

National Housing Supply Council

Housing Supply and Affordability Issues 2012–13

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Executive summary

This report marks a change to how the National Housing Supply Council publishes its work. The Council will now look at specific issues and themes in this *Housing Supply and Affordability Issues* publication each year. It will also publish its annual assessment of the balance between housing supply and underlying demand, as well as what is happening to housing affordability, in a shortened State of Supply Report around the middle of the year. The latter will be similar to the *Housing Supply and Affordability — Key Indicators, 2012* report published in June 2012.

There have been recent changes to the Council's terms of reference. Most notably, the Minister for Housing has specifically asked that the Council examine the broader implications for housing supply of urban planning and infrastructure development processes, including transport and telecommunication services. This report was largely completed before the terms of reference were amended. The revised terms of reference can be found in Appendix 1 and on the Council's website.

The housing market remained soft in most areas and market segments over 2012, presenting a difficult operating environment for the industry. As the Council outlined in previous reports, a slow housing market, reflecting sluggish effective demand and fragile confidence, is not necessarily inconsistent with an underlying housing shortage. In fact, a sluggish house purchase market and subsequent low volume of new supply coming onto the market potentially exacerbates the problem of inadequate supply. The shortage is likely to continue to be felt by the more vulnerable in our population, such as would-be buyers with low and insecure incomes, those at the lower end of the rental market and those dependent on government income support payments.

An update on Australians' housing and living arrangements

The release of 2011 Census data has provided the Council with an opportunity to assess how housing and living arrangements have changed over the last decade. This is discussed in Chapter 2, which outlines some important aspects of change in household formation and housing demand.

Housing stock and tenure

Since 2001, detached houses have declined as a proportion of all dwellings, while medium and higher density dwellings have increased. While this has been, to date, a relatively small shift for the total housing stock, building activity data show that there has been a notable change in the balance of type of new properties being built,

consistent with the focus of most capital cities' strategic plans on infill rather than greenfield development and with the impact of increased congestion and travel times on the relative attractiveness of smaller, more expensive dwellings in high-amenity locations. Detached housing still accounts for the majority of new supply but to a lesser degree than has been the case historically. The higher rate of growth of apartments vis-a-vis detached houses is confined to capital cities and most pronounced in Victoria and the Australian Capital Territory (ACT). Across Australia as a whole, detached houses will dominate housing supply for the foreseeable future.

From 2001 to 2011, the total housing stock increased by a total of 17 per cent (equivalent to a compound growth rate of 1.6 per cent per annum), the occupied stock increased by 15.1 per cent (1.4 per cent per annum) and number of detached houses grew by 16 per cent (just over 1.5 per cent per annum).

Tenure patterns have changed significantly, with fewer younger and middle-aged people owning their own home and, across all age groups, fewer owning outright. The rate of home ownership in Australia is being sustained at about 70 per cent of households in private dwellings by the high rate of ownership of the present generation of older people. As time progresses, it now seems certain that the aggregate rate of home ownership will drop and the proportion renting will increase significantly.

Housing occupancy

It is evident that the demographically-driven decline in household size has virtually stopped and that affordability pressures, among other things, are pushing in the opposite direction. There is clear evidence, for instance, of a marked increase in the propensity for Australian-born young adults to live in the parental home.

In 2011, 76 per cent of occupied private dwellings comprised three or four bedrooms. Unsurprisingly, most of these were separate houses, of which 89 per cent had three or four bedrooms. Meanwhile, 82 per cent of flats, units and apartments have one or two bedrooms, while 84 per cent of semi-detached dwellings have two or three bedrooms.

The most significant change in detached housing since 2001 has been the increased proportion with four or more bedrooms: from 32 per cent in 2001 to 36 per cent in 2006 and 39 per cent in 2011. There is anecdotal evidence of a trend in suburban redevelopment that sees larger homes replacing existing smaller houses. Growth in the stock of larger homes may also reflect changes in the purchase price of land — high land prices in and around the larger capital cities lead to changes in who can afford to build in these situations and in the nature of the dwellings they want — and the extension of existing homes to enhance potential capital gains.

Council members are often told that the supply of spare bedrooms in Australian dwellings could accommodate a substantial increase in population and that the policy

challenge is to encourage people to move on from larger homes and to 'right-size' the homes they live in. While having spare bedrooms indicates a capacity to accommodate more people in reasonable comfort, it does not necessarily mean that dwellings are not being fully utilised. Households may put these 'spare' rooms to various uses (for example, study, office, gymnasium, craft or hobby room, children's playroom, guest bedroom or storeroom).

Homelessness

While the majority of the population is able to access adequate housing, between 2001 and 2011 there was an increase in both the number of people recorded as homeless and the number living in other marginal housing. While a myriad of social issues underlie homelessness and the use of marginal housing, the lack of available suitable low-cost housing contributes to people living in these circumstances.

Summary

There have been a number of areas of notable change in the housing circumstances of the Australian population over the last decade. At the most extreme end of the spectrum, there has been an increase in the number of people living in 'severely' overcrowded conditions and other marginal housing. Tenure patterns have changed, with declines in rates of owner occupancy across the population. Couples, both with and without children, have experienced the largest falls in home ownership. There has also been an increase in the share of those approaching retirement age that still have a mortgage. Many of these changes are likely to have been at least partly driven by the increase in house prices over the decade, making it harder for people to get onto the housing ladder and taking out proportionately larger mortgages when they do.

Housing research and findings

The Council has developed a program of research to shed light on contemporary and emerging processes and trends that may impact on future housing needs. These are reported in detail in Chapter 3 and the full reports are available on the Council's website.

Baby Boomers

The first of the post-WWII 'Baby Boom' generation reached the age of 65 in 2011 and will be an important part of the housing market. A number of features are likely to differentiate this age group from previous generations of retirees. A scoping study *Understanding housing and location choices of retiring Australians in the 'Baby Boom'*

*generation*¹ was undertaken for the Council by the *City Futures Research Centre* at the University of New South Wales.

There will be particular challenges and opportunities presented by the Baby Boomers as this especially large cohort moves up the population's age distribution. Most developed countries are faced with a growing number and proportion of older households and associated issues including higher dependency rates, low retirement incomes, declining health and mobility, increasing health system costs and capacity problems, couples' separation and bereavement, and related housing issues. As the bulk of Australia's Baby Boomer 'bulge' moves out of the full time workforce, live considerably longer than previous generations and progress into 'old age', the magnitude of these challenges will increase rapidly.

It is frequently said that the Baby Boomer generation represents a step change in behaviour and expectations. Looking ahead, Baby Boomers are not simply of added interest due to their size as a group but also because their life experience and expectations might lead them to tread quite different pathways — including housing pathways — from those of their predecessors in their later years.

Most of the housing decisions of older households should be seen as integral to, and operating within, the broader housing market. Older households have been, are and will increasingly become key players in the mainstream housing market. It is important, therefore, to understand the residential decisions and behaviours of this cohort and its impact on housing demand, supply and affordability. It is equally important to understand that there are substantial differences within this group, including in its housing choices and likelihood that housing needs and preferences are likely to change when ill health, frailty and widowhood occur. For much of their later life, however, the Baby Boomers, due to their number and longevity, will be a potent force and the subject of considerable interest in the mainstream housing market.

Metropolitan planning frameworks in Australia assume that Baby Boomers, as their children leave the nest and as they retire, will represent an obvious market for smaller properties in well serviced, highly accessible locations, and at the same time they will release family housing in desirable locations in our metropolitan cities. Countering this, the challenge of creating these new communities and the desire to 'age in place' may well be pervasive.

Like anyone else, older people can be expected to grapple with financial as well as non-financial issues when they contemplate a move. While it is appropriate to consider how more 'efficient' use of existing housing stock could be encouraged (to contemplate enablers and incentives to facilitate and promote downsizing), it is also important not to assume that the aged are more inclined than other cohorts to make

1 Pinnegar, S, van den Nouwelant, R, Judd, B and Randolph, B 2012, *Understanding housing and location choices of retiring Australians in the 'Baby Boom' generation*, scoping report prepared for the National Housing Supply Council by City Futures Research Centre, Sydney.

financially efficient or 'rational' housing choices rather than respond to the non-financial attributes of neighbourhoods and homes. Indeed, freed from the need to live near their workplace, some may be attracted to 'sea change' locations that have few of the services that most older people will need sooner or later, and/or they may be heavily influenced by the security and familiarity of their present neighbourhood; the location of family, friends and familiar service providers; the financial and emotional cost of change; the burdensome logistics of moving; declining resilience and adaptability; or simply inertia.

Migration and housing needs

Given the substantial contribution of migration to Australia's population growth and, therefore, to underlying demand for additional housing stock, the Council commissioned a study from the Australian Demographic and Social Research Institute at the Australian National University into permanent and temporary migration² and the impact on dwelling and tenure types and the preferred housing locations of different groups of migrants. This research was undertaken using data sources that were available prior to the release of 2011 Census data.

It found that there are differences in the household and housing characteristics of different groups of permanent and temporary migrants. There are differences in household size, type of household, type of housing and housing tenure among the different visa groups of permanent migrants. For instance, by comparison with skilled migrants, recently arrived humanitarian migrants have larger household sizes and many more rent rather than own their home. Among temporary migrants, overseas students have different housing characteristics from skilled temporary migrants, although both groups are concentrated in the capital cities and in Sydney and Melbourne in particular.

