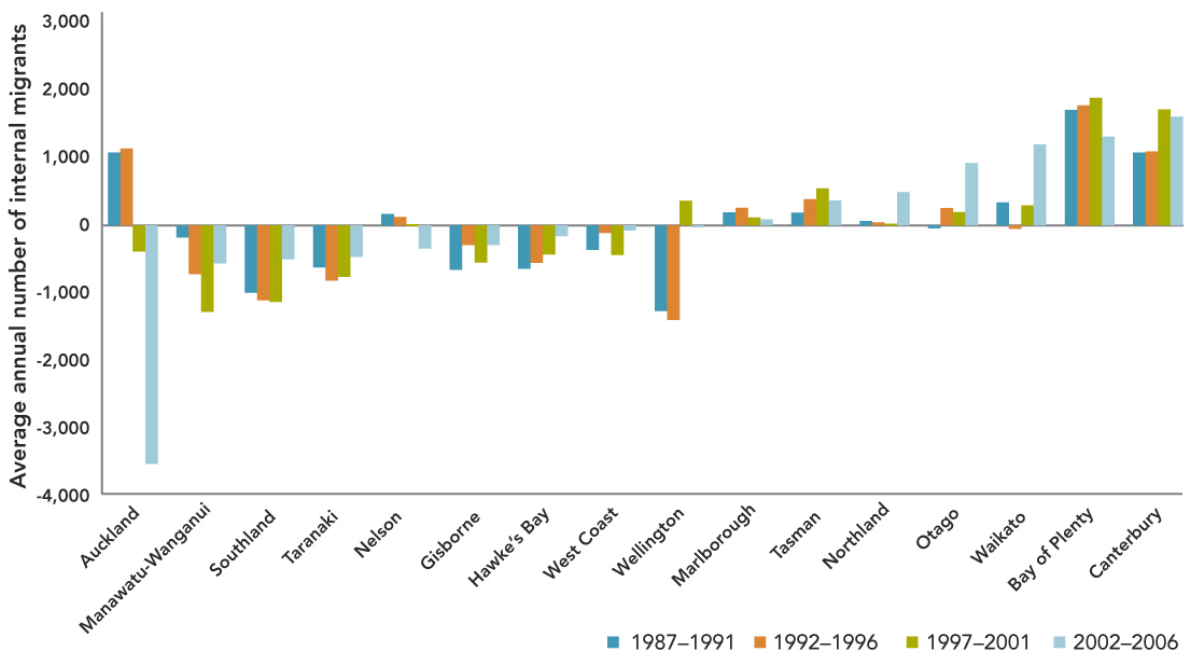
Despite this recent outflow of internal migrants, Auckland has still experienced the largest growth in population, in both absolute and percentage terms, across all regions of the country since 2000 (Figure 5.5). Indeed, the Auckland region accounted for 50% of the total increase in New Zealand’s population over the ten years to 2010. In contrast, there has been virtually no population growth over this period in some of New Zealand’s more rural regions, including Gisborne, Taranaki, Manawatu and Southland.

Figure 5.3 Net migration by selected regions



Source: Statistics New Zealand

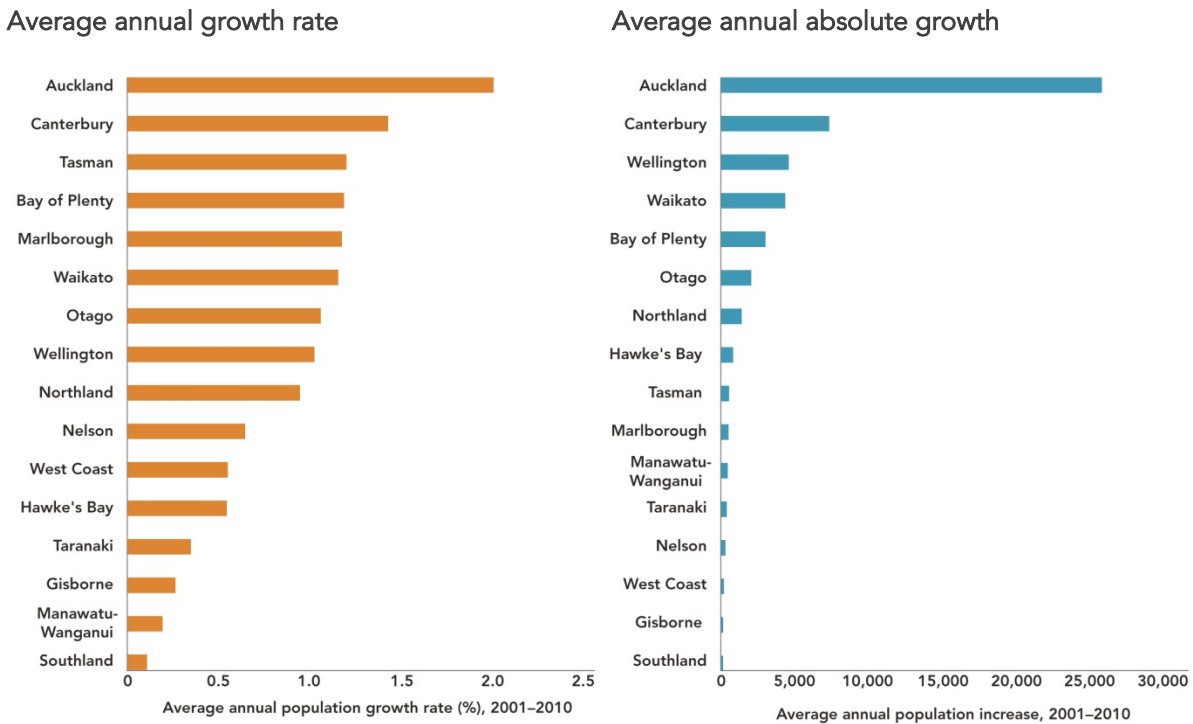
Figure 5.4 Average annual internal migration



⁴³ Other potential explanations could include leaving the city to retire or start a family.

Source: Statistics New Zealand, Census

Figure 5.5 Population growth by region, 2001–2010



Source: Statistics New Zealand

5.3 The impacts of demographic change on household formation

Average household size is falling

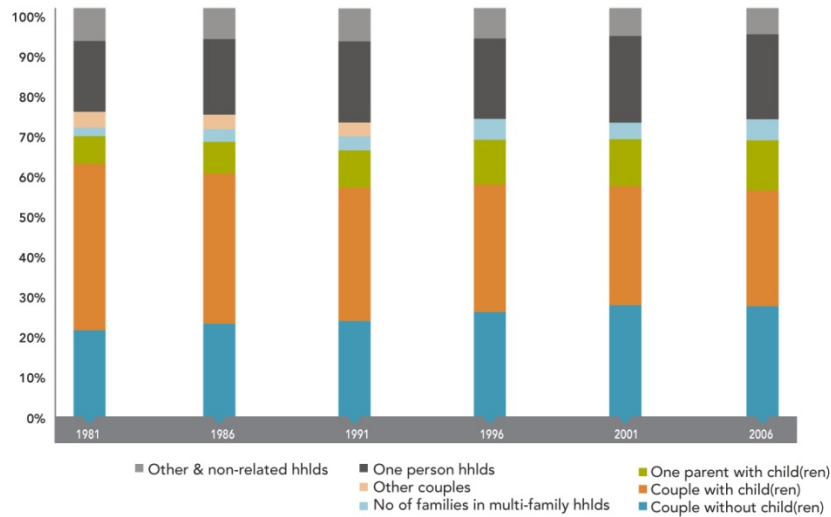
Between 1971 and 2001, underlying housing demand was boosted by a declining average household size from 3.38 to 2.67 people per dwelling.⁴⁴ From 2001, average household size broadly remained at this level until 2006, the last year that it was formally measured. Trends in average household size have varied at the regional level: average household size declined in all regions from 1996 to 2001 but increased from 2001 to 2006 for some regions, including Auckland and Canterbury (Statistics New Zealand, 2008). At the territorial authority level, between 1996 and 2006 average household size was particularly high in Manukau City, and the lowest in the Thames-Coromandel and Buller districts.⁴⁵

Significant changes in family structure explain much of the overall fall in average household size and the associated increase in household formation. Before the 1980s, the 'nuclear family' of a married couple with children was the norm. However, in the space of a generation, household composition has been transformed with 'singles', 'one-parent families', and 'couples without children' becoming much more common (Figure 5.6) (Statistics New Zealand, 2003). In large part, this has been driven by population ageing and changing ethnic structures (discussed below). Decisions on child-bearing, relationships and when to leave home have also played important roles.

⁴⁴ Household size is the average number of people in a 'household' (a private dwelling that is usually occupied by a person or group of people). Households exclude non-private dwellings, unoccupied dwellings, and dwellings which are not the usual residence of people (eg, holiday homes, second homes).

⁴⁵ Both Buller and Thames-Coromandel districts have relatively high proportions of one-person households and relatively low proportions of family households with children.

Figure 5.6 Family structure in New Zealand



Source: Statistics New Zealand, Census

Notes:

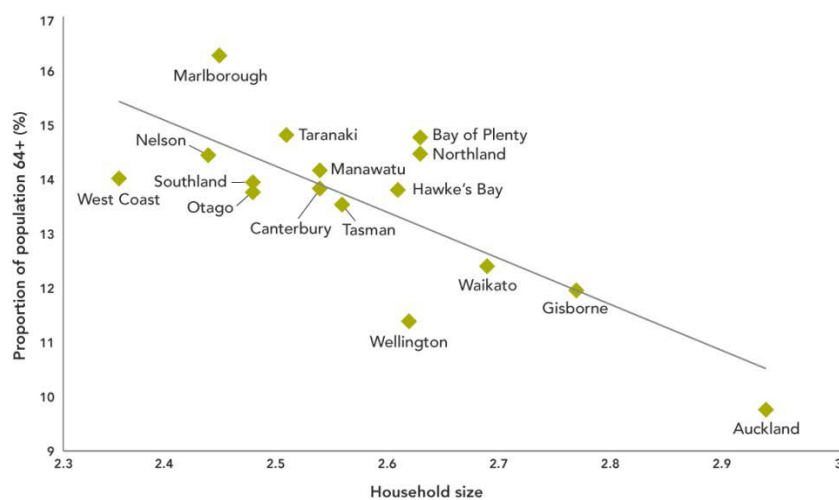
1. The category 'Other couple' was not reported after 1991. It most likely consisted of multi-family households, with some couples with child(ren) and some couples without child(ren).

Population ageing is reducing average household size

The ageing of New Zealand's population is one important reason why couples without children now account for more than one in four households. The population share of people aged 65+ increased from 11.5% in 1996 to 12.2% in 2006. However, the extent of this increase differs across the country. For example, urban Auckland and Wellington tend to have lower proportions of people aged above 65, while Marlborough and other 'sun belt' regions have relatively higher shares of older people (Figure 5.7).

These differences in age structure explain some of the regional variation in household size, as illustrated by a negative cross-region correlation between the population share aged 65+ and average household size (Figure 5.7).

Figure 5.7 Household size and proportion of population 65+ in 2006



Source: Productivity Commission calculations based on Statistics New Zealand data

Changes in ethnic structure are offsetting decreasing average household size

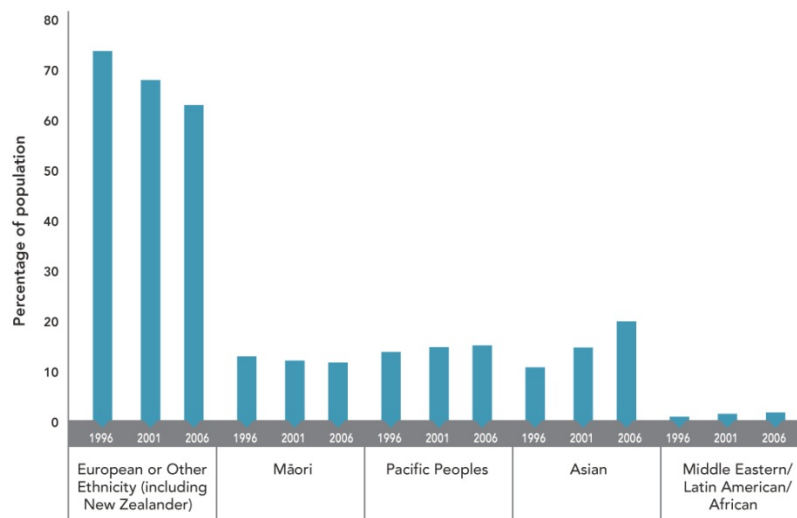
While household size has decreased on average, changes in New Zealand's ethnic structure have partially offset this, as ethnic groups with larger average household size have become a larger share of the population. Pacific, Māori and Asian ethnic groups tend to have larger households than New Zealanders of

European extraction. In 2001, for example, the average household size of Pacific, Māori and Asian ethnic groups was 4.19, 3.36 and 3.45 respectively, compared with 2.57 for New Zealand-European households.

According to census data, the population shares of New Zealanders with European background and Māori have fallen, while the shares of Pacific Islanders and Asians have increased.⁴⁶ Not only do Pacific, Māori and Asian people have larger average households than New Zealand-Europeans, they also have higher rates of over-crowding (Box 5.10),⁴⁷ suggesting that income differentials may influence differences in household size across ethnic groups.

These demographic influences on household size have been particularly pronounced in Auckland. Pacific Islanders make up 13% of Auckland's population, compared to 1–3% for all other regions except Wellington. Asians are also a growing share of Auckland's total population (Figure 5.8). These demographic influences work to reinforce the impact of Auckland's younger than average population on average household size.

Figure 5.8 Auckland Region's ethnic structure



Source: Statistics New Zealand, Census

Box 5.1 Crowding by ethnic structure

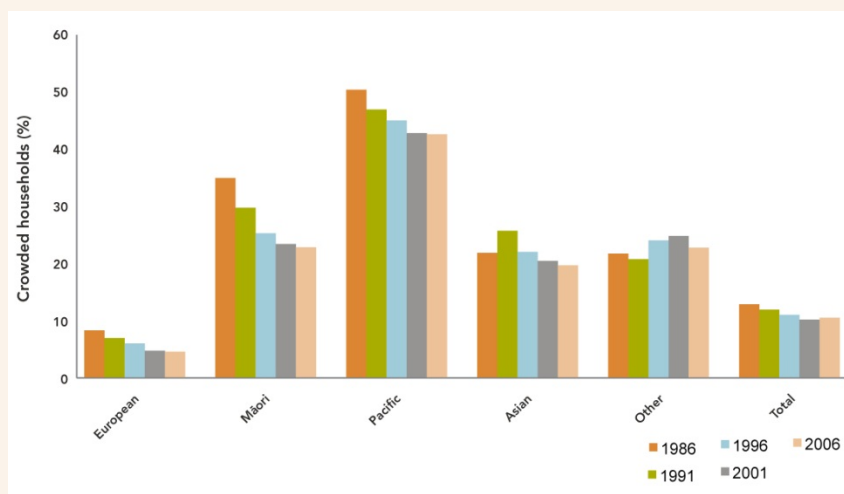
While the number of crowded houses has generally decreased over the last few decades, it remains a serious social issue, especially for minority ethnic groups. As shown in Figure 5.9, Pacific peoples have the highest rates of overcrowding, followed by Māori, Other, and Asian respectively (based on the Canadian National Occupancy Standard).⁴⁸

⁴⁶ Note that these are relative shifts in population shares. In absolute terms, the number of people in all ethnic groups has been increasing over recent years.

⁴⁷ While European New Zealanders have lower rates of crowding, they still make up 50% of all crowded households.

⁴⁸ Under the Canadian National Occupancy Standard, for a dwelling not to be crowded, there should be no more than 2 people per bedroom, and the following should have one bedroom: Married/cohabitating couples; Single adults over 18; Pairs of children under 5; Pairs of same sex children aged 5-17. A household is crowded if one or more extra bedrooms are required. For New Zealand, there is no one 'perfect' crowding measure, especially given the country's cultural diversity. However, Statistics New Zealand considers the Canadian National Occupancy Standard to be the most appropriate.

Figure 5.9 Proportion of population living in households requiring at least one additional bedroom, by ethnic group



Source: Ministry of Social Development, The Social Report (2010) and Statistics New Zealand, Census of Population and Dwelling (2001)

Notes:

1. Ethnicity is an individual characteristic and therefore cannot be directly applied to a household. The data in this figure uses the individual ethnicity responses of household members to compile the ethnic data for a household with at least one usual resident of a particular ethnic group.

There is some correlation between lower incomes and crowding. Māori and Pacific people have noticeably lower median Jensen Equivalised Annual Household (JEAH) income than European people (Statistics New Zealand, 2003).⁴⁹ Asian and Other ethnic groups have slightly higher median JEAH income than Māori and Pacific but still noticeably lower than European. For all ethnic groups, median JEAH incomes are lower for crowded houses than non-crowded.

As discussed by the Families Commission, crowding is associated with many negative health and social issues:

Poor housing, where there is overcrowding, cold and dampness, is associated with a higher prevalence of infectious diseases, and is estimated to have an impact on health which is of a similar magnitude to smoking. Crowded housing is associated with higher rates of rheumatic heart disease, particularly among Māori and Pacific peoples, psychological distress, meningitis, asthma and other respiratory diseases. Lynch (1999) in her thesis, *Healthful Housing*, reviewed these associations, and stated that it is difficult to prove that housing is responsible for these problems. (sub. 9, p. 2)

The Families Commission also noted that appropriate housing can help crowding issues:

In 2009 the Families Commission reported on a Housing Corporation project which was designed to provide appropriate and affordable housing for Pacific families within the Corporations guidelines for capital expenditure. A house was built for a large, extended Tokelauan family, which satisfied their living requirements, provided a healthier environment, and resulted in better family wellbeing (Howard-Chapman et al, 2009) (sub. 9, p. 7).

⁴⁹ JEAH income measure is an "equivalised" income index measures which allows the comparison of household incomes across households of different size and composition.

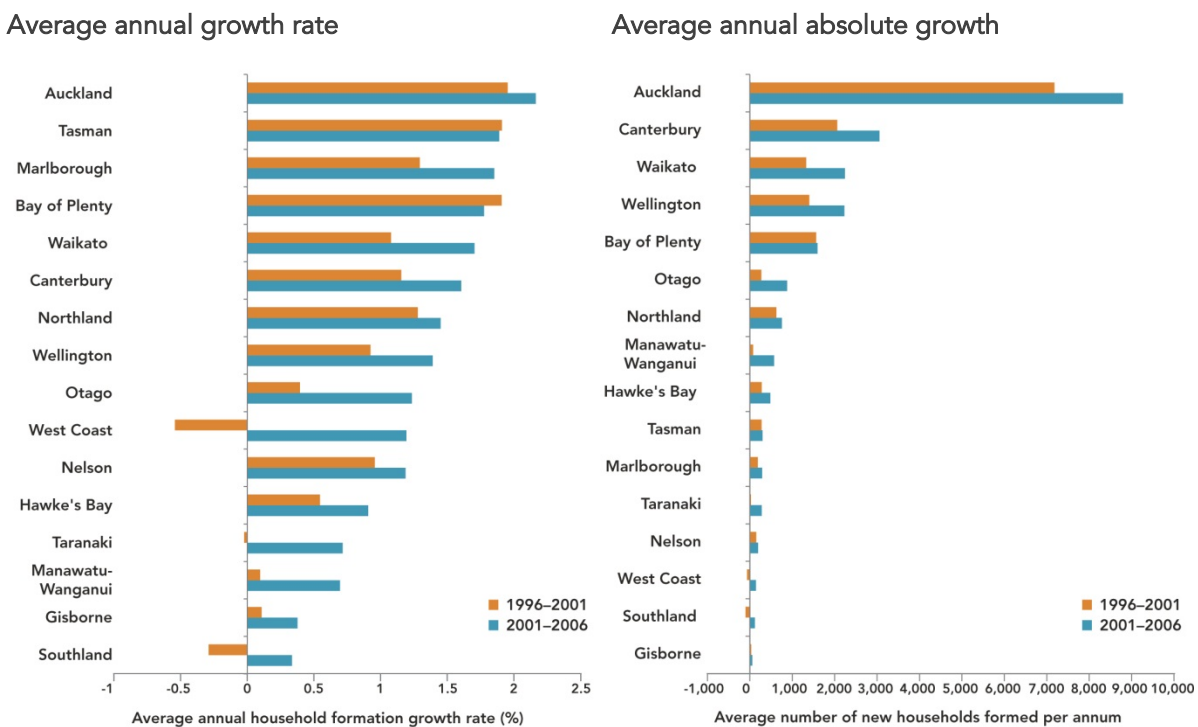
5.4 The impact of population growth and demographic change on underlying demand

The history

Underlying demand for housing has increased by about 20,000 houses per year, or 800,000 in total, since 1971. Decomposing this, if average household size had remained constant at the 1971 level of 3.38 people, population growth alone would have resulted in roughly 450,000 new households, or approximately 10,500 houses per year, since 1971. Demographic changes, which on balance have reduced average household size, led to underlying demand for another 350,000 houses, or roughly 9,000 per year.

Growth in underlying demand has differed widely across regions. Driven primarily by strong population growth trumping demographic influences, Auckland has accounted for around 40% of new household formation in New Zealand between 2001 and 2006 (Figure 5.10). At the territorial level, other high-growth areas include Queenstown Lakes District, which experienced the largest growth in households in the five years to 2006 (35%), followed by Selwyn District (25%), Rodney (17%) and Waimakariri (17%). In contrast, Ruapehu experienced a decrease in net household formation (minus 1.2%), while Wairoa and Clutha had virtually no growth.

Figure 5.10 Household formation by region



Source: Statistics New Zealand

The future

Net household formation in New Zealand is likely to continue increasing as the population continues to grow and households become smaller. Statistics New Zealand's 'medium series' projection is that the number of households in New Zealand will increase by 536,000, from 1.55 million in 2006 to 2.09 million in 2031.⁵⁰ This projection assumes that the population increases by 743,200. This growth rate is lower than recent history, as the birth rate falls relative to the death rate, and net migration inflows are projected to decrease relative to recent history (Statistics New Zealand, 2010c).

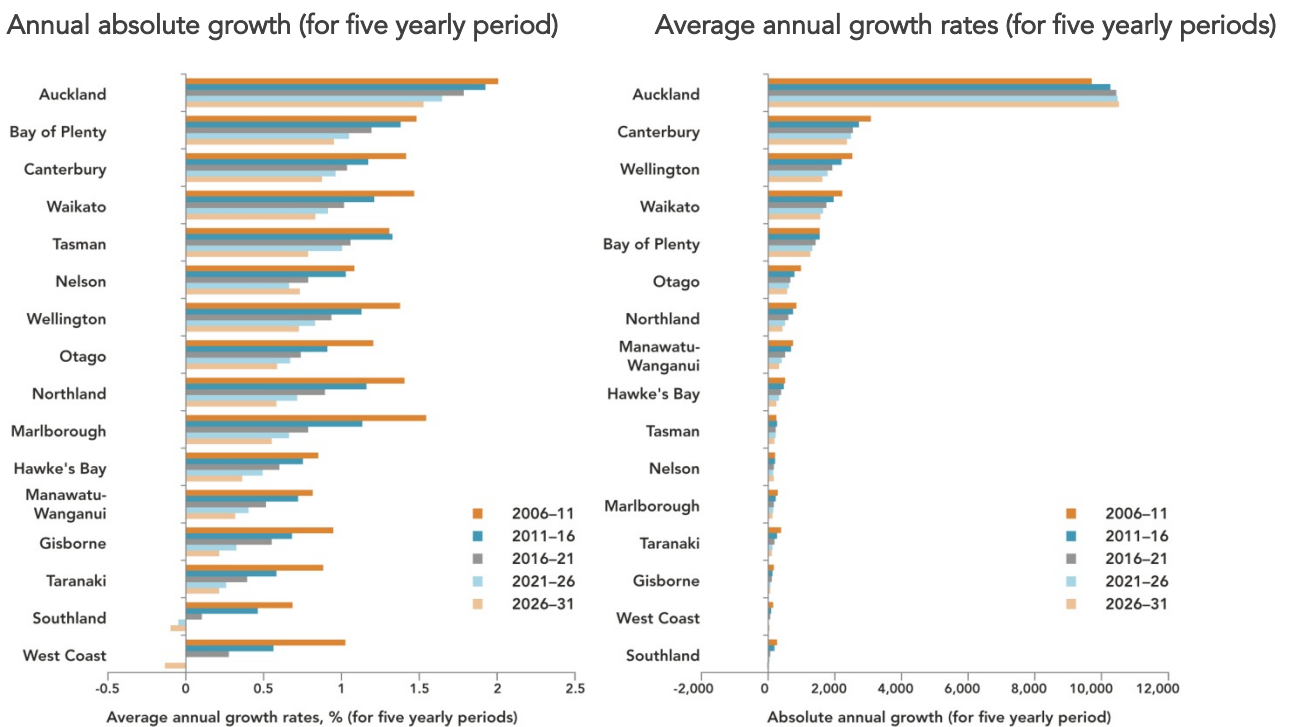
⁵⁰ Statistics New Zealand produces three alternative household projections – designated low, medium, and high – using different combinations of assumptions on fertility, mortality, migration, and living arrangements.

Household size is expected to continue decreasing from 2.7 in 2006 to 2.4 in 2031, increasing the number of households (Statistics New Zealand, 2010c). This projection is driven by ongoing population ageing and changing family structures. The number of one person households is projected to increase at twice the rate of overall family formation, and the growth of couples without children is expected to outstrip the growth of couples with children. By 2031, it is projected that couples without children will be the most common family structure.

Statistics New Zealand’s projections differ noticeably between regions (Figure 5.11). Net household formation is expected to increase in all regions, with the exception of the West Coast, in the period from 2026-2031. Auckland is projected to have the largest increase, accounting for 60% of New Zealand’s population growth over this period and for almost half the number of new households. Auckland is also expected to have the highest growth rate in household formation. Wellington and Canterbury are also projected to have relatively high rates (absolute) of household formation. These projections assume that the Canterbury earthquakes do not have a long-term impact on Canterbury’s population growth and household formation (Box 5.2).

These projections are in line with recent work emphasising that future population growth will be focused on the main urban centres and that non-urban areas can expect static to negative growth rates, given older population structures (Jackson, 2011). However, with average household size projected to fall across the country, all regions (except the West Coast) are still expected to experience some growth in household numbers.

Figure 5.11 Household formation projections by region



Source: Statistics New Zealand

Notes:

1. Figures are ranked from highest to lowest growth in 2026-31.

Box 5.2 Impact of the Canterbury earthquakes on household projections

In April 2011, Sapere Research Group (SRG) released a report concluding that the impact of the earthquake on Canterbury’s population is likely to be short term, and that population growth will eventually return to its pre-earthquake trajectory (Sapere Research Group, 2011). SRG’s research into the experience of other developed countries after natural disasters revealed that in areas that, like

Canterbury, were not already experiencing population decline, there was generally only a one-off impact on population.

SRG predicted that in one or two years the total population of Christchurch will be slightly smaller than it might have been if there had been no one-off out-migration to temporarily interrupt growth. But it is also likely that population growth will continue at, at least, the pre-existing trajectory. Growth may even be enhanced by in-migration of construction workers.

The New Zealand Treasury shares SRG's views, predicting in its August Monthly Economic Indicator that the impact from the Canterbury earthquakes will be short term (Treasury, 2011a).

5.5 Implications for tenure choice

As well as affecting underlying demand for housing, demographic changes also affect the composition of demand for rental and owner-occupied dwellings as some groups are more likely to rent than buy their own home, in particular Māori, Pacific Islanders and migrants.

Pacific home ownership

Home ownership rates for Pacific Islanders are lower than the New Zealand average (Grimes and Young, 2010) and have been declining since 1996 (as is the case for all New Zealanders). The percentage of New Zealand's Pacific population that owned or partly owned their dwelling was 27.5% in 2006, substantively down from 32.4% in 2001 (Ministry of Pacific Island Affairs, 2009).

There are several key factors that contribute to low home ownership rates amongst Pacific peoples including: lower incomes (related to age, qualifications and employment); higher unemployment rates; living in larger families; strong urbanised living in high-cost areas; having fewer assets and higher debt; and family and cultural obligations (Ministry of Pacific Island Affairs, 2009).

Māori home ownership

The Families Commission provides evidence of low home ownership among Māori even after income differentials are accounted for:

Māori are more likely than Europeans to rent rather than own their home regardless of their income. For example, 61% of Māori with incomes between \$20,001 and \$25,000 rented in 2006. For Europeans in the same income bracket the comparable figure was 26%. In the higher income bracket of \$70,000 to \$100,000, 36% of Māori rented compared with 20% of Europeans. (sub. 9, p. 5)

As well as relatively low incomes, Māori face a number of barriers to home ownership (especially for larger and younger Māori families) including: high debt levels; poor access to finance; and lack of information about home ownership (discussed in Chapter 13) (CHRANZ, 2006). Despite these barriers, most Māori have a strong desire to own their own home (CHRANZ, 2006).

Migrant home ownership

Differences in tenure choice can also be observed for migrants. Longitudinal data from the Survey of Family, Income and Employment (SoFIE) indicates that migrants who have lived in New Zealand for less than ten years are much less likely to own their home than people born in New Zealand. However, after ten years, this gap effectively disappears (Table 5.1).⁵¹

⁵¹ Similar results to these have been found using census data (BERL, 2008).

Table 5.1 Proportion of home-owners by length of time in New Zealand

Status	Home ownership rate (%)		
	Total	Couple	Singles
Born in New Zealand	58	64	44
Lived in New Zealand 10+ years	60	67	41
Lived in New Zealand less than 10 years	39	44	17
Total	57	63	42

Source: Productivity Commission calculations using the SoFIE database

In part, these differences in tenure characteristics reflect the generally lower incomes of new migrants, whose mean income is 17% below the New Zealand average (Maré and Stillman, 2008). However, even after controlling for lower income and different family and age structures, new immigrants are still 21% less likely to own their own home than the New Zealand-born population with the same characteristics and living in the same local area (Maré and Stillman, 2008).

This suggests that immigration has most likely increased demand for rental properties relative to owner-occupied dwellings. Of course, rental properties and owner-occupied dwellings are close substitutes, implying that increased demand for rentals still influences the housing market more generally.⁵²

5.6 Implications for house prices

As outlined above, demographics and population changes have driven large increases in underlying demand for housing (both owner-occupied and rental). As discussed in Chapter 2, the impact of this on house prices ultimately depends on the responsiveness of housing supply, in the context of other demand drivers such as income growth. However, given an inherent degree of 'stickiness' on the supply side of the New Zealand housing market, it is more than likely that increased underlying demand has invoked a price response.

Of course, quantifying that response is subject to significant uncertainty. Indeed, empirical evidence on the link between changes in migration, population growth and house prices in New Zealand is mixed:

- Coleman and Landon-Lane (2007) find that a migration inflow equal to 1% of the population is associated with an 8–12% increase in house prices after one year, and a slightly larger effect after three years. However, as noted by the authors, this correlation may not be causal in that migrant flows might occur at a time when locals are adjusting their expectations about future income growth; or migrants may have a 'destabilising' effect on people's expectations of house values.⁵³
- In an analysis at the Territorial Authority level, Maré and Stillman (2008) find that a 1% increase in an area's population is associated with a 0.2–0.5% increase in local house prices. However, these authors find no evidence of an inflow of foreign-born immigrants to an area impacting on house prices. They do, however, find a strong positive relationship between inflows of returning New Zealanders into an area and local house prices (with a 1% increase in population resulting from an inflow of returning Kiwis associated with a 6–9% increase in house prices).

The distinction between empirical results at the aggregate and regional levels has led to some debate as to the impact of population growth and migration flows on house prices. For instance, the Department of Labour refers to Maré and Stillman (2008) in its submission:

⁵² As discussed in Chapters 2 and 3, indicators – such as house price-to-rent and rent-to-income ratios – do not suggest acute excess demand in the rental sector over recent decades. However, it is likely that demand pressure from tenants was a factor driving house prices higher. In this scenario, landlords were rewarded with the promise of capital gain, rather than an increased rental return.

⁵³ That is, a temporary increase in house prices stemming from an inflow of migrants may cause local buyers and sellers to have overly optimistic beliefs about the appropriate value of houses, for instance, leading to a prolonged period of high prices.

Given the lack of a relationship at the local level, these results raise doubts about whether the strong positive correlation that exists between migration and house prices at the national level is in fact causal. In other words, given the uneven distribution of immigrants across New Zealand, if immigration were the key driver of recent house price inflation, then it would be expected that areas with higher inflows of immigrants would have the highest levels of house price appreciation. This was not found to be the case and suggests that the relationship at the national level may be a consequence of omitted factors that raise both immigration and house prices. (sub. 14, p. 8)

While Maré and Stillman interpret their results as raising questions about the correlation between migration and house prices at the aggregate level, they emphasise that their “estimates could understate the impact of immigration on house prices if local house prices are affected by population changes in all areas” (2008, p. 20).

This issue is essentially one of substitutability between regional housing markets. If households do move between areas in response to shifts in relative house prices, then the impact of migration on house prices at the regional level will be less evident than at the aggregate level. If this is the case, then there is not necessarily a contradiction between the aggregate and regional results. Indeed, significant internal migration in New Zealand suggests that houses in different parts of the country are highly substitutable. In addition, empirical work done by the Commission indicates that house prices in a given area are significantly influenced by house price developments in nearby areas, again indicative of strong spill-over effects.

High volatility in New Zealand’s population growth driven by migration swings may also impact on house prices.⁵⁴ For instance, the Reserve Bank considers the volatility of migration to be an issue.

When supply is relatively constrained in the short-term, swings in demand matter a lot for the determination of house prices. Lots of factors influence changes in the demand for housing but factors such as migration and demography appear to have been particularly important in New Zealand. (sub. 37, p. 4)

Box 5.3 Participants’ views on the impact of population growth and immigration on house prices

Housing New Zealand Corporation

A number of factors are thought to have increased the cost of housing over the last decade. In particular, the increasing population, driven by a surge in inward migration increasing demand for housing and put pressure on the housing markets in major centres, leading to generally higher housing prices. (sub. 34, p. 2)

Whangarei District Council

Whilst it is difficult to define with any form of precision, immigration has had some impact on local housing demand. As the WDC Demographic Background report notes, substantial numbers of international migrants aged 30-44 moved into our district. As these are often cashed up migrants rather than early starters, it probably led to higher prices. Anecdotal evidence suggests that local sellers were looking for international buyers who were prepared to pay a premium for amenity elements rather than paying prices based on local income. (sub. 32, p. 11)

Reserve Bank

The Reserve Bank has noted the impact of migration on, not just the previous housing cycle, but also those of the 1970s ... Indeed, New Zealand has tended to have large swings in migration flows. Moreover, the response of house prices to migration appears large relative to international experience. Coleman and Landon-Lane (2007) estimate that house prices rise 10% in response to an increase in migration equivalent to 1% of the population. Of course, net migration flows are, at least in part, an endogenous response to changes in the underlying behaviour of the economy. But in spite of the difficulties in identifying the relative contribution of different factors, it is important that the implications of big swings in the population growth rate for house prices, and

⁵⁴ This idea is also considered by Coleman and Landon-Lane (2007). However, they find little empirical evidence of this occurring in New Zealand.

macro stability more generally, are recognised. (sub. 37, p. 4)

Registered Master Builders Federation

It is difficult to say that immigration is a major source of increasing house prices. We suspect not, given net population is about 2/3rds births and 1/3rd immigration and the numbers are small in relation to all sales. (sub. 16, p. 15)

How will underlying demand influence house prices in the future?

As discussed in Chapter 2, the extent to which increased underlying demand for housing will push prices higher in future cannot be considered in isolation but needs to be done in the context of other demand drivers, such as income growth. Within this context, the impact of changes in demand on house prices depends on the responsiveness of the supply side of the market. This will reflect factors such as council planning processes that influence the timing and location of land release for new housing and charges for land development (Chapters 7 and 8); the flexibility and efficiency of the building construction industry (Chapter 10); and the regulation of housing construction (Chapter 8).

Based on household formation projections and the assumption that construction volumes increase in line with future economic growth rates, the Department of Building and Housing (2010) predicts a shortfall of 15,000 dwellings between 2011-16, 11,000 dwellings between 2016-21, 14,000 between 2021-26 and then a housing surplus of 2000 dwellings between 2021-31. In total, this amounts to a net shortfall of roughly 38,000 dwellings in the 20 years to 2031.⁵⁵ Over this time period, the Auckland region is expected to experience a shortfall of 90,500 dwellings while a number of other regions are expected to experience housing surpluses. The extent to which internal migration will balance the Auckland shortage with surpluses elsewhere is uncertain.

A key focus of this inquiry is policy changes aimed at improving the supply responsiveness of the housing sector, so that a supply shortfall of the magnitude predicted by the Department of Building and Housing does not occur.

⁵⁵ This is based on Statistics New Zealand household and family projections and Department of Building and Housing building forecasts.

6 The role of taxation

Key points

- Taxation affects the attractiveness of investing in housing and its affordability, although the impacts are difficult to quantify and depend on factors such as tax design and key features of housing markets.
- There has been a long standing presumption of a tax bias in favour of equity invested in owner-occupied housing. This bias has been reduced by increases in the GST rate since it was introduced in 1986, and the accompanying shift in the tax base away from income taxes and towards consumption tax, together with the application of territorial government rates.
- The deductibility, and assessability, of the inflation component of interest is a tax distortion. The former favours borrowing to invest in real assets, including for investment in rental properties, and the latter encourages investment in these kinds of asset over financial assets. However, this is a general flaw in the income tax system and would be best addressed as such, rather than specifically in the context of housing.
- Whether to tax capital gains from housing should be considered in a broader context. Taxation should be approached in a principled way across the economy – an ad hoc regime for housing alone would risk significant costs and distortions.
- The government should monitor the impact of the removal of depreciation allowances on commercial properties – which includes rental housing – to check that the absence of depreciation deductions, particularly if there were a falling market, does not result in resources being diverted away from the rental sector just as depreciation deductions in a rising market drew resources into the sector.
- Overall, the Commission does not see a case for changing the taxation of housing. Current arrangements are not ideal, but addressing particular anomalies in isolation from a broad review of the tax system would further complicate the system and could have unintended effects on housing markets and affordability.

6.1 Introduction

In New Zealand, as in many countries, whether housing is 'tax-favoured' was debated during the recent upswing in the housing market. Although there have been several reviews of the taxation of housing, significant questions remain unanswered. These include, for example, whether capital gains, and the benefit derived by owner-occupiers from living in their own home, should be included as taxable income. This chapter considers such questions, while recognising that the Commission is required to review housing affordability, including the impact of taxation, but not to undertake an inquiry into the taxation system.

This has required the Commission to strike a balance between taking the existing tax system as it is and considering how the taxation of housing can be made best to fit within that, and a more 'first principles' approach. For example, the current income tax system is a 'nominal' system – it taxes 'nominal' rather than a measure of 'real' (inflation-adjusted) income. Yet a key issue in relation to the taxation of housing concerns interactions amongst inflation, house prices (capital gains), and interest rates. This issue cannot be addressed in the context of housing alone, since it also unavoidably involves aspects of the taxation of personal interest income, business interest expense, and capital gains/losses across all asset classes. The interactions between inflation and taxation have also proved difficult to address in that broader context, highlighting the policy importance of keeping inflation low. For these reasons, the Commission does not

recommend housing-specific tax measures, but provides pointers to aspects of the taxation of housing that warrant attention in on-going tax policy development.

Section 6.2 outlines how housing is currently taxed, and section 6.3 summarises the issues addressed by previous tax inquiries, as they relate to housing. Section 6.4 considers what are commonly regarded as the income tax 'breaks' for housing. Section 6.5 discusses GST and territorial authority rates. Section 6.6 provides concluding observations.

6.2 How does the current tax system apply to housing?

Three categories of tax need to be considered in relation to housing: income tax, goods and services tax (GST), both of which are levied by central government, and rates, levied by local and regional government.

Income tax

Income tax applies to the housing sector in broadly the same way as it does to other sectors. Box 6.1 provides an overview of general principles underpinning the income tax system.

Box 6.1 Overview of the income tax system

Taxable income comprises returns to labour (salaries and wages) and capital (whether paid as interest or dividends, or retained profits). The net is cast wide to capture most 'market income'; that is, the value that arises from economic exchange. In general, income is taxed in the hands of those to whom it accrues. Therefore, that part of a firm's revenue that is paid as salaries and wages generally is taxed in the hands of its employees, and that part that is paid to providers of loan capital, as interest, is taxed in the hands of the lender. The taxable income of the firm is the residual profit, remaining after these and other costs incurred in generating the firm's revenue have been deducted. Generally, the taxable income of a taxpayer is the combined amount from all sources, with losses from some activities able to be offset against positive income from others.

Two classes of economic income, however, generally fall outside the tax net.

First, the value that accrues to a taxpayer from using their own capital or labour, often referred to as imputed income, is not taxable. For example, the benefit from painting one's own house (rather than employing a painter), or occupying one's own house (rather than renting it out), is not regarded as taxable income.

Second, tax law and practice distinguish between transactions on 'revenue account' and those on 'capital account', depending on whether the transactions occur in the course of a trading activity. The former are tax assessable and the latter, generally, are not. This distinction can result in elements of economic value-add – economic income – not being subject to income tax. Examples include where a person builds or lives in their own house. Generally the value added – or capital gain – created in these ways is not taxed, even if the resulting asset is sold. The proceeds of the sale are considered to be on capital account, rather than revenue proceeds from 'trading'. The capital/revenue boundary is not precise, although there is a body of rules and official interpretations that cover most situations – for example, for determining when someone is and is not in the business of building houses. Essentially the same capital/revenue distinction carries over to the taxation of changes in the market value of already existing assets. Transactions on revenue account (trading) are assessable, those on capital account are not.

Another important distinction relates to when a tax obligation arises, as between when income is generated, or 'accrues', and when it is 'realised', that is, when it is converted into money. In general, salary and wage taxpayers are taxed on a realisation, or cash, basis. Businesses are generally taxed on an accruals basis, which means income is recognised when it is entitled to be invoiced and expenditure is recognised when it is incurred. Given the time value of money, income that is taxed long after it arises is taxed lightly compared with that which is taxed at the time.

In the case of rental housing, rents received are assessable business income. To the extent that a rental house is financed by borrowing, interest is deductible for the landlord (and assessable for the lender). Similarly, expenses such as outlays on repairs and maintenance and for insurance are deductible for the landlord (and assessable in the hands of the recipient), leaving the residual profit to be taxed in the hands of the landlord.

For landlords, often the two largest items of expense are mortgage interest and depreciation. Where there is inflation and capital gains or losses, complexities arise in determining the appropriate amount to allow as deductions against gross rental income. As things stand, the full amount of interest paid, including that proportion that compensates the lender for the erosion by inflation of the loan amount, is allowed as a deduction. On the other hand, for buildings, allowances for depreciation and obsolescence were eliminated in 2010, on the basis of evidence that building values have been appreciating rather than depreciating.

The tax treatment of owner-occupied houses differs from rental housing, in that the imputed income that owner-occupied houses deliver to their occupants is not taxed, whereas rental income is. This follows the general practice of taxing only income from market transactions, not the (imputed) income that people derive from using their own resources (capital or labour) for their own purposes. Hence, the imputed return on the equity that a home owner invests in their own house is not taxed.

One way of assigning a value to the return a home-owner gets from their home is to consider the opportunity cost; that is, the return that could have been earned from an alternative investment. Another way is to base the value on the amount of rent that would have had to be paid if one did not own the house. In these ways one can put a value to the (untaxed) benefit, and hence on the tax value of that benefit.

An important qualification, however, is that an owner-occupied house that is entirely or partly debt-financed does not provide the same tax benefit. That portion of the return to the capital invested in a house that is financed by debt is taxed, in the hands of the lender. As things stand, it is only the equity-financed portion of owner-occupied housing that is tax preferred.

Income from building houses, as distinct from the return to the capital already invested in housing, generally is taxed, in the hands of building firms and of firms that supply building materials, for example. The exception is in the case of those who build, extend, or renovate, their own home. They can be thought of as generating imputed labour income, analogous to the imputed rental income that people benefit from when they live in their own house.

Changes in the market value of existing houses – ie, capital gains (and losses) – are generally not assessable (deductible), the main exception being if a taxpayer is deemed to have been ‘trading’ in houses. Those who are deemed to have been trading in houses are taxed no differently from other traders. However, the proportion of the turnover of existing houses that come within the scope of the tax definition of ‘trading’ is extremely small.

Overall, while income tax applies to housing in broadly the same way as to other sectors of the economy, there are some elements of a patchwork.

- The imputed income from an owner’s equity in their own house is not taxed. This is consistent with the tax treatment of other forms of income from ‘own’ capital or ‘own’ labour, but creates an unlevel playing field between owner-occupied housing and rental housing, and other forms of ‘market’ investment, such as shares, bonds, bank deposits, and commercial property.
- Capital gains/losses are not taxable/deductible unless they arise in the context of ‘trading’.
- The full amount, including the inflation component, of interest payments is allowed as a deduction against rental income (though a proportion of that is a repayment of capital rather than expense).

Deductions that allow for depreciation or obsolescence of rental houses have been removed. These aspects of the taxation of housing are discussed in section 6.4.

GST

GST, at a rate of 15%, is required to be paid by GST-registered businesses on their sales of new goods and services within New Zealand.⁵⁶ This is invoiced to the buyer and, where the buyer itself is registered, the GST content of its own input costs can be claimed as a GST credit. The effect is a tax on the value added at each stage in the production chain, which is passed forward until it reaches the final 'consumer' (anyone who is not GST registered).

Housing is subject to GST in essentially the same way as for all other goods and services. Building firms and property developers are liable for GST when they sell a new house and/or section and can claim credits for the GST content of the inputs they use. In this way, GST is built into the price of new houses in the same way as it is built into the price of any other consumer good or service.

In one respect, however, the GST treatment of rental housing is unique. Generally, the renting, or hiring out, of goods is treated as a taxable supply. Hence, a hire firm is liable for GST on the rental it charges to its customer (which is passed on to the customer), and can claim GST credits for the GST content of its inputs. For example, a car rental company is required to charge GST on the rental it charges, and can claim a GST credit for the GST content of the price paid for its cars.

If the same approach applied to rental housing, landlords would be required⁵⁷ to pay GST on the rents they charge their tenants, and would be eligible for GST credits in respect of the GST content of their input costs, including of the house. For rental housing, however, landlords are treated as if they were the final consumer. This does not mean that residential rents escape GST. While GST is not applied directly to rents, indirectly it is, as rents generally incorporate allowance for the GST landlords absorb.⁵⁸

It may also appear that GST does not apply to the consumption of the accommodation services that owner-occupied houses provide to their owners. However, all new residential houses, whether rental or owner-occupied, are subject to GST on the purchase price when they are first sold, whether to a landlord or owner-occupier. GST can be viewed as an up-front payment, in present value terms, of the GST applicable to the flow of accommodation services that the house will provide over its economic life. In effect, GST on housing is paid as a lump sum at the outset, rather than over the economic life of the house. Section 6.5 considers the implications of this in the housing affordability context.

GST is levied only on new houses. But new houses and existing houses are substitutes, and the closer they are in vintage, the closer the substitutability. Owing to this substitutability, GST tends to become incorporated over time into the market value of all houses.⁵⁹ In effect, each successive owner of a house bears the proportion of the GST attributable to the services provided by the house during their tenure as owner. In this way, existing houses, as well as new houses, bear GST.

Local and regional government taxes (rates)

Rates are the principal source of revenue for territorial authorities and, as a compulsory levy against landholders, can be regarded as a tax.⁶⁰ Rates are applied at a prescribed rate determined annually by the territorial authority, mostly on the basis of the assessed value of the real estate in question, and are simple

⁵⁶ Registration is mandatory for those with turnover exceeding \$60,000.

⁵⁷ If their rental income exceeded \$60,000; otherwise it would be open to the landlord to choose whether to be registered, or as is currently the case for all residential landlords, to be unregistered.

⁵⁸ To see the equivalence of the landlord or the tenant being regarded as the 'final consumer' in the case of residential rental dwellings, consider the following example, based on a house worth \$300,000 ex GST, a GST rate of 15%, and rent set to yield the landlord 5% pa. If the landlord is GST registered, then the cost to the landlord of the house is \$300,000, rent is \$15,000 pa, on which the GST would be \$2,250. If instead, the landlord is not GST registered (ie, is regarded as the final consumer) then the cost of the house is \$345,000, and to obtain a rental yield of 5%, the annual rent would need to be \$17,250, of which \$2,250 is attributable to the GST content of the house value.

⁵⁹ Although if the colonial villa has been refurbished and renovated, its market value will tend to incorporate a GST element attributable to the GST content of the cost of the refurbishment.

⁶⁰ There may be a closer connection between ratepayers and the services provided by territorial government than those provided by central government, but the difference is only one of degree.

to administer.⁶¹ They average about 0.6% of the capital value of residential real estate, although this varies amongst local authorities (OECD, 2011).

Rates can be expressed as the equivalent of a tax on the income (imputed or actual) from residential property, by making some assumptions about the level of that income. There is a range of possibilities. One is to attribute income to houses on the basis of the return that could be earned from an alternative investment; for example, a financial asset like a bank deposit. On that basis, and assuming a bank deposit rate of 5%, the rate of tax applied by territorial government, in income tax equivalent terms, can be estimated at about 12% ($0.6/5.0 = 0.12$).

That approach, however, may overstate the real economic returns to housing, and understate territorial government rates when expressed as a tax on that real income. Financial assets, like bank deposits, are fixed in money, and the interest paid generally includes a component to compensate for erosion of money by inflation. That is not the case for returns on 'real' assets, such as houses, whose values are not fixed in money and hence, on average tend to rise with inflation. Hence, where there is inflation, the returns achievable on 'real' assets, tend to be lower than the interest rates paid on financial assets, by the amount of the inflation compensation component of interest. On that basis, if the real rate of return on housing is, say, 3%, territorial government rates are equivalent to an income tax rate on real income of about 20% ($0.6/3.0 = 0.2$).⁶²

6.3 Recent tax inquiries

Two comprehensive reviews of the tax system – the McLeod Committee (2001), and the Tax Working Group (TWG 2010) – addressed the taxation of housing. The most recent OECD Review of New Zealand (OECD 2011) also considered tax policies as they relate to housing. Further, in 2007 an Independent Local Government Rates Inquiry (LGR 2007) considered the affordability of rates levied on residential property.

Both the McLeod Committee and the TWG reviews were equivocal about whether housing should be taxed more, whether by taxing the imputed income from owner-occupied houses, or by taxing capital gains, or both.

McLeod Committee

In its initial issues paper, the McLeod Committee consulted on taxing the income generated from the equity invested in housing, measured on the basis of a risk-free rate of return applied to the annual opening value of a property reduced by the amount of any debt secured over the property (McLeod Committee, 2001a, p. 40). This approach, which would have applied to both owner-occupied and rental housing, was floated as a simpler, practicable, alternative to developing a more comprehensive measure of income from housing, covering imputed income and capital gains. In the case of rental housing, it would have been in place of taxing rent (net of interest and other expense deductions). For owner-occupied houses, it would have extended the income tax net to capture imputed income from owners' equity. The proposal faced strong public opposition and the Committee, taking the view that a tax system needs to enjoy a reasonable measure of community support, did not recommend its adoption in its final report (McLeod Committee, 2001b).

Tax Working Group

The TWG also considered the risk-free rate of return approach, but with its possible application confined to rental housing. Again, it was considered as an alternative to taxing rental income net of interest and other expense deductions. One reason for considering the adoption of a deemed measure of income from rental housing, in place of actual accounting income, was that interest and other deductions had increased to a level where the rental housing sector was reporting aggregate tax losses, which was seen as problematic.

⁶¹ Rates are usually based on the capital, or improved, value of the land, buildings and other improvements, although in some cases they are based on land value alone. Valuations are carried out periodically for authorities, in most cases by Quotable Value New Zealand, using recent sales data.

⁶² Another angle on this is to recognise that application of the statutory rate of income tax to interest receipts results in the taxation of the economic return (the return to, as distinct from compensation for the erosion of, capital) higher than the statutory rate. For example, a 20% rate of tax applied to a nominal interest return of 5% that includes a 2 ½% inflation component is equivalent to a 40% rate of tax on the real interest return.

The TWG also considered taxing capital gains, and introducing a land tax or a 'capital charge', without coming to firm conclusions about them.

While the TWG saw introducing a comprehensive capital gains tax (CGT) across all asset classes as having merit in principle, most members of the TWG were concerned about its practical challenges and economic efficiency implications. In particular, excluding owner-occupied property, which the TWG saw as likely, would further bias the tax system in favour of owner-occupied housing (TWG, 2010, p. 67). It was also concerned about 'lock-in' effects if a CGT was applied on a realisation rather than accrual basis. The concern here was that owners might defer moving house, even though a sale might make economic sense, in order to avoid crystallising a tax obligation. The TWG was also concerned about boundary problems if some assets, or houses, were liable for CGT and others not (TWG, 2010, p.50).

The TWG recommended removing depreciation deductions for buildings if the evidence confirmed that buildings do not depreciate in value over time. That recommendation has been implemented. The TWG also recommended a shift from income tax to GST, which has also been implemented by way of the October 2010 increase in GST from 12.5% to 15%, with offsetting reductions in income tax rates. This has brought housing more within the tax system than previously.⁶³

OECD

The 2011 OECD economic review of New Zealand supported introducing a comprehensive realisation-based tax on capital gains, but recognised that partial exemption or rollover relief⁶⁴ for housing could be necessary to facilitate public acceptance. The OECD further recommended that if housing capital gains were not taxed, then the taxation of other forms of savings should be reduced, and further limits should be applied to the extent to which property investment losses can be deducted for tax purposes. The OECD also considered that such measures should be accompanied by higher property or land taxes that could be designed to achieve the same objectives as a tax on imputed rent (OECD, 2011).

The Independent Local Government Rates Inquiry (2007)

This inquiry saw rates as being administratively efficient, difficult to evade, and with low economic deadweight costs, but with a possible regressive effect on those with lower incomes. Its recommendations focused on the need for local government to contain its spending and/or find additional sources of funding, to lessen the need for rates increases. It supported improvements to the (government funded) rates rebate scheme and rates deferral arrangements provided by some local authorities, to ease affordability strains for those on low incomes (see section 6.5).

6.4 Income tax influences on housing affordability

This section considers whether the income tax system played a role in driving house prices higher during the housing boom in the early-mid part of the last decade, focusing on aspects of the system that are generally regarded as causing, or are symptomatic of, distortions that tilt investment toward housing. Submissions had a variety of views about this (Box 6.2).

Box 6.2 How significant have the tax drivers been? A range of views

Some submitters believe the tax system helped to drive house prices higher.

The Registered Master Builders' Federation considers that the tax treatment of residential properties provided an incentive to acquire an investment property, increasing competition for these homes and leading to higher prices (sub. 16, p. 16). The Auckland Council and the Auckland District Council of Social Services note that recent reports advocate structural reform of the tax system because the current system favours investment in housing and in other property over other forms of investment; for

⁶³ In so far as income from the equity invested in owner-occupied houses is not subject to income tax, but the investment of equity by owner-occupiers in housing is subject to GST.

⁶⁴ Roll-over relief exempts capital gains from taxation when the sale proceeds are re-invested in a similar asset.

example, the recent OECD Economic Survey of New Zealand (2011) identified the tax system as exaggerating the surge in house prices (sub. 45, p. 14 and sub. 41, p. 5, respectively). The Auckland Catholic Diocese Justice and Peace Commission has a similar view (sub. 50, p. 3).

The Department of Building and Housing considers “current property tax arrangements favour property investment over other investment classes; favour rental investors over first home buyers; encourage rental investment for untaxed capital gain and reduce personal income tax revenue by allowing rental losses to be deducted against one’s personal income tax liability” (sub. 55, p. 40).

Other submitters downplay the effect of tax distortions.

The Reserve Bank submits that “taxation regimes can affect house price movements and house prices cycles, but our judgement is that they have not been of decisive importance compared to supply factors, migration factors, or fiscal and monetary policy. At times, tax provisions, in conjunction with other shocks, may have served to amplify or extend a housing boom that had initially been triggered by quite unrelated factors”. Also, “countries with a variety of tax regimes experienced similar housing booms in the mid to late 2000s. Moreover, it is not clear that, in aggregate, housing is more tax-favoured in New Zealand than in other countries” (sub. 37, p. 2 and p. 8).

The New Zealand Property Investors Federation considers “...that the current tax settings seem to be efficient and are not overly lenient for residential rental property providers and (that) taxation policy instruments themselves will not of themselves significantly make much difference to the current cycle of housing and renting trends in New Zealand” (sub. 51, p. 9).

ICON Concepts considers that “housing expectations are driven by deep social conditioning so the tax system does not have great influence” (sub. 6, p. 13). Carrus Corporation Limited believes “taxation’s (income and GST) most significant influence is on the take-home pay which then flows through to what the potential purchaser can afford” (sub. 8, p. 15).

Owner-occupied housing

Under a fully comprehensive system of income tax, the imputed income from the accommodation services that houses provide would be subject to tax. As explained above, to the extent that houses are funded by owners’ equity, the associated income from the house – the benefit of occupancy – is not subject to income tax.

Some countries level up the taxation of income from owner-occupied housing as between that part attributable to, and paid to, the providers of debt capital, and that part attributable to the owner’s equity, by allowing mortgage interest to be deducted from assessable income. This results in the economic return to both debt and equity invested in owner-occupied housing not being taxed. This removes the tax discrepancy as between debt and equity financing of owner-occupied housing, but exacerbates the discrepancy as between owner-occupied and rental housing, and increases the tax bias in favour of housing overall.

The views in submissions

Although there is a full range of views from submitters on the impacts of different tax treatment as between returns to debt and returns to equity (Box 6.3), it is widely thought to:

- bias people toward investing their own savings (their equity) in their own home, rather than in other forms of investment;
- bias the housing market in favour of owner-occupancy and away from renting;
- result in more resources, overall, being allocated to housing than is ideal.

Box 6.3 Owner-occupied housing – a tax-favoured investment?

On the one hand:

Carrus Corporation Limited considers that New Zealand's tax system influences tenure decisions away from home ownership (sub. 8, p. 15). And the Department of Building and Housing notes that "current property tax arrangements favour ... rental investors over first home buyers" and that "New Zealand's current tax rules as they relate to owner-occupied housing are broadly in line with other western nations (ie, there is no capital gains tax or ability to deduct interest/mortgage expenses), but [the] treatment of rental investment housing is markedly different (capital gains are not taxed, there are no transfer/sales taxes, and there are few restrictions on the ability to offset rental losses against other taxable income)" (sub. 55, p. 40).

The Business Roundtable considers that "owner-occupied housing is treated more favourably than most other classes of assets for income tax purposes [and that] rental housing is treated somewhat less favourably than many classes of assets." But it also considers that "there is little reason to assume that such long-standing income tax arrangements played a major role in recent house price trends or that the distortion to resource allocation will have been significantly accentuated by tax treatment over the past few years (sub. 20, pp. 7-8).

The Reserve Bank also considers that "housing is a favoured investment from a tax treatment perspective ... especially for unleveraged owner-occupiers ... since owner-occupiers do not pay tax on the imputed rental value of the equity in their houses (although they do pay rates)" (sub. 37, p. 8).

On the other hand, some do not see tax as having much of a bearing on the choice whether to own or to rent. Affordable Housing New Zealand Limited considers "the tax system neither favours owners to non-owners of housing" (sub. 12, p. 11). Habitat Auckland submits that most people's decisions to rent or buy will not be influenced by the tax system (sub. 23, p. 6).

Impact on house prices

The tax free status of the imputed return on the equity invested in owner-occupied houses is likely to affect house prices, compared with a situation in which the imputed income was taxable. In theory, market transactions should arbitrage away the benefit from the tax-free status of the imputed income from housing by bidding up the price of housing until the untaxed imputed rental rate of return on home ownership is equal to the post-tax return on alternative investments.

Because a tax on the imputed income from owner-occupied houses would apply only to that proportion that is equity financed, the effect, at least over time, would likely be some combination of a shift to more mortgage financing (because there would not be the same tax advantage as at present in paying off one's mortgage), and reduced demand for housing overall. It is difficult to know what the balance between these would be. But to the extent that there was less demand for housing, the initial impact of introducing a tax on imputed income is likely to be a shift down in the level of house prices, compared with where they would otherwise have been.

In assessing whether income tax should be extended to imputed income from equity invested in owner-occupied houses, it is appropriate to consider to what extent that income is already, directly or indirectly, taxed.

First, as noted above, rates on residential properties can be viewed as the equivalent of a tax on the income from houses, at a rate of between about 12% and 20%, depending on whether the income is measured in nominal or real terms. The Reserve Bank also notes that "relatively high local government rates in New Zealand compared to other countries act as a tax on property ownership" (sub. 37, p. 8). This tax applies to all houses, irrespective of how they are financed, and therefore does not off-set the *tilts* in the playing field resulting from the different *income tax* treatment of owner-occupied and rental houses, and as between

debt and equity financing of owner-occupied houses. But it does mean that imputed income from owner occupied houses is taxed to some degree.

The second factor is the shift that has occurred in the balance between income tax and GST. GST, as explained above, applies equally to both the owner-occupied and rental segments of the housing market, and to investment in housing whether financed by debt or equity. Over the last two decades, there has been a significant shift in the balance between income tax and GST, which has gone some way to evening-up the tax playing field between housing and other forms of investment.⁶⁵ Some evidence of the impacts of the tax system is provided by the way in which the pattern of ownership, as between rental and owner-occupied, and of financing, as between debt and equity, evolved during the recent housing boom. If the increase in the top marginal tax rate to 39% in 2000, when combined with a tax bias in favour of investing one's own equity in a home, had been a driving force behind that boom, we might have expected to see the home ownership rate trending up, and equity flowing into the housing sector. However, the trends ran in the opposite directions. Also, although it is too soon to know, there have been few suggestions that the drop in the top marginal tax rate back to 33%, since 2010, is having much of a reverse effect.

F6.1

There has been a long standing presumption of a tax bias in favour of equity invested in owner-occupied housing. This bias has been reduced by increases in the GST rate since it was introduced in 1986, and the accompanying shift in the tax base away from income taxes and towards consumption tax, together with the application of territorial government rates.

Housing capital gains

As noted earlier, a series of reviews in New Zealand have considered the case for applying a CGT in the housing sector. A realisation based CGT has been advocated (for example, OECD, 2011) on the grounds that it would broaden the tax base and reduce distortions in investment decisions. Coleman (2009) points out that when the inflation rate is positive, the tax system generates an incentive for people to borrow and invest in assets that appreciate over time. This happens because interest, including the inflation component of nominal interest earnings, is tax deductible for the borrower (ie, for owners of rental housing), while the inflation component of capital gains is not. This creates a bias that potentially encourages excessive investment in rental housing, and may make it more difficult for young and low income people to enter the housing market. All other things being equal, the additional demand from investors for rental houses (assuming relatively unresponsive supply) pushes up house prices, while at the same time those saving to build a deposit for a house are taxed on the inflation component of their interest earnings. On the other hand, a greater supply of rental houses may cause housing rents to be lower than otherwise.

This section sets out the views of submissions on CGT, and considers its possible impacts on housing affordability and welfare, and some practical implementation issues. It concludes that a decision on whether to adopt a CGT on housing should be based on a coherent set of principles that have general application, not just to housing – a wider matter that runs beyond the scope of this inquiry. A number of difficult implementation issues would also need to be considered.

The views in submissions

Submissions expressed a range of views on whether taxing capital gains on houses would help to contain house prices, and contribute to achieving home affordability policy objectives. The Auckland Catholic Diocese Justice and Peace Commission, Habitat Auckland and the New Zealand Council of Trade Unions support a capital gains tax on the grounds that it would dampen speculation (sub. 50, p. 4; sub. 23, p. 6; sub. 15, p. 8). Other submitters disagree with this view. The Centre for Straight Thinking, citing Sir Roger Douglas, points out that countries with a CGT have experienced house price bubbles (sub. 24, p. 65). The

⁶⁵GST was introduced in 1986 at a rate of 10%, which was increased to 12.5% in 1989 and to 15% in 2010, while income tax rates have been brought down. (Although between 2000 and 2010 the top marginal rate was increased from 33% to 39%, it remained well below the top marginal rates that prevailed before the 1990s. The increase in the top marginal tax rate in 2000 will have increased the tax incentive to invest equity in owner-occupied housing compared with immediately previously, and also will have increased the tax value of any 'tax-breaks' for rental housing. However, it is difficult to gauge how large that effect was. The top marginal rate is now 33%.)

Reserve Bank finds “little evidence internationally that countries with capital gains taxes have experienced less marked cycles in house prices” (sub. 37, p. 9). The Business Roundtable points out that “capital gains on owner-occupied housing are not typically taxed in those countries where capital gains taxes are generally applied” (sub. 20, p. 8). The New Zealand Property Investors’ Federation considers that a “simplistic” CGT will not curtail real estate inflation and could create a housing slump that worsens supply and affordability (sub. 51, p. 6).

Impacts of a CGT on house prices and rents

Introducing a CGT would likely affect house prices and rents. Quantifying these impacts, however, is not straightforward and the effects would depend on the tax design: most importantly, whether the tax would apply to nominal or real changes in value; whether losses would be deductible; whether it would apply only to houses, or possibly just rental houses, or to all asset classes (for example, shares and commercial and rural property); and whether it would be an accruals or realisation based tax.

The implications of different tax regimes can be analysed by seeing how the tax system affects the after-tax returns of different investments; that is, on the basis that investors make investment decisions by comparing the after-tax rate of return available from alternative investments.

Applying a CGT would reduce the after-tax return on property investment when house prices are expected to rise and vice versa if capital losses were deductible. How that would play out across the different asset markets would depend on the pattern of price expectations across markets, and how comprehensively the tax was applied. For example, if it was applied to houses in isolation, and the market expectation was for the price of houses to increase, then introducing a CGT would result in lower post-tax returns on housing. To re-equilibrate returns with alternative investments, house prices would fall, or not increase by as much. Conversely if the market was expecting house prices to fall, and capital losses were tax deductible, house prices would fall by less.

That, at least, is how things would work in the broad. But there are complications. For example, some of the market adjustment to re-equilibrate rates of return may come through rents rather than house prices. The balance between adjustments in house prices and rents would depend on a range of factors, including the responsiveness of housing supply; and on whether the capital gains tax was applied to just rental, or to both rental and owner-occupied houses. The greater the responsiveness of housing supply, the greater the share of the adjustment that could be expected to come through rents rather than house prices.

Coleman (2009) analyses the possible effects of CGT. In his model, landlords are assumed to bid for houses and set rents at levels that leave them indifferent between the after-tax returns from lending money and the after-tax returns from investing in residential property. The adjustment following the introduction of a CGT occurs through changes in both house prices and rents. Coleman considers four CGT schemes, with different tax rates and coverage.⁶⁶ The results are sensitive to the CGT scheme and the assumed responsiveness of housing supply.

For example, when the supply of housing is elastic and inflation is 2%, imposing a CGT at the top marginal tax rate on rental houses (but not owner-occupied houses), results in an 11% increase in rents. There is also a small rise in house prices, in the order of 0.6–0.8%, because higher rents encourage some people to switch from renting to buying a house. The results are slightly smaller if CGT is applied at a 20% flat rate. When the supply curve of housing is inelastic, house prices need to increase by more (around 4% or 5%), in order to reduce the total demand for housing.⁶⁷ If CGT is applied to all housing on an accruals basis, either at a flat 20% or at marginal income tax rates (20%, 33%) and if housing supply is elastic, there is an increase in rents, but the price of large houses drops by about 0.5% (Coleman 2009).

⁶⁶ The first taxes capital gains at the taxpayer’s marginal income tax rate, but exempts owner-occupied housing. The second does not exempt owner-occupied housing. The third applies a flat rate capital gains tax of 20%, with an exemption for owner-occupied housing. The fourth scheme is similar, but does not exempt owner-occupied housing.

⁶⁷ Since the supply of housing does not increase in this case, the only way to reduce the total demand for housing is to raise house prices, which makes it more attractive for people to share (Coleman 2009, p. 15).

The OECD (2011) illustrates the impact of taxation on housing values using a discounted cash flow model that describes how much a consumer would be prepared to pay for a property based on the discounted after-tax returns of ownership. This approach indicates much larger impacts of taxation on consumers' valuation of housing, but does not model the relationships between different markets, as in Coleman's analysis.

Interaction between capital gains, inflation and a CGT

The analysis above deals with the possible effect of *introducing* a CGT on housing affordability levels.⁶⁸ Extending tax to capture income from housing that currently is not being taxed, all other things being equal, would bring about a *one-time*, level adjustment to house prices (and/or rents).⁶⁹ In the case of a capital gains tax, the direction of adjustment would depend on whether, at the time the CGT was introduced, house prices were expected to rise or fall. If expected to rise, then introducing a CGT on all housing would pull down the 'starting point' from which prices continue to escalate, and if expected to fall, would give house prices a nudge upwards. Those would be 'one-time' adjustments. A corollary to that analysis is that, without change to the taxation of housing, the path of house prices (and rents) would continue essentially unaffected.

A separate but closely related issue concerns how interactions amongst expected inflation, capital gains, and the tax treatment of nominal interest rates (which incorporate expected inflation) can drive (and distort) the housing market. The issue here is that the taxation as income of the inflation component of interest receipts, and the corresponding deductibility of that component of interest by business borrowers (including landlords), creates an uneven playing field between financial investments and real assets. It also creates a bias toward funding real assets (eg, houses) with debt rather than equity. That bias increases at times when inflation expectations are ratcheting up, and in the process tends to accentuate inflation pressures in the housing market. In other words, *a change in inflation expectations, given the existing nominal tax regime, can accentuate the distortions caused by the way inflation interacts with that regime.* That is particularly the case in the housing market, given the relative ease with which borrowing can be arranged for rental housing investments compared with most other forms of investment. There was evidence of these influences at work in the mid-2000s, when landlords were gearing up on the back of rising inflation expectations (at least rising house price inflation expectations), and claiming growing amounts of interest deductions.⁷⁰

As noted earlier, however, this issue also arises in relation to taxation of other assets, as well as housing. Addressing it in the context of housing alone would likely create other distortions between asset classes.

F6.2

The impacts of a capital gains tax on housing affordability is unclear and would depend on how the tax was designed, on how operational issues were resolved, and on key features of housing markets.

Impacts on economic welfare

Just as the impacts of a CGT on house prices are difficult to quantify, so are the impacts on economic welfare.

If a CGT did push down house and property values, it would tax existing property owners. The OECD notes that given the importance of property and farmland in balance sheets in New Zealand, this could have repercussions for the wider economy and financial system, although it also points out that the introduction of a CGT in Australia and Canada did not have a noticeable impact on aggregate house prices (OECD 2011, p. 77).

⁶⁸ This is similar to the preceding discussion of the exclusion from tax of the imputed return to equity in owner-occupied houses.

⁶⁹ In effect, an increase in the taxation of housing would, at least in theory, ultimately amount to a transfer from existing home owners to the government. The increase in taxation would result in lower entry prices for first home buyers, offset by higher taxes during their period of tenure.

⁷⁰ Increased interest deductions were an important contributing factor in the residential rental sector turning from a net taxpayer to a net claimant of tax credits in that period (Tax Working Group, p. 26).

Coleman (2009, p. 20) uses the model mentioned above to assess the impacts of a CGT on welfare. He concludes that his modelling cannot be definitive about these effects, which depend on the detailed structure of the economy: the “welfare effect of different policies depend a lot on several deep parameters in the models, suggesting empirical research on the nature of these parameters is important before policies are introduced”.

Tax changes would affect the welfare of groups in the community differently. Tax changes which drove down house prices would improve affordability for first home buyers. There would, however, be less favourable implications for other groups. Recent entrants to the housing market would not see lower house prices as making housing more ‘affordable’ for them, but may feel vulnerable, particularly if they are highly leveraged. There are issues relating to housing affordability for the elderly, who may see a reduction in value of their major retirement asset.

Operational issues

As pointed out by the Reserve Bank, designing a CGT is far from straightforward:

...we note that, in practice, capital gains taxes are only levied on realised gains (rather than accruals), which creates additional distortions and that capital gains taxes usually largely exclude owner-occupied houses, even though unleveraged owner-occupied housing is the most lightly taxed component of the housing stock...[and that] capital gains taxes are common internationally but are hard to design and implement in a way that works well. To avoid establishing new distortions, any capital gains tax should only tax real capital gains and needs to treat gains and losses relatively symmetrically. (sub. 37, p. 9)

The OECD (2011) supported a CGT, but noted that there would be practical and political challenges.

Practical and implementation issues for a CGT include:

- A tax applied on an accruals basis would create liquidity problems for households whose property values had risen sharply, but with insufficient cash flow to cover the tax burden.⁷¹ There would also be valuation issues to be addressed, both conceptual and practical. Would rating valuations be acceptable, particularly at times when the market is ‘thin’, with few actual transactions taking place?
- An accruals based tax could be perceived as treating unfairly retired households who do not plan to move.
- A realisation based tax might address these problems but create other distortions such as lock-in effects: owners who might otherwise have considered selling could refrain from doing so in order to avoid, or defer, a tax liability.⁷² This could have a perverse effect on house prices, causing them to rise further than otherwise in a rising housing market, by diminishing the supply of houses onto the market.
- Roll-over relief can address lock-in effects, but might create incentives to bring forward capital losses, whilst deferring realisation of capital gains, thus creating the need for ‘ring fencing’ rules.
- Home owners would need to retain records of outlays on betterment that increases the value of a house, and in economic terms represent additional investment rather than capital gain; for example, adding a room or refurbishing an old house. Under a realisation based CGT, depending on length of tenure, records may need to be retained for many years.

In the face of such complexities, most countries that tax capital gains exempt owner-occupied houses, apply the tax on a realisation rather than accruals basis, and at a lower rate than tax on other income, allow roll-over relief, and tax gains but do not allow deduction of losses (or allow losses only to be carried forward as a deduction against future capital gains). If circumscribed in these ways, taxation of capital gains from

⁷¹ One way to address this would be to allow people to ‘borrow’ to cover the tax obligation – by attaching a lien to the property.

⁷² ‘Roll-over relief’ – that is, allowing tax on a realised capital gain to be further deferred upon the proceeds being re-invested in another residence – would help to avoid this perverse outcome, but would also result in a CGT having less (stabilisation) policy ‘bite’.

housing could lose much of its principle-based intent, particularly given that about two thirds of houses are owner-occupied.⁷³

F6.3

There are significant practical challenges in implementing capital gains taxes and international experience suggests that implementation typically falls short of the in-principle 'ideal'.

These challenges point to the need for careful weighing of the role that a CGT could play in addressing housing affordability issues, relative to the design and operational complexities that would need to be resolved. Two key considerations are that the design of any CGT should: (a) be founded on principles that are applied consistently on an economy-wide basis; and (b) deal coherently with the distortions resulting from the interaction of inflation, interest and a nominal tax system, or at the very least not add to existing distortions caused by those interactions. If those outcomes cannot be achieved, then it is not clear that introducing a CGT would improve, rather than detract from, the performance of the housing market.

F6.4

A decision on whether to adopt a capital gains tax on housing should be based on a coherent set of principles that have general application, not just to housing. This matter needs to be considered from an economy-wide perspective and runs beyond the scope of this inquiry into housing affordability.

Rental housing tax losses

The TWG (2010, pp. 25-26) highlighted how taxable income from the rental housing sector trended down during the housing boom in the 2000s, and that by 2007–8 the sector was reporting aggregate tax losses. This brought a spotlight to bear on whether allowable deductions – principally for interest and depreciation – enabled landlords to 'manufacture' tax losses that did not reflect real economic losses. The ability to use these tax losses as offsets against other assessable income, particularly through the use of Loss Attributing Qualifying Companies (LAQCs), raised further questions about whether tax losses on rentals should be 'ring-fenced'. This would mean that rental housing losses would be available only as an offset against future rental income, not unrelated income, such as income from employment or unrelated business activity. Participants had a range of views about this issue (Box 6.4).

Box 6.4 Rental housing – what to make of the upsurge in tax losses?

The New Zealand Property Investors' Federation notes that the costs of providing rental accommodation are deductible against other assessable income; that the recent change to building depreciation looks likely to reduce the supply of rental property and further increase rental prices; and that "the notion that residential property investors knowingly lose money to save tax is ludicrous and is not supported by hard facts" (sub. 51, pp. 8-9).

The Registered Master Builders' Federation accepts that the tax treatment of investment property has encouraged investment in this sector but cautions that changing the tax regime could result in fewer private sector rental properties and a greater reliance on the State for housing (sub. 16, p. 16). Habitat Auckland points out that it would make the market unattractive to institutional investors (sub. 23, p. 6).

The Business Roundtable considers that "rental housing is treated somewhat less favourably than many classes of assets and that the ability to offset tax losses against other income is not a tax preference (sub. 20, pp. 7-10).

The Reserve Bank comments that "the inadequate tax treatment of the inflation component of

⁷³ Huang and Elliffe (2010, p. 36) argue, drawing on South Africa's experience, that a regime that deals with the acknowledged problems of a realisation-based CGT can produce results in effective and manageable tax reform. One feature of the South African regime, however, is that the first \$300,000 of gain or loss on disposal of a primary residence is excluded.

interest, whereby all interest received is taxed and all interest payments by investors are deductible, compounds [rental housing tax distortions]. With an inflation target centred on 2 per cent per annum, a significant chunk of any interest rate reflects simply the expected general rise in the price level (rather than a real income or real cost)... We also doubt that loss off-setting in and of itself was more than an amplifying factor... More generally, however, correcting the tax treatment of interest to assess or deduct only real interest would remove the distortion in this area" (sub. 37, pp. 8-9).

The Department of Building and Housing (sub. 55, p. 41) notes that "...the capacity for investors to deduct losses from rental properties against other sources of taxable income puts investors at a relative advantage to first home buyers (assuming they fund the property mainly through debt) ... estimates suggest that the ability to deduct losses from rental properties increases the value of a median priced house to the investor by \$25,000."

...current tax advantages (for rental investors) ... create inequities between 'ma and pa' and institutional investors as the latter cannot pass tax losses onto their investors. (sub. 55, p. 41)

Depreciation deductions – too large or too small?

Establishing the appropriate basis for depreciation allowances is closely bound up with how to tax capital gains (and losses). In principle, depreciation – the diminution in an asset's future income potential – is the converse of appreciation.

Ideally, economic depreciation, and appreciation, would be determined on the basis of changes in market value. However, for most assets objective market values are not available; hence the tax accounting practice of allocating depreciation year-by-year by apportioning the cost of an asset over its economic life (based on IRD estimates of the economic life of different classes of asset). The presumption is that most assets (land and, since 2010, buildings being exceptions) deteriorate as the result of decay and obsolescence and eventually need to be 'written off'.

Another complication is that changes in asset values do not necessarily reflect change in their future real output potential. In the case of houses, changes in market value typically reflect a combination of inflation, betterment (eg, refurbishment, or improved transport services to the locality in which the house is situated), and change in relative scarcity. Unpicking these elements in the context of determining what is an appropriate allowance for economic depreciation, or the amount of appreciation that should be taxed as income, is not straightforward.⁷⁴

Until 2011, rental houses⁷⁵ could be depreciated for tax purposes as a percentage of their acquisition cost (either 3% per annum on a diminishing value basis, or 2% per annum on a straight line basis).⁷⁶ Appreciation, or inflation, in the value of the house (capital gain) was not taken into account, although depreciation claimed on a house is still 'clawed back' on its sale, to the extent that the sale price exceeds its written down value. But since 2011, depreciation for buildings (with an economic life of more than 50 years) has been disallowed, on the basis that it does not make sense to allow depreciation for buildings that actually appreciate.

⁷⁴ The approach recommended by the Committee of Inquiry into Inflation Accounting (1976) was to revalue assets to their current replacement cost; to take the resulting nominal gain (or loss) to taxable income to the extent the assets are financed by debt (with nominal interest expense allowed as a deduction), and otherwise to a non-taxable revaluation reserve; and for depreciation expense over the remainder of the asset's economic life to be determined on the basis of the *written-up* current replacement value. The challenge is to devise an approach for taking account of depreciation and appreciation (capital gains), inflation, and the interactions between inflation and nominal interest, which is internally consistent – and also capable of practical application without too much difficulty. The recommendations of the 1976 Committee of Inquiry, which were formulated at a time of double-digit inflation, were not implemented largely because of difficulties in giving them practical application. Getting inflation down to a rate consistent with what could be regarded as price stability became the more attractive policy option.

⁷⁵ Only rental houses because owner-occupied houses are not regarded as business assets and hence the owner is not taxed as carrying out a business activity.

⁷⁶ Up until 2005 the rates had been 4% (DV) and 3% (SL).

This policy change appears to have been based on an assessment that for buildings, 'capital gains', which are not assessable, and outlays on repairs and maintenance, which are deductible, offset depreciation.⁷⁷ This can be seen as a 'pragmatic' way to cut through a situation involving a number of difficult to measure moving parts – capital gains, inflation, rates of physical decay, and the boundaries between repairs and maintenance outlays. But it does suggest a need, going forward, to maintain a watching brief, to check whether those moving parts continue to more or less balance out. If, for example, in the next decade or so house prices fall in real terms, then the tax policy settings for depreciation might need to be reviewed. That could be the case if being unable to claim depreciation or capital losses were to result in insufficient recognition of the economic cost of providing rental accommodation, and a tax disincentive to invest in the rental sector, just as the combination of depreciation deductions and tax-free capital gains drew investment into the sector in the 2000s.

Interest deductions for landlords

Interest paid on borrowings to finance a house that is rented is an expense that can be deducted from the tax assessable rent, consistent with normal tax policy and practice. This recognises that the income return to the capital invested in rental houses accrues to – and should be taxed in the hands of – those who provide the capital; that is, those who provide the debt, and equity, respectively.

Full deductibility of interest expense, however, does confer a tax advantage, for taxpayers who incur interest expense in the course of generating tax assessable income. That advantage stems from a significant component of interest not being a 'real' expense, but rather compensation for the erosion, over time, of a debt expressed in money and hence which is debased by inflation. Even at low rates of inflation, money loses significant value over a run of years – nearly 30% over 10 years of inflation averaging 2.5% per annum.

This tax advantage from borrowing provides an incentive to invest in tangible assets, using borrowed money. Housing is particularly amenable to investing in this way, given the relative ease with which borrowing against a house can be arranged. In the case of rental housing investments, deductibility of the full amount of interest, without being assessable for the inflation component of the increase in the value of the house, creates an opportunity, when there is inflation, to 'manufacture' tax losses that are not economic losses. While house price inflation expectations, and relative ease in arranging debt to finance residential rental investments, will have been the main driver of the upsurge in investor appetite for leveraged rental investments during the recent housing boom, full deductibility of the interest expense will have been an added factor.⁷⁸

One result of that lift in the appetite for leveraged investments in rental housing will have been an increase in the share of rental housing income that accrues to lenders, and correspondingly less to the (equity) owners. This accounts for at least part of the downtrend during the 2000s in rental income returned for income tax; a greater share of the rental revenue was being paid as (tax deductible) interest.⁷⁹ To the extent that this was the case, it is not as though the income was escaping tax, but rather was being taxed as interest income (including the 'unreal' inflation component) in the hands of the lenders, although some may be based offshore under a different tax regime.⁸⁰ This goes at least some way to explaining why New Zealanders have had a propensity to make leveraged investments in rental houses, rather than passively invest their savings for interest. Remedial measures to address these distortions, ideally, would apply to both sides of what is a general flaw in the income tax system.

⁷⁷ Also, as noted by the Business Roundtable, it is also possible that some outlays on buildings which are capital in nature are claimed as a deductible repairs and maintenance expense (sub. 20, p.7).

⁷⁸ The full assessability of nominal interest was also a factor. Although the tax 'subsidy' for borrowing is balanced by over-taxation of nominal interest income, the bias created by both is in the same direction – to invest in real rather than financial assets.

⁷⁹ Also, it was a period when mortgage interest rates were rising, which will have further shifted the allocation of rental revenues as between return to the landlord and transfer to the lender, in favour of the latter.

⁸⁰ The same phenomenon will have been occurring in the farm sector, where rapid growth in lending to agriculture was associated with rapidly inflating farm land prices, but relatively subdued (taxable) farm incomes, attributable at least in part to a greater share of gross revenues being paid over as interest expense.

Ring-fencing rental losses

'Ring-fencing' tax losses on rental investments, which is sometimes suggested as a solution to the preceding issues, would prevent losses from being deducted against unrelated income, such as the landlord's salary or other business income. Responding to the symptoms rather than the cause of the underlying problem, which is caused by mis-measurement and asymmetric taxation of expenses and income, may, however, create new distortions. The TWG did not recommend ring-fencing rental losses and the subsequent decision to amend and rename the LAQC regime, to the Look Through Company (LTC) regime, was intended to tidy up anomalies rather than to introduce a ring-fencing approach.

F6.5

- The elimination of depreciation allowances for houses (and other buildings) can be seen as a pragmatic balancing of a number of considerations in the light of a particular set of circumstances – the housing market boom of the early 2000s. Its aptness in the future, in different circumstances, should be monitored; ideally in the context of establishing an approach that is durable across a range of different circumstances.
- The full deductibility of interest expense for business borrowers (and assessability for savers), including of that component that is not 'real', is a tax distortion that favours borrowing to invest in real assets, including for investment in rental dwellings. However, it is a general flaw in the income tax system that would be best addressed as such, rather than specifically in the context of housing.
- Ring-fencing losses on residential rental investments from other taxable income is not called for.

R6.1

That the Government monitor the impact of the removal of the depreciation allowance on commercial properties, including rental properties, for evidence that expenditures relevant to the proper upkeep and safety of buildings are being sustained.

6.5 GST and territorial government rates – two good taxes?

The Goods and Services Tax

GST is widely regarded to be an efficient tax in that:

- it does not distort rates of return on saving/investment. Because GST is not applied to investment outlays, it leaves pre-and post-tax rates of return on investment unaltered;⁸¹
- it is broad-based, and therefore does not distort consumers' spending choices;
- it has low compliance and administrative burdens.⁸²

However, because GST is a flat rate tax,⁸³ and because those with lower incomes tend to spend a higher proportion of their income, it tends to be seen as regressive.

GST has not featured in policy discussion about the surge in demand for, and rise in the prices of, houses nearly as much as have aspects of income tax. The design of GST is not identified in public discussion with 'tax breaks' that have driven up house prices,⁸⁴ or as a tax that has caused house prices to be higher than

⁸¹ Note in this regard that GST treats housing as consumption expenditure, not as saving/investment.

⁸² The GST Act runs to 266 pages, while the Income Tax Act has 2,855 pages. Many GST registered businesses complete their own GST returns, but most find it necessary to engage a tax accountant to prepare their income tax returns.

⁸³ GST is a flat rate tax in the sense that all taxpayers pay the same rate of GST irrespective of their means (income, wealth or total spending). Many countries, however, apply different rates of GST (or VAT) to different categories of product, or exempt some categories altogether.

⁸⁴ Although occasionally it is suggested that the 'exemption' of residential rents from GST constitutes a tax distortion in favour of renting, but that in fact is not the case (see section 6.2 above).

they would be otherwise. Comparatively few submitters addressed the effect of GST on housing affordability, although Affordable Housing New Zealand (sub. 12, p. 11) and Martin Brown (sub. 52, pp. 8-9) pointed to arrangements in Australia and the United Kingdom respectively to reduce the impact of GST on first home buyers.