There were also differences between types of migrants' housing arrangements when analysed by characteristics such as country of origin. For example, overseas students from India have different housing characteristics from students from East and Southeast Asian countries such as China and Malaysia. Skilled temporary migrants' housing arrangements also differed by their demographic and employment characteristics.

Unsurprisingly, migrants' household and housing characteristics tend to change as the time since arrival lengthens. While a high proportion of recent migrants are renters, the proportion renting decreases the longer migrants live in Australia, and more become home owners. This is consistent with the findings of earlier studies of the housing characteristics of permanent migrants, including results published by the Council in 2011. Overseas students show this transition in housing tenure with

2 Khoo, SE, McDonald, P, Temple, J and Edgar, B 2012, *Scoping Study of Migration and Housing Needs*, report for the National Housing Supply Council.

duration of residence as well. Household size also decreases the longer a person has lived in Australia.

Household responses to changing housing affordability

The Council commissioned a scoping study on *Household Responses to Declining Affordability*³ from the Centre for Housing Urban and Regional Planning at the University of Adelaide.

While the scoping study did not undertake extensive analysis of changes in households that may be impacted on by increased housing costs relative to income, it notes that the relationship between housing affordability and household change is uneven and it does not occur in isolation. Non-housing factors (such as a loss of employment) also influence both housing affordability and/or changes to household structures. Any analysis of the relationship between changes to household structures and housing affordability is confounded by these inter-relationships and exogenous factors, making it difficult to establish the degree to which housing affordability actually influences change to household types and sizes (and vice versa).

The study concludes that at the 2006 Census somewhere between 135,000 and 167,000 persons were unable to meet their housing needs via the conventional housing market, although the data has since been superseded by the Australian Bureau of Statistics (ABS) release of 2011 data on homelessness.

The study also highlighted the need for further analysis of the data and for discussion and agreement on definitions to establish the number of individuals living in 'non-market' housing. It gives an example of the potential undercount in estimating unmet housing need depending on the extent to which accommodation in non-private dwellings for the aged or the retired is due to a need for extra care or a lack of other options.

The ABS's recently published analysis of homelessness using 2011 Census data shows a substantial increase in overcrowding but similar numbers of persons in other marginal housing in caravan parks and other insecure tenures.

Housing supply responses to changes in affordability

The Council commissioned the property consultancy Urbis Pty Ltd to conduct research on *Housing supply responses to changes in affordability*⁴ to evaluate whether and how the type of housing product being produced has changed in response to affordability concerns and barriers to home ownership.

3 Baker, E, Lester, L, Beer, A and Bunce, D 2012, *Households Responses to Declining Affordability*, National Housing Supply Council commissioned report.

4 Urbis 2012, *Report to the National Housing Supply Council: Scoping Study into Housing Supply Responses to Change in Affordability*, Australia.

The study documents a number of examples of industry innovation in response to rising land, development and construction costs. However, it was not possible, based on the number of interviews undertaken, to accurately identify the extent to which these innovations have been adopted and spread across the industry as a whole.

Beside a few truly innovative, world-class projects (such as off-site manufacture of apartments in building the Eureka Tower and the use of cross-laminated timber frames in constructing the 10-storey Forte Tower, both in Melbourne), evidence of radical innovation in response to declining housing affordability is somewhat limited. Given the risks, this is hardly surprising.

The research indicates that the predominant response to declining affordability is more evolutionary — reduced dwelling and lot sizes, especially in the new home-buyer market segment, with some related changes to design and the use of cheaper or more efficient materials that reduce time (and therefore costs) on site. The bulk of the limited change that has occurred in building processes has been in modifying or refining traditional construction techniques rather than wholesale process re-engineering.

The Council believes that a shift to downsizing lots and the type of homes being produced is a significant change in its own right, with potential implications for the structure and mode of operation of the residential development and construction industry. In the face of rising land prices and more widespread development contributions, it could be argued that this downsizing of products has been essential to meet many consumers' ability to pay and thus maintain sales. But it could also challenge consumers' expectations and bear on modes of development and construction. It is certainly evident that predominant approaches to greenfield development over recent decades are under stress. The recently observed move away from 'traditional' new homes to smaller attached homes and apartments might fail to satisfy some potential buyers and begs the question of whether the demand for these new products is sufficient to sustain the present mix of large-scale master-planned communities and small land developments. Relatively stronger demand for smaller new dwellings created through 'densification' of inner-city areas and existing suburbs in capital cities also potentially challenges the size and structure of greenfield development.

Developments in policy and practice

Over the past four years, the Council has witnessed the proliferation and acceleration of policy review processes bearing on the way in which planning arrangements affect housing supply and affordability, with a growing focus on getting the balance right. This has played out in demands for action from industry bodies and government advisers, policy statements at Commonwealth, State and local government level and a variety of relevant concrete actions. The Productivity Commission's (PC's) investigation of planning arrangements, the Council of Australian Governments

(COAG) Reform Council's report on metropolitan planning and the 2012 Housing Supply and Affordability Reform (HSAR) Working Party's report to COAG convey the concerns and priorities for action.

While much of the burgeoning activity is still in formative stages — notably the planning reform consultative processes under way in New South Wales, Queensland and Victoria — other actions have already made an important difference and shine a light on productive changes that could be applied more generally.

The related need for direct action to enable home ownership in the face of rising land and housing costs and to improve the supply of affordable rental housing has also played out in industry and government circles. Acceptance of small allotments and smaller homes has increased widely at government and industry levels based on the success of early experimentation and has had a profound effect on access to affordable home ownership in many greenfield developments. It has also boosted the development and construction industry's access to what could have been a lost market.

State governments' actions to better focus first home owner programs and stamp duty concessions on new supply and their wider expression and application of affordable housing targets are also having an effect. In the latter regard, the pioneering efforts of the ACT and South Australian governments deserve special mention in the Council's view.

Chapter 4 provides a snapshot of these recent changes in terms of both policy development and what has already been, or will soon be, implemented. It covers a number of reports which each present important analysis and evidence as well as recommendations and findings relevant to governments at all levels. Finally, the Council highlights some of the positive reforms being undertaken at the State, Territory and local government levels to address planning issues and improve affordability. The Council also notes the importance of tracking and evaluating the reforms as they occur so that the efficacy of the reforms can be assessed.

Methodological Issues

The release of 2011 Census data has provided the Council with an opportunity to reassess and evaluate its basis for estimating housing supply and latent or underlying demand as well as the housing shortfall. These are analysed in detail in Chapter 5.

While the Census has provided an up-to-date source of information to assess Australia's housing situation, it has also thrown up a wide range of technical questions to consider.

As a result of the Census, the ABS made a sizeable downward revision to the estimated number of people living in Australia as at August 2011, compared with

what had previously been implied from estimates of population growth since the previous Census in 2006. On the methodology currently employed by the Council to estimate underlying (or latent) housing demand, this would automatically lead to a reduction in the number of households and, consequently, to a downward revision in Council's estimate of housing shortage. However, questions arise as to whether the revised population estimate can be automatically translated into a revised household estimate.

When ABS population estimates are published in mid-2013, they will be revised back to 1991 and the impact of this adjustment will be spread unevenly across the period 1991–2011. As population estimates and changes feed into the Council's methodology for calculating housing demand at several stages in the process, there are clear challenges in producing consistent historic data. Meanwhile, some of the estimates on which the Council's methodology is based — for example, actual and projected household numbers — are unlikely to be updated.

As a consequence, for its next State of Supply Report, the Council will evaluate whether, and if so how, recent estimates of the shortfall need to be revised or whether a new methodology should be adopted.

The release of the preliminary results from the 2011 Census raised a range of issues. Some commentators and analysts suggested that the Census showed there is no housing shortfall. The Council does not agree with this assertion for a variety of reasons. From the Council's perspective, the shortfall is based on how many more homes a given population would require if observed past rates of household formation were unchanged. The Census, on the other hand, simply shows how the population occupies the existing stock.

Household formation rates have changed in each five-year age group since 2001. These changes have an impact on household size over and above the impact that arises from demographic change. Several commentators have missed this point. They have failed to recognise that demographic change alone would have meant that, other things being equal, average household size would have continued to fall. The fact that it has been relatively stable over the past decade means that there have been changes in the rate of household formation. People of the same age are less likely to form households than a decade ago.

Household growth had run above and beyond population and age-related drivers up to 2001. But this turned decisively in the early part of the last decade. In other words, for some reason the rate of household formation slowed from around 2001 to below that which the purely demographic drivers suggested would be the case given the experience of previous decades. The Council believes this is at least partly due to housing availability and affordability.

Conclusions

Looking ahead, the Council aims to refine its assessment of the adequacy of housing supply, including looking to overcome some of the challenges thrown up by the revisions to, and current uncertainty about, population estimates. It will also need to look more closely at its regional analysis. Previous estimates of the balance between housing supply and underlying demand for each State and Territory have included assumptions about interstate migration rates and the destination of new arrivals, driven by past trends. These have changed significantly in many parts of Australia. For instance, between 2006 and 2011 Western Australia overtook Queensland as the State with the fastest rate of population growth.

In addition to addressing data challenges, future work will see the Council taking a stronger interest in urban development patterns and infrastructure. Following the change to its terms of reference, the Council will look in more detail at linkages between housing and infrastructure, including roads and public transport, telecommunications, freight movement and major facilities like schools and public hospitals. This is an important area of work given the role of infrastructure provision and financing to many elements of success in new and expanding communities, as well as to those communities that act as conduits or destinations for an expanding population in a growing city. The Council also recognises the challenge of infrastructure maintenance and renewal in all communities, including those with static or declining populations. The interaction between infrastructure provision, housing supply, amenity and affordability will be the primary focus of the Council's work in this area.

Chapter 1

Introduction

This report marks a change to the format in which the National Housing Supply Council will publish its work.

The Council will now look at specific issues and themes in this *Housing Supply and Affordability Issues* publication each year. It will also publish its annual assessment of the balance between housing supply and underlying demand, as well as what is happening to housing affordability, in a shortened State of Supply Report around the middle of the year. The latter will be similar to the *Housing Supply and Affordability — Key Indicators, 2012* report published in June 2012.

There have been recent changes to the Council's terms of reference, and the updated version is included in Appendix 1. These changes will allow the Council to look at the broader implications for housing supply of the closely linked area of urban planning and infrastructure development. As the changes have been made recently, this report has been compiled in line with the previous terms of reference.

Market backdrop

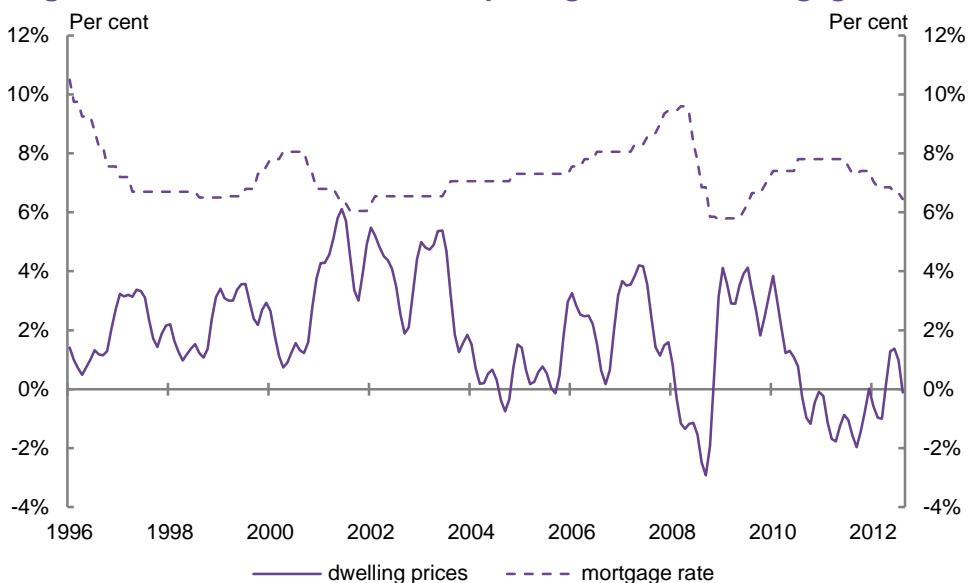
The housing market backdrop remained soft over 2012 and continues to provide a difficult operating environment for the industry. House prices held broadly stable at a national level from the start of the year, while transaction volumes remained low by historic standards and building activity sluggish. Meanwhile the Reserve Bank of Australia (RBA) cut its official cash rate by 1.75 percentage points between November 2011 and December 2012. Mortgage rates fell by around 1.35 percentage points in response. This is likely to support the housing market, although events in the broader domestic economy — and overseas, for that matter — are obviously important. But any improvement, from what was a low base, should be kept in perspective. The market remains fragile, in the Council's view, and modest improvements have only occurred following substantial weakness.

Figure 1.1 shows that, at a national level, transacted house prices fell modestly over the latter part of 2011 and into early 2012. They then recovered a little over the middle part of the 2012 and essentially stabilised thereafter. For the year to December 2012, median prices for all dwellings across Australia were down 0.4 per cent compared to a year earlier.¹ There was significant regional variation within this. Between December 2011 and December 2012, prices declined most significantly in Melbourne (2.9 per cent). Adelaide and Brisbane saw more modest falls (0.8 per cent in both cities), and there was little change in Canberra (down 0.3 per cent) and Hobart (0.1 per cent lower). Prices rose by 8.9 per cent in Darwin and more modestly in Sydney (1.5 per cent) and Perth (0.8 per cent). Prices outside of the capital cities were almost unchanged (a 0.1 per cent increase) over the year for the country as a whole. Non capital city prices increased in New South Wales

1 RP Data — Rismark, hedonic house price indices.

(2.1 per cent) and Queensland (0.9 per cent) and declined in Victoria (3.4 per cent), South Australia (4.2 per cent) and Western Australia (1.8 per cent).²

Figure 1.1 National annual house price growth and mortgage rates



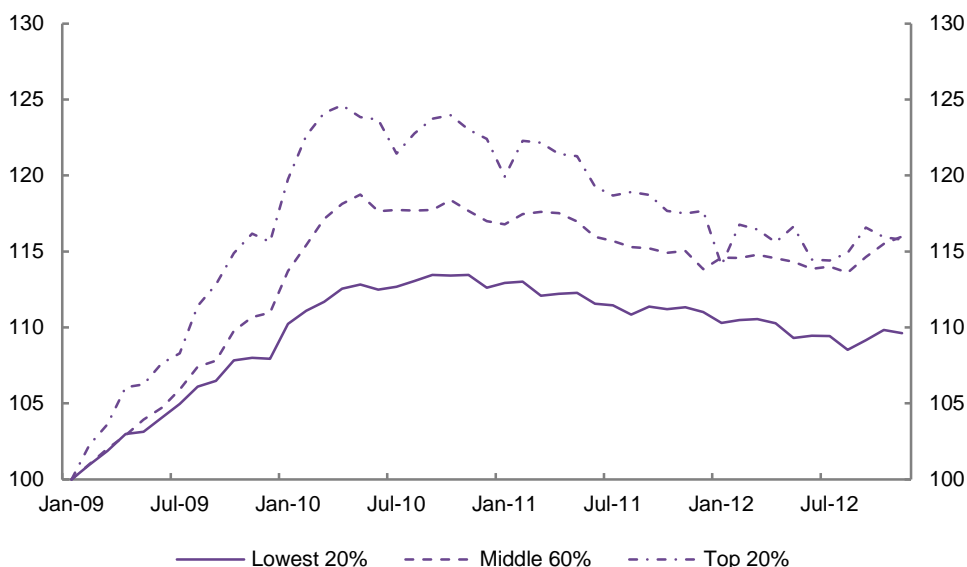
Source: RBA November 2012 *Indicator Lending Rates*, RP Data – Rismark.

Note: House price annual change is a three-month average of monthly data. The mortgage rate is the standard variable rate quoted for banks by the RBA. Many mortgage borrowers do not pay this rate, being either on a fixed rate or some type of discounted rate. While the actual rate is not necessarily representative of the rates paid by most borrowers, changes in it are a reasonable indicator of what is happening in the mortgage market as a whole.

The data behind the stratified split of house price growth (Figure 1.2) shows that falls over the last year have been a little larger in both lower priced suburbs and more expensive areas than in the middle-market suburbs — although more recent tentative rises have been larger in the more expensive areas.

² Data for prices outside of the capital cities are only available for these States.

Figure 1.2 House price indices (suburbs ranked by price) (indexed)



Source: RP Data–Rismark, stratified hedonic indices.

Note: Stratified data are for the average price in suburbs in each price sector. Data are based on the capital cities and indexed to January 2009.

Mortgage commitments are the most timely proxy measure of housing transactions available, albeit an incomplete one as they do not include cash purchases, which typically account for around one-quarter of all sales. Figure 1.3 shows that the total value of loan commitments to owner occupiers on a monthly basis has changed little since mid-2010, with activity materially below that seen in the preceding years — with the exception of the sharp drop in the wake of the global financial crisis (GFC) in 2008 and into 2009. The mini-cycle around the turn of 2011/2012 is likely to have been at least partly due to the phasing out of some first home buyer incentives in New South Wales over that period.³ This likely led to some activity being brought forward and a subsequent fall after the turn of the year. Once this had worked through, activity returned to broadly the level of the two preceding years. The number of mortgage commitments to owner occupiers over the first half of 2012 tells a broadly similar story: it edged up slightly from a year earlier but was down almost 20 per cent from the average volume of the last decade.

³ Recent changes in State policy settings are outlined in more detail in Chapter 4.

Figure 1.3 Mortgage commitments for house purchase, value and volume, Australia, trend



Source: ABS 2012, *Housing Finance*, cat no. 5609.0.