One reason why GST has not featured in public discussion of housing may be that it applies to housing only when new houses come to market. This means that, for the great majority of home owners, who purchase existing houses, no GST is visible. But over time GST is 'passed through' to the existing housing stock, as the proportion of the stock that has been subject to GST at the time of construction increases. GST is also included in the cost of additions or renovations, as well as of the repairs and maintenance that occur throughout the life of a house.

The front-loading of GST on houses increases the deposit requirement for a house (for example, in the case of a 20% deposit requirement for a \$350,000 house, by nearly \$10,000). While this could impede first home ownership in some situations, assistance for first-home buyers is also available. Under the KiwiSaver scheme, first-home buyers can access their account balance,⁸⁵ and those below a certain income threshold can also access a government grant of up to \$5,000 (each in the case of a couple) to buy a first-home. This assists those for whom the normal deposit requirement would be a barrier.

Territorial government rates

The Commission broadly concurs with the assessment of the Independent Local Government Rates Inquiry (2007) that, as a tax, rates:

...have many advantages – efficiency, difficulty of evasion, and low economic deadweight costs – and there is a reasonable relationship between property values and incomes, even though overall rates tend to be somewhat regressive in their impact.⁸⁶

Several submitters commented on territorial government rates, but most did not raise major concerns. The Registered Master Builders' Federation noted that the level of rates is low and does not influence overall housing demand (sub. 16, p. 17) and Habitat Auckland argued that front-loaded levies have a larger impact on affordability than do property rates (sub. 23, p. 6). Carrus Corporation Limited (sub. 8, p. 15) and the Society of Local Government Managers (sub. 53, pp. 5-7), on the other hand, both commented that rates have increased faster than the CPI. The Centre for Straight Thinking also noted that jurisdictions that have adopted Smart Growth tend to have steadily increasing rates, especially where the Smart Growth package involves major investments in urban rail and other public transport projects (sub. 24, p. 66).

Rates are a relatively efficient tax. They are a simple and broad-based tax on property and have not created the distortions or skewed incentives that have been associated with the income tax treatment of housing. For example, as with the case of GST, rates apply equally to owner-occupied and rental housing, and irrespective of whether they are equity or debt financed. Rates have featured less prominently in concerns about housing affordability, although the pace of increase has been attracting attention, as noted above. Concerns about rates in relation to housing affordability mostly involve the burden on low income households, including those who are housing 'asset rich' but 'income poor'.⁸⁷ In this regard, housing affordability issues are concerned more with whether people can 'afford' not to sell their home, rather than with whether they can 'afford' to buy a (first) home.

Mechanisms to help mitigate pressures on housing affordability for low income ratepayers include the rates rebate scheme, under which central government part rebates the rates payable by qualifying low income households, and a rates postponement scheme operated by some councils. The latter is effectively a home equity release scheme, under which rates for qualifying ratepayers can be postponed until the house is sold, at which point the rates are recovered from the sale proceeds. The Independent Inquiry into Local

⁸⁵ Including employer contributions but excluding government (starter and tax credit) contributions.

⁸⁶ From Executive Summary Report, para 7, available at http://www.dia.govt.nz/diawebsite.nsf/wpg_URL/Agency-Independent-Inquiry-into-Local-Government-Rates-Funding-Local-Government-Executive-Summary?OpenDocument#summary

⁸⁷ (For example, those who acquired a home several decades ago in a location that, at the time, was 'in the suburbs' but is now closer to 'inner city', and has become relatively more expensive.)

Government Rates noted, however, that uptake of these facilities by those eligible, particularly of the rates postponement facility, and of home equity release arrangements more generally, is low (Independent Inquiry into Local Government Rates, 2007). There may be a growing need for such mechanisms as the community ages.

F6.6

GST is an efficient tax in that it does not distort rates of return on saving and investment, is broad-based, and has low compliance and administrative burdens. The existing GST treatment of housing, which applies equally to rental and owner-occupied housing, is appropriate.

Territorial rates, which also apply equally to rental and owner-occupied housing, are an efficient form of tax.

F6.7

With respect to housing affordability:

- GST is front-loaded into the acquisition price of a house, which can raise the hurdle to first home ownership, offset at least in part by the availability of KiwiSaver assistance for first home buyers.
- Rates can cause strains for those who are 'housing rich but income poor'. The (government funded) rates rebate scheme, and rates postponement arrangements offered by local authorities, are available to ease these strains. There may be a growing need for these, particularly the latter, uptake of which has been low, as the community ages.

6.6 Concluding observations

The previous reviews of housing taxation arrangements, and the analysis in this chapter, indicate that current arrangements are not ideal.

The tax system favours investment in owner-occupied housing to the extent that these houses are financed by owner equity, although property taxes (rates) levied by territorial governments and the shift from income taxes to GST act to level up the playing field. Also, to the extent that owner-occupied housing is financed by debt, that debt is taxed heavily, given that tax is applied to the full amount of nominal, not just real, interest in the hands of savers.

Investment properties are subject to GST and local government taxes, and returns to equity are taxed. The ability of the investor to claim a nominal deduction for borrowing costs, which exceeds real borrowing costs, is a potential tax subsidy.

Capital gains on housing generally fall outside the tax net. These gains were substantial during the recent boom, but it is difficult to predict how large they will be in the future as is the extent, and direction, of any tilting of the tax system as it affects housing that stems from their exclusion from tax-assessable income.

House price inflation and leveraging up of rental investments in the early 2000s created opportunities for rental investors to achieve positive economic returns, including capital gains, whilst reporting tax losses. A number of things will have been going on. There likely will have been some downward pressure on the rental income that could be achieved in a market in which there was an expanding supply of rental properties; as well perhaps as landlords seeing less need to maximise rental income, given the perceived capital gains and 'tax breaks'. In effect, investors may have traded away some portion of those gains by accepting lower rents. It is also possible that, over the longer run, the capital gains and 'tax breaks' may come in below what was being anticipated (particularly now that depreciation deductions have been

eliminated). If that proves to be the case, the economics of the rental market ahead could look quite different from in the 2000s, resulting in both less investment and higher rents than in the last decade.

Notwithstanding these features of current tax arrangements, the Commission does not see a pressing case for changing the taxation of housing in isolation. Interactions amongst inflation, house prices (capital gains), and interest rates are a key issue for the taxation of housing. This issue cannot be addressed in the context of housing alone, since it also, unavoidably, involves aspects of the taxation of personal interest income, business interest expense, and capital gains/losses across all asset classes.

Addressing particular anomalies in isolation from a broad review of the tax system would further complicate the system and could have unintended effects on housing markets and housing affordability.

7 Urban planning and housing affordability

Key points

- The prevailing principles and practice of urban planning have a negative influence on housing affordability in our faster-growing cities. Through their plans, councils may impede residential development by constraining the amount of land they allow for the construction of new housing.
- The widespread planning preference for increasing residential densities and limiting greenfield development to achieve this places upward pressure on house prices across the board. In Auckland the MUL is a constraint on the supply of land for urban growth and has worked to increase section prices within Auckland city.
- Increased availability of residential land for development would help address affordability. This could be achieved by bringing significant tracts of both greenfield and brownfield land to the market in Auckland and Christchurch, and exploring the options for doing so in other high-growth centres.
- More generally, the Commission recommends that Territorial Authorities:
 - take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city fringe;
 - adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them;
 - reduce barriers to densification and consider more flexible approaches to achieve a balance between neighbourhood amenity and new development in existing suburbs;
 - develop strategies that promote adequate competition between developers for the sale of construction-ready sections;
 - ensure alignment between policy objectives, planning rules and consenting processes.
- There is scope for councils, developers, land owners and builders to collaborate in bringing affordable housing to market, by ensuring the alignment of land release in suitable locations, the provision of infrastructure, and market demand.
- The slow pace at which land for housing is planned, zoned, and released contributes to the high price of sections and thereby house prices. Significant transaction costs, including delays, and high compliance costs are reflected in prices and increased risk, which may deter development.
- Planning must take account of the Local Government Act, the Resource Management Act and the Land Transport Management Act. These statutes have different legal purposes, timeframes, processes and criteria. With multiple participants and decision-makers, there is no single mechanism for facilitating engagement, securing agreement among participants and providing information for robust decision-making. There also appears to be an absence of a framework in which the impacts of local government decisions on wider government policies, programmes and objectives can be examined.

7.1 Introduction

This chapter examines the impact of urban planning on housing affordability. It begins by outlining the origins and scope of planning to provide an understanding of its role and the principal methods it employs for urban development. It also sets out the background and development of New Zealand's planning-related legislative frameworks.

Issues and concerns were raised by submitters in relation to the impacts that the current approach has on housing affordability. The chapter outlines both the means by which urban planning affects affordability and the extent of these impacts. Recommendations are made on a way forward.

What is urban planning?

The traditional focus of urban planning has been to consider what arrangement of land uses will best enable a town or city to grow and operate effectively for its resident households and businesses. This means ensuring that land is available and serviced for expanding urban activity and shaping what activities might operate where in order to limit conflict among uses. It also influences how land will be occupied by way of height and location constraints placed on buildings. This traditional approach to 'town planning' was inward-looking, promoting orderly spatial development in response to expected urban growth pressures.

This approach has evolved significantly over time, its mandate expanding to take on an increasing number of objectives. Over the past 20 years planning has been influenced by the call for sustainable resource management and concerns with environmental capacity such as the long-term consequences of CO₂ emissions. Consequently, planning has broadened its mandate to address how best to manage resource use in the interests of sustainability. Among other things, this explains a growing emphasis on the relationship between land use and transport plans.

Recently planning has also become more outward looking, prescribing how we might shape a city so that it can prosper in an increasingly connected world, where people, capital, goods and services move more freely than ever. This economic development focus is particularly strong among the maturing cities of Europe, North America, and Australasia, where urban form and urban design are seen to play a significant role in responding to the challenges of growth and diversity.

Urban planners are the people who address these challenges. Traditionally, their field of expertise was land use, understanding what activities were compatible with each other and what activities were in conflict. They addressed how cities could be expanded to accommodate increasing industry, commerce and housing in a way which enabled complementary uses to interact most efficiently, even when it was not appropriate for them to co-locate (industry alongside housing, for example).

Today, planners deal with a much wider range of issues than in the past: how to manage land use conflict; promote sustainable resource management; create a buoyant local economy; ensure a good quality of life to retain and attract residents; and nurture strong communities. This multi-faceted mandate takes planning well beyond its early focus on land use and associated disciplines.

Origins

Planning was born out of upheaval – the transformation of the countryside, towns and cities during the industrial revolution in Western Europe and North America. A convergence of interests – the concerns of civic authorities for public health, the needs of employers for an accessible, fit labour force, and the drive of urban reformers towards more humane living conditions – led to an acceptance in the 19th century of the need to regulate property rights and the role of the state in influencing urban form to achieve socially desirable ends.

The 1909 House and Town Planning Act in Britain and establishment of the British Town Planning Institute in 1914 marked the emergence of a distinct profession committed to developing plans and regulations intended to manage urban expansion and living conditions. Mapping preferred land use allocations became the main tool of town planning, seeking to separate incompatible land uses by applying different rights allowed and restrictions to different zones. This approach to planning sought to apply common

principles, and provide a systematic, incremental, and functional approach to regulating urban growth. This approach to urban planning remains highly influential in many countries.

New Zealand's statutory heritage

Dealing with diversity: The Town and Country Planning Act 1977

The British practice of mapping preferred land use patterns was a key influence on the emergence of planning in New Zealand, and was reflected in the Town and Country Planning Acts of 1923 and 1953. In the latter half of the twentieth century, global recognition of the growing diversity of communities and places within urban areas saw international debate about the nature and role of planning. This in turn saw some broadening of the foundations of New Zealand planning. Hence, the Town and Country Planning Act 1977 (TCPA 1977) placed new emphasis on providing for "economic, spiritual and recreational opportunities and for amenities appropriate to the needs of the present and future inhabitants of the district, including the interests of children and minority groups".

Central government's directive role within New Zealand planning was reduced by the 1977 Act, with local councils given responsibility for preparing plans, allowing for the most intractable disputes to be resolved by the judiciary through appeal to a Planning Tribunal. The TCPA 1977 also introduced regional planning to reflect the links between urban areas and their hinterlands, thereby promoting a new economic emphasis. In addition, it introduced a newfound focus on "matters of national importance" that would be associated with the principle of environmental sustainability in its successor, the Resource Management Act 1991 (RMA).

The wider scope and increased flexibility of the TCPA 1977 led to more complex plans, sometimes prolonged appeals, and consequently more delays getting plans into place. Its greater demands on local capacity led to variable quality among districts, and raised issues of plan enforcement.

Elevating environmental values: The Resource Management Act 1991

Concerns with environmental sustainability, coupled with a desire to increase the role of the market in resource management, saw the TCPA 1977 replaced by the RMA 1991. The RMA's purpose (Part II, Section 5) is:

1. to promote the sustainable management of natural and physical resources.
2. sustainable management⁸⁸ means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while –
 - a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

In theory, New Zealand planning was now able to accommodate more diverse land use as long as development and activities observed the environmental limits set in district and city plans and regional policy statements, rather than simply prescribing prohibitions or constraints on particular activities in particular zones. It is in this sense enabling legislation: the RMA provided the flexibility for resource users to take steps to avoid, remedy or mitigate the environmental impacts of their actions.

In keeping with the enabling nature of the RMA, private interests (eg, those using land for development or for infrastructure) are entitled to propose plan changes for councils to consider, provided they can show how they will manage the environmental effects of their activities at development and operational stages. The RMA provides for consideration of the merits of such changes by the Environment Court if councils

⁸⁸ This definition was influenced by that put forward by the World Commission on Environment and Development (convened by the UN at Brundtland in 1983) as: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

reject them, subject to a willingness by promoters to proceed down a potentially costly and uncertain path. This has meant that councils, while responsible for developing plans, no longer have exclusive rights to propose changes to them.

Once plans are approved, the RMA provides for enforcement of conditions of resource use by enabling the Environment Court as the arbiter of disputes in the Act's application to impose penalties on parties that fail to abide by them.

Community outcomes: The Local Government Act 2002

The Local Government Act was reformed in 1989 and rewritten completely in 2002. The 1989 reforms were structural, reducing the number of councils and ad hoc statutory bodies, and improving governance arrangements, managerial capacity, and accountability. Changes introduced by the Local Government Act 2002 (LGA) were more fundamental. It replaced the schedule of activities controlling what councils could do in the former Act, with wider powers of general competence.

Councils are now free to undertake whatever activities they want (within the constraints imposed by the laws of the land), subject to following broadly prescribed decision-making procedures. Among other things, these require that councils undertake consultation to secure a public mandate for their significant decisions. Policy is directed towards a set of 'community outcomes' to be written into a Long Term Plan, including an indicative 10 year budget.

The LGA is not a planning statute, but rather one which prescribes procedures for how local government might go about preparing plans and policies. The procedures overlap with planning practice, providing "for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach" (Part 1 3(d)).

The freedoms the LGA confers on councils are conditioned on the appropriate use of these procedures in deciding how to align its own resource commitments with the needs and wishes of its constituencies. They focus on processes which in theory provide transparency, accountability, and thereby legitimacy around council investment and operational decisions. Plans prepared under the LGA need to be consistent with the provisions of the RMA. The LGA informs a council's resource commitments while the RMA constrains what it may do as a resource user. Commitments under the LGA are still subject to rules for sustainable resource use under the RMA. Equally, rules and regulations made by a council under the RMA should be compatible with community outcomes and financial plans contained in its Long Term Plan.

Planning for infrastructure and transport

Planning for public infrastructure (other than transport) is also provided for under the LGA. The LGA allows for considerable flexibility on how services are developed and delivered, including provision by the council itself, through Council Controlled Organisations (CCO), contracting services out, or joint ventures or partnerships.

Transport planning is more complicated – and adds to the complexities of local planning. The Ministry of Transport provides policy advice across all modes. Expenditure on land transport is administered by the New Zealand Transport Agency (NZTA). In turn, the NZTA is required to give effect to a three-yearly Government Policy Statement (GPS) on Land Transport Funding and to implement the National Land Transport Programme (NLTP). The GPS provides a framework for making funding decisions in the NLTP and for targeting expenditure on transport activities. Much of that spending is directed towards councils to fund local transport, although the planning is done by regional councils because transport systems operate across local boundaries.

Current philosophy and practice

Integrated planning

Given the diverse and complex institutional responsibilities for land use and infrastructure planning outlined above, increasing attention is being paid to integrated planning, if only to ensure efficient use of public funds. Integration may simply draw a range of plans together, driven perhaps by shared forecasts and assumptions about the future. But it may have institutional as well as technical implications. In this case,

integration implies alignment of objectives and programmes among agencies through identifying and promoting common goals, collaborating on analysis, planning, and decision-making, and coordinating responsibilities for implementation (CityScope Consultants, 2009).

Spatial planning

In a similar vein, spatial planning looks to coordinate and shape councils' activities at a strategic level. Spatial planning echoes the tradition of town and country planning, but applied to a wider range of activities. It seeks to respond to the challenge of coordination posed by the LGA framework, by aligning responsibility for decisions about long-term land use plans and infrastructure investment, often across administrative boundaries.

The expectations for spatial plans can go beyond this, though, to managing the various social, economic and environmental issues associated with city growth by providing for their future spatial arrangement (UCL and Deloitte, 2007). This is done in large part through identifying, setting, and mapping urban capacities (for housing, recreation, offices, retailing and industry) and associated infrastructure requirements. The question is raised as to whether spatial planning is sufficient to address the wide scope of objectives and associated expectations often placed on it. The Auckland Regional Growth Strategy (Auckland Regional Growth Forum, 1999) is the longest-established example of spatial planning in New Zealand. It set out multiple objectives to be achieved by pursuit of an integrative 'concept plan' across seven districts. Implementation focused on containing urban development and intensifying housing around the CBD, sub-regional centres, and arterial roads. The necessary land use provisions were introduced into local plans as the means of pursuing ARGs aims. This approach has been more or less emulated over the past decade by councils in Western Bay of Plenty, Greater Wellington, the northern Waikato (Hamilton, Waikato and Waipa), and Canterbury (Christchurch, Waimakariri and Selwyn).

Until recently, spatial plans have been non-statutory strategy documents, prepared to inform regional policy statements and district plans. However, spatial planning has been made a legal requirement for the new Auckland City in the Local Government (Auckland Council) Amendment Act 2009, where it is required to contribute to Auckland's "social, economic, environmental, and cultural well-being through a comprehensive and effective long-term (20 to 30 year) strategy for Auckland's growth and development" (Part 6, section 79).

The key elements of spatial plans are their indicative and strategic nature, a focus on multiple objectives and coordinated decision making, guidance for lower order plans, sensitivity to context, and the capacity to map future land use and infrastructure. As such the spatial plan is intended to provide the evidence and guidance for subsequent policy documents (such as the unitary plan in Auckland's case).

Smart Growth

There is an increasing reliance on the principles of Smart Growth as a means of managing urban development. Smart Growth is based on principles of urban design which span regional development for settlement and growth, neighbourhood and street planning, and building design (Duany, Speck and Lydon, 2010). It is characterised by the view that desirable social, economic, fiscal and environmental outcomes can be brought about by physical land use arrangements, design and transportation investment. It favours mixed land uses, compact development, walkable neighbourhoods, a range of housing styles, and design elements and amenities that create a strong sense of place. Smart Growth has evolved largely as a reaction against what are seen as the excesses of low-density urban sprawl.

Smart Growth principles have influenced urban planning throughout New Zealand. Auckland, Tauranga, Hamilton, Wellington and Christchurch have explicitly adopted Smart Growth principles, and other New Zealand cities have adopted aspects of them.

In summary

The history of urban planning has been one of evolution from a narrow focus on land use provisions to ensure orderly urban expansion while maintaining a pleasant residential environment, through a heightened concern with environmental matters, to today's more holistic consideration of multiple dimensions of urban development.

The introduction of growth management techniques has been one method through which planning has attempted to satisfy multiple economic, social, cultural and environmental objectives. The increasing reliance on the principles of Smart Growth as a means of managing urban development means that planning is closely implicated in the impact of intensifying urban areas on housing affordability.

7.2 Matching the demand and supply for housing

Demand

Housing demand is driven by household numbers and incomes. The choice people make about where they will live will depend on their preferences, with the actual choice constrained by the limits of what they can afford.

Box 7.1 Understanding housing preferences

Research commissioned by the Council for Housing Research Aotearoa New Zealand, found that while younger people in non-family households tend to favour central city locations, family households tend to favour suburbs and town centres, and older families and post-family households tend to want to remain in their established neighbourhood. Lifestyle preferences can cut across demographic or socio-economic segmentation of households. The findings highlight the diversity of preference and needs across and within demographic categories.

Notwithstanding this finding, the study concluded that future demand for new housing will be driven increasingly by the preferences of empty-nester and retirement households, many of which own their dwellings. This gives them the capacity to purchase well-appointed medium-density housing that can satisfy their expectations. They may be less likely to favour small, centralised apartments than younger households and are more likely to have a commitment to particular residential submarkets.

Consequently, residential intensification is more likely to be achieved with plans allowing for diversity of locality and form. This, in turn, means meeting supply challenges in suburban environments where land is more fragmented and there are fewer brownfield opportunities than associated with the centralised developments of the recent past. Intensification in suburban areas also raises a greater risk of resistance to spill-over effects from established households. It calls for a flexible approach to the location and form of medium-density housing and a public commitment to maintaining the quality of existing neighbourhoods.

Source: CityScope Consultants (2011) and Council for Housing Research Aotearoa New Zealand

Supply

Housing supply is a function of the availability and price of land, and capacity and costs in the development and construction sectors. How well and how quickly supply is able to respond to demand will largely determine whether an increase in the demand for housing leads to more housing or higher prices. Where supply is responsive, house prices seldom deviate significantly from the estimated minimal profitable production costs... building costs, land and assembly costs, and a normal profit (Glaeser, Gyourko and Saiz 2008). The implication is that constrained supply will see prices bid well above those that would be expected in a more responsive market.

A 2006 study by the Urban Development Institute of Australia (UDIA) concluded that failure to match land supply and demand in the capital cities was behind an affordability crisis.

With land costs now assuming up to three quarters of the cost of a house and land package and land supply diminishing ... the linkage between land costs, supply and affordability is distinct. (UDIA 2006, p. 2).

When supply is sticky, we would expect to see a resulting shortage of housing, rising prices, overcrowding as households double-up (or triple-up), and households that are struggling to pay their housing costs.

The Auckland Council acknowledges the severity of housing affordability in Auckland:

Housing affordability is a critical problem for Auckland, evident in widespread and persistent overcrowding and an escalating shortage of housing accessible for people on low and modest incomes. Twenty eight percent of all Auckland households pay more than 30% of gross household income on housing costs. (sub. DR142, p. 3)

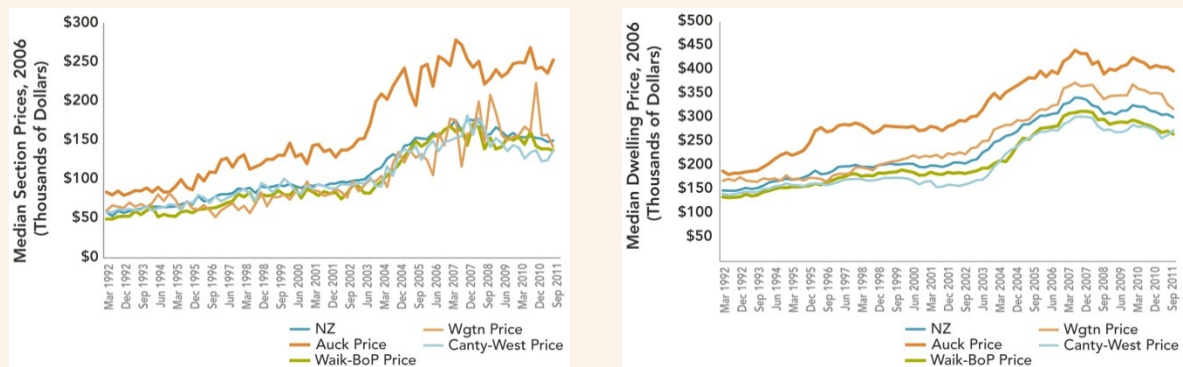
The Draft Auckland Plan estimates an immediate shortfall of 10,000 homes and possible annual demand of 11,000 new homes a year over the thirty years to 2040. This compares with an average of 7,500 new dwellings actually consented in Auckland annually over the ten years to June 2011, and just 4,700 annually over the past five years. Notwithstanding housing pressures in other parts of the country, the extent to which housing affordability is an Auckland phenomenon is now examined (Box 7.2).

Box 7.2 The Auckland Housing Market

Quarterly sales and price movements for several regions since 1992 are plotted below. All prices and values in this discussion are expressed in 2006 dollars. House prices grew steadily through the 1990s, although levelled off late in the decade (Figure 7.1). Auckland section prices led an acceleration in prices after 2000.

Between the September quarters 2001 and 2011 average section prices increased by 86% in Auckland and 60% elsewhere.⁸⁹ The average price of residential land in Auckland is now close to double that of the rest of New Zealand: \$304,000 versus \$154,000.

Figure 7.1 Growth in section and dwelling prices (house and land package) in selected regions 1992-2011



Source: Real Estate Institute of New Zealand

Notes:

1. Averages have been used here to avoid double-counting in the comparison because median property prices are not available for the rest of New Zealand category. Average prices can be distorted by a relatively small number of high-priced properties. This is especially so in Auckland. However, a comparison with other regions confirms an Auckland price premium, with the median section there costing 84% more than in Waikato-Bay of Plenty and Canterbury-West Coast and 79% more than in Wellington in September 2011.

Focusing on the Auckland market, house and section prices responded to a spike in demand after 2000 (Figure 7.2). Even after sales faltered in late 2003 prices continued to rise, finally levelling off when the recession hit in 2007. Although they have eased recently, median house prices in September 2011 were still nearly 50% ahead of where they were ten years earlier, on similar sales volumes.

⁸⁹ With land prices constituting a large and increasing share of the value of a dwelling, particularly in Auckland, the incentive is to build high-spec houses so as not to under-capitalise the value of the land.

Figure 7.2 Sales and prices in the Auckland real estate market



Source: Real Estate Institute of New Zealand

The apparent uncoupling of price from demand in Auckland is even more evident in the land market, with the number of sections sold in 2011 lower than any time in the previous 20 years. Compared with 2001, sales in 2011 were down 29% but median prices were up 86%. Taking the comparison back 15 years to 1996, sales volumes in 2011 were down 49% but median prices were 130% higher. The equivalent figures for dwellings were less marked: sales were 9% lower compared with 15 years earlier, and prices 47% higher.

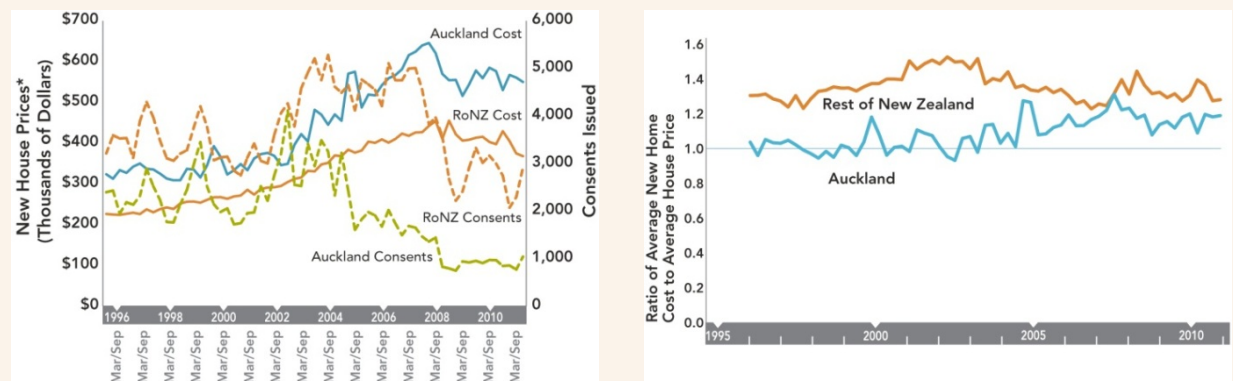
The implication is that a supply shortage rather than demand is holding prices up, especially for sections. Looked at another way, sticky prices imply that under conditions of constrained supply vendors are not necessarily inclined to chase sales by reducing prices.

So what is the role of new housing in this market? To address this question average consent values have been added to average (not median) section prices to indicate trends in new residential property costs since 1996.

The number of new dwellings built (using residential building consents as an indicator) fell from 2002, sharply after 2004 (Figure 7.3), but the representative cost of new homes did not fall until later in 2007. Elsewhere in New Zealand consents declined later but, unlike Auckland, costs fell at roughly the same time.

From 1996 to 2001 36 consents were issued for every 100 houses sold in Auckland. From 2000 to 2006 the figure was 29 per 100 sales, and then averaged 20 per 100 from 2006 to 2011. This also contrasts with the rest of New Zealand where 30 consents were issued for every 100 dwellings sold between 2006 and 2011. The earlier fall in building and continuing growth in costs in Auckland indicates greater supply constraints there.

Figure 7.3 House Sales and Building in Auckland, 1996-2011



Source: Real Estate Institute of New Zealand, Statistics New Zealand

One result is that the cost of a new home in Auckland (as estimated here) has consistently exceeded the mean value of all sales only since 2003. Across the rest of New Zealand, new houses have been

more expensive throughout the period (Figure 7.3). The reason for the upward Auckland trend is increasing section prices, up from 45% of the value of a new house in 1996 to 60% in 2006 (although back to 55% in September 2011).

Between 1996 and 2011 the price of a representative new residential property (average section price plus average consent value) increased by 65% in Auckland, from \$334,000 to \$550,000. Some 71% of this Auckland gain (\$154,000) is attributable to a doubling of section prices. A similar, but weaker, pattern was evident for the rest of New Zealand. Here, new house prices have increased by 63% but with only 56% of this attributable to the increase in the cost of land.

While the September 2011 value of the average Auckland new dwelling consent was much higher than elsewhere (\$245,500 compared to \$213,500), they increased by similar amounts: \$62,000 in Auckland and \$63,000 in the rest of New Zealand.

Market performance figures should be viewed alongside Auckland's population growth. 22,170 dwelling consents issued over five years to June 2011 fall well short of around 39,000 additional households in Auckland in that period (Statistics NZ estimate of 113,000 people at the 2006 average of 2.9 persons/household).

In summary, the numbers indicate that constrained land supply, reflected in section sales falling even as prices increased or held firm, has been a significant contributor to high new house prices in Auckland. This in turn puts pressure on existing house prices. It appears that the industry has not been able to respond to the pressure of growing demand over the past decade by increasing supply, an indication of why prices have increased, or held firm, even as sales have fallen dramatically.

7.3 Increasing the supply of land for housing

The supply of new houses begins with an adequate supply of land suitable for development. Increasing the supply can come from greenfields land – typically on the outer fringes of cities or satellite towns, and generally associated with low-density housing types, or from brownfields land – the redevelopment of previously urbanised land within a city for housing, or increasing the density of existing suburbs through infill housing. The relative cost of greenfields versus brownfields development is examined in this section.

Views expressed in submissions

The Commission received a number of submissions on the relative cost of greenfields versus brownfields development (transport, infrastructure and building costs), the opportunity cost of greenfields land and loss of amenity associated with 'urban sprawl'.

Relative costs

An argument in favour of intensification is the capacity to save money on infrastructure because trunk and distributor services are already in place. Some submissions suggest it is also favoured by lower land requirements per dwelling (Saltburn Ltd, sub. 7, p. 2). Others cite lower transport demands and the ability to take advantage of existing community amenities when housing is focused on central sites (New Zealand Transport Agency, sub. 29, p. 2).

On the other hand, an advantage of more expansive urban growth is the capacity to provide for larger-scale and more cost-competitive development. Three grounds are often cited for the economic efficiency of greenfield sites. First, development at scale (and consequently low cost) is necessary to substantively influence the market as a whole. Second, it would enable more builders and suppliers to gear up to build high-or medium-density housing rather than the low-density housing that currently prevails. Third, the availability of larger parcels of land for development enables builders to reap economies of scale (Fletcher Building, sub. 21, p.11).

Our team suggests that roughly you should aim for land tracts that would support about 50 lots. 50 is about the level that the development of land becomes economic (sub divisions, roads services etc)

From a developers perspective 50 is a good number to target to build and sell in a single year. (Fletcher Building, correspondence)

While in theory brownfields should cost less than greenfields to develop, the fact that existing services may be close to capacity in older areas and require significant investment in expansion and upgrading reduces their apparent advantage.

Amenities such as sewer and water demands may not have been engineered into the design of that specific location, eg, an urban development block with 400 toilets that connects to an area of the city that the sewer network was designed and built in 1926. Water services that were designed to supply 10,000 maximum in 1955 to support intensification now up to 100,000. (Affordable Housing New Zealand, sub. 12, p. 4)

In theory, brownfield development should cost less as it requires connection to existing services. However, in many New Zealand cities this is not the case as existing connections are sometimes almost at capacity ... To utilise these services a higher premium must be paid, increasing the cost of the development. (Housing New Zealand Corporation, sub. 34, p. 3)

The opportunity cost of greenfields land

Land with high-quality soils and high agricultural potential should be left for that purpose. If a significant amount of productive land is dedicated to urban purposes the opportunity costs lost could be high enough to cause issues of food affordability. (Rotorua District Council, sub. DR93, p. 1)

The negative impact that potential loss of primary production land will have on the economy. Legislative change in order to encourage greater development for housing should be considered carefully, given the need to balance other land uses. (Federated Farmers, sub. DR105, p. 2)

Transport costs

Kiwi accepts that housing affordability issues are of particular concern in and around Auckland... Kiwi considers that the policy settings ultimately adopted for housing in Auckland in particular will need to take account of the long term impacts of particular forms of development and the overall costs that will be generated. For example, the construction of low density housing on the periphery of the built up area would result in additional transportation costs in the long term which would need to be taken into account when calculating the true cost of that option. (Kiwi Income Property Trust, sub. DR86, p.1)

In many metropolitan/major provincial areas the location of affordable housing has been at the outer reaches of the city boundaries which results in steep transportation costs to places of work. The outcome is that we have a segment of people who are incurring these costs – as a price of home ownership – who can least afford it. (Certified Builders Association of NZ, sub. DR116, p.2)

Amenity

A 110 square metre builder's standard house on a 450 square metre bare section on the outer edge of Massey or Papakura, suitably removed from shops and schools and bus routes, might be affordable by the Demographia criterion, but overall amenity will be low. Social considerations of who will live there, what they will spend on car transport, and what sort of community will emerge there, are important to consider alongside a narrow analysis of affordability. (Graeme Scott, sub. DR81, pp.3-6)

What is the cost differential between inner and outer city development?

The Commission has looked at a number of New Zealand, US and Australian studies that set out to establish the differences in costs associated with different urban form.⁹⁰ By and large these contrast inner and outer city localities, at the same time analysing the differences in density between central and peripheral development (Auckland Regional Council, 2010; Canterbury Regional Policy Statement Change 1 (evidence presented to the Environment Court), 2011; Christchurch City Council, 1993; Gillham, 2002; Frank, 1989; Neilson Associates, 1987; Newton (ed.), 1997; Commonwealth Department of Housing and

⁹⁰ The review is clearly not exhaustive. The Commission has looked at New Zealand and Australian work attempting to cost different urban development scenarios and publications that encompass reviews of other (mainly US) studies.

Regional Development, 1995; Trubka, Newman and Bilsborough, 2008). The studies are summarised in Appendix B.

Consistent with the views expressed in submissions, studies of the costs of different urban forms do not yield clear conclusions and findings. The results of individual studies were highly specific to the location, the existing distribution of land use and the planning/regulatory environment. Most studies found evidence of non-linear relationships – for example between transport time, distance and cost – which confound attempts at averaging or aggregating across studies. It was also difficult to isolate the drivers of costs.

There are also methodological issues such as the selection and coverage of variables which made comparisons between studies problematic. For example, the studies made different technical assumptions about the delivery of services (including production functions that determine the mix between capital, maintenance, and operating costs) and about the behaviour of households, their activity and travel needs and demands, and the changing nature of employment.

However, despite the difficulties the Commission has identified, the main findings are:

- All else being equal there are capital savings in infrastructure from higher densities and savings in transport from shorter travel distances (although this is generally estimated as the distance to the CBD). However, the magnitude of the gains available and the capacity to achieve them may well be overstated.
- There are diminishing gains to increasing densities (high density may be more costly than medium density) and the relationship between transport time, distance and cost is non-linear.
- A significant proportion of any cost differential between different urban forms is borne directly by householders (by way of transport costs and by the infrastructure and subdivision development costs that are incorporated in house prices).

On-going versus upfront costs

For many households, the prospect of higher on-going costs is likely to be more than offset by the lower cost of more remote greenfield housing, especially when the household expects its financial position to improve over time. This expectation may reflect income expectations and a future move closer into the city (young families), lower indebtedness (older families trading down), and the long-term financial benefit anticipated from ownership rather than the uncertainty and cost of renting.

While it can be argued that in considering housing affordability, the focus should be on lifetime or lifecycle costs, the reality is that under conditions of limited affordability, higher on-going costs are likely to be accepted as the trade-off made in return for securing the house. Enforcing a particular urban form in an attempt to reduce those recurring costs, including externalities, will almost inevitably limit households' opportunities to purchase housing that meets their needs.

Travel and employment

Much of the debate around urban form centres on the transport costs (those that are internalised by householders but also the externalities that are not internalised in prices) from residential areas to places of work. In the studies the Commission reviewed, little attention appears to have been given to methods other than regulating urban form in achieving the desired environmental benefits. For example, carbon pricing would internalise many of the external costs of transport which lie at the heart of many studies of sustainable urban form. The more general point is that people make trade-offs when deciding where to live. Those choices will be more efficient if prices reflect real resource costs.

Many studies also assume that most travel will occur between the city fringes and the CBD. This is at odds with the current employment trends in major New Zealand cities, as well as cities in the US (Ingram et al, 2009). Of New Zealand cities, employment in Auckland is relatively decentralised, with a trend towards greater decentralisation of employment in Christchurch and Wellington. In 2000, 14% of Auckland's employment was located in the CBD, compared with 29% in Christchurch and 57% in Wellington. By 2011,

13% of employment in Auckland was located in the CBD, with 26% in Christchurch and 55% in Wellington.⁹¹

This suggests a mixed approach is needed to urban development – a combination of centralisation and decentralisation – a paradigm which is “in line with the market realities of growing cities and an information economy, where key concentrations of information and control exist as nodes in an otherwise distributed landscape of producers and consumers” (Newton, 1997, p.163).

F7.1

- An adequate supply of land matters for housing affordability.
- Both greenfields and brownfields land will be needed, and greater density is to be encouraged.
- There is a trend towards greater decentralisation of employment, so it cannot be assumed that most travel will occur between city fringes and the CBD.
- Pricing that reflects resource costs will enable people to make trade-offs – for example between distance to work and transport costs, according to their budget and their preferences.

R7.1

Increasing land supply for new housing should include moderate-density development of brownfield sites *and* development of greenfield sites close to existing centres, local employment, and services

7.4 The impact of urban development policies and processes on housing affordability

Some of the policies that influence the supply side of the housing market are determined by local government. In areas where council policies and practices allow for rapid expansions in new house construction, house prices could be expected to be less volatile than in areas where new supply is more constrained. This type of dynamic has been detected across cities in the United States. For instance, Green et al. (2005) find that housing supply is highly-responsive to demand pressures in cities with ‘pro-development’ regulatory environments and readily available land. In contrast, supply responsiveness is low in cities with high regulatory barriers to expansion. In the US Gyourko, Saiz and Summers (2008) examined the relationship between land regulations and land prices in over 2,500 local body districts. They found not only that regulations were widespread, but that there was a strong positive relationship between the restrictiveness of land use regulations and land prices. Other authors have explored the effect of land use regulation on house prices, coming to similar conclusions.

There is a lengthy literature and an emerging consensus that local land use regulation has become a binding constraint on the supply of new housing units in certain markets, and that this is leading to increased prices in the most constrained markets (Gyourko, 2009, p.14).

Moreover, in work on the impact of the Global Financial Crisis, Huang and Tang (2011) and Evans and Guthrie (2012) show that more restrictive residential land use regulations and geographic land constraints are linked to larger booms and busts in housing prices.

Councils took a rather different view of the impact of local authority policies on housing affordability. Auckland Council disputes the “disproportionate weight given to the effect of local government policies” (sub. DR142, p. 3).

⁹¹ Based on Statistics NZ employment data

Tauranga City Council (TCC) accepts that land prices will influence housing affordability, but only in some areas:

TCC does accept that if urban limit policies and other similar mechanisms are maintained rigidly as a planning tool to drive intensification targets or for other reasons, then the price of the limited supply of developable land will increase artificially ... TCC is of the view that this is not the case in the Western Bay of Plenty Region and that other factors will play a significant and more immediate role in improving housing affordability" (Tauranga City Council, sub. DR77, p. 3).

However, other inquiry participants contested this view:

Tauranga District Council Plan has been reviewed (now called Tauranga City Plan) and is in the final stages of appeals. I was part of the 3 year process ie. a commissioner on the panel listening to submissions and part of the decision-making process ... The developers believe this urban limit is constraining growth as the market should lead ie. demand dictates size of section and house rather than regulation. Constraints, I believe, add to the costs of building an 'affordable' home (Catherine Stewart, sub. DR73, p.1).

Previous empirical work by Grimes and Aitken (2010) indicates that the responsiveness of housing supply does differ across territorial authorities (TAs) in New Zealand. This implies that the construction and land development sectors are more responsive to changes in housing demand in some parts of the country compared to others. There is also evidence that in areas of the country where housing supply is more responsive, an increase in housing demand results in relatively more houses and smaller increases in real house prices, with potentially beneficial implications for housing affordability. Of course, while differences between territorial authorities may reflect different policies, differences in the supply responsiveness at the TA level may also, in part, reflect the efficiency with which local councils implement and enforce regulations governing the land development and building sectors.⁹²

The following section looks at the evidence of the impact of Smart Growth policies, the impact of the Metropolitan Urban Limit on housing in Auckland, and the impact that covenants and other restrictions have on intensification within urban boundaries, on housing supply and affordability. This section also looks at the speed of getting land through consenting processes to development, and the costs that may be incurred along the way.

Smart Growth

A key issue highlighted in US literature is the impact of Smart Growth policies on house prices. One of the early critics (Downs, 2005) concluded that:

There is little doubt that Smart Growth policies have caused housing prices to rise more than they otherwise would have at least in some communities where they have been applied. That is why some analysts have concluded that Smart Growth and affordable housing are inconsistent goals for a single community to pursue simultaneously (Downs, 2005, p. 371).

The State of Florida has been extensively studied. A widely cited study of the application of Florida's Growth Management Act (GMA) demonstrated that its early, state-wide introduction in 1985 had "a statistically significant and negative effect" on housing affordability (Anthony, 2003). Its contribution to higher house prices raised serious questions over the legitimacy of GMA on both efficiency and equity grounds.

A more recent study of Florida (Gilroy, Staley and Stedrone, 2007) indicated that house prices increased by 182% between 1994 and 2006, compared with 99% nationally, while median household incomes rose by only 61%, and 55% nationally:

[There was] a disconnection between the goals of statewide growth management laws that seek to ensure affordable housing for their residents and the effects of these growth management policies when implemented. ... based on the new analysis provided in this report approximately one sixth of the increase in housing priced in Florida may be attributable to its statewide GMA. (Gilroy, Staley and Stedrone, 2007)

⁹² The Commission is undertaking further work on TA responsiveness.

Florida repealed the GMA in June 2011 after 26 years, in the interests of giving greater flexibility to developers and promoting economic growth.

Ingram et al (2009) assessed the effectiveness of Smart Growth policies by comparing four US states with established Smart Growth programmes (Florida, Maryland, New Jersey and Oregon) with four states with a range of land management programmes (Colorado, Indiana, Texas and Virginia) between 1990 and 2000. On average, population and employment growth was slower in the Smart Growth states; average land consumption per 1,000 new residents was marginally lower; and the share of population locating in urban areas was higher. While decentralisation of population and employment was taking place across all states, it was less pronounced in metropolitan areas with Smart Growth policies. The study also looked at transport use and congestion. The results were mixed, but it appears small gains were made by the Smart Growth states in transport-related objectives.

On measures of housing affordability:

- The Smart Growth cities had the highest median house values, although non-Smart Growth cities' house values increased more rapidly over the decade.
- The ratio of median house prices and rents to median income was slightly higher in the Smart Growth states.
- A greater proportion of owners and renters in Smart Growth states were paying over 30% of their incomes on housing.
- In the Smart Growth states, the share of owners and renters paying more than 30% of their incomes grew the most in Oregon and Maryland, while the impact was more muted in New Jersey and Florida where there are state-mandated affordable housing programmes.

The Commission has not been able to undertake a full review of the impact of Smart Growth policies and has relied on the US experience where Smart Growth programmes are well established. The impact of Smart Growth on a range of objectives should be further investigated and evaluated in New Zealand. Importantly, there are likely to be *interactions* between Smart Growth and other policies and statutes in New Zealand (such as the RMA) that cannot be ascertained from looking at overseas experience.

F7.2

- The literature points to Smart Growth policies having a significant adverse impact on housing affordability.
- Councils adopting Smart Growth policies need to consider the impact of such policies on housing affordability in their planning and decision-making.

Urban limits

An urban limit defines “the boundary of the urban area with the rural part of the region” (Auckland Regional Growth Forum, 1999). An urban limit has a significant effect only when it is binding or is expected to bind in the future. The amount a binding urban limit raises *average* land prices is not clear cut. It will depend on the extent that prices throughout the city and not just at the boundary are affected by the urban limit.

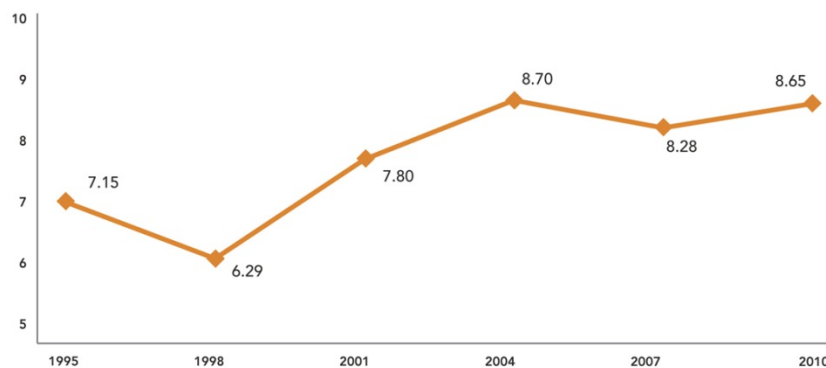
Grimes and Liang (2009) have previously estimated the impact of the Auckland Metropolitan Urban Limit (MUL). Controlling for a wide variety of factors that affect urban and rural land prices, they found that land just within the MUL was valued at approximately ten times the rate of neighbouring land just outside the MUL.

The Commission has applied a similar methodology to estimate the impact of the MUL between 1995 and 2010. The technical detail is described in Appendix C. The model captures approximately 65% of the variation in land values across almost 8,000 observations per year from the mid-1990s to 2010.⁹³

The results indicate that the MUL is a binding constraint on the supply of land for urban growth and has worked to increase section prices within Auckland city. After controlling for a range of other influences, the gradient in land prices (per hectare) from Auckland's CBD to the rural land adjacent to the city undergoes a step change at the point of the MUL. Specifically, the value of land just inside the MUL boundary is almost nine times greater than the price of land just outside the boundary, indicating that the MUL is a binding constraint on land supply (Figure 7.4). The value of this land price differential has increased since the late 1990s, indicating that the MUL has become increasingly binding as housing demand pressures have intensified within Auckland city.

Figure 7.4 The impact of the Auckland MUL on land prices

The price multiple of land 2km within the MUL to land 2km outside the MUL



Source: Productivity Commission

The Auckland MUL demonstrates that urban planning policies force people to pay more for housing than they otherwise would have. Research by the Commission and others has made the magnitude of the trade-off between the policy objectives of urban planning and housing affordability for Aucklanders more explicit.

Auckland Council (sub. 45) identifies adequate affordable housing as fundamental to wellbeing and a good quality of life, and that this is a key element of Auckland's strategy. However, its proposed compact city planning approach, based on containment of the city, undermines the aspiration of adequate affordable housing. The Council's spatial plan is intended to provide a stable and coherent planning framework for the efficient provision of infrastructure to serve existing communities and future growth. It should also provide a vehicle for reconciling competing priorities. The final plan will be adopted in 2012. The Commission would like to see in the final Auckland Plan how the Council has reconciled affordable housing with other priorities.

R7.2

Auckland Council should show in its final Auckland Plan how it has considered and reconciled affordable housing alongside its other priorities.

The impact of removing an urban limit and lowering the costs of building

A forthcoming Treasury Working Paper updates an earlier model of the New Zealand housing market by Coleman and Scobie (2009). In the first case the model estimates the impact of a reduction in costs that could come about through an improvement in the efficiency of the construction industry, or by a permanent reduction in land prices, or by lowering council fees or charges. In the second case the impact of a reduction in costs *and* an increase in the responsiveness of supply, such as could be achieved by removing a restrictive urban limit, is modelled.⁹⁴ A reduction in development and construction costs leads to a smaller

⁹³ Auckland formally adopted the MUL in 1998, although these boundaries reflected earlier growth limits.

⁹⁴ The two cases are modelled by lowering costs by 10% when the elasticity of supply is 0.5 (relatively unresponsive) or 2.0 (responsive). The modelling suggests that when costs decrease by 10% and supply is relatively unresponsive (elasticity 0.5) house prices would fall by 7.5%, rents by 4.3% and the

decrease in prices and rents and a smaller increase in the quantity of housing when supply is relatively unresponsive due to the urban limit, and a larger decrease in prices and rents and a larger increase in the quantity of housing when supply is responsive. The paper concludes that increasing supply responsiveness will have larger on-going effects on housing affordability as the population of cities with urban limits continues to grow (Coleman, forthcoming).

A different approach could be considered

All of this evidence leads to the proposition that a shift in philosophy is called for. Instead of relying on an MUL to guide development, councils could zone areas from which development is to be *excluded* (no-go areas) and then allow market forces to determine appropriate land uses on the balance (subject to complying with environmental standards). In this approach, councils would use their infrastructure planning as a means to signal where development will take place and under what timeframe. Alternatively, zones could be defined very broadly, leaving it up to developers or owners to produce responsible designs that have no more than minor effects on neighbours and the environment.

F7.3

- The Metropolitan Urban Limit appears to have constrained the supply of sections in Auckland and this is reflected in escalating housing prices generally.
- Councils can take alternative approaches to binding urban limits, signalling where development will not be allowed, and using their infrastructure planning to signal where development will take place.

Restrictions

Efforts to encourage greater density can sometimes be frustrated by restrictive land covenants such as minimum lot size or house size, height and setback rules, requirements for planting or protection of existing vegetation, or requirements for off-street parking or double garaging. Some of these are imposed by councils, but others by developers to maximise the value of the subdivision. Inquiry participants referred to a case study which examined the impacts of covenants on a housing development in Rolleston, Canterbury (David Hattam, sub. 11; Evan Keating, sub. DR115). Findings included:

- 75% of sites had a covenant requiring a house of at least 160m² (some of at least 200m²).
- Of the remaining 25%, the majority required approval of plans by the developer, with a minimum house size a criterion.
- Some of the sites without covenants were built directly by the developers with large houses.

While it focuses on one case study it clearly shows that the move toward larger homes is not always market driven and such covenants effectively mitigate against higher (or medium) density development and can operate as a planning policy without public input or scrutiny... The commission should give consideration to the options for regulation of such covenants. (Evan Keating, sub. DR115, p. 3)

Other covenant types that are problematic, and may be longstanding, are those that prevent more than one dwelling or further subdivision of sites. There is almost no ability to intensify some existing urban areas in New Zealand as all surrounding owners have to agree to uplifting the covenant.

Part of the problem appears to be a lack of alignment between policies relating to intensification and the rules and processes that apply to development.

Planning policies are no-where near flexible enough to cater for higher density housing in Auckland. The majority of Auckland has a density requirement of 1 unit per 350sqm of land with the ability to build to two levels only. This is incredibly restrictive and new developments are not financially viable under this scenario. (Saltburn Ltd, sub. 7, p. 3)

McIntosh and Gray (2011) argue that “the current Wellington City Council rules for suburban infill development compromise sustainable development in the city, and undermine the council’s policy of containment” (p. 127). They present work by Gray and Hore (2009) that explores opportunities for intensification in Kelburn. The aim was to determine the growth potential in Wellington within its present boundaries following current District Plan rules, and then by adopting an approach in which the rules may be broken (but not the purpose behind the rules). They show the potential to more than double the number of dwellings in the area with few effects on traditional suburban values. The authors argue that such intensification is possible in Wellington due to its hilly topography but the District Plan does not take account of the topography of the suburbs within it. Instead, the type of development they believe possible is “most vulnerable to Wellington City’s current planning rules because of the added costs of compliance with the district plan (for example, rules for sunlight access, height controls, boundary setbacks, road reserve encroachment licences, etc)” (p. 135).

A further example is the restriction on minimum lot size imposed by councils. Simply applying an *average* lot size in an area can allow for extra development and creative use of space.

F7.4

- The objectives of council plans for densification may not be reflected on the ground – developers can experience difficulty in getting infill and medium-density housing under way because of the various planning rules and restrictions that apply to subdivision, land use and building.
- These restrictions are likely to add to short-term costs, frustrate the objective of increasing density, and create long-term rigidities in urban design and development.

Councils can enable more medium-density development by looking at their own restrictions on development, and by being more flexible in applying rules.

R7.3

Councils interested in densification need to ensure that their local planning rules do not run counter to this objective. Councils should adopt more flexible approaches to achieve a balance between neighbourhood amenity and new development in existing suburbs.

Impact on land owners

Land banking

It has been argued that owners who can afford to will make a rational business decision to hold zoned vacant land back (‘land banking’) to take advantage of the price inflation associated with a controlled supply, further constraining the market by their actions. A report to the Auckland Regional Council observed that “there is some evidence that land banking could be occurring as land owners hold on to blocks in anticipation of further price increases” (Leggat-Cook, 2007, p. 16). This suggests a need to improve the market signals resulting from regulations influencing land availability (Reserve Bank, sub. 37, pp. 1-2).

On the other hand, it is expensive to hold non-zoned land for any period of time, especially if it is not producing any income, and few developers can afford to do so. In business terms it is a poor use of capital, particularly equity, and banks are unwilling to provide debt for the purpose of holding ‘raw’ land. As in most businesses, moving inventory at reasonable prices makes better sense in terms of return on capital than sitting on it and waiting for price escalation.

There is no easy way of determining whether land banking is taking place or for what reasons. There is some evidence of individuals holding land outside the MUL (or rural land within it) in anticipation of long-term re-zoning occurring as a result of long-term growth. However, their intentions are to ultimately move it in to the development process and they generally act to do so, seeking re-zoning, keeping close to the local authority regarding their plans. Anticipation of re-zoning may also see farmers act as land bankers to the extent that they may continue to farm at sub-optimal levels or maintain low farming returns in expectation of a windfall gain when the land changes uses.

Gains to land owners from re-zoning or from provision of infrastructure

Landowners can experience a windfall gain when land is re-zoned – for example, from agricultural to residential use or when a specific infrastructure investment raises local land values. The rise in land values through betterment could, in theory, be captured by local government through a tax on land values (Coleman and Grimes, 2010). Indeed, New Zealand local authorities had the power to impose betterment taxes in the past – from 1926 and 1953 (Harris, 2005).

While a betterment tax may be attractive from an equity perspective (taxing windfall gains) or as a means of funding infrastructure, there are incentive and implementation problems. For example, if the tax is collected on realisation of the windfall gain, that is, on sale of the land, the tax could lead to lock-in effects, as landowners postpone selling the land so as not to incur a tax liability (similar to the effect of a capital gains tax, see Chapter 6). This could prevent land from being transferred to someone who might be able to use it more efficiently. It could also bias council decision-making between outer urban fringe development and inner brownfields development (Abelson, 2010).

Time delays, uncertainty and complexity

Quite apart from absolute quantitative constraints arising from policies and regulations, the slow pace at which land for housing is planned, zoned and released contributes to the high price of sections and thereby house prices.

Long development lead times have been identified as a problem, taking between two and ten years because of regulatory complexities. Holding costs incurred on land waiting for re-zoning or consenting puts pressure on section prices on the one hand, while speed to the market also influences the viability of development. This is a critical issue for developers and their financiers, more so when upfront development costs and infrastructure charges are high.

Recently we had a subdivision that took 2 years of regulatory [processes] to begin and 14 weeks to construct. (Affordable Housing New Zealand Ltd, sub. 12, p. 5)

On the other hand, councils suggest that delays reflect a failure by developers to provide adequate documentation, although there is a feeling among the latter that the provision of additional information is not always warranted, and has not enhanced the consenting process or outcomes.

Significantly more information is now supplied to local authorities than was previously required. This adds administrative costs to the land development and residential construction process. This increased information does not appear to have had a corresponding improvement in the quality of housing stock and its environment. (Fletcher Building, sub. 21, p. 7)

The potential impact on affordability of drawn-out planning processes and of negative attitudes to development are revealed, according to some commentators, by variability between different council areas. Such variability occurs despite the limited discretion granted to individual officers.

The consent process can hold up even desirable developments. One builder described the difficulty of progressing a six unit terrace development on a 1,000m² site in Wellington even though it complied with the Council's objectives for medium-density housing. The cost of the consent process added \$20,000 per unit. In his view, some of the most desirable medium-density housing in Wellington, around Mount Victoria for example, was established long before planners were around.

Other inquiry participants also made the same point:

[Councils] do create unnecessary costs, whether it be in fees but also it is the delays in getting the various Consents ... opportunity costs in some cases have been over \$1,000 per day. (Carrus Corporation, sub. 8, p. 9)

The Department of Building and Housing (sub. 55, p. 7) provides information on typical territorial authority plan change and planning consent timeframes (Table 7.1).

Table 7.1 Typical plan change and planning consent timeframes

Year	Year 1				Year 2				Year 3				Year 4				Year 5				
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
1. Feasibility and setup	■																				
2. Structure plan			■		■																
3. Consultation	■				■				■				■								
4. Plan change/variation																					
i. Preparation						■															
ii. Pre-notification processing								■													
iii. Notification periods										■											
iv. Officers report											■										
v. Hearing and decision												■									
vi. Appeals												■	■								
5. Master plan													■								
6. Resource consents															■		■				
7. Construction (subdivision only)																		■			

Source: Department of Building and Housing, sub. 55

While councils were criticised for policies constraining supply and for their time-consuming and costly planning and consenting processes, the regulatory system itself was seen as a problem – if not *the* problem. The RMA in particular is considered to be overly complex, giving rise to unnecessary costs, duplication, delays and uncertainty (Business Roundtable, sub. 20, pp. 5 and 10). If this is the case, variability among councils may reflect a combination of complex issues to be dealt with and varying capacity to deal with them in a complicated policy environment.

The uncertainties as to timing and outcome invariably increases the risks of development projects. In order to retain investment within the sector this uncertainty and risk requires a commensurate return otherwise investment in other sectors becomes more attractive. A modestly costed generic apartment building housing say 50 apartments is likely to cost in the vicinity of \$22m (\$15m construction cost at \$2500 per metre for 50 x 120m² apartments, \$4m basement cost at \$1000 per metre and \$3.2m land cost at \$800 a metre). Even a reasonable return profile of 15% before tax requires an annual return of \$3.75m. Consenting delays of 6 months (a relatively short time frame) effectively adds over \$30,000 to the cost of each apartment. (Todd Property Group, sub. 25, p. 5)

Councils interpret requirements differently and set different timeframes and consent costs. Having an agreed interpretation of the requirements and a uniform process amongst all councils would be beneficial so that regardless of where a development is the process is the same and there are 'no surprises' when applications are lodged. Uncertainty, delays, and risks are costly to developers who already face high levels of market risk. Lengthy planning processes contribute to the cost of subdivisions significantly. (Housing New Zealand Corporation, sub. 34, p. 5)

The problem of complexity is compounded by the number of statutes councils have to consider. This compounds issues arising from poor practice, and is complicated by the capacity of third parties to intervene in decisions (through objections and appeals). National policy statements add another layer of complexity to obtaining consents for development.

F7.5

- The slow pace at which land for housing is planned, zoned and released contributes to the high price of sections and thereby house prices.
- Differences in supply responsiveness at the TA level may reflect the efficiency with which local councils implement and enforce regulations, the complex issues to be dealt with, and varying capacity to deal with them.

R7.4

Councils review regulatory processes with the aim of providing simplified, speedier and less costly consenting processes and formalities.

Three statutes

If the practice of planning and policy development is unduly constrained by legislative frameworks, there may be a case to review the local planning and policy environment in a more fundamental way.

We advocate for a need to align the planning processes under the LGA, the RMA, and the Land Transport Management Act (LTMA). While councils have developed direction regarding urban form and transport (eg through the Wellington Regional Strategy), the legislative complexity inhibits effective implementation. This is costly, time consuming and creates uncertainty for everyone. (Local Government New Zealand, sub. DR106, p. 7)

The three statutes have different legal purposes, timeframes, processes and criteria that have not been designed to work together (Ministry for the Environment, 2010). Development proposals are broken down into economic, infrastructure and environmental components, and examined separately according to relevant legislation. This disconnect can make it difficult to achieve quality integrated urban development.

With multiple participants and decision-makers, there is no single mechanism for facilitating engagement, securing agreement among participants and providing information for robust decision-making.

A particular concern is that the RMA, as the primary land-use planning legislation, has limited capacity to adequately consider the benefits of urban development that would lead to affordable housing. Its ability to do so is highly contingent on the objectives of an individual council's District Plan.

Fragmented regulatory responsibilities and decision-making can make it difficult for people to engage with the planning system, and can make that engagement costly, uncertain and risky.

R7.5

Government consider the case for a review of planning-related legislation to reduce the costs, complexity and uncertainty associated with the interaction of planning processes under the Local Government Act, the Resource Management Act and the Land Transport Management Act.

7.5 An immediate way forward

There is a strong case that the prevailing urban planning principles in New Zealand's growing urban areas, particularly in Auckland, have a significant negative influence on the prices of both new and existing housing. The Commission considers that a more balanced approach is required in the interests of housing affordability.

Urgent need for additional residential land

An immediate increase in land for development would help address affordability by redressing the current housing shortage. This could be achieved by a combination of bringing significant tracts of greenfield *and* brownfield land to the market in Auckland and Christchurch (where it is under way as part of the response to the earthquakes), and exploring the options for doing so in other high growth centres (for example, Tauranga and Hamilton).

Any such release should, of course, be contingent on meeting requisite geophysical and environmental standards; it should favour land that can be readily connected to existing urban areas and amenities and that can cater locally for employment needs, and that provides for a variety of housing markets (defined in terms of different demand segments and submarkets). The aim would be to identify, assemble and develop substantial parcels of land for housing and associated uses of such a scale that it leads to a rapid easing of current supply constraints and consequently a reduction in price pressures.

The Commission has considered what might be an appropriate time horizon in which councils should signal their intentions. In the case of Auckland, the task is to identify land that could be immediately released for development. It will then be important to signal significant tracts of land with the *potential* for urban development (which would be reflected in long-term infrastructure plans and incorporated into the National Infrastructure Plan) perhaps 50 years out, with a *commitment* to major offsite infrastructure capacity (say) 20 years out, and a commitment to *build* infrastructure within a 10-year horizon.

Co-ordination with other parties is likely to be required to ensure that the processes of identifying land, infrastructure development and house construction occur at the right time. The costs associated with delays, or expenditure committed before it is needed, can be substantial for all parties. There are costs when there is uncertainty. There is scope for councils, developers, land owners and builders to collaborate in identifying how best to bring affordable housing to market, ensuring the alignment of land release in suitable locations, the provision of infrastructure, and market demand.

Delivery might be facilitated by local and central government and the private sector working together in a collaborative project management and delivery structure or Public Private Partnership. Individual large-scale parcels/tracts could be delivered by Joint Ventures or by the establishment and operation of a development agency (along the lines of, say, The Queensland Land Development Agency or other overseas models).

R7.6

Bring significant tracts of greenfield and brownfield land to the market in Auckland – identify and assemble land that could be quickly released and made ready for development, signal land with future potential for urban development, and make a commitment to major offsite infrastructure capacity.

R7.7

Auckland Council should look to collaborative models for the process of identifying, assembling and releasing large-scale tracts of land.

What might a collaborative approach look like?

Different approaches can be taken to collaboration. It may be:

- driven by a strong planning mandate with the power to require diverse agencies to comply with regulations requiring the release and development of land in a particular order and manner;
- facilitated by collaborative planning and coordinated investment among agencies and investors;
- planned jointly and then subject to joint agreements for the delivery and coordination of regulatory changes (plans) and investment in infrastructure and services;
- subject to planning and implementation through a special purpose agency on a project basis;
- undertaken by a special purpose regional or city-wide development agency or corporation with the capacity to declare areas for urban re/development, undertake the planning, and enter into contractual and other arrangements for delivery, including direct investment.

In determining the preferred approach it is useful to consider other models that can provide insights about what has worked well and what hasn't in different circumstances. The Commission has looked at the collaborative approach adopted by Auckland for regional land use before the creation of a single city; the

integrated planning approach adopted by the New Zealand Transport Agency; the Hobsonville Development; Places Victoria, an urban renewal authority in Victoria Australia; and the Queensland Urban Land Development Agency (discussed in Appendix D).

This is a limited survey, some preliminary findings are:

- Centralised planning and regulation are likely to fail through inadequate knowledge of needs and capacities, and the difficulty of anticipating issues and enforcing behaviours.
- Voluntary collaboration appears to fail through lack of commitment to or capacity for local implementation of high-level plans by partners.
- A weak statutory base or lack of explicit precedence (of development plans relative to other plans) in any empowering statutes will also frustrate implementation.
- The creation of a statutory or similar agency to bring urban land to the market may range between a multi-purpose (regional) development authority through to a project-specific entity. Circumstances that call for focused short- to medium-term initiatives should favour the latter.
- A specialised land development agency may be empowered (or required) to behave in a commercial way when undertaking land transactions and development, subject to specific policy and statutory requirements. It is important that governance provisions ensure that other public objectives do not infringe on its activities.
- Too broad a role or too many instruments may undermine the performance of land development authorities because of the demands placed on resources, skills and management, the loss of clarity over mission, and the confusion that it might give rise to in the market.
- There might usefully be an organisational and governance differentiation between planning and the implementation authority. Questions of balance between environmental and development objectives, existing and future residents' rights, commercial and non-commercial objectives may require adjudication by a third party. Given the primary objective of bringing substantial areas of housing to the market, such adjudication might be given effect by means of the terms of declaration of land's development status and via ministerial call-in provisions.
- It is important to determine how infrastructure providers might be committed to implementation, especially with mixed private and public participation in large-scale development.

Importantly, the approach adopted will need to suit the urgency of the situation, and will reflect the likelihood of successful delivery without it.

Potential for increasing flexibility

Land made available for modest infill development could be widely distributed throughout urban areas to take advantage of existing suburban infrastructure and amenities, and help balance the interests of existing residents with the preferences of particular demand segments, such as baby-boomers seeking to downscale housing locally. Allowing more low-level infill may also see the population distributed closer to employment opportunities, which are also tending more towards dispersal rather than concentration.

The costs of achieving substantial brownfield sites of a size and that would accommodate significant housing and upgrading of infrastructure, together with the higher building costs of multi-storey units, suggest that dwellings built under these circumstances will either be expensive – and appeal to a distinctive preference within the high end of the market – or of inferior quality. The processes for identifying, assembling and releasing brownfield land therefore need close scrutiny to ensure such sites can play an efficient role in accommodating growth without contributing to undesirable social consequences.

One effective method of easing the pressure on greenfield development is to ensure that the conditions exist for cost-effective brownfield development. It is acknowledged, however, that there are significant

challenges in brownfield development, especially in existing low-density housing areas where it results in displacement of low-income households from existing ageing state housing.

Sufficient competition in the supply of land for development will assist in placing downward pressure on land prices. Developers competing with each other with respect to the sale of construction-ready sections should help to ensure that land is offered at affordable prices. Where competition amongst developers is limited by land availability constraints, land and house prices are likely to be higher.

F7.6

Promoting greater affordability of land and houses and providing for diverse demand can be addressed by:

- An active approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopting a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them to promote efficient urban development, offer a range of lifestyles, and avoid imposing unreasonable and costly constraints on individual segments within the housing market by recognising the benefits of advancing multiple forms of development.
- Identifying substantial areas of brownfield and greenfield land for development, (acknowledging that greenfield development also provides an opportunity to achieve medium-density development) and provision for more efficient use of existing suburban areas through infill where practical.
- Promoting competition between developers for the sale of construction-ready sections.

While it may take some time to implement, commitment to a less constrained planning environment could have an early positive impact on housing in Auckland by providing more certainty.

R7.8

Territorial authorities:

- Take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them.
- Develop strategies that promote adequate competition between developers for the right to develop land.
- Ensure alignment between policy objectives, planning rules and consent processing.

7.6 Concluding remarks

Councils have a statutory responsibility to promote the social, economic, environmental and cultural well-being of their communities. As such, councils must make trade-offs between multiple objectives.

There are many reasons that can be advanced to support Smart Growth policies, urban limits or restrictions on building. These include limiting environmental effects such as pollutants, protecting farmland, or loss of amenity from the loss of open countryside, and maintaining the character of existing neighbourhoods. However these wider 'environmental impacts' need to be set against the stark reality that these policies result in people paying more for housing than they otherwise would have, with the additional costs and consequences quite possibly outweighing the potential benefits of more restricted urban form. There is a significant body of evidence that the policies of urban containment have negative consequences for

housing affordability. Indeed, some researchers have concluded that Smart Growth and affordable housing are inconsistent goals for a single community to pursue simultaneously (Downs, 2005, p. 371).

It is concerning that councils may be unaware of the impact of policies that constrain or limit the supply of land for housing; dispute the “disproportionate weight given to the effect of local government policies” (Auckland Council, sub. DR142, p. 3); or claim that “other factors will play a significant and more immediate role in improving housing affordability” (Tauranga City Council, sub. DR77, p. 3). In some councils there are restrictive land covenants (including minimum house or lot size), or rules for sunlight access, height controls, boundary setbacks, road reserve and encroachment licences that undermine an overarching policy of containment. Even if other factors (for example, a decline in construction costs) favour lower-cost housing, they cannot be expected to be fully reflected in house prices if land for housing is in short supply relative to demand.

The introduction to this chapter outlined a history of urban planning – an evolution from a narrow focus on land use provisions, through a heightened concern with environmental matters, to today’s holistic consideration of multiple dimensions of wellbeing. There is a question as to whether the planning discipline is equipped to evaluate and reconcile these dimensions.

Making trade-offs is difficult. It is made difficult if councils do not have the tools or information to make informed decisions. It is made even more difficult if there is a complex set of institutional arrangements in which decisions must be made. Planning must take account of the LGA, the RMA and the LTMA. These statutes have different legal purposes, timeframes, processes and criteria. With multiple participants and decision-makers, there is no single mechanism for facilitating engagement, securing agreement among participants, and providing information for robust decision-making.

A consequence of local government planning policies is the spill-over effects for central government. Unaffordable housing increases the requirement for state-sponsored or subsidised housing while high rentals and house prices increase the demand for welfare assistance by way of the Accommodation Supplement. The other manifestation of housing shortages – overcrowding and dependence on poor quality housing stock – impacts adversely on health, education and community outcomes, as identified in submissions by the Ministry of Social Development (sub. 5), the Families Commission (sub. 9), the Auckland Regional Public Health Service (sub. 10) and others. This stores up long-term fiscal liabilities and potentially undermines productivity and national wealth. There appears to be an absence of a suitably balanced framework in which the impacts of local government decisions – in this case relating to urban land use – on wider government policies, programmes and objectives can be examined.

Resolving the issues surrounding the legal, institutional and decision-making frameworks in which urban planning occurs will take time. However, there are a number of measures that councils should progress that will remove impediments to the supply of housing. Specifically, a more balanced approach to urban planning is required in the interests of housing affordability. Land for housing can come from the development of brownfields sites, by infill development in existing suburbs, and by making suitable greenfields sites available, ideally in a complementary manner and in a way that provides for substantial short-, medium- and long-term capacity.

This chapter has made a number of recommendations that councils could adopt to increase the amount of land for housing and speed up the process of land release. In Auckland new institutional arrangements, with the mandate to assemble and develop land and facilitate provision of infrastructure, might be needed to respond to the urgency of the situation.

8 Paying for infrastructure development

Key points

- In principle, the case for development contributions is strong. Linking the payment made for some types of additional infrastructure to the benefits received helps to ensure that investment reflects its opportunity cost and that locational decisions are efficient. Linking benefits and payments is also likely to be equitable.
- Development and financial contributions are applied widely in New Zealand to recover some infrastructure costs. The level of charges varies considerably, but can be significant. They are not large enough to explain the surge in house prices in the early 2000s, but have affected affordability.
- Designing and implementing charges for infrastructure that accurately reflect incremental costs is difficult, and there is concern about the way these charges – particularly development contributions – are applied. These concerns relate to their efficiency, impacts on housing affordability, whether they should be levied up-front or over time, the transparency of the processes through which they are determined, and the capabilities of councils to set charges.
- Given the benefits of properly structured development contributions, a strategy is required that helps local government to improve continuously the way it implements these charges and strengthens its incentives to do so.
- The Government should update the Best Practice Guidelines to Development Contributions written in 2003 and enhance training in their implementation.
 - The process for developing the guidelines should be based on broad consultation, and cover matters such as when the contributions should be applied, how they should be calculated and how costs should be recovered.
- Conformity with the guidelines would be encouraged by:
 - making it a legal requirement that councils have regard to the guidelines and with broad principles that would be legislated;
 - better reporting by councils of how they are complying with them;
 - external assessment of performance to encourage continuous improvement.
- Increasing the scope for mediating disputes about development contributions would further strengthen incentives for good outcomes. The Department of Building and Housing should monitor how well this is working and whether there is a need to facilitate access to legal appeals.

8.1 Introduction

Housing developments require infrastructure services such as roads, water supply, sewerage and electricity, as well as community facilities such as parks and libraries, much of which needs to be in place before houses are built. This infrastructure is typically expensive and it has to be paid for. The incremental costs of providing some kinds of infrastructure can vary significantly between areas, depending on factors such as the nature of the terrain, distance from other infrastructure assets, and the age and state of repair of related network assets. For example, the costs of infrastructure in 'greenfields' areas may be pushed up if these areas are remote, but on the other hand it can be expensive to build infrastructure to service less remote infill developments if this involves retrofitting assets in already built-up areas.

Since the 1970s, growing numbers of local governments internationally have been charging developers directly for infrastructure, rather than recovering the costs through their general property rates or other tax revenue (Appendix E). This is justified partly on the basis that it is equitable that those who require the infrastructure should pay for it. Charging for infrastructure can also foster efficient location decisions that reflect the incremental costs of servicing particular locations. This can be particularly attractive for councils seeking to control the costs of providing infrastructure by encouraging expansion into areas that are less costly to service:

In principle, efficient provision of infrastructure would be encouraged where its users pay for the construction of infrastructure that would be avoidable (that is, not needed) if the development did not proceed. By levying infrastructure charges that reflect these costs ... governments provide signals to develop housing in ways and places of greatest value ... in the absence of pricing, developers build without regard to such costs, and governments are likely to rely on other policy instruments, such as planning regulations, to limit the costs of infrastructure associated with housing developments. The absence of effective infrastructure pricing increases the need for development regulations. (Australia's Future Tax System 2010, pp. 423-424)

Similarly, the Australian Productivity Commission argues that:

...linkage between the benefit received and the payment made is particularly important in helping to ensure that the level of investment in housing reflects its opportunity cost and that efficient locational choices are made. (Australian Productivity Commission 2004, p. 166)

It is, however, difficult to design and implement charges that accurately reflect the incremental costs of providing infrastructure to particular developments. Parts of the housing industry are concerned that infrastructure charges fall short of the theoretical efficiency and equity ideal, and diminish affordability. This chapter examines these concerns and suggests a way forward.

Section 8.2 describes the nature of infrastructure and different ways to fund it, and section 8.3 explains how infrastructure charges are used in New Zealand. Section 8.4 considers how these charges affect affordability and section 8.5 summarises problems that submissions and commentators have identified with them. Section 8.6 suggests ways to address these problems.

8.2 The nature and role of infrastructure

What is infrastructure?

The many different types of infrastructure assets can be classified in different ways, including according to whether they are economic or social, network or non-network⁹⁵ (Box 8.1). This classification is important because, as will be explained below, different approaches to charging for infrastructure are suited to different types of infrastructure.

Box 8.1 Classifying infrastructure

Economic infrastructure includes water, sewerage, drainage, electricity, gas, telecommunications, public transport and roads. It can be further classified into:

- major (shared) economic infrastructure, which services a number of land subdivisions. Examples include trunk water, sewerage and drainage, gas, electricity and telecommunications, urban rail services, major roads and airports;
- basic economic infrastructure within a subdivision, in most cases connecting each lot to major infrastructure (for example, roads, water, sewerage, gas and electricity connections). Basic infrastructure is sometimes referred to as private infrastructure, because the benefits accrue

⁹⁵ Another way of thinking about infrastructure is whether it is critical or non-critical, the former implying that the impact of a failure would be widespread, potentially disastrous, or impose significant economic and social costs on the community. Critical infrastructure tends to be networked, something that makes it vulnerable to disruption if there are capacity limitations. Examples include power and water supplies and major transport arteries, especially those at risk from geophysical events. Their vulnerability should be reflected in the level of resilience engineered into them, or perhaps in the provision of parallel or back-up utilities (Crimp, 2008).

overwhelmingly to the residents of the particular subdivision.

Social (or community) infrastructure provides community services. It can be primarily for the use of residents within a subdivision (for example, parks), or it can service a range of subdivisions (for example, a library, community centre, sports ground).

Infrastructure can also be classified into network and non-network assets. Network assets include water and wastewater pipes, stormwater drains, roads and transmission lines. A network might be divided between distributor and trunk components. Network infrastructure includes the associated headworks, such as water catchment and treatment facilities, sewage treatment and disposal, electricity generation, and public transport depots. It may also include rolling stock, such as buses, trains, rubbish trucks, and fire-fighting equipment. Non-network assets include parks and reserves, libraries, galleries, community and sports facilities.

Source: Australian Productivity Commission, 2004, p. 168

Who is responsible for providing infrastructure?

In New Zealand, councils have generally been responsible for constructing major economic infrastructure required up to the boundary of subdivisions, such as water supply, wastewater collection and treatment, stormwater management, and local roads and corridors. Councils also provide social infrastructure such as parks and reserves, leisure facilities (stadia and sports grounds, recreation centres and swimming pools), and cultural facilities (performing arts centres, museums and galleries). Not all councils provide all of these services and the mode of delivery and funding may vary from place to place.⁹⁶

Land owners have traditionally been required to bear the capital costs of providing basic economic infrastructure within subdivisions that is necessary to enable the council-provided infrastructure to be used. Within subdivisions, land for neighbourhood roads and infrastructure that developers construct on or under this land (such as water pipes) has to be vested in councils without compensation. Land owners have also generally been required to contribute to parks and reserves in cash or in kind (Local Government Forum and Property Council New Zealand 2010, pp. 1-2).

While there is broad agreement that the costs of basic infrastructure constructed within subdivisions should be borne initially by developers,^{97,98} there is less agreement about the best ways to charge for major economic and social infrastructure, as will become evident below.

Options for funding infrastructure

Broadly, infrastructure can be funded through:

- taxes, including property taxes, or rates;
- user charges, usually based on the volume of capacity consumed (water, drainage);
- access charges, which may be combined with variable user charge, typically in situations where there are economies of scale and variable user charges alone will not recover total costs. The fixed component may be levied on such factors as property value or the number of toilet pans in the case of water/wastewater charges, and the variable component based on volume consumed or generated;
- development contributions, involving direct funding or supply of on-site public amenities (such as parks and reserves) and hard infrastructure (such as roads and water reticulation), and usually a cash

⁹⁶ Private development agreements are also becoming more common, and allow developers to provide off-site infrastructure in lieu of paying a development contribution.

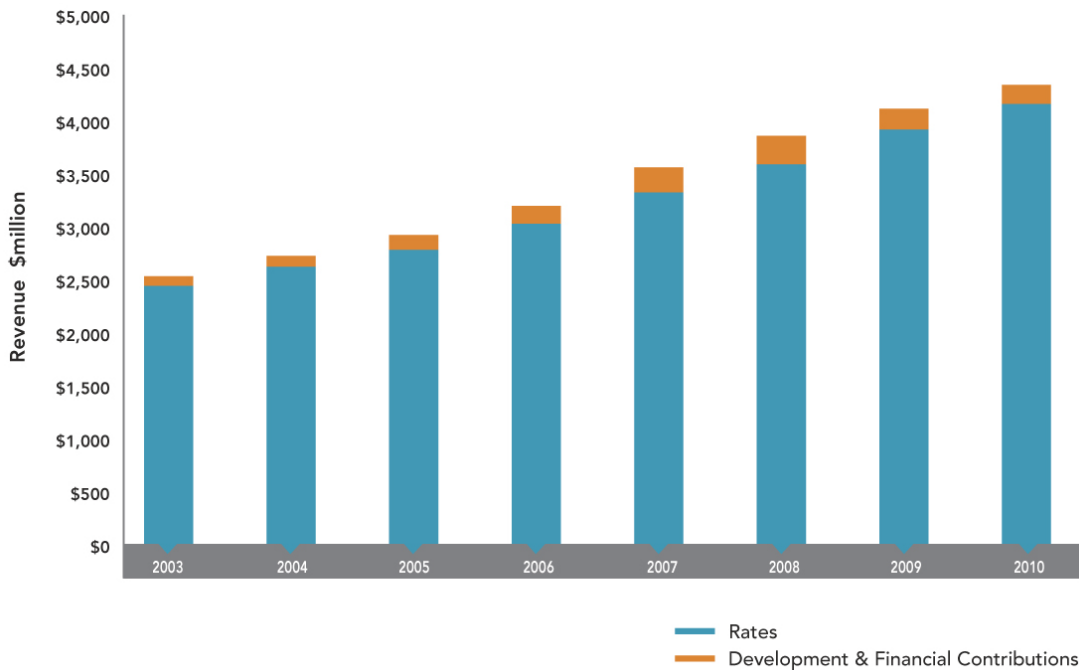
⁹⁷ While developers bear the cost initially, the incidence may be shared with land owners (in the form of lower land prices) and homeowners.

⁹⁸ There can be issues with larger developments, which are required to fund works deemed internal to their subdivision, but which would have been considered external if the subdivision had been owned by several parties. This is particularly the case for projects related to roads and reserves.

contribution to off-site capacity increments required in, for example, trunk or distributor networks or head works such as sewage treatment or water supply works.

Councils in New Zealand raise most of their revenue through property-based rates (Figure 8.1). Direct charging for infrastructure and its environmental effects through development and financial contributions (which are defined in the next section) is growing, increasing from \$88 million in 2003 to \$267 million in 2008 (June years). In 2008, this charging made up 4.5% of councils' total income (equivalent to 7.5% of their income from rates).

Figure 8.1 Council revenue 2003–2010 (\$ million)



Source: Statistics New Zealand, Local Authority Statistics, 2010

Development contributions appear to fund a small proportion of councils' total capital expenditures, even for relatively high-growth areas like Queenstown Lakes and Tauranga. Table 1 shows the forecast share of development contribution revenues and total capital expenditures reported in the Annual Reports of various councils. In total, development contributions accounted for less than 10% of planned capital expenditures by these councils.

Table 8.1 The share of development contributions in capital expenditure, selected councils, 2010–11 and 2011–12

Council	2010-11	2011-12
Hamilton	14	9
Hastings	7	9
Nelson	3	5
Queenstown Lakes	16	10
Tauranga	na	16
Waikato	11	11
Wellington	4	3
Whangarei	na	4
Total	10	8

Source: Council Annual Reports

This is likely to reflect two factors:

- Most councils' capital works programmes are dominated by renewals, with capacity expansion (either for backlog and/or growth) being only a minor component.
- Many councils have recently revised their development contributions revenue expectations downward to reflect prolonged historical shortfalls. For instance, Whangarei District Council originally forecast development contribution revenues of \$8 million for 2011/12 in its Long Term Council Community Plan (LTCCP), but the annual plan has since reduced this to \$2 million.

This chapter assesses the use of development and financial contributions to fund infrastructure, while also considering when other approaches might be more appropriate. While development contributions fund only a small part of councils' capital expenditures, they are used for funding the infrastructure servicing of new sections and may be a significant component of their cost, and so are of particular interest in the context of housing affordability.

8.3 Financial and development contributions

The statutory setting⁹⁹

Two forms of infrastructure charge are applied to new developments in New Zealand: development contributions under the Local Government Act 2002 (LGA), and financial contributions, which are given legal force by the Resource Management Act 1991 (RMA).

Development contributions

Development contributions were introduced in 2002 to allow councils to recover capital expenditure associated with facilities such as reserves, network and community infrastructure, where there is a direct causal link between the need for such capital expenditure and a development that is caused by growth (LGFCNZ, 2010, p. 3). Contributions can be used for reserve purposes that include the development of community or recreational facilities and the purchase of land for conservation purposes. Contributions are principally taken in cash, but may also be taken in land or a combination of the two (LGA S197).

Councils must develop a development contributions policy (DCP), which outlines the proportion of capital expenditure funded through development contributions and explains and justifies how each development contribution is calculated, and the underlying assumptions. Schedule 13 of the LGA prescribes the methodology for setting development contributions, and focuses on identifying and attributing the incremental costs of meeting increased demand. It requires territorial authorities to:

- (a) 'identify the total cost of the capital expenditure that the local authority expects to incur in respect of the community facility, or activity or group of activities, to meet increased demand resulting from growth within the district, or part of the district, as the case may be; and
- (b) identify the share of that expenditure attributable to each unit of demand, using the units of demand for the community facility or for separate activities or groups of activities, as the case may be, by which the impact of growth has been assessed'.

Councils must also implement a consultative procedure specified in the LGA, which requires statements of proposals to be prepared, advertised and made available. Councils must invite submissions on these statements. S2 of the LGA prevents councils from double-dipping by making two charges for the same asset; for example, requiring land for reserve purposes as a condition of development under the RMA and extracting development contributions for the same purpose.

The LGA does not allow objections to the Environment Court regarding development contributions. Unless the DCP itself allows scope for challenge, the only options are to seek an investigation by the Ombudsmen or to apply for judicial review or a declaration to the High Court.

⁹⁹ This section draws heavily on DLA Phillips Fox 2008.

Financial contributions

The financial contributions regime was introduced when the RMA was enacted in 1991, to provide local authorities with a further method to avoid, remedy and mitigate adverse environmental effects. Financial contributions can take the form of money or land and must promote the sustainable management of natural and physical resources. They may recover spending incurred in anticipation of development (S199) and be levied at the time of resource consent, building consent, or authorisation for connection to services. Financial contributions may be applied to fund capital expenditure in similar areas to development contributions where the spending is used to mitigate adverse environmental effects, but cannot be used to fund the same expenditure for the same purpose, or to fund operating spending. They tend to be preferred to development contributions to fund parks and reserves (LGFPCNZ 2010, p.3).

If a council includes financial contributions in a plan prepared under the RMA, it may impose them on developments subject to resource consent, provided that the contributions are directed at the purpose specified and determined in a manner set out in the plan (RMA S108(2)(a) and S111). In this way, financial contributions are subject to a prescribed, targeted and transparent process, as the reason for which they are levied must be clearly set out in the plan. Under the provisions of the RMA,¹⁰⁰ they may be challenged in the course of plan preparation through submissions, objections, and appeals.

Uptake

Financial and development contributions are used widely in New Zealand. A summary of existing surveys, prepared for the Commission by Dwyer and Wilkinson (2011), indicated that about 62 territorial authorities collected development and financial contributions in 2009/10, and 10 out of 12 regional councils required financial contributions as a condition of resource consents. A closer review of the policies of 43 councils indicated that 32 (74%) had 'active' development and financial contributions, while 11 had development contribution policies only.

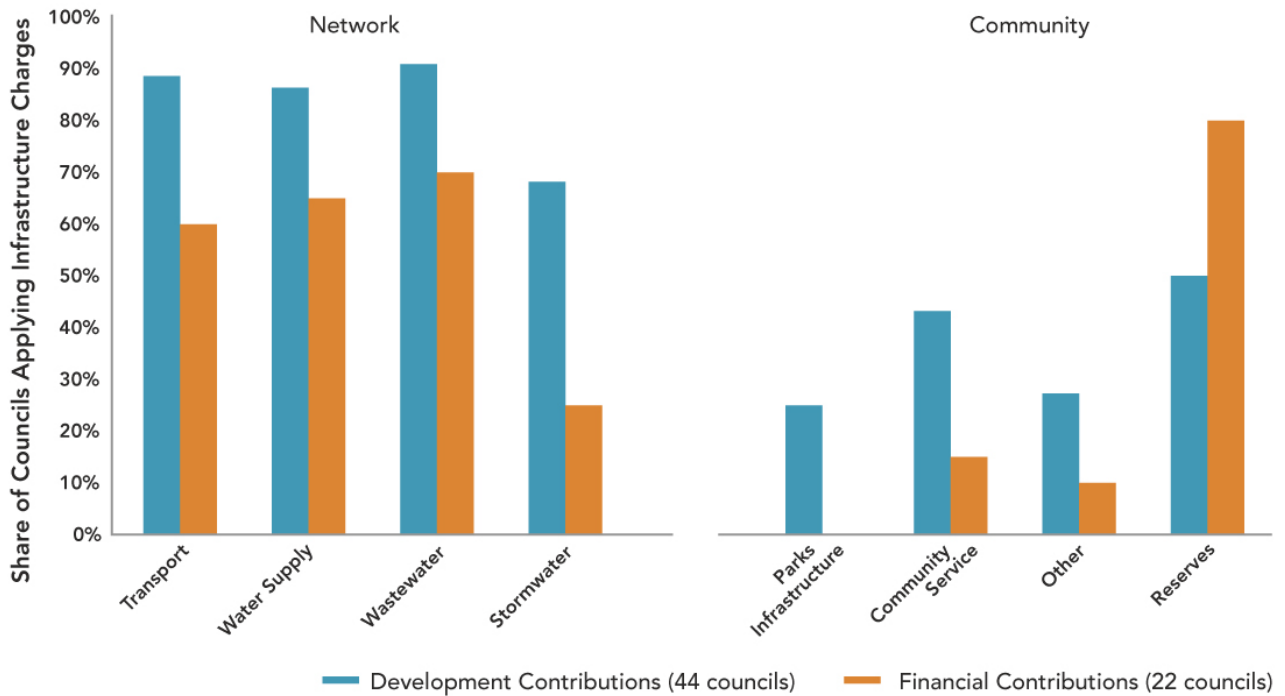
Figure 8.2 shows the proportion of surveyed councils that fund different types of infrastructure through development and financial contributions.¹⁰¹ Most surveyed councils use development contributions to fund network infrastructure, with wastewater, water supply and transport the most common type of infrastructure funded. More than half of the 22 surveyed councils that have financial contributions policies also applied them to network infrastructure, and about 80% of them used financial contributions to fund reserves.¹⁰²

¹⁰⁰ Part 5 sets out procedures for preparing national policy statements, regional, coastal, and district plans, all of which could in theory require the use of financial contributions to achieve the purpose of the Act. Part 6 deals with the issuing of resource consents, and associated schedules, Part 11 with the procedures and powers of the Environment Court in these matters. Other parts deal with rights of objection and appeal.

¹⁰¹ Dwyer and Wilkinson (2011) surveyed the development contributions policies of 42 territorial authorities and the financial contributions policies of 20 territorial authorities.

¹⁰² The analysis excludes contributions in kind, which tend to favour land for reserves, so this result may under-represent the role of reserves as a form of mitigation for the environmental effects of development.

Figure 8.2 The application of development and financial contributions (2009/10)



Source: Dwyer and Wilkinson (2011)

8.4 How do development contributions affect housing affordability?

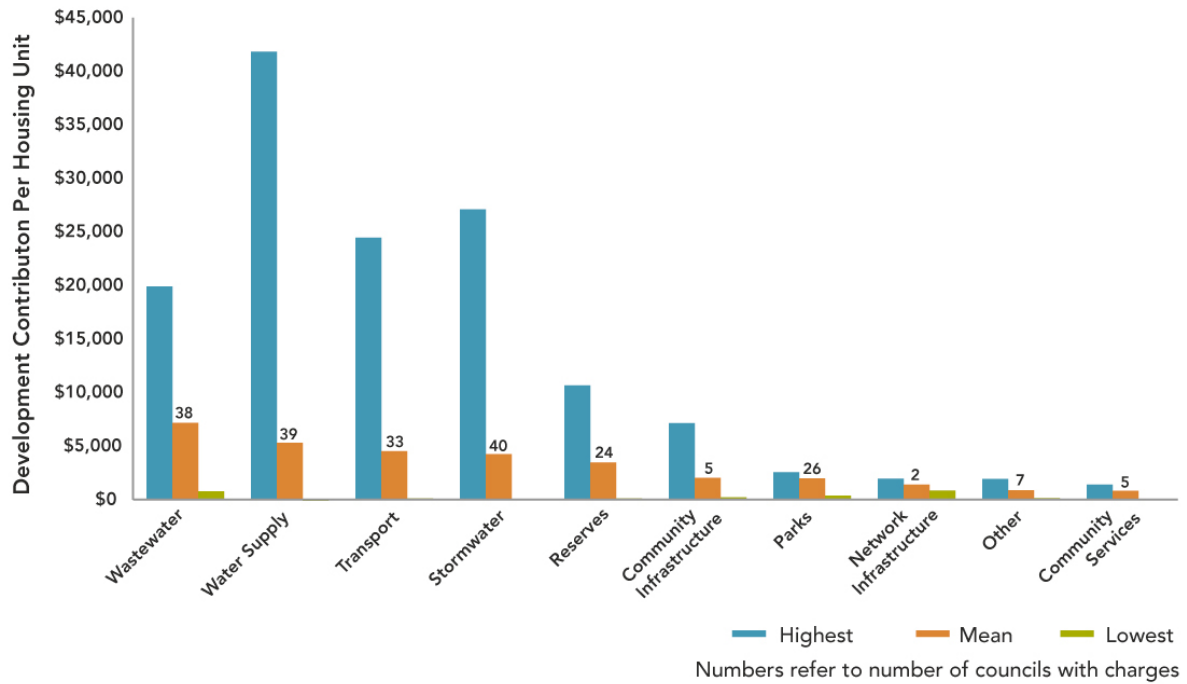
The impact of development contributions on affordability depends on their size; on who ultimately bears the charges; and on the alternative ways in which infrastructure would be funded if there were no infrastructure charges.

Size of charges

Figure 8.3 illustrates the size of development contributions, by showing the mean, highest and lowest charges identified for each infrastructure category. It shows that the level of development contributions per housing unit varies widely both across infrastructure categories¹⁰³ and between councils. More councils apply development contributions to fund water supply and waste-water services than any other type of infrastructure, and these categories attract the highest contributions. The share of development contributions in section prices varies considerably between regions (Box 8.2).

¹⁰³ The authors also analysed the magnitude of development contributions across infrastructure categories for 42 local authorities, using data assembled by the Department of Internal Affairs. The analysis is complicated by the range of charges that might apply to any single activity within a council. It is also partial to the extent that councils that charge low development contributions may charge high financial contributions, which were not analysed, and vice versa.

Figure 8.3 The range of development contributions in New Zealand (43 councils)



Source: Dwyer and Wilkinson (2011, pp.27-35).

Notes:

1. The figures refer to charges made by different councils and are therefore not additive.

Box 8.2 Development contributions and section prices

Table 8.2 compares development contributions for ten council areas with median section prices. It omits financial contributions, and therefore underestimates the impact of combined infrastructure charges.

The fifth column in the table illustrates considerable variability in the share of development contributions in section prices, although charges above \$20,000 per section are common.

Table 8.2 Development contributions as a share of section prices

REINZ Region	2010 Median Section Price	City / District	Contributions (GST Incl.)	
			Mean	% Price
Auckland	\$516,000	Auckland City	\$17,225	3.3%
Auckland	\$608,000	Rodney	\$23,260	3.8%
Auckland	\$525,000	North Shore	\$25,097	4.8%
Auckland	\$393,000	Waitakere	\$23,681	6.0%
Auckland	\$408,000	Manukau	\$5,956	1.5%
Auckland	\$368,000	Papakura	\$26,406	7.1%
Auckland	\$461,000	Franklin	\$14,619	3.2%
Canterbury/West Coast	\$312,000	Christchurch	\$10,888	3.5%
Waikato-Bay of Plenty	\$322,750	Hamilton	\$21,124	6.5%
Waikato-Bay of Plenty	\$322,750	Tauranga	\$31,229	9.7%

Source: Dwyer and Wilkinson (2011, pp.27-30); Quotable Value New Zealand

Incidence

How development contributions affect affordability depends on their incidence (that is, who ultimately bears them, which may be different from who initially pays them). Whether they will be passed forwards to homeowners or backwards to land owners “depends on the relative inelasticity of supply and demand: backwards if the supply of raw land is less elastic and forwards if the demand for serviced land is less elastic... [there is] growing consensus among economists that almost all of any developer contributions will be passed on to consumers in the long-run”¹⁰⁴ (VCEC 2005b, p. 420). The Australian Productivity Commission points out that if the value to homebuyers is roughly equal to the charge for the infrastructure, homebuyers would willingly bear this charge and the “implication is that such charges could, and would, be passed in full to the buyer” (Australian Productivity Commission 2004, p. 164).

Alternative funding sources

It is also important to consider what would happen if there were no development contributions and new infrastructure was funded in some other way. For example, infrastructure for a particular development might be funded by a general increase rates on a broader community. However:

...even if more of the cost of providing infrastructure to new developments were shifted onto the wider community, housing affordability might not be greatly enhanced. That is, the price of land in new housing developments would rise, meaning that the gains from lower infrastructure costs would be largely captured by the owners of raw land or by developers (Australian Productivity Commission 2004, p.165).

Another possibility is that councils might not be able to access alternative funding sources if there were no developer contributions. The Smart Growth Implementation Committee notes that in a number of growth areas, councils’ ‘debt envelopes’ are being pushed to their limit” (sub. DR90, p. 13). Tauranga City Council points out that:

...the effects on housing affordability of not having infrastructure charges might in some cases be significantly greater than the direct effect that infrastructure charges have on the cost of new dwellings. For example, reduced infrastructure investment might constrain land supply and push the cost of developable land and developed sections upwards. (sub. 19, p. 22)

The views in submissions

Given the complexities involved in assessing the incidence of development contributions, it is not surprising that submissions expressed a range of views about their impact on housing affordability – although the most common view (expressed largely by councils) was that the impacts would not be large (Box 8.3).

Box 8.3 Views on the impact of infrastructure charges on housing affordability

Amongst those who argued there is little effect, Auckland Council argued that while the costs are borne by the ultimate purchaser of the dwelling and not the developer, contributions are a relatively small addition to the cost of housing.

Development contributions are considered to be one of the mechanisms by which Council will be able to provide affordable housing ... they have only been identified as generating approximately 3%–5% of housing cost. (Auckland Council, sub. 45, p. 10)

The submission also suggests that there is a risk that prices would not be reduced by developers if contributions were removed, and that mechanisms are required to ensure that savings are passed on (sub. 45).

Wellington City Council argues that its residential development contributions are generally between

¹⁰⁴ Some international research supports this view. Skidmore and Peddle (1998) found that infrastructure charges reduced the rate of development in 29 municipalities in Illinois by more than 25%. Ihlandfeldt and Shaughnessy (2004), based on a review of nine other papers and their own research, found that impact fees increased the price of new and existing homes in Florida, although with a larger impact on new housing. A review of US literature by Evans-Cowley and Lawhon (2003, p.358) concluded that impact fees increase house prices where there are no reasonable substitutes. The research also indicated that the cost of impact fees is pushed backwards to sellers of land where reasonable housing substitutes exist.

\$5,000 and \$8,000 and do not have more than a marginal impact on housing affordability (sub. DR111, p. 12).

Palmerston North City Council similarly suggested that infrastructure charges add little to the price of a house and should be met by the developers that profit from development.

Private housing developments are undertaken for economic benefit. Infrastructure costs should, therefore, be recovered at appropriate levels ... the examples given may only account for only 5% of the overall purchase price [of a home]. There are many other factors that will have a greater impact on the final purchase price. (sub. 46, p. 5)

Whangarei District Council (sub. 32) also argued that contributions are a relatively minor contributor to house prices and likely to be passed through to buyers in "good times" but may have to be absorbed by developers in the form of lower profits in "bad times". The Development Contributions Group has a similar view:

While Development Contributions should be fully capitalised into the value of land there are circumstances where the entire value of the contribution is not borne by the land. This can be due to the particularities of the location, the relative value of the land to the capital improvements on the land, the indebtedness of the property and a myriad of market vagaries. The claim that Development Contributions cannot be fully capitalised into the value of the land typically arises when a developer has paid too much for a plot of undeveloped land, has underestimated the cost of completing the developments, or has overestimated the ultimate retail prices of the finished subdivision or other developments. (sub. 22, p. 5)

The Local Government Forum and Property Council New Zealand (LGFPCNZ) (2010, p.vi) pointed out that development contributions of around \$30,000 are common in certain districts and can generally be expected to be passed forward to home owners and consumers, or backward to the owners of undeveloped land and suppliers of other inputs, including employees.

Tauranga City Council (sub. 19) has a different position, citing an example of how development contributions can have a significant impact on affordability:

These fees have a significant impact on the cost of new houses and if they were reduced the affordability of housing in Wairakei could be improved. As an extreme example if these fees were removed entirely then the cost of a house in Wairakei could be reduced by over \$40,000+GST. (Tauranga City Council, sub. 19, p. 5)

Conclusion

It is difficult to draw a general conclusion about how much development contributions increase housing prices and reduce affordability: they vary considerably across New Zealand and the extent to which they are passed on probably also varies, although they are likely to be largely passed on to households in the long-run. It is clear, though, that while the implementation of development contributions in 2002 contributed to the increase in house prices, the charges were not large enough to explain the surge in house prices at that time. For example, the sample of 10 regions (Table 8.2) showed that in these cases development contributions made up between about 1% and 10% of median section prices, whereas house prices doubled during the boom.

While development contributions did not cause the house price boom, charges of \$20,000 per section are not uncommon and will often have increased land prices. However, given that infrastructure has to be provided to make land suitable for housing, and that infrastructure charges are intended to recover these costs, the relevant issue is whether the charges are being set so as to recover only the incremental costs of efficiently provided infrastructure. The next two sections consider this issue.

F8.1

It is difficult to draw a general conclusion about how much development contributions increase housing prices and reduce affordability: they vary considerably across New Zealand and the extent to which they are passed on probably also varies, although they are likely to be largely passed on to households in the long run.

8.5 Possible problems with the current system

Submissions to the inquiry and the Commission's review of the literature indicated concerns about infrastructure charges, covering:

- whether they promote efficiency and equity;
- whether councils have sufficient resources and capability to administer the charges;
- the transparency of the process for setting charges;
- the scope to challenge charges.

Do the charges promote efficiency?

Properly structured and administered infrastructure charges signal to developers the incremental costs of building infrastructure in different locations, encouraging them to factor these costs into decisions about when and where to build housing. The Development Contributions Working Group (DCWG), representing local government practitioners, argued that development contributions are economically efficient and equitable in purpose and effect, ensuring that the decision to develop and the cost of doing so are linked (sub. 22, p.4). It also pointed out that replacing development contributions with rates would lead to a "substantially less desirable situation" because "crystallisation of the costs-of-location at the point of the development or acquisition decision" would be lost (sub. DR123, p. 2). The Smart Growth Implementation Committee argues that "removing or reducing development contributions hides the true cost of development" (sub. DR90, p. 12). Tasman District Council considers that development contributions are "a necessary response to a high marginal cost of the services given the large, dispersed settlement pattern, a legacy of services underinvestment, and rising government standards for such services" (sub. DR135, p. 2).

Other inquiry participants and commentators, however, were not persuaded by these efficiency advantages, and suggested that charges may not be structured efficiently; may be applied to the wrong types of infrastructure; may be inferior to other forms of charges; and do not diminish incentives to 'gold-plate' infrastructure.

The structure of development contributions

There is concern that development contributions are not based on additional (marginal) infrastructure costs, as is required under schedule 13 of the LGA. The Property Council, for example, argues that councils have "failed to adhere to fundamental rules about causal nexus and the need to limit the application of contributions to the marginal cost of growth" (sub. 28, p. 13). LGFPCNZ, in a 2010 review of development and financial contributions, suggested that development and financial contributions often do not confront new and existing users with the marginal cost of supply. Reasons for this include:

- misguided attempts to allocate common costs;
- failure to discount expenditure for the time value of money or to take into account benefits that extend beyond the ten years of the LTCCP;
- inappropriately using population or the number of households as a proxy for incremental demand omitting operating costs from calculations of financial and development contributions (LGFPCNZ 2010, pp. 43-44).

The LGFPCNZ also points out that where a territorial local authority applies a uniform level of development contributions, they will not affect the location of developments within the relevant district (LGFPCNZ 2010, p. 45).

A related concern is that charges are being used to raise revenue rather than promote efficiency. If councils have a dominant position, they may be able to set charges for new infrastructure above costs, and use the extra revenue to fund discretionary spending in other areas or reduce property rates.

Councils are increasingly putting up the costs for (development and financial contributions) to reduce the cost on the ratepayer. A \$10,000 fee is \$25,000 once margin, holding costs, and GST are added. (Brady Nixon, sub. 26, p. 4)

Councils will be less able to behave in this way if developers (and home buyers) are mobile, and leave areas with excessive developer charges. However, this seems unlikely to happen where charges – even if excessive – make up a small proportion of the cost of a house and land package, as Table 8.1 suggested may often be the case.

The type of infrastructure

Some submissions and commentators point out that the breadth of the benefits from infrastructure is a key determinant of when development contributions should be applied, and that councils are not always making the correct decisions about when to use them. The concern is that the costs of particular infrastructure assets may be recovered from the residents of a narrowly defined area, when many of the beneficiaries live outside the area. For example, Icon Concepts argued that the costs of providing services such as schools, parks and libraries should not be recovered through infrastructure charges applied within a particular district:

The whole community uses that infrastructure so the cost should be spread over the whole community. Infrastructure charges work on the assumption that any new development is a cost to the community whereas the reality is the opposite. (Icon Concepts, sub. 6, p. 7)

LGFPCNZ also considered the impact of the distribution of benefits, arguing that “genuine public goods such as neighbourhood parks, reserves, outdoor recreation facilities and stormwater systems that exclusively or predominantly service or enhance a development and are located within a development” may be funded by requiring a developer to undertake the necessary works, make a monetary contribution, or grant land (LGFPCNZ, 2010, p. 50). This view is not necessarily at odds with that of Icon Concepts. The point at issue is the extent of diffusion of the benefits. If they can be identified as applying to a particular district, then the costs can be allocated to that district, but if the benefits are spread much more widely, then it seems neither equitable nor efficient to allocate them to an individual district.

Alternative approaches to charging

LGFPCNZ pointed out that development contributions sometimes fund capital spending in situations where councils could instead charge for supplying the related goods or services but do not do so. For example, councils could meter water use but either do not do so or, if they do, charge prices that do not approximate the marginal cost of supply. User charging would encourage, for example, water conservation, which might reduce the need for additional infrastructure. Prices could also be charged for using libraries, museums and art galleries (LGFPCNZ, 2010, pp. 49-50).

The New Zealand Chambers of Commerce considered that “wherever feasible, prices rather than development contributions should be charged for local government goods and services (for example, for water supply) and the use of development contributions should be restricted to public goods” (sub. DR144, p. 2).

Incentives to choose least cost infrastructure options

Councils have monopoly power in providing infrastructure to service land, limited mainly by the capacity of developers to move between council areas. Access to development contributions may encourage councils to design projects that have higher initial capital expenditure, to limit the risk of future capacity shortfall, rather than later when development contributions cannot be charged. Councils may also be induced to favour a more capital-intensive investment option with lower operating costs, which are generally funded

from rates (LGFCPNZ 2010, pp. 5–6). If either of these happens, the efficiency benefits from development contributions would be undermined.

Do the charges promote equity?

A common view is that it is equitable that the benefits of expenditure on new or expanded infrastructure assets should be largely confined to those paying for them. This is, however, often difficult to achieve, as the comments of Icon Concepts and the LGFCPNZ above suggest. It requires application of the rational nexus test, which may require contestable assumptions about demand and the capacity to exclude others from the benefits of investment. Public facilities often exhibit significant benefit leakage. Indeed, many are characterised by implicit or explicit exchange between beneficiaries (for example, visiting teams to recreational facilities). In addition, infrastructure is usually used by some groups more than others. For example, sports grounds may be used more by young people.

Habitat for Humanity proposes that development contributions should be waived or reduced for affordable housing provided by not-for-profit organisations (sub. DR107, p. 8). It is possible, however, that this could lead to an increase in the price of land in such developments, so that the full benefits would not flow through to home buyers.

Auckland City Council noted that it considers fast-tracking developments and/or mitigating development contributions and consent fees for developments that increase supply of a particular type of housing or ease overcrowding in targeted areas (sub. DR142, p. 17).

Do councils have adequate resources and capabilities?

There seems to be agreement that complexities in administering financial and particularly development contributions can test councils' resources and capabilities.

The DCWG acknowledged concerns over administrative efficiency, but attributed them to inadequate resourcing among some local authorities "together with constant to occasional threats of litigation [having] increased costs from the legal and consulting professions" (sub. 22, p. 4). This submission points out that a simpler regime would lower complexity and costs.

Small (2007), in an analysis prepared for the Local Government Rates Inquiry, pointed to the practical difficulty councils have in developing formulae and executing implementation in a way that adheres to the underlying efficiency and equity criteria for development contributions. He believed these difficulties are caused by councils' limited understanding of how these criteria might operate, and would be redressed as experience accumulates. He argued that radical reform was not needed, but that councils need additional support to ensure that their policies best serve the needs of their communities, and it would be cost-effective for this support to be provided centrally, through the Department of Internal Affairs or the Society of Local Government Managers (Small, 2007, p.18).

Is the process for setting charges transparent?

Transparent processes strengthen the accountability and hence incentives of those setting development and financial contributions to follow due process. Transparency increases the prospect that development contributions will be applied when appropriate and with regard to incremental costs. This in turn should boost the confidence in the system of those who pay these charges. There are different perspectives about how transparent are the processes for setting financial and development contributions, and some submissions saw room for improvement.

Three submissions from local government pointed out that being transparent about a complicated system means providing details that may be difficult for some to comprehend. Tauranga City Council believes its development contributions policy is "completely transparent" given that it comprises "approximately 300 pages [containing] a full explanation of the methodology, assumptions, growth funded projects, cost allocations and cost estimates". It points out, though, that "the downside of this type of complete transparency is complexity. It would be fair to say that Council's Development Contributions Policy itself would not be easily understandable to the average person on the street, but it is well understood by the

development sector and advisors active in city development” (sub. 19, p. 23). Similarly, the Society of Local Government Managers (SOLGM) pointed out that:

From a normative perspective it would seem appropriate to put a significant burden of proof on local authorities to justify the charges they impose. This inevitably however drives the process in the direction of detail and complexity, and the production of documents that as a result seem opaque to the lay reader (although they are not of course designed for a lay audience). (sub. DR143, p. 4)

The DCWG also pointed to the difficulty of achieving transparency in a complex area, that is “difficult for lay-people to comprehend without assistance” (sub. 22, p. 3). It noted that “an over-emphasis on compliance with the letter of the law”, can lead to opaque documentation. This may be a reaction to the “willingness of some developers to litigate,” which the group suggests has led to “a climate of risk aversion that is now beginning to moderate” (sub. 22, p. 4).

The Registered Master Builders Federation (sub. 16) had a different view, calling for greater transparency with respect to where the funds raised are allocated (sub. 22, pp. 3–4). The LGFPCNZ argues that development and financial contributions lack transparency and that this weakens the accountability of elected representatives (LGFPCNZ 2010, p. vii).

Is there adequate scope for challenge?

Given the limited contestability between councils noted above, providing opportunities to challenge development contributions can fill a significant gap. As noted earlier, however, there is less scope to appeal councils’ decisions about development contributions than about financial contributions. The rationale for this difference is not evident.

Justice Potter (in *Neil Construction Limited and Orrs v North Shore City Council*) noted that the absence of rights of appeal on merit against development contributions adds to the importance of open, consultative processes:

[293] The enactment in the Act of Subpart 5 of Part 8, relating to Development Contributions provided councils with a valuable and economically efficient funding tool in addition to the traditional funding sources such as general rates. There is no right of appeal from councils’ determinations in relation to development contributions and the review process is limited (refer [95]). Any challenge by developers has to be mounted by way of judicial review. In exercise of their discretions, given the greater flexibility in decision-making conferred on councils by the Act, it is therefore necessary and important that councils carefully observe the purpose and principles of the Act and the role of local authorities, that they ensure both openness in their decision-making processes, and the ability of sectors of the community affected by their decisions, to participate in those processes.

8.6 A way forward

Should development and financial contributions be retained?

Given the difficulties in implementing financial and development contributions, one option is to abolish them and for councils to rely on revenue raised from general property rates. The Commission does not favour this option.

- Well-structured development contributions signal the incremental costs of new developments. Abolishing development contributions could encourage development of expensive infrastructure projects in areas that are more costly to service. Striking a ‘special rate’ might offset this, but only to a limited extent unless it was carefully designed, in which case the special rate may resemble financial and development contributions.
- Funding infrastructure for growth areas through general rates would diminish transparency and consequently make decision-makers less accountable. This can undermine the quality of decisions, because spending priorities could be decided with less reference to costs and benefits.
- As noted earlier, there is a concern that having access to development contributions encourages councils to incur higher capital costs initially, funded by contributions, rather than incur higher expenditure later, when development contributions cannot be charged (LGFPCNZ, p. 6). However,

recovering infrastructure costs through rates has a similar risk, as councils might find it easier to 'gold-plate' infrastructure projects when their costs are spread across all rate payers.¹⁰⁵ Developers are more likely than rate payers to contest the charges of particular infrastructure assets.

- There is industry acceptance of aspects of the current system. For example, the LGFPCNZ suggests that the cost of supplying genuine public goods, such as neighbourhood parks, reserves, outdoor recreation facilities and stormwater systems that exclusively or predominantly service a development and are located within it, may be appropriately imposed on relevant households or businesses by requiring the developer to undertake the necessary works, make a monetary contribution or grant land. This would apply in situations where there is a close connection between the subdivision or development and the relevant infrastructure facilities (LGFPCNZ, 2010, pp. 50-51).
- Removing the requirement that those who create costs should pay for them may lead to inequities.
- There is considerable experience with financial and development contributions, although this is not necessarily being harvested.
- While submissions presented anecdotal evidence of problems with the current approach, they provided little quantitative evidence of the problems or of how these would be reduced by alternative approaches. It is also possible, as SOLGM suggest, that "there may well have been some less than perfect implementation in the initial period but we believe practice has evolved considerably since" (sub. DR143, p. 4). SOLGM points out that the absence of legal challenges supports this view (sub. DR143, p. 4), although the costs of litigation may rule out litigation in many cases.

Rather than abolish development and financial contributions, there is scope to improve the design and implementation of the current system. As Small (2007, p.19) notes, "radical reform does not appear warranted. However, councils do need additional support to ensure that their policies best serve the needs of their communities."

A strategy for taking advantage of the potential efficiency and equity benefits of development and financial contributions, while reducing current problems, could involve a combination of:

- focussing more tightly the application of development contributions;
- establishing high-level principles that must be followed when applying development contributions;
- improving the guidance available to councils about when and how to apply these charges;
- increasing councils' capability, through training;
- strengthening the incentives for careful implementation, through reporting, monitoring and enhanced opportunities for legal challenge.

F8.2

A well designed strategy could take advantage of the potential efficiency and equity benefits of development and financial contributions, while reducing current problems with them.

Focusing the use of development contributions

Type of infrastructure

Development contributions are particularly suited to major economic infrastructure assets (such as trunk water, sewerage and drainage, and major roads), when the incremental costs can be established and attributed to particular developments. Assets that provide comparable benefits to users in long-established areas (such as major sewage treatment plants) may be better recovered through rates. In most cases,

¹⁰⁵ A counter argument is that community opposition to rate increases can discourage gold-plating of infrastructure assets. However, this opposition may not be strong if funding the assets concerned would lead to only a small increase in rates.

beneficiaries of services from social infrastructure are likely to be dispersed throughout the community, and such investment is best funded by the wider community (APC, 2011, p.203). Accurate cost allocation of infrastructure that provides broadly-based benefits is very difficult.

Size of infrastructure

Setting and administering development and financial contributions involves costs. This suggests that trade-offs are required between the costs of implementing these charges and the benefits that they create through encouraging more efficient location decisions. The Greater Christchurch Urban Development Strategy Partnership considers that development contributions should be limited to major items (sub. DR103, p. 6). Recovering the costs of small infrastructure assets through sophisticated charges could lead to councils incurring costs to develop and administer charges that exceed the benefits from charging. Hence development contributions should be applied when the benefits of doing so exceed the costs. How this might be determined is considered below.

F8.3

Development contributions are particularly suited to recovering the incremental costs of major economic infrastructure assets, such as trunk water, sewerage and drainage, and major roads. Confining developer contributions to such critical infrastructure would simplify the charging regime for infrastructure arising from development.

Establishing high-level principles

High-level principles can indicate when and how to apply development contributions. Specifying such principles is common in Australia.

Most jurisdictions refer to specific principles or criteria that must be followed before development contributions can be charged for a particular proposal. For example, development/infrastructure plans must demonstrate a *nexus* between the contribution, the need for the service and the development itself. In addition, issues of equity, transparency, accountability and consistency feature prominently in policy guidance related to developer contributions. (Australian Productivity Commission, 2011, p.201)

Box 8.4 provides an example of a set of principles that have recently been proposed for Queensland, but a local consultative process would be needed to develop principles that are relevant for New Zealand. The LGA already sets out general principles relating to how councils should perform their role (s 14) as well as governance principles (s 49). However, because these principles are applied in a broader context, they may not provide adequate guidance for development contributions; whether this is so could be considered through a consultative process. It is possible to infer some principles relating to setting developer contributions from s 101(3) of the LGA, but they are not explicit.

Box 8.4 Principles for improving infrastructure charging

The Queensland Infrastructure Charges Task Force proposed principles for improving infrastructure charging:

- **Certainty:** Infrastructure charges should be predictable with respect to the quantum and timing and in accordance with the declared regime.
- **Transparency and accountability:** Infrastructure charges should be transparent, understandable and defensible. Infrastructure charging regimes should be supported by publicly accessible information regarding the determination of the charges and the allocation of the funds generated.
- **Equity and reasonableness:** Infrastructure charges should be shared for the benefit of all Queenslanders with regard to the affordability for the community, industry, government and property owner.
- **Simplicity and consistency:** Infrastructure charges should be clearly defined in line with published methodologies and schedules. Infrastructure charges should be derived, collected, held and spent consistently across responsible authorities.

- **Efficiency and economic impacts:** Infrastructure charges should not unnecessarily inhibit allocative, administrative or transactional efficiency, so as to facilitate development.

Source: Final Report of the Infrastructure Charges Task Force, Recommended Reform of local government development infrastructure charging arrangements, Brisbane, March 2011

Refreshing the best practice guide to development contributions

With the application of development contributions appropriately limited to significant infrastructure, the next step is to improve implementation so that when they are used they are efficient, equitable, transparent, and do not unduly penalise new development. Guidelines would help councils to achieve this.

When development contributions were introduced in 2002, the Government established a collaborative initiative between Local Government New Zealand, SOLGM and the Department of Internal Affairs, to assist councils to implement the new legislative framework. A Best Practice Guide to Development Contributions was developed under the auspices of this group and published in 2003. This guide sets out the requirement of the LGA and RMA regarding development and financial contributions; guides users through the stages of analysis and the process that the legislation contemplates; and sets out recommendations for good practice in managing the necessary systems and processes (Local Government New Zealand 2003).

The authors saw the guide as “very much a first edition” and intended to produce a second edition in 2004, including additional methods, case studies and worked examples (Local Government New Zealand 2003, p. 7). The Commission understands that this did not happen. Given that there has now been an additional eight years of experience since the guidelines were published; that there are concerns about the ways in which development contributions are being implemented; that development contributions are important for funding infrastructure, and signalling its cost; and that they affect housing affordability, the Commission considers that it is time for an update.

Several submissions support this proposal. SOLGM considers that, given that a body of experience has now been developed in this area, redeveloping good practice guidance would be appropriate (sub. DR143, p. 4). Tauranga City Council commented that developing new guidelines would provide an opportunity to resolve shortcomings or uncertainties associated with development contribution provisions in the LGA (sub. DR77, p. 10). Similarly, Civic Futures Limited suggested that updating the guidelines could yield principles that could be reflected in legislative amendments. The guidelines would need to be consistent with the LGA and could include a standard terminology, a default approach with departures for specific situations, and a standard way of setting out the information (sub. DR112, pp. 6-7). The Salvation Army supported updating the guidelines and including them in a statute (sub. DR76, p. 6). Todd Property Group also supported re-writing the guidelines, which it believes should include a cap on the level of services considered necessary to accommodate growth (sub. DR95, p. 3). SOLGM, however, points out that capping charges may prevent them from being set at efficient levels (sub. DR143, p. 5).

The Western Bay of Plenty Region warned, however, that it would be extremely difficult to develop a “one size fits all” set of guidelines (sub. DR136, p. 5).

Content of the guidelines

The current guidelines include chapters on methodology; policy; processing applications; and the integrity of development contributions policies. All of these issues would need to be covered in revised guidelines. There may be additional issues. For example, Wellington City Council suggested that the guidelines should cover: technical parameters to guide the self and special assessment process; advice on a mechanism and incentives to reduce disputes; guidance and a process for resolving conflicts in a low-cost way; operational guidance for council officers; and guidance to provide a level of standardisation across the country where possible (sub. DR111, p. 13).

Amongst the issues the update should consider – in addition to those suggested by Wellington City Council, for example – are when development contributions should be used; the process for calculating contributions; and cost recovery.

When development contributions should be used

The guidelines should indicate when to apply development contributions. As noted above, it is likely to be efficient to use these charges for infrastructure that exceeds a threshold size and where the incremental costs attributable to a new development can be established. One option is to specify a monetary threshold, but this is inevitably arbitrary.

A less prescriptive option would be for councils to consider a set of questions to help them to determine when they should use development contributions.

- Is the council (or a council agency) the appropriate supplier? (This can be resolved by considering whether the infrastructure would otherwise be supplied commercially, considering factors such as those outlined in Box 3) and, if not, whether the project would yield net benefits.)¹⁰⁶
- Is the infrastructure investment required as a condition of consent under the RMA? (If so, RMA processes for setting and exacting financial contributions should be followed.)
- Is the investment (i) of a sufficient scale to justify separate funding, and (ii) required predominantly to meet the needs of new development?
- Are the benefits of the infrastructure asset generated within a narrowly defined area or across a broader community?
- Are there alternative methods of infrastructure funding that may be preferable, taking into account factors such as administrative ease, community acceptability, continuity, likely yield, and transaction costs?

Case studies and worked examples would assist councils to make the judgements required in considering these questions (and others that might emerge from consultation).

Improve the calculation of the charges

The efficiency argument for infrastructure charges is that they will face the users of infrastructure with the additional costs imposed by development and thereby influence the underlying investment decisions: whether and where to develop, at what scale, and over what period. A landmark legal case was the challenge mounted in the High Court by Neil Construction Ltd and others against the North Shore City Council policy on development contributions promulgated in the LTCP for 2004–2014. This reaffirmed the importance of demonstrating the connection between the development (defined relative to the demand it creates for reserves and infrastructure), the direct impact on a council's capital expenditure requirements, and the consideration of alternative funding sources.

Efficiency will be served if charges are aligned with the additional costs to which a development gives rise and if development contributions (i) reflect the long-run incremental costs of additional capacity, (ii) allow for capacity or changes in service levels that benefit parties outside the development, and (iii) do not impose undue transaction costs on either councils or the developer (and subsequently occupants of the development).

Having established the grounds for charging contributions, the Best Practice Guidelines could develop and expand provisions in the existing guidelines where necessary, urging councils to:

- identify the total cost of the capital expenditure that the local authority expects to incur in respect of the community facility, or activity or groups of activities, to meet increased demand resulting from growth within a district, or part of the district;

¹⁰⁶ SOLGM considers that the question of what is appropriate for public ownership is a separate issue and should not be inserted into a discussion about funding mechanisms, and a decision for the elected representatives of the local community (sub. DR143, p. 7). However, including this question in a threshold test is not intended to over rule local decisions, but simply to encourage local decision-makers to consider who is the appropriate supplier.

- identify the share of that demand, using the units of demand for the community facility or for separate activities or groups of activities, as the case may be, by which the impact of growth has been assessed (LGA 2002, Schedule 13, 1);
- assess proportionality, by making provision for a share of identified costs to be funded from general rates to allow for benefit leakage, adjustments to service levels, contribution to community-wide objectives in the Long Term Plan, and to share risk where the development is consistent with such objectives.

Cost recovery

Some variability in infrastructure charges may arise from different approaches to measuring and allocating costs. While different approaches may sometimes be appropriate, the revised guidelines might establish some conventions, along with a requirement for councils to explain their reasons when they depart from the convention. Examples include:

- calculating contributions over the projected capacity life of the asset (years to 100% uptake), subject to sensitivity testing and some provision for under or over shooting;
- the basis for calculation of incidence of charges might include an average per dwelling charge across all development; variations by dwelling type; variation by location; or more complicated formulae;
- the minimum time period for setting fees (ideally a minimum of three years, to align with triennial reviews and provide for some predictability) and any provisions for indexing.

Legal status of the guidelines and principles

SOLGM pointed out that there is a distinction between guidelines and legislation. Guidelines are a tool for encouraging continual improvement, are 'softly enforceable' and can be readily updated. Legislation, on the other hand, is inflexible, and "the purpose of stating standards in law is not to achieve improvement but to improve compliance" (sub. DR143, p. 5).

The Commission agrees with these reasons for not incorporating the guidelines into the LGA. However, it considers that there should be a statutory obligation on councils to have regard to the guidelines when setting development contributions. The guidelines would not be prescribed in legislation – because 'best practice' is likely to evolve with experience – and councils would have the capacity to depart from the approach in the guidelines when they can demonstrate reasonable grounds for doing so.

While best practice can change, high-level principles for guiding charging practice normally do not. Any explicit principles that emerge from this process could be included in Schedule 13 of the LGA, which sets out the methodology for calculating development contributions.

The process for developing the guidelines

Submissions supported the draft recommendation that the guidelines be updated through a consultative process that draws on the experience of councils and the industry. This process could also draw on analytical work on the operation of development contributions (for example, Covec, 2010).

The 2003 guidelines were developed as a collaborative initiative between Local Government New Zealand, SOLGM and the Department of Internal Affairs. SOLGM is interested in being involved in developing revised guidelines (sub. DR143, p.5) and Palmerston North City Council recommended that local government should play a leading role in developing new guidelines (sub. DR122, p.4). A consultative process would help to avoid the problem identified by Tauranga City Council: that the revised guidelines could become excessively prescriptive and rule out good practices (sub. DR77, p.9). Industry and expert representatives should be involved in developing the guidelines. However, the Department of Internal Affairs is in the best position to determine the composition of the group that should develop the guidelines and facilitate its work.

R8.1

- The Department of Internal Affairs facilitate a consultative process for updating the Best Practice Guidelines to Development Contributions and developing a set of high-level principles for development contributions, taking account of the experience of both councils and the industry.
- The Best Practice Guidelines include a proposal that councils consider a set of threshold questions to help them to determine whether to apply development or financial contributions to particular infrastructure assets.
- The Local Government Act 2011 be amended to include a statutory obligation on councils to have regard to the Best Practice Guidelines.
- Principles for applying developer charges be included in Schedule 13 of the Local Government Act 2011.

Encouraging conformity with the Guidelines

While revising the Best Practice Guidelines would be helpful, on its own it may have limited impact, particularly if they do not have legal force. A range of measures would help councils both to implement the Guidelines and strengthen their incentives to do so. These include training, reporting and quality assurance.

Training

While councils now have considerable experience in implementing development contributions, there is room to enhance skills. Moreover, training would be required in relation to new processes or approaches that emerge from a new set of Best Practice Guidelines. Councils that supported training included Wellington City Council (sub. DR111, p. 13). Tauranga City Council indicated that it could offer expertise based on its extensive experience (sub. DR77, p. 12). SOLGM also would be willing to participate in providing training (sub. DR143, p. 6).

The amount of training that would be needed cannot be specified in advance, as it would depend on how much the Guidelines change. Recovering a significant proportion of the costs of training on a user pays basis would help to encourage an appropriate level of investment in it.

Initiating a training programme is likely to require leadership from central government. The training itself may be provided by councils (some of which appear keen to be involved) and/or by independent experts, drawing on industry and council experience.

R8.2

- The Department of Internal Affairs initiate a training programme to enable councils to enhance their skills in implementing the proposed Best Practice Guidelines for Development Contributions.

Reporting and quality assurance

Monitoring the performance of councils in implementing the Guidelines would strengthen their incentives to improve outcomes, while also providing information about how well the new Guidelines are operating and providing early warning signals about whether they need to be amended. Monitoring would also help to address the concerns of some submissions that development contributions can be set too high. The incentives would be further strengthened through external assessment of councils' application of the Guidelines.

In the draft report, the Commission recommended that the Government develop a process for regular auditing to assess councils' adherence to the Guidelines. SOLGM, however, pointed out that development contributions policies are already publicly available and that "to a large degree" the information and assumptions underpinning contributions policies are subject to audit of draft LTPs by the Audit Office (sub. DR143, p. 7). Tauranga City Council questioned the need to have both reporting and auditing processes, which would create additional costs both for councils and central government (sub. DR77, p. 13).

The Commission acknowledges that there is some auditing of development contributions policies and that it would be wasteful to set up a new process that duplicates this. It also notes that the purpose of an audit is typically to verify that the subject of the audit has been completed or is operating according to approved standards, practices or regulations. This differs from the aim of the process that the Commission has in mind, which is to use information provision and the exchange of experiences in applying the Best Practice Guidelines to encourage continuous improvement of the development and implementation of development contributions policies. To the extent that this improves practice, it will reduce any costs associated with poor implementation of development contributions and the prospects of appeals or litigation.

There are many different options available, with different combinations of the amount of data that would be reported, the number of councils whose policies and practices would be assessed, the frequency and depth of the assessments process, and the mechanisms for disseminating any lessons emerging from the assessment. The composition of those involved in the assessment is also important. Involving practitioners in the assessment – both from councils and industry – would provide useful perspectives, provided that participants approached the issue objectively.

To reduce the risks of an onerous reporting and assessment process, the approach could be determined as part of the process for developing the new Guidelines, which, as recommended above, should involve councils. Council involvement – along with other stakeholders – in developing and assessing options would help to identify options that generate the largest net benefits.

R8.3

As part of the consultative process for updating the Best Practice Guidelines to Development Contributions, the Department of Internal Affairs:

- identify information that councils would need to provide in regular reports to demonstrate performance against the Guidelines;
- develop a process for assessing this performance: identifying problems and how to address them; disseminating this information to councils; and, where necessary, using lessons learnt to inform changes to the Best Practice Guidelines.

Avoid gold-plating

Over-charging for infrastructure may be caused by so-called gold or green-plating, which may become an issue if councils have weaker incentives than do developers and homebuilders to select the option that is most cost-effective over the life of the infrastructure. This may happen, for example, when imposing a high capital cost solution on a development increases contributions above what they need to be, either to achieve conformity with service standards elsewhere or to reduce the council's exposure to future costs.

Todd Property Group pointed out that councils determine their own levels of service, which can lead to "gold (or green) plated standards" (sub. DR95, p. 3). And, as noted earlier, councils may have an incentive to choose options that build in capital expenditure up-front rather than over time, or that favour capital costs over maintenance expenditure, if they expect that it will be more difficult to recover costs later on. The Commission has received anecdotal evidence that projects with weak efficiency or equity merits may still be pursued and that councils seldom compare projects on a lifecycle cost basis. As such, the focus may be on options that are more expensive up-front (at the expense of developers and purchasers), but cheaper to maintain.

The options outlined above, aimed at improving the way that charges are calculated and levied, and increasing transparency and accountability, may reduce incentives for gold-plating but are unlikely to remove them. Whether councils choose the most efficient amount and type of infrastructure will be affected more by factors such as the extent of competition among councils to attract development and on the broader governance framework within which councils operate. Analysis of this broader framework would include issues such as:

- the appropriate role for councils in planning and providing infrastructure such as the 'three waters' (which in some jurisdictions are not provided by councils);

- the appropriate corporate form for the entities that provide infrastructure when provision remains a council responsibility;
- reporting and accountability arrangements.

Careful analysis of whether councils are best placed to supply infrastructure services such as water is warranted, although this is beyond the scope of this inquiry.

Should legal challenge be more accessible?

The problem

The recommendations in this chapter are aimed at increasing councils' capabilities and incentives to improve the setting and implementation of development contributions. Incentives could be strengthened further by increasing the scope for challenge.

As noted earlier, the LGA does not allow objections to the Environment Court regarding development contributions. Unless the DCP itself allows scope for some level of challenge, the sole avenue for those levied is to apply to the High Court for judicial review or a declaration. Appeals to the High Court are expensive and so would only be contemplated for the most significant cases. While councils can be expected to take a responsible approach to setting developer contributions, they also face pressure to reduce property rates and so may be tempted to increase infrastructure charges above efficient levels, if they do not expect to be challenged.

One reason for greater industry acceptance of financial contributions compared with development contributions appears to be the capacity to challenge council decisions in the courts on their merits under the RMA 1991. The knowledge that their decisions may be challenged strengthens incentive for councils to achieve a satisfactory outcome in the first place and enhances learning over time and the transfer of experience and knowledge among councils and developers.

Options

There is a hierarchy of options for resolving disputes, with varying costs and degrees of formality.

- One relatively informal and low cost option is for the Government to include in the LGA a dispute resolution process equivalent to the one in s 8AA of the Resources Management Act 1991. This enables councils to refer issues to mediation by an independent mediator, and requires councils to have regard to the mediator's report when it makes its decision. Mediators would need to be familiar with the principles and practice of development contributions.
- Limited hearings before independent Commissioners could provide a process for ensuring that a dispute is resolved – through a decision by a Commissioner, if necessary – which may not necessarily happen through mediation.
- Another option – that is already available – is to involve the Ombudsman. S 13(1) of the Ombudsmen Act 1975 empowers the Ombudsman to "investigate any decision or recommendation made, or any act done or omitted...relating to a matter of administration by bodies that include councils."
- A level beyond these processes would be to permit disputes over charging for development contributions that could not be resolved elsewhere to be taken to either the District Court or the Environment Court, rather than going direct to the High Court, as at present. If this option were available, the Ombudsmen would no longer be able to investigate complaints about these issues (see s 13 (7) (a) of the Ombudsmen Act).

The views in submissions

The Commission's support in the draft report for a merit-based legal challenge was opposed by local government. SOLGM is concerned that the grounds for challenge could be very broad, which would be inappropriate in principle and practically unworkable and would cast the courts "into a role of second guessing policy decisions that have been made through legally mandated democratic processes". SOLGM

suggests that an appeal process would add to delays, and could encourage councils to instead use rates and user charges, against which there is no appeal (sub. DR143, p. 8).

Tauranga City Council's view is that "if development contributions policies have to be consistent with the Guidelines and compliance is monitored then there would be no need for a merits review mechanism" (sub. DR77, p. 13). Palmerston North City Council also opposed this proposal, which it believed would discourage councils from providing infrastructure as the risk of not recovering these costs would increase significantly (sub. DR122, p. 4). Civic Futures Ltd, which advises public sector agencies, argued that the predictability and certainty about sources of funding would be weakened if challenges could be made too readily, and that the issues that the Commission proposed to be covered in a merit-based test are already provided for in legislation, and could in some cases be strengthened through best practice guidelines (sub. DR112, p. 6).

Todd Property Group, on the other hand, strongly supported judicial reviews of the merits of decisions relating to development contributions and argued that existing measures prevent frivolous litigation (sub. DR95, p. 3). The Local Government Forum supported a merits-based test, to discourage local authorities from setting excessive or unreasonable development charges. It considers that the possibility of challenge would reduce the likelihood of litigation generally (sub. DR108, pp.14-15). The New Zealand Chamber of Commerce supported the proposal for a merits based test (sub. DR144, p. 2). Affordable Housing New Zealand argued that a merits-based approach would be contestable, although merits based tests would need to be gauged against a national benchmark to avoid ambiguous decisions (sub. DR72, p. 1).

The Department of Building and Housing (DBH) helpfully articulated the advantages and disadvantages of access to merits-based legal challenge (sub. DR 140, pp. 4-5). The advantages are that it would encourage:

- consistent methodologies for differentiating between growth-related costs, asset renewal and changes in service level;
- transparent processes and methodologies for assigning benefits and costs to capital works processes;
- consistent methodologies across local government;
- a focus on major infrastructure capacity upgrades;
- greater transparency and accountability in councils' decision-making.

The Department suggested that the disadvantages mainly relate to possible appeals against decisions, which could:

- shift decision-making to the judiciary, and so reduce transparency and accountability of those decisions to ratepayers;
- be used by unscrupulous interests to hold up adoption of councils' Long Term Plans, which must be adopted by July 1 of the relevant year;
- strengthen the voice of minority interests;
- delay council projects and the projects of developers relying on the relevant literature.

The Department considers these disadvantages could be overcome by:

- amending the Local Government Act to specify more clearly how and when and for what purpose development contributions may be used;
- providing clear guidelines (statutory or non-statutory) about the methodologies to be used;
- timing the merit testing early in the cycle for establishing the council's financial strategy, and providing opportunity for full engagement and debate;

- establishing appeal mechanisms that would ensure issues were settled prior to development of the LTP, for example through mediation or arbitration. This could perhaps be established in the Local Government Act, providing an alternative to Court adjudication.

Frivolous litigation could be avoided by:

- requiring proof of “standing” relevant to the assignment of costs and benefits under the development contribution policy. This will be particularly difficult to do without impinging on the appeal rights of general ratepayers who disagree with the costs and benefits assigned to a particular growth-related project. Proof of “standing” would provide the Court with a test for the merit and relevance of the appeal and still maintain the right for people to have their say;
- awarding costs appropriately.

DBH noted that the process for recognising “standing” and the hearing of appeals may strain Court resources. The Courts would need to be appropriately resourced to deal with matters in a timely and efficient manner – particularly if the appeal materially affects adoption of a council’s Long Term Plan. An alternative non-Court based process would avoid this (sub. DR140, pp. 6-7).

The Commission’s view

Councils face limited contestability when they set development contributions. Making it easier for developers and others to challenge the application of development contributions would increase contestability and consequently strengthen the incentives for councils to follow good practice when they set and implement these charges. This should reduce some of the problems described in this chapter. But there is a range of review options, as outlined above. To provide a basis for choosing between them, it is useful to assess against the following attributes and trade-offs:

- the costs involved in pursuing a review, which are likely to increase with the formality of the option;
- accessibility, which is reduced with more formal options. For example, the High Court is less accessible than the Ombudsmen;
- timeliness of decisions, which is likely to be slower with more formal processes;
- the authority of the decision, which will be greater with formal rulings handed down by courts than with the outcomes of mediation;
- the impact on the incentives of councils to follow good practice in setting and implementing development contributions. The situation here is less clear. For example, while the scope for review by the High Court provides strong incentives for councils to follow good practice, this incentive is weakened if the probability that a case will reach the High Court is low, as seems likely for all but the largest instances.

Assessing the different options against the criteria in Table 7.3 does not indicate a clearly superior approach. Less formal options are less expensive, more accessible and faster, but their outcomes may have less authority, which in turn may weaken their impacts on incentives. While the choice between options is not straightforward, the Commission considers that there are four reasons for introducing initially only the least costly option; namely, amending the LGA to include provision for councils to participate in mediation when there is a dispute, equivalent to s 8AA of the RMA. First, it is the least costly option of the ones outlined above. Second, while there is a risk that mediation may not generate significant benefits if parties do not enter into it in good faith, this risk would be reduced by placing the provision for mediation in legislation and by the already existing right to complain to the Ombudsmen, who might be more willing to investigate a complaint when a council had refused to allow mediation of a dispute. Third, introducing a right to appeal to either the Environment or District Court would remove the opportunity for the Ombudsmen to investigate complaints. Fourth, increasing access to mediation does not rule out increasing access to courts later if mediation turns out to be an ineffective option.

Table 8.3 Dispute resolution mechanisms – key attributes and trade-offs

Option	Cost	Accessibility	Timeliness	Authority of decision
Mediation	Low	High	Fast	Not binding
Ombudsmen	Low	High	Fast	Not binding
Arbitration	Higher	Medium	Fast	Binding
District Court/ Environment Court	Higher	Lower	Slower	Binding
High Court	Highest	Lowest	Slower	Binding

While the Commission is not inclined to recommend at this stage more formal (and costly) options, enhancing legal appeal rights to the District or Environment Court should not be ruled out.¹⁰⁷ The size of any additional net benefits from providing access to one of these courts will depend on the costs involved and on whether the strategy outlined in this chapter, including easier access to mediation, improves the use of development contributions. The Department of Building and Housing should therefore monitor how well development contributions are operating, drawing on the information provided in the performance assessment process proposed in recommendation 8.3. Within, say, three years, the Department should advise the Government about whether there is a need to increase the scope for legal challenge through the District or Environment Court.

R8.4

- The Government include in the LGA a dispute resolution process equivalent to the one in s 8AA of the Resource Management Act 1991.
- The Department of Building and Housing monitor the use of these appeals and within, say, three years, provide advice to the Government about whether there is a need to increase the scope for legal challenge of development contributions.

¹⁰⁷ Given that providing such rights would rule out investigation of complaints by the Ombudsmen, it may be sensible to allow access to the District or Environment Court above a threshold level, so that the Ombudsmen can investigate smaller complaints.

9 Building regulations and affordability

Key points

- The regulatory framework can affect the cost of building or renovating a house by imposing standards that exceed what well-informed consumers would otherwise choose. It is important that the regulatory process identify the costs, risks and benefits of adopting changes to building standards to ensure effective and efficient outcomes.
- The costs arising from slow and uncertain administration of building regulations and inspection services can be substantial and are largely passed on to home buyers. They deserve greater attention from building regulatory authorities.
- Many inquiry participants raised concerns about quality, timeliness, cost and consistency in their interactions with the building control system. Relationships between building practitioners and building consent authorities were poor in some areas. These tensions are likely to impede the effectiveness of the regulatory system.
- Local authorities administering building regulation face challenges in acquiring, retaining and supporting the necessary technology, skills and judgements to perform their role to a high standard.
- Achieving greater scale and better use of available technology, to ensure faster dissemination of information, greater consistency and quality, and faster processing of residential building consenting and inspection services, is both feasible and desirable.
- The development of rapid and effective feedback mechanisms which enable emerging deficiencies in building practice to be identified, diagnosed and remedied promptly is required to improve the performance-based regulatory system.
- A lack of clear pathways by which alternative solutions can become acceptable solutions may be creating a barrier that impedes cost-reducing or quality-enhancing innovations becoming mainstream practice.
- Building Consent Authorities face strong incentives to be risk averse, especially given the liabilities they have incurred in the wake of leaky homes. Reforms are being implemented that will reallocate risk among the parties to building work. The evaluation of the reforms should focus not only on whether they are effective in addressing the problem but also on the costs imposed by the new requirements.
- There is little quantitative or qualitative information on the quality of the New Zealand housing stock. Such information would provide a source of data for policy development and monitoring purposes which is currently missing.

Regulation has a bearing on the quality and cost of residential building in New Zealand and, as a result, on housing affordability. It is important that regulation is effective in achieving its objectives, while not imposing unnecessary costs, impeding innovation or creating unnecessary barriers to efficiency. This inquiry has been conducted at a time when regulatory reforms are being implemented to improve the quality of building work (Box 9.1). This chapter considers whether there is further scope to improve the effectiveness and efficiency of building regulation beyond the reforms already envisaged.

The chapter describes the rationale for building regulation and describes the regulatory framework. It outlines the ways in which building regulations can increase the cost of housing and it considers the scope for improving the quality of regulatory decision-making and for reducing the costs of administration and compliance. The chapter also looks at two important issues that impact on the cost and quality of residential

building – the allocation of risk between builders, designers and Building Consent Authorities (BCAs), and the extent to which the regulatory environment encourages successful innovation and responds to failures in building materials and designs.

Based on the Commission’s findings, the final section makes a partial assessment of the quality of New Zealand’s building regulation against key criteria for good regulatory practice.

9.1 Why have building regulation?

Information asymmetry and consumer protection

Most home owners engage with builders infrequently, when they are building or renovating their home, and are not well informed about how to assess the quality of the work, and how building design and construction may reduce the impacts of earthquakes, fires or water ingress. They typically have little knowledge of the construction process, or of how to assess the quality of workmanship, particularly since faults are often hidden within the building and may not become evident for some years. The bespoke nature of much home building in New Zealand makes it more difficult for consumers to compare the building work being done for them with the work done for others.

What is noticeable in the residential construction industry is the comparative absence of ‘brand risk’. Large companies in other industries are very protective of their brand, which provides a strong incentive for quality control. They will also take rapid steps to recall a product or correct a problem for fear of damaging their brand reputation. For example, motor vehicle manufacturers move swiftly to recall vehicles with defects because of the risk to brand. Unlike the motor vehicle industry though, New Zealand has only a few residential construction firms of any scale with a recognisable brand and because house construction is much more bespoke than standardised, there are not the opportunities for production-line quality control.

Building in New Zealand involves extensive subcontracting arrangements, so the lead building contractor has the key relationship with the consumer. Consumers have very little leverage when there are problems with the work done by subcontractors, other than through the lead contractor.

Consumers may also not be in a position to assess the financial strength of builders, and building companies may not be around many years into the future to remedy any faults. It can be difficult and costly for home owners to hold building practitioners to account once building work is paid for, particularly given the high level of firm turnover within the building and construction industry (Chapter 10).

Market institutions have developed to reduce these problems: for example, architects or other specialists can project manage building work for consumers; industry associations can provide advice about the quality of builders; companies or industry associations can provide warranties;¹⁰⁸ insurance can limit consumers’ exposure; and there are dispute resolution processes. But consumers may find it prohibitively expensive to rely on project managers or dispute resolution processes, or to enforce implicit or explicit warranties, and insurance is not always available. The case for regulation is based on an assessment that market solutions that correct for information asymmetries or protect consumers are not sufficient and that regulation can improve market outcomes.

Balancing the costs, risks and benefits of building regulation

Building regulation was introduced in New Zealand following the 1931 Napier earthquake and resulting fires.¹⁰⁹ The building control system has undergone many changes since that time and includes, for example, performance standards around durability, waterproofing and insulation that have added to the quality, and the cost, of housing.

¹⁰⁸ Two builders’ associations (Registered Master Builders Federation of New Zealand (RMBF) and Certified Builders Association of New Zealand (CBANZ)) offer financial guarantees of building work. Both provide cover for non-completion of work and for latent defects (with some limitations and exclusions, including time limits). For both associations, the original building contractor has the primary obligation for repairing any damage, and the guarantor has a secondary obligation.

¹⁰⁹ The ability to escape from a building in the event of fire is still enshrined in the legislation today.

In 1992, the Building Act was overhauled to encourage the use of new innovations in building design, materials and methods of construction. The new performance-based approach to building regulation was subsequently pared back in the Building Act 2004 as a result of leaky homes.¹¹⁰ Further changes are now being implemented to provide greater consumer protection and improve the quality of building work (box 9.1).

Box 9.1 Reforms to building regulation

The package of reforms to building regulation, some of which have been implemented and some of which are still under consideration, include:

- changes to the Building Act to clarify the roles and accountabilities for building work and Building Code compliance between designers, builders, building owners and BCAs;
- new legislative provisions to enable consumers to better hold building contractors to account;
- a Licensed Building Practitioner (LBP) scheme to improve skills in the industry;
- work which is critical to the integrity of a building to be carried out by a LBP;
- for a building consent, the building design must be done by a licensed designer, registered architect or chartered professional engineer;
- written contracts for work over a prescribed minimum price, which identify the lead building contractor and make clear the work contracted for;
- a requirement for disclosure about what surety backing the building practitioner has available to meet the implicit warranties in the Building Act;
- provision of more information and guidance to home owners to help them understand and manage the risks associated with building work and the guarantee products and services available in the building sector;
- a risk-based approach to building consents to ensure that the amount of checking and inspection required is matched to the complexity of the work, and the skills and the capabilities of the people doing the work.

Sources: Department of Building and Housing, Building Act Review discussion document, 2010; Department of Building and Housing, sub. 55, p. 31; and Office of the Minister of Building and Construction, Building Act Review: Regulation of guarantee products and services Cabinet paper.

The Canterbury earthquakes and the cost of repairs has led some to question whether the Building Code should be amended to make buildings more resistant to damage or more easily repaired after an earthquake event.

One of the founding principles of the current Building Code is to protect life safety as far as possible, but it is less concerned with damage to buildings. One of the broad philosophical questions to be reviewed is whether New Zealand as a society wishes to review this approach. New design techniques are being researched to reduce damage in the event of earthquake, but these are still in their infancy. However, even current conventional design techniques can be employed in ways that will be more resistant to damage, but possibly at the expense of some utility in the buildings, and greater construction cost. (Batchelar et al, 2012).

¹¹⁰ In 2002 problems with leaking and rotting became evident in houses that were constructed in a 'Mediterranean style' using monolithic cladding. The new type of design relied on careful construction to avoid rain water, driven by wind, penetrating the outer envelope. If water gets in, it needs to get out again otherwise it leads to rotting framing, and because the rot occurs inside the walls it can be some time before problems are detected.

Building regulation inevitably comes under the spotlight when there are traumatic events. The case for changing regulation, however, must always be made by careful consideration of the risks, costs and benefits.

As Standards New Zealand (sub. DR146, p. 3) notes: “How and where the balance ... is struck between the level of risk acceptable by the community, and the costs associated with raising mandatory building standards, materially impact on the issue of housing affordability”.

9.2 The regulatory framework for residential building

The Building Act 2004

In New Zealand, residential building is controlled by the Building Act 2004. The Act (section 3) provides for the setting of performance standards for buildings, to ensure that:

- people who use buildings can do so safely and without endangering their health;
- buildings have attributes that contribute to the health, physical independence, and well-being of the people who use them;
- people who use a building can escape from the building if it is on fire;
- buildings are designed, constructed, and able to be used in ways that promote sustainable development.

The Building Code, Building Consent Authorities and building consents

Section 40 of the Building Act requires that buildings cannot be constructed, altered, demolished, or removed without a building consent from a Building Consent Authority (BCA), and section 17 requires that all building work must comply with the Building Code. The Building Code is a schedule to the Building Regulations¹¹¹ and prescribes the functional requirements for buildings and the performance criteria with which they must comply.

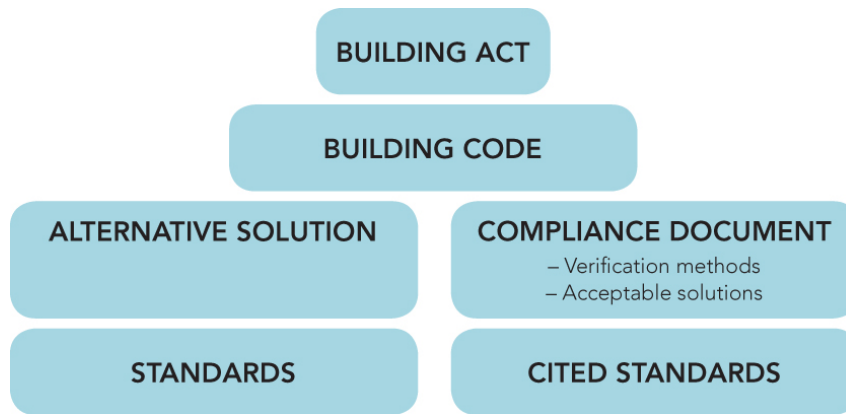
The Building Act 2004 provides for BCAs to be accredited and registered to provide services for processing/granting building consents, inspecting building work and issuing code compliance certificates (section 12 (1)). Currently, all territorial authorities are accredited and registered BCAs. Private organisations can apply to be accredited/registered, but the requirements for registration are difficult for private organisations to meet. There are no private BCAs operating in New Zealand currently. There are some council-owned organisations that have been accredited as BCAs and they carry out some of the tasks of a BCA under contract to the relevant territorial authority, but only the territorial authority BCA can issue building consents and code compliance certificates.

Complying with the Building Code

The Building Code sets a default minimum standard for buildings, which can be exceeded. Builders can comply with the Building Code in either of two ways – prescribed ‘acceptable’ solutions or innovative ‘alternative’ solutions – as illustrated in Figure 9.1. Box 9.2 describes how the system operates.

¹¹¹ The Building Code is a schedule to the old Building Regulations 1992. The only part of the 1992 regulations continuing in force is Schedule 1 which contains the Building Code.

Figure 9.1 Building blocks of the regulatory framework



Source: Standards New Zealand

Box 9.2 How the system works

- The Building Code prescribes functional requirements for buildings and the performance criteria that buildings must comply with in their intended use.
- Compliance documents include verification methods, which are methods of demonstrating compliance with the Code, and acceptable solutions which, if followed, will achieve compliance with the Code.
- Acceptable Solutions are prescriptive guidelines outlining what works for what purpose, whereas Verification Methods outline the testing necessary to meet the Building Code.
- If building designs comply with a compliance document (verification methods or acceptable solutions) then the building must be approved by the BCA.
- If the Licensed Building Practitioner (designer, architect, engineer) does not want to use a compliance document, then the onus is on them to prove that their alternative solution meets the Building Code and to prove to the BCA that their approach is satisfactory. For example, one method might be to get the approach tested by a building research and testing company such as The Building and Research Association of New Zealand (BRANZ).
- The Building Act allows for Standards to be incorporated by reference into compliance documents. Around 230 of the approximately 650 Building and Construction Standards are currently cited in compliance documents. Other Standards can be used as a part of establishing alternative solutions. Under the product certification scheme run by the Department of Building and Housing, a product with a certificate is deemed to comply and it must be accepted by BCAs if it is used under the right conditions.

Source: Standards New Zealand, Department of Building and Housing.

9.3 In what ways can building regulations increase the cost of housing?

The regulatory framework can affect the cost of building¹¹² or renovating a house in six main ways.

1. Imposing standards that buildings must meet with respect, for example, to durability and safety, which exceed levels that well-informed consumers would otherwise choose. This is very difficult to estimate. BRANZ has estimated that increases in changes related to the Building Code, together with new

¹¹² In addition to the building regulations covered in this chapter, there are also territorial authority regulations covering the management of building sites, such as builders refuse, noise and hours of operation, and site fencing. These regulations also add to building costs, but are not considered here.

occupational health and safety requirements, accounted for almost 30% of the increase in the nominal costs of building a 'modal' house between 2002 and 2011 (sub. 40, p. 4).

Material and labour cost increases included building code changes related to clause B1, B2 and E2 changes affecting foundations, framing and wraps/seals. (BRANZ, sub. 40, p. 4)

BRANZ estimates, for example, that window costs were increased by around \$3000 by the introduction of double glazing as a means to meet new thermal efficiency standards (BRANZ, sub. 40, p. 4), although it is not clear to what extent home buyers might have chosen double glazing in the absence of regulation. Additional costs were also generated by the regulatory response to leaky homes, which included requirements for drainage cavities, treated timber and waterproofing at openings (Page, 2008, p.16).

A study of building regulations in Victoria, Australia, surveyed a sample of industry practitioners about the costs of regulatory compliance. Where possible, the survey sought estimates of the incremental compliance costs imposed by regulation – that is, the additional cost imposed above the costs that would be incurred if there were no housing construction regulation. Given the conceptual difficulties of determining the counterfactual, the extent to which the respondents' estimates reflected incremental costs varies. However, the report concluded that meeting standards adds at least 4% to the cost of an 'average house' in that state (Victorian Competition and Efficiency Commission 2005a, pp.21–24 and their appendix C).

- There are costs in administering the regulatory framework, some of which are passed on to home buyers. BCAs process around 80,000 building consents each year, with most processed by the larger metropolitan authorities. Table 9.1 provides the Commission's estimates of the building consent charges of five territorial authorities. The variability in these figures is partly due to local conditions and different charging methods – for example, the adoption of a single consent fee by some BCAs. A survey of 55 territorial authorities reported by the Department of Building and Housing in 2008 shows that the consent process has become more costly over time. Between 2000/01 and 2006/07, consent fees for a small house increased from \$920 to \$1,759, while fees for a larger house increased from \$1,005 to \$1,760 (Department of Building and Housing, 2008, p.9).

Table 9.1 Breakdown of 2011/12 building consent charges by selected territorial authorities

	Auckland	Tauranga	Hamilton	Wellington	Dunedin
Consent lodgement and processing	\$1,234.00	\$1,119.70	NA	\$995.00	NA
Inspections and CCC	\$1,190.00	\$1,554.60	NA	\$1,482.50	NA
Single consent fee	NA	NA	\$3,568.00	NA	\$4,610.00
PIM	\$190.00	\$401.00	\$200.00	NA	\$816.00
Levies	\$831.76	\$800.83	\$772.08	\$780.81	\$769.02
Total	\$3,445.76	\$3,876.13	\$4,540.08	\$3,258.31	\$6,195.02

Source: Productivity Commission analysis of selected territorial authority fee schedules

Notes:

- Data assumes a single 'small' (<145m²) house, and uses average \$/m² by region to estimate dwelling value, in determining which charges apply.
 - 'Levies' (the Building Research Levy and the Building Levy) refers to the BRANZ and the Department of Building and Housing levies applied to all building works above \$20,000, and collected by councils on their behalf. They are not strictly a building consent charge.
 - CCC stands for Certificate of Code Compliance.
 - PIM stands for Project Information Memorandum. A PIM report provides information known to the territorial authority which is relevant to the building proposal, particularly about the site.
- Inconsistent or slow enforcement of regulatory requirements can delay project completion or otherwise increase project costs. The Registered Master Builders Federation commented that:

Not only are regulatory costs greater but the amount of time now required to meet these controls has increased markedly. Far more detailed plans, delays with inspections and longer from concept to consent approval. (sub. 16, p.12)

4. Regulation can affect the incentives to innovate with new materials or processes. In 1991 New Zealand introduced a performance-based approach to building regulation, after years of largely prescriptive controls. Performance-based standards provide more opportunities for innovation whilst prescriptive standards can stifle innovation. The issue is whether the acceptable solution/alternative solution approach for meeting the Building Code, in its conception and implementation, encourages innovations that reduce costs and/or improve quality. There are also questions about how successful innovations that improve quality or reduce costs can become mainstream practice, and how information about deficiencies in materials, designs or building practice can be disseminated quickly.
5. Regulation can influence how risks are shared between different parties – home owners, architects and engineers, builders and subcontractors, material suppliers and regulatory agencies. Risks are best managed by those who have the ability to control them, have the right incentives to make the best decisions, or take steps to prevent problems. When risks are not allocated by those who are best placed to deal with them, quality is compromised and costs increase.
6. The structure of the building consenting and inspection service can influence costs. Small BCAs may suffer from diseconomies of scale or be unable to take advantage of efficiency-enhancing technology, adding to the costs of administering building regulations. Costs cannot be challenged if there is limited contestability in the market for consenting and inspection services – for example, if it is too difficult for private organisations to become registered BCAs, or if home owners are unable to use or discouraged from using the services of a registered BCA outside their local area.

9.4 Are housing standards set at the right level?

Housing standards that are designed to prevent injury and save lives or to keep us dry and warm, or to make our homes more durable or thermal-efficient are not costless. Given that regulations impose obligations, the process through which these obligations are determined matters.

The question of whether the benefits of extensive regulation of building outweigh related costs is vital to the inquiry and warrants further examination. (Local Government Forum, sub. DR108, p. 4)

Changes to the Building Code go through a regulatory review process, which is intended to ensure they are providing the desired benefits without excessive cost. Building Code updates require a Regulatory Impact Statement (RIS) and statutory regulations are tabled with the Regulations Review Committee.

The RIS process plays a particularly important role in ensuring that building regulation is set at the right level.

While quantifying the regulatory impacts can be challenging, we believe it should be incumbent on the regulator to demonstrate that benefits of regulation actually outweigh costs, and exactly why regulatory intervention is warranted. (Standards New Zealand, sub. DR146, p. 3)

However, Standards New Zealand comments that “in our experience, there is a high degree of variability in terms of quality and robustness of RIS work completed for building regulation” (sub. DR146, p. 3).

The Treasury Regulatory Quality Team is responsible for the RIS process. It has a role in providing guidance for agencies and building regulatory capability. It has a medium-term focus on engaging with agencies that are responsible for the regulation of leading sectors, and where there are specific ‘active issues’. These include building weather tightness and earthquake resistance (Release of 2011 Treasury Briefings to Incoming Ministers: Regulatory Quality, pp.6-7)

The Commission considers that the Treasury, as the overall monitor of regulatory quality and processes, and the Department of Building and Housing, as the regulator responsible for the performance of its regulatory functions, should review the quality and robustness of RIS work for changes to the Building Code. Such a review would focus on ensuring that the process undertaken to identify the costs, risks and benefits of adopting changes to the Building Code are consistent with best practice.

R9.1

Treasury Regulatory Quality Team in consultation with the Department of Building and Housing review the quality and robustness of the Department's RIS process for changes to the Building Code.

While individual changes to the Building Code are subject to a RIS process, the *cumulative* impact of changes to the Building Code could be imposing greater costs than is justified by the overall benefits. While this can be difficult to assess, it should be kept in mind as part of the review of the RIS process, and in any future system review of the impact of building regulation in New Zealand.

9.5 Is there scope to expedite the building consent process?

While around 83% of building consents are issued within statutory timeframes, the Department of Building and Housing submission notes "a widespread perception among builders and developers that timeframes are not always met [and time is] wasted in arranging inspections and waiting for building officials to complete inspections before work can proceed." (sub. 55, p. 34)

BCAs must process applications for a building consent within 20 working days of being lodged. They can, however, request further information, which effectively 'stops the clock' until the information is received. There have been suggestions that BCAs request extra information not because they need it to assess the application, but to give them more time to process the information they already have.

While the evidence about unnecessary costs caused by 'stop the clock' arrangements is patchy, the Commission considers that it is worth exploring options to improve the situation. There are several options.

- The 'stop the clock' provision could be abolished.
- 'Stop the clock' opportunities, seeking additional information could be limited.¹¹³
- BCAs could be required to collect data on the number of occasions on which they 'stop the clock', along with their reasons for doing so, perhaps with the addition of random audit by the Department of Building and Housing.
- The Department of Building and Housing could publish the total time taken between receiving applications and finally granting consents for each BCA, and the number of occasions where each BCA has used the 'stop the clock' provision.¹¹⁴

The inquiry has not generated enough evidence to justify abolishing or curtailing the opportunities for BCAs to 'stop the clock'. BCAs may have good reasons for requesting more information and time. The Department of Building and Housing considers that comparing BCA performance would be relatively meaningless, as it would not take into account the quality of applications received, or differences in the complexity of applications (sub. DR140, p.3). The Commission does consider, however, that BCAs should report on the number of occasions that they use the 'stop the clock' provision and their reasons for doing so, and the total time taken between receiving applications and granting consents. This would provide an evidence base to analyse the underlying issues. Auditing a sample of BCAs would help reveal whether there is excessive use of the 'stop the clock' provision. An audit would also take account of the quality of applications.

¹¹³ The Resource Management Act 1991 (RMA) limits the times the processing 'clock' can be stopped for further information requests and when s37A can be used to extend timeframes.

¹¹⁴ Under the Accreditation of Building Consent Authorities Regulations 2006.

R9.2

- The Department of Building and Housing publish, for each BCA, the total time taken between receiving applications and finally granting consents, and the number of occasions where each BCA has used the 'stop the clock' provision.
- The Department of Building and Housing audit the 'stop the clock' information from a sample of BCAs.

Better management of the overall building consent process would also help expedite matters. Saltburn Limited reported that although they do not experience significant delays in the building consent process, they have to "manage it carefully every step of the way" (sub. 7, p. 5).

Carrus Corporation outlines several practical actions that territorial local authority BCAs could take (sub. DR69, p.1):

- A project manager could be appointed by the council to co-ordinate various divisions within the council when there is a major subdivision or building development.
- An online job monitoring system would enable the applicant to check on the status of a consent (this would also provide some accountability).
- Use email as a means of communication rather than letters.
- Rate building companies according to the quality of the information they provide in applications. Those with an A grade would have their application fast-tracked.

These suggest that a more customer-oriented approach is necessary in BCAs interactions with building practitioners while acknowledging the importance of good consent applications.

R9.3

BCAs adopt a customer-focussed approach in their interaction with building practitioners. They should take practical actions that would expedite the building consent process and improve their communication with building practitioners going through the consenting process.

9.6 Is there scope to improve the allocation of risk under the Building Act?

Regulation can influence how risks are shared between different parties – home owners, architects and engineers, builders and subcontractors, material suppliers and regulatory agencies.

Residential consumers and building consent authorities bear the brunt of the risk associated with building work that fails to perform, despite having the least control over the quality of that work. Building practitioners on the other hand are able to manage and mitigate risks through the quality of their work ... while building consent authorities face high risk they do not realise any benefits from risk-taking within the context of a building project, thus creating incentives for building consent authorities to be risk averse. (Department of Building and Housing, sub. 55, p. 32)

Civil action for damages

Building Consent Authorities issue compliance certificates, which verify that the building work complies with the Building Code. If the building is subsequently found to be defective, the home owner can take a civil action against parties for damages. Under tort law, a party can be held liable if there is a duty of care to the claimant; the failure to take care caused the damage; the damage caused the loss to the client; and the loss was foreseeable. All of these links need to be established for a claim to be upheld. Such a claim was upheld in a case against Invercargill City Council (*Invercargill City Council v Hamlin 1994*), which established the precedent for claims against BCAs by home owners with leaky building syndrome.

Joint and several liability

The risk faced by BCAs is compounded by the rule of joint and several liability, which potentially exposes them to the full costs of remediation where building work is subsequently found to be defective. Under joint and several liability, the plaintiff may collect from all or any one of the liable parties until the judgment is paid in full. If any of the liable parties do not have enough money or assets to pay an equal share of the award, the others must make up the difference. The issue for territorial authority BCAs is that because they have the power to levy rates, they have 'deep pockets', relative to other parties, to meet claims for defective buildings, while the typically small firms in the building industry do not. As a result, BCAs effectively become 'the last man standing'.

To manage or mitigate their exposures, BCAs may become risk averse in their treatment of building consents:

- Inquiry participants commented that BCAs may require more information, take more time in their deliberations and increase the number of inspections, all of which increase costs.

It is apparent to us that the regulators of building consents in local authorities have become very risk averse in the wake of the leaky buildings fiasco and that they pay little regard to the costs of compliance and delay which they impose on builders and consumers. (The Salvation Army, sub. 59, p.4)

Building consent authorities take an unduly risk-averse approach in regulatory decision making, which has resulted in an increase in compliance costs (e.g. documentation requirements, number of inspections etc.) and over-regulation of low-risk building work. (Department of Building and Housing, sub. 55, p.33)

- In addition, inspection processes have become more rigorous, with the average number of house inspections increasing from seven in 2000/01 to eleven in 2006/07 (Department of Building and Housing, 2008, p. 29). These additional inspections add costs not just in terms of the fees charged¹¹⁵ but also in terms of time costs and additional staff to facilitate the inspection process.
- Estimates from the Registered Master Builders Federation suggest that costs such as the need for more drawing details (typically from 10 pages in 2002 to 30 pages in 2007), more office and on-site staff to facilitate the consenting process and additional inspections, and a higher risk margin to allow for building consent time delays have increased total construction costs by approximately 10% (Registered Master Builders, cited in Page, 2008, p.16).

Submissions have highlighted the increased costs associated with the risk faced by BCAs. It is therefore not surprising that BCAs take a conservative approach.

We are puzzled by the implication that it is somehow inappropriate for local authorities to be risk averse. Local authorities owe a fiduciary obligation to their residents and ratepayers. Surely anything other than a risk averse approach would be open to the accusation of irresponsibility, especially when the local authority has often been left as 'the last man standing' for civil claims. (Society of Local Government Managers, sub. 53, p. 5)

The Department of Building and Housing notes in its submission that "while building consent authorities face high risk they do not realise any benefits from risk-taking within the context of a building project" (sub. 55, p.32), and "current regulatory settings are based on a low tolerance for risk and a strong emphasis on the role of government in protecting home owners from risks of building defects and failures" (sub. 55, p.33).

The Government is making changes that will reallocate risks between industry participants. They include reforms designed to protect consumers and make them more aware and improve the skills of building practitioners. From mid-2012, a risk-based approach to building consents will be introduced to ensure that the amount of checking and inspection required by BCAs is matched to the complexity of the work, and the skills and the capabilities of the people doing the work (Department of Building and Housing, 2011a).

¹¹⁵ For example, Christchurch City Council charges a minimum fixed fee of \$122 per building inspection, while Wellington City Council charges an hourly rate of \$150 (Christchurch City Council, 2011; Wellington City Council, 2011).

The Commission considers that, if successfully implemented, stepped consenting could simplify the consent process and help to reduce costs and improve affordability. However, while BCAs have a duty of care in respect of residential home owners for building defects and the rule of joint and several liability remains,¹¹⁶ they have strong incentives to be excessively risk averse in their approach to building consents, especially given the liabilities they have faced in the wake of the leaky homes experience. Such risk aversion imposes costs on the purchasers of new homes in terms of compliance costs and barriers to innovation in design, materials and construction techniques.

The Law Commission has been asked to undertake a more general review of joint and several liability following a review of the application of joint and several liability to the building and construction sector by Buddle Findlay and Sapere Research Group (2011). The Buddle Findlay and Sapere report looked at the impact of joint and several liability on the behaviour of parties in the events leading up to the leaky building episode. The report considered the rule to be fair to home owners and did not recommend a change in the liability rule; however, the report did note that joint and several liability is not well aligned to industry practices. It may exacerbate industry features such as informal contracting, the structure of the industry (lots of small operators, the large number of parties involved in any building project), and the complex and bespoke nature of residential building in New Zealand (Buddle Findlay and Sapere Research Group 2011, p.4).

R9.4

The Law Commission should consider in its review of joint and several liability the interaction between liability rules and the structure of industries and industry practices, and the impact of joint and several liability on the incentives faced by regulators.

Contracts

Another important component of the reform package is the introduction of mandatory written contracts for all residential building work and a requirement for builders to disclose information about their skills, qualifications, licensing status, track record, financial back-up or insurance and dispute history. An update from the Department of Building and Housing in July indicated that the threshold for contracts would be set at \$20,000 (Department of Building and Housing 2011b). While an amendment to the Building Act provides for contracts, it does not specify the threshold above which they will be required. This will be specified in the relevant regulations. While the threshold should be based on analysis of factors such as the transaction costs involved in writing contracts and their benefits in enhanced consumer protection and the clarification of responsibilities, the \$20,000 threshold originally considered is a significant outlay for consumers and seems a sensible starting point for the analysis.

Behavioural changes

It is difficult to know the extent to which the proposed reforms will affect the behaviour of BCAs, building practitioners and consumers. Behavioural changes, for example home owners using the information available to them to understand and manage the risks associated with building work, can take some time to become established.

The Department of Building and Housing's monitoring and evaluation programme is establishing baselines against which the impacts of the reforms can be assessed. The evaluation of the reforms on the allocation of risks between parties to building work will be ongoing.

Notwithstanding the difficulties in measuring the extent of behavioural changes as a result of the reforms and the time it takes for behaviour changes to become fully embedded, the Commission recommends that five years after introduction would be appropriate timeframe in which to report on behavioural changes.

¹¹⁶ Even with the introduction of mandatory contracts for work over a specified sum, civil claims can still be made. As before, a BCA can be held liable in a civil claim if there is a duty of care to the client; the failure to take care caused the damage; the damage caused the loss to the client; and the loss was foreseeable.

R9.5

The Department of Building and Housing report on the impact of the reforms on the allocation of risks between parties to building work, five years after their introduction.

9.7 Is there scope to improve the impact of regulation on innovation?

The Building Code can affect incentives to innovate in building design, materials and construction methods.

The regulatory framework offers two main routes for compliance with the Building Code. Firms with a *high capacity to innovate* (because they are able to experiment with different approaches, to appropriate the profits, and can quickly assess success or failure) can choose the alternative solution route. This is more likely to be the case for larger firms. The regulations tell them what standard they need to comply with and they have incentives to find a least-cost way of meeting the standard. However, there are benefits for the many small firms in the industry in simply 'following the rules' by using a prescribed acceptable solution, as long the Building Code is clear.

While the dual approach for compliance with the Building Code appears, conceptually, to suit the nature of the building industry in New Zealand, the question is whether in its implementation, the dual approach impedes the adoption of innovation. Participants' comments suggest there may be some problems (Box 9.3).

Box 9.3 Participants' views about the impact of regulation on innovation

Department of Building and Housing

Innovation is hampered because there are lower compliance costs associated with low-risk building designs and building systems that comply with Compliance Documents (acceptable 'stock' solutions rather than alternative 'design-led' solutions). There are also productive-efficiency enhancing innovations, in the form of standardisation and mass production, which can be hampered by inconsistent interpretations across local authorities. (sub. 55, p. 33)

New Zealand Green Building Council

Many designers and builders are reluctant to go beyond the current code [acceptable solution] for fear of extra upfront costs and compliance complications involved with different innovative designs. The fears can significantly impact the achievement of better performing homes which in turn impacts the running costs and therefore the affordability of housing. (sub. 60, p.5)

Affordable Housing New Zealand

Unnecessary costs and uncertainty generated by local authorities' interpretation of the design principles is a major contributing factor to time over runs and budget increases. On an AHNZ subdivision the town engineer wanted us to investigate the use of a gravity fed sewer to a different connection point. This took one month and cost over \$5000 with consultants plus holding costs to only find the original approved sewer was the best design. (sub.12, p.7)

Standards New Zealand

The wider building and construction sector would benefit from ... a clear articulation of exactly where and how innovative practice will be monitored and assessed in terms of risks and benefits, should be supported by voluntary Standards, industry guidance documents, or both [and] can evolve into mainstream practice (ie. the criteria and process for recognition of alternative solutions as an acceptable solution and incorporation into either mandatory Standards or in Department compliance documents). (sub. DR 146, pp.3-4).