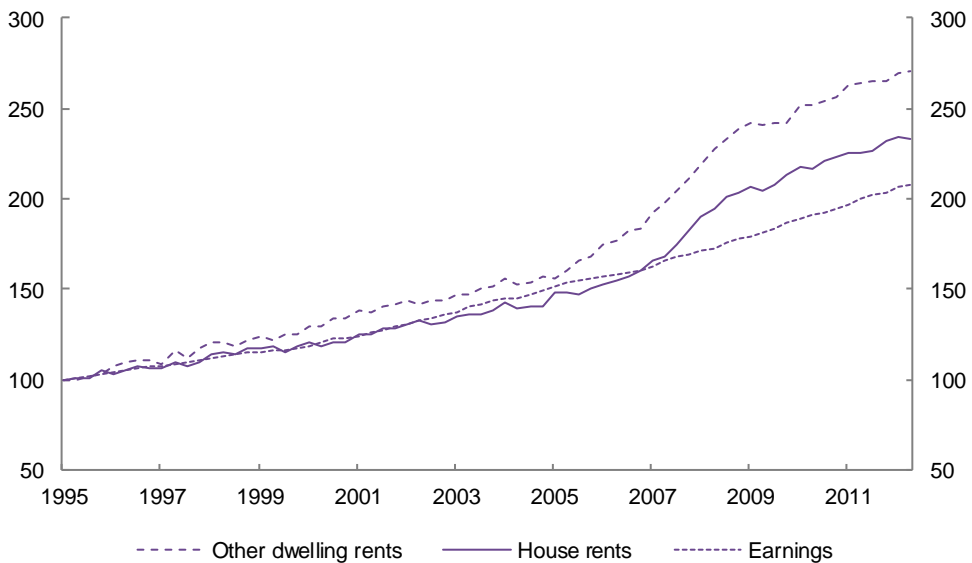
Note: LHS = left-hand scale; RHS = right-hand scale. All data are the ABS' monthly trend series. The value of loans to owner occupiers and investors relate to the left hand scale. The number of loans to owner occupiers (O-O) relates to the right hand scale, with the dotted line indicating the average level of monthly activity over the last decade. Refinancing activity is excluded from owner occupier commitments.

The number of loans to investors is not available, but the value data suggests a similar pattern to that seen in the owner occupier market — that is, activity in 2012 ran above the lows of the GFC and its immediate aftermath but at a low level on a historical comparison. By value, investors' share of housing finance has been broadly stable since 2004, apart from a relatively short-lived decline in the immediate aftermath of the GFC in 2008 and 2009.

Despite the soft home purchase market, rents have increased faster than house prices. This points to a possible pressure point where a lack of available housing is biting. Data from the Real Estate Institute of Australia (REIA) show that rents on houses in capital cities in the second quarter of 2012 were up by 3.2 per cent on a year earlier). Rents on 'other dwellings'⁴ (mostly flats/apartments) were up just over 2 per cent over the year.

4 Rents on other dwellings for Australia as a whole have been estimated by the Council from REIA data for each capital city, weighted by the factors used by the ABS in its *Established House Price Index*.

Figure 1.4 Rents and earnings, Australia (indexed)



Source: ABS 2012, *Average Weekly Earnings*, cat no. 6302.0. REIA October 2012, quarterly median rents on three-bedroom houses. NHSC calculations.

Note: All data are indexed to the first quarter of 1995. Other dwelling rents are calculated from the index for each city, weighted by factors used by the ABS in its *Established House Price Index*.

Compared to a decade ago, the average nominal rent paid is up by 75.8 per cent for houses and 91.8 per cent for other dwellings (mostly flats/apartments) (see Figure 1.4). By comparison, average earnings rose by 57 per cent over the same period⁵ and house prices rose by 69 per cent.⁶ A further factor suggesting that the market remains tight is that vacancy rates remain low, at around 2 per cent.⁷

House building activity also remains sluggish, although there are signs that it may have edged up a little from recent lows. As the Council's previous report⁸ explained, building of public sector housing played a significant role in maintaining overall completion volumes during and immediately after the financial crisis when private sector activity was weak. This softness, coinciding with the phasing out of the rise in public sector activity at the time, means that residential building completions are likely to have been lower in 2012 than in previous years.

Recently there have been some slightly more encouraging signs of an increase in private sector approvals (see Figure 1.5), but it remains to be seen whether these will be sustained. Monthly building approval data can be volatile, particularly the impact

⁵ ABS May 2012, *Average Weekly Earnings, Australia*, average full-time adult earnings, cat no. 6302.0.

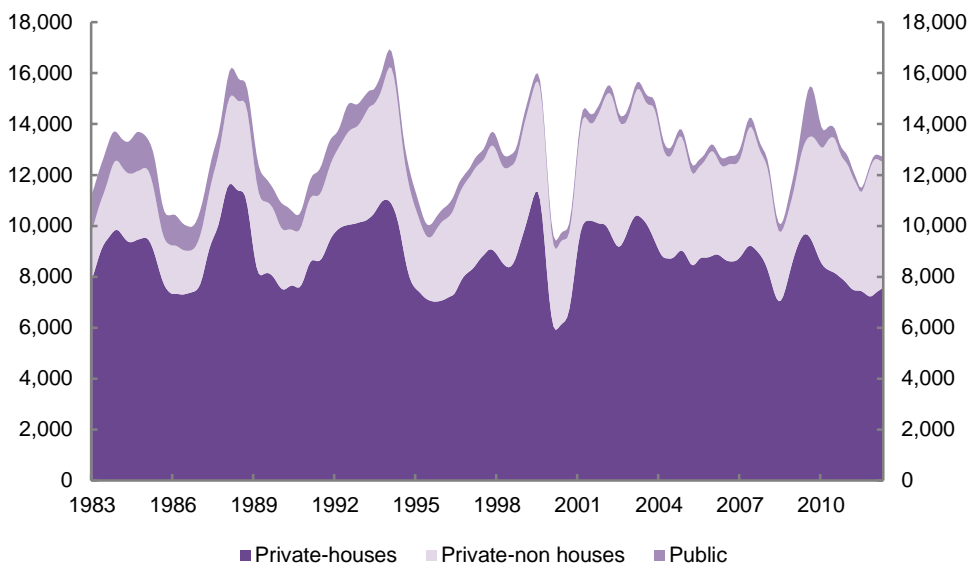
⁶ RP Data – Rismark, eight capital city hedonic house prices.

⁷ Both SQM Research and the REIA report rental vacancy rates near 2 per cent as at mid-2012.

⁸ NHSC 2012, *Housing Supply and Affordability — Key Indicators, 2012*, pp 16 and 17.

of large apartment block projects. The number of approvals relates to the number of dwellings, so approval for a large project can mean a (relatively) large number of dwellings being approved at once. The total number of approvals (both private and public) remains low by historical standards.

Figure 1.5 Residential building approvals, Australia, trend



Source: ABS 2012, *Building Approvals, Australia*, cat no. 8731.0.

Note: Private sector approvals are split into house and non-house (predominantly flats/apartments); public sector approvals are grouped together.

As the Council has outlined in previous reports, a slow housing market, reflecting sluggish effective demand, is not necessarily inconsistent with an underlying housing shortage. In fact, a slow house purchase market and subsequent low volume of new supply coming onto the market potentially exacerbates the problem of inadequate supply. The shortage is likely to continue to be felt by the more vulnerable in society, such as those at the lower end of the rental market and those in need of government support.

Census results

The release of data from the 2011 Census is a key source of information for the Council’s work. It provides an opportunity to recalibrate and investigate key data on population, household formation and housing consumption patterns. Initial investigations are presented in Chapter 2.

The Census data provides evidence of the changing ways in which Australians occupy the housing stock. The analysis points to a decrease in household formation rates

among younger age groups over the last decade, and the population at large forming fewer new households than would have been expected from demographic trends and past household formation patterns. Those in their late teens and early twenties are less likely to form households than a decade ago, and there has been a noticeable increase in the share of Australian-born younger people living with their parents for longer.

There have also been significant changes in the housing tenure of various age groups, particularly a sizeable increase in those nearing retirement age with a mortgage. A range of issues arise from this. In some cases retiring households may need to use lump sum superannuation payments to clear mortgages and in other cases they may need to sell their homes. Financial institutions may, in an environment of limited funding and less appetite for risk, choose to focus on lending to older groups with more established track records and more assets as collateral, possibly at the expense of younger potential first home buyers. A larger share of retirees who do not own their homes outright could also have implications for aged care and how people will fund their retirement.

The current structure and use of the housing stock also throws up challenges. The share of the stock that is flats, apartments and attached houses has increased over the last decade as the industry has adapted to the challenges of the modern economic, planning and social environment. As a consequence the share of dwellings that are detached homes has fallen a little, although it still accounts for three-quarters of all dwellings. Lone-person households occupied a larger share of detached houses in 2011 than in 2001, and a larger share of families lived in flats and attached dwellings. There are many one-, two- and three-person households in relatively large dwellings. This is unsurprising given the ageing population and the fact that many older households will opt to stay in their family homes after their children move out. However, it does point to a potential inefficient distribution of the current housing stock whereby small households often occupy relatively large homes and younger family households end up in smaller homes.

The Census data have provided evidence of the changing ways in which Australians occupy the housing stock. Disentangling how much change is driven by social change and conscious decisions and how much is 'forced' by a lack of available and affordable housing is a difficult task. However, there does appear to be some evidence that rising house prices relative to income and the oft-contested housing shortfall estimated by the Council (relative to the supply required to maintain historical housing consumption patterns) are affecting the population's housing choices.

The initial release of the 2011 Census data in June 2012 led a number of commentators to question whether there actually is a housing shortfall. The Council considers that much of this analysis missed the key point that what the Census actually shows is how potential mismatches in housing demand and supply are reconciled. The aggregate Census data shows how many dwellings and people there are in the country. It cannot be expected to reveal a shortage in its own right.

While it does not provide as detailed evidence as is available from survey data,⁹ the Census does provide evidence of more households facing higher housing costs. Table 1.1 shows the share of households that face mortgage costs of 30 per cent or more of income. This is a broader, and less significant, analysis of households across the entire income spectrum than previous Council work, which focused on lower income within tenure groups, specifically those in the lowest 40 per cent of earners who had a mortgage (and, separately, those who rent). Unlike that analysis it includes those higher up the income spectrum, who are less likely to face the same pressure as those on lower incomes even if they do spend a relatively high proportion of their income on housing, and does not exclude households in other tenures. It may also include a number of older, established households that have refinanced their dwelling for both consumption and investment purposes.¹⁰

Furthermore the analysis in Table 1.1 does not take account of the fact that, due to challenges around housing affordability and more recent issues with accessing finance, recent home buyers may have typically been further up the income distribution than earlier buyers. These buyers are more likely to face higher mortgage costs relative to income. But if this group is nearer the higher end of the income distribution than previously, then their mortgage costs may not be as great an issue as the aggregate analysis suggests, as higher income households have a greater capacity than lower-income households to bear mortgage costs above 30 per cent of income.

This is an illustration of why the income-segmented work previously done by the Council is of greater value. It is not currently possible to analyse available Census data using the same segmentation.

In aggregate, the share of all households that face mortgage costs of more than 30 per cent of income increased noticeably between the 2006 Census and the 2011 Census (Table 1.1). The share of households with mortgage costs of more than 30 per cent of household income remained highest in New South Wales, Western Australia and Victoria. The States with the sharpest increase between 2006 and 2011 were Western Australia and Tasmania. In the case of Tasmania, this was from a relatively low base in 2006.

9 NHSC 2012, *Housing Supply and Affordability — Key Indicators, 2012*, pp 39–46.

10 The RBA in its March 2012 *Financial Stability Review* (pp 53–56) observed that it is older households that are most likely to have taken out additional owner occupier mortgage debt (as well as being the cohort most likely to pay down mortgages) over the last decade.

Table 1.1 Households with mortgage costs of more than 30 per cent of gross household income

	2006	2011	Percentage point change	Proportionate increase
NSW	9.6%	10.5%	0.9%	9.4%
VIC	8.7%	10.1%	1.4%	16.1%
QLD	7.7%	9.7%	2.0%	26.0%
WA	7.8%	10.2%	2.4%	30.8%
SA	6.9%	8.8%	1.9%	27.5%
TAS	5.6%	7.5%	1.9%	33.9%
NT	6.0%	7.7%	1.7%	28.3%
ACT	6.5%	7.8%	1.3%	20.0%
Australia	8.4%	9.9%	1.5%	17.9%

Source: ABS Censuses of Population and Housing, 2006 and 2011.

Note: Data includes households that do not have a mortgage on their dwelling.

Table 1.2 provides the equivalent analysis for the rental sector. Queensland and New South Wales have the highest shares of households facing rents of more than 30 per cent of household income. The sharpest increase between 2006 and 2011 was in the Northern Territory, followed by Tasmania. The higher share facing rental costs of more than 30 per cent of income, compared to those equivalent mortgage costs, is despite the fact that more households have a mortgage on their home than rent. It adds weight to the contention that the greater affordability pressures are found in the rental market.

Table 1.2 Households with rents of more than 30 per cent of gross household income

	2006	2011	Percentage point change	Proportionate increase
NSW	10.7%	11.6%	0.9%	8.4%
VIC	8.1%	9.1%	1.0%	12.3%
QLD	10.3%	11.9%	1.6%	15.5%
WA	7.4%	8.9%	1.5%	20.3%
SA	8.4%	9.3%	0.9%	10.7%
TAS	7.4%	9.5%	2.1%	28.4%
NT	6.8%	9.0%	2.2%	32.4%
ACT	7.1%	8.0%	0.9%	12.7%
Australia	9.3%	10.4%	1.1%	11.8%

Source: ABS Censuses of Population and Housing, 2006 and 2011.

Note: Income includes receipt of Commonwealth rent assistance. Data includes households that do not rent their dwelling.

The Council believes that the various factors outlined support the view of a shortfall — or at least that there are groups who are unable to access housing as readily as earlier cohorts did at the same age. At the most extreme end of the spectrum of housing situations, the ABS reported an increase in homelessness between 2006 and 2011.¹¹ Within this the largest increase was in those living in ‘severely crowded dwellings’ — usual residents of dwellings that need four or more extra bedrooms to accommodate them adequately. There will clearly be those who fall into homelessness categories for social rather than housing-specific reasons, so an increase in these numbers is not in itself indicative of a housing shortage. However, it could at least partly reflect pressures faced by some at the lower end of the housing system (specifically social renting and the low end of private renting) and an increase in demand that cannot be met by the conventional market.

There is clear evidence of a change in household formation patterns since the 2001 Census. Since 2001, fewer households have formed than would have been expected on the basis of past patterns given age and population changes. In other words, people of the same age were less likely to form households in 2011 than in 2001. Meanwhile, the number of group households has risen more rapidly than household growth as a whole — as the ageing population means a larger share of people are older, and older people are more likely to live in smaller households. On a related note, average household size has not declined as much as would have been expected from demographic drivers.

However, the Census has raised a number of points that the Council will explore further. Revised ABS estimates of the number of people resident in Australia at end-June 2011, which arise from new and improved collection and adjustment techniques, present the Council with particular challenges. Historical population estimates are due to be revised by the ABS in mid-2013. There will likely be a considerable delay until official numbers of households for 2011 are produced. However, past household estimates and projections — projections based on earlier trends form a crucial part of the Council’s estimate of underlying demand — are unlikely to be updated, and the impact of revised population estimates on household estimates is not clear. These and other matters, such as concerns about the unoccupied housing estimates in the Census, have contributed to the Council reflecting on how it presents the implications of its approach to estimating underlying housing demand and supply. These issues, which are explored in more detail in Chapter 5, may lead the Council to reassess how it judges the balance between housing demand and supply in future.

Scoping studies

The Council has initiated scoping research that has helped develop its understanding in a number of areas and will enable it to fine-tune further research on important

11 ABS 2012, *2011 Census of Population and Housing: Estimating Homelessness*, cat no. 2049.0.

aspects of demand and supply. This report outlines findings from four separate scoping exercises.

The first focused on those from the Baby Boom generation who reached the age of 65 in 2011. The present and future housing consumption pattern of Baby Boomers will be highly significant for the entire housing system. They will continue to shape mainstream housing outcomes rather than simply represent an interesting demographic group or 'other' in housing, planning and other policy considerations. The study looked at a number of possible housing paths for this group. The possibilities are diverse. They include remaining in the family home long into retirement years, staying in the same area, and moving away (sea changers and tree changers) either from choice or from financial necessity. There is also a potentially more vulnerable group who do not own their own homes and will need to retain or find affordable rental accommodation.

Second, a study of migrants' settlement patterns and their impact on demand for housing found that, unsurprisingly, migrants are a diverse group with a wide variety of experiences. Their situations change the longer they are resident in Australia. There are significant differences between temporary and permanent arrivals and within these groups as well. Given that net overseas migration represents around half of Australia's population growth, a developed understanding of migrants' housing consumption patterns is important for understanding the adequacy of additions to Australia's housing stock.

The Council has long noted the impact of supply and affordability constraints on the formation of households and on housing consumption choices. It has also questioned what choices and trade-offs households make to deal with higher housing costs. The third study considered the feasibility of measuring these trade-offs. It also studied the non-private dwelling sector and estimated that there were between 135,000 and 167,000 people living in non-private dwellings (or other informal arrangements) at the 2006 Census because of the inability of these individuals to access the private dwelling market.

The fourth study commissioned by the Council looked at supply-side responses to affordability challenges and how the industry is changing the type of product it produces. The main conclusion of this report is that the biggest change in recent years has been a reduction in dwelling and lot sizes for new homes. There has also been some innovation in production methods and in materials usage. But the report also noted some challenges faced by the industry in adopting new techniques and processes at a time when it already faces a range of challenges from a softer market. There is a potential role for governments to act as catalysts when partnering with the private sector to deliver new homes.

The results of these studies are discussed in detail in Chapter 3, and the full reports can be found on the Council's website.

Changes in housing and planning policy

Housing policy, urban planning and infrastructure provision have been subject to extensive critique and change over the past couple of years. The Council broadly supports the direction of reform but notes that enactment and implementation are some distance away in many cases. A range of matters still need to be addressed substantially, many of which are interrelated and politically challenging.

The recently released Council of Australian Government (COAG) *Housing Supply and Affordability Reform* report made a number of recommendations as to how the States and Territories could enhance housing supply and affordability. These include making the development assessment process more efficient; making greater use of code-based frameworks for assessing development applications; adopting more consistent and transparent principles for infrastructure charges; and ensuring that planning policy regarding the diversity of lot size and dwelling mix does not constrain the operation of the market. The report also recommended trialling underutilised land principles for land held by the Commonwealth and considering whether housing programs could be made more efficient and effective.