The potential for building regulations to negatively influence innovation can be summarised as follows:

- The process through which alternative solutions are deemed to meet the Building Code is more costly and complicated than it needs to be.

- BCAs provide insufficient guidance about what it takes for an alternative solution to comply with the Building Code.
- There is a lack of a clear pathway by which alternative solutions can become acceptable solutions.
- BCAs are inconsistent in interpreting the Building Code and it takes too much time.

Establishing an alternative solution

Given that the alternative solution approach is designed to encourage innovation which can improve quality and/or reduce costs, it is important that this process works smoothly. The Department of Building and Housing has issued guidance both to those applying for approval of an alternative solution, and to BCAs assessing and approving those applications. It is up to the applicant to establish that the product or method they wish to use is compliant with the Building Code, either by:

- providing expert opinion (based on testing and analysis) that the product is compliant;
- explaining that the proposed method or material is relevantly similar to current means of complying with the Code, appealing to precedent; or
- demonstrating that the product performs well where it is already in use, and would perform similarly in the conditions specific to the proposed project.

In turn, the BCA must assess whether the applicant has identified all relevant parts of the Building Code, and has demonstrated that the product will meet the requirements of the Building Code. The DBH guidance includes notes on things to look for (such as whether the results of tests performed in other countries would be relevant in New Zealand conditions). The guidance is silent, though, on what sufficient proof would be. Although tests and expert opinions are an obvious way of demonstrating compliance, how a BCA decides how relevant and reliable that information is causes significant uncertainty and cost for applicants.

An alternative to taking a case-by-case approach to assessing compliance of alternative solutions is to have new materials or methods pre-certified for use by a central authority or system. This enables applicants and BCAs to have confidence in those products, without needing to seek further testing or expert opinions. The CodeMark programme (and former product accreditation programme) does this.

Under the CodeMark programme, a producer of a new building material can apply to an accredited assessor to have their product certified as Building Code compliant (if the product is used properly). Under the Building (Product Certification) Regulations 2008, the product must then be treated by BCAs as Code compliant, and consented for as such. The same is true for product certificates of accreditation issued under the Building Act 1991.

Few products have been certified under both regimes. As well, all the incentives are for product manufacturers, rather than applicants through the building consent process, to seek prior accreditation. It is not efficient for a developer or building company to seek certification for someone else's product each time they wish to undertake an alternative method of building. In a practical sense, the time it would take and information requirements would not necessarily be less than going through the consent process without certification. Product accreditation has not provided a timely and cost-effective means for builders and developers to pursue alternative means of complying with the Building Code.

Outside these systems, the BRANZ website contains a range of information about research on building materials and methods, and other matters relevant to the building industry.

It appears that building and design professionals are largely reliant on their own experience and the experience of their peers for learning about and determining how best to move to a new or non-standard technique through the building consent process. While this is to an extent inevitable, the costs of using this process would be lower if there was more guidance about what is required for an alternative solution to comply with the Building Code.

Further, the lack of clear pathways in the regulatory framework, by which alternative solutions can become acceptable solutions, may be creating a barrier that impedes cost-reducing or quality-enhancing innovations becoming mainstream practice.

R9.6

The Department of Building and Housing provide more support to assist designers and Building Consent Authorities to demonstrate and assess how alternative solutions comply with the Building Code.

R9.7

The Department of Building and Housing investigate mechanisms or pathways by which alternative solutions can evolve into mainstream practice.

The MultiProof Building Consent

In 2010 the Department of Building and Housing (DBH) introduced the 'MultiProof Building Consent', which removed the need for the same or similar building designs to be repeatedly assessed for compliance by individual BCAs (Department of Building and Housing, 2011d). However, the Commission found that while inquiry participants supported the principles behind the MultiProof consent, none had been able to make use of it.¹¹⁷ Builders reported that MultiProof consents were not flexible enough to accommodate site-specific requirements and minor design changes sought by consumers. One group builder also noted that the cost of obtaining a MultiProof consent for all of their standard plans was prohibitive. The DBH reports that consents can take up to 40 days and cost between \$900 and \$15,000 depending on the complexity of the building.

The DBH is working to make the consent more flexible. For example, builders are able to specify which zone (for example, the wind loading requirements) they wish the consent to apply to, and the Department is looking at ways to allow for minor design changes by specifying the ranges within which modifications can be made.

MultiProof consents are designed for builders who expect to build ten or more houses over two years. Given that only a few builders are building at this scale, this seems an unnecessary hurdle. If the costs of getting consent reflect the true costs of processing to the DBH there does not seem to be any reason for putting an arbitrary lower limit on the number of houses or the time period in which they are expected to be built.

R9.8

The Department of Building and Housing should review the MultiProof building consent process with a focus on identifying barriers to its application and uptake, and suggest ways to overcome these barriers.

Improving feedback loops

Efficient feedback loops are vital for the fast dissemination of productivity-enhancing innovations, but it is even more important that they allow for rapid dissemination of information about defects in materials, designs or building methods. The experience with leaky building syndrome is illustrative.

It is estimated that between 22,000 and 89,000 homes built between 1992 and 2005 are affected by leaky building syndrome, although a consensus view puts the likely figure at 42,000 homes. The cost of repairing these homes is estimated at \$11.3 billion (PricewaterhouseCoopers, 2009).¹¹⁸ In this case the feedback loop

¹¹⁷The DBH reports that to date 29 MultiProof consents have been issued.

¹¹⁸ This figure needs to be put in context. The performance-based regulatory regime would have resulted in the use of a number of innovative building practices, including the use of monolithic cladding, which would have decreased the cost of building and/or improved building quality since its introduction in 1991. The PricewaterhouseCoopers report was not a full cost-benefit analysis of the change in the regulatory regime. The point being made here is that faster and more effective feedback loops would have prevented continued inappropriate or flawed use of the cladding in designs or construction.

which could have alerted the building industry to concerns was too slow and too weak to change building practices before large-scale problems had emerged. This point was made strongly by the Home Owners and Buyers Association of New Zealand, who argued that if part of an aeroplane failed that information would be circulated around the world in a matter of hours. There seems to be no such mechanism to report defective materials or building processes. The leaky building issue emerged in the US, Germany, Japan and Canada as early as 1975.

Roles, responsibilities and skills

Research on New Zealand's performance-based building control system by Mumford (2011) describes the move from prescriptive to performance-based building regulation in 1991. In the traditional standards-based regulatory regime:

Standards bodies produced standards; designers designed to standards; builders built to standards; regulators checked against standards; and consumers relied on all these participants to produce a building that was fit for purpose. (Mumford, 2011, p.185)

Mumford argues that the introduction of the performance-based regulatory regime redefined roles without changing the embedded expectations, and hence behaviours, of participants. What are the expectations of a performance-based regime?

There was an assumption that the various participants ... in particular front-line regulators, designers, builders and consumers, had the necessary knowledge ... to make judgements that standards committees, in the past, had made on their behalf. (Mumford, 2011, p.184)

Knowledge diffusion and accessibility of information

While the leaky building episode occurred at a time when participants were adjusting to new roles and responsibilities and required new skills, it is also evident from submissions and engagement meetings that the sector continues to grapple with the issues of knowledge diffusion.

Mumford suggests that this is an institutional problem:

The problem of dispersed knowledge could be described as an institutional problem: existing institutions for aggregating, evaluating, codifying, and diffusing knowledge had been sidelined and no substitute had been put in place. (Mumford, 2011, p.185)

The Construction Industry Council submits that a performance-based system of standards needs to be underpinned by a robust framework of information. The Council argues that "...the user pays funding model used for Standards development and access is a barrier to practitioner access and has flow through impacts on sector knowledge, productivity and eventually affordability" (sub. DR141, p. 2).

This raises a question about whether there are purely private benefits, for which a user pays regime would be appropriate, or whether there are wider public benefits from access to information that should be considered. The Commission considers this issue worthy of further investigation.

R9.9

The Department of Building and Housing report on the ways in which the building control system can improve the diffusion of knowledge and information in the building sector, including rapid dissemination of information about defects in materials, designs or building methods.

9.8 Is there scope to reduce the diseconomies associated with many small BCAs?

Currently, 69 territorial authorities process around 80,000 building consents each year, but most are processed by larger metropolitan territorial authorities. Almost all BCAs separately establish and manage their own systems and processes, and they compete in the labour market to maintain sufficient capacity and capability to carry out their functions. There is no requirement that a building consent must be approved in the local authority in which it was generated; in theory a home owner wanting to have building work done

can apply to any BCA for a building consent. This paves the way for consolidation of BCAs; however, small BCAs may:

- Face challenges in acquiring, retaining and supporting the necessary skills, experience and technology to perform these tasks to a high standard. “A number of councils face difficulty in attracting and retaining staff with the appropriate level of skill and experience, and in maintaining effective systems” (DBH, sub. 55, p.9).
- Be unable to take advantage of economies of scale. “Given the low volume of consents processed in some centres, and the application of national building standards, the Department considers that there may be significant economies of scale in a more consolidated approach and has undertaken work to investigate the potential for investing in productivity-enhancing technologies, systems and processes. These potential efficiencies are being forgone under the status quo” (DBH, sub. 55, p.9).
- Be more prone to inconsistent interpretations of the Building Code.

Some inquiry participants (for example, Carrus Corporation Ltd, sub. 8, p. 12) pointed to an adversarial relationship between architects/developers/builders and BCAs. While this is not necessarily a consequence of the small scale of regulators, it may be a contributing factor if it is adding to difficulties in retaining staff and to inconsistencies in interpretation of the Building Code. It is almost certainly likely to hinder diffusion of knowledge, which has been identified as critical for the success of performance-based building regulation.

DBH is exploring opportunities to drive greater national consistency and efficiency in the building regulatory system, including a work programme to lift the performance of consent authorities (sub. DR140, p.8). It notes that while efforts have been made to consolidate building consent functions, the pace of consolidation has been slow (sub. 55, p. 34).

The Commission considers that there could be large benefits from a faster pace of consolidation. The slow progress so far could indicate either institutional barriers to consolidation or that the gains are not as large as may first appear. Because there is no requirement that a building consent must be approved in the local authority in which it was generated, there is no institutional barrier to any BCA having their functions undertaken by another BCA.

The Commission also considered the potential value of greater contestability in the market for consenting and inspection services, such as occurs for motor vehicle testing, for example. The old building certifier scheme¹¹⁹ showed that private building consent authorities can reduce processing times and improve customer service by providing competition and choice.

Private organisations can apply to be accredited/registered but the requirements for registration are a high hurdle and difficult for private organisations to meet. A potentially greater barrier is that a private BCA can be held liable for the full cost of building defects under the rule of joint and several liability (DBH sub. DR140, p.8). Rotorua District Council points to the lack of insurance for private providers of building consent services as a barrier to private firms entering this market (sub. DR93, p.2).

R9.10

Urgency be given to the Department of Building and Housing’s programme to lift the performance of BCAs and promote greater consistency and efficiency in the building regulatory system.

9.9 Measuring the outcomes of regulation

There is surprisingly little information available about the quality of New Zealand’s housing stock. In 2010, the DBH commissioned a report on consumers’ experience of building work based on a survey of

¹¹⁹ The Building Act 2004 makes no provision for private building certifiers to undertake certification work on consents issued after 31 March 2005.

homeowners who obtained building consents in 2005. In previous chapters, the Commission has referred to information about housing quality prepared by BRANZ, and to Statistics New Zealand's general social survey information on attitude towards homes and neighbourhoods. The Commission has not, however, found other information about either the quality of housing or of consumer satisfaction with the quality of the built product or of builders' project management. This information gap compromises efforts to assess whether building outcomes are improving, owing to the efforts of the building industry and its interactions with the regulatory framework.

Data collection about the quality of the housing stock and consumers' experience of the building industry would generate information that would inform policy making and assist assessment of the performance of the industry and of the regulatory framework.

The need for official statistics on housing quality has been added to the list of Tier 1 Statistics. This is an across government look at New Zealand's most important statistics to identify gaps and deficiencies. While information on housing quality has been recognised as a need, it is also recognised that this issue is likely to take longer than the next five years to resolve. In the meantime, the BRANZ House Condition Survey remains an important source of information.

F9.1

This lack of statistical information on the quality of New Zealand housing compromises efforts to assess whether building outcomes are improving, as a result of the efforts of the building industry and its interactions with the regulatory framework.

9.10 Overall assessment

This chapter concludes by offering a partial assessment of the regulatory framework for residential building in New Zealand, based on key features of good regulatory practice (Box 9.4).

Box 9.4 Features of good practice regulation

- The overall benefits to the community justify the costs and are the minimum necessary to achieve this objective.
- Regulation does not impede innovation (is not unduly prescriptive and where possible is performance and outcomes focussed).
- It is administered efficiently and does not impose unnecessary compliance costs.
- It provides minimum incentives for reasonable compliance and can be monitored and enforced effectively.
- It is coherent, readily accessible and communicated clearly.

Source: Adapted from S. Argy and M. Johnson (2003) *Mechanisms for improving the quality of regulations: Australia in an international context*, Australian Productivity Commission Staff Working Paper, July 2003.

The benefits and costs of regulation

The Commission cannot be sure that the benefits of the current building control framework justify the costs. There is evidence of variability in the quality and robustness of RIS work completed for changes to the Building Code, and the cumulative impact of changes to the Building Code could be substantial. The Commission has recommended that this be given attention by the Treasury Regulatory Quality Team and the Department of Building and Housing.

The inquiry has been conducted at a time when a comprehensive package of reforms, designed to reallocate risks between industry participants, is being implemented. They include reforms designed to protect consumers and make them more aware, and improve the skills of building practitioners.

Overall it is difficult to know whether the costs the reforms impose on industry participants will be justified. The Commission will be particularly interested in the impact of occupational licensing of builders – who typically operate as small firms and where there have been few barriers to entry. The impact of the behavioural changes expected, for example home owners using the information available to them to understand and manage the risks associated with building work, are notoriously difficult to measure, but should form part of the DBH's evaluation of the reforms.

Impact on innovation

There is evidence that the regulatory framework, and its interaction with legal rules, impedes innovation in the building industry and efficiency in the building consents process.

The Commission has found:

- The process through which alternative solutions are deemed to meet the Building Code is more complicated and more costly than it needs to be.
- There is insufficient guidance about what it takes for an alternative solution to comply with the Building Code.
- The mechanisms or pathways by which alternative solutions can evolve into mainstream practice are unclear.
- There is poor knowledge diffusion, which likely impedes the uptake of innovation, and slow feedback about emerging problems with new materials, designs or construction methods.
- BCAs do not face incentives to encourage innovation – they face high risk yet they do not realise any benefits from risk-taking associated with the use of new materials or designs.
- There are continuing capability issues in the New Zealand building sector and among those administering and enforcing building regulations, and in some cases poor relationships between the parties.

Administrative efficiency

There is a widespread perception in the building industry that the building consent process takes too much time, and requires too much documentation and too many building inspections, all adding to the cost of building. The Commission also found that there are opportunities to drive greater consistency and efficiency in the building regulatory system through shared use of technology and consolidation of building consent functions. This would achieve desired regulatory outcomes at lower cost.

System monitoring

It is of concern that so little is known about the quality of New Zealand housing. The information gap compromises efforts to assess whether building outcomes are improving, due to the efforts of the building industry and its interactions with the regulatory framework.

Accessibility, communication and coherence

There are a number of measures that could be taken to improve the regulatory framework and the diffusion of knowledge through the sector, provide better and quicker feedback on innovative practices, and promote learning and adaptation. Some of these measures would be directed at improving the accessibility of information, or by more clearly communicating the requirements of regulation – for example, by providing more assistance to BCAs and building practitioners about what is required to demonstrate or assess how an alternative solution complies with the Building Code. Better diffusion of knowledge is also likely to be facilitated by improving the skills and capabilities of BCA staff.

Other measures may be needed to improve the regulatory framework itself, for example by providing clear pathways by which alternative solutions can become acceptable solutions and thereby become mainstream practice.

The issues identified in this chapter require attention from regulatory authorities. They are important for the productivity of the building industry and for their impact on housing affordability.

10 The performance of the building industry

Key points

- The performance of the building and construction industry plays an important role in the supply, quality and cost of new housing, along with the upkeep of existing rental, social and owner-occupied housing. The industry is a significant contributor to the wider economy and poor productivity can act as a drag on overall economic growth.
- Industry productivity is flat-lining, and this is reflected in growing building costs and evidence of poor building quality. During the recent housing boom building costs increased above the general rate of inflation, and residential building costs are higher than in Australia.
- Building materials are more expensive in New Zealand than they are in Australia.
 - In part, this can be explained by the small size of the New Zealand market and the small scale of major material manufacturers.
 - It is unclear whether additional competition in the materials industry would reduce the costs. The Commerce Commission has investigated concerns about the behaviour of material suppliers and has found no breaches of the Commerce Act.
- The trend in New Zealand toward larger and higher-specification housing increases building costs.
- The small scale and fragmented nature of the New Zealand building industry contributes to high costs.
 - The industry is dominated by small firms which build one house at a time, are unable to generate economies of scale, and often lack management capability.
 - The industry is fragmented vertically which presents difficulties in the management of the supply chain.
 - New houses tend to be bespoke one-off designs. Building costs can be reduced through greater uptake of standardised designs and building techniques.
 - In part, the small and fragmented nature of the industry is a reflection of the small and expensive areas of land that are available for development.
- The industry is subject to significant demand cycles, making investment in firm expansion and the recruitment and retention of skilled staff difficult.
- The industry suffers from a number of skill issues, particularly at the management level. The misalignment between industry business cycles and industry training can result in skill shortages during booms and excess staff during periods of downturn.
- The construction industry and government have identified productivity growth as a priority and have established the Building and Construction Sector Productivity Partnership to develop practical proposals to address productivity issues.

10.1 Introduction

This chapter examines one part of the housing supply chain: the building and construction industry, and the role that it plays in the housing market. More specifically, the chapter seeks to identify mechanisms to improve the productivity of the building industry. Better productivity can increase affordability by improving the quality of building work, and by reducing residential construction costs. When referring to residential construction costs, this chapter is primarily concerned with the major inputs to residential building work, which are materials, labour, subcontracted work, and other costs such as overheads and profit margins. Depending on land values, which vary across the country, these costs will generally account for half of a typical house and land package, with land, development levies and consent fees comprising the remainder.

Reducing the construction costs of new housing is not a simple or straightforward task. A high proportion of building costs are fixed, and there was agreement among inquiry participants that any efforts to reduce costs should not come at the expense of building quality. But the Commission believes that there is scope to improve the productivity of the residential building sector and reduce construction costs without compromising building quality. While the extent to which construction costs can be reduced is difficult to quantify, improvements in this area alone are unlikely to provide a complete solution to affordability issues. Rather, measures designed to improve industry productivity and reduce construction costs should be seen as just one part of improving housing supply.

The chapter begins by outlining how industry performance influences housing affordability. Section 10.2 examines trends in both the cost of building a standard home, and individual building cost inputs. Section 10.3 examines the performance of the building industry and the extent to which there may be scope for improved productivity. Major barriers to improved productivity are identified in section 10.4 and initiatives to address these barriers are presented.

How industry performance influences housing affordability

Improved industry productivity has potential to influence housing affordability in two main ways. First, it removes a potential 'blockage' from the supply of new housing. If building costs are too high, existing home owners may choose not to upgrade to newly built housing, thereby increasing demand for existing stock. In essence, the construction of new housing frees up older, more affordable housing for traditional first-home buyers.

Improved productivity may also increase the ability of the residential construction industry to respond to middle- to low-income households which aspire to home ownership. As discussed earlier (Chapter 2) over 80% of new dwellings are valued in the upper two quartiles of the total housing market, meaning that new housing is generally well beyond the reach of middle- to lower-income households. While a number of changes will be required to address this missing rung on the housing ladder, improved industry productivity and reduced construction costs are an important part of the equation.

Coleman and Scobie (2009) modelled the effects of a number of changes to the New Zealand housing market, including changes to the tax regime, interest rate changes, subsidies to owner occupancy and a reduction in construction costs. Of these changes, reducing construction costs was the only change that "simultaneously reduces rents and house prices, increases the quantity of housing and raises owner-occupancy rates" (p.18). The authors conclude that "significant reductions in rents and house prices would follow a fall in the cost of housing" (p.iii). This suggests that improving the productivity of the building industry would have immense benefits for housing affordability, although reductions in costs could also come from lower regulatory and consent costs that increase the cost of construction (as discussed in Chapter 9).

The wider role of the industry

In addition to building new houses, the residential construction industry also plays an important role in the improvement, renovation and maintenance of existing housing. Inquiry participants noted that these whole-of-life housing costs are an important component of housing affordability:

The Commission should also not restrict their interpretation of affordable housing to first up costs ... Ongoing operational ... and maintenance costs must fall within any definition of affordable housing. (Cement and Concrete Association of New Zealand, sub. 27, p. 3)

As discussed earlier (Chapter 2), many New Zealand houses are old, cold and poorly maintained, meaning that maintenance costs are particularly relevant for some home owners. Likewise, changing preferences and changes to household composition mean that existing housing is increasingly out of sync with New Zealand's demographic profile (Chapter 5). As such, retro-fitting existing housing to meet changing demand is likely to be a key role for the construction industry in the coming years.

The productivity performance of the residential construction sector also matters to New Zealand's wider economy. The construction industry as a whole employs 8% of New Zealand's workforce and accounts for 4% of GDP (PWC, 2011). In a typical year, the residential construction sector will usually build around 24,000 new homes, renovate approximately 32,000 existing homes, and engage in around \$6 billion worth of building work (BCSPP, 2009; Statistics New Zealand, 2011a). In addition to regular demand for new buildings and other renovation work, there will be significant challenges for the residential building sector over the next five to ten years (Box 10.1).

Box 10.1 Big issues for the residential building sector

Increasing demand

Consents for new housing have dropped to very low levels over the past five years. Industry representatives suggest that this pent-up demand will result in a sharp increase in building work over the next five years. For example, it is estimated that Auckland needs around 10,000 new houses each year to meet projected growth rates, but recent building levels have been around half this volume.

Leaky buildings

Estimates suggest that approximately 42,000 houses built between 1995 and 2005 have weathertightness issues and require repair (Chapter 7). The Government's Weathertight Homes Financial Assistance Package has been available since mid-2011, and this is expected to generate significant demand for repair work, particularly in Auckland.

Canterbury rebuild

The Canterbury earthquakes caused significant damage, with the Earthquake Commission receiving 397,000 claims for damage to residential buildings. The Canterbury rebuild is expected to drive a significant upswing in building and construction activity in Canterbury over the next five years. In addition, it is likely that other New Zealand towns and cities will also review the seismic risk of their buildings, which might place additional pressure on the capacity of the building sector.

Source: Department of Building and Housing Briefing for the Incoming Minister 2011; Productivity Partnership Draft Research Action Plan, 2011a; Earthquake Commission; Registered Master Builders Federation, sub. 16

10.2 Are building costs increasing?

Inquiry participants presented a range of views regarding residential construction costs, but most noted that building costs have increased:

Construction costs increase on an incremental scale they constantly ratchet upward, there are never any decreases. (Affordable Housing New Zealand, sub. 12, p. 8)

The cost of residential construction is now much higher than it was in the past. (Tauranga City Council, sub. 19, p. 7)

The Registered Master Builders Federation also notes that building costs have increased, but not unreasonably:

Construction had to expand rapidly in the early-mid 2000s to meet increasing demand. At its peak there was pressure on resources and costs increased as a result. However, we do not think the cost

increases were excessive or highly out of kilter with other sectors of the economy at that time. (sub. 16, p. 13)

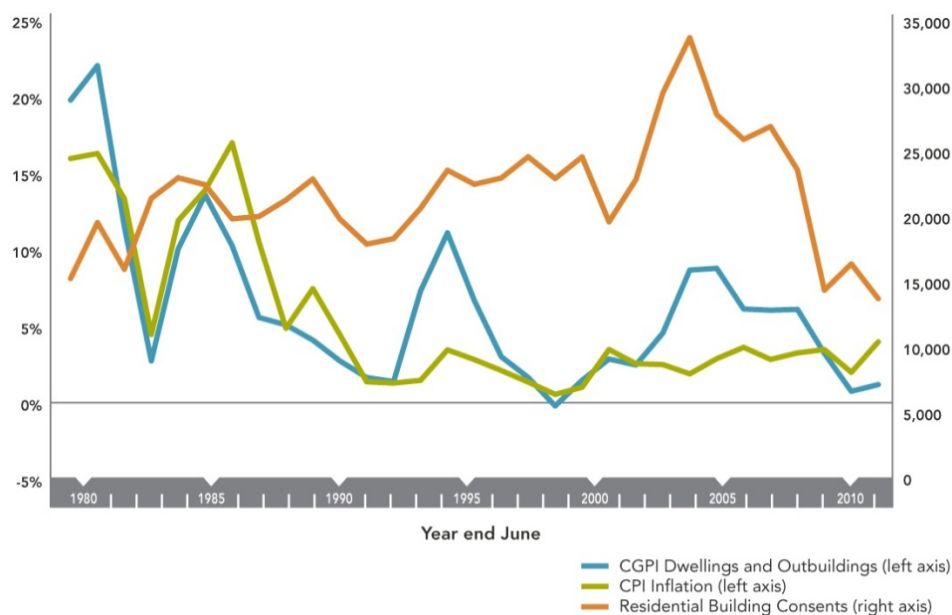
The following section examines residential building costs by:

- examining how the cost of building a standard home has changed over time;
- examining changes in the individual cost components of the residential construction process;
- comparing New Zealand's building costs with those in Australia;
- considering other factors which influence construction costs.

The cost of building a standard home has increased

Figure 10.1 (left axis) shows the nominal trend for Statistics New Zealand's Capital Goods Price Index (CGPI) – dwellings and outbuildings measure¹²⁰ since 1980 relative to the overall Consumer Price Index (CPI). During the past 25 years, growth in residential construction costs has averaged 4.3% per year, which is higher than CPI growth which averaged 3.5% per year. Figure 10.1 shows two distinct periods where growth in construction costs outpaced CPI growth. Between 1993 and 1998, construction costs grew at an average annual rate of 5.8% compared with CPI growth of 2.1% per year. During the recent housing boom (2003–2008) construction costs grew at an average annual rate of 7% while CPI growth was 2.7% per year.

Figure 10.1 Construction costs, building consents and inflation



Source: Statistics New Zealand

Included in Figure 10.1 (right axis) is the number of building consents granted each year. Building consents peaked in 2004 and this demand correlates with the growth in construction costs seen between 2003 and 2008. The period of strong cost growth during the mid-1990s was also preceded by an increase in demand, with consents increasing from 17,650 to 23,250 between 1992 and 1995.

All of the major building cost inputs have increased

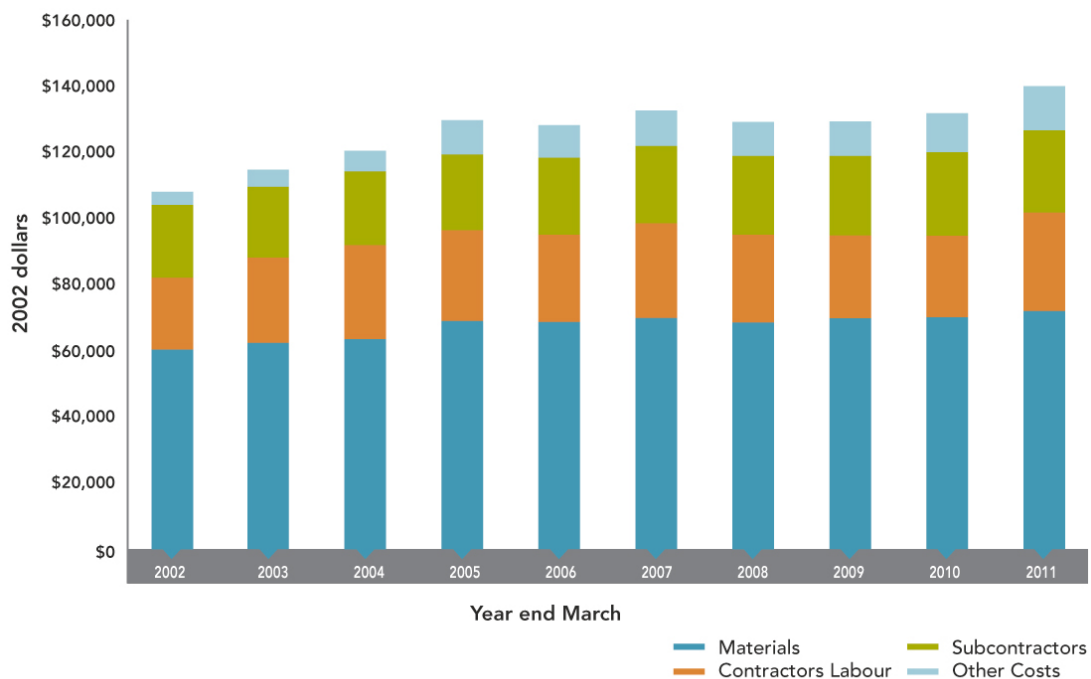
The Commission has assessed a breakdown of cost inputs into the construction of a new house since 2002 (Figure 10.2). This was provided by a group house builder for a standard 190m² house which has changed very little over the time period. The four cost components are:

¹²⁰ The CGPI – dwellings and outbuildings measure represents the output price of a standard house including construction components, defined fittings, labour costs, subcontractor charges, consent fees and other local authority charges, other administrative costs and profit margins. The index is based on a quarterly survey of approximately 140 builders from across the country who are asked to provide a quote for a standard-plan house that they build regularly. When the price for the quote provided changes, respondents are asked to indicate the reason for the change, which enables Statistics New Zealand to remove any price changes that can be attributed to a change in quality (CHRANZ, 2011).

- Materials installed by the builder
- Contractors' labour
- Subcontractors and the materials they install
- 'Other costs' which include consent fees, building levies, drawings, and occupational health and safety requirements (BRANZ, sub. 40)¹²¹

As shown in Figure 10.2, total construction costs have increased by 30% in real terms during the past nine years. Consistent with the CGPI shown in Figure 10.1, there was a sharp increase in costs during the period from 2002–2005, while prices remained relatively constant from 2006–2010. While all of the cost inputs have increased in real terms, increases in contractors' labour (37%), materials (19%) and subcontractors (13%) are relatively modest. 'Other costs' have increased significantly (241%); while important, these costs remain relatively small as a proportion of total building costs.

Figure 10.2 Cost components of a standard new house, 2002–2011 (in 2002 \$)



Source: BRANZ, sub. 40

BRANZ suggests that around one-third of cost input growth is due to compliance costs brought about primarily by amendments to the building code and new occupational health and safety requirements. There is a range of evidence which does suggest that regulatory changes have increased the cost of building. In particular, additional compliance costs such as consent fees, inspections and drawing documentation account for a significant proportion of the growth seen in 'other costs' (Chapter 9). However, these factors only account for part of the cost increases seen in recent years. The other drivers of residential building costs are now examined further.

Building materials

Materials account for around half of all residential construction costs. Figure 10.2 shows that material costs for a standard home (excluding those installed by subcontractors) have increased by a total of 19% in real terms between 2002 and 2011. However, around one-third of this increase is due to changes in the nature of materials used (for example, the introduction of double glazing to meet revised thermal efficiency

¹²¹ These costs exclude marketing, sales and management expenses, infrastructure fees and administration overheads; as such, they are significantly lower than the total price that a consumer will pay. The costs presented here are broadly consistent with a similar analysis of building costs from 2002–2007 carried out by the Registered Master Builders Federation (see DBH, 2008, p. 18).

guidelines in the Building Code) rather than the cost of specific materials. As such, real price increases for individual materials appear to have been relatively modest.

In their un-published research paper on residential construction costs, CHRANZ (2011) sourced information about the change in price of essential building materials from two periodicals, the *New Zealand Building Economist* (NZBE) and *Rawlinsons*. The results are shown in Table 10.1 and indicate that any increase in the cost of materials is likely to have been relatively minor. The NZBE data suggests that material prices have increased, with five materials increasing in price in real terms and minor price reductions for two materials. However, there is no clear trend in the data gathered by Rawlinsons, with some material prices increasing and others decreasing.

Table 10.1 Percentage change in key material costs, 1995–2010

Material	NZBE		Rawlinsons	
	Average Annual Compound (Nominal)	Average Annual Compound (Real)	Average Annual Compound (Nominal)	Average Annual Compound (Real)
Concrete	2.10%	-0.10%	2.10%	0.00%
Brickwork	na	na	2.60%	0.40%
Framing Timber	2.40%	0.30%	1.00%	-1.20%
Interior Wall Linings	4.50%	2.30%	1.50%	-0.70%
Wooden Windows	3.30%	1.10%	6.60%	4.30%
Aluminium Windows	5.10%	2.80%	2.80%	0.60%
Roofing Tiles	2.00%	-0.20%	na	na
Iron Roof	3.70%	1.50%	1.10%	-1.00%
CPI	2.20%	0%	2.20%	0%

Source: CHRANZ, 2011

Page (2008) investigated the price trends in building materials over five years from 2003–2008. The most significant nominal increases (greater than 3% per annum) were electrical items, PVC spouting, plumbing items, metal roof cladding and ready-mix concrete. Page suggests that the price trend for some of these materials is likely to be heavily influenced by worldwide demand for these materials. It was also found that some material prices are heavily influenced by the price of oil and other forms of energy, which increased significantly between 1996 and 2007 (Page, 2008).

While the overall trend in the cost of building materials is for fairly modest increases in real terms, concerns raised by submitters tended to focus on the price of materials in New Zealand relative to Australia:

Building material prices are significantly lower in real terms in both Australia and USA than in New Zealand. (Habitat Auckland, sub. 23, p. 5)

Some material suppliers in New Zealand are selling materials for significantly higher costs than [they] are sold for in Australia. (Brady Nixon, sub. 26, p. 2)

The evidence available to the Commission supports suggestions that materials are more expensive in New Zealand. The Commission was provided with material prices for a typical modest-specification home built by the same company in New Zealand and Australia. A selection of the key materials is shown below (Table 10.2). While there are variations between different types of materials, overall, the materials purchased in Australia are cheaper than those in New Zealand.

Table 10.2 Trade prices for building materials in New Zealand and Australia

Material	New Zealand price (\$NZ)	Australian price (PPP adjusted to \$NZ)	Australian price as a % of NZ price
Bricks	\$4,978	\$4,051	81%
Frame hardware	\$2,428	\$344	14%
Pre-nailed framing	\$10,575	\$7,920	75%
Eave/Gable material	\$3,524	\$1,395	40%
Finishing timber	\$1,032	\$978	95%
Finishing material	\$677	\$867	128%
Internal doors	\$713	\$526	74%
Carpenter frame	\$6,870	\$6,142	89%
Trusses	\$8,111	\$7,158	88%
Metal fascia/gutter	\$2,148	\$2,777	129%
Metal roofing	\$11,567	\$12,226	106%
Windows ¹	\$12,873	\$5,325	41%
Kitchen cupboards	\$5,442	\$4,758	87%
Insulation	\$2,227	\$1,699	76%
Plasterboard ²	\$12,713	\$8,973	71%
Total	\$85,878	\$65,139	76%

Source: Material supplied in confidence.

Notes:

1. The windows in the New Zealand house are double-glazed while the Australian house uses single-glazed windows.
2. This figure includes labour costs for installation.

An earlier comparison of retail prices in large builders' hardware stores in Auckland and Melbourne also found that Australian prices are cheaper. After adjusting for the exchange rate, a selection of ten common building materials cost 55% more in New Zealand than they did in Australia (Kenley, 2003).

The New Zealand market has a number of different characteristics compared with Australia which will impact on the price of materials. One factor is New Zealand's small and dispersed population with relatively low demand for construction services and building materials making it harder to generate economies of scale. As a result, local manufacturers are usually unable to produce materials at a scale similar to that of other major manufacturers around the world. For example, the output of New Zealand's two cement plants is well below that of newer plants in a number of other countries (Page, 2008). Although the New Zealand market is generally open to imported substitutes from other countries which can produce materials on a more economic scale, the size and isolation of New Zealand's market presents a number of practical barriers, making this less likely to occur.

Inquiry participants also suggested that despite considerable transport distances, Australian manufacturers are also able to generate cost savings through volume transport using the rail network. In contrast, New Zealand's transport costs are increased due to a lack of transport infrastructure, mountainous terrain and the need to ship materials between the two islands (New Zealand Building Industry Federation, sub. 47; Fletcher Building, sub. 21). Transport costs assume particular significance given the heavy and bulky nature of many building materials. Inquiry participants from the residential building sector also suggested that although cost savings can be achieved in some cases through the use of imported materials, they have

found that New Zealand-made materials are higher quality and more suited to local conditions. As a result, they have a preference toward locally sourced materials.

Along with the scale of the industry a number inquiry participants raised concerns about the level of competition in the building materials industry (Box 10.2).

Box 10.2 Competition in the supply of building materials

There are only two major manufacturers of building materials in New Zealand. Taken in combination with the relatively high price of New Zealand building materials, this has resulted in claims that the materials market suffers from a lack of competition. This issue was raised by a number of submitters, most of whom suggested that there is a lack of competition in the materials market that is detrimental to affordability:

Auckland Council

Having only a duopoly of companies providing construction materials ... has been identified [by some developers] as driving up costs. (sub. 45, p. 12)

Habitat Auckland

There appears to be adequate competition in the retail/wholesale end of the market but insufficient competition in the manufacturing end and insufficient market size to enable globally competitive pricing. (sub. 23, p. 5)

Land Solutions Limited

Costs are high, there is a lack of competition in building materials supply. (sub. 35, p. 10)

However, some submissions suggested that a lack of competition was less of an issue:

New Zealand Building Industry Federation

There is a high level of competition ... among building material manufacturers. The market is fully open to overseas competition. (sub. 47, p. 2)

Fletcher Building

Fletcher Building manufactures a range of building materials... Most of these products are internationally-available commodities and all of these products are subject to some level of competition or competitive threat from local manufacturers and/or importers... Most of these products also exist in broad market categories where they compete with a range of substitutable products. (sub. 21, p. 11)

Clearly, the level of competition and its impact on the supply of building materials is a subject of debate. But the fact that the market for some materials is dominated by one or two suppliers is not in itself evidence of monopolistic behaviour. The Commerce Commission is responsible for enforcement of legislation (the Commerce Act) that promotes competition in New Zealand's markets. The Productivity Commission understands that although the Commerce Commission has investigated material suppliers on occasion,¹²² no breaches of the Commerce Act have been found.

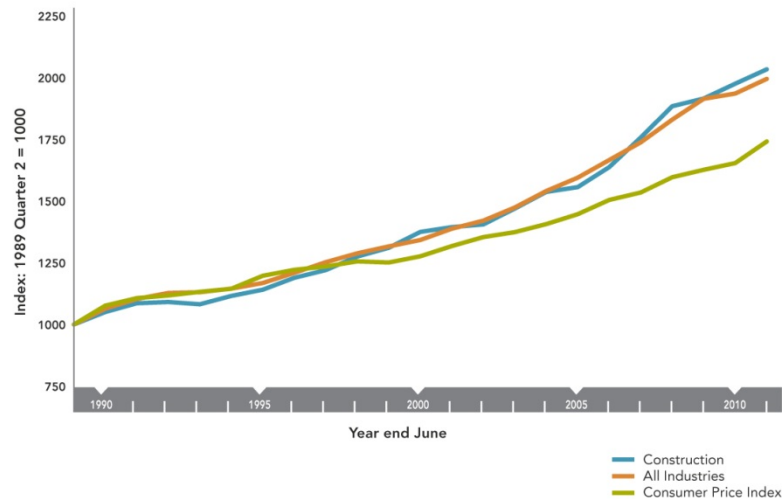
Moreover, despite practical difficulties outlined earlier, the building materials market is 'contestable' in the sense that it is open to new competitors to establish themselves and for imported products and building systems. However, the process for gaining approval (from building consent authorities) for products or systems through an 'alternative solution' can be time-consuming and uncertain (Chapter 9).

¹²² The most noteworthy example dates back to a case in 2001 where Carter Holt Harvey was found guilty in the High Court and the Court of Appeal of using their dominant market position to prevent or deter competition in the supply of insulation. But this decision was ultimately overturned by the Privy Council in 2004 (OECD, 2004, p. 9). The Commerce Commission also issued a warning to Fletcher Concrete and Infrastructure Limited in response to allegations of excessive price-cutting in 1998 and 1999 following the introduction of imported cement to New Zealand (Commerce Commission, 2011a).

Labour costs

Residential construction is labour-intensive, with labour costs contributing around 20% to the total cost of building a typical house. Figure 10.3 presents the annual change in salary and wages in the construction industry since March 1989 relative to the consumer price index (CPI) and labour costs in all industries. Between 1989 and 2010 construction sector wages increased at an average annual rate of 4.7% – significantly faster than the CPI, which increased at an average rate of 3.4% per year. But in the long run, the relative growth of labour costs in the construction industry has been very similar to that of other industries. The periods of strongest wage growth in the construction sector coincide with the mid to later phase of the upswing of the residential property cycle.

Figure 10.3 Labour costs



Source: Statistics New Zealand

Profit margins are also relevant

Although not included in the price breakdown shown in Figure 10.2, it is also important to consider the role of profit margins and how these have changed during the recent housing cycle. As shown in Figure 10.1, the recent housing cycle was characterised by a 30-year peak in dwelling consents. Given the highly cyclical nature of the New Zealand construction industry, it is generally accepted that profit margins will increase during periods of high demand (CHRANZ, 2011).

While there is limited data available on profit margins in the residential building industry, the available evidence does suggest that profit margins were higher during the recent housing boom. Unpublished estimates from Rawlinsons suggest profit margins of 4–5% between 1999 and 2004, with margins dropping to 3.8% between 2008 and 2010 (cited in CHRANZ, 2011). Page (2008) has estimated construction sector profitability using national accounts data from Statistics New Zealand. This analysis shows construction sector profitability of 10–14% between 1987 and 1995 and 14–16% between 1996 and 2005. Putting aside the significant difference between the two sources, both show higher profit margins during periods of stronger demand, supporting the notion that profit margins were likely to have been higher during the recent housing boom.

How do building costs compare with Australia?

Another way to consider residential construction costs is to compare the total cost of building a similar dwelling in New Zealand and Australia. Rawlinsons NZ (2011) and Rawlinsons Australia (2011) publish estimated building costs on a per square metre basis for a range of different residential buildings in major centres. Table 10.3 shows the mid-point of Rawlinsons' estimates for the cost of building a single house to a moderate standard in a range of New Zealand¹²³ and Australian cities. The prices quoted by Rawlinsons relate to broadly comparable houses which are commonly built in each country, but they are not identical. As such, the price differential between the New Zealand and Australian houses is likely to alter, either up or

¹²³ From Rawlinsons data, Auckland is the most expensive New Zealand city for building, while Dunedin is the cheapest.

down, as a result of different characteristics of the houses. The cost differential between New Zealand and Australia varies depending on the city, but building costs are in the order of 15-25% lower in Australia.

Table 10.3 Per square metre building costs in New Zealand and Australia

Location	Price (PPP adjusted to \$NZ)	% of Auckland price	% of Dunedin price
Auckland	\$1,650/m ²	100%	108%
Dunedin	\$1,525/m ²	92%	100%
Melbourne	\$1,175/m ²	71%	77%
Sydney	\$1,309/m ²	79%	86%
Brisbane	\$1,209/m ²	73%	79%

Source: Rawlinsons New Zealand (2011) and Rawlinsons Australia (2011).

Notes:

1. Costs exclude GST and consent fees

The Commission was also provided with actual building costs for a four-bedroom house built by the same company in New Zealand and Australia (Table 10.4). These costs also point toward lower overall construction costs in Australia relative to New Zealand; however, the size of the differential is lower than that in the Rawlinsons estimates.

Table 10.4 Total building costs in New Zealand and Australia

Location	Cost (PPP adjusted to \$NZ)	% of New Zealand Price
Rodney, Auckland	\$177,500	100%
Geelong, Victoria	\$156,368	88%

Source: Material supplied in confidence.

Notes:

1. Costs exclude GST, profit margins and local consent fees.

The comparative cost figures in both examples shown above assume that the house is being built according to the local building code. Although there are differences between the New Zealand and Australian building codes, inquiry participants noted that the overall difference in building cost generated by different code requirements is quite marginal. However, this does not consider the wider administrative and inspection costs associated with the consent process (these costs are considered in Chapter 9).

Are consumer preferences driving price increases?

Consumer preferences regarding the size and specification of new housing also has an important bearing on construction costs. A number of submissions noted that preferences and expectations about housing have continued to change over recent years; in particular, house size is continuing to grow (ICON Concepts, sub. 6, p. 12). As noted earlier (Chapter 2) the average floor area for new residential housing has increased rapidly, particularly since the early 1990s.

Although larger houses generally cost slightly less to build on a per square metre basis, the additional floor space of new houses does significantly increase construction costs. While building costs will vary on a house-by-house basis, the following example¹²⁴ provides an indication of the additional cost of building a 200m² home (which is typical of current new builds) relative to a 140m² home (typical in the early 1990s):

- A 140m² house will cost \$197,680 at a cost of \$1,412 per square metre.

¹²⁴ These costs are based on the Department of Building and Housing's building cost estimates for a group home builder in Auckland (DBH, 2011b).

- A 200m² house will cost \$257,000 at a slightly lower per square metre cost of \$1,285.
- The cost for an additional 60m² of floor space is \$59,320.

Inquiry participants also noted that consumers increasingly seek higher-quality and more expensive fit-outs:

We expect 250 sqm, three bathrooms, a media room, two car garages and a pool. Expectations like this are increasing costs. (Brady Nixon, sub. 26, p. 4)

This sentiment is supported by a 2007 survey of new home owners which shows that quality kitchen and bathroom fittings along with total house size and a double garage are the most sought-after house features (Page, 2007).

Although the trend toward larger and higher specification housing can partly be explained by changing consumer preferences, inquiry participants noted that building a relatively inexpensive house can be seen as under-capitalisation given (currently) high section prices (land prices are examined in Chapter 7):

The Commission characterised an underlying issue as the distribution of new housing investment being heavily skewed to ... relatively expensive ... housing. Fletcher Building's own residential construction activities support this view, and we can confirm this is driven by the economic requirement to maximise returns on expensive land. (Fletcher Building, sub. DR138, p. 1)

Inquiry participants also suggested that the trend toward larger houses may have been exacerbated by developers who increasingly impose covenants relating to house size and quality:

...almost all subdivision in Rolleston requires that houses of 180m² or larger be built, regardless of buyer preference. This may inflate the price of houses built or prevent the erection of smaller cheaper homes that would be suitable for some parts of the market. (David Hattam, sub. 11, p. 1)

Construction costs overall assessment

During the first half of the 2000s, the cost of building a standard house increased at a faster rate than generalised inflation. Increasing costs were generated by growth across all of the major inputs to the building process. There are a number of underlying factors that contribute to the current cost of building, for example:

- Material costs can partly be explained by scale issues, international demand, and the increased cost of natural resources on which the production and transport of materials is dependent.
- Labour costs have increased significantly across all New Zealand industries and this is reflected in higher labour costs in the construction sector (Figure 10.3).
- Total building costs are influenced by consumer preferences for increased floor space and higher specifications.

Inquiry participants did voice concerns about the rate at which construction costs are increasing; however, costs relative to Australia were a more prominent source of discontent. Both building materials and aggregated building costs are significantly higher in New Zealand.

F10.1

- During the recent housing boom, the cost of building a standard house has increased at a greater rate than inflation.
- The cost of both building materials and building a standard house is substantially higher than in Australia.
- A trend toward larger and higher specification houses is also contributing to increased costs. Factors driving this trend include changing consumer preferences, the use of covenants, and a desire to avoid under-capitalising given high section prices.

10.3 There is evidence of poor productivity

Along with concerns about the cost of building, inquiry participants also raised a number of issues relating to the performance of the building industry including:

- Projects exceeding the original budget
- Failure to meet agreed timeframes
- Non-compliant or defective work
- Poor design and layout
- Reliance on lower-quality materials which have a shorter life-span and require higher levels of maintenance

A study conducted in 2010 surveyed 752 home owners who had obtained consents for residential building projects in 2005. 19% of the sample group reported having a 'major dispute' during or after their building project, while 12% stated they had experienced a 'minor dispute' (DBH, 2010). The most common reasons for disputes were non-compliant or defective work, poor workmanship, obligations not being met, and 'unprofessional behaviour'. In the same survey, 49% of respondents reported that the final cost of their project was more expensive than at its commencement (DBH, 2010).

The need for re-work also appears to be a common problem. A survey of 268 new home owners found that 61% required a call-back to address one or more aspects of the building (Page, 2011). The most common issues related to the quality of finishing such as paint defects or problems with fittings. Several industry representatives pointed out that these problems are relatively minor and are unlikely to create health and safety issues. But other inquiry participants suggested that "re-work is re-work," and that the high incidence of call-backs is indicative of poor performance in the industry.

Industry productivity is flat-lining

In the case of the building and construction industry, improved productivity can generate greater housing affordability for consumers in the form of lower construction costs, better quality without additional expense, or a combination of both (Davis, 2007). The information presented in the preceding sections suggests that the building industry could perform better on both these counts. Building costs are higher than they were a decade ago, with price increases visible across all of the major cost components of building. There is also evidence of building quality issues with frequent disputes between clients and builders and a high incidence of call-backs to address defective work.

Low productivity in the residential building sector was also raised by many inquiry participants and in a number of submissions:

Productivity is very low and the rework rate high. (Registered Master Builders Federation, sub. 16, p.13)

The CPI sub-index for construction has risen by much more than the index for all consumer products, while the increase in hourly wages for construction workers since 2000 has been only slightly higher than for the full workforce. This is suggestive of low labour productivity growth in construction relative to the rest of the economy. (The Reserve Bank of New Zealand, sub. 37, p. 7)

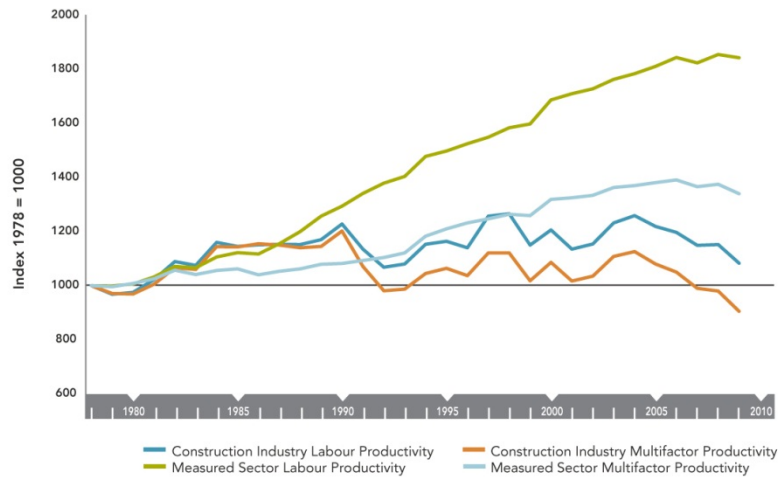
Statistics New Zealand has gathered a range of productivity data for New Zealand industries which adds further weight to these findings. Two measures of productivity recorded by Statistics New Zealand (2010) are:

- Labour productivity – which shows the change in the amount of output per hour paid.
- Multi-factor productivity – which shows the contribution of changing management processes and technology towards output growth. It represents the growth in output that cannot be attributed to either labour or capital input.

The New Zealand construction industry has had the second lowest growth rate in labour and multi-factor

productivity growth rates of all New Zealand's 'measured sector'¹²⁵ industries over the last 30 years. Labour productivity has grown at an average annual rate of 0.4% per annum; however, this is offset by a small decrease in multi-factor productivity (Figure 10.4).

Figure 10.4 New Zealand construction industry productivity growth compared to measured sector (1978=1000)



Source: Statistics New Zealand

Furthermore, a number of sources suggest that the productivity of New Zealand's construction industry is low relative to other countries. For example, the New Zealand Institute of Economic Research (NZIER) estimates that the labour productivity of New Zealand's construction industry was 72% of Australia's construction industry for the period 2001–2006. NZIER measurements also show that the relative productivity performance of the New Zealand construction industry is declining, with labour productivity measured at 95% and 87% of Australia's labour productivity for the periods 1989–1994 and 1995–2000 (NZIER, 2011). Mason and Osborne (2007) measured multi-factor productivity levels and growth rates in 21 specific industry sectors and compared them with corresponding sectors in the UK. The productivity of New Zealand's construction industry was found to be between 55% and 60% of the equivalent industry in the UK for the period 1995–2003.

It is important to note that the information collected by Statistics New Zealand, NZIER and Mason and Osborne shows the productivity of the construction industry as a whole; as such, it does not account for variations in the productivity performance of different construction sub-industries. Similarly, the data does not account for variations in the productivity of different firms within industries. However, evidence from inquiry participants, including representatives from the residential construction industry, suggests that the productivity of the construction industry as a whole is indicative of productivity performance in the residential construction sub-industries. This finding is also supported by Page and Curtis (2011), who examined the labour productivity of 24 construction sub-industries by measuring value-added per person. Their findings show that the productivity of sub-industries involved in residential construction tends to be level with, or slightly below, the average of the industry as a whole.

Hence, although there is potential for further research to uncover the variations in productivity performance between different construction sub-industries, the available evidence suggests that there is considerable scope for productivity improvement in the residential construction industry.

F10.2

Industry productivity is flat-lining, and this is reflected in growing building costs and evidence of poor building quality. Evidence suggests that the productivity performance of the construction industry over the past thirty years has been poor relative to other New Zealand industries, and relative to other jurisdictions.

¹²⁵ The measured sector includes industries such as transport and storage, manufacturing and agriculture, and covers 80% of the economy. It excludes certain industries due to measurement difficulties, primarily government services.

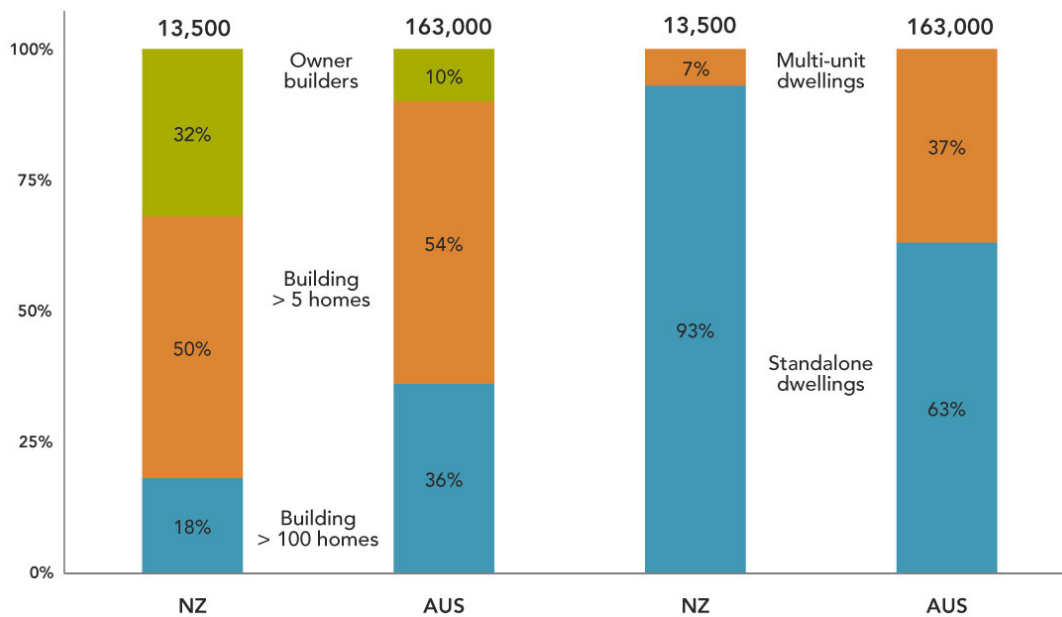
10.4 What are the barriers to improved productivity?

The available evidence suggests that the building and construction industry is not performing as well as it might. The Commission considers that improvements in industry productivity can reduce construction costs and improve building quality. Improved productivity growth is likely to come from three sources: increased industry scale, greater levels of innovation, and an increase in the level and diversity of skills.

Scale problems of a cottage industry

The New Zealand building industry is dominated by small firms and has been characterised as a “cottage industry” (Fletcher Building, sub. 21, p. 4). Sole traders (with zero employees) are by far the most common firm size in the residential building sector. Conversely, businesses employing more than 20 employees constitute only 9% of total employment (Statistics New Zealand, 2011b). Compared with Australia there is a much smaller proportion of group home builders and multi-unit home designs (Figure 10.5).

Figure 10.5 Estimated size of builders in NZ and Australia and nature of dwellings built



Source: Fletcher Building, sub. 21

As a result of the industry’s small scale, most New Zealand building firms are building just one house at a time. In the year to May 2010, 4,604 firms built just one house during the year. In contrast, just 30 firms built more than 30 homes, while only five firms built more than 100 houses (Page and Fung, 2011). The fragmented nature of the building industry can be explained in part by the small and dispersed nature of the market. However, inquiry participants noted that there is scope for group-home builders to gain a greater share of the residential construction market in New Zealand, particularly in the main centres. Indeed, a slight increase in the proportion of the house construction workforce employed by larger firms over the past ten years suggests that larger firms may be starting to gain a greater share of the market (Page and Fung, 2011). Inquiry participants also suggested that smaller building firms may struggle to respond to recent regulation changes (Chapter 9), which in future may result in these firms accounting for a smaller share of the industry:

...recent regulation changes, especially the use of licensed building practitioners for restricted building work, may affect the number of 1 and 2 person SMEs – given the need for ‘CPD [continuing professional development] maintenance’ to retain licensing, such that it discourages practitioners from continuing their licence. (CIC, sub. DR141, p. 1)

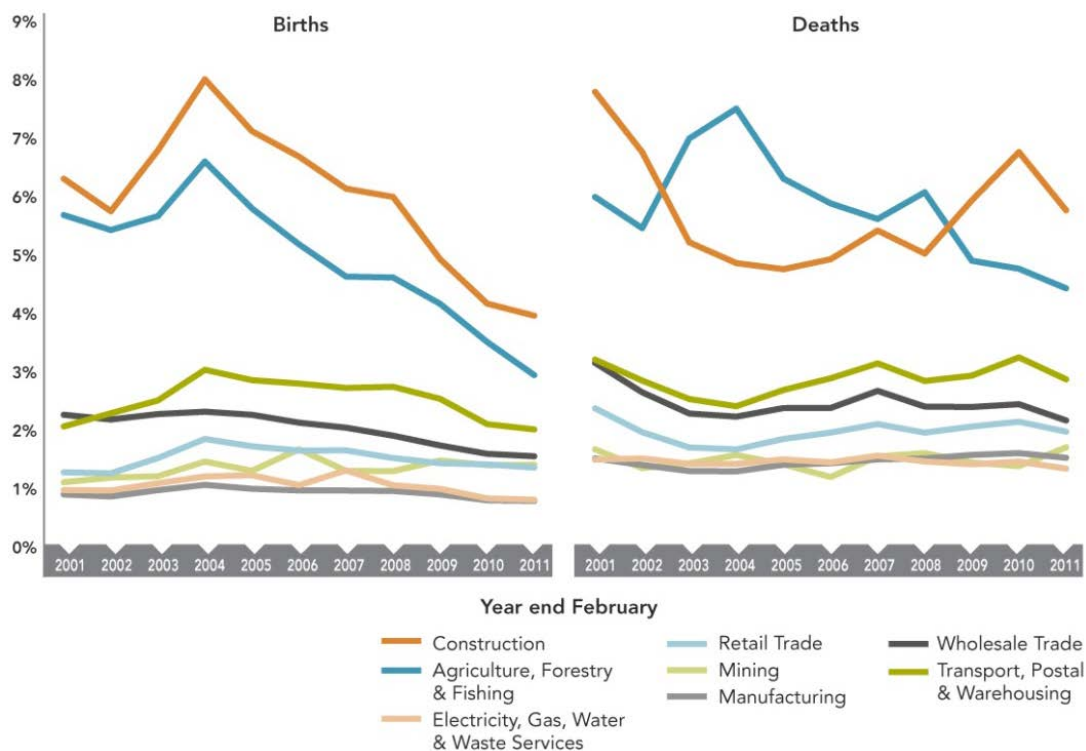
Larger firms are able to generate cost reductions through more efficient organisation of subcontractors, and working on several houses with an efficient schedule which results in less downtime (Page and Fung, 2011). Conversely, many smaller firms “do not have the capability or capacity to implement good management and quality control systems” (Registered Master Builders Federation, sub. 16, p. 13). Inquiry participants

also noted that larger firms have the ability to purchase at a greater scale, particularly materials, with one large building firm estimating that they are able to reduce material costs by 10–15% through ‘smart buying’.

Larger building firms are also able to generate scale efficiencies from building large numbers of houses on the same site. This creates efficiencies from repeating building processes, and also allows the different parts of the supply chain to work sequentially on different projects, resulting in fewer time delays. In order to achieve this, builders require “sufficient developed land to be available to leverage their model across multiple build sites” (Fletcher Building, sub. 21, p. 3). Inquiry participants noted that it is rare for land areas of this size to be available (Saltburn Limited, sub. 7; Fletcher Building, sub. 21).

Another issue associated with the small scale of the residential building sector is a high level of ‘employee job churn’ with staff turnover rates particularly high in smaller firms (BCSPT, 2009). Inquiry participants noted that the industry’s low entry and exit costs allow small operators to enter and exit the industry without incentives to establish a good reputation through quality work. While data specific to residential building is not available, evidence from Statistics New Zealand’s business demographics dataset about the construction industry as a whole does support suggestions of high firm turnover. Figure 10.6 shows the number of firm births and deaths as a proportion of total employees in the industry. Alongside agriculture, forestry and fishing, the construction industry has the highest proportion of firm births and deaths.

Figure 10.6 Firm births and deaths as a proportion of total employees in New Zealand industries



Source: Statistics New Zealand

Customised house design

A number of inquiry participants noted that one of the major factors contributing to high New Zealand construction costs is the tendency to build houses according to one-off bespoke designs:

We build too few buildings of standard type design to encourage the capital investment in large scale prefabrication or standardisation. (Registered Master Builders Federation, sub. 16, p. 13)

Home designs are much more customized than in Australia. This appears to be driven by the significant role played by small developers and owner builders, as well as scale home builders responding to consumer preferences. (Fletcher Building, sub. 21, p. 4)

Approximately 45% of new detached houses are one-off designs built by small-scale builders. The remaining 55% are built by builders erecting more than one house per year, most of which include at least some measure of repetition (Page and Fung, 2011). While there was agreement among inquiry participants as to the prevalence of custom-designed housing, participants were divided as to what was driving this

behaviour. Some inquiry participants noted that consumers have a preference for individuality in home design and construction, and although standard designs are available, consumers will prefer to make their own changes to these designs. On the other hand, others suggested that builders offer little price premium for standard designs as they are able to achieve better profit margins on custom-designed builds.

Although uptake of standard house designs has been minimal, it is generally understood that standard designs can generate significant cost savings. Page (2008) argues that major builders are able to construct standard houses, on average, 15% cheaper than one-off designs typically provided by small-scale builders. Other sources suggest that group builders can generate savings of up to 25% (Maltbys, 2010).

Page and Fung (2011) examined the relationship between per square metre building costs and the number of houses that a firm builds each year. They found the one-off designs were around 8% more expensive than houses built by medium-sized firms (8–30 houses per year). Interestingly, larger group builders (building more than 30 houses per year) were more expensive than medium-sized builders; however, they were still around 5% cheaper than one-off builders. The price premium achieved by group builders offering standardised house designs is partially reduced by the fact that only 11% of such houses are built without changes to the plans. The average cost increase associated with plan changes is just over 4% (Page and Fung, 2011).

Inquiry participants also noted that the cost of standard house designs could be further reduced if the building consent process was streamlined for standard pre-approved designs (Chapter 9).

The barriers to scale

The Commission considers that the single biggest factor which has constrained the emergence of larger and more efficient building firms is a shortage of large land parcels which enable residential development at scale. Inquiry participants suggested that the dominance of small firms building bespoke houses is a natural by-product of the typically small and expensive land areas which are available in most of New Zealand's faster-growing regions:

... lack of scale is a key barrier to productivity gains. This barrier can be overcome through land release policy. Land blocks representing housing developments of say over 50 homes are of enough scale to justify the involvement of industry players with the size and sophistication to deliver productivity gains. (Fletcher Building, sub. DR138, p. 3)

In addition, the dominance of small firms is also likely to be driven in part by the highly cyclical nature of demand in the residential construction industry (discussed later). Smaller firms have less to lose during periods of low demand as they will have a lower level of investment in fixed assets such as factories and heavy machinery. The limited capital base of small firms makes it easier to enter or exit the industry depending on the prevailing level of demand. However, a consequence of maintaining a limited capital base is that the opportunity to scale up and invest in productivity enhancement is severely limited. Inquiry participants also suggested that smaller firms have greater flexibility which reduces vulnerability during periods of low demand:

One benefit of the current industry model is that it allows project management companies to upscale their workforce as needed, without the overheads that full time employed staff can impose. (CIC, sub. DR141, p. 1)

In essence, the structure of the industry is a reflection of the environment in which it operates. Until conditions emerge which favour larger developments with a reasonable level of certainty around future demand, it is unlikely that we will see a significant shift in the nature of the industry.

F10.3

The lack of scale in the New Zealand residential construction industry presents a significant barrier to productivity growth.

- Small builders are less able to generate economies of scale.
- Scale home builders can reduce construction costs through the delivery of standardised housing, but scale building firms occupy a comparatively small share of New Zealand's building market.
- A lack of available land can present a significant barrier to productivity through inhibiting the development of group home builders and scale developments.

Innovation in building systems and techniques is required

Innovation in construction firms is relatively low (Page, 2010) and a number of inquiry participants suggested that greater innovation is required to improve industry productivity:

...increasing creative, robust innovation is essential to improving the market. (Tim Robinson, sub. 56, p.3)

Two areas with particular scope for productivity-enhancing innovation are management of building processes, and building materials and techniques.

Innovative approaches to supply chain management

The industry is fragmented vertically with a reliance on an increasing number of different sub-trades. Sub-contracting, or outsourcing services, is a practice that has increased in popularity over the last 30-40 years. This is partly due to the increasingly technical and bespoke nature of today's buildings, which prohibits many firms from supporting the broad range of technical skills required to complete a project within one company. Surveys of New Zealand's residential builders show that almost all firms will employ one or more sub-contractors to complete plumbing, electrical, painting, kitchen installation, and roofing. Sub-contractors are also commonly used in a range of other sub-trades (Page and Fung, 2011). The introduction and integration of specialist sub-contractors into an ever-increasing and complex supply chain does present benefits in that it allows the industry to organise itself flexibly to respond to variable demand (Davis, 2010). However, inquiry participants noted that industry fragmentation increases the potential for coordination problems, the development of adversarial relationships, time delays and rework.

The management of subcontracted work can present problems due to a tendency for various sub-trades to focus solely on the work that they are doing rather than thinking about the wider context (BCSPP, 2011b). Inquiry participants reported that houses are often built using a staged step-by-step approach, with individual trades working sequentially in isolation from each other. This can result in time delays and associated holding expenses caused by sub-contractors not being on-site when required. It can also result in the need for re-work due to different tasks being completed in isolation meaning that work is incompatible with the overall design. For example, the Commission was referred to an example where the wall cavities in a house that was being constructed were too small for the specified insulation.

Poor management and integration of sub-contracted building work can also lead to the development of adversarial relationships between different parts of the supply chain (Beach, Webster and Campbell, 2005; Eom, Yun and Paek, 2008; Hartmann and Caerteling, 2010; Shapiro, 2005). This issue was raised by Department of Building and Housing:

[Construction is] labour intensive with upwards of 40 different disciplines needed in the design and production system process, with individual professional goals as well as project goals potentially leading to conflict. (sub. 55, p. 28)

To an extent, this stems from the different objectives of sub-contractors as opposed to main contractors (Love, Irani and Edwards, 2004). Main contractors will generally measure their success on the level of client satisfaction and strive to enhance their brand and reputation. Conversely, subcontractors are often held at arm's length from the client and generally perceive profitability as the first criterion for success (Duren and

Dorée, 2008). These contrasting objectives are thought to be a common source of adversarial relationships, the consequence of which is ultimately transferred to the consumer in the form of additional costs (Hinton, 2011).

A number of inquiry participants noted that supply-chain issues could be minimised through better upfront planning and greater collaboration between clients, designers, builders and sub-trades. Integrated Project Delivery (Table 10.5) is suggested by the American Institute of Architects as one approach to facilitate better management of the building supply chain. It has been estimated that the adoption of collaborative practices and early involvement of the supply team in the design process can reduce initial construction costs by up to 30%. Furthermore, collaboration between supply chain members is also shown to generate completed projects with greater operational efficiency and ongoing savings throughout the life of the building (Bourn, 2001).

Inquiry participants noted that although residential building practices in New Zealand are varied, projects have a tendency to resemble the Traditional Project Delivery model. As such, greater uptake and implementation of collaborative working principles could help to improve industry productivity.

Table 10.5 Traditional versus integrated project delivery

Traditional Project Delivery		Integrated Project Delivery
Fragmented, assembled on “just-as-needed” or “minimum-necessary” basis, strongly hierarchical, controlled.	Teams	An integrated team entity composed of key project stakeholders, assembled early in the process, open, collaborative
Linear, distinct, segregated; knowledge gathered “just-as-needed”; information hoarded; silos of knowledge and expertise	Process	Concurrent and multi-level; early contributions of knowledge and expertise; information openly shared; stakeholder trust and respect
Individually managed, transferred to the greatest possible extent	Risk	Collectively managed, appropriately shared
Individually pursued; minimum effort for maximum return; (usually) first-cost based	Compensation and reward	Team success tied to project success; value based
Encourage unilateral effort; allocate and transfer risk; no sharing	Agreements	Encourage, foster, promote and support multi-lateral open sharing and collaboration; risk-sharing

Source: AIA, 2007

Procurement

A related supply-chain management issue is the tendency for industry procurement practices to exacerbate the disconnect between main contractors and subcontractors. While some firms have established relationships with trusted subcontractors, it is common practice in the industry to request tenders from subcontractors for the various components of building projects. This traditional tender approach is often based on the assumption that market forces will generate the best value project at the lowest fixed cost (BCSPT, 2009). But in reality, this approach can generate a number of problems, which drive up costs while reducing quality.

One major problem with the traditional tender approach is that it involves significant transaction costs. The success rate for tenders is usually around 15%, meaning that subcontractors spend a significant amount on unsuccessful tenders – the cost of which is ultimately incorporated into the projects that they do complete (Hinton, 2011). Because tenders are often evaluated based predominantly on the price, some inquiry participants noted that contractors will often place tenders at below the market rate, and look to re-coup this through add-ons and variations to the original contract, substituting the use of cheaper materials, and taking short-cuts where possible. The consequence is that costs increase during the project, and will often

exceed the original tender, whilst the quality of the finished project deteriorates, and projects routinely run over time (Riazi et al, 2011).

In addition, Commerce Commission research has found evidence of anti-competitive behaviour in tendering processes in the construction sector. Their research found that some firms will submit a tender which is not intended to win, but is meant to look like a legitimate bid. This is known as 'cover pricing' and occurs when firms submit a tender at a price that they know is higher than that of a 'friendly competitor' – either for the purposes of making their competitor look good, or more commonly, because they do not want to win the job, but believe that they will not be considered for future work if they do not submit a tender. Based on this research, the Commerce Commission is developing communications to educate the construction sector about what activities might breach the Commerce Act, and how to avoid being either a party to, or the victim of, anti-competitive behaviour (Commerce Commission, 2011b).

Following the recommendations of a UK government report (Latham, 1994), the UK Construction Industry Board published a code of practice for the selection of subcontractors which includes guidelines that main contractors and subcontractors should follow during any selection process (Construction Industry Board, 1997). The primary purpose of the code of practice is to increase the efficiency and associated productivity of the industry through the use of best practice principles that minimise waste in the supply chain and reduce the potential for duplication (Hinton, 2011). Although this code of practice is now somewhat dated, the core guidelines remain relevant (Box 10.3).

Box 10.3 Code of practice for the selection of sub-contractors

- Clear procedures that ensure fair and transparent competition in a single round of tendering consisting of one or more stages should be followed
- Tender lists should be as short as possible
- Conditions for all tenderers should be the same
- Confidentiality should be respected by all parties
- Tenders should be assessed and accepted having regards to quality as well as price
- Practices that avoid or discourage collusion should be followed
- Tender prices should not change on an unaltered scope of works
- Proposed contracts should be compatible and consistent with the main contract
- Suites of contracts and standard unamended forms from recognised bodies should be used where they are available
- There should be a commitment to teamwork from all parties

Source: UK Construction Industry Board, 1997

The Commission considers that the establishment of best practice guidelines, appropriate to the New Zealand context, would be beneficial. As an existing organisation which has acknowledged the productivity challenges faced by the construction industry, the Building and Construction Sector Productivity Partnership is an appropriate group to undertake this work (Box 10.4).

Box 10.4 The Building and Construction Sector Productivity Partnership

The Building and Construction Sector Productivity Partnership (the Partnership) is a partnership between industry and government that was established in 2010 to address the issue of low productivity in the sector. The Partnership was formed following a recommendation in the Report of

the Productivity Taskforce (BCSPT, 2009) and has a membership drawn from the industry (including representatives from residential construction firms), industry bodies, research organisations, education agencies and government departments. The Partnership aims to raise construction sector productivity by 20% by 2020 and is working in four key areas:

- Developing a skills strategy with the aim of generating a greater return on current investment, identifying skill shortages and reducing entry barriers to the industry.
- Examining how government procurement can be used to create value for both customers and providers, and how other areas of procurement can be improved. It will also assess where further improvement is required, particularly to smooth boom/bust cycles and to meet customer and provider needs.
- Identifying areas where change can be applied across the sector to improve productivity, including increased innovation and better uptake of technology.
- Gaining a better understanding of the drivers of productivity, developing productivity measurements that are meaningful for the sector, and identifying areas of research where better knowledge can contribute to higher productivity.

Source: Productivity Partnership Draft Research Action Plan

Building materials and techniques

Increased use of prefabrication or modular components is also suggested as an effective mechanism to lift building productivity and reduce costs:

While most innovations in materials are likely to be received from overseas, examination of the processes for adoption of innovations and their use in novel ways are areas where significant gains might be made. In particular the development of modular or prefabricated systems to maximise off-site controlled production are likely to reduce waste, the level of rework required, and construction time. (Department of Building and Housing, sub. 55, p. 30)

Prefabrication is a form of offsite construction and can range from prefabrication of specific components (such as pre-nailed framing) through to prefabrication of complete buildings which are then transported to a site and attached to foundations (Bell, 2010). While there were mixed views about the ability to reduce construction costs through fully prefabricated buildings, there was agreement regarding the ability to improve productivity through the use of prefabricated components. Key advantages were seen in greater product certainty and quality control, time reduction, and lower rates of re-work due to offsite assembly. Inquiry participants noted a lack of scale and negative consumer perceptions as key impediments to growth in the use of prefabrication in residential construction. Also, as discussed in Chapter 9, the time and expense barriers associated with developing innovative alternative building solutions are particularly acute for small firms.

F10.4

The fragmented nature of the residential construction industry supply chain presents a number of management difficulties which can dampen innovation and result in lower building quality and higher construction costs.

R10.1

Given that the Productivity Partnership has a number of relevant workstreams in progress, and has an established membership of relevant representatives, the Commission considers that it is an appropriate organisation to develop practical initiatives to improve industry productivity. In particular, the Partnership should develop, in consultation with the sector, practical responses to the supply chain issues outlined in section 10.4.

Skill levels are a problem

Inquiry participants raised a number of issues relating to low skill levels in the industry.

The provision of sufficient skills to the industry (and their leakage to Australia and elsewhere) is a significant productivity issue. (Council of Trade Unions, sub. 15, p. 5)

An additional issue identified by the industry is the lack of qualified trades' people coming through the system. Construction occupations are listed on the long-term skill shortage list. (Auckland Council, sub. 45, p. 12)

Table 10.6 shows the spread of different qualifications held by individuals working in various construction industry occupations. In all occupations there is a relatively large proportion of employees without any form of post-secondary school training.¹²⁶

Table 10.6 Highest qualifications held by individuals in construction industry occupations (2006)

Occupation	No qualification	School qualification	Vocational qualification	Bachelor Degree or higher
Construction Manager	7%	20%	51%	21%
Carpenter and/or joiner	18%	25%	55%	2%
Builder	19%	32%	46%	3%
Builder's labourer	33%	34%	29%	4%
General labourer	44%	37%	16%	4%
All Occupations	19%	35%	27%	19%

Source: BCSPT, 2009

Inquiry participants noted that the pathways both into and within the industry are unclear. The ability of young people to successfully transition from secondary school into tertiary training, and then into employment is a common issue across many industries (Quintini, Martin and Martin, 2007). This has been identified as a particular problem in the construction industry with a need to develop appropriate and clearly understood career pathways (BCSPP, 2011b). Inquiry participants noted that it is difficult for young people to source good-quality information about training and career options.

There is also an absence of a clear career path within the industry, meaning that very few people progress beyond owner-operator status. Importantly, inquiry participants noted that as a result, the industry suffers from a shortage of management skills:

The DBH led Productivity Taskforce report would indicate an hourglass skills gap problem in our industry with trade and initial training levels about right, and the higher (professional) end being adequate, but significant gaps exist at the construction manager and supervisor levels. (CIC, sub. DR141, p. 1)

... low productivity can be attributed to an unclear, fragmented and non aspirational career pathway ... This has been borne from a fragmented training framework that has ... scant regard to the required business processes of the industry. This has resulted in the lack of incentive (or skill) for builders to grow their business size, which amongst other things brings the understanding of the need to improve productivity. (Certified Builders Association, sub. DR116, p. 2)

There appears to be a presumption within the industry that the development of management expertise is best gained through "entering at the bottom and working your way up" (BCSPT, 2009). This is reflected in the very low number of people completing Bachelors level qualifications in Building and Construction Management, with just 20 people completing this qualification in 2010 (Education Counts, 2011). The shortage of management skills at the upper levels of the industry results in a number of problems such as

¹²⁶ This information was collected in the 2006 Census during the peak of a construction boom. More recently, the industry has entered a strong downturn. Participants suggest that the industry tends to lose its lowest skilled workers during downturns; as such it is likely that current figures would show a proportionately higher skilled industry.

the inability of firms to manage business cycle fluctuations, limited firm expansion, and little large-scale innovation in supply-chain management (Davis, 2010).

The cyclical nature of the building and construction industry also has a negative impact on skill levels in the industry, with periods of downturn generating difficulty in the recruitment and retention of industry employees. A related issue raised by inquiry participants is that training for building and building-related trades (which generally takes between three and four years) is poorly aligned with the construction industry demand cycle. During periods of downturn, people are reluctant to begin training due to a perceived lack of employment prospects. Likewise, a requirement of the Industry Training and the Modern Apprenticeship systems is that trainees are already employed in the relevant industry. During downturns, many firms have insufficient resources to provide these opportunities. As a consequence, when the industry enters a period of growth there is often a shortage of skilled workers. Conversely, during growth periods, people will begin training, only to find that by the time they have completed their training, the demand no longer exists. Skill shortages experienced during the recent housing boom have been attributed to the sharp downturn in the building and construction industry during the early 1990s. This resulted in a period of reduced investment in industry training and the loss of a large cohort of experienced construction practitioners and managers (Davis, 2010).

Inquiry participants anticipated very strong growth in the residential construction sector over the next two to three years, which will see the industry going from a situation of relative over-supply of skills, to a period of acute skills shortages:

Skills shortages of a large scale are predicted going forward ... 3 years of very low activity has resulted in the sector losing a high number of skilled trades people. (Registered Master Builders, sub. 16, p. 13)

Demand is expected to eventually return to the longer-term average, with additional demand generated from the Canterbury rebuild and the financial assistance package to fund the repair of leaky buildings:

Coming off such a low base and if these demands eventuate in 2012–2013 it is highly unlikely NZ has sufficient skills going forward. (Registered Master Builders, sub. 16, p. 13)

There was agreement among inquiry participants that the existing skill levels in New Zealand will not be sufficient to meet this demand, and that some of the shortfall will need to be taken up from abroad. In addition, as noted earlier, recent regulatory changes which require certain building work to be carried out by a 'licensed building practitioner' may result in some builders exiting the industry. A number of measures are in place to address the predicted skills shortage, including additional funding of \$42 million for trades training in the Canterbury region and a special immigration skill shortage list to allow employers to import high-skilled workers that can't be trained in time (Joyce, 2011).

The Building and Construction Sector Productivity Partnership is focusing on skills issues in the industry. Following a process of consultation with the sector, the Partnership has just completed a skills strategy document for the industry. Although aimed at the construction industry as a whole rather than specifically focussing on the residential construction industry, the key areas for action identified in their strategy (Table 10.7) match closely with the issues raised by participants in this inquiry. As such, if implemented effectively, the Partnership's strategy has scope to address a number of important skills issues in the industry.

Table 10.7 Productivity Partnership skills strategy for the construction sector

Areas for Action			
Short-term skills challenge	Firms	Culture	Education and training
Responses to short-term skills shortages are required to ensure that the industry is equipped to respond to a significant increase in demand over the next five years.	<p>Firm-level skill issues are identified which can help increase sector productivity:</p> <ul style="list-style-type: none"> • Firms need to be better equipped to respond to fluctuations in demand. • Improving management skills to ensure that workers are productive and being used efficiently. • Management and responsiveness to demand cycles are especially important for small firms (which are particularly prevalent in the residential building sector). 	<p>A number of cultural barriers present impediments to productivity growth:</p> <ul style="list-style-type: none"> • Fragmentation and a lack of collaboration. • The industry's ability to attract and retain skilled staff. • Negative perceptions stemming from delays, variable quality and a lack of customer focus. • Ensuring that the importance of education and training is embedded across all firms. 	<p>Education and training is a fundamental lever to address the skills of workers. Particular areas for improvement are:</p> <ul style="list-style-type: none"> • Improving pathways into the sector, between different parts of the sector and to higher skilled parts of the sector. • Greater collaboration between different tertiary education providers. • Continuing work to improve industry health and safety, and reduce work-related fatalities and injuries.

Source: Adapted from the Built Environment Skills Strategy (BCSPP, 2011b)

Boom/bust cycles can hamper industry productivity

Many inquiry participants voiced concerns about the cyclical nature of the building and construction industry, and the negative impacts this has on productivity:

The existing construction industry has almost unique characteristics which work against productivity compared to other project-based industries. Those characteristics include ... volatile boom/bust demand cycles. (Department of Building and Housing, sub. 55, p. 8)

The boom bust nature of the sector makes it particularly difficult to manage and the industry tends to lurch from cycle to cycle. (Registered Master Builders Federation, sub. 16, p. 3)

Growth in the building industry tends to mirror that of the wider economy; however, like other industries where people are making large capital investments, swings tend to be more pronounced as they respond to economic conditions. This means that the building industry experiences "booms" and "busts" (Allan, Yin and Scheepbouwer, 2008). In 2001, when growth in New Zealand's overall GDP had slowed to around 2%, growth in construction GDP fell to -8.6%. During the period of strong economic growth between 2003 and 2006, GDP growth in the construction sector peaked at 15% while overall GDP growth was around 5%. Likewise, during the recent downturn, construction growth has fallen well below that of the total economy¹²⁷ (PWC, 2011).

The cyclical nature of the construction industry presents a number of barriers to productivity. For firms, the pace of growth or decline presents particular challenges to management. Uncertainty makes planning, investment and human resources difficult, which can generate waste and additional costs (Allan, Yin and Scheepbouwer, 2008). Uncertainty also presents a barrier to increasing scale. As noted earlier, smaller firms are more flexible and better able to manage downturns in demand. This helps firms to manage risk, but ultimately it prevents consumers capturing any benefits which might be achieved through greater scale economies.

¹²⁷ While these figures relate to the construction industry as a whole, inquiry participants were of the opinion that the residential building industry is subject to similar swings in demand.

Fluctuating demand for construction work can also create difficulty in the recruitment of young people, with lay-offs and other negative publicity during the downturn leaving an impression that the industry does not offer stable career opportunities (Karaitiana, 2010). Inquiry participants also noted that demand cycles create difficulties in retaining skilled staff and that better management is required during periods of downturn to prevent good staff from leaving the industry or the country:

Due to the lack of residential building work many New Zealand builders have left New Zealand for more constant work opportunities ... Many of these builders did not leave for better pay rates, they left because the level of house building in New Zealand halved. (Affordable Housing New Zealand, sub. 12, p. 9)

Inquiry participants from the building industry noted that during the recent housing boom, high levels of demand resulted in lower levels of competition and inflated profit margins. In more recent years, as residential demand has dropped away, the industry has become ruthlessly competitive with some builders reporting lower levels of quality as a result of cost-cutting measures.

The impact of industry cycles on skills and productivity growth was identified by the Building and Construction Sector Productivity Taskforce¹²⁸ (the Taskforce), who note:

Better management of the cycle will help skill development and retention and will reduce waste, by giving greater confidence to industry participants that the skill investments they are making will actually be useful (BCSPT, 2009).

Subsequently, the Productivity Partnership has established a workstream which is examining how government procurement can be used to smooth industry boom/bust cycles (Box 10.5).

Box 10.5 Productivity Partnership procurement workstream

The Partnership has recently commissioned a report which examines the value of the construction industry and the extent to which it is vulnerable to business cycles. This report presents a number of recommendations as to how government can work with the industry to develop forward visibility of future construction that is required, allowing the sector to maintain and develop skills and boost labour productivity. The report also suggests that as a buyer of construction services, government can help to smooth industry cycles through counter-cyclical investment (PWC, 2011).

The Commission is supportive of initiatives geared towards improving the forward visibility of government investment. But given the limited success of previous attempts by government to smooth industry cycles, the Commission does not endorse suggestions that aim to actively manage demand cycles through counter-cyclical investment. Instead, the Commission considers that the Partnership's work to determine ways that the building industry can better equip itself to respond to boom-bust cycles is a more appropriate response to this issue. In particular, innovative approaches to management and building processes might enable firms to better manage resources during periods of fluctuating demand. The Partnership's skills workstream is currently examining these issues (Table 10.7).

Greater levels of forward planning and visibility around future work requirements could also help the industry to better manage demand cycles (BCSPT, 2009). The National Infrastructure Unit has been established, and is responsible for formulating and monitoring progress on a 20-year National Infrastructure Plan, which will be updated every three years (National Infrastructure Unit, 2011). The current National Infrastructure Plan provides a strong indication of where government infrastructure funding is likely to be directed in the coming years and may go some way to helping the industry plan for future demand. The plan also commits to a number of actions which are likely to provide further clarity and visibility around future demand (Box 10.6).

¹²⁸ The Taskforce was established in 2008 to develop approaches to address productivity issues in the building and construction industry. The Taskforce released its findings and recommendations in 2009.

Box 10.6 Three-year commitments included in the National Infrastructure Plan

- Central government will commit to developing and publishing a ten-year Capital Intentions Plan for infrastructure development to match the planning timeframe required of local government.
- Improve access to information on current infrastructure performance to create certainty about when, where and how infrastructure development is occurring, including consideration of whole-of-life costs.
- Develop performance indicators for each sector on the stock, state, and performance of central and local government infrastructure assets.
- Work with regions to develop more strategic infrastructure planning at a macro-regional level. Consider where adoption of spatial planning would produce optimum outcomes, particularly in metropolitan areas.
- Improve scenario modelling to more accurately project likely infrastructure investment requirements from the short to very long term.

Source: National Infrastructure Unit, 2011

Although the National Infrastructure Plan makes some reference to housing within the context of 'social infrastructure,' the focus of the plan is much more relevant to commercial and civil construction sectors than the residential building industry. Given that future versions of the National Infrastructure Plan will contain greater detail about when, where and how infrastructure development will occur, there is potential for the plan to include more information that is relevant to the residential building sector. While the majority of investment in residential housing is from private individuals, Table 10.8 presents a range of government investment in residential housing, along with other ways in which government might influence demand for new housing. More certainty about this investment may help residential construction firms to ensure that they are well equipped to respond to emerging and future demands.

Table 10.8 Government investment in the residential building sector

Activity	Impact
Regular maintenance of state housing stock	During 2009/10, HNZN spent \$219 million on responsive and planned maintenance of state housing. In addition, HNZN has spent approximately \$50 million over the past five years on healthy housing upgrades.
Expansion of the community housing sector	The Social Housing Unit has \$37.35 million available to allocate to social and affordable housing providers during 2011/12 (Social Housing Unit, 2011).
Government initiatives to improve the quality of privately owned housing	Government has committed to spending \$347 million over three years on the Warm Up New Zealand scheme (EECA, 2011). Because the government subsidy for this scheme only covers one third of total costs, investment is compounded by private funding.
Regeneration programmes	For example, \$5 million has been put aside for the Tamaki regeneration project in Auckland, much of which will be put towards expanding housing stock (Heatley, 2011).
Improvements to social housing stock	While not currently budgeted for, HNZN estimates that the cost upgrading their current housing portfolio at \$2 billion (HNZN, 2010).
Major release or re-zoning of land for residential use	Local or central government initiatives to release or re-zone large tracts of land for residential use would likely stimulate significant demand in the residential building sector.
Construction of new state housing stock	While construction of new state housing is not currently planned, policy changes with regard to state housing could have a significant impact on the level of demand in the residential building sector.

F10.5

The National Infrastructure Plan represents a good mechanism for providing, where possible, forward visibility of government investment which is reliant on the residential construction sector.

F10.6

Skills issues, particularly at the management level, require attention in order for the residential construction industry to better respond to industry cycles and to improve productivity performance. The Productivity Partnership Skills Strategy focuses on a number of skill issues, which, if addressed, would help lift industry productivity growth.

Summing up

The Commission considers that there is scope to lift productivity in the residential construction sector. Productivity improvement is particularly important because construction costs (including renovation and maintenance work) are a significant component of housing affordability, and given the upsurge in demand for residential building work which is anticipated in the coming years. Key barriers to productivity growth are seen in the industry's small scale and cyclicity, low levels of innovation, and skill issues.

The industry is characterised by small firms which build just one or two houses each year. This pushes up new house prices because the small firms are unable to generate economies of scale. New Zealanders' preference for bespoke houses also adds to building costs as standard designs can yield significant savings. While there is little that can be done about market characteristics which reflect consumer preferences and the small size of the New Zealand market, the Commission considers that the current industry structure is influenced by the environment in which it operates, which is characterised by a fragmented and expensive land supply. The Commission recommends a number of policies to improve the supply of land in Chapter 7.

New approaches to management of the building processes and greater innovation in the materials and building techniques have potential to improve productivity. The residential construction process involves an increasing range of different sub-trades along with designers and builders. Without good management and procurement practices, this fragmentation in the supply chain can generate inefficiencies, time delays and re-work, which drive up cost and reduce quality. The adoption of collaborative working practices has been shown to address many of these issues and reduce costs. Likewise, best practice guidelines to cover the engagement of subcontractors are also likely to improve coordination within the building process. In addition, greater use of prefabricated or modular building components also presents a number of benefits including greater product certainty and quality control, time reduction, and lower rates of re-work due to offsite assembly.

Increasing the breadth and depth of skills in the industry is also an important prerequisite for improved productivity performance. Firms in the residential construction industry suffer from a number of skills issues, particularly at the management level. Addressing a shortage of management skills is particularly important as firms seek to upscale and make use of new building techniques and materials. In addition, better management is required in order for residential construction firms to better respond to the highly cyclical nature of the industry. It is also important that the construction industry has appropriate pathways available for entrants to the industry, as well as sufficient upward progression within the industry.

The institutional apparatus is already in place to implement change in the form of the Building and Construction Sector Productivity Partnership, established in 2010 as a joint industry/government initiative. The Partnership has a number of projects under way and is an appropriate organisation to implement initiatives to improve skill and innovation rates in the industry. Additionally, the newly established National Infrastructure Plan also presents a good platform by which government can provide forward visibility of future investment in residential building work, helping the industry to plan accordingly.

11 The private rental market: affordability and outcomes

Key points

- An effective rental market is a critical component of the New Zealand housing market.
- The rental market works well for relatively well-off households who value the flexibility offered by renting.
- During the recent housing boom, the private rental market expanded rapidly, providing housing for an increasing number of households that were unable to purchase a home.
- A growing number of households that would previously have transitioned into home ownership are now unable to do so. For these households, improving housing outcomes is most likely to be achieved through a reduction in house prices.
- Despite rents increasing at only a modest rate compared to median incomes during the recent housing boom, rental affordability remains an acute issue for lower-income households. Affordability pressures for these households are a longstanding issue.
- Renters on lower incomes have few housing options. They often spend a high proportion of their income on rent and may have to settle for poor-quality or inappropriate housing. The current rental market provides limited options for those who seek secure long-term rental accommodation, and people who enter retirement while renting are more likely to face hardship.
- During the past decade, the rent-to-house-price ratio significantly diverged from its long run trend. How this will resolve is unclear but rising rents will have important ramifications for the affordability of rental housing.
- Large numbers of households in the private rental sector receive the Accommodation Supplement. Any future decline in rental affordability is likely to place additional pressure on low-income households and generate further growth in Accommodation Supplement expenditure.
- Options to improve the quality of rental accommodation and tenure security without generating increased rents, reduced rental housing supply, or increased public expenditure are limited. There are no readily identifiable responses that would effectively address quality issues in the private rental market in the short to medium term.
- In the long run, better options for long-term renters on low incomes are likely to come through the growth of the community housing sector. But in the short to medium term, this sector is unlikely to be able to meet demand, particularly in Auckland.

This chapter examines the private rental market as a distinct entity, however the rental market interacts closely with other housing markets. Traditionally, the private rental market has been seen in a transitional capacity occupied by households working toward the purchase of a first home (Leggat-Cook, 2007). In this regard, house prices and the relative affordability of home ownership compared with renting have an important impact on the size and composition of the private rental market. The private rental market also interacts with state and community housing. These sectors are primarily tasked with provision of housing for those with the most acute housing needs – which often overlap with other social issues. Where there is a disjunction between the private and social rental sectors, the likelihood of households living in accommodation that is not best suited to their needs increases, resulting in poor outcomes.

11.1 The dynamics of the private rental market – an overview

The supply of rental property

Housing has two functions – it provides a flow of housing services and it is also an asset. For landlords, the decision to invest in housing will depend on the cost of securing the asset and what it will return for the housing services it provides (rent), and expectations about the asset's future value. It will also depend on the availability and relative attractiveness of investment alternatives.

In New Zealand, property investment has performed well compared with other investment options for 'mum and dad' investors, although the net cash yield on rental properties over the 2000s is estimated to be well below 4% (Department of Building and Housing, 2008). Despite the attractiveness of rental property for small-scale investors, yields have not been sufficient to attract institutional investors into the market (Burleigh Evatt, 2009; Deloitte, 2007). It is also difficult to achieve the scale required for institutional investment in New Zealand (PWC, 2008).

During the house price boom, rapid escalation in house prices was likely to have convinced many small-scale investors of the likelihood of generating a capital gain on their investment. This, combined with relatively low interest rates and ease of entry into the rental property market, saw an increase in the number of properties being purchased for rental, largely meeting the increased demand for private rental accommodation from new household formation and from those unable to transition to home ownership. Private rental accommodation increased as a proportion of all households from 20% in 1996 to just under 30% in 2010.

The demand for rental accommodation

The demand for housing services is not a just a straightforward relationship between numbers of people and the supply of accommodation, although population growth and net migration are central to the *underlying demand* for housing. *Effective demand* for rental housing depends on household preferences, the price of rental housing compared to the cost of home ownership, the price of other goods and services (such as food and transport) and ability to pay.

For some households, the private rental market offers flexibility, prompt access, reasonably efficient allocation and a range of housing types to meet different needs. As such, many households who are able to afford home ownership choose to remain in rented accommodation. In particular the market caters well for younger households such as tertiary students and early to mid-career workers who want the flexibility to move for study and employment opportunities. Short-term tenancies also provide a 'stop-gap' between selling and buying or in the event of a change in relationship status (Beer and Faulkner, 2009). In addition, surveys of residential preference indicate that some households that could purchase 'entry-level' housing continue renting in order to enjoy high-amenity locations close to the central city or around the harbour foreshore in Auckland and Wellington (Page, 2007; Beacon Pathways, 2010). While these renters are not a focus of this inquiry, it is worth noting that for some, the private rental market functions very well.

For some people renting is a poor substitute for home ownership but rising house prices can delay home ownership or place home ownership out of reach. During the recent housing boom the number of households defined as 'intermediate renters' – households with at least one member in paid employment who are unable to purchase a lower-quartile priced house – more than doubled between 2001 and 2006 (Table 11.1). The rent-to-house-price ratio significantly diverged from its long-run trend over this period, making renting relative to home ownership cheaper than it had been since the late 1970s (Figure 11.3).

The cost of renting relative to a household's ability to pay also matters. Despite the uncharacteristically low rent-to-house-price ratio, the two lowest income quintiles currently spend on average over 30% of their disposable income on rent. This affordability pressure appears to be a longstanding issue for lower-income households, pre-dating the latest house price cycle (Figure 11.1). A more recent phenomenon is the number of renting households further up the income distribution devoting more than 30% of their budgets to housing, especially in Auckland (Figure 11.2).

High rental prices will cause some to delay forming new households (for example, students may stay at home with parents rather than go flatting); result in more sharing of accommodation (for example, couples renting out additional rooms to other flatmates to help cover the rent; or families doubling or even tripling up, and using garages or sheds for sleeping). The extent of overcrowding is very difficult to determine, particularly given the lack of census information. However, inquiry participants from community organisations suggest that overcrowding has markedly increased as people's ability to pay has become more constrained.

The high cost of renting will also force some families to trade down the quality of their accommodation, or sacrifice other essentials. Again, community organisations have reported increasing numbers of families living in poor-quality accommodation because it is the only accommodation they can afford. For those where their choice of accommodation is severely constrained by their ability to pay, those 'choices' can become very unpalatable.

The private rental market after the boom

As house prices have dipped, it would be expected that relatively stable house prices coupled with historically low interest rates would result in an increasing number of first-home buyers entering the housing market. But higher deposit requirements, low levels of properties listed for sale, and wariness about the stability of the wider economy may have acted to limit the extent to which this is occurring.

Lower property prices and changes in tax rules around depreciation have also changed the cost structures and yield expectations of landlords. The prospect of less attractive long-term yields and some uncertainty in the economic outlook have likely slowed investment in rental property. Landlords are likely to attempt to maintain total yields by raising rents, or lowering costs (for example by deferring maintenance), which they are more able to do when rental accommodation is in short supply (New Zealand Housing Report 2009/10).

Although rents were relatively flat in real terms during the house price boom, there is evidence that rent pressures are starting to emerge, particularly in Auckland and Christchurch (where shortages are compounded by earthquake damage to properties). 2011 data on new bonds held by the Department of Building and Housing shows rents in all areas of Auckland have increased, particularly in South Auckland. In Christchurch rent increases spiked at the end of the quarter to March 2011. Aggregate data collected by Statistics New Zealand shows that rents have increased faster than incomes, with average household expenditure on rent increasing by 7.4% in the year to June 2011 (Statistics New Zealand, 2011c). In addition, anecdotal evidence reported through the news media suggests significant rent increases in the two major population centres facing the worst housing shortages.

Three affordability issues

The steep increase in real house prices over the 2000s has significantly decreased the likelihood of some households being able to purchase their own home. If this trend continues, an increasing number of households may face a life time of renting, particularly in Auckland where housing affordability issues are most acute.

The private rental market has increased as a share of total housing tenure with increasing numbers of households who can't afford to progress into home ownership.

In addition to a growing number of households which are unable to access home ownership, there are also many lower-income households in the private rental market who struggle to meet housing costs from their income. Wellington City Council (sub. DR 111) suggests that there are few options for these households given that eligibility for state housing is narrow and the Accommodation Supplement has a maximum subsidy level which leaves some households with high housing costs relative to income. As such, there are many households "who are not eligible for state housing but find the accommodation supplement inadequate" (Wellington City Council, sub. DR111, p. 16).

Lower-income households spend (on average) more than 30% of their income on rent. These households are particularly vulnerable to any increase in rents.

Over and above traditional affordability challenges, inquiry participants raised a number of other concerns relating to the private rental market. Specifically, the quality of rental housing is often poor, there is a lack of

tenure security, and long-term renters often struggle to maintain their standard of living in retirement. Taking a holistic view of housing affordability, these issues are no less relevant than more traditional measures of affordability. Although a household might spend less than 30% of their income on rent, their housing will still be unaffordable if the occupants can't heat it adequately.

The quality of private rental housing is generally low and the tendency for short term tenancies can adversely affect other social outcomes such as health and education.

The rest of this chapter examines these affordability challenges in more detail.

11.2 Growth of the private rental market

The proportion of households in the rental market has increased significantly over the past decade. At the same time, the internal composition within the rental market also changed. Table 11.1 identifies three broad groups of households in the private rental market:

- Not in paid work renters: typically aged pensioners, or tenants receiving other forms of income (eg, Domestic Purposes Benefit, Sickness Benefit, Unemployment Benefit).
- Intermediate renters: these are defined as households with at least one member in paid employment who are unable to purchase a lower-quartile priced house.¹²⁹
- 'Relatively well-off' renters: renters with a household income that enables them to purchase a modestly priced dwelling if they choose to do so. For many of these households the flexibility and convenience of the private rental market makes it an attractive alternative to home ownership.

Table 11.1 Changes in the composition of the private rental market

	Not in paid work		Intermediate renters		Relatively well-off renters	
	Households	% of all Households	Households	% of all Households	Households	% of all Households
1996	49,200	4%	70,300	5%	87,100	7%
2001	66,700	5%	72,300	5%	139,800	10%
2006	59,500	4%	187,400	12%	75,300	5%
2011	71,800	4%	157,700	9%	144,800	9%
2016	85,900	5%	203,600	11%	138,300	8%
2021	100,600	5%	232,300	12%	148,000	8%

Source: Productivity Commission modelling

Notes:

1. The years 1996–2006 show actual figures for each group in the private rental market based on census data.
2. Figures for the years 2011–2021 are projected based on the following assumptions: a 4.8% decline in the rate of home ownership; household growth of 1.2% per annum; interest rates increasing from 6% in 2011 to 7.5% in 2021; household income increasing 3% per annum; and house price growth of 2.5% per annum.

Numbers of 'not in paid work' renters tend to fluctuate according to prevailing economic conditions, and as a proportion of all households have remained relatively constant in recent years. The number of 'relatively well-off renters' who could afford to purchase a modest-priced house declined significantly between 2001 and 2006 as a result of rising house prices and mortgage interest rates in the mid-2000s. The absolute number of relatively well-off renters in 2011 is projected to have increased indicating that affordability isn't the only criterion determining whether a household will choose to own their own house. As noted earlier,

¹²⁹ Calculations assume normal lending criteria and a maximum debt servicing ratio of 30% of gross household income; a 25-year mortgage term using market interest rates; and a 10% deposit.

the rental market caters very well for some households particularly those valuing flexibility, meaning that some households prefer to rent.

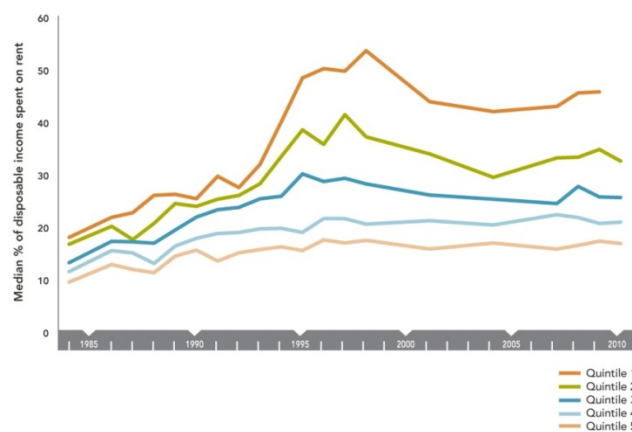
The concerning trend in the composition of the private rental market is the absolute and relative increase in the number of intermediate renter households (households with at least one member in paid employment who are unable to purchase a lower-quartile priced house). The relative size of the intermediate market segment more than doubled on the back of the housing cycle upswing, rising from 5% of households in 2001 to 12% in 2006. As a result of easing house prices and lower interest rates, the current number of intermediate renters has reduced; however, the Commission's projections show that intermediate renters may continue to grow, both in absolute numbers and as a proportion of all households. This indicates that intermediate renters are not progressing into home ownership in the same way that they were before. While new households form within this market segment, a backlog of existing households remain entrenched in the rental market and unable to purchase their own home. This backlog is indicative of 'missing rungs' on the housing ladder. Increasing numbers of middle- to low-income households who were previously able to purchase a 'starter home' are currently relying on the private rental market as a long-term form of accommodation rather than as a temporary stepping stone.

Housing affordability is also impacting now on many middle income New Zealanders groups with young families. Younger middle income New Zealanders who traditionally would have been able to buy a house have effectively been squeezed out of the housing market. (New Zealand Council of Trade Unions, sub. DR 104, p. 5)

11.3 Lower-income households are under stress

While the growth in the number of intermediate renters is the most evident change in the composition of the private rental market, there are also large numbers of households in the private rental market that struggle just to meet their housing costs. Figure 11.1 shows the median proportion of disposable household income which is spent on rent (including households who rent state houses from Housing New Zealand Corporation).

Figure 11.1 Median rent-to-household disposable income by disposable income quintile



Source: Productivity Commission and Treasury calculations using Statistics New Zealand (HES) data

Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.
2. Income quintiles are based on the entire HES sample.
3. The 2010 quintile 1 figure is excluded because there is some uncertainty about its reliability (Perry, 2011).

The proportion of income spent on rent for income quintiles four and five increased gradually until the mid to late 1990s and has subsequently remained relatively flat. The trend for income quintiles one and two is similar for the early and later years of the series, but shows a pronounced decline in affordability between 1993 and 1998, followed by an improvement in the following few years. While a range of factors may be at play in influencing rental affordability relative to income, this spike in unaffordability was most likely a result of policy changes relating to state housing tenants. In 1991, the income-related rent subsidy received by most state housing tenants was replaced by market rents and the introduction of the Accommodation

Supplement. Because the value of the Accommodation Supplement was lower than the subsidy which state housing tenants received, it had a detrimental impact on affordability for many state housing tenants. This policy was reversed in 1999, at which time the affordability trends for lower income renters improved.

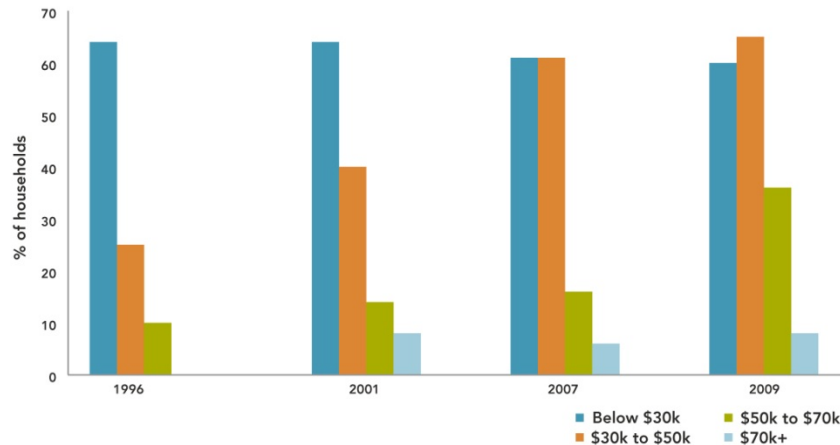
The two lowest income quintiles spend over 30% of their disposable income on rent. While there are a number of different methods for measuring housing affordability, a common benchmark is that housing affordability becomes a concern when housing costs exceed 30% of income. This affordability pressure is a longstanding issue for lower-income households. The average expenditure on rent exceeded 30% for the first time in 1993 and 1994 for the lowest and second lowest income quintiles respectively (Figure 11.1). The longstanding nature of the housing affordability pressures for lower income renters suggests that this issue is one which may persist irrespective of housing cycles.

F11.1

Low levels of housing affordability for lower income-households in the private rental market are longstanding. If rents had increased in line with house prices over the past decade, affordability for renters would be considerably worse.

While recent affordability pressures have been relatively unchanged in the New Zealand rental market as a whole, the Department of Building and Housing (sub. 55) points to research which suggests that new affordability pressures have emerged in the Auckland rental market (Darroch, 2010a). Figure 11.2 shows the proportion of households in different income bands spending more than 30% of their gross income on housing costs in the Auckland region between 1996 and 2009. It shows that the proportion of lower-income households (< \$30,000) with high rent outgoings has remained much the same throughout. What is striking is the threefold growth in the proportions of renting households in the \$30–50,000 and \$50–70,000 income classes now devoting more than 30% of their budgets to housing.

Figure 11.2 Proportion of Auckland renters (by income) spending more than 30% of their income on rent, 1996-2009



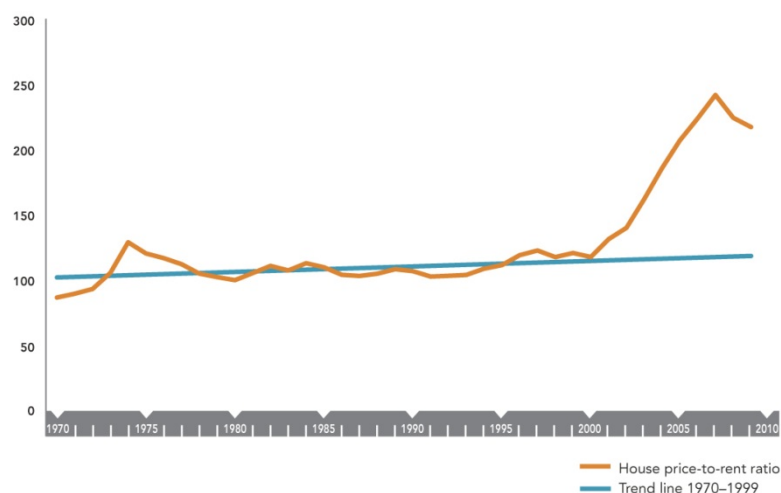
Source: Darroch, 2010a, and Department of Building and Housing, sub. 55.

F11.2

In Auckland, there has been an increase in the proportion of renting households in the \$30–\$70,000 income bracket spending more than 30% of their income on housing.

The divergence from the long-run relationship of rents to house prices

From 1970 to 2000, rents moved broadly in line with house prices. During the 2000s, house price increases accelerated sharply, but rents remained relatively stable. As a result, the ratio of rents to house prices increased markedly (Figure 11.3). Included in Figure 11.3 is the long-term trend line from 1970 to 1999. The gap between the two lines that emerges from the start of the housing boom demonstrates the extent to which house prices and rent have diverged from the long-run trend. Currently there is an 83% difference between rent and the long-run house price-to-rent ratio.

Figure 11.3 House price-to-rent ratio and long-term trends

Source: Productivity Commission modelling

It is not clear that there has been a permanent structural shift in the relationship between house prices and rents. As such, it is unlikely that the current divergence between house prices and rents will persist in the long term. A return to the long-run trend would require either a reduction in house prices, an increase in rents, or a combination of the two. Following changes to the tax provisions for rental property and a steep slide in home building activity over the last four years, there is growing uncertainty about the future capacity of the housing market to adequately respond to future demand for affordable rental accommodation. A number of submitters raised concerns about the potential for rents to adjust upwards toward the longer-run relationship with house prices:

Those who invested in the market at an early stage may still be receiving satisfactory yield based on their purchase prices, rather than the current valuation. However ... it is expected that the next owners will have a higher yield expectation and this could exacerbate an already adverse affordability situation for renters. (Habitat for Humanity, sub. DR107, p. 21-22)

We share the PC concern about the trends in market rentals as the effect of the house price boom eases and landlords seek to increase rents to cover the reduced capital profits through slower house price appreciation. (New Zealand Council of Christian Social Services, sub. DR125, p. 3)

Given the affordability pressures which already exist for lower-income households who live in private rental housing, substantial rent increases would present a number of challenges for these households. They may face unpalatable choices such as going short on other essentials, or moving to alternative accommodation which is overcrowded, poor quality or un-suited to the dynamics of the household. The wide range of adverse health and well-being outcomes associated with unaffordable rental accommodation are well documented:

...families in unaffordable housing often do not have money for food, especially nutritious food, or health services. When rents for appropriate accommodation are beyond a family's means, they are forced by circumstances into substandard, overcrowded or unhealthy housing. They may not be able to afford adequate heating in winter. (Families Commission, sub. 9, p. 4)

An increase in rents would likely be felt most acutely in Auckland, where a higher proportion of households are renting. In addition, rental prices in Auckland are among the highest in the country.

In addition to placing additional pressure on lower-income households, an increase in rental costs also presents a significant fiscal risk for government. Currently, approximately 280,000 individuals who rent in the private sector receive the Accommodation Supplement (AS). Although the value of AS payments that a household can receive is capped, an increase in rental prices is likely to generate additional demand for AS and other housing support:

If the housing shortage in Auckland is not addressed, inevitably rents will rise in real terms ... perhaps causing more widespread claims for the assistance from struggling households and certainly increasing the average payments being made. (The Salvation Army, sub. 59, p. 3)

However, it is important to note that the extent of AS payments that an individual can receive is capped, meaning that increasing rents will not simply be absorbed by an increase in AS payments. Rather, at an aggregate level, the cost is likely to be shared between increased levels of hardship among renters and additional government expenditure on AS.

F11.3

There is a risk that the house price-to-rent ratio will begin to return toward the long-run norm through an increase in rents. A period where rents increase at a significantly higher rate than incomes would result in further pressure on already stressed lower-income households, and would likely result in an increase in Accommodation Supplement expenditure.

11.4 Quality and tenure issues

In addition to the affordability pressures outlined above, private rental accommodation often exhibits characteristics which are detrimental to wellbeing in a broader sense such as poor quality, a lack of tenure security and increased hardship in retirement. While these issues may be less concerning when rental accommodation is just a transitional form of accommodation, many households rely on the private rental sector for long-term or permanent accommodation. This can create fiscal risk for government in other sectors of social service provision.

Poor quality

Generally, the quality of New Zealand's housing stock is considered to be poor. Although there is very little quantitative information available on the quality of New Zealand's housing, a periodic survey of housing quality is carried out by BRANZ. The most recent survey was the first to include rental properties. Although only a small sample, the quality of the rental properties examined by BRANZ was significantly lower than owner-occupied housing. This corresponds with submissions which suggested that quality issues such as dampness, poor sanitation and thermal inefficiency are more prominent in rental housing:

We endorse the Commission's findings about the relatively poor standard of rental accommodation (in comparison to that which is owner-occupied) ... The negative outcomes associated with poor quality housing ... and the growing proportion of the population living in rental housing, mean that the quality of rental accommodation is of pressing concern. (Palmerston North City Council, sub. DR122, p. 4)

It is important to recognise that rental housing is amongst the poorest quality houses in New Zealand, creating substantial burdens on both the tenant (direct resource costs, direct health costs) and the nation (health, productivity, justice costs). (Beacon Pathways, sub. 57, p. 3)

Rented housing is associated with lower incomes and poorer health, while poor quality housing is a key contributor to health inequalities. (New Zealand Nurses Organisation, sub. 36, p. 1)

The Housing and Health Research Programme, in the Department of Public Health at the University of Otago has undertaken a range of research demonstrating the adverse health effects associated with poor quality housing. It suggests that lower-income households, particularly in the private rental sector, are spending increasing proportions of income on energy, which compounds affordability issues:

[T]hose in the lowest income decile are also spending an increasing proportion of their household expenditure on energy (from 7.6% in 1989 to 13.1% in 2010) ... for private renters in particular, whose houses are of poorer quality, affordability must be measured in terms of both rents and operating costs. (University of Otago, Department of Public Health, sub. DR145, p. 1)

Historically, investment in New Zealand's private rental market has very much been the domain of small-scale investors (sometimes referred to as 'mum and dad investors'). Many will invest on a temporary basis and will 'sell up' before they have had time to gain much knowledge or experience (Saville-Smith and Fraser, 2004; SHORE, 2011a). The annual ANZ Property Investment Survey indicates that the most common number of rental properties owned is one to three, and that less than 10% of property investors work full-time in the sector (ANZ, 2011). As well as operating on a very small scale, the available evidence also suggests that New Zealand landlords are reasonably 'self-sufficient' in that they are disinclined to use professional property management services. About three-quarters of landlords in New Zealand manage

their own properties.¹³⁰ This is because “the majority of landlords do not see themselves as running a rental business in a service industry” (Saville-Smith and Fraser, 2004, p. 19). The New Zealand Property Investors Federation is the industry body working to improve professional practice on behalf of its 7,000 members (sub. 51); however, these investor/landlords are a small fraction of the over 180,000 landlords in New Zealand.

Some consider long-term institutional investment as the best way of increasing new supply, and that it could also offer better quality of accommodation and greater security of tenure low to moderate wage households facing the prospect of life-long renting (Berry and Hall, 2002). The primary advantage of this model is that the investor focuses on a sustainable yield – which encourages ongoing maintenance, a focus on longer tenancy terms, and the use of professional property management.

Security of tenure

Although the flexibility of the private rental market presents benefits to some tenants, inquiry participants raised concerns about the high rate of churn in the rental market:

Tenure type becomes more of a health and societal issue when one considers the rate of tenancy churn amongst tenants. (Auckland Regional Public Health Service, sub. 10, p. 17)

While a shorter length of rental tenure may not be a problem for younger ‘flatters’ (who have historically made up the bulk of the rental market) it can have a number of undesirable outcomes for families with children and older people – who are the growth segments in the rental market. (Department of Building and Housing, sub. 55, p. 20)

... security of tenure is an extremely serious issue for low income renters ... the rate of churn is especially high within this group. This is especially valid for Auckland where competition for available rental units is intense. (Habitat for Humanity, sub. DR107, p. 22)

Evidence from the Residential Tenancies Act Review provided by the Auckland Regional Public Health Service shows that the average rental tenure is 15 months. In addition, 50% end within 10 months, 33% end within 6 months, and 13% end within 3 months (Auckland Regional Public Health Service, sub. 10, p. 18).

Many household moves in the private rental market are initiated by the tenant or are in response to poor tenant behaviour. For example, in 2007 the Tenancy Tribunal received over 21,000 applications seeking to terminate the tenancy due to rent being in arrears. This makes landlords cautious about longer-term leases. However, surveys of tenants show that in 20% of cases it was the actions of a landlord that forced a tenant to move (SHORE, 2011).

High tenancy turnover in the private rental market tends to be a particular concern for two categories of household. Firstly, it often fails lower-income families requiring secure housing, particularly during school years. Multiple changes of address are suggested to adversely affect children’s educational attainment and access to healthcare (Auckland Regional Public Health Service, sub. 10, p. 18). Secondly, older renters preferring to live independently in settled accommodation are also vulnerable in the private rental market given the importance of continuity of access to healthcare, support services, community networks, neighbours and friends. Therefore, the housing tenure that offers choice and flexibility for some can be a source of insecurity and disruption in the lives of other renters.

F11.4

Poor-quality rental accommodation and insecure tenure have a detrimental impact on tenants, particularly older people and families with children.

A lack of retirement savings

The Commission for Financial Literacy and Retirement Income (CFLRI, 2010) notes that preserving a high proportion of people reaching retirement without a mortgage is a fundamental element of retirement policy. Home ownership can contribute to a positive retirement in many ways:

¹³⁰ In contrast, anecdotal evidence collected in engagement meetings suggests that around 80% of rental properties in Australia are managed by a property manager.

- Net retirement income is boosted for a retired person living in a home which he or she owns mortgage-free, because living costs are lower compared with living in rented accommodation.
- Enabling older people to live in their own home is central to 'ageing in place', which is part of New Zealand's Positive Ageing Strategy, and the preferred option of many older people (Davey, 2006).
- The house that the retired person lives in can be sold in order to move to a less expensive one, or equity can be released from the home while it is still occupied.

The Christchurch City Council (sub. DR102, p. 5) notes that:

... home ownership is arguably one of the two most important financial foundations for preventing poverty in old age, notwithstanding the contribution that superannuation and the relatively recently introduced savings schemes such as Kiwisaver may offer. The lack of familiarity with, access to, and comfort with other investment avenues increases the risk that the declining rates of home ownership, coupled delayed entry into the housing market will result will undermine the basis for such security for the elderly if alternative investment avenues are not adequately developed.

Table 11.2 shows the proportion of individuals aged over 65 whose household income (after paying for housing) is less than 60% of total median income. After paying for housing, those in rental accommodation are significantly more likely to have a lower income, underlining the value of owning a home, even if it is not mortgage-free, by retirement age.

Table 11.2 Proportion of individuals aged 65+ in low-income households (after paying for housing costs) by tenure, 2009

	Share of tenure type	Proportion of individuals living in low-income households
Owned without mortgage	79%	3%
Owned with a mortgage	11%	20%
Rented	10%	47%
Total	100%	9%

Source: CFLRI, Review of Retirement Income Policy, 2010

Notes:

1. Low income is defined as households whose income (after paying for housing) is below 60% of the median income for the two reference years.

F11.5

People who are in rental accommodation by retirement age are more likely to face hardship than those who own their own home.

11.5 Improving outcomes from the private rental market

In the short to medium term, the options available to address the challenges in the rental market fall into four broad categories:

- Improve the quality of rental accommodation across the board through regulation, and/or enforcement of minimum standards;
- Lower the cost structures for landlords and change their incentives for managing the property;
- Supplement incomes to meet housing costs;
- Increase the supply of affordable housing and assist tenants out of the private rental market and into home ownership.

Regulate, and/or enforce minimum standards for rental accommodation

Poor-quality rental accommodation will affect those on low incomes most, but may also be affecting those in the middle of the rental market adversely. Many submitters suggested minimum guidelines for rental properties as a means of improving quality:

Without minimum performance standards for rental properties or even an easy way for prospective renters to assess running costs, tenants not only face the risk of living in sub-standard conditions but also have limited capacity for affecting positive change. (New Zealand Green Building Council, sub. 60, p. 6)

Tenants need assistance at time of rental to understand quality and performance ... home performance is not strictly regulated, despite the significant costs involved ... a taxi driver requires registration and a special licence to carry passengers, yet there are no minimum performance requirements on rental houses. (Beacon Pathways, sub. 57, p. 5)

Despite recent reviews and changes to tenancy legislation, the private sector rental market continues to fail lower income renters by delivering poor quality housing in insecure tenancies ... The private rental market needs stronger regulation of housing standards ... (New Zealand Council of Christian Social Services, sub. DR125, p. 3)

The CTU supports regulation and not just voluntary reporting tools to provide information about housing quality and standards of rental accommodation. There must also be auditing to ensure standards are met. (NZCTU, sub. DR104, p. 8)

There are four key pieces of legislation which make reference to the quality of existing housing stock (Table 11.3).

Table 11.3 Current regulation relating to housing quality

Legislation	Date	Quality requirements	Responsibility for enforcement	Responsibility for administration
Housing Improvement Regulations	1947	Prescriptive list of requirements including heating, amenities, and number of people per room	Local government	Ministry of Health (with the Minister for Housing)
Health Act	1956	Free from nuisance and insanitary conditions	Local government	Ministry of Health
Residential Tenancies Act	1986	"Reasonable condition" and compliance with relevant legislation	Tenancy Services and Tribunal	Department of Building and Housing
The Building Act and Code	2004	Free from nuisance and insanitary conditions	Local government	Department of Building and Housing

Source: Bierre, Howden-Chapman, Signal and Cunningham, 2007

Bierre, Howden-Chapman, Signal and Cunningham (2007) have examined the current regulatory framework for housing standards and suggest a number of shortcomings:

- The Housing Improvement Regulations are a dated set of requirements which are often not enforced.
- A distinction is made in the Building Act between new and existing buildings, with new buildings required to meet much higher health and wellbeing standards. For example, over two-thirds of New Zealand's housing was built prior to standards requiring insulation in new buildings being introduced in 1977.
- The Health Act and the Building Act attempt to ensure that the immediate illness and injury risks of existing dwellings are minimised. However, existing housing is rarely subject to the regulatory provisions of the Building Act, except in extreme cases. The cost for local authorities in taking a case to court is high, and uncertainty of the outcome of a hearing can influence the decision to prosecute. In addition, a

lack of alternative accommodation options for the occupants of a house can also influence the way that housing regulations are enforced.

- The Residential Tenancies Act requires that rental properties be maintained to a reasonable condition. However, “reasonable condition” is un-defined and open to a range of interpretations. In addition, identification of un-reasonable housing is reliant on complaints being raised by tenants, who may fear jeopardising the tenancy.

Given the shortcomings of the current regulatory regime, the views of inquiry participants, and the growing body of evidence which illustrates the health, well-being and energy efficiency benefits associated with quality housing, there is merit in further review of the current regulatory framework, particularly as it relates to rental housing. However, enforcing regulations where households are in poor-quality accommodation because they have nowhere else to go risks worsening their situation. Either repair costs will be passed on through increased rents, or in extreme cases the building may be condemned. This may generate greater risk for those who struggle the most to achieve adequate housing:

Absolute [primary] homelessness represents only the tip of the iceberg ... there are many thousands more who represent the incipient homeless ... the plight of the currently homeless is desperate, but just around the corner is a potentially vast population of ill-housed people, *many of whom are little more than one additional domestic crisis away from being on the streets*. (Kearns, Smith and Abbot, 1992, p. 369) quoted in New Zealand Coalition to End Homelessness, sub. DR149, p. 2 (emphasis in the original)

Growing the community housing sector and realigning the state housing portfolio so that there are sufficient alternatives to cope with those who may lose their accommodation needs to occur before any heavier regulatory response.

In addition, any greater use of regulation should come after evaluating changes in the rental market resulting from the reforms proposed in this report. Although the flow-on effects of greater supply responsiveness and lower house prices are likely to take some time to reach those in the worst situations, significant shifts in how the housing markets operate are possible. Any regulatory response would need to take into account the changed environment to determine any potential adverse effects.

Further or updated regulation, or better enforcement of existing regulation, may be a viable option in the medium term, provided that suitable alternatives are available for those tenants likely to be most adversely affected. Growing the community housing sector and reviewing the relevant legislation and standards for efficacy are necessary antecedent conditions.

R11.1

Department of Building and Housing review the legislation and regulations relevant to rental accommodation quality for their effectiveness, and consider options for improvement, including their implementation and enforcement, in the medium term. This review should be aligned with initiatives led by Department of Building and Housing and the Social Housing Unit to support the growth of the community sector to create suitable alternatives for those in the worst housing situations.

Change the incentives for landlords to manage the property

Where landlords have a low enough cost structure, they can rent properties for the ongoing cash yield, rather than long-term gains. Maintaining a stable cashflow incentivises greater tenure security, and maintaining or improving the property to attract good tenants. This may alleviate some of the problems faced by long-term low-income renters. In the international context, this kind of rental property is usually provided by institutional investors.

The Department of Building and Housing (DBH) has commissioned three pieces of research on the potential for institutional property investment in New Zealand (PWC, 2008; Burleigh Evatt, 2009; Deloitte, 2007). This research suggests that an inability to obtain sufficient scale in a short period of time is a significant barrier to institutional investment. Institutions would need to invest upwards of \$200m in a diversified portfolio – different types of housing, different geographies and different demographic exposure. They suggested the

small and dispersed nature of New Zealand's population is also a barrier to large-scale investment in private rental accommodation (PWC, 2008).

Difficulty in generating sufficient cash yield was also identified as a significant barrier to institutional investment in the residential rental market:

Institutional investment in residential real estate is not attractive because the yields are too low. It is only when yields start to compete with commercial rates that you will start to see these players enter the market. (Saltburn Limited, sub. 7, p. 2)

... in the Auckland market ... valuation of existing stock would need to drop by as much as 40% in order to reinstate yields that would encourage further private or institutional investment in affordable rental stock. (Habitat for Humanity, sub. DR107, p. 19)

In particular, inquiry participants noted that the willingness of small-scale property investors to accept low yields on their properties has acted as a barrier to institutional involvement in the sector. Although estimates vary, the cash yield on rental properties over the 2000s house price boom is estimated to be well below 4%. It appears many property investors were absorbing at least some of the operating costs of their rental property in anticipation of future income. In contrast, institutional investors seek a cash yield of 5–6% for this asset class (PWC, 2008).

It has been suggested that with the introduction of policies to remove barriers to the supply of affordable housing, the necessary market conditions for institutional investment could emerge:

... if NZ's urban land prices were brought back to as low as possible a level ... more stable and sensible "price to earnings ratios" of rental properties would eventuate, leading to greater institutional involvement. (Hayward, sub. DR084, p. 26)

While a change in the market conditions may well improve the returns for different investment models in the private rental market, even in the best case scenario it is likely to take some time for change to filter through the market. The Commission has concluded that, in the current market, the incentives for a substantial increase in institutional investment in the private rental market do not exist. If institutional investors were able to enter the current market, their requirement for higher ongoing yield would likely offset any affordability benefit that might be generated through a focus on professional tenancy services.

F11.6

Under the current market conditions the emergence of institutional investors into the private rental market is unlikely. Obtaining sufficient scale in a short period of time is a major barrier for institutional investment. In addition, institutional investors require higher on-going yields and are priced out of the market by small-scale private investors.

Improve incomes relative to housing costs

Inquiry participants noted that employment and income have an important influence on housing affordability:

...housing affordability is a relationship between the cost of housing and income. Putting to one side the cost of housing, there is a fundamental issue in New Zealand with low wages. (New Zealand Council of Trade Unions, sub. 15, p. 5)

The Local Government Forum (sub. DR108, p. 20) notes that along with unemployment and non-participation in the labour market, "the real problems facing certain groups are found elsewhere, for instance in impediments to employment and a quality education, welfare dependency, or drug and alcohol abuse."

Housing costs are the largest single source of expenditure for most households and will consume a large proportion of income. Assuming that house prices and rents remain stable, an increase in income will improve housing affordability. While broad economic development may generate an improvement in housing affordability in the longer term, in the short to medium term income changes are more likely to be

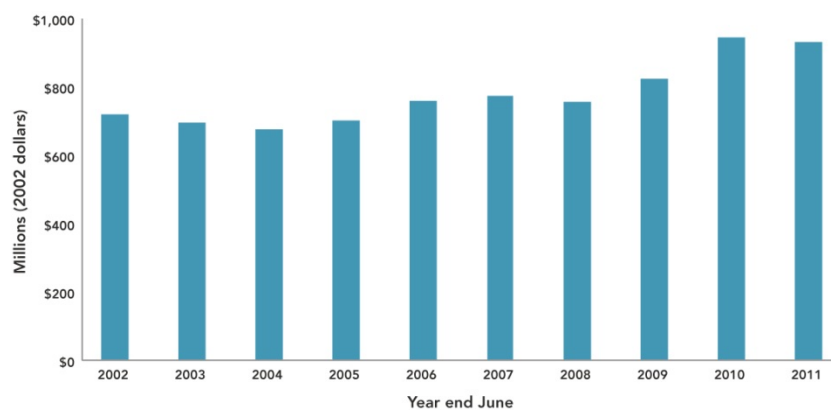
achieved through changes in housing assistance policy. Governments already provide direct assistance to lower-income individuals to meet their housing costs through the Accommodation Supplement (AS).¹³¹

The role of the Accommodation Supplement

The AS is a weekly payment to an individual, administered by the Ministry of Social Development, which helps people with their rent, board or the cost of owning a home. Eligibility for the supplement depends on income, assets, accommodation costs, family circumstances and where an individual lives. Currently, 322,000 individuals receive AS, the majority of whom rent in the private sector.

The AS is a significant subsidy, with total payments in the year to June 2011 of \$1.2 billion. Total AS payments (in constant 2002 dollars) were relatively stable during the course of the house price boom fluctuating between \$700 million and \$800 million, but in the latter half of the 2000s payments have increased in real terms (Figure 11.4). Average weekly AS payments have also shown only moderate growth in real terms, increasing from \$49/week in 2002 to \$54/week in 2011 (adjusted for inflation).

Figure 11.4 Accommodation Supplement expenditure (2002 dollars)



Source: Ministry of Social Development

Because there is no fixed cap on the AS, total annual payments are subject to change depending on housing and income trends. As noted earlier, a rapid escalation in rents relative to incomes would place increasing pressure on the AS and generate associated fiscal risks. The Housing Advisory Shareholders Group projects that AS expenditure will grow rapidly to between \$1.7 and \$2.2 billion by the year 2015 (HSAG, 2010). However government projections for future AS expenditure are more moderate and suggest that total payments will remain largely unchanged over the next few years¹³² (Treasury, 2011b).

Mixed views about the AS

Inquiry participants presented mixed views with regard to the effectiveness of the AS in improving housing affordability. Most suggested that the AS plays an important role in improving affordability; some were concerned that it was being captured by landlords; and others questioned whether the AS could be used more effectively (Box 11.1).

Box 11.1 Participants' views about the Accommodation Supplement

New Zealand Council of Christian Social Services

The Accommodation Supplement ... is a vital tool for private renters to be able to afford any kind of rent but we share concerns about the effectiveness of the \$1.2 billion spend on AS. (sub. DR125, p. 3)

¹³¹ A range of other initiatives are designed to improve incomes, although are not tied directly to meeting housing costs. For example, Working for Families was introduced to improve incomes for lower and middle-income families.

¹³² These projections show expenditure increasing from \$1,196 million in the year to June 2011 to \$1,276 million in 2016.

Auckland Council

Government spending on the Accommodation Supplement is approximately \$1.2b per year. This is, in effect a subsidy to private landlords ... [There is a need for] work on identifying more efficient and effective ways this money would better assist home ownership and secure renting. (sub. 45, p. 14 –15)

The Auckland Catholic Diocese Justice and Peace Commission

Regrettably the availability of the Accommodation Supplement has enabled private land owners to charge higher rents and consequently benefit from them. (sub. 50, p. 4)

Queenstown Lakes Community Housing Trust

Some of this appropriation we believe could be diverted to putting in place a structural solution to produce better outcomes than a straight subsidy that AS represents. (sub. 42, p. 17)

The impact of the AS on rents and ability to pay

The Accommodation Supplement can be considered an income subsidy in that it is paid to low-income households and is not a direct subsidy of the rental market. The supplement bolsters the household's income, the money does not have to go on rent. However, in as much as the AS increases household incomes for those households struggling to pay rent, it facilitates a household's ability to pay rent for a quality of rental accommodation *that they would be unable to afford without the supplement*. In that sense, it maintains rental levels and thus the incomes of landlords.

As discussed earlier, tenants have a number of responses (such as disestablishing a household to share accommodation with another) when rents increase beyond their ability to pay. It is likely that the AS has militated against household disestablishment and overcrowding to some degree.

Establishing the extent to which landlords 'capture' the AS would require sophisticated modelling of the rental market including estimates of both demand and supply responsiveness to price (rents). Analysis by Stoombergen (2004) failed to find any measureable effect of 'landlord capture'.

More effective use of the AS

Some inquiry participants suggested the AS would be more effective if recipients were able to capitalise the AS to provide a deposit for home ownership. In order for this to be fiscally neutral, the amount capitalised would have to be offset through the recipient being able to manage their housing costs without further government assistance after purchasing a house. But in most circumstances, even with a substantial deposit to reduce the initial mortgage size, AS recipients would still struggle to meet the costs of servicing a mortgage and paying other ongoing costs (such as rates and maintenance), particularly given the current disequilibrium between rents and house prices.¹³³ As such, this model is unlikely to be viable in the private market. There may, however, be scope to use the AS more effectively as a mechanism to increase scale in the community housing sector (Chapter 12).

Another option to improve housing affordability through changes to the AS would be a simple relaxation of its eligibility thresholds, or to increase the percentage of costs that the AS pays. But this would be a costly option. As well, any increase in its provision is likely to lead to an increase in demand for accommodation, as those previously just unable to form their own household would now be able to. This increase in demand would stimulate some increase in supply only if rents were to increase, leading to part of the subsidy increase being captured by landlords. A simple increase in the subsidy would therefore be costly and would increase rents, although less than the full value of the subsidy.

¹³³ For example, a household with two children and a before-tax income of \$680/week paying the median lower-quartile rent for a house in Manukau (\$340/week) is eligible for a weekly AS payment of \$134. As a result, their total housing costs are reduced to \$206/week or 30% of their income. If their AS payment was capitalised for ten years, the household would have a deposit of \$70,000. This would effectively reduce the cost of a lower-quartile house in Manukau from \$302,000 to \$232,000. Assuming an interest rate of 6.5%, the weekly repayment required to service this mortgage would be \$361 (53% of income) plus other on-going costs such as maintenance and rates. As a result, the household would considerably worse-off under this scenario, despite the significant deposit generated through capitalisation of the AS.

The Ministry of Social Development, Treasury and the Department of Building and Housing are undertaking a review of the supplement. While the Commission encourages investigation into more effective ways in which AS expenditure could be used to improve housing affordability, any changes to the supplement would need to take full account of the immediate and ongoing impacts that the changes would generate for housing affordability. When rental affordability is measured relative to income (Figure 11.1), AS payments are included as a form of income. The trend for lower-income households to spend more than 30% of their income on housing costs indicates that AS only moderates housing affordability to a certain extent. As such, a reduction in AS payments or a restriction of eligibility criteria, without a commensurate improvement in rental affordability, would further exacerbate existing housing affordability pressures.

...any change to the AS must be carefully managed to ensure that the vulnerable families who depend on this support are not further disadvantaged. (New Zealand Council of Christian Social Services, sub. DR125, p. 3)

Overall assessment

A long-run improvement in incomes without a commensurate increase in housing costs will improve housing affordability. In the short to medium term, an improvement in household incomes relative to housing costs is more readily achieved through changes in housing support policy, particularly the AS. However, AS expenditure is already high, and has grown in recent years. An increase in the size of the subsidy or relaxation of eligibility criteria would come at significant additional cost to government, and some of the benefit from the subsidy may be captured by landlords. On the other hand, lower-income renters are already under housing stress, and AS payments are embedded in both tenant and landlord cost structures. As such, a reduction or phasing-out of the AS would present a number of risks.

Increase the supply of affordable housing and assist tenants out of the private rental market

Reduced house prices will assist middle to higher-income renters into home ownership. This would address the first challenge identified in this chapter – the large number of tenants who would ordinarily have progressed into home ownership, but haven't due to supply-side issues. Addressing housing supply constraints has been a key focus of the preceding chapters in this inquiry.

While a reduction in house prices will open the option of home ownership to a number of households at the 'upper end' of the private rental market, it is unclear to what extent this will filter through to improved rental affordability for those on lower incomes. While new investors will have a lower cost structure, existing investors who purchased under different market conditions will have different costs to manage. Likewise, a period of slow house price appreciation will likely result in different perceptions about longer-term capital gains which may result in investors seeking a higher ongoing yield on their investment. As such, it may be some time before a reduction in house prices filters through to reduced rents for those on lower incomes in the private rental market.

The Commission has modelled the extent to which a reduction in house price would reduce the number of intermediate renters. Table 11.4 shows the change in lower-quartile house prices required to achieve a fall of between 5% and 25% in the number of households in the intermediate housing market. A substantial reduction in lower-quartile house prices would be required in order to have a meaningful impact on the number of intermediate renters. For example, in Auckland the current lower-quartile house price would need to fall by 23% in order to reduce the number of intermediate renter households in Auckland by 20%.

Table 11.4 House price reductions required to reduce the number of intermediate renter households

Reduction in the number of intermediate renter households:	5%	10%	15%	20%	25%
Required reduction in median lower-quartile house prices:					
Auckland	-7%	-13%	-19%	-23%	-26%
Waikato	-6%	-11%	-16%	-19%	-22%
Bay of Plenty	-5%	-11%	-15%	-18%	-22%
Wellington	-7%	-13%	-18%	-21%	-23%
Canterbury	-6%	-11%	-15%	-19%	-22%
Southland	-4%	-8%	-11%	-14%	-16%

Source: Productivity Commission modelling

Notes:

1. Intermediate renters are defined as households with at least one member in paid employment who are unable to purchase a lower-quartile priced house. The ability to purchase a lower-quartile priced house is based on normal lending criteria and a maximum debt servicing ratio of 30% of gross household income; a 25-year mortgage term using market interest rates; and a 10% deposit.

Measures designed to improve the ability of intermediate renters to transition into home ownership also include those that seek to increase households' purchasing power. While home ownership has certainly become more difficult for those in the private rental market, governments have introduced a number of demand-side assistance programmes to help facilitate the transition to home ownership (Box 11.2).

Box 11.2 Government assistance with home ownership

- The Welcome Home Loan programme enables borrowers with a maximum yearly income of \$85,000 (or three or more borrowers with a maximum gross income of \$120,000) to borrow up to \$200,000 without a deposit, and a maximum of \$280,000 (or \$350,000 for those living in certain high-priced areas).¹³⁴ 7851 loans have been approved between 2003/04 and 2010/11 inclusive.
- The Kāinga Whenua programme began in February 2010 and enables those with a licence to occupy Māori land to obtain a loan of up to \$200,000 to build, purchase or relocate a house there. Eligibility is based on the same income criteria as for Welcome Home Loans. Just three loans have been settled to date.
- Gateway Housing makes Crown land available to first-time buyers with payment for the land deferred and capped for 10 years. Gateway Housing opportunities are available primarily through partnerships with community housing organisations and HNZC. Seven organisations have completed registrations of interest and have been found eligible for Gateway land. To date 17 properties have been confirmed in Hobsonville and a further 15 sites have been identified through the country as available for the Gateway Housing programme.
- The KiwiSaver First Home Deposit Subsidy programme allows individuals and couples (within an income threshold) a subsidy of \$3,000 to \$5,000 depending on the duration of their contribution to the scheme. The programme started in July 2010 and 929 subsidies were approved in its first year at a cost of around \$3.7 million. Additionally, all KiwiSaver members may withdraw all personal and employer contributions and returns to purchase a first home.

Source: HSAG, 2010; OECD, 2011

¹³⁴ A 15% deposit is required for the value of any borrowing between \$280,000 and \$350,000.

Inquiry participants questioned the effectiveness of ownership assistance programmes:

The Government schemes to assist home ownership set out in the Paper are of limited value in Auckland...The Kiwisaver programme appears to have had the most potential to assist first time buyers. (Auckland Council, sub. 45, p. 14)

...neglect of any meaningful housing policy is well illustrated by the somewhat ad hoc and often ineffective set of housing assistance programmes currently being operated by Government... The availability of Kiwi Saver deposits for purchase of a first home is a welcome innovation that may expand the availability of homeownership to more households. (The Salvation Army, sub. 59, p. 3)

Existing Government programmes have only scratched the surface of the problem. Welcome Home loans are targeted at a segment of the market that is too narrowly focussed and has met with only limited success. Kāinga Whenua loans have been spectacularly unsuccessful despite many Māori having access to land at no cost. (Habitat Auckland, sub. 23, p. 2–3)

The Housing Shareholders Advisory Group (HSAG, 2010) was also critical of current assistance programmes noting that they have low uptake and reach only a small proportion of people. In commenting on the Welcome Home Loan scheme, the HSAG (2010) notes that in all but three areas of New Zealand, \$200,000 is not enough to purchase an average lower-quartile house. Further, the amount actually available to a potential purchaser is likely to be lower than the maximum. For example, a couple with two children, earning \$45,000 per year and owing less than \$50 a week in debt, would be eligible for only \$120,000. This would not buy an average lower-quartile house in any area. Alternatively, if the same couple had an annual income of \$60,000, they would be eligible to borrow \$220,000. This would be easily enough to purchase a lower-quartile priced house in Invercargill (\$148,000), but would be well short of the median lower-quartile price in Manukau (\$302,000).

The Commission shares the concerns of inquiry participants with regard to current home ownership assistance programmes. In particular, where uptake is extremely low (such as Kāinga Whenua), associated administrative costs alone are likely to outweigh the benefits of the programme. The one programme which received favourable review from inquiry participants was the KiwiSaver deposit subsidy. While there may be scope to extend this programme, there is a risk that without sufficient responsiveness in the supply of housing, grants can be absorbed into house prices leaving home buyers no better off:

Subsidies for some to buy houses do nothing to reduce scarcity in the community, but they can be expected to raise house prices, thereby transferring wealth to those who owned properties at the time the subsidies were introduced. (Local Government Forum, sub. DR108, p. 20)

F11.7

Assistance programmes designed to help facilitate the transition to home ownership have generally proven ineffectual in assisting large numbers of households to purchase a first home.

Given the doubts raised regarding the effectiveness of current housing assistance programmes, there is value in a review of the existing home ownership assistance programmes. Criteria for evaluating assistance programmes could include (APC, 2004):

- Initiatives should be targeted appropriately to ensure that people who would otherwise have been unable to purchase a house in the medium to long term are able to enter home ownership. Initiatives should be designed based on a realistic assessment of what is needed in order to overcome the barriers to home ownership for target households.
- Initiatives should allow flexibility so that recipients are able to choose the type of housing which best suits their needs and preferences, within their available means (taking account of the fact that for those struggling to purchase a first home, choices may be very limited).
- The benefits of any programme should comfortably outweigh the costs of provision. In an environment of fiscal constraint, it is important that programmes deliver maximum output for the value of the subsidy. It is also important that administrative costs are kept to a minimum – programmes delivered on a large scale are likely to be most efficient.

R11.2

Government agencies responsible for the development and implementation of home ownership assistance programmes review existing (and future) programmes against criteria based around clarity of objectives, effectively targeting recipients, flexibility and cost effectiveness.

11.6 A long-term solution

Sustainable long-term solutions to affordability challenges in the private rental market are more likely to be accomplished through structural changes across the housing market as a whole. The key causes of the issues identified in the private rental market include high house prices and a social housing sector that is too small for the task before it. These factors can be addressed; however, they are unlikely to be resolved in the short to medium term.

The most effective strategy for improving outcomes in the rental market is likely to be through reducing house prices so that intermediate renters can enter home ownership more readily, and increasing community housing options to assist those who are least well-off and face renting long term. The rental market can deliver good outcomes for those who are looking for a transitional or flexible set of accommodation arrangements.

Taking pressure off the rental market – lowering house prices to reduce the number of intermediate renters and reduce the cost structure of landlords

The measures recommended in Chapters 7-10 are as important for increasing supply and decreasing prices in the rental market as they are in the home ownership market. The rental market is intricately connected to the demand and supply of housing as a whole and there are important feedback loops. As Coleman and Scobie (2009) demonstrate, interventions that increase the supply of housing or land for housing, or decrease the cost of constructing housing, have an impact on rates of home ownership and rental prices. Increasing the supply of housing puts downward pressure on prices, which will be met with some new household formation and increase the likelihood of intermediate renters transitioning into home ownership. Reductions in house prices will also reduce the cost structures of landlords, putting downward pressure on rents as long as there is competitive entry into the rental property market.

An increase in the number of new dwellings will increase the total stock of housing and result in lower prices (everything else equal). Lower house prices will mean that some existing renters will be able to purchase a house, leading to an increase in the rate of owner occupied housing. However, potential investors in rental properties will also face lower house prices, and will find further investment profitable at existing rents. This will drive rents down, leading to decrease in the rate of owner-occupancy as new households form... (Coleman and Scobie, 2009, p.2)

Additionally, responsiveness of housing supply to the demand for housing, whether for ownership or rental, has been shown to reduce the impact of housing price cycles (Huang and Tang, 2011; Evans and Guthrie, 2012). Therefore the measures recommended in Chapters 7–10 are likely to be beneficial in reducing pressure on the rental market due to volatility and sticky supply in the housing market.

Providing an alternative for those who are unlikely to ever enter home ownership

Although many expectations are currently being placed on the community housing sector (see Chapter 12), either it or state housing are obvious candidates for addressing the needs of those who are struggling the most in the private rental market. Because of the cost involved in government building more state houses, the community housing sector has been the preferred candidate for significant expansion, as it can access a wider range of private and philanthropic funding. The integration that community housing providers can achieve through providing other social services is another advantage.

An expanded community housing sector could provide an alternative for those who are in the worst housing situations. The community housing sector will struggle to grow to a scale necessary to apply competitive pressure on the bottom end of the private rental market, but it may be able to do so at a sub-regional level. Where community housing develops in sub-regional clusters it may place competitive pressure on landlords to improve the quality of low-cost accommodation, or on the rents they charge. Also, where community

housing provides greater housing alternatives for those in the worst housing situations, enforcing regulations about the quality of accommodation becomes more practical.

12 Social housing

Key points

- Social housing is best thought of as a contribution to a complex set of social needs that typically occur in clusters.
- The current Social Housing Reform Programme (SHRP) is based on making the best use of limited government capital. This will generally be difficult to reconcile with the stability and continuity often essential for addressing the needs of families requiring social assistance.
- HNZC's role has been refocused to provide accommodation "for those who need it, for the duration of that need". The community housing sector is being called upon to deliver an increased supply of affordable housing. In particular, the sector is expected to provide "opportunity for those who are ready to move on [from state housing]". As a result, the social relationships that underpin families and local communities in areas of high state housing concentrations can be disturbed and that can undermine the social objectives of providing state housing.
- Because housing is often just one of the needs social housing tenants have, 'wrap around' social services are essential for sustainable improvements in the wellbeing of social housing tenants.
- Coupling redevelopment with a transfer of existing state housing stock to the community housing sector might deliver better social outcomes. Transferring ownership of some state housing stock to the community is likely to better align incentives for balancing the interests of current and future residents.
- Starting the reforms by making changes to state housing without addressing external demand pressures and building sufficient options to 'move on' generates a risk that those who are reviewed out of state housing will have to accept inadequate housing alternatives, or are placed in a situation that leaves them vulnerable. This creates a future risk for the tenant and the state.
- Although the formal objectives of the Social Housing Unit are clear, its structure as a semi-autonomous body leaves room for unclear priorities, mixed purposes and misaligned accountabilities.
 - To be effective, the SHU will need clear accountabilities, and a clear mandate.
 - There is potential for greater effectiveness and efficiency through closer integration of the SHU with social policy and services.
 - Any final institutional arrangements need to balance autonomy to enable it to innovate, with integration in broader social service provision.
- There is limited financial capacity in the community housing sector, and current funding appears insufficient to expand the community sector to meet the government's objectives. If the community sector is not funded properly for this transition, there is a risk that Community Housing Organisations (CHOs) will be seen to fail in the eyes of their clients, undermining their ability to provide services.
- Reduction in rent from market value will largely be absorbed by reductions in the Accommodation Supplement, which won't make a tenant much better off. However, if the tenant received market rent levels of Accommodation Supplement where the CHO offers a reduced rent, this would enable the CHO to materially improve the wellbeing of its tenants. Regardless of the need to fund community housing organisations further, the Accommodation Supplement needs to be adjusted so that rent reductions in community housing create meaningful financial benefits to their clients.

12.1 Introduction – the role of state and community (social) housing

State intervention in the supply of affordable housing in New Zealand has most visibly been through the provision of state housing. The policy rationale has been that the state should house those whom the market cannot, or will not, accommodate. As well as being driven by a sense of collective social responsibility, there are a number of expectations about what state housing can do for other social outcomes including for health, education, and employment. In the case of health outcomes:

Social housing applicants are a vulnerable group with high rates of hospitalisation and deteriorating health status leading up to the period when they apply for social housing. Placement in social housing is associated with marked improvements in health, as measured by declines in hospitalisation for a wide range of conditions suggesting positive short-term health effects. Medium to long-term health benefits from social housing are less certain. - (Baker, Zhang and Howden-Chapman, 2010, p. 8)

Providing stable housing situations is expected to improve children's educational outcomes (Phibbs and Young, 2005). There is also an expectation that state housing can better manage high-needs tenants through brokering access to other services.

The Commission's view is that social housing is best thought of as a contribution to a complex set of social needs that typically occur in clusters. The focus of inquiry participants was developing and transforming communities through enabling families to take more responsibility for their futures. These inquiry participants were working with people and their communities, often where multiple social issues were present. The Commission considers that the role of social housing is to provide a stable, quality environment for this to occur within.

The current social housing reform is based on making the best use of limited government capital. This will generally be difficult to reconcile with the desires of communities for stability and continuity, which are often essential for addressing the needs of families requiring social assistance. The Commission sees CHOs as playing an essential role in responding to housing and other needs, although considerable time and resource may be needed to achieve the required capacity in these organisations.

12.2 The state and community housing sectors

State housing

The government owns 69,000 houses with a total book value of around \$15 billion - about 4% of all housing stock in New Zealand. Most are occupied by tenants who pay rent which is capped at a certain proportion of their income (income-related rent). The difference between market rents and income-related rents (the income-related rent subsidy) cost government a total of \$564 million in 2010/11. Additionally, government invests significant amounts in maintaining, upgrading and managing state housing. HNZN returned a \$71 million dividend to the Crown in 2010/11.

Currently there are 3,500 high-need applicants (10,000 people when family members are included) on the waiting list for a state house.¹³⁵ However, around 5,000 state houses are currently occupied by tenants who already pay a market rent and are likely to be able to manage in the private rental sector (HSAG, 2010). This stems from a historical policy whereby tenants in good standing have been able to remain in their houses for as long as they desired. The 'house for life' expectation has meant that generally all tenants within the state housing portfolio can choose to remain in their existing house regardless of their changing financial circumstances. HNZN has recently had its role refocused to providing state houses to 'people in the greatest need, for the duration of that need'. As such, HNZN is seeking what it calls "opportunit[ies] to work more actively with tenants to explore suitable alternative housing options, when their circumstances have improved" (HNZN, 2010a, p. 11).

¹³⁵ This figure may underestimate total need, with suggestions that many households will not apply, or will not stay on the waiting list because they believe that they won't get into a house (HSAG, 2010).

In addition to the challenges facing HNZC with regard to its changing role and focus, the state housing stock is becoming increasingly unsuited to the needs of its target group. Changing household composition has resulted in an over-supply of three-bedroom houses and an under-supply of houses for single people and large families. The resulting mismatch has seen a number of properties where two or more bedrooms are not used, and a similar number of properties where there is overcrowding. There is an under-supply of at least 5,000 properties in Auckland. In addition, many state houses need significant upgrading over and above their existing maintenance to achieve a modest but reasonably current standard. Over half of current social housing was constructed in the 1940s, 1950s or 1960s, with only 11% built in the past 20 years (HSAG, 2010). The cost of upgrading the state housing portfolio is estimated at \$2 billion (HNZC, 2009). HNZC upgraded 9,025 houses in 2010/11 (HNZC, 2011a).

New Zealand's community housing sector

Community housing is the provision of affordable housing to lower- and moderate-income groups by non-government, not-for-profit organisations. Currently, community housing comprises 1.2% of the total housing stock in New Zealand (Minister of Housing, 2011a). The community sector is small and fragmented. Community housing organisations operate with a range of different philosophies, from those whose mission is helping people into home ownership through to those who provide emergency shelter. Many concentrate their efforts on particular groups – for example, the Salvation Army has developed rental accommodation to meet the needs of the elderly. However, Community Housing Aotearoa¹³⁶ advised us that, in many cases, providers had not made a deliberate decision to focus on a specific group and had some enthusiasm to expand the range of groups they deliver services to.

Box 12.1 The community housing sector at a glance

In 2007 the Centre for Housing Research Aotearoa New Zealand (CHRANZ) conducted a survey of the community housing sector. At the time of the survey:

- There were an estimated 160 non-profit community housing organisations
- The median number of units owned by each organisation was nine
- 58% of organisations did not own any units
- Three respondents owned more than 100 units

A more recent review of the sector conducted by HNZC counted a total of 5,076 community housing units.

Source: Capital Strategy/SGS Economics and Planning, 2007; HNZC, 2010c

Councils throughout New Zealand also provide social housing at their discretion. Often this is in the form of housing for the elderly. Although not strictly community housing, councils are providers of social housing locally. Often their contribution is significant. Both Wellington City Council and Christchurch City Council have large portfolios, at around 2,300 units and 2,640 units respectively. In Wellington City Council's case, it has needed assistance from central government (\$220 million over 20 years) to modernise and keep its portfolio.

12.3 Social Housing Reform Programme (SHRP)

Housing assistance in New Zealand has been based around state housing delivered by HNZC for those with high and complex needs, and the availability of the Accommodation Supplement (AS) primarily for lower-income households in the private rental sector. However, in more recent times this model has faced scrutiny. The Housing Shareholders Advisory Group (HSAG) was established in February 2010. The HSAG's

¹³⁶ Community Housing Aotearoa is a national organisation, which was established in 2004/5 as the representative group for the community housing sector.

objectives were to provide advice on: the most effective and efficient delivery model for state housing services to those most in need; and, more productive and innovative ways to use current social housing assets to better support the objectives of government (HSAG, 2010).

HNZC's role has been refocused to providing accommodation "for those who need it, for the duration of that need" (HSAG, 2010, p. 5). Revising the 'house for life' focus was suggested as a way to free up assets for reinvestment either in HNZC's portfolio or in the community housing sector. In addition, the HSAG recommended greater involvement of community housing organisations in the provision of affordable housing (HSAG, 2010). Although there will be an ongoing role for HNZC in providing housing for those with the highest needs, it is envisaged that it will become part of a pool of providers. It is tasked with helping the sector to grow, partly through the transfer of housing stock (HSAG, 2010) and partly through releasing funds (Minister of Housing, 2011a).

Box 12.2 Comparative advantage for community housing organisations

In the view of Community Housing Aotearoa, community housing providers have a comparative advantage through their:

- ability to leverage charitable sources of funding and voluntary effort from communities;
- not-for-profit nature and the ability to work off smaller margins;
- ability to provide security of tenure to tenants which often results in lower tenancy turnover and hence lower costs.

Source: Community Housing Aotearoa

The community housing sector is being called upon to deliver an increased supply of affordable housing. In particular, the sector is expected to provide "opportunity for those who are ready to move on [from state housing]" (HSAG, 2010, p.4). There is a wide range of other objectives being sought through this change as well. For the purposes of this inquiry, the Commission has chosen to focus on its likely impact on increasing affordable and social housing.

The throughput model underpinning the reforms

Managing the state housing portfolio is challenging, not least because it involves balancing the interests of:

- current state housing tenants;
- those on the waiting list; and
- taxpayers who fund this.

Understandably, the thrust of the reforms has been to match public assets and expenditure to a sliding scale of need (the social allocation system), weighted towards those with the most acute affordability challenges. However, this has somewhat overlooked that such a need assessment is only for a point in time. Moving households about within the non-ownership housing markets (managing throughput) can have a negative effect on their level of need. Housing's contribution to wellbeing is more complicated than just having a roof over one's head. Having a stable, quality living environment is essential for social development.

The throughput model presumes that people and families can be reallocated amongst the housing stock relatively flexibly. However, the social relationships that underpin families and local communities in areas of high state housing concentrations can be disturbed in this way and that can undermine the social objectives of providing state housing (especially where families have multiple needs besides housing).

There is already some significant turnover in state housing. Redevelopments can achieve greater stability, largely through improving the character of areas so that people desire to settle in them. However, there are

also families that have a multi-generational attachment to state housing areas, suggesting that there is also significant stability for many existing tenants. An effective process is necessary for managing redevelopments so that the stability some current tenants need isn't traded off against this greater stability for future residents. This is discussed further in section 12.4 below.

The social ills associated with large neighbourhoods of transient populations are generally well accepted. We raise the question as to whether by moving to supporting only 'those with the greatest need, for the duration of that need' HNZC is moving to a model of large-scale transitional housing, which is likely to tax some communities and undermine other social outcomes. This is most likely to be the case where long term intervention is required to manage complex needs. The definition of 'need' and its duration must be robust for the improvement in tenant outcomes to be sustainable in the long term, and to avoid shifting costs to other social services where those improved social outcomes aren't maintained.

The language of 'greatest need' obscures whether the system is trying to address the underlying vulnerabilities people or households have to poverty and social disadvantage, or is simply addressing immediate needs generated by income pressures and poor accommodation quality. Social housing is targeted to people with a set of risks or vulnerabilities that predispose them to social and economic disadvantage. In turn, at different times and in different circumstances, this creates a high level of housing need as measured by the Social Allocation System (SAS) criteria for state housing eligibility. The sustainability of these people's 'readiness to move on' is contingent not on a change in their level of need, but on addressing the vulnerabilities that create that need.

The Commission is concerned that the emphasis on moving people through state houses undervalues the stability needed for sustainable improvements in social outcomes. Although the Commission strongly supports better use of public capital, we consider that some social outcomes are more likely to be improved if both the tenants and their houses were transferred to the community sector. We discuss how this might work without depleting public capital in section 12.4.

HNZC's mandate has shifted

HNZC's mandate has narrowed. Its objectives and outcomes have been reduced to:

- Tenancy Management – New Zealanders who request state housing are well informed of their housing choices, and those in greatest need have access to a state house for the duration of that need.
- Asset Management – The housing portfolio is reconfigured to align with demand, and the number of houses that are fit for purpose is increased (HNZC, 2011b, p.12).

Previous objectives such as "to actively seek and develop genuine partnerships that strengthen social housing and communities." (HNZC, 2010b, p.12) are no longer being pursued. Throughout its engagement meetings the Commission heard concerns that the shift in HNZC's mandate, commonly summarised as 'returning to its core business', was being interpreted and implemented as a shift to a more commercial model of service delivery. Inquiry participants noted that HNZC itself was undervaluing the 'social dividend' it can and should return as pressures to better utilise capital and return an increased financial dividend to the Crown increase.

There is growing discontent with the approach HNZC is taking. Whether a question of mandate or its interpretation, the focus on asset and tenancy management led inquiry participants to call into question whether HNZC's mandate fits well with integrated social service delivery:

The Report sees the ability of community housing organizations to provide a *"complete 'wrap around' package of support that extends beyond just the provision of housing"* as one of the main advantages of social housing provided by such organizations. The Council accepts this conclusion, and considers that it would be advantageous if all those involved with providing social housing were able to offer this kind of support... Many of those who find their way into HNZC accommodation are likely to have multiple social issues and there is really no reason why central government should not provide similar "wrap around" support for the HNZC tenants who need such assistance. – (Waimakariri District Council, sub. 129, p. 8-9)

The greater focus on tenancy and asset management leaves unresolved the question of integration with other social service provision. Because housing is a contribution to what are often a range of social needs, any narrowing of focus on asset and tenancy management needs to occur within a context of integration with wider social services.

As well, the dividend that HNZC is required to return seems out of step with its role in providing housing to those whom it is uneconomical for others to house. The better use of public assets is always desirable. The Commission questions, though, whether generating a dividend (albeit to part-fund the SHU) is the best use of state housing assets. The incentives this creates can undermine the social objectives for HNZC.

The transition to the Social Housing Unit

The Social Housing Unit (SHU) has been established as a semi-autonomous body operating within the Department of Building and Housing (DBH). It is an interim measure to fund the expansion of social housing providers for 2011/12 while options for the final institutional arrangement are considered. The advice of the Minister of Housing to Cabinet was that:

Establishing a Unit within DBH will create a funder/provider split, consistent with our long-term intentions, and will provide for accountability to Ministers for the progress being made (Minister of Housing, 2011a, p.7).

Responsibility for housing policy and non-state housing programmes has been transferred from HNZC to DBH and the SHU respectively. \$35.35m has been allocated to the Social Housing Fund for building houses. The assistance will be in the form of grants up to 50% of the capital costs of a development to qualifying organisations (SHU, 2012).

Box 12.3 Objectives of the Social Housing Unit

The Unit is expected to provide advice that enables the government to grow the total amount of social housing and “maximise the effectiveness and efficiency of supply-side provision through increased diversity and scale.” In the long term, the Unit’s specific objectives are to achieve:

Improved effectiveness of social housing provision, by:

- facilitating/encouraging increased scale in the provision of social housing;
- creating the conditions to enable innovation in social housing provision to occur;
- creating the conditions to enable specialist provision that will better meet the needs of particular tenant groups;
- ensuring that social housing provision is of an adequate standard to support positive outcomes, and that provision for households with high needs is a priority.

Improved efficiency of social housing provision, so that:

- more individuals and households in need are housed for each dollar spent by government;
- to the greatest extent possible, the government’s investments in the sector are funded through improved financial performance of the current investment.

A market that is able to respond effectively and efficiently to changes in demand to the greatest extent possible, that is:

- expected increases in demand can be met without significant additional investment from government;
- the sector becomes self-sustaining over time, through the emergence of viable economic models for the provision of social and affordable housing.

Source: SHU, 2011

The Social Housing Fund is divided into four components, but the majority of the money is for growing social housing providers-at-scale (SHU, 2012). The Social Housing Fund represents a moderate increase over the amount of funding available through the Housing Innovation Fund (Box 12.4). This is so particularly when one considers that the Rural Housing Programme (RHP), which had an average annual expenditure of \$13.5 million, ended at the same time. The Housing Innovation Fund (HIF) and its subset, Māori Demonstration Partnerships, were both used to test innovations and demonstrate what might be achieved (see Appendix F).

Box 12.4 Housing Innovation Fund – the previous community housing funding mechanism

In 2003 the Government decided to establish a Housing Innovation Fund (HIF), initially for four years, in order to support small community housing organisation 'start-ups'. Applicants were required to contribute 15% of the project costs in the form of land or in-kind support. A best estimate suggests that over the lifetime of the programme (2004/05 to 2010/11), 505 Community Housing Organisation (CHO) and local government housing units were built with total HIF funds of \$140m. Eventually, the applicants' capital contribution was increased to 50%, and 'leverage' averaged two community housing dollars for every one public dollar (HNZC annual reports).

A mid-term evaluation concluded that more affordable houses were built to meet 'niche' housing needs, often in communities where HNZC lacks an operational presence. For example, in the 2009/10 financial year the Government set aside one-quarter of the HIF allocation for four Māori Demonstration Partnerships. 2010/11 was the last year of funding for HIF. While the projects did help to broaden local social housing options, the degree of asset and capacity-building was never enough for many of those community housing organisations to become self-sufficient.

The Social Housing Fund continues the HIF's funding criteria (particularly the 50% equity requirement). In 2011, the Auditor-General (OAG, 2011) criticised the Māori Demonstration Partnerships component of the HIF for reasons including:

- There were high upfront costs for those that applied for funding, restricting the ability of some to apply effectively;
- The funding was being administered as a contestable fund when a partnership approach was more appropriate; and
- Having funding appropriated only for a single year made it hard to build ongoing relationships, appropriate to multi-year projects.

Initial indications are that these criticisms can be applied to the SHU funding as well, suggesting that with the same criteria and similar process have come the same challenges. DBH has acknowledged in its submission that it intends to review how the Māori and rural components of the funding have been administered (sub. DR140). The Commission suggests that once this funding round is completed, a comprehensive review of the SHU funding process will be appropriate.

R12.1

Once this funding round is completed, a comprehensive review of the SHU funding process should be undertaken to reduce the cost involved in applying.

Effect of criteria on achieving scale

The requirement for CHOs to contribute 50% or more of the equity is likely to contribute to a fragmented sector, at least in the short term, and could act as a brake on growth. Equity is distributed unequally in the sector, and those groups that have some equity will not necessarily be able to readily acquire more. Where the equity vested in a CHO is exhausted and it is unable to service greater debt, its ability to grow further will be constrained. CHOs are likely to face this problem as they receive below-market rents which will make it harder to service debt (where this makes up their equity contribution).

The present take up of the funding programme offered by the Social Housing Unit is based on CHO's existing equity and philanthropic funding. As a business model CHA believes that this is probably not sustainable over the medium term. This is in part because CHOs will eventually burn their equity positions by taking on enough debt to soak up their existing income streams leaving little opportunity for further borrowing. The capacity of the philanthropic sector to continue to meet the need for further equity grants to CHOs at the level they are contributing now is probably limited as well. As a business model, the current proportion of equity contribution coming from the State for new projects is definitely not scalable to the size of programme anticipated. (Community Housing Aotearoa, sub. 126, p5)

However, it is too simplistic to talk about 'burning equity positions'. By using that equity to access a capital grant from the SHU, the overall equity position of a CHO will be increased. If 30–50% of a project is grant-funded then the CHO should be able to raise another loan against the house sooner than if it were entirely debt-funded.

The vision of having several large providers-at-scale is challenged by the financial capacity of the sector to meet current equity criteria. The most likely result is many medium providers developing, as first-movers meet their debt servicing limits and funding can only be allocated to others.

F12.1

The most likely result of current funding criteria is many medium-scale providers developing, rather than several large-scale providers.

Does the size of the Social Housing Fund fit future demand?

Reviewable tenancies for state houses were introduced in July 2011. HNZC has committed to reviewing these tenancies at least every three years. This will identify at least some of those who are expected to be 'ready to move on' into the community housing sector. Table 12.1 below projects potential numbers of tenants ready to be moved on under different assumptions and relates it to the projected supply of community housing and projected state housing waiting lists.

Table 12.1 Projected clients for and supply of community and state housing

Year	State housing new entrants	Reviewable tenants exited from cohort 3 years previous			Community housing annual build	A&B waiting list (includes transfers)
		10%	15%	20%		
2010/11	8126	-	-	-	127	3700
2011/12	8629	-	-	-	275	3900
2012/13	8440	813	1219	1625	275	3850
2013/14	8251	863	1294	1726	275	3800
2014/15	8062	844	1266	1688	275	3750
2015/16	7872	825	1238	1650	275	3700

Source: Productivity Commission modelling, based on HNZC data.

Notes:

1. Numbers in bold are actual, all others are projections. State housing projections are based on trends in the previous ten years of HNZC data. Community housing build projections are based on the 'leverage' achieved by HIF in its last year, applied to the amount of SHU funding at 2011/12 levels.
2. Reviewable tenants projected to be exited is based on the cohort that entered three years previously. We have not projected how many might be expected to move on in the fourth or more years. This is a conservative projection.
3. No overall change in the waiting list is forecast here, as underreported demand and changes in the circumstances of others not on the waiting list mean its overall size tends to change little.

Table 12.1 shows that even under conservative assumptions, the number of tenants whose circumstances may improve enough to no longer need a state house far outstrips the annual increase in community housing likely to be achieved through funding from the SHU. These are the tenants that would need to be

accommodated in the private rental market. The Commission sees some considerable risk in potentially two-thirds or more of tenants reviewed out of HNZC needing to rely on the private rental market for accommodation. Although for many the private rental market will be a realistic option, two-thirds seems high.

F12.2

Excessive reliance on the private rental market to accommodate former HNZC tenants may undermine the improvement in wellbeing that has been achieved for those tenants through state housing.

As well, the persistence of an A&B waiting list,¹³⁷ and its size, means that even if reviewable tenants freed up enough state houses to halve the waiting list, there would still be considerable unmet demand by the kinds of tenants the community housing sector is currently working with. Because state house waiting lists underreport unmet need, (as families and individuals choose not to go on it where they believe they are unlikely to receive a state house), demand for a community or state house is likely to be higher, and will increase when there is more likelihood of receiving a house.

Community Housing Aotearoa (CHA) included in its submission to the draft report an estimate of future need for social housing. The full details of its estimate are available in its submission on the Commission's website.¹³⁸ In summary, CHA estimates that the community housing sector would need to build between 500 and 750 houses annually, with 375 to 500 of these being in Auckland.

CHA believes that this is achievable within five years as long as the sector has a reliable and adequate funding path to make the necessary investment in organizational capacity worthwhile. (Sub. DR126, p.4)

Crucially, CHA does not include in its estimate the direct effect of reviewable tenancies. Many tenants reviewed and exited from state housing would need to be accommodated, on top of the estimated 500–700 other households.

The vision of the HSAG was that the third sector would provide “opportunity for those who are ready to move on” from state housing (HSAG, 2010, p.4). However, the focus of the third sector understandably appears to be on providing housing solutions to those who meet the criteria for a state home, but cannot access one because none are available:

Habitat for Humanity agrees that much of its focus is on providing housing solutions to those who meet the criteria for a state home, but cannot access one because none are available. (Habitat for Humanity Auckland, sub. 107, p14)

So long as there are people living in the community with a housing need equivalent to a state housing category A and B need, it seems unlikely that CHOs will ignore these in preference for C and D category needs. This suggests that either the community housing sector will need to grow to accommodate both needs, or that, until HNZC can completely adjust the client group it works with, the sector will be stretched to provide “opportunity for those who are ready to move on” (HSAG, 2010, p.4). Because no current tenants will be removed from state houses (Heatley, 2010), this adjustment period is likely to take years.

Based on current funding for the community housing sector and projected housing need for the client group it works with, the community housing sector is unlikely to meet the demands and responsibilities being placed on it. This in turn generates significant risks for state housing tenants who may be expected to leave their state house when their tenancy is reviewed, but would struggle in the private rental market.

F12.3

The community housing sector is unlikely to meet the demands and responsibilities being placed on it, based on current funding for the community housing sector and projected housing need for the client group it works with.

¹³⁷ HNZC assesses eligibility for a state house against its Social Allocation System (SAS) criteria. Those with an 'A' rated need are in most need, those with a 'D' are in least need. Since 1 July 2011 HNZC has been required to house only A&B new applicants.

¹³⁸ <http://www.productivity.govt.nz/sites/default/files/DR126%20-%20Community%20Housing%20Aotearoa%20-%20Draft%20Report%20Submission.pdf>

This is not to say that the policy of reviewable tenancies lacks merit. Rather, the support necessary to manage risks of adverse consequences needs improvement. Although SHU funding will not be the total solution, having a stable and reliable funding base for growing the sector is important. It creates some funding certainty and reduces the amount of debt CHOs must take on so that they are capable of expanding year-on-year.

The SHU's role and structure

Although the formal objectives of the SHU are clear, its structure as a semi-autonomous body leaves room for unclear priorities, mixed purposes and misaligned accountabilities. Inquiry participants noted that there appeared to be conflicting views of the SHU's role, and some observed that there were mixed messages or tension about the role and priorities of the SHU. Semi-autonomous bodies are a hybrid governance model that is difficult to get right. Being accountable to a departmental chief executive and being required to act autonomously can lead to confused responsibilities that can hinder performance.