The Australian Government remains a significant player in the housing field and continues to administer a variety of programs aimed at increasing housing supply. These include the National Rental Affordability Scheme, the Housing Affordability Fund, Building Better Regional Cities, the Social Housing Initiative and the National Partnership Agreement on Social Housing. The Council will look into these programs in more detail in future reports. The COAG Reform Council's review of capital city strategic planning systems identified a key point relevant to housing: that no single level of government holds all policy responsibility for or expertise on city strategic planning and so it is important that they work together.

There have been changes to State and Territory regimes both in terms of grants and taxes for housing and in terms of planning regimes. Some of the most high-profile developments have been in New South Wales, where first home owner grants have been targeted solely for new homes rather than for the existing market (as has also happened in Queensland and South Australia) and substantial changes to the planning system have been proposed. Meanwhile the Council of Mayors in South East Queensland has been driving planning reform initiatives to deliver effective and efficient planning systems and spread good practice.

These issues and changes are examined in more detail in Chapter 4.

Chapter 2

An update on Australians' housing and living arrangements

Overview

This chapter uses data from the 2001 and 2011 Censuses to provide a stocktake of housing and types of households and an indication of how Australians' living arrangements have changed over the past decade. Additional data on building activity are used to add a flow perspective to the cross-sectional Census data.

The chapter begins with a brief overview of how the Census measures the population stock of dwellings and households that live in these dwellings. As discussed further in Chapter 5, how Census data are collected and aggregated, and the quality of the data, is exceptionally important for how the Council and other users understand and interpret the state of housing supply relative to the population it accommodates.

Since 2001, detached houses declined as a proportion of all dwellings, while the share of medium- and higher-density dwellings increased. This is consistent with the focus of most capital cities' strategic plans on infill rather than greenfield development and with the impact of increased congestion and travel times on the relative attractiveness of smaller, more expensive dwellings in high-amenity locations. The higher rate of growth in the number of apartments vis-a-vis detached houses is confined to capital cities and most pronounced in Victoria and the Australian Capital Territory (ACT). Across Australia as a whole, detached houses will dominate housing supply for the foreseeable future.

Tenure patterns have changed significantly over the decade, with fewer younger and middle-aged people owning their own home and, across all age groups, many fewer owning outright. It is clear that the rate of home ownership in Australia — about 70 per cent of households living in private dwellings — is being sustained by the high rate of home ownership of the present generation of older people. As time progresses, it now seems certain that the aggregate rate of home ownership will drop.

With regard to living arrangements, it is evident that the demographically driven decline in household size has virtually stopped and that affordability pressures, among other things, are pushing in the opposite direction. There is clear evidence, for instance, of a marked shift in the propensity for Australian-born young adults to live in the parental home.

Strengths and limitations of Census data

The Australian Bureau of Statistics (ABS) conducts a Census of Population and Housing every five years to measure the number of people living in Australia and a variety of aspects of their living conditions and the dwellings in which they live.

Of obvious relevance to the Council's work is the array of information that the Census provides on Australia's dwelling stock and how the population utilises these dwellings.

Census undercount and Post Enumeration Survey

Among the various sources of data, the ABS's five-yearly Census provides the most complete enumeration of population and living arrangements in Australia. While there are a limited number of data items, the number of observations is close to the total population of dwellings. Moreover, the data may be analysed from high levels of aggregation down to small geographic units without unacceptable levels of sampling error, as well as at 'unit record' (individual respondent) level. No other data source on the 'stock' of people, households, families and dwellings comes close to the Census with regard to the completeness and accuracy of the count.

For many reasons, no estimate of the total population is likely to be completely accurate. Despite the ABS's best efforts, a small number of people will be missed in the Census count and some may be counted more than once. As more are missed than counted twice, the net effect is an undercount. As part of its effort to maximise the accuracy of Census data — and of estimates based on those data, such as Estimated Resident Population (ERP) — the ABS conducts a Post Enumeration Survey to measure the extent of under-coverage in the Census and to adjust the population counts based on 'place of usual residence' and 'place of enumeration'.¹ In 2011, the ABS found that the population undercount was equivalent to 1.7 per cent of the population, which is an extremely low rate relative to both previous Censuses and international standards.

The resulting post-Census estimate of Australia's resident population at 30 June 2011 was nearly 300,000 people lower than the ABS' pre-Census estimate. The latter was based on the 2006 Census adjusted, back to 30 June 2006, for under enumeration as estimated by the previous Post Enumeration Survey method and by estimates of subsequent births, deaths and migration. The 2011 post-Census revision of ERP and its impact on Council work are investigated in more detail in Chapter 5 and Appendix 2.

It is important to note that the undercount can bias some other Census statistics because the mix of characteristics of missed people is highly likely to differ from that of counted people.² The housing characteristics in particular of the people missed are likely to be different from those counted: those missed are more likely to be those living in marginal housing. For example, the Council believes that people living in unregulated boarding houses or students living in overcrowded accommodation are less likely to be counted. The sample size of the Post Enumeration Survey does not allow for all such matters to be taken into account

1 ABS 2011, *How Australia Takes a Census*, Information Paper, cat no. 2903.0.

2 *ibid*

when converting Census counts into estimates of the prevalence of various attributes of people, households or dwellings.

It is also important to understand the difference between the two bases on which data are collected and aggregated.

Place of enumeration — This is the place at which the person is counted — that is, where he/she spent Census night. This may not be where he/she usually lives. This count includes people away from their usual residence in another part of the country and overseas visitors. It does not include Australians temporarily overseas on Census night.

Place of usual residence — This is the place where a person usually lives. It may or may not be the place where the person was counted on Census night. Each person is also required to state his/her address of usual residence on the Census form. In effect, the ABS reallocates people who are away from home on Census night back to their usual area of residence. This count also excludes overseas visitors.³

Dwelling supply

Table 2.1 provides a broad overview of the total housing stock in 2001 and 2011. Note that all numbers in the table are Census night counts based on place of enumeration.

3 ABS 2011, *Op. cit.*

Table 2.1 Dwelling type by structure, Australia 2001–2011

Dwelling type	Dwellings '000			Private occupied dwellings (a) '000			People '000		
	2001	2011	Per cent change 2001–2011	2001	2011	Per cent change 2001–2011	2001	2011	Per cent change 2001–11
<i>Private dwellings</i>									
Separate house	5,826.0	6,731.9	15.5	5,189.7	5,864.6	13.0	14,971.5	16,688.2	11.5
Semi-detached, row, terrace, townhouse	699.6	905.7	29.5	603.9	766.0	26.8	1,278.3	1,713.6	34.1
<i>Flat, unit or apartment</i>									
Flat, unit or apartment up to three storeys	798.6	948.3	18.7	643.5	766.0	19.0	1,216.8	1,497.1	23.0
Flat, unit or apartment four storeys and over	228.8	374.1	63.5	162.3	281.2	73.3	364.1	606.8	66.7
Flat, unit or apartment attached to a house	21.4	11.6	-46.0	17.1	9.1	-46.9	31.2	18.1	-42.0
Total conventional private dwellings	7,574.5	8,971.6	18.4	6,616.5	7,686.8	16.2	17,861.8	20,523.8	14.9
<i>Other dwelling</i>									
Caravan, cabin, houseboat	101.7	98.9	-2.7	52.9	47.0	-11.3	162.5	159.0	-2.1
Improvised home, tent, sleepers-out	16.4	14.5	-11.7	6.9	3.8	-44.0	22.2	19.1	-14.2
House or flat attached to shop or office etc	30.6	21.1	-30.9	24.2	15.9	-34.4	61.8	39.2	-36.5
Total other private dwellings	148.7	134.5	-9.5	83.9	66.7	-20.6	246.5	217.4	-11.8
Total private dwellings (b)	7,790.1	9,117.0	17.0	6,744.8	7,760.3	15.1	18,229.9	20,762.3	13.9
Total non-private dwellings (c)	20.1	22.8	13.3				530.5	734.2	38.4
Total (d)	7,810.4	9,140.2	17.0				18,770.5	21,507.7	14.3

Source: 2001 and 2011 Censuses of Population and Housing.

Note: Dwelling counts are based on place of enumeration on Census night.

(a) Private occupied dwellings figures exclude visitor only and other non-classifiable households.

(b) Total private dwellings figures include dwelling structure not stated, so components do not add to total. Total private dwellings figures include dwellings occupied by visitor only and other non-classifiable households.

(c) Includes other non-private dwelling type not listed and non-private dwelling type not stated. Non-private dwellings are counted only when occupied.

(d) Total includes migratory, offshore and shipping dwellings, so components may not add to total.

Occupied and unoccupied dwellings

The 2011 Census counted 9.1 million private dwellings in Australia, of which 422,000 were occupied on Census night by visitor only or non-classifiable households. These dwellings are excluded from further detailed analysis presented in this report. Of the remaining 8.7 million dwellings, 89.3 per cent (7.8 million) were occupied and 10.7 per cent (934,000) were unoccupied. Close to three-quarters (74 per cent) of the dwelling supply were detached (separate) houses.

Compared with a decade previously, the dwelling stock increased by a total of 17.0 per cent (equivalent to a compound growth rate of 1.6 per cent per annum). The occupied stock grew by 15.1 per cent (1.4 per cent per annum) and the number of detached houses increased by 16 per cent (just over 1.5 per cent per annum).