Currently, the SHU is housed within DBH, which monitors HNZN and has acquired the housing policy function from HNZN. This creates some efficiencies if the emphasis is on simply getting more houses built. At another level though, it leaves the SHU isolated from the other arms of government involved in improving social outcomes. Given the social outcomes that form the rationale for the state's involvement in housing, this emphasis on connections to housing markets rather than social development seems misplaced.

To be effective, the SHU will need clear accountabilities, and a clear mandate. There is also potential for greater effectiveness and efficiency through closer integration with social policy and services. Any final institutional arrangements need to balance autonomy to innovate with integration in broader social service provision.

12.4 The future role of the community housing sector

Drawing together social service provision by having the whole suite of services available through a community organisation has the potential to overcome the challenge of poor coordination common amongst government agencies. Organisations that deliver social and housing services are well placed to improve a family's ability to engage with the housing market.

A significant number of organisations seeking a greater role in community housing have a strong background in social service provision, such as health or youth and family services (Community Housing Aotearoa, 2011a). This reflects the devolution and contracting approaches taken by government in those sectors over the past two decades. The relatively limited amount of funding that has been available for community housing means that as a sector it is comparatively underdeveloped, although there are good grounds to believe that their other social services are more effective if linked to housing.

Providing capital to allow these providers to expand or move into community housing provision enables them to join together the full range of services needed to help struggling families succeed. The effect that stable, quality housing has on health and educational outcomes is well established. Community housing providers are likely to provide and maintain a better standard of accommodation, and provide more secure tenure.

Table 12.2 Example of social service and housing provision

Trust	Summary of the project
Ngati Hine Health Trust	Eight rental houses for kuia/koroua houses, and two transitional home ownership houses. The transitional home ownership houses will be used for whānau whose home-ownership aspirations are out of their reach. Whānau would stay in the houses for up to two years, during this time receiving social service support and home-ownership education, so that they are ready and can achieve home ownership. Ngati Hine Health Trust refers to this as a "landlord plus" approach.

Source: Office of the Auditor-General, 2011

Many of the organisations involved are well placed to take a community development approach to addressing the needs of existing communities, particularly where the social needs may be multiple, complex, or intergenerational. The Commission supports local service delivery through organisations that are close to their communities, know their clients well, and are therefore best placed and best motivated to find affordable housing solutions.

Growing the community housing sector faces significant challenges. While the Commission sees value in greater development of the community housing sector, it is not convinced that this sector alone will generate an effective response to a shortage of affordable housing in the short or medium term. The Commission also sees a greater role for the community sector in managing community redevelopments. These challenges and opportunities are discussed below.

Potential role for community housing organisations in redevelopment programmes

To meet requirements to provide transitional housing for A and B priority applicants, HNZC needs to redevelop its housing stock. The prominent examples of redevelopment are Pomare in Lower Hutt and Glen Innes in Auckland (Tamaki Transformation).

Redevelopments of state housing are fundamentally challenging because they generate a conflict between the interests of existing residents and the pressing need of others for state housing. The approach HNZC is taking in redevelopment generally is to build more houses, retain a similar number as state houses, make some available to the community sector, and the rest become a return to private sector investment through private sale (HNZC, 2012). This type of development is known as a mixed development (Box 1.5). Those tenants moved out of state houses to make way for the redevelopment have been promised that they will still have access to a state house tenancy, although there is some uncertainty about whether they will be able to move back to the community (HNZC, 2012). In the Pomare redevelopment tenants won't be returned to the area, as part of a response to anti-social and gang-related behaviours previously in the area.

Box 12.5 International evidence on the success of mixed developments

Set out below are some of the claimed advantages and disadvantages of mixed developments from international experience:

- *Appropriate forms of tenure mix* – Experience in the UK, Canada and Australia indicates that home buyers and community housing tenants moving into regenerating neighbourhoods are attracted by the affordable housing (ie, they are on moderate incomes). Mixing decile 1-3 and 8-10 households is not usually contemplated as part of estate regeneration strategies. Cheshire (2007), for example, describes as unworkable the co-location of rich and poor.
- *Residential mobility and neighbourhood change* – Population turnover is a naturally ongoing process in most neighbourhoods and suburbs, even where public housing is dominant. Experience in the UK suggests that community development initiatives on 'troubled' estates has contributed to the loss of tenants who have gained sufficient skills and confidence in the process to literally 'get up and go'. In this way, people with leadership qualities are lost to the community.
- *'Neighbourhood effects'* – This is the idea that geographical clustering of low-income households may lower life chances by presenting obstacles over and above those experienced in more mixed communities. What can be said from the MTO and other UK evidence is that where neighbourhood effects are demonstrated, they are invariably smaller than individual or household effects (Feinstein, et al., 2008). The report authored by Feinstein and colleagues concludes:

Crucially, we do not really know which mechanisms cause negative neighbourhood effects and whether changing tenure or income mix would remove these effects. We also do not sufficiently understand how household and area interact.

- *Stigma* – (Page, 2000, p.1) points out that although economic and social exclusion is selective even

amongst the most deprived populations, “the norms and values of this group were perceived as defining an estate culture which dominated the common areas of each estate, and coloured its reputation in the neighbourhood”. Furthermore, the effects of ‘postcode discrimination’ are often felt wider afield when job seekers reveal their place of residence.

- *Strengthening communities* – Studies of neighbouring behaviour, group participation, and the formation of social capital in communities do not promise enhanced social inclusion as a result of mixing tenure. Hence expectation of an improvement in the nature and quality of social interaction attributable to diversifying tenure, along with neighbourhood improvement and stock renovation, is optimistic.
- *Social outcomes for families* – Community regeneration increases the possibility that children will grow up in healthy and safe surroundings, and have access to the better schooling and public services available in middle-income suburbs. West Lakes and Golden Grove in Adelaide, which were developed in the 1970s requiring about a 12–15% South Australia Housing Trust presence, demonstrate the positive outcomes that can be achieved for public tenants. This is a significantly lower concentration of public tenants than proposed under current regeneration models.

Proposals to ‘break up’ concentrations of public tenants must weigh asset management ‘gains’ against social impact very carefully. One of the consequences of moving households with complex and high needs away from former estates is that it severs their access to specialised support services, and their links with the informal networks and carers centred in those communities. In some situations, however well intentioned, the displacement of inherently crisis-prone households could prove counterproductive.

Social mix planning should be approached with a substantial dose of circumspection, sensitivity to contextual nuance, and modest expectations. (Galster, 2009, p.29 cited in Pinneagar, Randolph and Davison, 2011, p.5)

The strain this has placed on existing communities has generated significant discontent in both Glen Innes and Pomare. Without questioning the need for HNZC to better utilise the public capital invested in it, the Commission questions whether a stronger focus on community could have been taken, and whether in the future coupling redevelopment with a stock transfer to the community housing sector might deliver better social outcomes. A change in ownership of some of the stock to the community is likely to better align incentives for balancing the interests of current and future residents.

Community groups were keen to convey to the Commission their belief that they are better placed to manage community development than HNZC. This would align with international experience (Cowan and Maclennan, 2008). An option would be to transfer the HNZC stock that underpins a community to a relevant community housing organisation. This would be on a no-cost basis – provided that it increases the housing stock in an area supplying back to HNZC agreed types and numbers of housing for transitional state houses. This agreement serves to protect the state interest in better use of capital.

In its engagement meetings the Commission heard different examples of good practice or critical success factors for expanding community housing provision. Box 12.6 outlines an example. We encourage the Social Housing Unit, HNZC, and other relevant government agencies to take account of these as principles that will help manage any risks that might arise from community housing organisations playing a greater role in social housing redevelopments.

Box 12.6 Determinants of successful community housing involvement in stock renewal and regeneration projects

The Council for Infrastructure Development submitted to the Commission a report it had written, based on a visit to see three models of mixed tenure state housing redevelopment projects in Australia. The themes arising from this report included the importance of:

- a community housing organisation leading the development and providing ongoing, onsite management, and performing strongly in this role;
- balance between commercial realism and social vision;
- compromise, communication, trust, and clarity of objectives;
- the public sector being willing to commit resources; and
- a strong culture of community engagement, public consultation, and use of affected community knowledge.

As well, the Council identified that:

- stock replacement is insufficient to overcome social challenges;
- because New Zealand has not pursued large-scale housing redevelopments like Australia, sufficient human resources may be as scarce as financial ones. In particular “there is no experience in the combined delivery of development, community support, and facilities maintenance”; and
- success depends on the performance of the community housing organisation and its leadership. The model is vulnerable to changes in funding that the community housing organisation relies on for social services.

Source: New Zealand Council of Infrastructure Development, sub. 30

Even with these principles though, growing the community sector needs to be approached with prudent caution. We outline some of the challenges the sector faces below.

Capacity of the community sector to grow

Growing the capability of the community sector in New Zealand will be a big challenge. Inquiry participants from the community sector noted that all community groups experienced difficulty putting housing on a sound business footing. One larger provider stated that it would need access to capital and a reliable income stream to ensure that its housing activities were on a sound business footing.

Increasing portfolios and access to capital through state housing stock transfers

Stock transfers from HNZC to community housing organisations may generate growth either as a capital or cashflow asset. It has been easier for housing trusts in the UK and Australia to access finance from banks once they had a sufficient portfolio of houses. Caution should be applied in assuming that raising capital against existing stock will readily occur here. Community housing organisations were bigger in the UK than those in New Zealand at the time that their stock transfers occurred, as was social housing as a whole (31% of households were in social housing in Britain (Pawson and Mullins, 2010), compared to around 4% in state housing in New Zealand currently). Stock with a deferred maintenance liability is obviously a less desirable capital asset to secure finance against than well maintained stock.

A great deal has been made of the importance of balance sheets as the spring board for expansion of the social housing stock. This is the tenor of the Housing Shareholders Advisory Group’s recommendations to Government and of the Minister of Housing’s perception that stock transfers are a funding mechanism (see p.177 of the draft report). Once again, there are no magic bullets here. Strong equity positions are only able to be leveraged if an individual or organisation has the income to meet debt servicing costs involved. CHOs do not have and will not have strong income streams to support

much higher levels of debt if they are to rely entirely on the rent paid by tenants – which as noted in the draft report and above is targeted to 75 to 80% of market. (Community Housing Aotearoa, sub. 126, p.5)

The Commission was advised that HNZC should refrain from transferring stock in need of major upgrade or in areas of low demand, if the intention is to build balance sheets for borrowing capital. HNZC has 42,000 properties which it describes as being “of the right bedroom configuration, in the right place and in the right condition” (HNZC, 2011b, p.19). These are homes that it will need to retain to carry out its core business. The remaining 27,000 properties are described as either needing an upgrade or as mismatched to demand.

However, where stock is transferred at no-cost, any rent received can be used as cashflow to pay borrowing costs for building or buying more homes. As well, where there is no finance cost through not purchasing the houses, it should be possible for the CHO to provide lower than market rents. Stock transfers of obsolete houses may still be able to generate an increase in community housing. However, transferring the problems of modernisation and low demand to the third sector will lead to slower growth in third sector portfolios than might otherwise be possible.

As well as financially beneficial, stock transfers may be a more effective and acceptable way to reduce the number of non-priority tenants in state housing. Those tenants can continue to live in homes they have come to see as theirs, without receiving the IRR subsidy but at the discounted rent charged by the community sector. Transfers would be on a no cost basis provided that the CHO increases the housing stock in an area and supplies back to HNZC agreed types and numbers of houses for transitional state houses. This agreement serves to protect the state interest in better use of currently public capital, and creates a cost structure that enables CHOs to provide below-market rents.

In some limited circumstances the benefits of transferring modern, well maintained, needed stock to CHOs may outweigh the costs to HNZC. Although the Commission understands no decision has been taken about what stock might be transferred, it seems likely that most stock available for transfer will be surplus stock, much of which will have a short remaining economic life. In practice, this means that stock transfers to CHOs are likely to entail redevelopment anyway. Stock transfers are best seen as being about community redevelopment rather than providing income streams to CHOs (although they will serve this purpose too). However, state housing stock transfers may transfer some of the risk that as demand changes stock becomes obsolete, from government to the community sector. This is problematic for two reasons.

First, where government remains a residual provider (as it does, through state housing provision by HNZC at the least), it also retains a residual risk when it transfers stock. HNZC would only have limited control over how those risks are managed. Should things go wrong, government as residual provider ‘picks up the tab.’

Secondly, a fragmented community sector with a smaller asset base may face greater difficulties in managing the risks of obsolescence. Potentially, smaller organisations may prove to be more nimble in responding to demand, but this does not sit easily with the intention to build community housing providers-at-scale. Transfers need to be designed and managed with some consideration to the amount of risk a community housing provider is taking on, so that it will remain viable in the long term. There are a range of mechanisms used internationally for doing so.

F12.4

A fragmented community sector with a smaller asset base may face greater difficulties in managing the risks of obsolete housing.

It is our understanding that to date there have been no transfers of state housing stock to the community sector. The Cabinet paper for establishing the SHU noted that: “In future years, we intend to potentially draw on a broader range of funding mechanisms, including stock transfers” (Minister of Housing, 2011a, p. 9). DBH has noted that only a limited increase in housing supply is likely to be possible by transferring state housing stock to community housing providers (Minister of Housing, 2011a). Because the community housing sector is relatively underdeveloped, stock transfers will need to be judiciously managed to avoid setting back the development of the community housing sector. However, they show potential to generate

some growth in social housing overall, and to provide a more socially acceptable approach to community and stock redevelopment projects.

Providing homes for less than the rental market

Overseas experience indicates that “rapid growth of community housing in New Zealand is ... likely to require supplementary sources of funding over and above capital investment by Central Government” (Capital Strategy / SGS Economics and Planning, 2007, p.v). As well:

Private sector investment in affordable housing is relatively rare in OECD countries without significant subsidies... This overseas experience suggests that without significant incentive or subsidy, private sector providers are not likely to grow the level of investment in affordable housing. (Department of Building and Housing, sub. 55, p.37)

Many community housing organisations aim to charge rents of 75–80% of equivalent market rents. In some cases it will be difficult for community providers to achieve much of a discount compared to private landlords, where those landlords are absorbing some operating costs in the expectation of future income from the investment. Where this is the case, landlords are often paying rates, maintenance and similar costs out of income streams other than rent. Without a comparable alternative income community housing providers may struggle to cover their costs through market rents, let alone through reduced rents.

Community housing providers may be able to achieve cost reductions through larger-scale developments. New Zealand has almost no institutional/corporate investment in the private rental market, in part because the yields are too low for them to invest. A not-for-profit, although it cannot ignore its financial and cashflow situation, may not be as concerned by the low rental yield compared to investment costs. Cost reductions from greater scale may make it financially viable. However, much of the management of the private rental stock is done by small-scale landlords who carry out tenancy management and maintenance personally, at no direct labour cost. Community organisations reliant on economies of scale will struggle to achieve lower than market rents through cost reductions, where the costs of the private rental market are already heavily discounted.

Community housing providers may be able to use volunteer assistance and philanthropic donations to reduce their costs. While this will be true in some cases, at the very least it limits the scale of the community housing stock to an amount where providers can be confident future donations and volunteer assistance will cover the costs. It is also acknowledged that providers-at-scale will need to have highly developed professional skills to manage their community housing portfolios. Inquiry participants noted that successful community housing projects need expertise and experience – they can’t just rely on goodwill and dedication.

Gap between Income-Related Rents and the Accommodation Supplement

HSAG advised that the Income-Related Rent Subsidy (IRRS) should be extended to community housing providers. One inquiry participant went so far as to say that the community sector will never be able to compete without income-related rents. The income-related rent subsidy is significantly greater than the Accommodation Supplement (HSAG, 2010, pp. 41-42). Income-related rents are a targeted response to a particular level of need for housing assistance. As the social housing reform programme stands, it appears the intention is that higher needs will be accommodated by state housing, rather than through the community housing sector.

The AS covers 70% of costs up to a maximum level, dependent on the recipient’s income and other circumstances. As such, a third of any rent increase must be met from a tenant’s own pocket. As well, if rent decreases, AS recipients will only receive a third of the decrease. Table 12.3 below describe two scenarios for a low income household. It illustrates how the AS reduces when a households’ accommodation expenses decrease, leaving a small income difference that incentivises finding cheaper housing (or disincentivises moving into more expensive housing). This makes sense in a private rental situation – state support decreases as financial need does. However, where the AS is the only ongoing state support that a community housing organisation receives, and that support decreases if the CHO offers a below-market rent, it makes it harder for them to materially improve the wellbeing of their tenants.

Table 12.3 Example of Accommodation Supplement reductions absorbing the benefit of reduced rents in the community housing sector

This example uses a two adult, two child family, with one fulltime wage earner on minimum wage

Item	Market rent	Reduced rent
Gross income	\$480	\$480
PAYE	(\$74.95)	(\$74.95)
Working for Families tax credits	\$209	\$209
Rent	(\$298)	(\$250)
Accommodation Supplement	\$135	\$101
Disposable income	\$451.05	\$465.05

The table above shows an example where most of the benefit of reduced rents in community housing is received not by the tenant, but by government. The \$48 rent reduction that the CHO achieves leaves the family only \$14 better off. However, where a tenant is on the maximum AS available for their area, and is still paying more than 30% of their income in rent, the CHO's rent reduction may be passed on with a smaller AS abatement. Whilst this may enable the CHO to address extreme unaffordability, moving a client from moderate unaffordability to affordability will be hindered by the abatement. The way that the AS is calculated can make it harder for CHOs to help their clients. HSAG commented on this indirectly, noting that the difference between the IRRS that a state housing tenant receives and the AS disincentivises state housing tenants from moving into the private rental market. We discuss an option to address this in section 12.5 below.

F12.5

The way the Accommodation Supplement abates hinders the ability of community housing organisations to improve housing affordability for their clients.

We note that there is also a Temporary Additional Support benefit that can be, and is being, used in part for accommodation costs. The Commission estimates are that around half of the \$142 million that was spent on the Temporary Additional Support benefit in 2010/11 went to accommodation costs.

12.5 Funding the community housing sector using the Accommodation Supplement

Inquiry participants raised with the Commission the possibility of better using the AS funding to deliver more value, possibly through funding the community sector. Four options have potential to better fund the community housing sector which may either in part be offset by reduced expenditure on the AS, or be funded from it in a fiscally neutral way:

- Invest heavily in growing the scale of the community sector rapidly through additional funding.
- Reduce eligibility for the AS and use these savings to fund growth in the community sector.
- Reduce the amount the AS pays to each recipient, and use these savings to fund growth in the community sector.
- Provide market AS levels where CHOs provide reduced rents to their clients.

Table 12.4 sets out the likely results of each option. Significant and detailed modelling would need to be conducted before implementing any of these options. Further details of each option are included in the sections below.

Table 12.4 Likely results of three options for funding the community sector differently

	Additional investment	Fund through savings on reduced AS eligibility	Fund through savings on reduced AS payment levels	Provide market AS levels where CHOs offer reduced rents
Lower CHO capital costs so that they can reduce rents.	Yes. This strategy is reliant on government grants reducing the cost structures of CHOs so that they can afford to offer below-market rents.	Yes. Could expand the capital grants available to CHOs, leading to reduced private finance costs.	Yes. Could expand the capital grants available to CHOs, leading to reduced private finance costs.	No. Would not provide capital funding to reduce debt servicing cost. Would be a funding stream that could be used to offset operational costs (as many private land lords do against their other incomes).
Make CHO tenants financially better off	Minimal effect. Rent reductions will be absorbed by reductions in the AS. Only a relatively minor improvement to disposable income.	Minimal effect. Rent reductions will be absorbed by reductions in the AS. Only a relatively minor improvement to disposable income.	Minimal effect. Rent reductions will be absorbed by reductions in the AS. Only a relatively minor improvement to disposable income.	Yes, if the CHO's capital costs are also reduced. This option might close the gap between IRRS and AS, making the HSAG vision of the community sector helping to transition state housing tenants more realistic.
Offset costs through lower AS expenditure	Unlikely. Eventually, if rents decrease, a number of landlords will choose to exit the market. Rents would equilibrate back to near present levels. There would not be reductions in the level of AS being paid to sufficiently offset the upfront investment.	Unlikely. Eventually, if rents decrease, a number of landlords will choose to exit the market. Rents would equilibrate back to near present levels. The reductions in the level of AS being paid would not be offset by reductions in rent.	Unlikely. Eventually, if rents decrease, a number of landlords will choose to exit the market. Rents would equilibrate back to near present levels. The reductions in the level of AS being paid would not be offset by reductions in rent.	Fiscally neutral. If the tenants come from state housing, it should cost less than providing that tenant with the IRRS. This benefit may net out if the state house that is 'freed up' is occupied by someone from the private sector receiving AS. Overall this option is likely to be fiscally neutral.

Investing in growing the scale of the community sector rapidly through additional funding, offset by reduced AS expenditure

The HSAG projected that expenditure on the AS would rise to between \$1.7 and \$2.2 billion in 2015. The question has been whether some of that can be spent now to achieve better affordable housing outcomes and reduce the future cost of the AS.

The most obvious approach would be to invest heavily in growing the scale of the community housing sector. This could be offset if reduced rents in the community sector translate largely into savings on the AS. As well, if the community housing sector achieves sufficient scale, it will reduce demand in the private rental sector, placing downward pressure on rents and the AS temporarily.

This is a high-risk strategy which, reliant as it is on large-scale borrowing to provide grants, may not be viable in the current environment of fiscal restraint. A way of reducing this risk, but potentially increasing others, would be to reduce the eligibility for the AS and use the money this 'saves' to fund growth of the community sector.

Reduce eligibility for the AS and use these savings to fund growth in the community sector

Half of all renters receive the AS, some at fairly low weekly amounts. In its engagement meetings it was suggested to the Commission that the threshold for qualifying could be lifted. Households receiving relatively small amounts of money would 'tighten their belts', and the money that government saves could be re-targeted to provide more community housing. The downward pressure on private rents that a larger community sector creates might perhaps with a lag offset the decrease in AS some households receive.

It could take years for the community housing sector to be large enough to significantly affect rents across the market. During this adjustment period, loss of the AS may place some households under financial strain. Community housing could have a significant effect on rents in a regional submarket, which is one reason why growing the sector would be positive. Cuts to the AS though would need to be a matter of national rather than regional policy, so the costs and benefits would be unequally distributed.

Table 12.5 shows how much funding would be available if those who were receiving low amounts of the AS ceased doing so. Quite significant cuts would need to be made to achieve anything like the amount of funding needed annually to expand the sector sufficiently to meet anticipated demand.

Table 12.5 Expenditure available to be reprioritised if entitlement to the AS is cut at various thresholds

Weekly amount paid to AS recipient	Reduction in expenditure on the AS	Recipients/households affected
< \$5	\$1,101,360.00	4236
< \$10	\$6,844,760.00	15,281
< \$15	\$13,006,760.00	23,181
< \$20	\$24,134,760.00	33,881
< \$25	\$40,505,660.00	46,474
< \$30	\$55,519,100.00	56,098

Source: Productivity Commission analysis of Ministry of Social Development data

Notes:

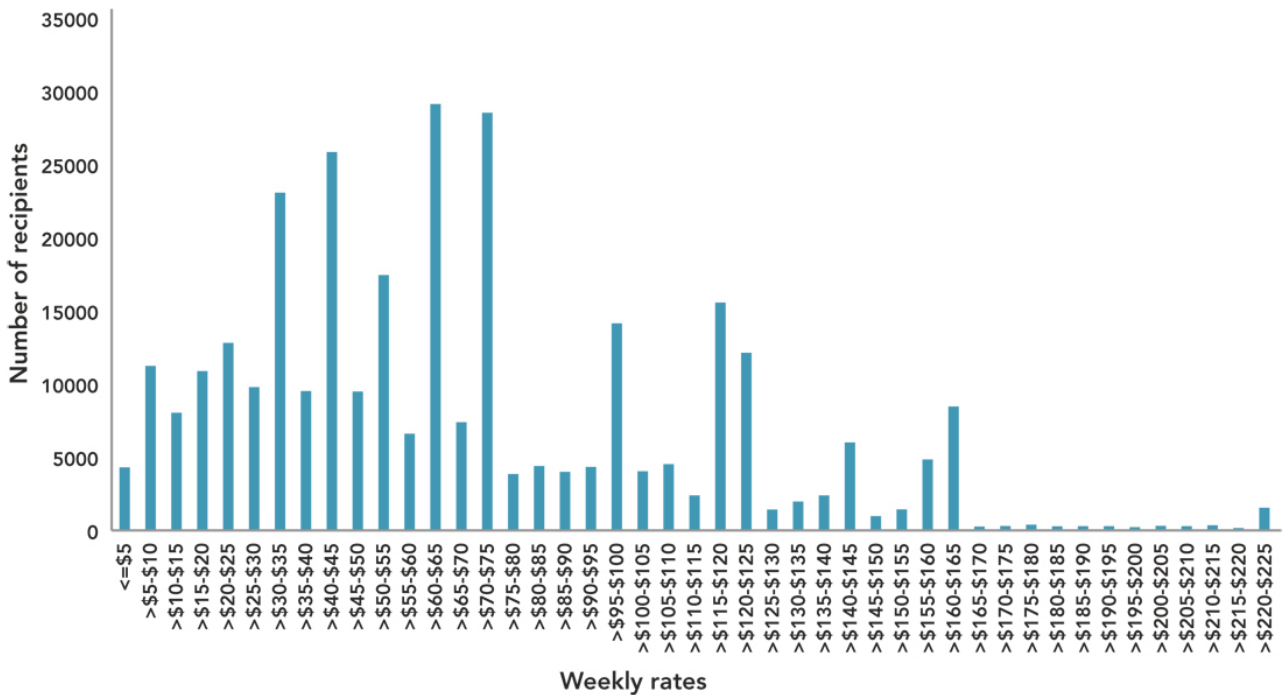
1. Figures as at March 2011. The Commission considers that the general distribution of the AS is unlikely to have changed over time.

Reduce the amount the AS pays to each recipient, and use these savings to fund growth in the community sector

Another option would be to cut the amount paid to each AS recipient by, say, \$5 a week. Modelling indicates that this would result in around \$80 million that could be reprioritised (using payment amounts as at June 2011).

However, there are significant spikes in the distribution of AS recipients that may be explained by clustering around the upper limits of payment in particular areas or for particular household types. This in turn would suggest that a significant proportion of these recipients may have accommodation costs above levels that the AS will assist with (likely to be those who are paying above 30% of their incomes for accommodation). These spikes would represent those most likely to struggle with any cut to the amount of AS they receive.

Figure 12.1 Number of AS recipients receiving different payment levels



Source: Productivity Commission analysis of Ministry of Social Development data

Notes:

1. Figures as at March 2011. The Commission considers that the general distribution of the AS is unlikely to have changed over time.

If no cuts were made to those groups above \$70 a week where there are spikes, the amount available to be reprioritised would reduce to about \$50 million annually. If no households represented by the spikes received cuts, then the amount available to be reprioritised would reduce to about \$27 million annually.

Any exceptions may prove hard to administer in practice, as people seeking re-assessment of their level of need may over time move into higher brackets. Moving away from a simple need criteria based on rent and income would further complicate the system. Significant modelling and analysis would be needed to prove this option viable.

Provide market Accommodation Supplement levels where community housing organisations provide reduced rents

Reduction in rent from market value will largely be absorbed by reductions in the AS, which won't make a tenant much better off. However, if the tenant received market rent levels of AS where the CHO offers a reduced rent, this would enable the CHO to materially improve the wellbeing of its tenants.

As a subsidy paid to the tenant the AS is relatively bureaucratically efficient. If the tenant moves, the subsidy goes with the tenant relatively freely, based on their housing costs. There is potential to put the tenant at risk of financial hardship if there is a delay in the AS being shifted due to organisational processes or poor coordination in assessing whether they are with a CHO or not.

Of the four, option four is the only option that would address the disincentives to achieve the HSAG vision of moving lower-need state housing tenants who are ready to move on into community housing. The other three maintain the gap between IRRS and the AS such that it would act as a significant disincentive.

Regardless of the need to fund community housing organisations further, the AS needs to be adjusted so that rent reductions in community housing create meaningful financial benefits to their clients.

R12.2

Provide market rent levels of Accommodation Supplement where community housing organisations provide reduced rents to their clients.

12.6 Areas requiring emphasis in the reform programme

Set out below are several areas that need emphasis in the ongoing reform of social housing. It sets out what the Commission considers needs to happen to better balance the interests of those in state housing, those on the waiting list, and the taxpayers' financial interests.

Change the model underpinning the reforms

Where state houses make up the backbone of a community, transitioning most of the stock to community ownership may change the composition of tenants in state housing in a manner that is less likely to be detrimental to social outcomes. This is dependent on the ability of CHOs to redevelop the stock so that there is no net loss in the number of needed state houses. Although helping some existing tenants into other housing options may be a necessary part of the process, moving tenants out of houses needn't be the primary tool for achieving the desired reforms.

"Greatest need, for the duration of that need" needs to be redefined to clarify the balance between high immediate need, and ongoing need. The people that social housing is targeted to are largely those with a set of risks or vulnerabilities that predispose them to social and economic disadvantage. At different times and in different circumstances, this creates a high level of housing need as measured by the SAS criteria for state housing eligibility. A focus on immediate needs can mean that insufficient account is taken of other social risk factors that might justify maintaining a household in stable housing. Rationing state housing assistance on this basis can create further fiscal risk for the health and welfare systems. It also doesn't align well with the purpose of state housing – contributing to a broader cluster of social needs.

Start the reforms at the other end of the housing ladder

More affordable home ownership will enable people to move out of the private rental market, reducing current demand pressures. Trying to change how state and community housing work in isolation from the total market for housing (rental and owner-occupied) ignores how the latter two affect and create demand for social housing.

The Commission is not the first to make this connection:

...unless the issue of affordable housing and subsequently of affordable housing supply is addressed directly, issues relating to social housing will worsen and the initiatives proposed in this report will be of limited effectiveness (HSAG, 2010, p.22).

The pressure on social housing from unaffordable private housing options needs to be addressed as a matter of urgency so that social housing can better address its proper – role – providing housing for those whose income levels make it impossible for them in the medium to long term to access appropriate housing in private housing markets.

Starting the reforms at state housing without addressing demand pressures and without building sufficient options for people to 'move on' is generating a risk that those who are reviewed out of state housing have to accept inadequate housing alternatives, or are placed in a situation that leaves them vulnerable. Handled poorly, today's 'ready to move on tenant' is tomorrow's vulnerable household in the greatest need of state assistance.

Lower house prices

House prices are a key determinant of rental affordability, as in the long run rents will reflect the financing and operating costs of providing rental accommodation (less whatever offset a landlord is prepared to pay from their other income in expectation of future returns). Rents in the private rental market drive Accommodation Supplement expenditure and the demand for social housing.

Any reduction in AS expenditure that doesn't come from reducing current entitlements can only be driven by increasing incomes, or lowering the long-run rent equilibrium. However, there is likely to be some legacy from the house price boom. Reducing house prices is a long-run structural solution to reducing AS expenditure. More immediately, mitigating increases in house price inflation is a way of holding future AS expenditure to its current funding path, rather than a higher one still.

The ability of the community sector to grow will in part depend on the cost of procuring further houses. Lower house prices means that more can be bought or built for the same funding.

Clarify the institutional accountabilities so that they align with the delivery of social outcomes

HNZC

HNZC provides housing to achieve a range of social objectives, within the context of clear budget constraints. In particular, it must make best use of Crown capital to minimise requirements for additional funding. However, capital constraints will incentivise maximum-density approaches which may reduce the range of design and community options that can be undertaken. These housing options, and the way they are implemented, may undermine the stability of existing communities. Excessive social dislocation and housing developments with an insufficient focus on community form can exacerbate other social problems, generating a fiscal risk elsewhere in the welfare, social service and justice systems. This is particularly the case where there is poor integration of housing with other social services.

F12.6

Better utilisation of public housing capital is always desirable, but needs to be managed in a way that does not create fiscal risks elsewhere in the welfare, social service, and justice systems.

The new focus on tenancy and asset management is necessary for achieving efficient use of the housing stock. However, integration with social services is critical for addressing social vulnerabilities and risks that generate housing need. The Commission supports current and greater efforts to better integrate other services with housing.

SHU

The SHU is tasked with growing the social housing sector, funded through better use of 'the current investment'. Although the formal objectives of the SHU are clear, its structure as a semi-autonomous body leaves room for unclear priorities, mixed purposes and misaligned accountabilities.

Currently, the SHU is housed within DBH, which monitors HNZC and has acquired the housing policy function from HNZC. This makes some sense if the emphasis is getting more houses built. However, this leaves the SHU isolated from the other arms of government involved in improving social outcomes. It is not clear that these objectives and agencies fit together well to achieve the social outcomes that underpin the rationale for the state's involvement in housing.

Effective growth of social service providers in other sectors, notably the health sector, relied on organisations having a high level of autonomy. This meant that agencies could make decisions without the providers they were working with needing to go through a protracted contract approval process. This past experience raises questions about whether the SHU has sufficient autonomy to carry out its functions effectively. For the SHU's social objectives to be delivered effectively the agency will need greater autonomy, or alternatively greater alignment with a social service delivery agency such as MSD.

Improve the sufficiency and pace of response to needs

Growing the community housing sector is far from being a new policy, but progress has been slow. The sufficiency and pace of current social housing reforms needs to be addressed for the community housing sector to play a meaningfully greater role in responding to social housing needs.

From 2003, the Housing Innovation Fund (HIF) had provided funding to community groups to trial different 'innovative' approaches to social housing delivery. At the same time, periodic evaluations of the HIF and its processes have enabled government to learn more about funding and growing the community housing sector. From 2009 until its disestablishment in 2011, the HIF was focused on funding and building providers-at-scale. Stock transfers to help grow the community housing sector were mooted as early as 2009, although none have yet occurred.

Nevertheless, DBH's response to our draft report noted that it had been, and would for the next 12 months be, piloting approaches to building community housing organisations. The SHU's funding process needs to be reviewed, as it suffers from the same criticisms of previous HIF funding rounds. Taken together, it appears there has been a loss of institutional knowledge about managing funding to the community housing sector in the shift of functions from HNZC to the SHU.

Of further concern is the absence of any clear demand projections or objectives setting out what a sufficient social housing response would be. The estimates the Commission has seen have focused on the number of houses a CHO might need to be financially self-sufficient, which still leaves uncertain the scale of social and housing problems that need to be addressed. Even estimates of relatively small proportions of tenants being reviewed out of state housing raises questions about whether the community housing sector will be able to respond effectively.

F12.7

Robust projections of unmet demand and future demand for social housing that will not be met through increasing or realigning the state housing portfolio are essential for an honest assessment and conversation about what needs to be done, at what pace, and with what resource.

Reconsider how the transition will be resourced

The throughput model underpinning the reforms and the greater focus on community development are only viable if the community sector is capable of expanding. There is limited financial capacity in the sector, and the current funding package appears insufficient for the community sector to expand as is needed. The only alternatives are an even more costly expansion of state housing, or a presently unlikely steep increase in household incomes.

Current or proposed use of the available funding includes:

- Ongoing funding through a cash flow from state housing stock transfers. The amount that could be reinvested is what would be left over after deferred maintenance liabilities, saving for modernisation in the near future, and providing a discounted rent, are accounted for. This might not often be possible.
- Providing market levels of the Accommodation Supplement to the CHO or their tenants even where the CHO provides reduced rents. However, this may simply preserve the rent reduction possible from a SHU capital grant, rather than provide an ongoing funding stream similar to the incomes private landlords are using to offset their maintenance and other costs. Capital grants from the SHU, which could reduce a CHO's capital costs, would enable it to take on more debt or offer lower rents.

In reality, any CHO that is not cross-subsidising its housing provision is likely to need all of these funding streams. The Commission's assessment is that there is insufficient total funding for the community sector to expand as is needed. If the community sector is not funded properly for this transition, there is a risk that CHOs will be seen to fail in the eyes of their clients, undermining their ability to provide services. Should appropriate funding become available in the future, that damaged trust may well undermine any future reforms.

13 Māori housing

Key points

- For many Māori communities, housing is valued more for keeping whānau connected to land, tradition, tūpuna, and their whanaunga, than as a financial investment. It is “about building communities, rather than building houses.” This is not to say that Māori are never interested in housing for financial reasons. Housing solutions for Māori will sometimes need to be different, particularly in areas of traditional settlement.
- Māori housing aspirations face challenges related to (on average) lower household incomes and lower financial literacy. Financial literacy education is an important part of any solution to Māori housing needs, especially if a community development approach is taken.
- Māori inquiry participants identified the social and cultural resources they have that could enable them to overcome the other barriers they faced to affordable housing solutions. The Commission is persuaded that this is a realistic approach.
- Whānau Ora is the government response best placed to address Māori housing aspirations, through helping whānau plan and in coordinating local public services. The Commission identifies the role it could play, and what it would have to do to be successful.
- Housing affordability includes ongoing maintenance costs. The Pūtea Taiwhenua (Rural Fund) should be used to provide seed funding to organisations, using a microfinance lending approach, to address the quality of the rural housing stock.
- The review of Kāinga Whenua needs to be drawn to a conclusion, soon. However, whatever the new conditions, it is unlikely to meet the needs of the many Māori in rural New Zealand who would struggle to service a mortgage, or to deliver a great volume of housing on Māori land.
- To get homes built on Māori land, public services, whānau, and finance institutions would all need to take action. In general, this doesn't happen because there are plausible reasons why another group, or someone else within the group, should act first. To address this:
 - A team of Māori housing expert advisors, housed in a national agency like Te Puni Kōkiri or the proposed Whānau Ora commissioning agency, should be made available to Māori land owners with aspirations to build housing on their whenua, to guide them through consent processes.
 - Whānau Ora facilitators should be trained to educate whānau about the options for management structures for their Māori land, and to play a role in developing plans for the use of Māori land for housing (where this is what the whānau wants).
 - Te Puni Kōkiri, working with the Māori Land Court and private finance institutions, should develop options to adapt existing lending policies and precedents for private finance institutions to lend for building homes on Māori land.
- To start the conversation, the Commission has reviewed three models to see whether they could provide the necessary security for banks to lend: trust guarantees, a financial options system, and mutual insurance schemes. Under the right circumstances, each of these shows some promise. As well, the Commission has reviewed two models of housing where there is an element of common ownership. These are licences to occupy (as used by retirement villages) and unit titles, under the Unit Titles Act 2010. Each of these models could form robust ways to manage housing on Māori land.

Māori as a group face worse housing outcomes than most other groups. Meeting housing needs is essential for overall wellbeing, and addressing other economic and social disadvantages that many Māori face. Housing, through the connections to places and communities it creates, is also essential for cultural retention. Where a whānau (family) has shares in Māori land, it may present an opportunity to achieve a more affordable housing solution for the whānau, but only if the land is situated close to job opportunities.

Māori inquiry participants identified that the social and cultural resources they have could enable them to overcome the other barriers they faced to affordable housing solutions. The desire to take a community-based approach that would strengthen whānau to address the range of social issues they face – not just housing – was almost universal. Improving the financial literacy of Māori was identified by many as an important first step for enabling whānau to improve their own housing situations.

Whānau Ora is the new approach government is taking to addressing multiple social needs. Its approach of helping whānau plan their own futures, and helping them to access any relevant government assistance, is well-matched to the aspirations of those we met with. This chapter sets out the housing challenges that face Māori, and identifies the role and performance necessary for Whānau Ora to successfully address Māori housing.

13.1 Māori housing needs

How does housing contribute to wellbeing for Māori?

Housing plays different roles in the wellbeing of different cultural groups. Individuals will place different emphasis on different kinds of value from housing. Generally, it contributes to the wellbeing of Māori communities in the following ways:

- Housing is valued more for keeping whānau connected to land, tradition, tūpuna (ancestors), and their whanaunga (relatives), than as a financial investment (particularly when on Māori land). This might mean having somewhere for whānau to stay when they come back for tangi (funerals), maintaining ahi kā¹³⁹ for an extended whānau to a marae, or having a tangible connection to tūpuna whenua (ancestral land) to pass on to children and mokopuna (grandchildren).
- Taking care of whānau housing needs – kuia and kaumatua (elders) tend to be prioritised, rather than getting young families into homes.
- Providing healthy, affordable housing.

These observations were largely borne out in submissions. However, the Commission was asked to ensure that an appropriate focus on the opportunity to use Māori land as a solution to affordable housing issues was applied:

...increasingly Māori are looking to develop Māori land for housing, which despite having its own subset of difficulties is the only realistic option for affordable housing that Māori have. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 3)

Submitters were split in their views about the investment role that housing can play for Māori:

It is also important not to misinterpret financial investment limitations associated with housing on Māori land as a lack of desire amongst Māori to have housing that can also be a financial investment. Cultural aspirations are not mutually exclusive to economic development and growth. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 8).

Accumulation of vast amounts of wealth is not a priority or a sign of prosperity in the world of māori... a strong whānau is. (Rueben Taipari Porter, Sub. DR88, p.15)

¹³⁹ Literally 'keeping the home fires burning' – keeping a connection through family with a place. This is particularly important for Māori where the place has a strong ancestral connection – such as tūpuna whenua and marae.

F13.1

Housing needs are more pronounced for many Māori, and the contribution to wellbeing housing makes is not strictly the same as for other groups. Housing solutions for Māori will sometimes need to be different, particularly in areas of traditional settlement.

Housing affordability for Māori

Māori as a group experience disproportionately poorer housing situations compared with the rest of the population. (OAG, 2011) Māori are:

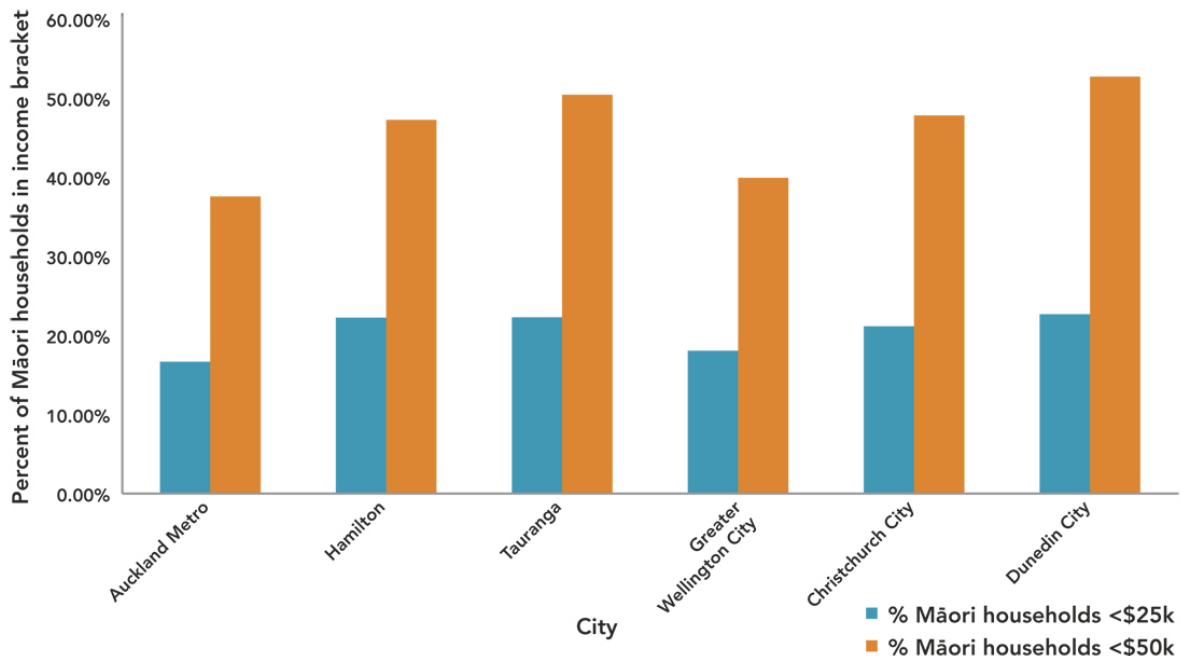
- disproportionately represented on state housing waiting lists (31.3% of applicants in 2010, compared to being approximately 13.9% of New Zealand's population)
- more likely to live in housing of poor condition compared with the rest of the population
- less likely than non-Māori to own their own house (43.3% of Māori were owner-occupiers in 2006, compared to 69.7% of Europeans)
- more likely to be in lower income brackets.

The large Māori population in Auckland means that as a group Māori are likely to be disproportionately affected by Auckland affordability issues. Despite these challenges, the evidence suggests that Māori still aspire to home ownership (Waldegrave, et al., 2006, p.11).

Household incomes

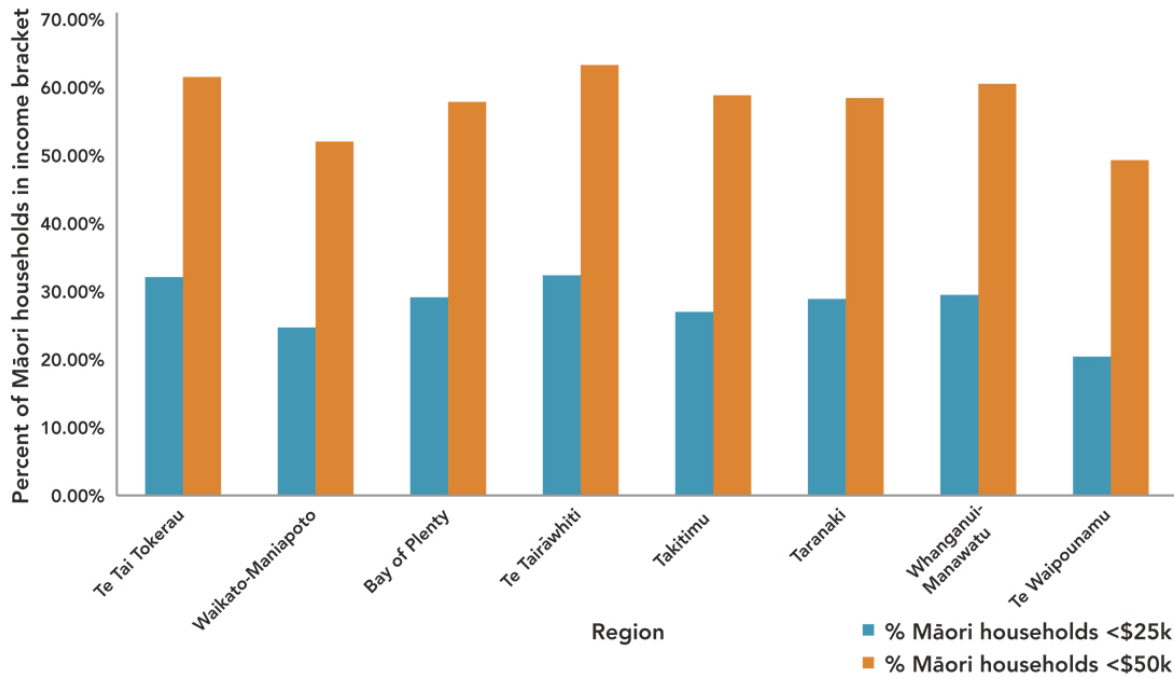
Māori household incomes, as well as being relatively lower than almost all other groups, are also low in absolute terms:

Figure 13.1 Percentage of urban Māori households with incomes under \$25,000 and \$50,000 a year, at 2006 Census



Source: Productivity Commission analysis of Statistics NZ data

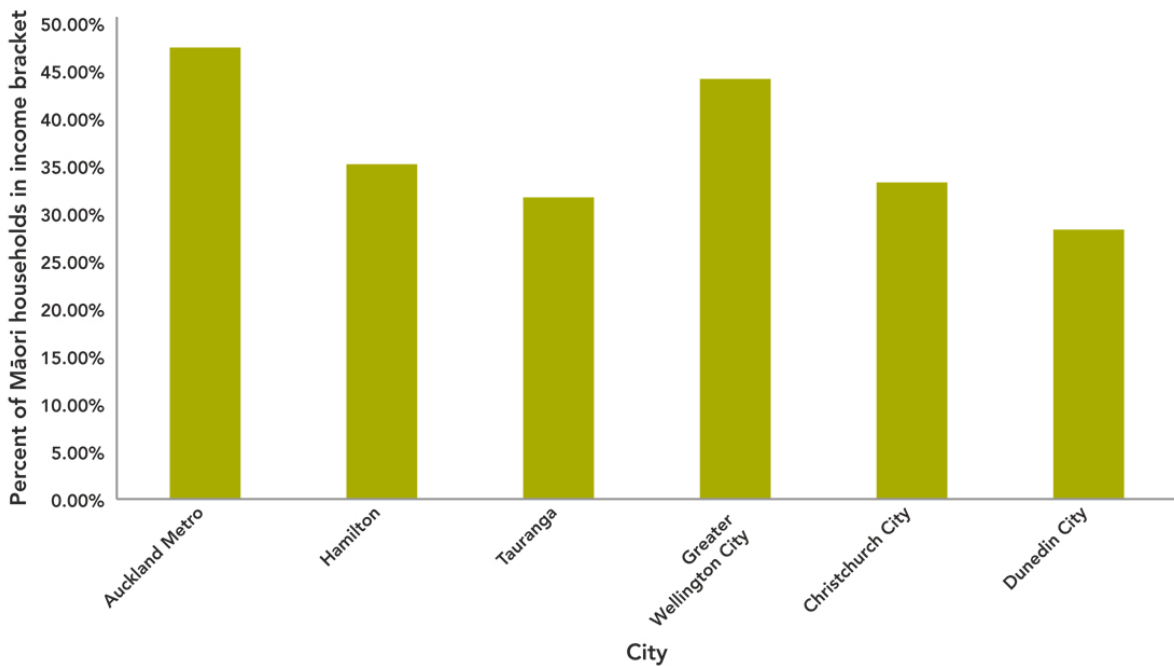
Figure 13.2 Percentage of rural Māori households with incomes under \$25,000 and \$50,000 a year, at 2006 Census



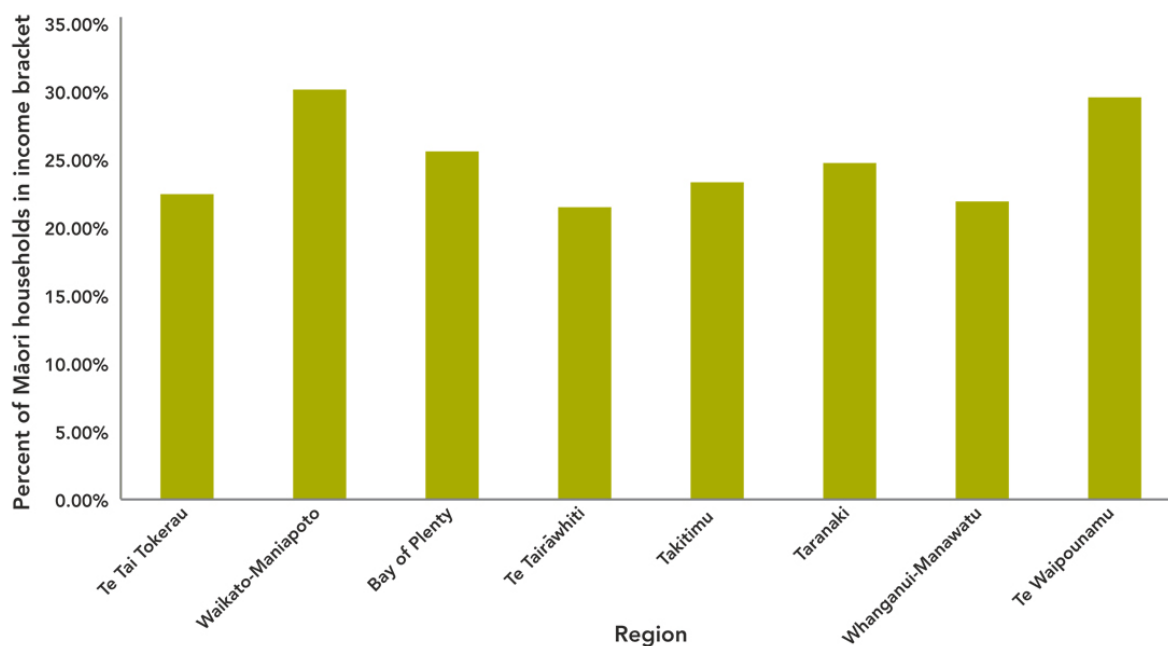
Source: Productivity Commission analysis of Statistics NZ data

However, as one inquiry participant was quick to point out, not all Māori are on low incomes:

Figure 13.3 Percentage of urban Māori households with incomes over \$70,000 a year, at 2006 Census



Source: Productivity Commission analysis of Statistics NZ data

Figure 13.4 Percentage of rural Māori households with incomes over \$70,000 a year, at 2006 Census

Source: Productivity Commission analysis of Statistics NZ data

Financial knowledge

Māori are heavily overrepresented amongst those with the lowest financial knowledge, and heavily underrepresented amongst those with the highest financial knowledge (Crossan, Feslier and Hurnard, 2011). This generally lower knowledge about financial issues could act as a barrier to sound decisions needed to achieve affordable housing for some Māori.

Table 13.1 Profile of demographic groups by financial knowledge

	Low Knowledge		Medium Knowledge		High Knowledge	
	2006	2009	2006	2009	2006	2009
NZ European	24%	24%	37%	27%	39%	49%
Māori	67%	56%	22%	31%	11%	13%
Pacific peoples	85%	66%	11%	12%	4%	21%
Asian peoples	56%	40%	24%	28%	20%	32%
All Respondents	33%	31%	34%	26%	33%	43%

Source: Adapted from Crossan, Feslier and Hurnard, 2011, pp. 11-12

As well as generally lower financial knowledge, less exposure to home ownership through whānau networks can reduce confidence in making decisions about home ownership. Rates of home ownership have been decreasing for Māori since 1991. In 2006 43.4% of people who identified themselves as Māori lived in owner-occupied homes. Of those who were over 15 years old, only 28.8% owned their own home (Flynn, Carne and Soa-Lafoa'i, 2010, pp.48-49).

Financial literacy was consistently raised with the Commission as crucial to enabling whānau to progress their own development. Inquiry participants saw it as the essential building block for lifting the housing outcomes they and their whānau experienced. Although not a response to the supply side issues that have increased house prices, financial literacy can effectively raise the level of income that Māori households have to spend on housing, through making better decisions about taking on and managing other debts.

...the education component was absolutely necessary and provided information that, for many, would be invaluable in the future. (Whakaatu Whanaunga Trust, sub. DR148, p. 1)

F13.2

Māori are heavily over-represented amongst those with the lowest financial knowledge, and heavily under-represented amongst those with the highest financial knowledge.

Challenges within urban and rural communities

Urban Māori communities can face significant disadvantages in housing affordability, especially in areas like Auckland where house prices have increased much faster than incomes. Māori are disproportionately represented in adverse educational and unemployment statistics (the unemployment rate for Māori is 13.4%, compared to the unemployment rate for the general population of 6.3% (Department of Labour, 2012)), which increases the challenge of improving income, housing and associated wellbeing.

The affordability and sustainability of rural housing poses a challenge for some Māori in sustaining a connection to their land and the cultural practices that centre on marae (which require a stable and continued presence). Affordable housing in rural Māori communities therefore has a role to play in cultural preservation. These communities fear that dwindling populations in rural communities may lead to an irreversible culture loss for many whānau.

Settlement patterns

Research suggests that Māori in general have a strong preference to have their whānau network living nearby. Māori tend to place a greater reliance than European cultures on extended whānau for support. Isolation from these networks can place pressure on whānau, and make them more vulnerable to social ills associated with poverty.

Proximity to whānau was a crucial determinant of where people preferred to live in both rural and urban areas... In the cities, participants often accepted lower grade housing to be close to their families rather than better housing in a suburb further away. (Waldegrave, et al., 2006, p. 12)

This also means that assumptions about people trading up from entry level homes in 'undesirable' areas once they can afford to do not hold so readily for at least some urban Māori.

Urbanisation, driven in part by too few employment opportunities in rural areas, has led to significant reductions in population for some rural Māori communities. Additionally, a number of rural Māori communities are in areas where there is no access to the unemployment benefit. Financial pressure on households and the absence of sustainable employment for those seeking to return can stop those who wish to return home from doing so.

Prevalence in state housing

Because Māori are the largest tenant group in state housing (Flynn, Carne and Soa-Lafoa'i, 2010), they are disproportionately affected by changes in how the state housing stock is managed, or by redevelopments:

State Housing – intergeneration trap both financially and by location, old designs, concentration of housing, poor community engagement on redevelopments, commercial tendering model for redevelopments doesn't value iwi or community partnerships. (Iwi Leaders Group for Housing, sub. DR118, p. 2)

The experiences and aspirations that Māori groups shared with us have in part formed the Commission's thinking on how state housing redevelopments could be undertaken (discussed in Chapter 12). Some Māori and iwi community groups would be good candidates for any stock transfers as discussed in section 12.4.

Quality of the rural housing stock

For some whānau, their housing affordability issue is not about paying a mortgage or rent. The state of repair for houses in some rural areas has been a significant concern. The Salvation Army noted:

There are no reliable estimates of the extent of the rural Māori housing problem although a preliminary report undertaken for Department of Building and Housing suggested that there were as many as 9,600 rural houses in poor condition and in need of repair or replacement. Three quarters of these houses were said to be in Northland. Moreover the high housing costs in urban areas, alongside diminished employment opportunities there, may mean that the populations in such areas as

Northland, Eastern Bay of Plenty and the East Coast grow and hence place further pressure on the existing and by all account inadequate housing stock. (sub. 59, p. 1)

The government response to substandard rural Māori housing is discussed in section 13.3 below.

13.2 Broader issues in Māori housing

Link with economic development

The Productivity Commissions [draft] findings on Housing fundamentally fail to identify and appreciate the linkage between the importance of local and regional economic development and the linkages between this and any government housing strategy. If given the choice between living and working on the land as happened in the decades 1960's to 1980's versus going off to work in the mines in Australia, staying at home in Māori communities will win every time. (Kaitiakitanga, sub. DR97, p. 1)

It is acknowledged that our rural populations are dwindling. However, we suggest that this is occurring more as a direct result of lack of long term employment or access to welfare benefits in isolated areas, rather than a lack of housing alone. One influences the other. The common employment in rural areas is often seasonal and intermittent and without an income one cannot afford to purchase a home unless subsidised rental is offered. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 8)

...need to better utilize Māori land to provide housing for low and medium income earners. If you asked Māori if they would rather live in the city or on their ancestral land they would reply the latter. People create industry, so if Māori were to move home to their lands, this would create economic opportunities in rural areas. (Heeni Shortland, sub. DR91, p. 1)

Housing affordability is a function of both incomes and prices or rents. Because significant numbers of Māori households have incomes so low that any likely price reductions will not sufficiently close the gap between prices and incomes, economic development is often proposed as an affordable housing solution. Achieving significant regional economic development is seldom easy, and some positive economic effects can have negative effects on housing affordability:

Local housing markets are also affected by external demand issues and this is particularly the case in rural areas that contain land with high amenity values. High income households or investors from outside of a local property market can use their superior economic position, and access to finance, to bid-up house prices in high amenity areas. The interplay of local and external demand can have significant implications for local housing markets and communities. In particular, the emergence of the 'second-home', retiree, and 'sea-change' phenomenon in rural areas can have significant positive impacts on the local economy, but serious negative effects on the housing circumstances of local households. (Darroch Limited, 2010b, p. 4)

The Commission agrees with submitters that emphasise the importance of higher incomes through economic development as well as lower house prices in improving housing affordability.

Is Māori housing social housing?

Current government funding assistance through the Social Housing Unit (SHU) has a focus on building new social housing. Being a social housing provider-at-scale though, may not align well with some of the aspirations Māori have for housing on their land. Aspirations to keep whānau connected to the whenua, their tūpuna, their marae, and the associated traditions are only indirectly related to providing social housing. The Social Housing Fund, its predecessors, and loans for those only on low incomes have been the only funding available to Māori for building homes on their land.

The Commission received the full range of views from Māori about this. Some examples include:

...this is not just a "housing project" it is a commitment to revitalising papakāinga a sustainable whānau way of life and at the same time we look after Papatūānuku. Unfortunately, this communal approach is often in conflict with the 2.5 children/ nuclear family approach taken to the delivery of social service funds. (Nga Whare Oranga Trust, sub. DR137, p. 1)

State/ social housing are the responsibility of the Crown and therefore should be heavily subsidised when devolved to third sector providers. (Iwi Leaders Group for Housing, sub. DR118, p. 2)

It is clear that Māori do have aspirations to build both rentals and homes for ownership on their land. Unfortunately, the term social housing provider is not a good fit as it infers provision and management

of rental housing only... However, lack of real opportunity, capability, resourcing and affordability rather than a reluctance to become a provider are probably more of a deterrent than the aspirations of Māori. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 9)

Given a concern to take care of whānau members who are less well off or in inadequate housing, Māori housing solutions will often have social goals that are not unlike those of the Social Housing Unit. The SHU is seeking to build social housing providers-at-scale. The Commission considers that this will be a solution to some but not all Māori housing issues, and may not always be the most appropriate approach.

The housing needs that Maori organisations address are broader than those the SHU has tried to address. For example, there is a significant need to address the quality of the existing housing stock in areas where there are many rural Māori communities. There needs to be greater flexibility to enable communities to take action that is appropriate to their local circumstance. The Commission sees merit in exploring the proposal by Community Housing Aotearoa, that:

...rural Māori housing and social housing budgets should be appropriated and accounted for separately for clarity and certainty. (sub. DR126, p. 5)

Cultural retention, and the link between urban and rural housing

One inquiry participant questioned whether the current model of funding – especially the focus on low-income households or those with social housing needs – appropriately supports housing’s role in cultural retention. They characterised the model as supporting whānau to move home when living in the cities becomes unaffordable, without consideration to whether this is the best approach to sustaining the community and culture back home. This inquiry participant identified a need to be clear about “who we are planning for”.

Inquiry participants acknowledged to us, with some reluctance, that economic necessity means that most Māori are likely to continue to live in cities. Although they saw it as hard within the existing cultural framework, they considered urban papakāinga¹⁴⁰ away from tūpuna whenua may be necessary for cultural retention.

While Māori nostalgically yearn for a connection to the whenua that has remained in Māori ownership, this is unrealistic and economically unaffordable... Instead of concentrating on rural areas the focus should shift towards assisting Māori to recolonise urban centres not as tenants to the State but as land owners. (Fleur Palmer, sub. DR98, p. 2)

Participants noted that other ethnic groups had practices that included buying whole streets in a subdivision where language and cultural practices could be retained. Some participants expressed unease about ‘doing it without the whenua’ – it didn’t sit well with the centrality of tūpuna whenua to Māori culture. Other groups that either did whakapapa (have an ancestral connection) to an urban area or who were more accepting that economic necessity placed moving home outside their reach were more enthusiastic about pursuing urban papakāinga. The Commission visited two examples of successful urban papakāinga; one on tūpuna whenua, and one that was not.

For those urban Māori who whakapapa back to rural whenua, multiple households pooling funding to own a house on the whenua, to be used alternately, was proposed as an option for maintaining ahi kā. Inquiry participants noted that this is how whānau homesteads are used anyway. This is a mechanism currently used in New Zealand largely for holiday homes. In this instance though, that communally owned house can act as a ‘safety valve’ in times of job loss, relationship breakup or other social and financial distress. It may be an affordable option for maintaining ahi kā, accommodating whānau at important event like tangi, and can improve the resilience of whānau.

¹⁴⁰ Papakāinga can mean different things to different groups. Broadly, it is a home village or place of belonging – a place to return to as home. Some emphasise in their definitions that the community exists and operates in a tikanga Māori way, to others papakāinga applies solely to housing on Māori ancestral land.

13.3 Responses to the housing affordability and wellbeing challenges facing Māori

Community, rather than housing, focus

The response from many Māori inquiry participants in both rural and urban areas has been to emphasise the role that whānau and communities should play in resolving the housing and other social issues they face:

Urban and rural papakāinga development offers opportunities for whānau, hapū, iwi to collectivise human, land [and] fiscal resources to design and action culturally relevant and appropriate lifestyles for current and future generations. (Nga Whare Oranga Trust, sub. DR137, p. 1)

It is accurate to say that Māori have aspirations to build housing on Māori land that builds communities not just houses. We have seen a resurgence of interest in group builds and papakāinga housing based on traditional Māori design and living principles. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 6)

These and other participants noted that they had solutions to their housing difficulties that they could pursue. This did not equate to a belief that government had no role, but rather a drive to get on with those solutions that could be actioned, and a firm resolve to place whānau at the centre, rather than just on the receiving end of these solutions. Finance, rather than being the main need, was seen as one of many resources or means that could be used to achieve improved outcomes, alongside cultural and social resources.

Better loan systems and funding support is only a small portion of the answer. How the social and cultural issues impact upon our financial woes, are not addressed sufficiently... Tikanga māori is vital in this type of work environment... The Commission needs to understand that these tools are just as important as monetary contributions. (Rueben Taipari Porter, sub. DR88, p. 4)

...the collective "buying-power" of whānau that could be generated to contribute towards the financing of papakāinga developments works. (Nga Whare Oranga Trust, sub. DR137, p. 2)

There are lots of people out there in your community wanting to help, especially if it benefits the whole community. (Rueben Taipari Porter, sub. DR88, p. 13)

It's not about land. It's not about money. It's about vision (Sam Chapman).

F13.3

The social and cultural resources that whānau and communities can bring to bear are essential for resolving the housing and other social issues they face.

The Commission is persuaded that this is a realistic approach, and that there is a real need to make policies and decisions about how public resources will be used and delivered that are better integrated with the realities and aspirations of the people and the communities they are intended to benefit. Providing funding and some autonomy to Māori organisations that have accountability to their local communities means those who are best placed and best motivated to find housing solutions are better empowered to do so. In turn, this aligns with Māori aspirations to have a greater control over their own futures and the way government influences them. It also aligns closely with the developing Whānau Ora approach.

Box 13.1 Example of an affordable housing project taking a community development approach

Whareuku is a whānau housing project in Ahipara. The project used rammed earth wall construction, and a community development approach to deliver an affordable housing solution on Māori land. Because Whareuku is engineered to last an estimated 200 years, the investment now is also a sustainable one for future generations. Approximate costs were:

Item	Cost
Planning: Architect, TP58s, Council costs and consent etc	\$10,000
Building: Floor materials	\$10,000
Wall materials	\$10,000
Doors and windows	\$15,000
Roof materials	\$20,000
Services: tradesmen	\$10,000
Whānau/hapū	\$10,000
Total for Whareuku to date	\$85,000

This is more expensive than first calculated, because my original materials were going to be of inferior quality. However the extra cost of better quality materials will repay itself in less than 10 years, through health benefits and being “house proud”. I still need to purchase interior kitchen and bathroom materials, however most of my cabinetry will be made from macrocarpa timber left over from roof, so it will still be close to \$100,000 in final costs. (Rueben Taipari Porter, sub. DR88, p. 7)

Lower-quartile house prices throughout New Zealand tend to be above \$200,000. Using rammed earth for walls will reduce some cost, although walls are not a very expensive part of house construction. We consider that the approach taken, of engaging the wider whānau community to help, has made the project demonstrably and significantly cheaper.

Perhaps the greatest grievance we have is that govt depts are stymied in their ability to understand that we have innovative alternatives to solve our housing problems inside a māori paradigm... Govt depts also continue to try to solve our problems, using their methods of solutions. This proves difficult as they don't understand that our issues are more complex than just needing more money to have a successful outcome. (Rueben Taipari Porter, sub. DR88, p. 2)

Whānau Ora is an approach to providing services and opportunities to whānau as a whole, rather than focusing separately on individual whānau members. Selected whānau have a practitioner to work with them to identify their needs, develop a programme of action to address them, and broker their access to a range of health and social services (Te Puni Kōkiri, 2011). Funding for service delivery has come from largely pre-existing sources. Because housing services have been specific contracts to build a specific number of units, there have been no housing ‘funding streams’ that could be rolled into Whānau Ora. Government spending on Māori housing is outlined below (Box 13.2). Integrating that funding with other social service delivery has the potential to lead to better outcomes for Māori.

Box 13.2 Government spending on Māori housing

Funding available for Māori housing includes:

- \$35.35 million Social Housing Fund – of this, \$3 million is tagged for Māori housing specifically, and \$5 million for rural social housing. In theory Māori organisations would be able to apply for all of it.
- \$0.456 million Special Housing Action Zones – managed by Te Puni Kōkiri, this fund is used to build capability in Māori organisations and communities to address housing issues.

The Commission received a range of views about Whānau Ora as a vehicle for progressing the housing aspirations of Māori. Some were more supportive than others. In theory, the Whānau Ora approach is a

good fit with the aspirations of those we spoke to. While commentary on the programme is beyond its scope, the Commission considers that it is the 'best fit' arm of government currently available for progressing Māori housing aspirations.

F13.4

Whānau Ora is the 'best fit' arm of government currently available for progressing Māori housing aspirations.

Financial literacy support for Māori

Ngāi Tahu worked with the Commission for Financial Literacy and Retirement Income, ANZ, and several other stakeholders to run a financial literacy survey for Ngāi Tahu. The results showed that Ngāi Tahu beneficiaries are about as financially literate as the general population (diverging from the lower national Māori average significantly) (Te Rūnanga o Ngāi Tahu, 2010). Crossan, Feslier and Hurnard, (2011) explain this in part by the effort Te Rūnanga o Ngāi Tahu is putting into financial literacy education. This is based around its matched savings scheme, Whāi Rawa. ANZ is now rolling out 'MoneyMinded Aotearoa' workshops to Ngāi Tahu, but aims to eventually offer them to all iwi (Te Rūnanga o Ngāi Tahu, 2010). The Commission commends this initiative for the material impact it is likely to have on housing affordability for Māori. We have repeatedly heard in consultations that financial literacy is a problem.

Addressing the quality of the rural housing stock

Repairing the rural housing stock has had a specific programme since 2003 (the Rural Housing Programme). That programme has been wound down. Although a Rural Community Regeneration Programme was proposed, it has not been progressed. DBH notes that elements of that approach have been included in the rural fund component of the SHU:

Aspects of the former Rural Community Regeneration Programme have already been incorporated into the criteria of the Rural Fund (part of the Social Housing Funds) for the 2011/12 year. Criteria for the Social Housing Funds will be reviewed once this year's funds have been distributed. (sub. DR140, p. 8)

Box 13.3 Maintaining rather than building homes – the Rural Housing Programme

An often understated cost of housing is maintenance. Although a whānau might be able to cover the mortgage costs of a home, when times get tough one of the first things that is postponed to reduce costs is maintenance. In the early 2000s, poorly maintained homes in some rural, predominantly Māori communities were identified as a significant problem.

The Rural Housing Programme was a response designed to assist whānau with essential repairs and, in extreme cases, source a new home to replace houses that were not cost effective to repair. Between 2001 and 2010 \$139.5 million was spent on essential repairs to houses and infrastructure, and a limited number of replacement houses.

In 2010 the programme was reviewed by DBH, which concluded that the programme did not provide value for money, as it did not lead to sustainable improvements in the rural housing stock. The programme had failed to deliver its objective of eliminating poorly maintained houses for the regions it targeted, and would prove insufficient to the task for the foreseeable future. The programme was wound up, pending options for a replacement programme, with whānau still on its waiting list.

So far, the closest thing to a replacement has been the rural fund component of the social housing fund. At \$5 million, it is less than half the average annual cost of the Rural Housing Programme, and is intended for organisations building or buying social housing in rural areas, rather than repairs.

The Commission questions whether a small fund for building replacement rental houses (Pūtea Taiwhenua/ the Rural Fund) is the best way to address substandard housing in rural areas. A common request from Māori organisations is that the funding for housing programmes be devolved to them, as they would administer it more efficiently, and through loans be able to 'recycle' it. A microfinance approach might be

well suited to addressing need for credit to repair homes. It devolves responsibility and the ability to make decisions about priorities to communities, and over time could be a self-sustaining response to the need for home repairs in rural areas. Local community members are well placed to determine what repairs and in which order would best raise their wellbeing. They can benefit from aggregating repair work to multiple houses in a location.

Microfinance refers to small loans made to those on low incomes who typically find it hard to access credit without collateral that the loan can be secured against. Central to the microfinance model is group lending, where borrowers are in small groups. The loan is repayable only by the individual it is made to, but the ability of all members to borrow depends on the credit rating of the group as a whole (Maclsaac and Whahid, 1996). This incentivises the group to support one another and to "...invest in feasible and productive undertakings" (Maclsaac and Whahid, 1996, p.598). Further discussion of how a microfinance approach might fit is included in the table below.

Table 13.2 Features of microfinance and their applicability to repair loans on Māori land

Feature	Rationale	Applicability
Group lending	For group lending to work, there must be some feeling of solidarity amongst members, so that they will encourage and support each other.	Whānau and hapū connections could be well suited.
Targeted to the 'functionally landless'	Borrowers typically have insufficient land or other collateral for loan security.	Banks are reluctant to accept Māori land as security for loans. Most also will not take security over the house.
Small, regular payments	Small weekly payments make the debt servicing less burdensome, and enable issues to be identified early.	Māori households in areas where there are greater numbers of rural communities typically have lower incomes, suited to smaller regular payments
Commercial interest rates	Still lower than 'loan sharks'. Because there are more, smaller loans, operating costs are greater relative to the size of money being lent.	High-cost 'loan sharks' have been identified as a problem previously (albeit more for living-related expenses). In practice, interest rates could be determined by the group making the loans, to cover their costs.

Source: Productivity Commission analysis of N. Maclsaac and A.N. Whahid (1996); The Grameen Bank: Its Institutional Lessons for Rural Financing

To start this initiative, we suggest making some seed funding available to local Māori organisations or Whānau Ora provider collectives to deliver loans for essential repairs using a microfinance approach. Using small loans for housing repairs allows Māori organisations to 'recycle' funding in a way that the suspensory loans (which were essentially grants)¹⁴¹ made under the RHP were not, giving greater value for money.

The Commission received significantly positive feedback in its engagement meetings and through submissions about this option:

A range of strategies is required to address Māori housing needs including new builds and maintenance of current stock. It is appropriate to revive a maintenance fund for this purpose and to learn from mistakes made during the time this fund was administered by HNZC. We support the recommendation that Māori organisations that wish to become housing providers or Whānau Ora provider collectives that have expertise in the area of housing delivery/development/maintenance be funded to deliver loans for essential repairs. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 10)

¹⁴¹ A suspensory loan under the Rural Housing Programme did not have to be repaid if the occupant still lived in the house three years after the repair was made. This appears to have been more a mechanism to prevent the grants being used to do up homes for on-sale, than any attempt at making an actual loan.

I support the Productivity Commission thinking around micro-finance as an option that shares risk while providing important finance to get affordable housing happening for Māori, by Māori in our Māori communities. (Kaitiakitanga, sub. DR97, p. 2)

R13.1

The Pūtea Taiwhenua (Rural Fund) be used to provide seed funding to organisations for using a microfinance lending approach to address the quality of the rural housing stock.

13.4 Building homes on Māori land

There is the potential for Māori land that is near to growth centres to increase the supply of affordable housing and reduce some of the pressures on price for housing on general land. The Auditor-General identified that about 30% of Māori land is in or near provincial centres (OAG, 2011, p.25). It also noted that in the Northland, Bay of Plenty, Auckland and Canterbury regions “there was significant demand from Māori individuals and organisations to use their land for housing, given appropriate support and regulation” (OAG, 2011, p.23).

Communities near urban centres face a different set of population drivers and opportunities than more isolated communities. Some are growing to accommodate the need for homes close to larger towns and cities, such as in the western Bay of Plenty (OAG, 2011, p.45). Māori land,¹⁴² where present in these communities, is sometimes seen by its owners as a resource that could be used to increase the supply of affordable housing for Māori whānau in the area (OAG, 2011, p.23).

Government has played a significant and ongoing role in Māori housing over the last 80 years. This role is currently undergoing considerable change. In the last 5 years there has been a shift away from the role the state had played (providing funding), to a role focused more on facilitating use of private assets and philanthropic donations to increase housing construction. The thrust of this direction of change has also led to a focus on organisations developing multiple houses, and somewhat away from providing finance to individual whānau to build or buy their own home.

It is not surprising that the recent break with the previous policy direction has led to calls to bring back (improved versions of) previous programmes. This has also in part been fuelled by the failure of Kāinga Whenua, and the bureaucratic difficulties in accessing funding through Māori Demonstration Partnerships (a subset of HIF).

The Commission is not recommending a revitalisation of old funding programmes, because the policy direction has changed and because fiscal constraints would limit the ability of government to do so. In section 13.5 the Commission describes how government might work to enable the necessary actors (whānau, local state agencies, and private finance) to achieve a lasting solution for getting homes built on Māori land.

Focus for developing Māori land – communities or single homes for individual whānau?

Building individual houses for individual whānau has been recognised as leading to an inefficient use of some land blocks. Wider recognition of the need to improve the wellbeing of whole communities has turned the tide towards more communal approaches to development. This in part reflects that there are economies of scale available for whānau developing multiple homes, and in part reflects a more prevalent philosophical preference for the kind of social relationships that a ‘papakāinga’ development involves.

That said, groups the Commission spoke to noted that their aspiration to develop communities did not rule out a need for individual finance packages. This was because the complexity of developing homes on Māori land (discussed below) can lead to inertia – there can be a need for a whānau or individual to take a lead to

¹⁴² Te Ture Whenua Māori Act 1993 defines four kinds of Māori land, which are separate to General title land (which is what most of New Zealand now is, and is based on English land titles). Of the four kinds of Māori land, three have restrictions placed on their sale and other forms of alienation (such as leasing), and all will typically be held in multiple ownership. This poses distinct challenges for its ownership and use.

demonstrate what is possible. In these cases, waiting for a group finance package can stop such leadership being shown. The Commission considers that this is an appropriate role for the Kāinga Whenua lending product. However, taking out a Kāinga Whenua loan can be fraught:

The product criteria and the process of obtaining a loan makes it near impossible to qualify by creating unnecessary barriers. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 11)

Reviewing features of Kāinga Whenua

Kāinga Whenua loans are an extension of the Welcome Home Loan programme for houses built or put on Māori land. The Welcome Home Loan is a no-deposit or low-deposit loan for first-home buyers, provided by Kiwibank and underwritten by HNZC. The Office of the Auditor-General (OAG) has noted that: “Kāinga Whenua is not well matched to the incomes of Māori households. Loan uptake in the first year has been well below expectations” (OAG, 2011, p.32).

If proposed changes to the income and asset caps for Kāinga Whenua are approved (OAG, 2011, p.81), this will represent a broader loan product for housing on Māori land.

There are, however, other complexities and restrictions in the product. Submitters raised a number of questions about these, and recommended they be removed:

1. Why is there an income cap on the Kāinga Whenua Scheme? Is it assumed that whānau who earn over the income threshold have the ability to source finance elsewhere?
2. Will high-income earners be able to access this scheme if they are unable to secure finance elsewhere?
3. If whānau have equity in their existing home and decide to sell, yet still require extra funds to purchase on papakāinga land, will they also be eligible?
4. Has consideration been given to the future underwriting of the loan in the likely event of whānau needing to do non-routine maintenance such as re-roofing, septic upgrade requirements, extensions etc.?
5. Do all the applicants as in criteria 1 have to live in the abode? (Pahia Turia, sub. DR78, p. 1)

The maximum number of loans that HNZC can insure each year (250) also drew some comment:

HNZC set a maximum limit to guarantee **only 250** Kāinga Whenua loans per annum. It is interesting that we are being asked to become providers and develop housing for Māori at scale when the only lending product available for Māori land development is already capped by Government at 250 houses per annum and the SHU component of funding for Māori is \$3million per annum which could support building approximately 10 – 15 homes per annum. (Western Bay of Plenty Māori Housing Forum, sub. 136, p. 12) (emphasis in the original)

The Commission understands that the maximum annual number of loans merely reflects how many loans can be insured from the existing mortgage insurance scheme appropriation used to insure Welcome Home Loans. This does not preclude increasing the appropriation or reallocating from within it between Welcome Home Loans and Kāinga Whenua. We note that 250 loans a year is several times greater than the number of Low Deposit Rural Loans (LDRL) and Papakāinga Lending Scheme loans being made in the last years before those programmes were wound down. We also note that to date the number of loans made under Kāinga Whenua are in low single figures. It seems too soon to us for government to appropriate more money for the mortgage insurance scheme, as it seems unlikely that even with changes the product would provide 250 loans each year.

Box 13.4 Suggestions made to the Commission for improving Kāinga Whenua

- Remove the limit of 250 loans per annum
- Remove the income cap
- Remove the requirement of being a first-home owner and/or be made available to higher-income earners who desire to live on papakāinga lands that are unable to access finance through other

mainstream tier one lenders.

- Remove the internal requirement of holding back 10% of the approved loan as contingency when a fixed-price building contract has been signed
- Remove the requirement of placing an encumbrance on the Māori land title merely to note that HNZC has legal interest in the removal of the house
- Review and contemporise the tripartite agreement, including making it possible to use forms of tenure other than licences to occupy
- Remove the requirement to building on piles which increases cost by 5–10% where the owner agrees to take out mortgage insurance or the Trust agrees to assist with default management
- Make the product available to island communities (eg, Chatham Islands, Matakana Island , Rangiwaea Island in Tauranga)
- Those whānau members who are jointly applying for the loan not be required to live in the same abode.
- Extend the term of the guarantee being provided by HNZC on the borrowing where capital expenditure is required on the property in the future, or a suitable alternative.

Source: Western Bay of Plenty Māori Housing Forum, sub. DR136; Pahia Turia, sub. DR78; engagement meetings

Most Māori inquiry participants considered that there was merit in reviewing Kāinga Whenua. The Commission understands that Kāinga Whenua has been under review since at least September 2011. One urban participant suggested that it was merely a distraction from bigger picture issues of how state housing stock is being redeveloped and the larger social housing funds. Another rightly pointed out that where there are many Māori on low incomes, Kāinga Whenua as a loan product would not provide a solution to their housing needs. Because it is a conventional mortgage product, it would not meet the needs of the many Māori in rural New Zealand who would struggle to service a mortgage.

The Commission considers that even with the various conditions within Kāinga Whenua relaxed, the other processes involved in building homes on Māori land and household incomes mean it is unlikely to ever deliver a great volume of housing on Māori land.

F13.5

The review of Kāinga Whenua needs to be drawn to a conclusion, soon. However, whatever the new conditions, it is unlikely to meet the needs of the many Māori in rural New Zealand who would struggle to service a mortgage, or to deliver a great volume of housing on Māori land.

Financing model – bank loans or bridging finance?

The predominant model for building homes on Māori land has been heavily influenced by previous programmes. In particular, the land development schemes and then Māori Affairs housing programme that ran between 1935 and the 1980s were based around getting individual loans for individual whānau. This has persisted through the LDRL and Papakāinga Lending Schemes. However, as both a more communal approach is being taken, and private finance is more and more being looked to to fund them, the question has to be raised as to whether this is still the right or best way. In housing developments more generally, startup costs for a development are usually met through bridging finance, often from mezzanine providers.

Mezzanine finance is hard to get now in NZ as that sector has largely disappeared. Providers of mezzanine or philanthropic finance for affordable housing are an underdeveloped part of the community housing sector as a whole. At least one inquiry participant was seeking to secure offshore funds to provide housing in rural areas, with some success. This suggests that it is possible.

Kāinga Whenua or other loans like it are always likely to be a long and difficult process for whānau, where it is being extended beyond what a mortgage product can normally do. This in part explains some of the calls for the range of things that Kāinga Whenua will pay for to be extended – ordinarily, they would have been paid for or provided by the developer using bridging or mezzanine finance, and passed on in the house price. Individual loans are not a ‘best-fit’ funding model for multiple-house developments.

To an extent, the capability funding provided under Māori Demonstration Projects (MDP) or through the TPK Special Housing Action Zones (SHAZ) programme has acted in this capacity – funding initial preparation for development. The MDP capability funding has not been replicated in SHU funding, however. The OAG identified that there were significant upfront costs for trusts accessing the MDP funding (\$110,000 and \$215,000) (OAG, 2011, p.88). Mezzanine finance may be an inappropriate mechanism for developing housing on Māori land. What is clear though, is that for Kāinga Whenua or any other individual loan/mortgage programme to work, some form of bridging funding will be necessary upfront, particularly where multiple houses are being developed.

F13.6

The model of using individual mortgages to build homes on Māori land is overextended where initial funding would ordinarily be obtained through mezzanine finance.

How a house on Māori land has been valued for the purposes of securing a loan

The normal approach for mortgages of using the resale value of a house as security for a mortgage does not work well on most Māori land (discussed below). The workaround for this has been for HNZC to use an ‘in situ’ value.

The in situ value of a house on Māori land is calculated based on its worth where it stands. This is calculated based on the cost of the home to construct or move on site, and provision of relevant services to it. Crucially, this is not the price that might be received for selling the house. It is best thought of as the price to construct and service the house. This is the valuation that was used by HNZC for providing loans under the LDRL and Papakāinga Lending Scheme, and which it now uses for insuring Kāinga Whenua loans made by Kiwibank.

The reality is though, that the resale value of the house is likely to be significantly less than the cost of the mortgage (perhaps as low as \$35,000 (OAG, 2011, p. 84)), so these loans are essentially unsecured. Where HNZC removes or takes possession over a house in the case of a mortgage default it almost always loses money. Removing the house (once legal and other default management costs are included) can cost more than the house can be sold for. Taking security over the house merely creates a threat to discourage default on the loan to manage the financial risk to the Crown. Because carrying out this option is so costly though, it in turn generates further financial risk.

This approach to lending on homes for Māori land has been used since at least 1985. It therefore seems timely to ask whether money spent on repossessing houses could be used better to reduce and prevent mortgage defaults. The OAG identified LDRL’s education programme and ongoing advice as having a material effect on the level of loan defaults (OAG, 2011, p. 83). This programme is not part of the Kāinga Whenua loan scheme. The Commission suggests that less draconian approaches to ensuring that loans are paid back should be explored, to improve both the housing outcomes for whānau, and the fiscal outcomes for the Crown.

R13.2

Where the government lends for homes on Māori land, it should manage defaults through a more cost-effective means than repossessing the houses.

13.5 Why aren’t homes getting built on Māori land?

The challenges of building homes on Māori land are well documented. Difficulties using land as security for finance, zoning restrictions, getting agreement from shareholders in land blocks, and poorly coordinated or

communicated government responses all feature prominently. Most of these challenges, taken by themselves, are not insurmountable. Rather than re-litigate these challenges, the Commission is interested in why there has been no effective and lasting response to these challenges. We conclude that to resolve these issues, three groups of people and institutions would need to take action:

- Public services at the local level – Local Authorities, Māori Land Court district offices, local Te Puni Kōkiri offices, and in some cases national organisations like the SHU and Kiwibank;
- Whānau and shareholders in Māori land; and
- Private finance institutions.

The reason these groups haven't taken action is that there are plausible reasons why another group, or someone else within the group, should act first. The rest of this section outlines this deadlock, and suggests ways to break it.

F13.7

To get homes built on Māori land, public services, whānau, and finance institutions would all need to take action. In general, this doesn't happen because there are plausible reasons why another group, or someone else within the group, should act first.

Local public services

Before building a home on Māori land, the whānau seeking to do so would need the consent of the local authority, and to have a tenure decision either made or lodged with the Māori Land Court. As well, absent private finance, they will need some indication of whether they can receive funding from Kiwibank through the Kāinga Whenua loan scheme, or from the Social Housing Unit. They may also seek guidance from the local Te Puni Kōkiri office (OAG, 2011).

Today, there is no one stop shop. At least in during the time of Māori Affairs which had the clear responsibility to provide for Māori housing, 26,000 homes for Māori were built... We either need a return to a one stop shop approach or a multi agency accord between relevant Government agencies with Māori. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 12)

Because of its location historically, much Māori land is zoned rural, or in another way that restricts the number of houses that can be built on it (OAG, 2011). This means that in many instances, any significant housing developments on Māori land will require resource consent or potentially a district plan change. As well, permission from Council does not mean that permission to occupy or build on the land will be granted through the Māori Land Court.

As an example, a whānau seeking to build on their whenua may have to undertake a contentious consultation process with other shareholders through the Maori Land Court, only to find that upon receiving permission to build, the council requires them to consult with the same disaffected whānau as 'affected parties' before their resource consent can be approved.

As well as the consent process, the advice and guidance for whānau seeking to build on their land is fragmented and disconnected. This makes it hard for those seeking to build on their land to know where to go. This was the key theme of the Auditor-General's 2011 report *Government planning and support for housing on Māori land*. Because each organisation has a necessary but not sufficient role to play in approving or helping build homes on Māori land, and none are solely accountable for it, it is common to see no action amongst local public services.

As well, there is little reason for any of the local consenting agencies to take action where low overt demand from whānau or difficulties getting finance may mean that the results of taking action are minimal. The OAG's solution to this was to recommend that:

The agencies involved in providing advice and support coordinate what they do locally by:

- having one organisation act as a single point of contact for Māori who want to build housing on their land;

- agreeing a shared process that sets out who will work with Māori who want to build on their land and when; and
- having staff with the relevant expertise and knowledge available to provide high-quality information and advice. (OAG, 2011, p.16)

The OAG further recommended that “local authorities identify and work with land owners who have particularly suitable land blocks and who want to build housing on Māori land” (OAG, 2011, p.16). There are some good practice examples of this happening:

We would also note the following initiatives in the Bay of Plenty for your information:

- As a Regional Council we have supported the development of a Papakāinga Toolkit as a smart growth initiative to support papakāinga on Māori land in the Western Bay of Plenty. This toolkit is a step by step guide to develop and build on multiple owned Māori land. Workshops are being held with Māori Land Trusts on how to use the toolkit.
- The Papakāinga Toolkit workshops are being facilitated by Te Puni Kōkiri. This is a successful initiative that could be replicated by other local authorities
- Through the Treaty Settlements process, iwi are brokering relationships with key agencies such as Housing New Zealand to develop housing strategies for their respective Māori communities. Some of these housing strategies will be implemented through cultural redress packages with iwi in the Bay of Plenty i.e Ngāi Tahu
- Māori Land Trusts in our region are increasing their role of developer on Māori land, often providing the finance to build then offering the dwellings as ‘rent to buy’ for their shareholders.

(Bay of Plenty Regional Council, sub. DR101, p.2)

The OAG singled out both the Western Bay of Plenty District Council and Whangarei District Councils as good examples where the councils are working closely with whānau to progress their housing aspirations proactively (OAG, 2011). Anecdotally, the OAG report has led to some councils also taking steps to improve how they address housing proposals for Māori land.

However, the incentive structure remains unchanged. Where councils have made increasing affordable housing a priority and have identified Māori land as a solution, or are otherwise interested, they are taking steps to make progress. This begs the question of what can be done where a whānau is seeking to develop a land block for housing and there is not a proactive response from the local consenting and advice agencies.

The task of planning for and delivering multiple papakāinga housing on Māori land is herculean and requires capability and commitment of not only land trusts but also other agencies in a collaborative approach to deliver this... It is no easy task to build a community and requires a new way of operating, a joint agency approach working with Māori. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 7)

Of all the instruments available, the best fit for addressing this deadlock are Whānau Ora providers or ‘navigators’. Helping whānau to access the appropriate advice and government services is a clear fit with the Whānau Ora approach. It can also address the challenge of who acts first, or who will take leadership at the local level for assisting a whānau with getting approvals and accessing state funding (where the latter is appropriate).

The challenge of building capability in Māori organisations and whānau to undertake housing is not new. Several inquiry participants lamented the loss of capability funding as making it too difficult for otherwise good housing proposals to be progressed. The OAG noted that high upfront costs involved in planning housing on Maori land inhibited the ability of some groups with otherwise suitable housing plans from being able to apply for funding. It recommended that DBH and other relevant organisations build the capability of Māori organisations to plan and participate in housing (OAG, 2011).

The Commission suggests that although some basic assistance with project management and governance systems may be necessary for many trusts, the specific challenges of building homes are best addressed through a capability held centrally that can be deployed to assist whānau on request. This would mean a specialist team including an architect, legal specialist in Māori land, and construction project manager,

housed in the national Whānau Ora commissioning agency and available to assist whānau through the process of building on their land. The Commission considers that this approach, originally proposed by Rau Hoskins, is the optimum mix of operational efficiency and appropriate capability support for whānau.

R13.3

A team of Māori housing expert advisors, housed in a national agency like Te Puni Kōkiri or the proposed Whānau Ora commissioning agency, be made available to Māori land owners with aspirations to build housing on their whenua.

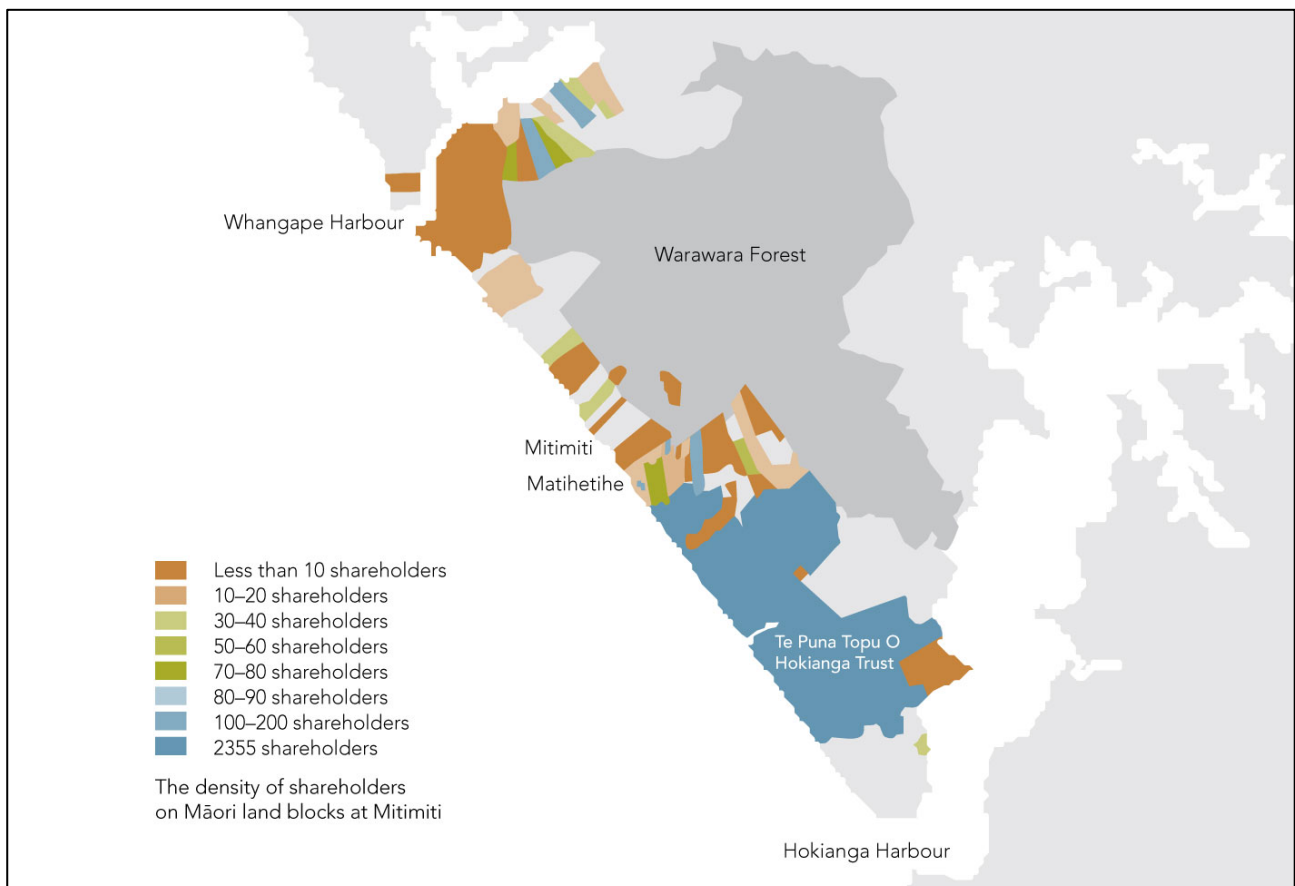
Whānau vision and permission to use the land

For anything to happen on Māori land, there first needs to be agreement within that whānau about what should be done. This is far from straightforward, as there can be many shareholders in Māori land. In June 2011 the average number of shareholders was 90 per land block (Māori Land Court, 2011). Because shares in Māori land are not automatically inherited, but instead must be 'succeeded' to through the Māori Land Court, it is likely that some, and perhaps many, of those shareholders formally recorded for a land block may have passed away. As well, whānau or potential succeedees living overseas complicate meeting the thresholds for agreement set out in Te Ture Whenua Māori Act 1993.

Politics amongst whānau and hapū can create havoc also. There are so many shareholders in Māori land that it is hard to get a unified decision from everybody, so nothing seems to happen while division is there (Rueben Taipari Porter, sub. DR88, p. 5)

This ratio [of shareholders to land mass] is well in excess of any possible sustainable development, which means that Māori are always left with the difficult choice of deciding who gets the right to build on collectively owned land... Given this difficult choice, a lot of Māori leave their land undeveloped and abstain from granting permits for people to occupy, as, aside from issues of affordability, the limited number of houses that can be built on each block means people in future will miss out. (Fleur Palmer, sub. DR98, p. 1)

Figure 13.5 Number of shareholders and potential houses in a sub-region north of Hokianga



Source: Adapted from Fleur Palmer, sub. DR98, p. 1

Because the process can be so fraught and costly, there are significant disincentives to an individual shareholder trying to get a plan or trust (which simplifies decision making greatly) organised for the land block. As well, if there is no certainty that finance will be available or that the Council will grant resource consent there is less incentive for anyone to start the process for planning how the land block might be used, including for housing.

With the right instruments and information, Whānau Ora facilitators might be able to assist whānau to overcome some of these barriers to organising and using their land. There are four kinds of land trusts under Te Ture Whenua Māori Act 1993. Ahu Whenua trusts are the most commonly used. Concern has been raised that the decision-making thresholds in Te Ture Whenua Māori Act 1993 are very difficult for shareholders to meet, hindering the effective use of Māori land. The DBH is looking at tenure issues through its Māori housing policy programme:

Other approaches that the Department sees value in considering are:

- Exploring the establishment of legal cooperatives in which Māori land would remain protected and collectively owned, but would be easier to build on (sub. DR140, annex 2, p. 9)

In practice, it is hard to see how any management structure over land with fragmented shares could function differently, without reducing the property rights of some or all shareholders. However, this may be unnecessary. The Māori Land Court advises that any trust can exercise the full powers of its shareholders if they are included in the trust deed. Where there is a trust over the land, challenges about making decisions for effective land use are more a question of what the trust has been empowered to do, than fragmentation of shareholding. If there were a desire to address share fragmentation, a mechanism within Te Ture Whenua Māori already exists – Whenua Topu trusts.

Whenua Topu trusts are seldom used. The features of Whenua Topu trusts include:

- Shares stop splitting after they are constituted, as it is no longer possible to legally succeed to (inherit) shares;
- The assets vested in the trust and any income from them must be used for the designated hapū or iwi, rather than just the beneficial shareholders; but
- An order by the Māori Land Court can be made to apportion some of the income to a beneficial shareholder, in order to avoid any unfairness where a particular shareholder or whānau has an interest larger than others in the land block.

The focus on returning a benefit to the wider hapū group is in keeping with the wider social objectives of community development projects. They may also go some way to addressing the imbalance in ownership of what were hapū resources that the imposition of a shareholding system caused. Figure 13.5 above illustrates some of this imbalance. However, in a recent report TPK noted that:

With the primary aspiration referred to in the research process being retention of the land and the affiliation links to the land it is perhaps not surprising that the WTT's severance of the actual beneficial interest in the land is proving a deterrent to adoption.

This is borne out not just in the low uptake nationally but also in the nature of the lands that are being put into WTT. With a number of notable exceptions, it appears that lands are small, have a long history of diffuse ownership ties and are not in a position to generate an economic surplus. (Dewes, Walzl and Martin, 2011, p.62)

The OAG identified that about 70% of Māori land titles are without a management structure over them, although this is only about 40% of all Māori land by area size (OAG, 2011, pp.81–82). The absence of trusts over significant amounts of Māori land means that those shareholders will have to go through the more rigorous thresholds for decision-making (percent of shareholders voting in agreement), which as shares fragment may become more problematic. Ultimately, the solution is less about changing those thresholds or devising new potential structures, and more about getting trusts established or reviewing existing trust deeds to update them for any new purposes they are intended for.

The Commission sees a role for Whānau Ora in educating whānau about these options, and enabling whānau to come to a decision that is right for them.

R13.4

Whānau Ora facilitators be trained to educate whānau about the options for management structures for their Māori land, and to play a role in developing plans for the use of Māori land for housing (where this is what the whānau wants).

Private Finance

...a mechanism is required that can convert the asset-base of whānau from the shares and interests held on 'paper'. For example, one of the key whānau groups we have been working with has a paper asset-base of \$1.5million across 55 Te Arawa land blocks which could be used to establish papakāinga. (Nga Whare Oranga Trust, sub. DR137, p. 1)

Banks have been reluctant to lend money for homes on Māori land (OAG, 2011). Bank's can take Māori land as security for a loan without it 'triggering' the processes that have to be gone through under Te Ture Whenua Māori Act 1993 for 'alienation'. However, although the bank could take possession of the land because of a default on the loan, it is difficult to sell the land to recover the money lent. The simplest way would be to have the Māori Land Court convert it to General Title land, and then on-sell it. There is a cost involved in this process which reduces the amount of the money that is then recovered. As well, alienating Māori land is an emotive issue which can entail significant community resentment for the bank.

The accepted expectation is that financial investment requires the incentive of capital growth or a passive rental income return. Rental income assumes the house is excess to the owners need which is rarely the case when building on Māori land and difficulty to alienate Māori land affects capital growth. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 7)

A solution has been to secure the loan against just the house if it is removable. However, the OAG's report noted that "the limited market for houses on Māori land means that a house on Māori land is likely to lose rather than gain value" (OAG, 2011, p.84). A lack of certainty about future willingness to buy a particular home on Māori land (due to the limited market for some homes) reduces the price a home owner is likely to get for it (should they later wish or need to sell), and places them at quite some financial risk. It also undermines the confidence of lenders to lend, because if they have to take possession of the house, on-selling it might not recoup the cost of the loan. The salvage price of the house is likely to be lower than the cost of its purchase, and the limited market for the home makes it harder to realise a good price for the house. Again, commercial banks have been unwilling to accept this form of security without the government insuring the loan.

Issues:

- Lending institutions do not seem to understand both the legislation in which Māori land operates and the values attached to Māori land
- Applicants also face institutional racism from banks, especially at the retail banking which is often the face of banking in the community
- Lack of innovation, not considering similar security options and reliance on Crown assistance programmes (Kāinga Whenua). (Iwi Leaders Group for Housing, sub. DR118, p. 2)

Banks we spoke to indicated that there was an interest in resolving these issues with lending on Māori land. They noted that Māori land isn't well understood within banks, and that if some model frameworks for thinking about lending on Māori land were available this might help lead to more suitable lending products. For instance, banks already have some models that could be adapted for lending on Māori land. These include lending on long-term leases for houses on church land, and some approaches in agribusiness to managing risks in long-term property assets.

Box 13.5 Securitising private lending for homes on Māori land

Unlike government loans, for banks to get involved there would have to be an asset backing a loan. Suggestion has been that the asset backing the loan be valued as a cashflow asset, rather than on its resale value:

Other ways of making lending more accessible is to allow alternative forms of security; 1. for example loan against the rental income potential of a dwelling. (Dr Kapa Morgan quoted in Rueben Taipari Porter, sub. DR88, p. 5)

This would essentially require the lender to accept the serviceability as being sufficient and certain enough to lend without additional security. Banks have been unwilling to do this on any kind of land. However, certainty of serviceability might be higher where a trust is involved. The OAG noted that –

The primary financial risks for individuals who build on Māori land are not present for trusts, because Māori trusts are inextricably linked to the land. This means that the risks to individuals posed by possible changes in personal circumstances are not present. (OAG, 2011, p.85)

A further suggestion made by inquiry participants was that homes on Māori land should be treated the same as heritage buildings. This was for two reasons:

- Because land is a tāonga tuku iho (a treasure to be passed on to future generations), a house on that land won't usually be sold, but instead passed on. It should be a long-term asset like heritage buildings – they require similar ways of thinking about them financially.
- Social housing developments internationally have sometimes been valued and financed in a manner similar to heritage buildings because it is an asset being built and retained for a social dividend rather than a capital gain. This would be true for Māori housing, where it is playing a cultural role.

It is unclear how using assets that have only a cashflow rather than capital value to back commercial loans could work. There may be some precedents in assets such as heritage buildings, and overall the approach seems worth exploring further.

However, banks noted that there was currently no incentive to pursue these options, as the other constraints to getting housing built on Māori land mean that it would not readily lead to increased business for them. Banks, in their view, are best placed to be the last of the three groups we are discussing to move on getting houses built on Māori land. As well, they noted that credit teams and managers are understandably risk averse. New and unknown lending approaches are treated with a lot of caution, and there is a distinct preference for others to try new approaches first. There is significant reluctance to be a first mover amongst banks.

There are indications that some banks are prepared to trial new lending approaches. For instance, of all the institutions first to offer Welcome Home Loans, only Kiwibank is a national organisation (Westpac has recently joined too). This suggests that in some of the regional financial institutions there may be greater willingness to try different approaches to lending.

The Commission suggests that it would be worth exploring further how existing lending policies could be adapted, and provide the information banks need to encourage them to review their approaches to lending on Māori land. The target group for this information would perhaps first be the WHL partner banks, who may have a greater willingness to try different lending approaches, and particularly those based largely in areas where there are higher amounts of Māori land.

R13.5

Te Puni Kōkiri, working with the Māori Land Court and private finance institutions, develop options to adapt existing lending policies and precedents for private finance institutions to lend for building homes on Māori land.

Government funding as the alternative

The other way that financing homes for Māori land has been achieved is through government funding. The SHU has opened its funding round for 2011/12, and will be providing grants for up to 50% of the capital costs of a housing development (Social Housing Unit, 2011). This is a significant step forward for making housing on Māori land accessible and affordable.

The relatively small amount of money available (\$3 million in the Māori fund, and \$5 million in the Rural fund), and the intent to use that money to access private money for housing (Heatley, 2011), may make it difficult for trusts with few assets to access these funds. They would not be available at all to individual home buyers.

Other ways to overcome the financial challenges to housing on Māori land

The constraints associated with Māori land tenure are the disincentives for and barriers to the financial investment potential of housing on Māori land, more so than Māori cultural aspirations of connection to whenua and whānau. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 7)

Māori home buyers may still be willing to borrow to buy or build a home on Māori land despite the obstacles, because of the value they place on a home on their whenua. The Commission has given consideration to three models that might ease the financial risk to home buyers, while also providing confidence to lenders. Feedback we received on these models was mixed, with some favoured more than others by both banks and Māori keen to build homes on their whenua. We have retained them in our final report not as perfect solutions, but to stimulate ongoing discussion of ways that lending on Māori land might be achieved.

Trusts guaranteeing loans and finding future buyers

There has been some suggestion that trusts should guarantee home investments, and then find and manage future demand directly. This could be through maintaining a list of those who have expressed an interest in living on the land. Anecdotally, guaranteeing homes is often resisted due to the level of risk the trust would have to take on. Trusts are themselves not always confident that they will be able to organise replacement buyers. The risk that they might have to pay significant amounts of money where they cannot readily find a buyer can be impractical where the Trust has small financial reserves.

The focus that iwi rūnanga have on good stewardship of Treaty Settlement money, especially in the early years of growing that settlement into an economic base for the future of the iwi, means that they are typically reluctant to issue a guarantee that would mean risking Treaty Settlement money for no financial return. At the least, it limits the amount of housing that a rūnanga would usually be willing to guarantee to a number that would not significantly deplete those funds, were the guarantees to be called in.

Purchasing an option

Another way to demonstrate continued demand is for prospective home owners to purchase an 'option' on owning one of the homes in the future. Making a financial commitment indicates that lenders and home owners can have a greater level of confidence that there is a serious demand for the homes in the future, and therefore likely to be a better price. If paying for a 'right to live on the whenua' is culturally inappropriate, then the cost of the option could form part of any payment required for the home itself. If the options were tradable, then should someone change their mind or have their circumstances change they could on-sell it to another land owner, which recoups their investment, ensures continued certainty of demand, and minimises the management responsibility and workload for the trust or organisation.

Mutual insurance schemes

Remove the requirement to build on piles which increases cost by 5 to 10 percent where the owner agrees to take out mortgage insurance or the Trust agrees to assist with default management. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 13)

An alternative to having a trust guarantee the loan is for each home owner to pay a premium into a mutual insurance fund that would insure the lender against defaults. Because the level of financial surety needed would be based on the likelihood of defaults in the future, rather than the value of the whole development, the premiums could be relatively low.

This wouldn't provide certainty of future demand – the home owner would still be taking a risk – but the lender would have greater certainty that should the borrower default, they would get the loan back in full.

Because the lender would want the insurance to be in place before lending, initial funding for the scheme would probably be needed either from the government or from a larger trust (possibly an iwi rūnanga or the Māori Trustee). The premiums would then form a repayment of this initial capital, reducing the costs of the sponsoring organisation, enabling it to reuse that capital to insure further homes.

Under the mutual insurance approach, the ultimate liability for a default would fall on all the owners. That liability would only be realised if the insurance fund were depleted. This model would have limited applicability to small housing developments (and none to a single home development).

Table 13.3 Strengths and weaknesses of mutual insurance schemes

Strengths	Weaknesses
Could meet a private lender's security requirements without using a government programme	It would cost more to individual borrowers than a Kāinga Whenua loan, if they could get one
Don't need to be tested for or meet the restrictions on Kāinga Whenua	Reliance on third party for insurance premium seed funding
Places more control over how it works in the hands of Māori	Reduced certainty about availability of funding. Reliance on ability to negotiate a solution with a private lender
Regularity of premium payments provides signal of when assistance or support might be needed	Mutual insurance is only practical where there are a greater number of homes to spread the premiums between

If the development were set up by a trust already involved in social service provision then the regularity of a household's premium payments would be an early indicator of potential financial difficulty. This would enable them to provide or access support and assistance for that household, to improve their circumstances and help reduce the risk of default.

Although this would be more expensive than a Kāinga Whenua loan or previous approaches to state lending on Māori land, it is likely to still be cheaper than buying a home on general land. It has the potential to lead to greater scale in building homes on Māori land.

13.6 Alternative models for managing housing developments on rural Māori land

The Commission has reviewed two models of managing housing where there is an element of common ownership. These are:

- licences to occupy, as used by retirement villages; and
- unit titles, under the Unit Titles Act 2010.

The Commission has concluded that each of these models would form robust ways to manage housing on Māori land. They might make it easier to run developments on Māori land, although they will not address affordability issues. The details of these models and their advantages and disadvantages are discussed further below. The need for a significant amount of cash upfront to pay the planning and infrastructure charges would remain a barrier to affordability for Māori organisations with low financial capacity.

The licence to occupy model used in retirement villages could work but is not an appropriate model for Māori who are most in need of housing as they would never be able to buy into it.

The unit titles model could work and is also not suitable for Māori most in need of housing who could not afford it.

Both models provide good management options however, tenancy management plans can also be effective with less bureaucracy and cost to administer. (Western Bay of Plenty Māori Housing Forum, sub. DR136, p. 13)

Licences to occupy

Using a Licence to Occupy approach, as is done by retirement villages, would mean upfront capital payments for the homes. There would be almost no loan cost. Only the ongoing maintenance costs and rates would need to be paid. The upfront capital cost would limit potential residents to those who already had considerable equity available to invest.

Housing on Māori land using licences to occupy has an established history. The difference between the usual model and the one used by retirement villages is that typically a licence to occupy Māori land has been for the land alone, but the whānau with the licence builds or buys and owns the house as their own possession.

Box 13.6 How licences to occupy Māori land for housing have worked previously

Licences to Occupy have recently been favoured as a means for establishing a legal right to occupy or own a home on Māori land because:

- It is easier to get a licence to occupy (where a trust is in place on the land), than alternatives like an occupation order. It is also an easier process with the Māori Land Court for noting a licence to occupy by a registrar, as opposed to requiring a court hearing for the issuing of an occupation order.
- HNZC, the only organisation that has been willing to lend money for homes on Māori land, has required that the borrowers have a licence to occupy.

The licences to occupy that are used commonly are licences to occupy the land alone – the house remains the property of the owner. To get a licence to occupy, the agreement of every owner, or their trustees, must be had. Where there is no trust over the land, and there is a large number of owners, it is virtually impossible to get such a licence.

As well, for the home to remain the property of the licensee, rather than all the land owners, there must be an agreement between the licensee and the owners (or their trustees) that the house will be a chattel of the licensee, and not an improvement to the land. This has been required by HNZC in the form of a tripartite agreement with the borrower and the other owners of the land, allowing it to take security over the house. Because this agreement requires the consent of all the owners, it typically only occurs where there is a trust in place. The licence to occupy is included in the tripartite agreement for expedience, and doesn't reflect a preference on HNZC's behalf.

Under the retirement village model of using licences to occupy, a tripartite agreement would probably not be required.

With retirement villages, the licence to occupy is for the house or unit itself, which is not owned by the person who lives in it. A 'capital sum' is paid when the Occupation Right Agreement is settled, and is refunded when the resident departs. Deferred Management Fees are charged typically for the first two years and are usually capped at 20–30% of the capital sum. These fees are used for refurbishing the unit before it is on-sold, and are only payable on leaving the home. They are deducted from the capital sum, which is refunded on departure.

The retirement village approach relies on a household 'trading down' – owning a home with a higher price, selling it, and having a sufficient capital sum left after repaying the mortgage (if they are not mortgage-free) to make the capital sum payment to get their licence to occupy. This works well in a retirement environment. It could also work well where a whānau with a mortgage for a home on general land sells it to move into a home on Māori land, where they need to pay a capital sum for the licence to occupy.

Because owning Māori land makes buying into a development on Māori land cheaper than if it were on general land, a model that has previously only worked at scale for the retirement market could help younger households into affordable housing. The requirement that the household has saved the equivalent of the build cost of a house in equity will still place some limits on who could take up such a scheme.

Table 13.4 Strengths and weaknesses for using the retirement village approach to licences to occupy on Māori land

Strengths	Weaknesses
Risk pooling – financial risks of owning homes on Māori land and any difficulties with on-selling sit with an organisation, which may have more resources than a single whānau to bear and manage them.	Not all trusts/organisations will be well placed to manage this risk. Refunding capital sums on departure requires certainty that there will be a demand for the home in the future – further capital sums coming in.
Individual whānau would not make a capital loss on their housing investment.	Licences to Occupy cannot be used as security for a mortgage – would limit the kinds of whānau (particularly first-home buyers) who could access a home under this model.
Single management organisation makes managing the development less complicated. Can build on existing practice in managing rest homes, without having to reinvent the wheel.	-
Ownership of homes and land being vested in the trust better aligned with cultural importance of an intergenerational asset.	Lose some of the flexibility for making alterations that home ownership allows. Makes it harder to pass something on to one's children directly (although current LtOs can't be succeeded to in the way that Occupation Orders can either).

Unit titles model

The Unit Titles Act 2010 updates the Unit Titles Act 1972. It is the legislation that guides how apartment blocks and similar developments are organised and managed. This is relevant to Māori housing developments more generally because it is a model of home ownership where individuals own their dwellings but everyone owns the land they sit on.

A unit title approach is a way of passing on ownership of the development to remove the role and financial pressure on the trust. Its success is dependent on the ability of the residents to pay their individual mortgages and costs toward common spaces and maintenance. The OAG has identified that “servicing a home loan is unaffordable for many Māori households” (OAG, 2011, p.79). As well, Kāinga Whenua loans (the only loans available for homes on Māori land) are only available for detached, removable houses (HNZC, 2010d, p.10).

The additional benefit of a unit titles approach is that it has an established set of management procedures and regulatory environment. If these were available more generally to housing developments on Māori land, the management capability needed to set up or run such a development would be less.

Under the unit titles model, individual residents:

- own their unit, giving security of tenure and the ability to alter its interior;
- also have a share in ‘common property’; and
- manage the property as a body corporate consisting of everyone who owns a unit (the body corporate can delegate management to a committee) (Department of Building and Housing, 2010a).

Table 13.5 Strengths and weaknesses of using the unit titles approach to managing a housing development on Māori land

Strengths	Weaknesses
Home ownership model (often preferred) which includes security of tenure and the ability to make changes to the interior of a dwelling (where it is part of a larger building)	If on Māori land, it's unlikely that the owner would be able to mortgage it
It has a built-in mechanism for managing common ownership of some areas and property (such as the land)	Shareholders in the Māori land it's built on who don't live there would not be included in the body corporate decisions for how common property is managed ¹⁴³
Owners can on-sell their unit	Potentially complicates land management by needing both a body corporate and a land trust. Each member would still require a licence, lease, or occupation order to live there

The advantage that a unit titles approach has is that the regulations under the Unit Titles Act provide a readily usable framework for organising how the development would work. As well, a body corporate managing the land that the development sits in on would place the management of the relevant part of the land in the hands of those living there, making it simpler to resolve matters of how it will be cared for. Major decisions (such as alienation of the land) would still be reserved for all shareholders in the land block.

However, elements of the model might prove useful for developments on Māori land. Licences issued by trusts could be written so that they can be sold and on-sold, enabling individual owners and the body corporate to manage the sale of units independently. For there to be an effective market for homes using a unit title model, there would need to be an established demand for the units in the future, to give confidence to buyers that they will be able to on-sell their unit for at or about what they paid for it.

Sale as a means of exchanging title may not be a culturally acceptable way to organise who benefits from the land by being able to live on it. Because the right to ownership descends from having common tūpuna, deciding who can use it based on how much they can afford may be inappropriate. Market exchange is also not well-suited where land and housing built on it is seen as a resource for taking care of the elderly or those in need. However, it is a way of reducing some financial barriers to owning a home on Māori land, as the risk of financial loss is reduced (if continued demand is assured).

¹⁴³ This is particularly a problem if the whole land block is used for the development

Findings and recommendations

Below is the full set of findings and recommendations from the final report.

Chapter 6 – The role of taxation

Findings

F6.1

There has been a long-standing presumption of a tax bias in favour of equity invested in owner-occupied housing. This bias has been reduced by increases in the GST rate since it was introduced in 1986, and the accompanying shift in the tax base away from income taxes and towards consumption tax, together with the application of territorial government rates.

F6.2

The impacts of a capital gains tax on housing affordability is unclear and would depend on how the tax was designed, on how operational issues were resolved, and on key features of housing markets.

F6.3

There are significant practical challenges in implementing capital gains taxes and international experience suggests that implementation typically falls short of the in-principle 'ideal'.

F6.4

A decision on whether to adopt a capital gains tax on housing should be based on a coherent set of principles that have general application, not just to housing. This matter needs to be considered from an economy-wide perspective and runs beyond the scope of this inquiry into housing affordability.

F6.5

- The elimination of depreciation allowances for houses (and other buildings) can be seen as a pragmatic balancing of a number of considerations in the light of a particular set of circumstances – the housing market boom of the early 2000s. Its aptness in the future, in different circumstances, should be monitored; ideally in the context of establishing an approach that is durable across a range of different circumstances.
- The full deductibility of interest expense for business borrowers (and assessability for savers), including of that component that is not 'real', is a tax distortion that favours borrowing to invest in real assets, including for investment in rental dwellings. However, it is a general flaw in the income tax system that would be best addressed as such, rather than specifically in the context of housing.
- Ring-fencing losses on residential rental investments from other taxable income is not called for.

F6.6

GST is an efficient tax in that it does not distort rates of return on saving and investment, is broad-based, and has low compliance and administrative burdens. The existing GST treatment of housing, which applies equally to rental and owner-occupied housing, is appropriate.

Territorial rates, which also apply equally to rental and owner-occupied housing, are an efficient form of tax.

F6.7

With respect to housing affordability:

- GST is front-loaded into the acquisition price of a house, which can raise the hurdle to first-home ownership, offset at least in part by the availability of KiwiSaver assistance for first-home buyers.
- Rates can cause strains for those who are 'housing rich but income poor'. The (government funded) rates rebate scheme, and rates postponement arrangements offered by local authorities, are available to ease these strains. There may be a growing need for these, particularly the latter, uptake of which has been low, as the community ages.

Recommendations

R6.1

That the Government monitor the impact of the removal of the depreciation allowance on commercial properties, including rental properties, for evidence that expenditures relevant to the proper upkeep and safety of buildings are being sustained.

Chapter 7 – Urban planning and housing affordability

Findings

F7.1

- An adequate supply of land matters for housing affordability.
- Both greenfields and brownfields land will be needed, and greater density is to be encouraged.
- There is a trend towards greater decentralisation of employment, so it cannot be assumed that most travel will occur between city fringes and the CBD.
- Pricing that reflects resource costs will enable people to make trade-offs – for example between distance to work and transport costs, according to their budget and their preferences.

F7.2

- The literature points to Smart Growth policies having a significant adverse impact on housing affordability.
- Councils adopting Smart Growth policies need to consider the impact of such policies on housing affordability in their planning and decision-making.

F7.3

- The Metropolitan Urban Limit appears to have constrained the supply of sections in Auckland and this is reflected in escalating housing prices generally.
- Councils can take alternative approaches to binding urban limits, signalling where development will not be allowed, and using their infrastructure planning to signal where development will take place.

F7.4

- The objectives of council plans for densification may not be reflected on the ground – developers can experience difficulty in getting infill and medium-density housing underway because of the various planning rules and restrictions that apply to subdivision, land use and building.
- These restrictions are likely to add to short-term costs, frustrate the objective of increasing density, and create long-term rigidities in urban design and development.

F7.5

- The slow pace at which land for housing is planned, zoned and released contributes to the high price of sections and thereby house prices.
- Differences in supply responsiveness at the TA level may reflect the efficiency with which local councils implement and enforce regulations, the complex issues to be dealt with, and varying capacity to deal with them.

F7.6

Promoting greater affordability of land and houses and providing for diverse demand can be addressed by:

- An active approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopting a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them to promote efficient urban development, offer a range of lifestyles, and avoid imposing unreasonable and costly constraints on individual segments within the housing market by recognising the benefits of advancing multiple forms of development.
- Identifying substantial areas of brownfield and greenfield land for development, (acknowledging that greenfield development also provides an opportunity to achieve medium-density development) and provision for more efficient use of existing suburban areas through infill where practical.
- Promoting competition between developers for the sale of construction-ready sections.

Recommendations

R7.1

Increasing land supply for new housing should include moderate-density development of brownfield sites *and* development of greenfield sites close to existing centres, local employment, and services.

R7.2

Auckland Council should show in its final Auckland Plan how it has considered and reconciled affordable housing alongside its other priorities.

R7.3

Councils interested in densification need to ensure that their local planning rules do not run counter to this objective. Councils should adopt more flexible approaches to achieve a balance between neighbourhood amenity and new development in existing suburbs.

R7.4

Councils review regulatory processes with the aim of providing simplified, speedier and less costly consenting processes and formalities.

R7.5

Government consider the case for a review of planning-related legislation to reduce the costs, complexity and uncertainty associated with the interaction of planning processes under the Local Government Act, the Resource Management Act and the Land Transport Management Act.

R7.6

Bring significant tracts of greenfield and brownfield land to the market in Auckland – identify and assemble land that could be quickly released and made ready for development, signal land with future potential for urban development, and make a commitment to major offsite infrastructure capacity.

R7.7

Auckland Council should look to collaborative models for the process of identifying, assembling and releasing large-scale tracts of land.

R7.8

Territorial authorities:

- Take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them.
- Develop strategies that promote adequate competition between developers for the right to develop land.
- Ensure alignment between policy objectives, planning rules and consent processing.

Chapter 8 – Paying for infrastructure development

Findings

F8.1

It is difficult to draw a general conclusion about how much development contributions increase housing prices and reduce affordability: they vary considerably across New Zealand and the extent to which they are passed on probably also varies, although they are likely to be largely passed on to households in the long run.

F8.2

A well designed strategy could take advantage of the potential efficiency and equity benefits of development and financial contributions, while reducing current problems with them.

F8.3

Development contributions are particularly suited to recovering the incremental costs of major economic infrastructure assets, such as trunk water, sewerage and drainage, and major roads. Confining developer contributions to such critical infrastructure would simplify the charging regime for infrastructure arising from development.

Recommendations

R8.1

- The Department of Internal Affairs facilitate a consultative process for updating the Best Practice Guidelines to Development Contributions and developing a set of high-level principles for development contributions, taking account of the experience of both councils and the industry.
- The Best Practice Guidelines include a proposal that councils consider a set of threshold questions to help them to determine whether to apply development or financial contributions to particular infrastructure assets.
- The Local Government Act 2011 be amended to include a statutory obligation on councils to have regard to the Best Practice Guidelines.
- Principles for applying developer charges be included in Schedule 13 of the Local Government Act 2011.

R8.2

The Department of Internal Affairs initiate a training programme to enable councils to enhance their skills in implementing the proposed Best Practice Guidelines for Development Contributions.

R8.3

As part of the consultative process for updating the Best Practice Guidelines to Development Contributions, the Department of Internal Affairs:

- identify information that councils would need to provide in regular reports to demonstrate performance against the Guidelines;
- develop a process for assessing this performance; identifying problems and how to address them; disseminating this information to councils; and, where necessary, using lessons learnt to inform changes to the best practice guidelines.

R8.4

- The Government include in the LGA a dispute resolution process equivalent to the one in s 8AA of the Resource Management Act 1991.
- The Department of Building and Housing monitor the use of these appeals and within, say, three years, provide advice to the Government about whether there is a need to increase the scope for legal challenge of development contributions.

Chapter 9 – Building regulations and affordability**Findings****F9.1**

This lack of statistical information on the quality of New Zealand housing compromises efforts to assess whether building outcomes are improving, as a result of the efforts of the building industry and its interactions with the regulatory framework.

Recommendations**R9.1**

Treasury Regulatory Quality Team in consultation with the Department of Building and Housing review the quality and robustness of the Department's RIS process for changes to the Building Code.

R9.2

- The Department of Building and Housing publish, for each BCA, the total time taken between receiving applications and finally granting consents, and the number of occasions where each BCA has used the 'stop the clock' provision.
- The Department of Building and Housing audit the 'stop the clock' information from a sample of BCAs.

R9.3

BCAs adopt a customer-focused approach in their interaction with building practitioners. They should take practical actions that would expedite the building consent process and improve their communication with building practitioners going through the consenting process.

R9.4

The Law Commission should consider in its review of joint and several liability the interaction between liability rules and the structure of industries and industry practices, and the impact of joint and several liability on the incentives faced by regulators.

R9.5

The Department of Building and Housing report on the impact of the reforms on the allocation of risks between parties to building work, five years after their introduction.

R9.6

The Department of Building and Housing provide more support to assist designers and Building Consent Authorities to demonstrate and assess how alternative solutions comply with the Building Code.

R9.7

The Department of Building and Housing investigate mechanisms or pathways by which alternative solutions can evolve into mainstream practice.

R9.8

The Department of Building and Housing should review the MultiProof building consent process with a focus on identifying barriers to its application and uptake, and suggest ways to overcome these barriers.

R9.9

The Department of Building and Housing report on the ways in which the building control system can improve the diffusion of knowledge and information in the building sector, including rapid dissemination of information about defects in materials, designs or building methods.

R9.10

Urgency be given to the Department of Building and Housing's programme to lift the performance of BCAs and promote greater consistency and efficiency in the building regulatory system.

Chapter 10 – The performance of the building industry

Findings

F10.1

- During the recent housing boom, the cost of building a standard house has increased at a greater rate than inflation.
- The cost of both building materials and building a standard house is substantially higher than in Australia.
- A trend toward larger and higher specification houses is also contributing to increased costs. Factors driving this trend include changing consumer preferences, the use of covenants, and a desire to avoid under-capitalising given high section prices.

F10.2

Industry productivity is flat-lining, and this is reflected in growing building costs and evidence of poor building quality. Evidence suggests that the productivity performance of the construction industry over the past thirty years has been poor relative to other New Zealand industries, and relative to other jurisdictions.

F10.3

The lack of scale in the New Zealand residential construction industry presents a significant barrier to productivity growth.

- Small builders are less able to generate economies of scale.
- Scale home builders can reduce construction costs through the delivery of standardised housing, but scale building firms occupy a comparatively small share of New Zealand's building market.
- A lack of available land can present a significant barrier to productivity through inhibiting the development of group home builders and scale developments.

F10.4

The fragmented nature of the residential construction industry supply chain presents a number of management difficulties which can dampen innovation and result in lower building quality and higher construction costs.

F10.5

The National Infrastructure Plan represents a good mechanism for providing, where possible, forward visibility of government investment which is reliant on the residential construction sector.

F10.6

Skills issues, particularly at the management level, require attention in order for the residential construction industry to better respond to industry cycles and to improve productivity performance. The Productivity Partnership Skills Strategy focuses on a number of skill issues, which, if addressed, would help lift industry productivity growth.

Recommendations

R10.1

Given that the Productivity Partnership has a number of relevant workstreams in progress, and has an established membership of relevant representatives, the Commission considers that it is the appropriate organisation to develop practical initiatives to improve industry productivity. In particular, the Partnership should develop, in consultation with the sector, practical responses to the supply chain issues outlined in section 10.4.

Chapter 11 – The private rental market: affordability and outcomes

Findings

F11.1

Low levels of housing affordability for lower-income households in the private rental market are longstanding. If rents had increased in line with house prices over the past decade, affordability for renters would be considerably worse.

F11.2

In Auckland, there has been an increase in the proportion of renting households in the \$30–70,000 income bracket spending more than 30% of their income on housing.

F11.3

There is a risk that the house price-to-rent ratio will begin to return toward the long-run norm through an increase in rents. A period where rents increase at a significantly higher rate than incomes would result in further pressure on already stressed lower-income households, and would likely result in an increase in Accommodation Supplement expenditure.

F11.4

Poor-quality rental accommodation and insecure tenure have a detrimental impact on tenants, particularly older people and families with children.

F11.5

People who are in rental accommodation by retirement age are more likely to face hardship than those who own their own home.

F11.6

Under the current market conditions the emergence of institutional investors into the private rental market is unlikely. Obtaining sufficient scale in a short period of time is a major barrier for institutional investment. In addition, institutional investors require higher on-going yields and are priced out of the market by small-scale private investors.

F11.7

Assistance programmes designed to help facilitate the transition to home ownership have generally proven ineffectual in assisting large numbers of households to purchase a first home.

Recommendations

R11.1

Department of Building and Housing review the legislation and regulations relevant to rental accommodation quality for their effectiveness, and consider options for improvement, including their implementation and enforcement, in the medium term. This review should be aligned with initiatives led by Department of Building and Housing and the Social Housing Unit to support the growth of the community sector to create suitable alternatives for those in the worst housing situations.

R11.2

Government agencies responsible for the development and implementation of home ownership assistance programmes review existing (and future) programmes against criteria based around clarity of objectives, effectively targeting recipients, flexibility and cost effectiveness.

Chapter 12 – Social housing

Findings

F12.1

The most likely result of current funding criteria is many medium-scale providers developing, rather than several large-scale providers.

F12.2

Excessive reliance on the private rental market to accommodate former HNZC tenants may undermine the improvement in wellbeing that has been achieved for those tenants through state housing.

F12.3

The community housing sector is unlikely to meet the demands and responsibilities being placed on it, based on current funding for the community housing sector and projected housing need for the client group it works with.

F12.4

A fragmented community sector with a smaller asset base may face greater difficulties in managing the risks of obsolete housing.

F12.5

The way the accommodation supplement abates hinders the ability of community housing organisations to improve housing affordability for their clients.

F12.6

Better utilisation of public housing capital is always desirable, but needs to be managed in a way that does not create fiscal risks elsewhere in the welfare, social service, and justice systems.

F12.7

Robust projections of unmet demand and future demand for social housing that will not be met through increasing or realigning the state housing portfolio are essential for an honest assessment and conversation about what needs to be done, at what pace, and with what resource.

Recommendations

R12.1

Once this funding round is completed, a comprehensive review of the SHU funding process should be undertaken to reduce the cost involved in applying.

R12.2

Provide market rent levels of Accommodation Supplement where community housing organisations provide reduced rents to their clients.

Chapter 13 – Māori housing

Findings

F13.1

Housing needs are more pronounced for many Māori, and the contribution to wellbeing housing makes is not strictly the same as for other groups. Housing solutions for Māori will sometimes need to be different, particularly in areas of traditional settlement.

F13.2

Māori are heavily over-represented amongst those with the lowest financial knowledge, and heavily under-represented amongst those with the highest financial knowledge.

F13.3

The social and cultural resources that whānau and communities can bring to bear are essential for resolving the housing and other social issues they face.

F13.4

Whānau Ora is the 'best fit' arm of government currently available for progressing Māori housing aspirations.

F13.5

The review of Kāinga Whenua needs to be drawn to a conclusion, soon. However, whatever the new conditions, it is unlikely to meet the needs of the many Māori in rural New Zealand who would struggle to service a mortgage, or to deliver a great volume of housing on Māori land.

F13.6

The model of using individual mortgages to build homes on Māori land is overextended where initial funding would ordinarily be obtained through mezzanine finance.

F13.7

To get homes built on Māori land, public services, whānau, and finance institutions would all need to take action. In general, this doesn't happen because there are plausible reasons why another group, or someone else within the group, should act first.

Recommendations

R13.1

The Pūtea Taiwhenua (Rural Fund) be used to provide seed funding to organisations for using a microfinance lending approach to address the quality of the rural housing stock.

R13.2

Where the government lends for homes on Māori land, it should manage defaults through a more cost-effective means than repossessing the houses.

R13.3

A team of Māori housing expert advisors, housed in a national agency like Te Puni Kōkiri or the proposed Whānau Ora commissioning agency, be made available to Māori land owners with aspirations to build housing on their whenua.

R13.4

Whānau Ora facilitators be trained to educate whānau about the options for management structures for their Māori land, and to play a role in developing plans for the use of Māori land for housing (where this is what the whānau wants).

R13.5

Te Puni Kōkiri, working with the Māori Land Court and private finance institutions, develop options to adapt existing lending policies and precedents for private finance institutions to lend for building homes on Māori land.

Appendix A Public consultation

Submissions

INDIVIDUAL OR ORGANISATION	SUBMISSION NUMBER
Action Key Trust Foundation	DR133
Affordable Housing New Zealand Limited	012, DR072
Age Concern New Zealand	DR100
Alun Breward	001, DR110
Auckland Council	045, DR142
Auckland District Council of Social Services	041
Auckland Regional Public Health Service	010, DR128
Bay of Plenty Regional Council	DR101
Beacon Pathway	057
Brady Nixon	026, DR131
BRANZ	040
Brent Wheeler Group	049
Building Industry Federation of New Zealand	047
Carrus Corporation	008, DR069
Catherine Stewart	DR073
Cement & Concrete Association of New Zealand	027
Centre for Straight Thinking	024
Certified Builders Association of NZ	DR116
Christchurch City Council	DR102
Civic Futures Ltd	DR112
Commission for Financial Literacy and Retirement Income	DR071
Community Housing Aotearoa	DR126
Construction Industry Council	DR141
David Chandler	DR132
David Hattam	011
David Mead	DR099
David Willmott	DR127
Department of Building and Housing	055, DR140
Department of Labour	014
Development Contributions Working Group	022, DR123
Evan Keating	DR115
Families Commission	009
Federated Farmers of New Zealand	DR105
Fletcher Building	021, DR138
Fleur Palmer	DR098
Future Proof	DR150
G A Mourant & Co Limited	004
Graeme North	DR070
Graeme Scott	DR081
Greater Christchurch Urban Development Strategy Partnership	DR103
Habitat for Humanity Auckland	023, DR107
Hamilton City Council	DR139
Heeni Shortland	DR091
Housing Affordability Forum (Western Bay of Plenty Sub-Region)	DR080
Housing New Zealand	034
Human Rights Commission	038
IAG New Zealand	017
ICON Concepts	006
Iwi Leaders' Group for Housing	DR118
John Welch	DR130
Kaitiakitanga	DR097

Kapiti Coast District Council	DR089
Karen Temple	DR074
Kevin Honiss	DR075
Kiwi Income Property Trust	DR086
Laurie Meadows	002
Land Solutions	035
Local Government Forum	DR108
Local Government New Zealand	058, DR106
Market Economics Ltd	DR124
Martin Brown	052
MC Communications	DR113
Michael Beckett	DR114
Miles Hayward-Ryan	DR061
Ministry of Social Development	005
Natural Building Systems Ltd	DR134
Negawatt Resources Ltd	DR147
New Zealand Business Roundtable	020
New Zealand Coalition to End Homelessness	DR149
New Zealand Council for Infrastructure Development	030, DR092
New Zealand Council of Christian Social Services	DR125
New Zealand Council of Trade Unions	015, DR104
New Zealand Green Building Council	060, DR119
New Zealand Housing Foundation	048
New Zealand Nurses Organisation	036
New Zealand Planning Institute	DR096
New Zealand Property Investors	051
New Zealand Transport Agency	029
Nga Whare Oranga Trust	DR137
Northland Regional Council	DR085
Pahia Turia	DR078
Palmerston North City Council	046, DR122
Patricia Austin	DR067
Patrick Nicholas	DR079
Peter Macleod	DR062
Philip Hayward	DR084
PositiveMoneyNZ	DR087
Property Council New Zealand	028, DR109
Queenstown Lakes Community Housing Trust	042
Rangitikei District Council	018
Registered Master Builders Federation	016
Reserve Bank of New Zealand	037
Rotorua District Council	DR093
Rueben Taipari Porter	DR088
Saltburn Limited	007
Scott Espie	DR068
Simon White	013, DR064
SmartGrowth	DR090
Society of Local Government Managers	053, DR143
Solar Action	044
Standards New Zealand	DR146
Stephen Pattinson	DR120
Tasman District Council	DR135
Tauranga City Council	019, DR077
The Business and Housing Group	DR083
The Auckland Catholic Diocese Justice and Peace Commission	050
The Salvation Army	059, DR076
Tim Robinson	056, DR121
Todd Property Group	025, DR095
Tony Watkins	DR066

Unitec Institute of Technology	DR065
University of Otago, Department of Public Health	039, DR145
Waimakariri District Council	DR129
Warwick Smith	DR082
Wellington City Council	DR111
Wellington Employers' Chamber of Commerce	DR144
Western Bay of Plenty Māori Housing Forum	DR136
Whakaatu Whanaunga Trust	DR148
Whangarei Accessible Housing Trust	DR094
Whangarei District Council	032

Engagement meetings

ORGANISATION

Age Concern
 Affordable Housing New Zealand Limited
 Auckland City Mission
 Auckland Council
 Auckland Council Property Limited
 Auckland Policy Office
 Australian Government Productivity Commission
 Bank of New Zealand
 BECA
 Building and Construction Industry Training Organisation
 Building Element Assessment Laboratory Limited
 Burleigh Evatt & Co
 Canterbury Earthquake Recovery Authority
 Certified Builders Association of New Zealand
 City Mission
 Commerce Commission
 Commission for Financial Literacy and Retirement Income
 Community Housing Aotearoa
 Construction Industry Council
 Department of Building and Housing
 Department of Labour
 Department of Internal Affairs
 Department of Prime Minister & Cabinet
 Energy Efficiency and Conservation Authority
 Families Commission
 Fletcher Building
 Habitat for Humanity New Zealand
 Home Owners and Buyers Association of New Zealand
 Hobsonville Land Company
 Housing New Zealand Corporation
 IAG New Zealand Limited
 Local Government New Zealand
 Lockwood Homes
 Master Builders Association of New Zealand
 Ministry of Pacific Island Affairs
 Ministry of Social Development
 Ministry for the Environment
 Mission Australia
 New Zealand Building Industry Federation
 New Zealand Contractors Federation
 New Zealand Centre for Sustainable Cities
 New Zealand Construction Industry Council
 New Zealand Green Building Council
 New Zealand Housing Foundation
 New Zealand Institute of Architects
 New Zealand Institute of Quantity Surveyors
 New Zealand Institute of Valuers
 New Zealand Planning Institute
 New Zealand Property Investors Federation
 New Zealand Transport Agency
 Office of the Auditor General
 PrefabNZ
 Primesite Homes
 Property Council of New Zealand
 Queenstown Lakes Community Housing Trust

Quinovic
Real Estate Institute of New Zealand
Registered Master Builders Association
Reserve Bank of New Zealand
Ryman Healthcare
Society of Local Government Managers
Specialist Trade Contractors Federation
Standards New Zealand
Statistics New Zealand
Tauranga City Council
Te Puni Kōkiri
The Building and Construction Sector Productivity Partnership
The Institution of Professional Engineers New Zealand
The Salvation Army
The Treasury
Todd Property Group
Unitec New Zealand, Department of Construction, Associate Professor John Boon
Versatile Homes and Buildings and Spanbild Holdings Limited
Victoria University, School of Accounting & Commercial Law, Professor Norman Gemmell
Victorian Competition and Efficiency Commission
Westpac New Zealand

Māori specific engagement

The Commission is committed to engaging with different communities in the ways best suited to those communities. The Commission undertook specific engagement with Māori, recognising the cultural preference for *kōrero kanohi-ki-te-kanohi* (talking face to face), and the uniqueness of Māori housing issues (particularly on Māori land). This took the form of several discussion groups, in addition to our ordinary submission and engagement process.

Māori finance discussion

Anthony Ririnui – ASB Bank
Tuhi Leef – Aotearoa Credit Union
Fonteyn Moses-Te Kani – Westpac
David Harrison – ANZ
Kristin Kohere-Soutar – Kiwibank
Marcel Wainohu – Action Key Trust Foundation

Te Matapihi – He Tirohanga Mo te Iwi Trust

Rau Hoskins
Vicky George
Fred Sadlier
Tiopira Rauna
Lucy Tukua
Victoria Kingi

Auckland focus group

Sam Chapman QSM
Gena Moses-Te Kani
Sheryl Connell
Toa Faneva
Diane Tuari
Sean Phillips
Anne Huriwai
George Kahi

Waiwhetu focus group

Teri Puketapu

Neville Baker

Iris Pahau

Joy Bullen

George Kupa

Tina Bennett

Mataheke Kahaki

Gavin Brooks

Eddie Ellison

Rūnanga (consulted separately)

Ngāi Tahu Property

Ngāti Whātua o Orakei Maori Trust Board

Te Runanga o Ngāti Porou

Te Whānau o Waipareira Trust

Manukau Urban Māori Authority

Wellington Tenths Trust, Port Nicholson Block Trust

Appendix B The costs of urban form

This appendix summarises a number of New Zealand, US and Australian studies that set out to establish the differences in costs associated with differences in urban form. The review is not exhaustive and has instead focused on several pieces of New Zealand and Australian work that have costed different urban development scenarios, and on publications that encompass multiple reviews of other (mainly US) studies. The aim has been to establish whether economic analysis demonstrates definitive resource cost advantages for higher-density and more compact forms of urban development that might offset any adverse impacts on housing affordability. This appendix also examines whether it is possible to provide generic costs of consolidation by considering a recent attempt to develop a generic decision tool measuring the economic benefits of “inner” rather than “outer” urban development in Australian state capital cities (Trubka, Newman and Bilsborough, 2008).

B.1 New Zealand

Auckland

In the 1990s the Auckland Strategic Planning version of the regional transport model (ASP) informed the development of the regional growth strategy, with its emphasis on urban containment and increasing residential densities around the CBD and selected centres. The results of any economic analysis were not formally reported. More recently the ARC (2010) Report *Future Land Use and Transport Planning Project* informed the draft Auckland Spatial Plan. It relied on an ordinal scaling exercise by experts and stakeholders for comparison across evaluation criteria, informed by a series of prescriptive transport indicators for different land use scenarios (focusing on two ‘compact’ and one ‘expansive’ land use scenarios). The evaluation was described as follows:

Evaluation criteria were developed by identifying high level goals and outcomes from such agreed strategies as the Auckland Sustainability Framework and the Regional Growth Strategy. The resultant criteria were grouped under four wellbeing headings – environmental, social, economic and cultural. An expert evaluation team assessed each of the scenarios against the criteria, collating and analysing the outputs from the integrated transport models (ATM2), plus qualitative advice from expert groups, workshops, and advice from stakeholders (p.2).

The results are presented in Table B.1. Some of the items identified were assessed with reference to quantitative indicators, although no formal assessment was made of costs and benefits in an economic framework. Nor was any evaluation undertaken of the impact on housing costs for the three scenarios.

The report concluded that:

Overall, a compact urban form is preferable ...For most criteria the compact scenarios perform the best by having, for example:

- Less impact on the environment, by avoiding pristine and valued environmental areas and better protecting stream corridors and marine values;
- Improved regional productivity by enabling firms to better access skilled labour and key ports;
- Provision of a strong network of centres enabling better social cohesion and access to social facilities.

The results point to a spatial form that is based predominantly on compact principles, but that includes some flexibility to accommodate new greenfield areas for Group 1 business sectors (p.5), reinforcing the prescription contained in the Auckland Regional Growth Strategy. In neither case was a formal economic framework denoting trade-offs among resource costs presented.

Table B.1 Evaluation of development scenarios for Auckland

Scenario 1 – compact city Scenario 4 – current policy Scenario 5 – expansive

Criteria	Scenario 1	Scenario 4	Scenario 5
Economic wellbeing			
Improved travel reliability	✓	0	x
Improved accessibility to economic activity	xx	x	xx
Improved access to labour pool	✓✓	✓✓	✓
Increased productivity	✓✓✓	✓	✓✓
To enable land extensive business sectors (Group 1) to grow in appropriate areas	x	x	✓
Minimised infrastructure costs	x	x	xx
Protection of productive rural land	0	0	xx
Energy resilience	x	x	xx
Feasibility from current market perspective	xxx	xx	✓✓
Environmental wellbeing			
Reduced greenhouse gas emissions	xx	xx	xxx
Protection or enhancement of stream corridors	x	x	xxx
Identify, protect and enhance terrestrial ecosystems	x	x	xxx
Avoidance of hazards	x	x	xx
Improved air quality (impact on public health)	xx	xx	x
Water quality and human health	xx	xx	xxx
Social wellbeing			
Improved accessibility	✓✓	✓	x
Improved accessibility for deprived households	✓✓	✓	0
Housing choice	✓	✓	✓✓
Ageing in place	✓	✓	0

Christchurch

An economic analysis was undertaken in support of recent Policy Change 1 for Canterbury Region (recently adopted by CERA) which strengthens the urban limit. The methodology and results were summarised in evidence provided to the Environment Court by Butcher in 2011 on behalf of the local councils. This was in response to objections from land owners seeking more liberal provision for land in the north and west of the city, effectively a variation in the proposed urban fence that would reduce reliance on intensification of housing around the central city. The analysis drew on a comparison of infrastructure costing and transport modelling prepared for a "Favoured" compact city scenario and a more dispersed "Business as Usual" scenario.

Questions were raised in evidence by McDermott at the Environment Court hearing over the economic analysis. The main issue was the specification of the land use scenarios costed and particularly the definition of the Business as Usual or dispersed housing scenario. For this the analysis simply added land to the Favoured scenario, without any adjustment of population projections and employment distributions. The effect was to increase capacity without providing for any variation in demand, and to increase one set of costs (to service new land) without offsetting the costs associated with the alternative scenario by modifying the infrastructure programme to reflect the alternative development path.

The assumed employment distribution was not varied between the two scenarios, either, further distorting the comparison. In effect, urban form was extended for residential purposes (by way of areas 'zoned') for the purpose of comparison without commensurate adjustment of employment land use. This is despite (pre-earthquake) evidence that labour demand was becoming more dispersed in and around Christchurch, a tendency consistent with more dispersed housing.

This arbitrary structuring of the scenarios appears to lie at the heart of the economic differences presented. This results in a number of shortcomings:

- Not re-specifying infrastructure investment to account for the different residential distributions imposes a configuration aligned with the preferred intensification scenario onto the alternatives, inevitably portraying them as less efficient and implying a failure to align infrastructure and land use outcomes. Transport investment appears to have been held constant in the comparison of the Favoured and Business as Usual scenarios, which also exaggerates cost differences.
- The options make no allowance for expression of different preferences by way of household choice of dwelling style and location under different scenarios.
- Capital costs are approximated by development contributions in a way which assumes that capital expenditure (including headworks and trunk reticulation) is insensitive to the pattern of development.
- The analysis raised some methodological issues, including the treatment of the capital expenditure schedule and the inclusion of funding assumptions in an economic analysis.
- The assumption that the only variations in costs and benefits between the scenarios lie in physical infrastructure-related (including transport) costs can be challenged.
- There were omissions of such items as social infrastructure and the provision of active and passive open space.

The major cost differentials associated with land uses that divert from the favoured compact scenario lay in the transport costs (accounting for around 90% of the difference in net present costs between the Favoured and Business as Usual scenarios. (Net present costs were calculated using an 8% discount rate applied over the period 2009 to 2041).

It is interesting to consider the magnitude of the difference identified at the individual household level. In evidence to the Environment Court Markham identified the population projections used by the Urban Development Strategy Partners. By also discounting the annual cumulative increment in household numbers projected at 8% it is possible to calculate the net present cost per household of the two scenarios, subject to the methodological qualifications identified above. For present purposes the midpoint between the high

and low population scenarios has been used which indicates a net present cost penalty to the Business as Usual scenario of \$2,680 per household, a figure which is higher if population growth is slower, or lower if it is faster.

Table B.2 Difference in net present costs between the Favoured and BAU scenarios

	Cumulative \$m 2009-2041			NPV		
	Household	Business	Total	\$m NPV	Share	\$/Household
Transport						
Time	1840	404	2244	474	66%	1771
Operating costs	676	148	824	174	24%	650
CO ₂	17	4	21	4	1%	15
Infrastructure costs						
Capital costs to Council	123	82	205	71	10%	265
Developer contributions	-	-46	-46	-16	-2%	-60
Operating costs to Council	32	21	54	11	2%	41
TOTAL	2688	613	3301	718	100%	2682

Source: Table 1, Appendix 1 Supplementary statement of evidence of Geoffrey Vernon Butcher for Christchurch City Council and Canterbury Regional Council, before the Environment Court, Env-2009-CHC-240, etc. 2011.

This can be interpreted as the average capitalised value of the cost per household of allowing more dispersed development to occur (the actual value to individual households will vary around this average which is spread over time and across localities). It does not suggest an insurmountable economic penalty from allowing more households to opt for a lower-density housing choice, and implies that the lower housing prices resulting from dispersal or the benefits to households of greater space and privacy associated with traditional suburban housing might readily offset the threshold implied by apparently higher operating costs for individual households.

The interpretation offered by the Urban Development Strategy Partners' in the Christchurch analysis treated the lower cumulative cost of the Favoured scenario as a benefit that would accrue to residents and businesses. This contrasts with the observation that people pay a higher price for properties according to their preferences. In the case of less concentrated settlement this is mainly by way of accepting increased journey-to-work costs. If constraining supply reduces the capacity of people to satisfy their preferences, benefits will be reduced – so that the apparent difference in costs of smaller central properties might equate to a loss of benefit for households whose preferences are for larger, less centralised properties.

An earlier study for Christchurch City Council (McDermott Fairgray Group, 1993) took a slightly different approach. It explored eight options for housing an increment of 10,000 households over 25 years to examine the differences in marginal costs of developing different areas. The cost of extending infrastructure services (water, drainage, sewerage and roads); utilities (power, telecommunications); private transport, site development; and community costs (schools, lost output, and accident costs) were identified on a per household basis. Employment distribution was not varied between options, potentially exaggerating costs in the most dispersed ones. In this case, however, costs were expressed on a (discounted) household basis. A 10% discount rate was used (Table B.3).

Four generic options were identified:

- Central, based on inner city infill and urban consolidation;

- Focal points or urban villages, based on consolidating around key nodes within the city;
- Fringe expansion – with one option being the Port Hills and another being the North-West; and
- Growth Nodes – with four options considered: Templeton, Halswell, Bottle Lake, and Marshlands

The study concluded that:

- Central and focal points options were the least cost in terms of the items considered;
- Clear contrasts exist among fringe and growth node options;
- The principal drivers of cost differences were traffic (accident costs), water supply, and lost output from the rural sector.
- The net present cost (discounted at 10%) relative to the least cost central option ranged from \$722/household for focal points through to \$3,660 in the northwest Marshlands site, a range which encompasses the difference identified in the later Urban Development Strategy study, above. The latter was heavily influenced by accident costs and forgone agricultural output. Traffic accident costs were a major component of the disadvantage for fringe sites, generally.

The results were not intended to underpin any particular spatial pattern or policy, but to inform urban planners of potential economic trade-offs between different spatial outcomes. They pointed to a modest cost advantage of central over fringe locations and the savings which might be available by pursuing policies to encourage consolidation.

They also identified the costs that might have to be addressed in the development of sites on the edge of the city, and revealed the advantages of some city edge sites over others indicating that analysis that does not differentiate among sites obscures significant differences within generic categories of 'inner' versus 'outer' or 'consolidated' versus 'dispersed'. At the same time, they highlight that some of the costs associated with less central sites might be mitigated by other means, including better policing and road improvements, for example, to reduce traffic accidents.

	Focal Points		Port Hills		NW/West		Central	Templeton		Halswell		Bottle Lake		Marshlands		Range
	\$	Share	\$	Share	\$	Share	\$	Share	\$	Share	\$	Share	\$	Share	\$	Share
Infrastructure	300	42%	1584	45%	1032	28%	0	1142	41%	1118	42%	907	32%	1314	36%	
Utilities	73	10%	248	7%	278	8%	0	185	7%	187	7%	175	6%	206	6%	
Private costs	89	12%	1072	30%	530	14%	0	544	19%	519	20%	720	26%	1047	29%	
Community costs	260	36%	621	18%	1824	50%	0	929	33%	819	31%	1011	36%	1049	29%	
TOTAL	722	100%	3525	100%	3664	100%	0	2800	100%	2643	100%	2813	100%	3616	100%	

Other New Zealand cities

Several New Zealand studies dealt systematically with the costs and benefits of differences in urban form in the late 1970s and early 1980s (Palmerston North, Napier-Hastings, Western Bay of Plenty, Hibiscus Coast). A review of these early studies and of Australian and US experience by McDermott Miller (1992) concluded:

Under most circumstances containment is the urban form which offers the greatest promise of efficiency of development and sensible resource use.

but noted that:

Containment does not depend just on urban infill... It may also involve finishing off fringe development... 'backfilling' areas that have been leap-frogged... or rationalising existing urban form by selective greenfield development... The nature of containment depends on the particular settlement involved.

These conclusions highlighted the importance of considering a range of options within the particular context of an individual city or settlement when evaluating the costs and benefits of particular forms and densities of development, rather than relying on over-simplistic definitions of consolidation and density, or expansion and sprawl.

B.2 United States

Gillham, 2002

In a review of reviews in the United States, Gillham (2002, pp.123-5) makes the following observations:

- Most studies reviewed by Benfield, Kain and Chen (1999) suggest that the cost of infrastructure – including roads, footpaths, water supply and sewer collection – are higher on a per unit basis in low-density situations because of the greater distances of pipe or road required.
- Work by Burchall (2000) for the State of New Jersey found 9% savings in favour of a planned development focused on existing centres compared with continuing the pattern of post-war suburbanisation.
- A study by Calthorpe and Fulton (2000) found that while savings can be made from more compact development, these are not linear: at a certain level of density costs begin to rise again, mainly because a point is reached at which existing infrastructure is insufficient, and expensive new investments are called for by way of replacement or expansion. An obvious example is the heavy spending called for in public transit systems.
- Holcombe and Williams (2008) studied 487 municipalities in the US with populations of 50,000 or more, and found that increased population density had no statistically significant effect on government expenditures in cities with populations from 50,000 to 500,000, and higher population density is associated with higher government expenditures for cities larger than 500,000. Whatever the other merits of policies designed to increase population density, these results indicate that increases in population density will not lead to lower municipal per capita government expenditures.

Gillham concluded that there are limits to establishing generic or national estimates of the economic relationship between density and infrastructure costs because of difficulties in agreeing on what should and should not be included.

Frank, 1989

An older review by Frank (1989) brought together nine US studies – one of which was itself a review of other studies – and reached the conclusion that the key elements of urban form that influence costs are *"density and lot size or width, contiguity of development, distance to central facilities, and size of urban area ..."* The infrastructure considered included roading, sewerage collection and treatment, water supply, stormwater and schools. Frank estimated a figure of \$35,000 per unit for municipal services based on 3 units per acre (7 detached units per hectare), compared with \$24,000 at 12 units per acre (29 units/hectare; 30% detached

dwellings and 70% apartments), or a difference of \$11,000. The study also suggested that a distance of 10 miles from infrastructure headworks and employment could add \$15,000 to the costs per residential unit.

This analysis combines public and private costs, though, with some of the costs of transport carried by the residents. If the construction, maintenance, and operating costs of dwellings are lower in a suburban environment and this saving and the utility associated with additional open space were valued by households at more than \$24,000 (when capitalised) the economic advantages of higher density are called into question. If user charges (or development contributions) are applied to some or all of the capital and operating costs of fixed infrastructure, then the public (or fiscal) costs of lower density implied by the survey are reduced and the externalities effectively internalised in household decision-making.

B.3 Australia

Newton (ed., 1997) reported on the results of a study by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) of the externalities associated with alternative urban development patterns. This dealt with two sources of externality associated with different urban forms: atmospheric pollution and energy consumption. The impact of an increment of 500,000 people was simulated for each of seven options for urban form: business as usual, corridor, compact, edge, dispersed (into regional centres), fringe, and a 'tele-option' (substitution of telecommunications for a share of transport).

The results suggest that compact city form is by no means the best performer with respect to transport-related air pollution. The results are summarised as follows:

Table B.4 Externalities associated with alternative urban development patterns

Option	Consequences
Business as Usual: Growth maintains the recent emphasis on dual occupancy and high densities throughout the built-up area and particularly inner areas.	Substantially increased levels of congestion on existing networks, pollutant emissions, energy/fuel use and travel time, and substantially increased human exposure to dosages of air pollutants.
Compact City: All new residential and service activity in the inner city, including high-rise residential developments close to the city.	Low levels of pollutant emissions, greenhouse emissions, fuel usages, travel distance and travel time but it places all new residential and service activities in the area of very high urban air pollution, providing residents and workers with high dosages of air pollutants.
Edge City: All residential and service activities in cities distributed around the metropolitan area and accessible by a new ring road, with centres on radial railway and highway routes.	Relatively low levels of air pollutants and as the most self-contained of all scenarios, second best in terms of fuel usage and greenhouse emissions, with moderate travel distances but short travel times.
Corridor City: Growth on greenfields in three development corridors connected by highways and radial rail.	Best solution for low excess summer and winter pollutants; low energy use from relatively low travel distances but long travel times, and relatively high greenhouse gas emissions.
Dispersed ('Ultra') City: 70% of growth in regional centres, with 25% of new activities cross-commuting, 80% on fast rail.	Low emissions in main city; long travel distances but rail facilitates low travel time. Energy and greenhouse gas impacts similar to corridor city.
Fringe City: Growth mainly in outer suburbs and city fringe.	Well placed for summer and winter pollutant dosages although high overall emissions (partly from extension into rural areas).
Tele City: Substitution of telecommunications for some transport and travel across all the preceding scenarios	A substantial improvement in summer and winter pollutant doses and particularly excess doses, for all scenario options leading to the observation that: "All in all, it is desirable to provide conditions, or policies, which encourage telecommunication substitution for some trips."

Melbourne

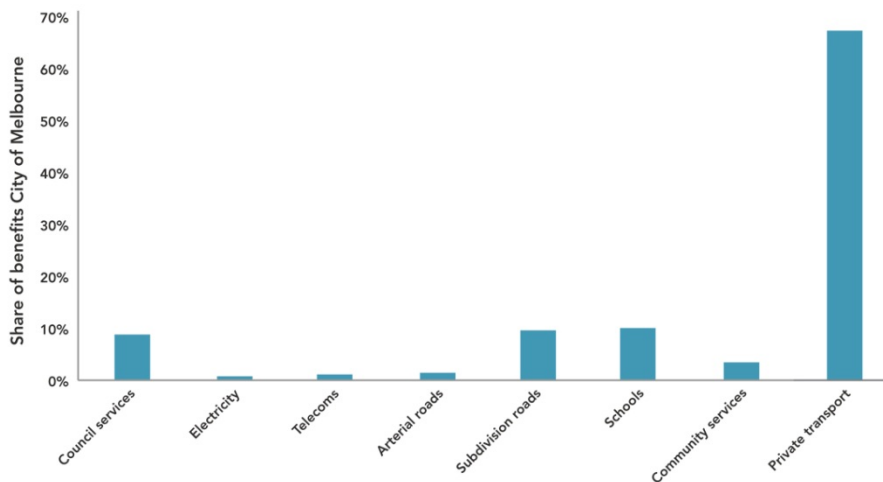
Work by Nielsen Associates in 1987 indicated an average “economic and financial benefit” to the community of A\$41,640 per household for an inner versus fringe residential location in Melbourne. While the study is now dated, two interesting findings emerge.

The first is the distribution of costs among producers (suppliers of services) and consumers (households). It is the latter that carry the lion’s share of the derived net costs (Figure B.1). 66% of the costs associated with fringe development are incurred through the use of private transport. Another 9.5% is attributable to roading within subdivisions, generally carried by developers and so transferred as a cost to the household as purchaser. Another 8.5% falls on councils, and 10% on the school system.

The implication is that the household meets most of the additional costs – mainly transport costs – of opting for a lower-density fringe location. Offsetting this is the argument that taxpayer subsidies are incurred to the extent that the marginal costs of the additional traffic on arterial roads is less than the contribution of the additional households to road taxes (always allowing for a more general benefit from the improved level of service to established households associated with better roads).

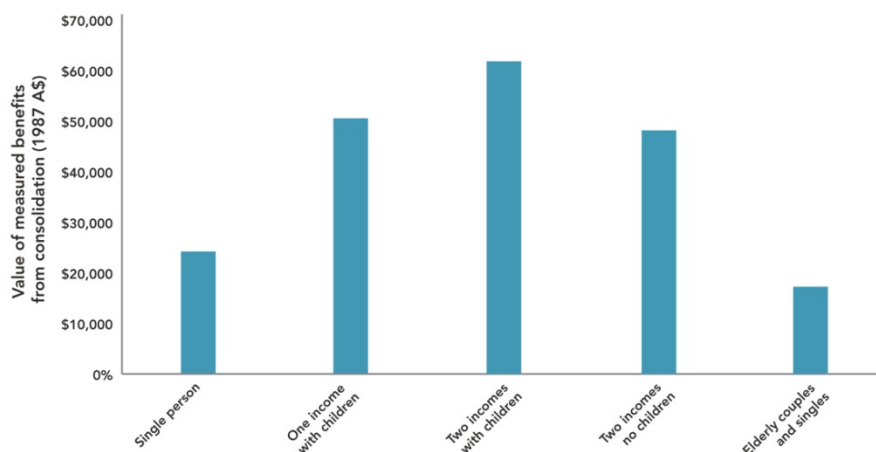
Nevertheless, the question remains whether the value of the utility derived by households for dwelling in fringe localities is greater than the additional costs they incur to live there. Especially relevant is whether the additional costs are also offset in whole or part by the lower cost of fringe housing.

Figure B.1 Distribution of the costs of fringe development, Melbourne 1986



The second interesting finding is that these costs of fringe development vary substantially by household type (Figure B.2), mainly because of variations in their transport behaviours. Hence, family households with children tend to make greater demands on transport resources because of their greater levels of activity than either single person or older family households or two income households without children. The other inference is that the cost of fringe housing is higher for two income households than for others – which can be interpreted as suggesting that dispersal is more likely as incomes increase and households can afford to pay for the benefits they receive from lower-density living.

Figure B.2 Costs of fringe development by household type, Melbourne 1986



Brisbane–Gold Coast

The Australian Urban and Regional Development Review included a case study of alternative patterns of development for Coomera between Brisbane and the Gold Coast, with a projected population of 100,000 (Infrastructure and Urban Strategies Branch, Commonwealth Department of Housing and Regional Development, 1995).

The review first covered results from earlier studies. One dealt simply with the different capital costs for the supply of infrastructure associated with different lot sizes within a single subdivision in Sydney (Rouse Hill). Items assessed included water supply, sewerage, drainage, electricity and gas, stormwater, telecommunications and local roads. Capital costs ranged from \$15,600 with 18 lots/ha to \$31,650/lot at 8 lots/ha (a doubling).

While confirming a higher cost associated with lower densities (larger section sizes), it demonstrated a non-linear increase in private costs as lot sizes increase, and the constant cost of government services once a density threshold (between 380m² and 450m² lot size) is reached.

The second study compared development in suburban Brisbane in 1993, focusing on Ormeau 44km southeast of Brisbane CBD, Rochedale 18km out, and Taigum 19km to the northeast. This study included the cost of social infrastructure (including recreational facilities), arterial roads, and additional capital to expand the capacity of bus and rail transit, discounting costs at 6% over 20 years.

The study indicated again the non-linear nature of gains to increasing density: a doubling of density within these localities had the potential to reduce costs by around a third. There is also evidence that locality might influence savings ahead of density. The capital cost of developing 10 units/ha in Rochedale was estimated at \$26,000/unit. The cost of development at Ormeau at 20 units/ha was higher than this, at \$28,900/unit.

The sources of differences were presented between Ormeau and Rochedale. Looking at the totals: the advantage to Rochedale at 10 dwellings/ha was \$14,600, a difference that fell to \$9,800 at 20units/ha. By way of comparison, moving from 10 units/ha to 20 units/ha at Ormeau yields a \$10,800 reduction (and \$7,000 at Rochedale).

The big contributors to these shifts are:

- Density – roading and utilities (supporting the thesis of savings from shorter runs at higher densities).
- Locality – health and education services, denoting less developed social infrastructure at Ormeau.

The Coomera study considered the relative impact of a greater variety of urban forms at a single locality. It considered integrated urban design connecting workplace, residential and service activities at the neighbourhood level and public transport sensitive design (PTSD). It focused on the capital rather than recurrent costs of infrastructure, and did not deal with costs and benefits to households.

This study concluded that conventional development at 10 dwellings per hectare was 3% more expensive than 15 dwellings per hectare in interconnected design. However, interconnected (multi-unit) design at 15 dwellings per hectare was somewhat less expensive than the same form at 20 dwellings/ha, with 25 dwellings/ha and PTSD the most expensive of all as result of the investment required in transit.

Beyond that, the study acknowledged that while savings were evident, the differences are relatively small and decline as densities increase. It was also acknowledged that holding density constant, more complex urban form is more expensive than conventional urban development.

On the other hand, sensitive sequencing, especially of social infrastructure, could yield significant savings.

B.4 A Generic Decision Tool for Urban Density?

Trubka, Newman and Bilsborough (2008) went beyond simply reviewing studies by attempting to integrate their findings into “a tool to assess the economic costs on urban development decisions in Australia by comparing inner city development and conventional fringe development” This covered infrastructure provision, transport costs, greenhouse gas emissions, and inactivity-related health costs per 1,000 (new) dwellings (p.2). The authors state that:

The proposed approach can be used to assess these costs in any development or any infrastructure decisions that would lead to different development patterns (p.2).

They go further claiming that the model derived from it:

...can be used to predict costs associated with any urban development in Australian cities. The model reduces to a simple relationship between urban development costs and distance to the CBD which is a surrogate for the character of urban development: $y=5.68x+306.56$ where y is the cost of development in millions of dollars and x is the distance to CBD (p.3)

This is a strong claim in the light of evidence from the studies described above that:

- Density and locality interact to influence costs, with urban design intervening further in economic outcomes.
- The distribution of different land use activities will affect the different components of transport costs (accidents, fuel consumption and emissions, road construction, rail capacity expansion).
- The return on increasing densities is U shaped – beyond a certain level the gains diminish or are reversed altogether.
- The suggestion that high densities based on substantial investment in transit will incur higher costs than even conventional development, reducing any returns associated with integrated urban design.
- Savings associated with centrality and density vary significantly between studies as a result of quite different physical settings, the capacity for expansion of existing infrastructure, analysts’ decisions about what to include and what to exclude, and methodological matters such as choice of discount rate and measurement conventions.

It is a claim that also appears inconsistent with the authors’ own observation that:

The challenge in interpreting the assessments is that infrastructure costs are so heavily dependent on area-specific values. For instance, road costs among different prospective development areas may vary based on the necessity for major arterial roads, costs for sewerage and water infrastructure could vary immensely depending on terrain and trenching conditions and many infrastructure components will differ depending on the level and degree of excess capacity (p.4)

On these grounds, the study is flawed by aggregation of highly specific results from diverse localities. The main source for the analysis of infrastructure, for example, was a study of the “inner, middle and fringe areas” of Perth undertaken for the Western Australia Planning Commission in 2001 (Environmental Resource Management, 2001), which was itself based on studies from 1972 to 2000.

Transportation costs were drawn from a study by Newman and Kenworthy (1999). The pricing of the economic impacts of emissions was based on an arbitrary \$170 per tonne without any sensitivity testing around what is a wide and contested range of values. Finally, costs are applied on a highly arbitrary and selective manner to the prospect that health is influenced by urban form. The main assumption is that suburban life leads to obesity because of a greater reliance on vehicle use than active (walking, biking) travel modes, without consideration of intervening factors such as access to open space, formal and informal recreation, on the one hand, and more sedentary lifestyles and reliance on fast foods on the other. The authors discounted a cost-of-obesity-related-illness measure by the difference in shares of people walking for a recommended 2.5 hours a week in 'walkable' compared with 'sprawling' neighbourhoods in Metropolitan Atlanta (19%). The derived figure (\$3.02/hour per dwelling) was then applied to an estimate of differences in bicycle trips as a proportion of walking trips in some western Australian suburbs. The annual savings from the greater levels of physical activity calculated in this way per 1,000 households were then discounted over 50 years at 3%, a figure based on the rate of inflation in Australia.

It can be argued that cross-national contextual differences negate any transfer of analytical results from one country to another. Differences include service levels associated with different elements of infrastructure, the technologies acceptable to deliver them, and different standards and expectations.

A critical difference in context can be demonstrated in this instance by simple comparison of lot size. Transferring US-based activity ratios to Australia, for example, ignores differences in suburban form. Data for 2008 from the US Bureau of Census (website) and the Urban Development Institute of Australia (2011 State of Land Report) show that while both countries have experienced declining lot size, the median densities for new residential lots (including lots for semi-detached housing) are substantially lower in Australian capital cities than identified in the US, including within Metropolitan Statistical Areas. There is also substantial variation among cities within Australia (Table B.5).

Table B.5 Variation in density associated with new residential lots, Australia and US 2008

	Square Metres	Units/Ha (net*)	% USA MSA
Australia			
Brisbane	600	16.7	32%
Sydney	550	18.2	44%
Melbourne	540	18.5	46%
Perth	480	20.8	65%
Adelaide	450	22.2	76%
United States			
Northeast	1370	7.3	-42%
Midwest	980	10.2	-19%
South	880	11.4	-10%
West	640	15.6	23%
Metro Areas	790	12.7	0%

Note:

1. Net makes no provision for roads, reserves, and open space.

Under these circumstances, sprawl and density are likely to mean quite different things in practical terms in Australia than in the US and, incidentally, are the result of quite different social, cultural and especially regulatory differences.

Beyond these substantive differences and the fallibility of transferring results from one national (or regional) setting to another, the study suffers from methodological deficiencies. Quite apart from the contestable

nature of assumptions around linearity and the transferability of ratios adopted from different studies at different times simple methodological quirks raise questions over the veracity of the study. An obvious one is mixing discount rates (zero for infrastructure capital costs, 7% for transport-related costs, and 3% for health and emission costs), and omitting operating costs for some items (non-transport infrastructure) and not others. While containing some interesting ideas and data the study cannot support any claim to generalisation or the transportability of its conclusions.

B.5 Conclusion

While all the studies considered here are limited by terms of reference, setting, scope, methodological conventions, and the capacity to estimate differences in indicators, they do suggest that up to a point higher densities and reasonable proximity between dwellings and centres of employment (including but not necessarily limited to the CBD) are more resource efficient and environmentally benign than more dispersed, low-density development.

The relationship does not appear unequivocal, though. For example, based on the studies considered here it cannot be concluded that the relationship between urban form and resource costs will be consistent or even significant. The gains in health and emissions sought could be achieved by more direct methods, although none of the studies consider the counterfactual in these terms. Moreover, there is no evidence from this material that the resource cost savings associated with greater urban intensity will not be offset in many instances by the greater affordability of traditional suburban housing and the benefits many residents derive from occupying it.

Appendix C Methodology on impacts of Auckland's Metropolitan Urban Limit on land price

This appendix outlines the model used to estimate the impact of Auckland's Metropolitan Urban Limit (MUL) on land prices in the city. This model is based on the work of Grimes and Liang (2009). Real median land price (\$ per hectare) is modelled at the meshblock level across the seven Auckland Territorial Authorities (TAs) – Rodney, North Shore, Waitakere, Auckland City, Manukau, Papakura and Franklin.¹⁴⁴

The median land values are weighted medians for two main types of properties – residential dwellings and lifestyle dwellings. These properties usually have detached or semi-detached dwellings on clearly defined sections and make up over 70% of the total number and values of dwellings in the Auckland region. Median land values are less influenced by low or high extreme values compared to means. The model is estimated using a robust linear regression technique.¹⁴⁵

The key variables of interest in the regression are the MUL dummies. These dummies are constructed on the basis of meshblock distance from the MUL. Specifically, each meshblock is assigned into one of four categories depending on its distance to the MUL.¹⁴⁶ These categories are: greater than 2km inside the MUL, 2km within the MUL, 2km outside the MUL, and greater than 2km outside the MUL. If a meshblock is dissected by the MUL, it is randomly assigned to either just inside or outside MUL by a uniform distribution. The location of the MUL is assumed to be constant over time. Although this is not the case in reality, changes of MUL over the last 15 years have been relatively minor and the vast majority of the MUL has remained static.

The distances from the centre of meshblocks to the CBD and local centric nodes are also included in the regression, as in the original work of Grimes and Liang (2009).¹⁴⁷ In addition, TA and urban area dummies are included in the model to explain systematic variations in land prices across the Auckland region.