Occupied and unoccupied dwelling counts relate to whether private dwellings were vacant or not on Census night based on place of enumeration rather than place of residence. Caution is advised when using the percentage of private dwellings that were vacant on Census night as a measure of dwellings that are vacant in the sense of 'spare' and available for occupancy — many of the dwellings classified as vacant are holiday homes or vacant because their usual occupants were temporarily absent on Census night. Conversely, holiday homes that were occupied on Census night may be vacant for much of the year. How the Council uses and interprets these data is explored in more detail in Chapter 5.

Table 2.2 shows changes in private dwelling supply across States and Territories. The largest increases in dwelling supply occurred in Western Australia (24 per cent) and Queensland (23 per cent), consistent with their higher rates of population growth. These were also the States with the highest rates of growth in the population living in private dwellings. Queensland experienced identical rates of increase in dwelling stock and population.

Table 2.2 Dwelling supply, Australian States and Territories, 2001–2011

	Occupied private dwellings (a) '000		Unoccupied dwellings '000		Total private dwellings (b) '000		Percentage change	Total population in private dwellings (b)		Percentage change
	2001	2011	2001	2011	2001	2011	2001–2011	2001	2011	2001–2011
NSW	2,232.8	2,471.3	227.9	265.3	2,571.5	2,864.5	11.4	6,139.6	6,691.2	9.0
Vic	1,667.7	1,944.7	182.9	246.7	1,914.2	2,278.0	19.0	4,501.6	5,166.3	14.8
Qld	1,275.4	1,547.3	127.3	177.9	1,482.9	1,826.4	23.2	3,468.3	4,207.4	21.3
SA	567.1	619.0	61.9	83.8	645.9	727.7	12.7	1,418.6	1,534.2	8.2
WA	659.7	794.2	77.1	109.3	772.8	960.7	24.3	1,772.4	2,141.0	20.8
Tas	175.9	192.8	26.9	32.5	208.0	232.4	11.7	442.5	472.2	6.7
NT	55.2	60.9	6.9	8.6	72.0	81.2	12.8	187.8	208.1	10.9
ACT	110.3	129.4	6.9	10.2	121.8	145.2	19.3	296.7	339.7	14.5
Australia (c)	6,744.8	7,760.3	717.9	934.5	7,790.1	9,117.0	17.0	18,229.9	20,762.3	13.9

Source: 2001 and 2011 Censuses of Population and Housing.

Note: Dwelling counts are place of enumeration on Census night.

(a) Occupied private dwellings figures exclude visitor only and other non-classifiable households.

(b) Total private dwellings figures include dwellings occupied by visitor only and other non-classifiable households.

(c) Australian total includes 'Other territories'.

Therefore, components do not add to total.

When looking at the types of dwelling being occupied, separate houses remain the most dominant type of accommodation, continuing to account for over three-quarters of the occupied private dwelling stock in 2011. However, the largest proportional increases since 2001 have been in semi-detached houses (27 per cent increase to 766,000 in 2011) and flats, units and apartments (28 per cent increase to 1,056,200 in 2011). In terms of overall numbers, the largest increase was in separate houses, but the proportional increase was relatively low at 13 per cent. This may be expected given the greater emphasis on infill development and a push to increase the supply of housing within existing urban area boundaries.

Table 2.3 Occupied private dwellings by type of structure (a), 2001–2011

Dwelling type	2001		2011		2001–2011
	'000	Per cent	'000	Per cent	Per cent change
Separate house	5,189.7	76.9	5,864.6	75.6	13.0
Semi-detached, row or terrace house	603.9	9.0	766.0	9.9	26.8
Flat, unit or apartment	822.9	12.2	1,056.2	13.6	28.4
Other dwelling	83.9	1.2	66.7	0.9	-20.6
Dwelling structure not stated	44.4	0.7	6.9	0.1	-84.5
Total private dwellings	6,744.8	100.0	7,760.3	100.0	15.1

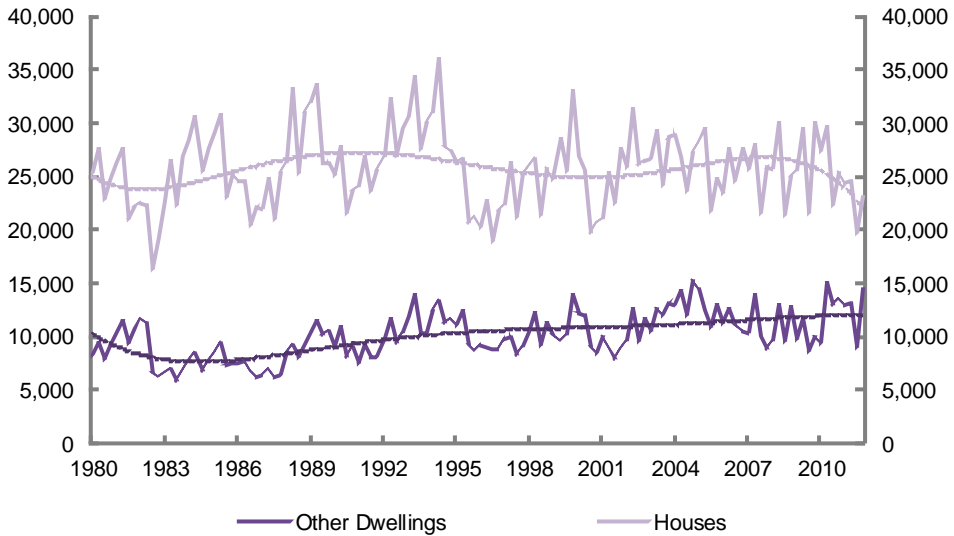
Source: 2001 and 2011 Censuses of Population and Housing.

Note: Dwelling counts are place of enumeration on Census night.

(a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.

It is clear that detached houses will dominate over other forms of housing stock for the foreseeable future in most States and Territories. The rates of growth in the various forms of dwelling (the flows) are simply insufficient to offset the substantial dominance of detached houses in composition of dwelling supply (the stock) for many years. Moreover, it is clear from Figures 2.1 to 2.9 that the dominance of detached houses in building activity, while dwindling, continues to be a feature of new building activity in most States and Territories. Only in the Northern Territory and ACT has the construction of higher-density forms of housing approached or exceeded the growth in detached housing over a sustained period.

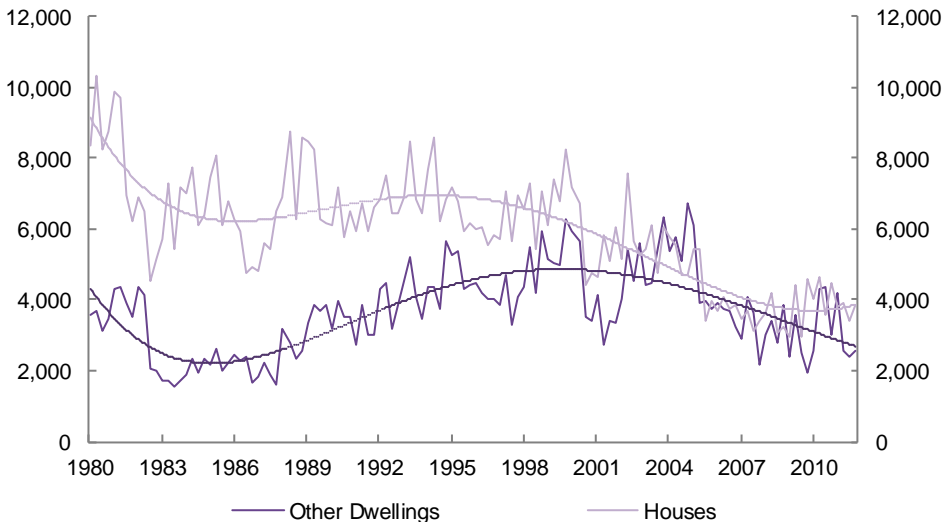
Figure 2.1 Quarterly dwelling completions, Australia: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Australia*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

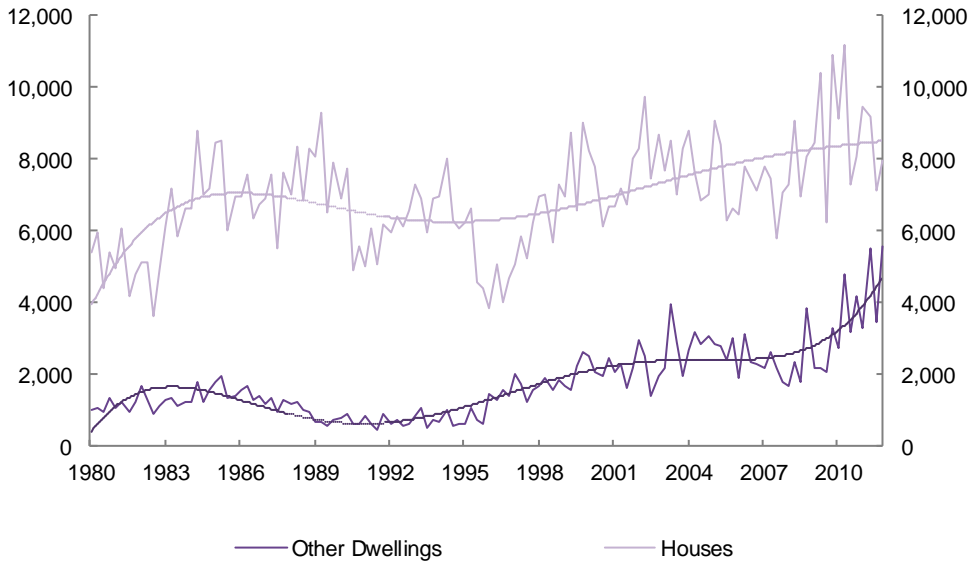
Figure 2.2 Quarterly dwelling completions, New South Wales: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, New South Wales*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