The following regression is estimated:

$$\ln(RLV_i) = \sum_k \{\beta_k DIST_{ik} + \gamma_k \ln(DIST_{ik})\} + \delta_1 CBD_i + \delta_2 \ln(CBD_i) + \theta_2 MUL_2 + \theta_3 MUL_3 + \theta_4 MUL_4 + \pi_1 URBAN + \rho_4 TA_4 + \rho_5 TA_5 + \rho_6 TA_6 + \rho_8 TA_8 + \rho_9 TA_9 + \rho_{10} TA_{10} + \alpha + \varepsilon_i$$

Where,

1. Ln(RLV) is log real land value per hectare in meshblock i.
2. DIST_{ik} is distance to local centric node k from meshblock i. The linear and log-linear specifications capture the non-linear feature on real land value.
3. CBD is distance to Auckland CBD from meshblock i. The linear and log-linear specifications capture the non-linear feature on real land value.
4. MUL is MUL dummies. MUL2, MUL3 and MUL4 represent meshblocks just inside MUL within 2km, just outside MUL within 2km and greater 2km outside MUL. MUL1, well inside MUL, is set to be a baseline.
5. TA is TA dummies. TA4, TA5, TA6, TA8, TA9 and TA10 represent Rodney, North Shore, Waikakere, Manukau, Papakura, Franklin. Auckland City, TA7, is set to a baseline.
6. URBAN is an urban dummy. It is defined by Census classification in 2006.

¹⁴⁴ Land value data are sourced by Quotable Value New Zealand (QVNZ). Real values are derived by using CPI from Statistics New Zealand.

¹⁴⁵ Robust linear regression is a form of regression analysis which provides robust estimates by detecting and downweighting outlying observations. Usually it returns more efficient and/or unbiased results when outliers present in the data. Estimation method is from Li (1985).

¹⁴⁶ MUL boundary is based on the version in 2011.

¹⁴⁷ Piha and Omaha are excluded due to no information being available

7. α is the intercept.

8. ε is residuals that are assumed to be independently and identically distributed by normal distribution.

To compare the effects of explanatory variables on real land values, the regression is estimated separately on cross-sectional data for 1995, 1998, 2001, 2004, 2007 and 2010.

Results

Results for regression estimated for each of these years are reported in Table A.1. Overall, the goodness-of-fit for all regression is relatively good, with around 65% of total variation in real land prices explained by explanatory variables.

The impact of the MUL is assessed by comparing the value of land situated just inside the MUL relative to land situated just outside the MUL, as measured by the relevant MUL dummies. On average, land just inside the MUL is almost eight times more expensive than land just outside the MUL. Given that the coefficient on MUL2 has decreased and the coefficient on MUL3 has increased through time, the price differential has increased from 7.15 to 8.65 in 2010 (Figure 7.4).

Impact of distance to Auckland CBD

Coefficients on both the linear and log-linear terms of CBD are negative and statistically significant indicating that the distribution of land value follows a 'sand-castle' style shape as distance from the CBD increase (Figure A.1 and Table A.2). That implies land values monotonically decline with distance.

Table C.1 Robust regression results

Explanatory Variables	1995	1998	2001	2004	2007	2010
CBD	-0.012***	-0.018***	-0.016***	-0.018***	-0.015***	-0.015***
Ln(CBD)	-0.028	0.059	-0.040	-0.016	-0.078***	-0.026
URBAN	1.246***	1.888***	0.816***	0.547***	2.682***	2.712***
MUL2	-0.136***	-0.034***	-0.054***	-0.023	-0.008	-0.036***
MUL3	-2.103***	-1.874***	-2.108***	-2.186***	-2.122***	-2.194***
MUL4	-2.153***	-1.928***	-2.386***	-2.505***	-1.929***	-0.423***
TLA4	-0.242***	-0.079*	-0.454***	-0.354***	-0.527***	-0.238***
TLA5	-0.021***	0.211***	-0.286***	-0.374***	-0.320***	-0.224***
TLA6	-0.661***	-0.799***	-1.026***	-0.717***	-1.079***	-0.482***
TLA8	-0.146***	-0.271***	-0.611***	-0.389***	-0.296***	-0.204***
TLA9	-0.328***	-0.596***	-0.497***	-0.484***	-0.369***	-0.517***
TLA10	0.500***	0.493***	-0.189***	-0.068***	0.680***	-0.160***
Pseudo R Square ¹⁴⁸	0.642	0.651	0.675	0.618	0.673	0.622

Source: Productivity Commission estimates

Notes:

1. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$
2. Intercept, linear and log-linear coefficients relating to local centric nodes are not reported for clarity.
3. Coefficients for the same variable may vary in some degree due to uncontrolled heterogeneity in cross-sectional models.

¹⁴⁸ Pseudo R Square = $1 - \text{SSE}(\text{regression with all explanatory variables}) / \text{SSE}(\text{regression only with intercept term})$. SSE stands for Sum of Square Errors which are derived from residuals.

Table C.2 Relative price differences on real land values to CBD

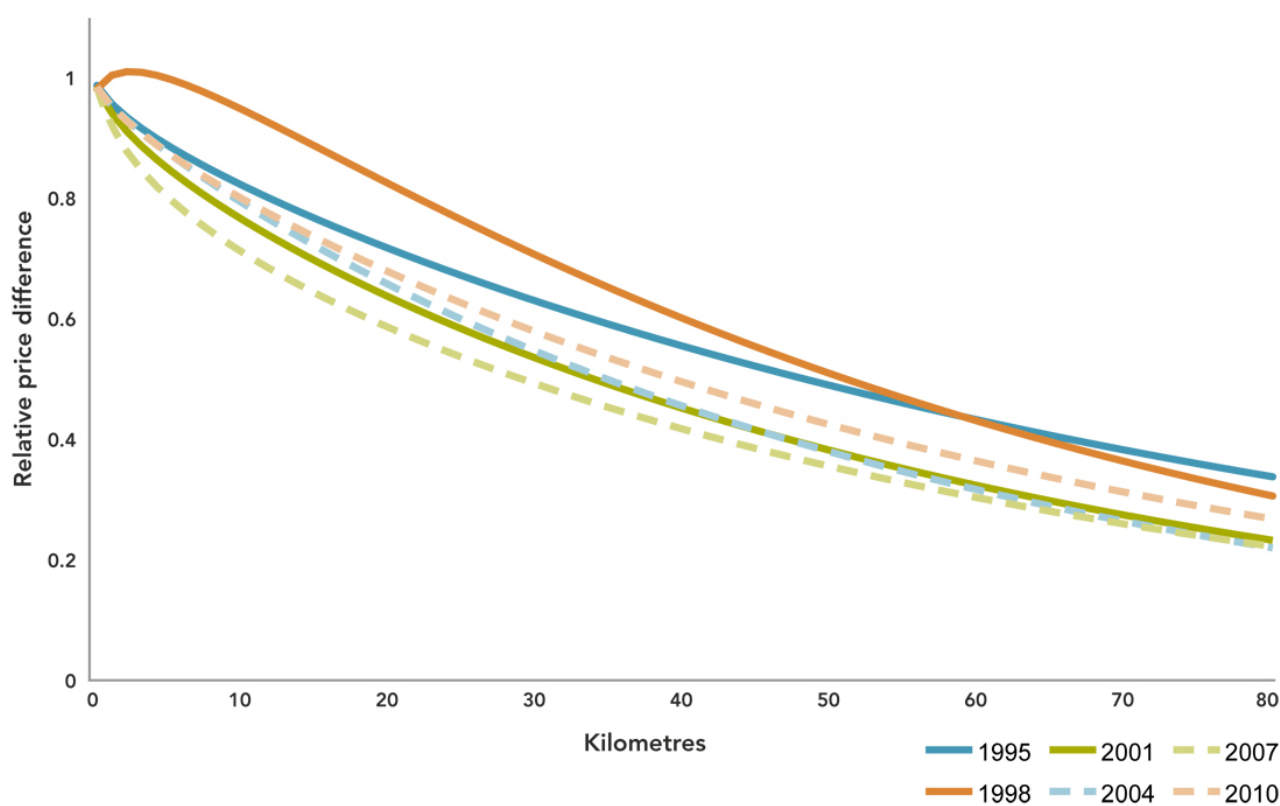
Distance to CBD	1995	1998	2001	2004	2007	2010
20	0.28	0.17	0.36	0.33	0.41	0.31
40	0.44	0.39	0.55	0.54	0.59	0.50
60	0.57	0.57	0.67	0.68	0.69	0.63

Source: Productivity Commission estimates

Notes:

1. Figures are derived from figure A.1
2. Relative price differences show the proportion of average price difference land situated certain kilometres from the CBD compared to land situated in CBD.

Figure C.1 Impact of distance to Auckland CBD on real land values between 1995 and 2010



Source: Productivity Commission estimates

Appendix D Collaborative models for urban land development

Appendix D looks at New Zealand experience with collaboration and the experiences of urban development authorities in Melbourne and Queensland.

D.1 New Zealand

Auckland's experience

In Auckland, collaboration was the preferred approach for issues surrounding regional land use prior to the creation of a single city. This experience was reviewed in a paper prepared for the Royal Submission on Auckland Governance by CityScope Consultants 2008. In summary:

Over the past 15 years... there have been several adjustments to governance arrangements to enhance coordination. One result has been a series of high order plans which tend to have stumbled at the point of delivery....

Among the consequences of this recent history has been a return of responsibilities in land use, transport, and economic development matters to the regional council, and a move towards using appointees at arm's length from councils rather than councillors themselves to oversee the governance of infrastructure of regional significance...

One underlying message is the need for clarity and unity of direction. One Plan is a means for delivering this across a wide range of matters, including coordinating and prioritising transport and other infrastructure projects, land use and economic development. The Auckland experience suggests, however, that to a commitment to cooperate on major developmental issues must be added the capacity to deliver in priority areas...

While collaborative planning should enhance allocation decisions and reduce transaction costs, especially in terms of long-term land use and infrastructure, technical efficiencies will generally be sustained by ensuring specialist agencies are responsible for implementation. There may be some benefit from selective operational mergers, but at this stage there is no compelling argument that delivery will necessarily be enhanced by bringing a wide range of development activities and infrastructure into a single organisation. (CityScope Consultants, 2008)

Integrated planning

The New Zealand Transport Agency (NZTA) has promoted the integrated planning of transport and land use for some time, an approach which it encourages in funding applications for major transport projects.

Among the reports it has commissioned, one deals with how best to organise integrated urban development projects (CityScope Consultants, 2009, NZTA Research Report 379). The focus was on integrated urban development projects (including Transit Oriented Development) and not simply on housing development. Nevertheless, some of the process and institutional options proposed may be relevant in the current context. Based on a review of New Zealand and overseas experience, the report suggests guidelines for resolving, ordering, and clarifying as necessary the issues related to governance and project management, stakeholder management, funding issues, and timeliness.

It recommended:

The establishment of independent implementation partnerships, with appropriate governance structures, to minimise the fulfilment risk. Establishing an independent entity with the mandate and authority to deliver the project achieves several objectives:

- It provides a vehicle for accessing the range of project planning, project management, and commercial skills and expertise required for delivery.
- It provides clarity of purpose.

- It removes the agency charged with implementation from political influence. It provides an entity that can independently apply for consents and advocate more widely on behalf of the project.
- It provides an entity through which funding for project delivery can be channelled.
- It provides an agency for engaging with third parties, both stakeholders in general and those with whom financial and legal arrangements may be made (suppliers, subcontractors, tenants, etc).

The report suggested that such an agency would involve the relevant arms of government “at all levels” and would involve the private sector. Agencies could be formed as Council Controlled Organisations or Public Private Partnerships.

The report also addressed process matters, and outlined possible governance arrangements and a sequence of process and planning actions to smooth the way and enhance implementation.

Hobsonville development

Housing New Zealand Corporation, (HNZC) purchased 167 hectares of land for housing purposes at the former Hobsonville Airbase in the northeast of Auckland. Development of this land is being facilitated through a collaborative partnership with the private sector. HNZC has established the Hobsonville Land Company, which is a wholly-owned subsidiary of the Corporation. Through a tender process, Australian-listed company AV Jennings was appointed in 2007 as the preferred partner to develop the first stage of the Hobsonville development. Subsequently, AV Jennings has contracted several New Zealand group-home builders to undertake the actual housing construction. The Hobsonville development is a 10-15 year project.

The Hobsonville development is a 10–15 year project with plans for the development of around 3,000 stand alone and terrace houses along with community facilities such as schools, parks and public transport. One of the development conditions for Hobsonville is that it includes opportunities for first home buyers. This has been delivered through the Gateway Housing programme. Gateway is designed to improve housing affordability for low to middle income first home buyers. The programme allows first home buyers to build a new house on HNZC or Crown land. For the first 10 years of ownership a reduced interest rate is paid on the land component of the loan. As of June 2011, 17 Gateway properties have been confirmed in the Hobsonville development.

D.2 Australia

VicUrban/Places Victoria

Places Victoria, an urban renewal authority, replaces Vic Urban, the state government’s land development agency. VicUrban was established as an urban development authority in 2003 to:

- purchase, consolidate, transfer or otherwise acquire land in metropolitan and regional areas for development for urban purposes;
- parry out development of land alone or in partnership, or through agreements for development;
- promote best practice in urban and community design and development;
- assist in implementation of government urban development policies;
- contribute to improvements in housing affordability;
- provide consultancy services in relation to land development;
- undertake and manage declared projects;
- perform other functions conferred by the act and the Docklands Act 1991.

The functions include:

- Purchase, consolidate, take on, transfer or otherwise acquire land in metropolitan and regional areas for development for urban purposes.
- Promote best practice in urban and community design and sustainable development, having regard to links to transport services and innovations in sustainable development.
- Develop land in Victoria for residential and other urban purposes to provide a competitive market.
- Contribute to improvements in housing affordability.

The focus has been on large urban redevelopment projects. VicUrban was charged with implementing the State Government Strategy, *Melbourne 2030*, by facilitating the delivery of high quality, diverse and affordable living options. It took the lead in innovative (risky) projects, intervening where the market was seen to be failing, acting as the master developer on major projects, and using its influence to leverage government investment.

The authority could operate through joint ventures under the legislation, form agencies for its purposes, enter into partnership arrangements, and so forth, with investment authority up to \$5m, with Treasurer approval required beyond that. Conditions were also set out in the Act under which it could reach reciprocal arrangements with other government agencies.

According to the Annual Report, during 2010/2011 VicUrban's role included the following:

- Working with industry to accelerate outcomes, encourage greater diversity of product and share knowledge.
- Working with the government to identify key development sites in strategic urban renewal locations that can accommodate greater density and diversity of product.
- Re-examining VicUrban's landholdings to ensure a greater emphasis on urban renewal and to identify new opportunities for private partnerships.
- Ensuring the business is commercially self-sustaining in carrying out its role.

In 2010/11 operating revenue was \$212.8m and net revenue \$16.9m, with equity of \$256.5m.

Places Victoria has a clearer emphasis on *renewal* (not development) in defined urban precincts in Metropolitan Melbourne and regional centres. It will continue to contribute to government policies to improve the quality of urban living, converting policy into practice to stimulate economic activity and providing certainty for the private sector in major urban renewal projects.

Queensland Urban Land Development Authority

The ULDA was set up under the Urban Land Development Authority Act 2007 "to plan, carry out, promote or coordinate and control the development of land in areas for which it also provided for declaration of urban development areas". The purpose of the Act was to facilitate:

- the availability of land for urban purposes;
- the provision of a range of housing options to address diverse community needs;
- the provision of infrastructure for urban purposes;
- planning principles that give effect to ecological sustainability and best practice urban design;
- on-going availability of affordable housing options for low- to moderate-income households.

The Act sets out the procedures for identifying, reducing, or revoking and declaring an urban development area via regulation and for State- imposed changes to existing planning instruments in such areas. Section 3

outlines the requirements for the preparation of a Development Scheme for an Urban Development Area, providing also for a Development Scheme to prevail over planning instruments, plans, policies, or codes under the Integrated Planning Act (more or less equivalent to the RMA).

The ULDA Strategic Plan sets out a two-pronged mission underpinned by five strategies - bringing urban land to market, promoting diverse housing, catalysing infrastructure, promoting sustainability, and affordable housing.

Table D.1 ULDA Strategies

ULDA strategies				
Urban land to market	Housing diversity	Catalyst infrastructure	Sustainable places	Affordable housing
<ul style="list-style-type: none"> • Practical development schemes produced • Work with landowners to maximise site potential 	<ul style="list-style-type: none"> • Housing in UDAs to have a wide diversity in size and values 	<ul style="list-style-type: none"> • Catalyst infrastructure identified and funding strategies formulated 	<ul style="list-style-type: none"> • Best practice ecologically sustainable policies balanced with affordability 	<ul style="list-style-type: none"> • Policies implemented that promote and require housing provision for key workers and/or low- to moderate-income households
Performance indicators for each strategy				
Urban land to market	Housing diversity	Catalyst infrastructure	Sustainable places	Affordable housing
<ul style="list-style-type: none"> • Value of development commenced in UDAs 	<ul style="list-style-type: none"> • Residential mix and price points 	<ul style="list-style-type: none"> • Catalyst infrastructure constructed 	<ul style="list-style-type: none"> • Sustainability outcomes exceed mandated minima 	<ul style="list-style-type: none"> • Number of dwellings affordable to households \$41–94k p.a.

The 2010-2011 Annual Report records rapid growth with total assets of \$392.8m in 2011 and equity of \$26.7m. Operational revenue was \$54.8m, with \$40.3m from land sales (\$9.9m net).

Comment

Large, multi-purpose agencies may run the risk of over-extension, both in terms of objectives and consequently in terms of capability. In the case of Victoria, this has seen a tightening of the reins through a re-orientation towards brownfield development. Nevertheless, VicUrban and the Queensland ULDA appear to have been progressive and effective. The question arises in the case of the latter as to how much activity it can promote, especially when it lacks the capacity to compel infrastructure providers, for example, to invest in a way that ensures its plans are fulfilled.

A highly focused entity with powers relating to specific development objectives and areas is favoured, acting on development areas that have been declared through a formal process. Such an entity should have the capacity to enter into contracts with suppliers and trade on its own behalf.

Appendix E Charging for infrastructure: international experience

This appendix discusses the international development, principles, and application of infrastructure charges which have come to the fore since the 1970s as a means of funding public infrastructure associated with new development.

United States experience

Impact fees have been used in the United States since the 1970s, widely implemented at state level in response to “unprecedented, rapid growth accompanied by decreasing financial resources” (US Department of Housing, 1993, p. v). They are widely accepted in principle, although how charges are calculated and implemented in practice remains contentious.

The claim for financial contributions to fund infrastructure development took off with publication of the *Fiscal Impact Handbook* (Burchell and Listokin, 1978). This provided a range of options for identifying the costs imposed by new development, such as projecting current per capita costs onto the expected population. The methodology was, however, based on charging average and not marginal costs against new development and so was unlikely to reflect the real cost of providing the infrastructure capacity associated with additional demand on existing infrastructure.

A symposium of the American Planning Association in the late 1980s set out many of the underlying issues and principles (Nelson, 1988). In particular, it endorsed the notion of a *rational nexus test* as the rationale for calculating development impact fees. Such a test should demonstrate that:

- the fees charged are reasonably connected to the community growth generated by new development and particularly the additional facilities required to service that growth; and
- there is a reasonable connection between the expenditure of the fees collected and the benefits accruing to the development from which they were collected (Nicholas and Nelson, 1988).

These principles remain central to guidelines and practice. However, it is usually difficult to establish and measure the nexus between development-induced growth, fees levied, expenditure, and the distribution of benefits.

For example, there are issues around the divisibility of costs and benefits. At a conceptual level there is debate about the focus on input costs as a basis for charges compared with a focus on the impacts of development expenditure (Heikkila and Davis, 1997). The latter, an output-focused approach, is considered more likely to identify the marginal expenditure required to mitigate impacts in particular settings (which may be higher or lower than the current average cost of supply) and can be aligned with changes in the level of service arising from the investment.

A US Department of Housing and Urban Development publication in 1993 was intended to deflect the criticism that fees increased housing costs and denied home ownership to ‘moderate-income people’ by analysing past experience and developing guidelines for drafting state legislation. State-enabling legislation was called for “*to assure fairness, equality, and uniformity among local impact fee programs, as well as minimal effect on housing affordability*”.

The criteria outlined by the Department of Housing called for the following provisions (among others) in designing impact fee legislation (pp.vi-viii):

- Specification of land use types eligible for assessment and clarity of the basis for assessment;
- Stipulation of the types of facilities eligible for funding through fees, specifying only facilities reasonably related to the new development and excluding spill-over into expansion or upgrading for existing residents;

- Definition of a defined service area for fee calculation, assessment, collection, and spending;
- Requirement to demonstrate a rational nexus among the development's needs (a needs test), the fee charged (proportionality), and the benefits to the new development from the facility funded (benefits test);
- The level of service funded should be on a par with service levels experienced by the existing community; adopting a higher level of service would require funding by other means;
- Provision for exemptions for specified types of development consistent with community priorities, including the option of waiving fees for affordable housing;
- Specification of timing, noting that "*planning has unique consequences for the land seller, developer, builder, and home buyer. To minimize the effects the fee may be assessed early in the development process ... and collected late in the process (e.g., at building permit issuance)*".

In 2008 the Department of Housing and Urban Development (HUD) issued another set of guidelines, promoting fees as a means of assuring "adequate public facilities" in response to the growth of communities, nominating as the principal facilities to be funded in this way:

...additional water and sewer systems, schools, libraries, parks and recreation facilities, and other infrastructure made necessary by the presence of new residents in an area. (p.1)

The new guidelines were issued:

...to educate practitioners on impact fees and present recommended approaches that can reduce potentially adverse effects of impact fees on housing affordability. (p.3)

It noted, however, that:

...impact fees are not the best way in which to finance most public facilities from a variety of theoretical perspectives and instead taxes are... [although where they do not have the ability to raise taxes] ... "elected officials may see impact fees as a pragmatic solution." (p.ii)

The report noted the inequities if average or equal charges are applied across new developments, effectively subsidising development more remote from headworks, for example. In this example, inequity is compounded if the more remote properties are occupied by higher-income households making greater demands on the resources involved (such as water treatment and distribution).

Marginal cost pricing was canvassed. This would see a two or three part charge: the capital cost of an asset averaged across households, possibly a distribution charge based on distance from headworks and development density to cover variations in local distribution costs,¹⁴⁹ and a per unit volume charge for consumption. In theory, the distribution of demand for network infrastructure – the location of new development – would be influenced by the variable pricing resulting.

The reason marginal cost pricing was not widely used in the US included the complexity and cost of calculating and explaining the resulting prices, and the political costs of doing so. The report concludes that "only water and wastewater facilities would seem to be the appropriate facilities for which impact fees should be assessed... Yet impact fees are used to help finance ... other facilities by an ever-increasing number of communities." (p.20)

The guidebook suggests six policy-making criteria for funding policy development (pp.28-30):

- Revenue potential: will it generate sufficient revenue?
- Proportionality: how are the costs of new developments apportioned relative to the demand, the costs, and how does this relate to horizontal (equal charges/dwelling) and vertical (charges based on capacity to pay) equity?

¹⁴⁹ The density charge is less relevant if onsite reticulation is in the hands of the developer, as in New Zealand.

- Geographic equity: how important is marginal cost pricing to reflect differences in servicing costs between, for example, infill, suburban, or ex-urban development?
- Administrative ease: are administrative, compliance and enforcement costs (transaction costs) reasonable relative to the funding outcome achieved?
- Public acceptance: will current ratepayers, for example, face higher rates for the benefits of new development, and how acceptable is that likely to be?
- Housing affordability: does the funding reflect differences in cost by the size and type of housing (proportionality) and does it have the capacity to vary this based on ability to pay?

The guide discusses the merits of the widely utilised approach of charging average or flat fees, which has the benefit of simplicity but raises equity issues:

Flat rate impact fees compromise affordability and are socially negative to the degree that they systematically overcharge purchasers in smaller, less expensive house or apartments and undercharge others in the more valuable houses. (p. 43)

The report recommends the use of fees calculated on an area of dwelling basis, on the empirical grounds that smaller and lower-income households tend to occupy smaller dwellings and make less demands on services, allowing, though, that the rate could be set on a sliding scale, with the marginal fee diminishing as size increases (p.53).

An alternative approach was recommended by the National Association of Home Builders (NAHB, 2008), promoting flat fees rather than fees graduated by unit size. One of the reasons is that the measured difference in household numbers by dwelling size is minimal, unlikely to justify the more complicated methods associated with proportionate share methods and the greater difficulty in defending them. This rejoinder also suggests that unit type is a superior basis for differentiating fees than unit size. However, it argues that the legal test of "rough proportionality"¹⁵⁰ can be satisfied using an average fee calculation. The assumption that flat fees are regressive and graduated fees progressive is contested on several grounds:

- When household size varies within the same size dwellings, higher-income households with fewer occupants would tend to over-pay whereas lower-paid households with more occupants would tend to underpay;
- The assumption that higher-income households occupy larger buildings is "very crude";
- Flat fees are less prone to the vagaries of the market and therefore easier to predict;
- Flat fees make calculation of revenue credits easier¹⁵¹ (p.2).

The difference does not appear to be resolved, and graduated or proportional fees are still promulgated by different agencies and councils. The Washington-based Center for Housing Policy, for example, promulgates on its good practice the use of proportionate fee schedules as a means of keeping smaller homes more affordable. It also suggests that these can be further revised – or subject to selective waivers - to influence prices in rapidly growing districts, and to increase affordability.¹⁵²

United Kingdom experience

Impact fees are held to be more structured and less open to bargaining between planning authorities and developers than the traditional British practice of ad hoc negotiation of charges within development

¹⁵⁰ *Dolan v City of Tigard*, 512 U.S. 374 (1994)

¹⁵¹ Revenue credits are provisions that need to be made in a graduated fees regime to avoid double-dipping by way of future contributions from user charges and rates. In the case of flat fees, any contribution from other sources of revenue would be deducted from the anticipated costs prior to calculation of the average fee.

¹⁵² Center for Housing Policy (2010), *Revise Impact Fee Structures* http://www.housingpolicy.org/toolbox/strategy/policies/impact_fees.html, accessed Nov. 2011

agreements under Section 106 of the Town and Country Planning Act 1909. These arrangements were based on the notion of sharing in the betterment arising from planning decisions more than any analysis of costs arising or benefits accruing from development.

The case for impact fees in Britain was couched in terms of privatising the financing of public infrastructure and as such was seen as consistent with the pre-eminence of a market-based political economy in the last two decades of the 20th century. It was also seen as simpler than what went before, and as providing “a financial dimension to the planning system” and “local authorities new means of influencing the pattern of urban development” (Goodchild, Booth and Henneberry, 1996, p.164).

Two shortcomings were identified, though:

- A potential conflict between economic and environmental matters on the grounds that “efficiency in the use of public facilities does not always lead to patterns of urban development that are acceptable from an environmental viewpoint”.
- The rationale and debate is about the cost of development rather than the justification for development in the first place.

It was also feared that the revenue-generating capacity of impact fees would lead to a reduction in the share of central funding to local government, and that the value of fees would be absorbed into land values, potentially resulting in an increase in prices from costs previously spread over the community as a whole.

The authors’ main argument, though, was that development impact fees should not substitute for good planning: the capacity to recover costs does not necessarily make a particular planning strategy more or less appropriate.

Australian experience

A concern over the prospect that a shift to full, upfront charges for the cost of new physical and social infrastructure would reduce housing affordability in Australia was articulated in 1992 by Walsh. He was reacting to the emerging view that the supply and development of land for housing, especially on the urban fringe, was effectively cross-subsidised, encouraging urban sprawl.

Walsh argued for a simple distinction between predominantly user charges for physical infrastructure and predominantly community-wide taxes and charges for social infrastructure, “reflecting the facts that [for the latter] the bulk of benefits flow to the community as a whole, rather than to individual users, and that the provision of social facilities also usually serves important re-distributional purposes” (p.7). He saw onsite infrastructure as a developer responsibility (and therefore a cost to purchasers), but argued that offsite infrastructure should be funded by user charges across the system as a whole.

Australian Productivity Commission, 2004

A number of inquiries have been held into the cost of housing in Australia. The 2004 report into first-home ownership by the Productivity Commission (2004) found that while infrastructure charges had increased over time, this increase did not explain the surge in housing prices since the mid-1990s, and that reductions were unlikely to significantly influence affordability. This was partly because charges on development for items of wider benefit to the community had been limited, with most charges justified on efficiency or equity grounds. Unlike a tax, infrastructure charges enhance the value of a property (Australian Productivity Commission, 2004, p.155).

The Commission acknowledged the debate over how far charges were passed forward to buyers or back to land owners on purchase of raw land by the developer. The resolution of where the burden of charges falls depends in part on whether the value of the investment in infrastructure is recognised in the price the buyer is prepared to pay. Even under these circumstances, the Commission felt that any increase in charges upfront is likely to be reflected in a reduction in raw land prices rather than an increase in the new home costs (p.164), especially if that increase is a reduction in existing subsidies (in which case the increase represents a transitional issue).

It was felt that excessive infrastructure charges arise from:

- inappropriate concentration of charges on individual projects (i.e., some projects paying more than their fair share);
- excessive standards, perhaps adopted to minimise public liability for future maintenance costs;
- double charging, when residents pay through upfront charges and rates;
- the funds raised through charges not being spent on the designated purpose;
- lack of scope for or the high costs of appeal.

While acknowledging the importance of testing proposals for charges against the principles of need nexus, equity, and accountability, the Commission recognised the difficulty of doing so in practice. It suggested that they might be applied differently to different types of infrastructure: distinguishing among basic (equivalent to onsite), major (shared), and social infrastructure (p.168).

The Australian Productivity Commission concluded that:

...though changes in the level and form of infrastructure charges are not responsible for recent sharp declines in housing affordability, compliance with some general charging principles will help to promote more efficient and equitable outcomes. (p.176)

The Victorian Competition and Efficiency Commission, 2005

The Victorian Competition and Efficiency Commission (VCEC), as part of a more general review of housing regulations in 2005, revisited a 2001 review of local government development contributions (which are only a minority of total charges on land development), and drew on the Productivity Commission's 2004 report.

It reiterated the infrastructure charging problems identified in the 2001 review:

- Failure to differentiate clearly between *use nexus* (sharing costs across all users) and *impact nexus* (recovering additional costs from development);
- Uncertainty over what items may be levied, especially with reference to discretionary social or community services;
- No definitive advice on cost apportionment;
- "Unfair" distinctions between development and community infrastructure that directed contributions more towards the former than the latter;
- Cumbersome administration, especially when development streams were small or sporadic;
- The inability to require developments to pay for offsite works not anticipated in an approved development contribution plan;
- Difficulties in projecting costs and demands;
- Confusion over whether owners exempt from rates should also be exempt from contributions;
- Difficulties collecting contributions from state infrastructure developments.

(Victorian Competition and Efficiency Commission, 2005b, p.405).

The VCEC felt that reform provisions introduced after the 2001 review, but only recently enacted, covered these issues, and should be allowed to work through the system. They included detailed guidance and simpler methods for preparing development contributions plans. They also provided greater capacity to fund community facilities through contributions (pp.406-7).

The VCEC endorsed the 2004 view of the Australian Productivity Commission that developer contributions should be demonstrated to be necessary, efficient and equitable; that guidelines were required based on

these principles and subject to independent scrutiny; that provision should be made for contributions to compensate for the cost of out-of-sequence development; that there should be opportunities for alternative arrangements to meet household needs; and that those imposing charges should be accountable for the actual expenditure of the funds raised.

Submissions to the VCEC raised concerns about a number of matters – funding alternatives, transparency and accountability, arrangement for levying state agencies, affordability, and implementation. By and large the position taken was that the recently revised arrangements through the passage of the *Planning and Environment (Development Contributions) Act 2004* addressed most concerns, subject to regular monitoring and auditing of how well they were being implemented (0).

Box E.1 VCEC: finding on development contributions

The Planning and Environment Act 1987 embodies requirements that could be expected, if adhered to by councils, to ensure development contributions are levied only for infrastructure linked to the development, that levies are spent as hypothecated, and that double dipping does not occur. There appears to be no independent, comprehensive monitoring or public disclosure of local governments' adherence to the requirements designed to prevent abuses of the development contributions system. Independent monitoring of councils' adherence to the requirements embodied in the Act and related guidance material is needed to identify the effectiveness of those requirements, and if and where reform might be needed.

Source: VCEC (2005), *Housing Regulation in Victoria: Building Better Outcomes*, p.417

The VCEC did acknowledge that increasing reliance on development contributions raised the question of local government financing generally, something that fell outside its remit (p.411).

The Commission did not pursue the question of the marginal cost of providing infrastructure in response to some submitters' concerns over their impact on affordability. It felt that factors other than local body infrastructure charges, including land shortages and cheap finance, played a bigger role in affordability, and that the shift to upfront charges rather than paying over time should not affect it. The average cost per lot is small relative to other factors (p.421). Evidence presented by the Department of Sustainability and Environment indicated that impact or developer charges amounted to 12% of average land and development charges (of \$32,507). Utility charges under state legislation accounted for 53% and stamp duties and registration charges for the balance (35%).

The VCEC also noted a "growing consensus among economists that almost all of any developer contribution is passed on to the ultimate consumer in the long run" (p.420).

It concluded that "the cost represented by development contributions is not an adequate measure of the extent to which they affect housing affordability" and that "it is hardly appropriate to attach the odium of higher costs (and diminished affordability) to the instrument used to raise the money to pay for infrastructure" (p.422).

Australian Productivity Commission, 2009, 2011

A recent review of Public Infrastructure Financing by the Australian Productivity Commission noted the proliferation of development contributions since the 1980s, and their diverse scope (Chan et al., 2009). This was seen to reflect increasing demands for infrastructure associated with expansion, rising service level expectations, and the possibility that the demand for lower-density housing had increased the cost of infrastructure supply. At the same time, there is a growing commitment to economic instruments to promote more efficient investment.

The review notes that when a nexus does not exist between a development, infrastructure, and expenditure, the contributions become little more than a tax on development. On the other hand, if there is a connection there should be advantages by way of more efficient resource decisions to the extent that they are passed on to home buyers in prices.

This presumes that buyers have choices and that their choices reflect varying infrastructure costs and services from place to place. It also assumes that the charges are well founded in terms of both the integrity of the nexus and the cost of the asset provided. Over- or under-pricing might arise from poor design specification – a particular risk if subject to monopoly supply – or poor timing. In particular, a delay relative to expectation would inflate the apparent resource costs of a particular development.

The authors also noted:

- substantial unspent contributions;
- significant variability across jurisdictions.

An analysis of 2005–06 contributions across the 152 local councils in New South Wales indicated that the ten with the highest impact fee revenues accounted for 42% of the total received. Further analysis reveals significant variability even among the top ten: cash contributions amounted to 16% of operating revenue in Liverpool, 11% in Ku-ring-gai, but just 2% in the City of Sydney. They accounted for 6% of revenue in the top ten and 2% in the other 142 jurisdictions.

The figures also reveal significant unspent funds.¹⁵³ Liverpool, for example, had an opening balance (accumulated contributions) of \$61.2m, received \$21.5m in cash and \$4.8m in interest on the account over the year, but spent only \$20m (76% of all revenue to the contributions account). At the end of the year the balance account had grown by 10% and was equivalent to 60% of all annual revenue. While retention of this magnitude reflects the lumpiness of anticipated capital works, it also represents a transfer from the development community which is likely to be reflected in property prices. If nothing else, the interest accruing to the account reflects the cost to developers of early payment for services. The figure across all jurisdictions in that year was over \$66m. Not all councils recorded positive movements in their contributions accounts.

Infrastructure Charges Task Force, Queensland, 2011

The Infrastructure Taskforce (IFT) was appointed by the Queensland Government to report on the current regime, including opportunities to simplify charges, provide greater certainty, and consider alternative arrangement for financing trunk infrastructure. It was also seen as timely in support of a government initiative to manage growth following something of a downturn, with infrastructure charges seen by many stakeholders as potentially contributing to the growth management initiatives being pursued by the Queensland government (p.7).

Based on reviewing practice in other states and their similar reviews, submissions and presentations by interested and expert parties, and consultation based on a draft report, the Taskforce made ten recommendations to implement a simplified regime, summarised as (pp.10-12):

1. Adopt principles to improve current infrastructure: certainty, transparency and accountability, equity and reasonableness, simplicity and consistency, efficiency and economic impacts;
2. Implement a maximum standard charges framework as specified by the Taskforce;
3. Put in place arrangements, specified by the taskforce, to “manage the payment, distribution, and apportionment of charges”, which deals with discretion around subsidies to reduce the maximum charge, distribution of funds across local government-controlled networks, transitional arrangements for water and waste water networks, split of water charges between residential and non-residential uses;
4. Maximum standard charges to be applied in a standard planning regime;
5. Maximum standard charges to be set for three years subject to transitional arrangements;

¹⁵³ The common experience in New Zealand appears different. Most councils receive less than expected, with significant funds already spent. This reflects a depressed economy and the inherent difficulty of providing infrastructure ahead of demand, the nature, location and timing of which is difficult to predict, a problem exacerbated where zoning provisions result in sporadic and geographically diverse development.

6. Maximum standard charges to be escalated according to the PPI Construction Index;
7. Charges to be monitored and subject to ex-post evaluation;
8. The government to undertake reforms for infrastructure planning and charging beyond three years with a number of provisions nominated by the Taskforce;
9. Local government to explore administrative improvements.

Appendix F Housing initiatives

Programme name	Description	Dates and expenditure	Results
Growth Fund – Pūtea Whakatipu	For providers that can deliver affordable and social housing at scale in the long term.	2011/12, \$22.35m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovation Fund (HIF)
Niche fund – Pūtea Kaupapa Motuhake	For providers working at a small local scale, or with a specific client group.	2011/12, \$5.0m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovation Fund (HIF)
Māori fund – Pūtea Māori	Seeks to promote sustainable communities for Māori, and the use of Māori freehold or Māori reserve land for housing.	2011/12, \$3.0m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovation Fund (HIF)
Rural fund – Pūtea Taiwhenua	Seeks to promote sustainable rural communities, and the use of Māori freehold or Māori reserve land for housing.	2011/12, \$5.0m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovative Fund (HIF)
Gateway Housing Scheme	Gateway Housing Scheme enables first-home buyers, or community housing organisations, to defer payment (which is capped) for Crown and Housing New Zealand Corporation (HNZC) land for up to ten years, whilst they design, build, and begin to pay for their house.	This programme commenced in October 2010	Seven organisations have completed registration of interest and have been found to be eligible for Gateway land. To date 17 properties have been confirmed in Hobsonville and a further 15 sites have been identified throughout the country as available for Gateway.
Welcome Home Loans	Welcome Home Loans require no deposit for a loan of up to \$200,000 and then 15% on the amount above that (capped at \$350,000). The eligibility criteria are principally that they be first-home buyers or in a similar financial position, and their combined income be less than \$85,000.00 a year (two borrowers). HNZC insures the loans that are made by banks and other private lenders.	This programme commenced in September 2003. \$37m non-current liability in 2011/12.	7,851 loans have been approved between 2003/04 and 2010/11 inclusive. 1,405 loans were approved in 2010/11 against a target of 1,750. Demand softened over the last year as a result of subdued market conditions.

Programme name	Description	Dates and expenditure	Results
KiwiSaver Deposit Subsidy	Householders can apply for a KiwiSaver deposit subsidy if they have belonged to a KiwiSaver scheme, a complying fund, or exempt employer scheme for at least 3 years.	First home withdrawal became available from July 2010. Estimated cost to date of \$3.7 million.	Demand for the product has continued with 929 subsidies approved and paid out in 2010/2011.
Tenant Home Ownership Programme	This scheme offers qualifying state sector tenants the opportunity to buy the state house they occupy.	This programme commenced in September 2009.	59 state houses have been sold to their tenants since September 2009. 37 of these sales were in 2010/2011.
Kāinga Whenua Loans	Extension of the Welcome Home Loan programme which is designed to assist individuals to build on multiply owned Māori land. HNZN insures the loans which are provided by Kiwibank to assist individuals build on multiply-owned Māori land. Kiwibank is the sole lender for Kāinga Whenua loans. The scheme was intended to improve access to finance which was seen as one of the greatest barriers for Māori wishing to build on multiple owned Māori land.	Programme commenced 2009/2010.	1 loan settled in 2009/2010 and a further 2 loans in 2010/2011. HNZN's implementation costs were \$100,000 plus staff time. HNZN has recommended changes to the scheme which include removing income caps and other restrictive criteria with the view to developing the scheme as a standalone product in the future.
Housing Innovation Fund	The Housing Innovation Fund aims to increase the availability of rental and home ownership opportunities for low income households and people with special needs by working with local government, third sector and community organisations.	Scheme commenced in 2003. Estimated total funding in loans and capital grants of \$131.8 million or an average of \$16.5 million per annum.	Since the Housing Innovations Fund was introduced in 2003, the fund has delivered 1,752 new or upgraded units (an average of 219 per annum) and leveraged an additional \$115 million from social housing organisations.
Māori Demonstration Partnerships	This programme was introduced in 2009/2010 to encourage sector growth and deliver affordable rental housing and home ownership opportunities to Māori. Some of the opportunities may be on multiply-owned Māori land.	In the first two years of the programme grants and loans have totalled \$9.5 million.	The initiative has approved 44 new dwellings in 2009/2010 and 40 housing units in 2010/2011.
Rural Housing Programme	The Rural Housing Programme aimed to improve sub-standard rural housing and was a needs-based programme. The main rural housing areas are Northland, East Cape, and the Eastern Bay of Plenty. The scheme includes suspensory loans for essential repairs and the provision of infrastructure.	2001/2002 was the start of a 5 year strategy/programme which was subsequently extended. Total expenditure since 2001/2002 is estimated at \$139.5 million.	Over 3,500 dwellings have benefited from the programme over the last 10 years.

Programme name	Description	Dates and expenditure	Results
Community Owned Rural Rental Loans	Provided loans for community-based organisations to build their rental housing stock. Units were leased back to HNZN for the first 10 years of their existence. This was the first HNZN programme that provided loans to Māori trusts and, as such, represented a step forward for encouraging trusts to provide housing on Māori land.	The scheme commenced in 2002 and finished in 2008. \$6.6 million provided to Māori trusts in low-cost loans.	Results are unclear, but the programme spent less than the target amount for each year. As at June 2011 there were seven outstanding loans.
Papakāinga Lending Scheme	The Papakāinga Loan was intended to help individuals and households to build on Māori land, when they might not have qualified for a commercial mortgage because the land was held in multiple-ownership.	Scheme was introduced in 1985 and ceased in 2009.	The Corporation approved 44 loans between 2000 and 2009. Papakāinga Loan funding ceased at the end of June 2009. This programme was replaced with the Kāinga Whenua loans.
Special Housing Action Zones	This was originally a much larger programme, which was a joint initiative between TPK and HNZN. TPK was responsible for the capacity support to Māori communities and organisations, and HNZN was responsible for the capital funding for a suite of housing initiatives developed by Māori communities and organisations able to enter into contractual arrangements. Funding was used for a range of purposes, including paying for professional services such as planners and architects, and funding home maintenance programmes.	2000 to present \$0.456million in 2010/2011	The programme has been instrumental in progressing a number of housing developments. This includes two of the successful Māori Demonstration Partnership Fund projects in 2010/11.
Healthy Housing Programme	Healthy Housing is a joint project between HNZN and District Health Boards (DHBs). The programme works with HNZN tenants in selected areas. Healthy Housing aims to raise awareness of infectious diseases like meningococcal disease, rheumatic fever, tuberculosis, cellulitis and respiratory disease, improve access to health and social services, reduce the risk of housing-related health problems, and reduce overcrowding.	2001 to present Total cost over the last 5 years is approximately \$50 million	Evaluation of the Healthy Housing programme has shown significant reductions in potentially avoidable housing-related hospitalisation rates for children in participating households. The programme was also effective at reducing hospitalisations in the total participant population.
Shared Equity Scheme	Two year pilot study designed to improve the home ownership affordability of modest-income households. The shared equity scheme allows potential home owners to bridge the difference between the maximum they can borrow from Kiwibank and the amount they need to buy a house up to a maximum value of 30% of the house price with a loan from HNZN. The loan has no interest costs and requires no repayment until the house is sold. If the value of the property increases or decreases so does the amount that needs to be repaid.	Commenced 30 th June 2008 and was not continued after the end of the second year.	The scheme was budgeted to provide assistance to approximately 700 low to middle-income households.

Programme name	Description	Dates and expenditure	Results
Low Deposit Rural Loans	Home loan for low-income households with 3% deposit. Applicants completed a home ownership education course and had to prove that they could service a loan. Information and coaching/brokering support was provided for up to five years to help manage defaults in the most common default period.	Introduced in 1984 and closed in 2008. As at June 2011 there were 332 outstanding low-deposit rural lending loans.	142 loans were provided between 2000 and 2009 for houses on multiply-owned Māori land and as at June 2011 there were 111 outstanding loans.

Source: OAG, HNZA, MSD, Hon Phil Heatley (2010) 'Gateway to improve housing affordability' accessed at <http://www.scoop.co.nz/stories/PA1010/S00123/gateway-to-improve-housing-affordability.htm> Accessed 7/11/2011

References

- Abelson, P., 2010. A review of funding measures for urban infrastructure with special reference to developer charges, betterment (value uplift) taxes and turnover taxes, Working Paper. [pdf] Sydney: Applied Economics. Available at: <<http://www.appliedeconomics.com.au/pubs/2010/>>
- Allan, N. Yin, Y. and Scheepbouwer, E., 2008. *A study into the cyclical performance of the New Zealand construction industry*. Christchurch: CAENZ.
- The American Institute of Architects, 2007. *Integrated project delivery: a guide*. Washington, DC: AIA.
- André, C., 2010. *A bird's eye view of OECD housing markets*, OECD Economics Department Working Papers No. 746. Paris: OECD.
- Anthony J., 2003. The effects of Florida's Growth Management Act on housing affordability. *APA Journal*, 69(3), pp.282-95.
- ANZ, 2011. *The ANZ property investment survey*. Auckland: ANZ.
- Argy, S. and Johnson, M., 2003. *Mechanisms for improving the quality of regulations: Australia in an international context*, Staff Working Paper. Melbourne: Australian Productivity Commission.
- Auckland Regional Council, 2010. *Future land use and transport planning project*. Auckland: Auckland Regional Council.
- Auckland Regional Growth Forum, 1997. *A place sought by many: a brief history of regional planning for Auckland's growth*. Auckland: Auckland Regional Council.
- Auckland Regional Growth Forum, 1999a. *Auckland regional growth strategy*. Auckland: Auckland Regional Council.
- Auckland Regional Growth Forum, 1999b. *Metropolitan urban limits: impact on land prices*. Auckland: Auckland Regional Council.
- Australia's Future Tax System Review Panel, 2010. Report to the Treasurer. [online] Canberra: Commonwealth of Australia. Available at: <http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm>
- Australian Productivity Commission (APC), 2004. *First home ownership*, Report 28. Melbourne: Australian Productivity Commission.
- Australian Productivity Commission (APC), 2011. *Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments*, Research report. Melbourne: Australian Productivity Commission.
- Batchelar, M., Clark, W., Hare, J. and Hopkins, D., 2012. *Quake – a year on: How safe are NZ buildings?* Structural Engineering Society, NZ Society for Earthquake Engineering and consulting engineers in association with IPENZ. [Online] Available at: http://www.nzherald.co.nz/technology/news/article.cfm?c_id=5&objectid=10786784 21
- Baker, M., Zhang, J. and Howden-Chapman, P., 2010. *Health Status of Housing New Zealand applicants and tenants: key indicators for 2004-2008*. [Online] Available at: <www.healthyhousing.org.nz/publications>
- Barker K., 2004a. *Review of housing supply: delivering stability: securing our future housing needs*. London: Treasury/HMSO.
- Barker, K., 2004b. *Review of housing supply: delivering stability: securing our future housing needs*, Final Report – recommendations. London: HM Treasury.

- BCSPP (Building and Construction Sector Productivity Partnership), 2011a. *Productivity partnership draft research action plan*. Wellington: BCSPP.
- BCSPP (Building and Construction Sector Productivity Partnership), 2011b. *Built environment skills strategy: draft for consultation*. Wellington: BCSPP.
- BCSPT (Building and Construction Sector Productivity Taskforce), 2009. *A modern efficient and productive New Zealand built infrastructure industry*. Wellington: BCSPP.
- Beach, R., Webster, M. and Campbell, K.M., 2005. An evaluation of partnership development in the construction industry. *International Journal of Project Management*, 23(8), pp.611-21.
- Beacon Pathway Ltd, 2010. *The determinants of tenure and location choices of 20-40 year old households in the Auckland region*. Wellington: CHRANZ (Centre for Housing Research, Aotearoa New Zealand).
- Beer, A. and Faulkner, D., 2009. *21st century housing careers and Australia's housing future*, AHURI Final Report No. 28. Melbourne: Australian Housing and Urban Research Institute.
- Bell, P., 2010. Prefab housing: potential for development. *Build Magazine*, June/July Issue.
- Benfield, F., Kain, M. and Chen, D., 1999. *Once there were greenfields: how urban sprawl is undermining America's environment, economy, and social fabric*. Washington, DC: Natural Resources Defense Council.
- BERL (Business and Economic Research Limited), 2008. *The economic impacts of immigration on housing*. Wellington: CHRANZ and Department of Labour.
- Bierre, S., Howden-Chapman, P., Signal, L. and Cunningham, C., 2007. Institutional challenges in addressing healthy low-cost housing for all: learning from past policy. *Social Policy Journal of New Zealand*, 30, pp.42-64.
- Bollard, A. and Smith, M., 2006. *Major global developments in the new millenium*. Paper prepared for address to the Canterbury Chambers of Commerce, January 2006.
- Bourn, C., 2001. *Modernising construction*. London: United Kingdom National Audit Office.
- Briggs, P. and Ng, T., 2009. *Trends and cycles in New Zealand house prices*. Wellington: Reserve Bank of New Zealand.
- Buckett, N., Marston, N., Saville-Smith, K., Jowett J. and Jones, M., 2011. *Preliminary BRANZ 2010 house conditions survey report – second edition*, BRANZ Study Report 240. Judgeford: BRANZ.
- Buddle Findlay and Sapere Research Group, 2011. *Review of the application of joint and several liability to the building and construction sector*. Wellington: Department of Building and Housing.
- Buiter, W.H., 2010. Housing wealth isn't wealth. *Economics*, [online] Available at: <<http://www.economics-ejournal.org/economics/journalarticles/2010-22>> [Accessed 5 August 2010].
- Burchell, R., Dolphin, W. and Galley, C., 2000. *The costs and benefits of alternative growth patterns: the impact assessment of the New Jersey state plan*. New Jersey Office of State Planning: Trenton, NJ.
- Burchell, R.W. and Listokin, L., 1978. *The fiscal impacts handbook*. New Brunswick, NJ: Center for Urban Policy Research.
- Burchell, R.W., Listokin, D. and Galley, C.G., 2000. Smart growth: more than a ghost of urban policy past: less than a bold new horizon. *Housing Policy Debate*, 11(4), pp.821-79.
- Burleigh Evatt Consulting Limited, 2009. *Research on understanding investment decision-making*. Wellington: Department of Building and Housing.
- Calthorpe, P. and Fulton, W., 2001. *The regional city*. Washington, DC: Island Press.

- Carney, M., 2011. *Housing in Canada*. Remarks by the Governor of the Bank of Canada to the Vancouver Board of Trade. [speech] 15 June 2011, Vancouver, British Columbia. Available at: <<http://www.bankofcanada.ca/2011/06/speeches/housing-in-canada>> [Accessed 9 December 2011].
- Center for Housing Policy, 2010. *Revise impact fee structures*. [online] Available at: <http://www.housingpolicy.org/toolbox/strategy/policies/impact_fees.html>
- Chan, C., Forwood, D., Roper, H. and Sayers, C., 2009. *Public infrastructure financing: an international perspective*, Staff Working Paper. Melbourne: Australian Productivity Commission.
- Cheshire, P., 2007. *Are mixed communities the answer to segregation and poverty?* York: Joseph Rowntree Foundation.
- CHRANZ (Centre for Housing Research, Aotearoa New Zealand), 2007. *Affordable housing: the community housing sector in New Zealand*. Report prepared by Capital Strategy / SGS Economics and Planning. Wellington: CHRANZ.
- CHRANZ (Centre for Housing Research, Aotearoa New Zealand), 2011. *Why have residential construction costs increased more than costs in other sectors of the New Zealand economy?* Unpublished discussion paper.
- CityScope Consultants, 2009. *Organising integrated urban development project*, Research Report 379. Wellington: New Zealand Transport Agency.
- CityScope Consultants, 2011. *Improving the design, quality and affordability of residential intensification in New Zealand*. Wellington: CHRANZ.
- Coleman, A. 2007. *Credit constraints and housing markets in New Zealand*, Discussion Paper DP2007/11. Wellington: Reserve Bank of New Zealand.
- Coleman, A. and Landon-Lane, J., 2007. *Housing markets and migration in New Zealand 1962-2006*. Wellington: Reserve Bank of New Zealand.
- Coleman, A., 2008. *Inflation and the measurement of savings and housing affordability*. Motu Working Paper, 08-09. Wellington: Motu Economic and Public Policy Research.
- Coleman, A., 2009. *The long term effects of a capital gains tax in New Zealand*. Motu Working Paper, 09-13. Wellington: Motu Economic and Public Policy Research.
- Coleman, A. and Scobie, G., 2009. *A simple model of housing rental and ownership with policy simulations*. Treasury Working Paper 09/05. Wellington: New Zealand Treasury.
- Coleman, A., 2010. *Squeezed in and squeezed out: the effects of population ageing on the demand for housing*, Motu Working Paper, 10-01. Wellington: Motu Economic and Public Policy Research.
- Coleman, A. and Grimes, G., 2010. Betterment taxes, capital gains and benefit cost ratios. *Economic Letters*, 109, pp.54-56.
- Coleman, A. (in progress). *The effects of government supply-side interventions in the housing market*. New Zealand Treasury Working Paper (forthcoming).
- Commerce Commission, 2011a. *Fletcher Concrete receives Commerce Commission warning: behaviour at risk of breaching the Commerce Act*. Wellington: Commerce Commission.
- Commerce Commission, 2011b. *Construction sector research – key findings*. Wellington: Commerce Commission.
- CFLRI (Commission for Financial Literacy and Retirement Income), 2010. *Review of retirement income policy*. Wellington: Retirement Commission.

- Committee of Inquiry into Inflation Accounting, 1976. *Report of the Committee of Inquiry into inflation accounting*, Parliamentary Paper H4, House of Representatives. Wellington: New Zealand Government Printer.
- Community Housing Aotearoa, 2011a. *Community Housing Aotearoa homepage*. [online] Available at: <<http://communityhousing.org.nz>> [Accessed 7 December 2011].
- Community Housing Aotearoa, 2011b. *Annual report 2010-2011*, Wellington: Community Housing Aotearoa.
- Construction Industry Board, 1997. *Code of practice for the selection of subcontractors*. London: Institute of Civil Engineers.
- Cowan, J. and MacLennan, D., 2008. *Visions for social housing: international perspectives*. London: The Smith Institute.
- Crimp, R., 2008. *Summary report on research and publications related to engineering lifelines and critical infrastructure around the world*, Report 1. Auckland: National Engineering Lifelines Committee.
- Crossan, D., Feslier, D. and Hurnard, R., 2011. *Financial Literacy and Retirement Planning in New Zealand*. [Online] Available at: <<http://www.financialliteracyfocus.org/files/FLatDocs/FinLit%20New%20Zealand.pdf>> [Accessed 19 January 2012].
- Darroch Limited, 2010a. *Auckland region housing market assessment*. Wellington: CHRANZ.
- Darroch Limited, 2010b. *Sub-Regional Housing Demand in the Northland Region*, Wellington: CHRANZ.
- Davey, J., 2006. Ageing in place: the views of older homeowners on maintenance, renovation and adaptation. *Social Policy Journal of New Zealand*, 26.
- Davis, N., 2007. *Construction sector productivity*, draft scoping report for the House Prices Unit (unpublished).
- Davis, N., 2010. Poor productivity needs turning around: what do we know about productivity in the construction industry, and what can be done to improve it? *Build Magazine*, June/July issue.
- Deloitte, 2007. *Real estate investment trusts for residential properties report*. Wellington: DBH.
- Demographia, 2011. *7th annual Demographia international housing affordability survey*. Belleville, Illinois: Performance Urban Planning.
- Department of Building and Housing, 2008. *Identification and analysis of building consent, inspection and approval costs*. [online] Available at: <<http://www.dbh.govt.nz/bc-approval-costs>> [Accessed 9 December 2011].
- Department of Building and Housing, 2010a. *Introduction to the Unit Titles Act 2010*. Wellington: DBH.
- Department of Building and Housing, 2010b. *New Zealand housing report 2009/2010: structure, pressures and issues*. Wellington: DBH.
- Department of Building and Housing, 2010c. *Residential consumers' experience of commissioning building work: a survey of homeowners who obtained building consents in 2005*. Wellington: DBH.
- Department of Building and Housing, 2011a. *Building Act review 3: stepped consenting*. [pdf] Available at: <<http://www.dbh.govt.nz/UserFiles/File/Building/Building%20law%20and%20compliance/Paper-3-Stepped-consenting.pdf>> [Accessed 9 December 2011].
- Department of Building and Housing, 2011b. *Estimated building costs*. Wellington: DBH.

- Department of Building and Housing, 2011c. *Update on implementing the Building Act review*. [pdf] Available at: <<http://www.dbh.govt.nz/UserFiles/File/Building/Building%20law%20and%20compliance/fact-sheet-BAR-results-next-steps.pdf>> [Accessed 9 December 2011].
- Department of Building and Housing, 2011d. *Multiproof*. [online] Available at: <<http://www.dbh.govt.nz/multiproof>> [Accessed 9 December 2011].
- Department of Labour (DoL), 2012. *Employment and Unemployment - December 2011 quarter*. [Online] Available at: <<http://www.dol.govt.nz/lmr/lmr-hlfs.asp>> [Accessed 16 March 2012].
- Department of the Prime Minister and Cabinet, 2008. *Final report of the House Price Unit: house price increases and housing in New Zealand*. Wellington: DPMC.
- Dewes, W., Walzl, T. and Martin, D., 2011. *Owner Aspirations Regarding the Utilisation of Māori Land*. Wellington: Te Puni Kōkiri.
- DLA Phillips Fox, 2008. *Review of Financial Contributions and Development Contributions*. [Online] Available at: <<http://www.lgnz.co.nz/library/>>. [Accessed 29 July 2011].
- Downs, A., 2005. Smart growth: why we discuss it more than we do it. *Journal of the American Planning Association*, Autumn Issue, 71(4).
- Drage, D., Munro, A. and Sleeman, C., 2005. An update on Eurokiwi and Uridashi bonds. *Reserve Bank of New Zealand Bulletin*, 68(3).
- DTZ New Zealand, 2008. *The intermediate housing market in New Zealand*. Wellington: CHRANZ.
- Duany, A., Speck, J. and Lydon, M., 2010. *The smart growth manual*. New York: McGraw-Hill.
- Dunbar, R. and McDermott, P., 2011. *Improving the design, quality and affordability of residential intensification in New Zealand*. Wellington: CHRANZ.
- van Duren, J. and Dorée, A.G., 2008. *An evaluation of performance information procurement system (PIPS)*. Paper presented at the 3rd international IPPC conference, Amsterdam 28-30 August 2008.
- Dwyer, G.E. and Wilkinson, B.D., 2011. *Efficient infrastructure charges*, Background working paper. Wellington: New Zealand Productivity Commission.
- Earthquake Commission New Zealand, 2011. *Statistics: claims overview*. [online] Available at: <<http://canterbury.eqc.govt.nz/news/progress/statistics>> [Accessed February 2012].
- The Economist, 2011. Bringing down the house. *The Economist*, 24 September 2011. [online] Available at: <<http://www.economist.com/node/21530077>>
- Education Counts, 2011. *Retention and achievement – updated data tables*. [online] Available at: <http://www.educationcounts.govt.nz/statistics/tertiary_education/retention_and_achievement>
- EECA (Energy and Efficiency Conservation Authority), 2011. *About the warm up New Zealand: heat smart programme*. [online] Available at: <<http://www.energywise.govt.nz/node/18453>>
- Eom, C.S.J., Yun, S.H. and Paek, J.H., 2008. Subcontractor evaluation and management framework for strategic partnering. *Journal of Construction Engineering and Management*, 134, p.842.
- Evans, L. and Guthrie, G., 2011. U.S. house prices: the role of fundamentals. Working paper, Victoria University of Wellington. [online] Available at: <<http://ssrn.com/abstract=1852186>> [Accessed 4 November 2011].
- Evans-Cowley, J.S. and Lawhon, L.L., 2003. The effects of impact fees on the price of housing and land: a literature review. *Journal of Planning Literature*, 17(3), pp.351-59.

- Feinstein, L., Lupton, R., Hammond, C., Mujtaba, T., Salter, E., and Sorhaindo, A., 2008. *The public value of social housing: a longitudinal analysis of the relationship between housing and life chances*. London: Smith Institute.
- Flynn, M., Carne, S. and Soa-Lafoa'i, M., 2010. *Māori Housing Trends 2010*. Wellington: Housing New Zealand Corporation.
- Frank, J.E., 1989. *The cost of alternative development patterns*. Washington, DC: Urban land Institute.
- Galster, G., 2009. *Neighbourhood social mix: theory, evidence and implications for policy and planning*. Haifa, Israel: Technion University workshop.
- Gillham, O., 2002. *The limitless city*. Washington, DC: Island Press.
- Gilroy, L.C., Staley, S.R. and Stedron, S., 2007. *Statewide growth management and housing affordability in Florida, Background*, 53. Tallahassee, Florida: James Madison Institute.
- Girouard, N., Kennedy, M., van den Noord, P. and Andre, C., 2006. *Recent house price developments: the role of fundamentals*, OECD Economics Department Working Paper, No. 475. Paris: OECD.
- Glaeser, E.L. and Gyourko, J., 2003. *The impact of building restrictions on housing affordability*. New York: Federal Reserve Bank of New York.
- Glaeser, E.L., Gyourko, J. and Saiz, A., 2008. *Housing supply and housing bubbles*, National Bureau of Economic Research, Working paper 14193.
- Glaeser, E.L. and Shapiro, J.M., 2002. *The benefits of the home mortgage interest deduction*, Discussion Paper, no. 1979. Cambridge, MA: Harvard Institute of Economic Research.
- Goodchild, B., Booth, C. and Henneberry, J., 1996. Impact fees: a review of alternatives and their implications for planning practice in Britain. *Town Planning Review*, 67(2), pp.161-81.
- Gray, J. and Hoare, C., 2009. Suburban intensification and indigenous settlement patterns. In: K. Stuart and M. Thompson-Fawcett, eds. 2009. *Tāone Tupu Ora: Indigenous knowledge and sustainable urban design*. Wellington: Steele Roberts Aotearoa.
- Green, R., Green, K., Malpezzi, S. and Mayo, S., 2005. Metropolitan specific estimates of the price elasticities of supply of housing, and their sources. *American Economic Review*, 95(2), pp.334-9.
- Grimes, A. and Aitken, A., 2007. *Housing supply and price adjustment*, Motu Working Paper 06-01. Wellington: Motu Economic and Public Policy Research.
- Grimes, A. and Aitken, A., 2010. Housing supply, land costs and price adjustment. *Real Estate Economics*, 38(2).
- Grimes, A. and Liang, Y., 2009. Spatial determinants of land prices: does Auckland's metropolitan urban limit have an effect? *Applied Spatial Analysis and Policy*, 2(1), pp.23-45.
- Grimes, A. and Young, C., 2010. *Pacific peoples' homeownership in New Zealand*. Wellington: Motu Economic and Public Policy Research.
- Grimes, A., Aitken, A. and Kerr, S., 2004. *House price efficiency: expectations, sales, symmetry*, Motu Working Paper 04-02. Wellington: Motu Economic and Public Policy Research.
- Grimes, A., Aitken, A., Mitchell, I. and Smith, V., 2007. *Housing supply in the Auckland region 2000-2005*. Wellington: CHRANZ.
- Gurran, N., Ruming, K. and Randolph, B., 2010. *Planning, government charges, and the costs of land and housing*. Melbourne: Australian Housing and Urban Research Institute.

- Gurran, N., Ruming, K., Randolph, B. and Quintal, D., 2008. *Planning, government charges, and the costs of land and housing*, Positioning Paper 109. Melbourne: Australian Housing and Urban Research Institute.
- Gyourko, J., 2009. Housing supply. *Annual Review of Economics*, 1, pp.295-318.
- Gyourko, J., Saiz, A. and Summers, A., 2008. A new measure of the local regulatory environment for housing markets: the Wharton Residential Land Use regulatory Index. *Urban Studies*, 45(3), pp.693-729.
- Hall, V., McDermott, J. and Tremewan, J., 2006. *The ups and downs of New Zealand house prices*, Motu Working Paper 06-03. Wellington: Motu Economic and Public Policy Research.
- Hare, J., Clark, W., Batchelar, M. and Hopkins, D. in association with the Institution of Professional Engineers of New Zealand, 2012. Quake a year on: how safe are NZ buildings? *The New Zealand Herald*, 21 February 2012. [online] Available at: <http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10786784>
- Harris, C., 2005. Slow train coming: the New Zealand state changes its mind about Auckland transit, 1949-56. *Urban Policy and Research*, 23, pp.37-55.
- Hartmann, A. and Caerteling, J., 2010. Subcontractor procurement in construction: the interplay of price and trust. *Supply Chain Management: An International Journal*, 15(5), pp.354-62.
- Haurin, D.R., Parcel, T.L. and Haurin, R.J., 2001. *The impacts of home ownership on child outcomes*, Low Income Home Ownership Working Paper Series 01.1-4. Cambridge, MA: Joint Center for Housing.
- Heatley, Hon. P., 2010. *Government acts on housing recommendations*. [press release], 9 December 2010, Available at <<http://www.beehive.govt.nz/release/government-acts-housing-recommendations>> [Accessed 7 December 2011].
- Heatley, Hon. P., 2011. *More funding to grow volume of social housing*. [press release], 14 June 2011, Available at: <<http://www.beehive.govt.nz/release/more-funding-grow-volume-social-housing>> [Accessed 7 December 2011].
- Heikkila, E.J. and Davis, W., 1997. Rethinking fiscal impacts. *Journal of Planning Education and Research*, 15, pp.201-11.
- Hinton, M., 2011. *Procurement processes in the building and construction industry: a New Zealand Productivity Commission resource paper*. Wellington: New Zealand Productivity Commission.
- Holcombe, R.G. and Williams, D.W., 2008. The impact of population density on municipal government expenditures. *Public Finance Review*, 36(3), pp.359-73.
- House Prices Unit, 2008. *Final report of the House Prices Unit: house price increases and housing in New Zealand*. Wellington: Department of the Prime Minister and Cabinet.
- HNZC (Housing New Zealand Corporation), 2009. *Statement of intent 2009-2010*. Wellington: HNZC.
- HNZC (Housing New Zealand Corporation), 2010a. *Annual report 2009/2010*. Wellington: HNZC.
- HNZC (Housing New Zealand Corporation), 2010b. *Statement of intent 2010-2013*. Wellington: HNZC.
- HNZC (Housing New Zealand Corporation), 2010c. *Strategic plan 2010-2015*. Wellington: HNZC.
- HNZC (Housing New Zealand Corporation), 2010d. *Kainga whenua loan – a guide to lending for housing on multiple-owned Māori land*. [online] Available at: <<http://www.hnzc.co.nz/about-us/our-publications/Brochures/kainga-whenua-loan-guide/kainga-whenua-loan-guide.pdf>> [Accessed 7 December 2011].
- HNZC (Housing New Zealand Corporation), 2011a. *Annual Report, 2010/11*, Wellington: HNZC.

- HNZC (Housing New Zealand Corporation), 2011b. *Statement of Intent 2011-14*, Wellington: HNZC.
- HNZC (Housing New Zealand Corporation), 2012. *Glenn Innes redevelopment*. [Online] Available at: <<http://www.hnzc.co.nz/housing-improvements-and-development/developments/glenn-innes-redevelopment>> [Accessed 20 March 2012].
- Housing Shareholders Advisory Group, 2010. *Home and housed – a vision for social housing in New Zealand*. Wellington: Department of Building and Housing.
- 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. Effects of insulating existing homes on health inequality: cluster randomised study in the community. *British Medical Journal*, 334(7591), p.460.
- Howden-Chapman, P., Peita, M. and Pene, G., 2009. *Living the Tokelauan way in New Zealand*. Dunedin: University of Otago.
- Huang, H. and Tang, Y., 2011. Residential Land Use Regulation and the US Housing Price Cycle Between 2000 and 2009. *Journal of Urban Economics*, (70)2-3, pp.32-46.
- Ihlanfeldt, K.R. and Shaughnessy, T.M., 2004. An empirical investigation of the effects of impact fees on housing and land markets. *Regional Science and Urban Economics*, 34, pp.639-61.
- Independent Inquiry into Local Government Rates, 2007. *Funding local government*. Wellington.
- Infrastructure Charges Taskforce, 2011. *Final report: recommended reform of local government development infrastructure charging arrangements*. Brisbane.
- Infrastructure and Urban Strategies Branch, 1995. *Smart planning not sprawl*, Discussion Paper 5, Australian Urban and Regional Development Review. Canberra: Department of Housing and Regional Development.
- Ingerson, J., 2011. *Average house size by age*. Wellington: Quotable Value.
- Ingram, G., Carbonell, A., Yu-Hung Hong, and Flint, A., 2009. *Smart growth policies: an evaluation of programs and outcomes*. Cambridge, MA: Lincoln Institute of Land Policy.
- Inland Revenue Department/New Zealand Treasury, 2009. *The taxation of capital gains*, Background paper for Session 3 of the Victoria University of Wellington Tax Working Group. Wellington: New Zealand Treasury.
- Invercargill City Council v Hamlin* [1994] 3 NZLR 513, New Zealand Court of Appeal.
- Jackson, N., 2011. *The demographic forces shaping New Zealand’s future: what population ageing [really] means*. Hamilton: National Institute of Demographic and Economic Analysis, University of Waikato.
- Jacobsen, V., 1999. Resource management in New Zealand: rhetoric, reality and reform. *Agenda*, 6(3) pp.225-36.
- Jaine, R., Baker, M. and Venugopal, K., 2008. Epidemiology of acute rheumatic fever in New Zealand. *Paediatrics and Child Health*, 44, pp.64-71.
- James, B. and Saville-Smith, K., 2010. *Children’s housing futures*. Wellington: CHRANZ.
- James, C., 2009. *Australian homes are biggest in the world*. [pdf] CommSec Economics. Available at: <<http://images.comsec.com.au/ipo/UploadedImages/craigjames3f6189175551497fada1a4769f74d09c.pdf>>
- Jones, C., Smith, F., Mead, A., Greenway, A. and Taylor, J., 2009. *Housing stock and housing demand, Tauranga city*. Unpublished research paper.

- Joyce, S., 2011. *Budget 2011: Canterbury trades training boost*. [press release], 12 May 2011, Available at: <<http://beehive.govt.nz/release/budget-2011-canterbury-trades-training-boost>>
- Karaitiana, R., 2010. Skills in focus as productivity tops agenda. *Build Magazine*, June/July Issue.
- Kenly, K., 2003. Strewth mate! It's a rip off. *Architecture New Zealand*, 4, July/August Issue.
- Latham, M., 1994. *Constructing the team: joint review of procurement and contractual arrangements in the United Kingdom construction industry*, Final Report. London: HMSO.
- Law, D. and Meehan, L. (in progress). *Housing affordability in New Zealand: evidence from household surveys*. Wellington: New Zealand Productivity Commission/Treasury working paper (forthcoming).
- Leggat-Cook, C., 2007. *Housing demand, supply and affordability in the Auckland region: a review of current trends and drivers*. Report prepared for Social and Economic Research and Monitoring, Auckland Regional Council. Auckland: Auckland Regional Council.
- Li, G., 1985. *Exploring data tables, trends and shapes*. New York: Wiley.
- Local Government Forum and Property Council New Zealand, 2010. *Taxing growth and development: a critical review of the role of development and financial contributions*. Christchurch: Local Government Forum.
- Local Government New Zealand, 2003. *Local government knowhow: best practice guide to development contributions*. Available at: <<http://library.lgnz.co.nz/cgi-bin/koha/opac-searchresults.pl?subjectitems=Best%20Practice>>
- Love, P.E.D., Irani, Z. and Edwards, D.J., 2004. A rework reduction model for construction projects. *Engineering Management*, 51(4), pp.426-40.
- Maani, S., Vaithianathan, R. and Wolf, B., 2006. *Inequality and health: is housing crowding the link?*, Motu Working Paper 06-09. Wellington: Motu Economic and Public Policy Research.
- McDermott Fairgray Group, 1993. *Options for urban development: economic evaluation report to Christchurch City Council*.
- McDermott Miller Group, 1992. *Christchurch Urban Growth Strategy – a framework for economic evaluation*. Report to Christchurch City Council.
- Mcintosh, J. and Gray, J., 2011. Growth misconduct in the suburbs. In: K. Witten, W. Abrahamse and K. Stewart, eds. *Growth misconduct? Avoiding sprawl and improving intensification in New Zealand*. Wellington: Steele Roberts, Aotearoa.
- Maclsaac, N. and Whahid, A.N., 1996. The Grameen Bank: its institutional lessons for rural financing. In: K.P. Jameson and C.K. Wilbur, eds. *The political economy of development and underdevelopment*. New York City: McGraw-Hill Inc., pp.596-609.
- Maclennan, D., 2008. *Focussing on the housing system and modernising housing policy*. Wellington: CHRANZ.
- McLeod Committee, 2001a. *Issues Paper – Tax Review 2001*. Wellington: New Zealand Treasury.
- McLeod Committee, 2001b. *Final Report – Tax Review 2001*. Wellington: New Zealand Treasury.
- Maltbys, 2010. *Cost and indices of building construction*. [pdf] Available at: <http://www.maltbys.co.nz/pages/latestNews/BIA_Indicies.pdf>
- Māori Land Court, 2011. *Māori land update June 2011 - Nga ahuatanga o te whenua, Pipiri 2011*, Wellington: Te Kooti Whenua Māori The Māori Land Court.

- Maré, D. and Stillman, S., 2008. *Housing markets and migration: evidence from New Zealand*, Motu Working Paper 09-06. Wellington: Motu Economic and Public Policy Research.
- Mason, G. and Osborne, M., 2007. *Productivity, capital-intensity and labour quality at sector level in New Zealand and the UK*, Working Paper. Wellington: New Zealand Treasury.
- Minister of Housing, 2011a. *Establishing a funding mechanism for future social housing provision*. Wellington: Social Housing Unit.
- Minister of Housing, 2011b. *Budget 2011 – funding the new direction for social housing*. [online]. Available at: <<http://www.socialhousingunit.govt.nz/assets/documents-2/cabinet-paper-shu-feb2011-budget.pdf>>
- Ministry for the Environment, 2010. *Building competitive cities: reform of the urban and infrastructure planning system*, Technical Working Paper, October. [online] Wellington: Ministry for the Environment. Available at: <<http://www.mfe.govt.nz/publications/rma/building-competitive-cities-technical-working-paper/>>
- Ministry of Pacific Affairs, 2009. *Exploring housing options for Pacific families*. Wellington: Ministry of Pacific Island Affairs.
- Ministry of Social Development, 2006. *New Zealand living standards 2004*. Wellington: Ministry of Social Development.
- Morrison, P., 2008. *On the falling rate of home ownership in the New Zealand market*. Wellington: CHРАНZ.
- Mumford, P.J., 2011. *Enhancing performance-based regulation: lessons from New Zealand's building control system*. Wellington: Institute of Policy Studies.
- National Association of Home Builders, 2008. *Impact fee handbook*. Washington, DC: NAHB.
- National Infrastructure Unit, 2011. *National Infrastructure Plan, 2011*. Available at: <<http://www.infrastructure.govt.nz/plan>>
- Nielsen Associates, 1987. *Net community benefits of urban consolidation: city of Melbourne*. Melbourne: Nielsen Associates.
- Nelson, A.C, ed., 1988. *Development impact fees: policy rationale, practice, theory and issues*. Chicago: American Planning Association.
- Neutze, M., 1997. *Funding urban services: options for physical infrastructure*. Sydney: Allen & Unwin.
- Newport Partners, Davidson, M.D. and Virginia Polytechnic Institute and State University, 2008. *Impact fees and housing affordability: a guidebook for practitioners*. Washington, DC: US Department of Housing and Urban Development.
- Newton, P.W. ed., 1997. *Re-shaping cities for a more sustainable future*. Research Monograph Australian Housing and Urban Research Institute.
- Nicholas, J.C. and Nelson, A.C., 1988. Determining the appropriate development impact fee using the rational nexus test. *Journal of the American Planning Association*, Winter, pp.56-66.
- Nickell, S., 2009. The British housing market: what has been happening? *Oxonomics*, 4(1).
- NZIER (New Zealand Institute of Economic Research), 2011. *Industry productivity and the Australia-New Zealand income gap*. [pdf] Available at: <http://nzier.org.nz/sites/nzier.org.nz/files/WP2011-03%20-%20Industry%20productivity%20and%20the%20Australia-New%20Zealand_final_0.pdf>
- O'Donovan, B. and Rae, D., 1997. The determinants of house prices in New Zealand: an aggregate and regional analysis. *New Zealand Economic Papers*, 31(2).

- OECD, 2004. *Annual report on competition policy developments in New Zealand: September 2003 – August 2004*. [pdf] Paris: OECD. Available at: <<http://www.oecd.org/dataoecd/36/52/34720907.pdf>>
- OECD, 2011. *OECD economic survey: New Zealand*. Paris: OECD.
- Office of the Auditor General, 2011. *Government planning and support for housing on Māori land*. Wellington: Office of the Auditor General.
- Office of the Minister of Building and Construction, 2011. *Building Act review: regulation of guarantee products and services*. Wellington: Department of Building and Housing.
- Page, D., 2000. *Communities in the balance. The reality of social exclusion on housing estates*. York: Joseph Rowntree Foundation.
- Page, I.C., 2007. *Changing housing demand*, BRANZ Study Report 183. Wellington: BRANZ.
- Page, I.C., 2008. *New house price modelling*, BRANZ Study Report 196. Wellington: BRANZ.
- Page, I.C., 2010. *Construction industry productivity*, BRANZ Study Report 219. Wellington: BRANZ.
- Page, I.C., 2011. *Construction industry data to assist in productivity research*, BRANZ Study Report 256. Wellington: BRANZ.
- Page, I.C. and Curtis, M.D., 2011. *Firm productivity variations*, BRANZ Study Report 254. Wellington: BRANZ.
- Page, I.C. and Fung, J., 2011. *Cost efficiencies of standardised new housing*, BRANZ Study Report 247. Wellington: BRANZ Ltd.
- Pawson, H. and Mullins, D., 2010. *After council housing. Britain's new social landlords*. Basingstoke: Palgrave Macmillan.
- Perry, B., 2010. *2010 Household incomes report: background and summary of key findings*. Wellington: Ministry of Social Development.
- Perry, B., 2011. *Household incomes in New Zealand: trends in indicators of inequality and hardship 1982-2010*. Wellington: Ministry of Social Development.
- Phibbs, P. and Young, p., 2005. *The health, employment and education benefits of public housing. Research and Policy Bulletin 54*, Melbourne: AHURI.
- Pinneagar, S., Randolph, B. and Davison, G., 2011. *Feasibility study to undertake a multi-year research project. Addressing spatial concentrations of social disadvantage*. Melbourne: AHURI.
- Pomeroy, S., 2011. *The contribution and potential of the private residential rental market: US case study; Canada case study*. Unpublished papers.
- PricewaterhouseCoopers, 2009. *Weathertightness – estimating the cost*. Wellington: Department of Building and Housing.
- PricewaterhouseCoopers, 2008. *Report on institutional investment in residential rental accommodation*. Wellington: Department of Building and Housing.
- PricewaterhouseCoopers, 2011. *Valuing the role of construction in the New Zealand economy: a report to the Construction Strategy Group*. Auckland: PWC.
- Quintini, G., Martin, J. and Martin, S., 2007. *The changing nature of the school-to-work transition process in OECD countries*. Bonn: Institute for the Study of Labor.
- Rawlinsons, 2011. *Rawlinsons construction cost guide 2011, Edition 16* (Australia). Perth: Rawlinsons Publishing.

- Rawlinsons, 2011. *Rawlinsons New Zealand construction handbook, Edition 26*. Auckland: Rawlinsons Media Limited.
- Riazi, M., Riazi, S., Skitmore, M. and Cheung, Y.K.F., 2011. *The use of supply chain management to reduce delays: Malaysian public sector construction projects*. Denmark: Aalborg University.
- Rohe, W., McCarthy, G. and Van Zandt, S., 2000. *The social benefits and costs of home ownership: a critical assessment of the research*, Working Paper 0-01, May. Washington, DC: Research Institute for Housing America.
- Rosen, S., 1974. Hedonic prices and implicit markets: product differentiation in pure competition. *Journal of Political Economy*, 82(1) pp.34-55.
- Roskrige, M., Grimes, A., McCann, P. and Poot, J., 2011. *Home ownership and social capital in New Zealand*, Motu Working Paper 11-02. Wellington: Motu Economic and Public Policy Research.
- Saiz, A., 2010. The geographic determinants of housing supply. *Quarterly Journal of Economics*, 125(3), pp.1253-96.
- Samuelson, P.A., 1964. Tax deductibility of economic depreciation to insure invariant valuations. *Journal of Political Economy*, 72(6).
- Sánchez, C. and Johansson, Å., 2011. *The price responsiveness of housing supply in OECD countries*, OECD Economics Department Working Papers, No. 837. Paris: OECD.
- Sapere Research Group, 2011. *Population movement after natural disasters: a literature review and assessment of Christchurch data*. Wellington: Sapere Research Group.
- Saville-Smith, K. and Fraser, R., 2004. *National landlords survey: preliminary analysis of the data*. Wellington: Centre for Research, Evaluation and Social Assessment.
- Savings Working Group, 2011. *Saving New Zealand: reducing vulnerabilities and barriers to growth and prosperity*, Final Report to the Minister of Finance. Wellington.
- Shapiro, B., 2005. Inherent conflicts in the construction industry and the structure of contracts. Paper presented at: *The fundamentals of construction contracts: understanding the issues*, Vancouver BC.
- SHORE, 2011a. *The contribution and potential of the private residential rental market in New Zealand – landlords' survey*. Auckland: SHORE and Whāriki Research Centre, Massey University.
- SHORE, 2011b. *The contribution and potential of the private residential rental market in New Zealand – tenants' survey*. Auckland: SHORE and Whāriki Research Centre, Massey University.
- Short, J.R., 2006. *Urban theory: a critical assessment*. New York: Palgrave MacMillan.
- Skidmore, M. and Peddle, M., 1998. Do development impact fees reduce the rate of residential development? *Growth and Change*, 29, pp.383-400.
- Small, J., 2007. *Non-rates funding options available to local authorities*. Auckland: Local Government Rates Inquiry Covec Ltd.
- Social Housing Unit, 2011. *Funds 2011/12*. [online] Available at: <<http://www.socialhousingunit.govt.nz/funds-2011-12>> [Accessed 7 December 2011].
- Social Housing Unit, 2011. *Terms of reference*. Available at: <<http://www.socialhousingunit.govt.nz/about/terms-of-reference>> [Accessed 7 December 2011].
- Statistics New Zealand, 2003. *What is the extent of crowding in New Zealand? An analysis of crowding in New Zealand households 1986–2001*. Wellington: Statistics New Zealand.
- Statistics New Zealand, 2008. *Housing indicators 2008*. Wellington: Statistics New Zealand.

- Statistics New Zealand, 2010a. *Apartment dwellers: 2006 census*. Wellington: Statistics New Zealand.
- Statistics New Zealand, 2010b. *Industry productivity statistics 1978–2008*. Wellington: Statistics New Zealand.
- Statistics New Zealand, 2010c. *Subnational family and household projections: 2006 (base) – 2031 update*. Wellington: Statistics New Zealand.
- Statistics New Zealand, 2011a. *Value of building work put in place*. [online] Available at: <http://www.stats.govt.nz/browse_for_stats/industry_sectors/Construction/value-of-building-work-info-releases.aspx>
- Statistics New Zealand, 2011b. *Business demography tables*. [online] Available at: <http://www.stats.govt.nz/tools_and_services/tools/TableBuilder/business-statistics.aspx>
- Statistics New Zealand, 2011c. *Household economic survey (Income): year ended June 2011*. [online] Available at: <http://www.stats.govt.nz/browse_for_stats/people_and_communities/Households/HouseholdEconomicSurvey_HOTPYeJun11.aspx> [Accessed 9 December 2011].
- Statistics New Zealand, 2011d. *Internal migration: migration by age*. Wellington: Statistics New Zealand.
- Stroombergen, A., 2004. *The effects of the Accommodation Supplement on market rents*, MSD Working Paper 02/04. Wellington: Ministry of Social Development.
- Tax Working Group, 2010. *A tax system for New Zealand's future*. Wellington: Victoria University of Wellington.
- Te Puni Kōkiri, 2011. *In focus – Whanau Ora*. [online] Available at: <<http://www.tpk.govt.nz/en/in-focus/whanau-ora>> [Accessed 7 December 2011].
- Te Rūnanga o Ngāi Tahu, 2010. *ANZ Ngāi Tahu Financial Knowledge Survey*. Wellington: Financial Literacy and Retirement Income Commission.
- Treasury, 2011a. *August monthly economic indicators*. Wellington: New Zealand Treasury.
- Treasury, 2011b. *Core Crown expense tables*. [online] Available at: <http://www.treasury.govt.nz/budget/forec_asts/befu2011/092.htm> [Accessed 23 February 2012].
- Treasury, 2012. *Release of 2011 Treasury briefings to incoming ministers: regulatory quality*. Wellington: New Zealand Treasury.
- Trubka, R., Newman, P. and Bilsborough, D., 2008. *Assessing the costs of alternative development paths in Australian cities*. Fremantle: Curtin University Sustainability Policy Institute.
- UCL and Deloitte, 2007. *Shaping and delivering tomorrow's places: effective practice in spatial planning*. London: Royal Town Planning Institute.
- UDIA, 2006. *The 2006 UDIA state of the land: national land supply study and consultation paper*. Epping, NSW: Urban Development Institute of Australia.
- US Department of Housing and Urban Development, 1993. *Impact fees and the role of the state: guidance for drafting legislation*. Upper Marlboro, Maryland: NAHB Research Center.
- US Department of Housing and Urban Development, 2008. *Impact fees and housing affordability: a guide for practitioners*. Washington, DC: Newport Partners.
- Victorian Competition and Efficiency Commission, 2005a. *Inquiry into the regulation of the housing construction sector and related issues*. Final Report. Melbourne.

- Victorian Competition and Efficiency Commission, 2005b. *Housing regulation in Australia: building better outcomes*. Final report. Melbourne.
- Waldegrave, C., King, P., Walker, T. and Fitzgerald, E., 2006. *Māori housing experiences: emerging trends and issues*. Wellington: Centre for Housing Research, Aotearoa New Zealand and Te Puni Kōkiri.
- Walsh, C., 1992. Who should pay for urban infrastructure? *National Housing Convention*, Hamilton Island.
- Yates, J., Randolph, B. and Holloway, D., 2006. Are housing affordability problems creating labour shortages?, *AHURI Research Bulletin*, Issue 72, June.

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