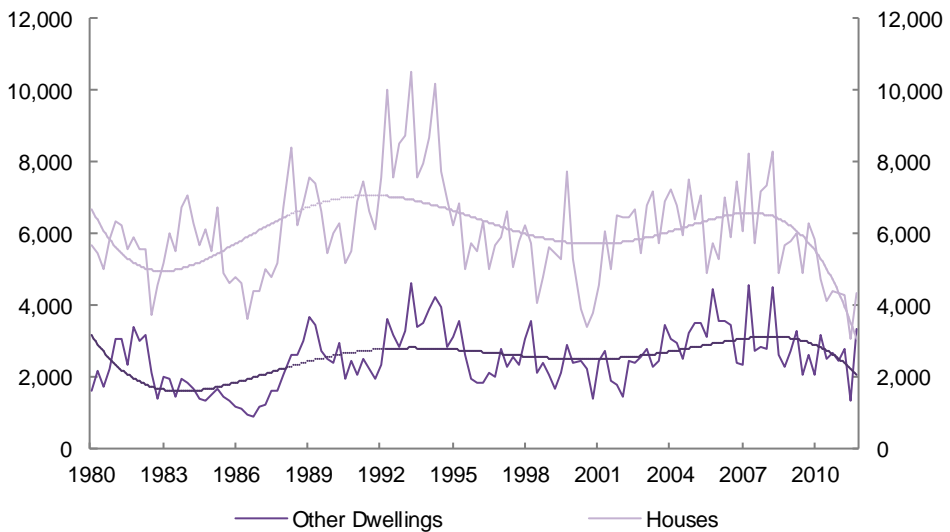
Figure 2.3 Quarterly dwelling completions, Victoria: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Victoria*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

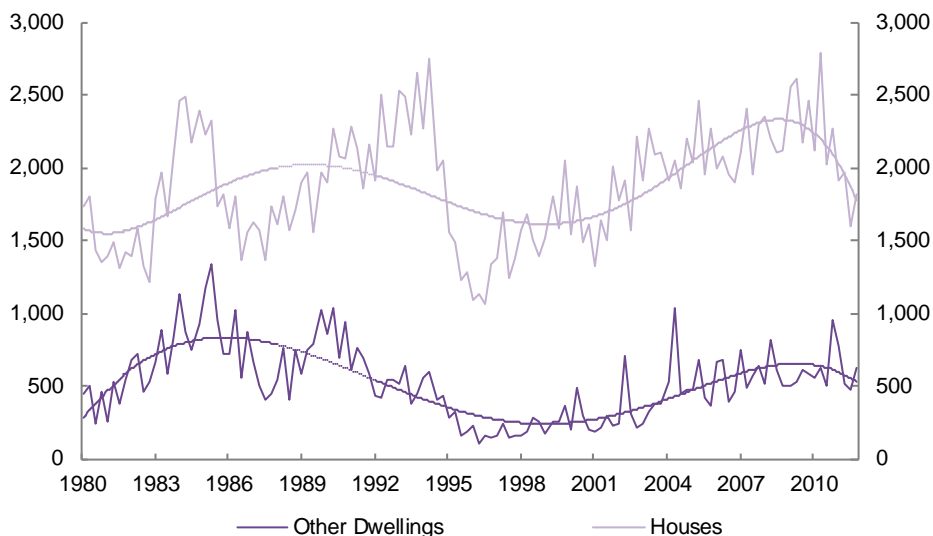
Figure 2.4 Quarterly dwelling completions, Queensland: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Queensland*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

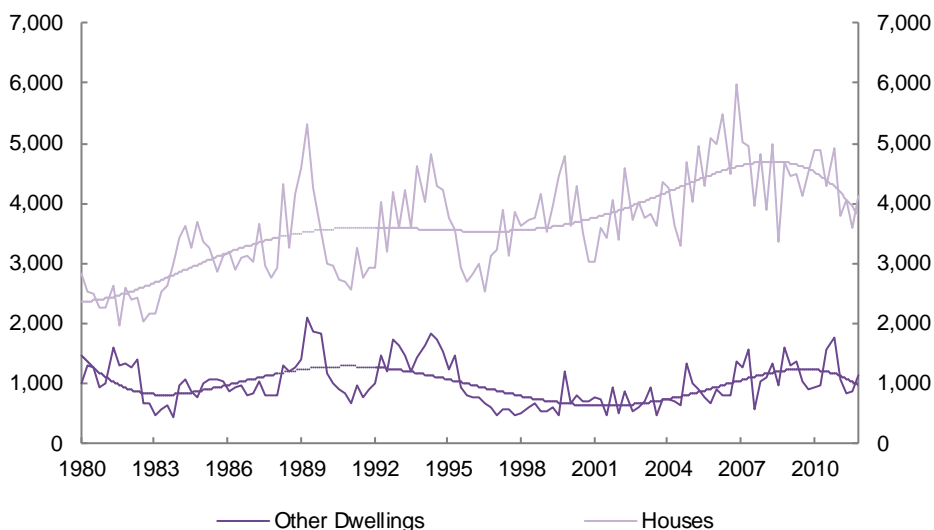
Figure 2.5 Quarterly dwelling completions, South Australia: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, South Australia*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

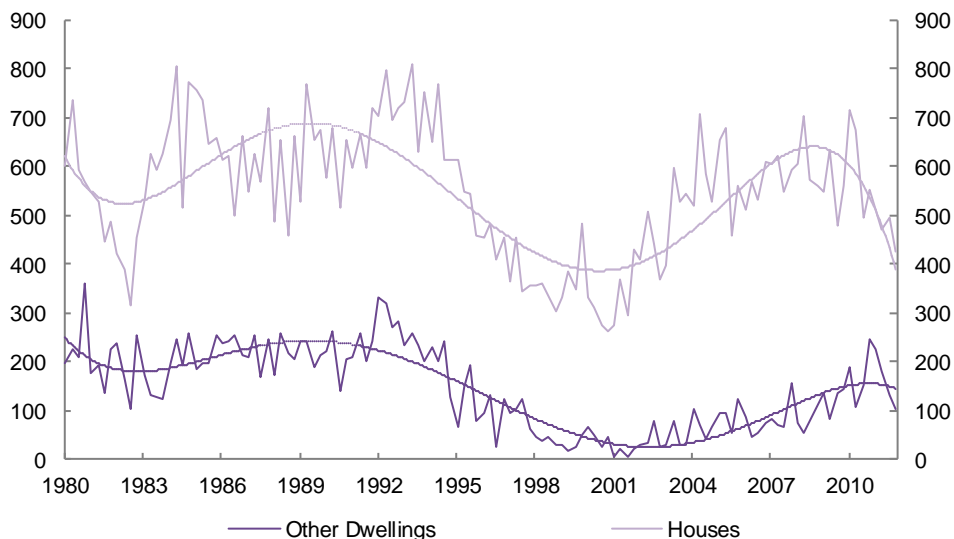
Figure 2.6 Quarterly dwelling completions, Western Australia: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Western Australia*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

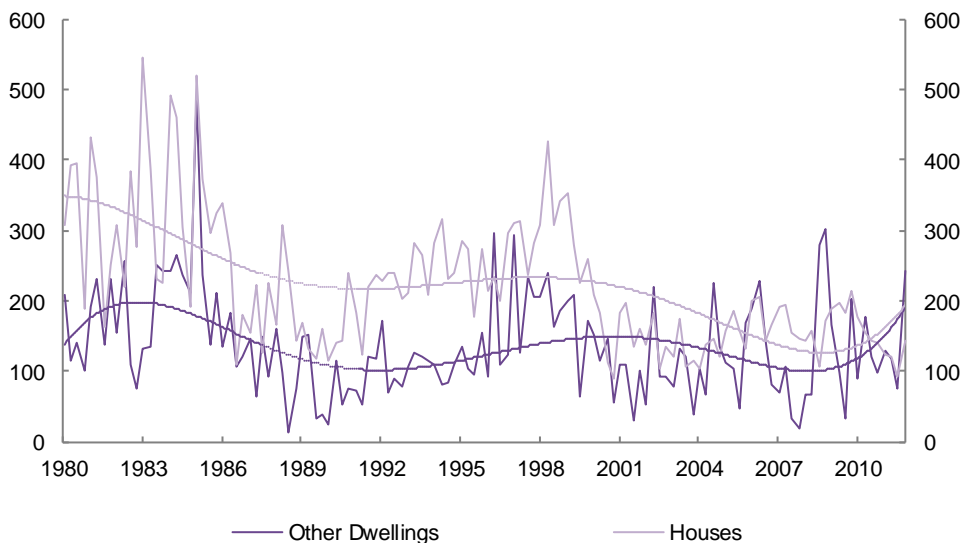
Figure 2.7 Quarterly dwelling completions, Tasmania: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Tasmania*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

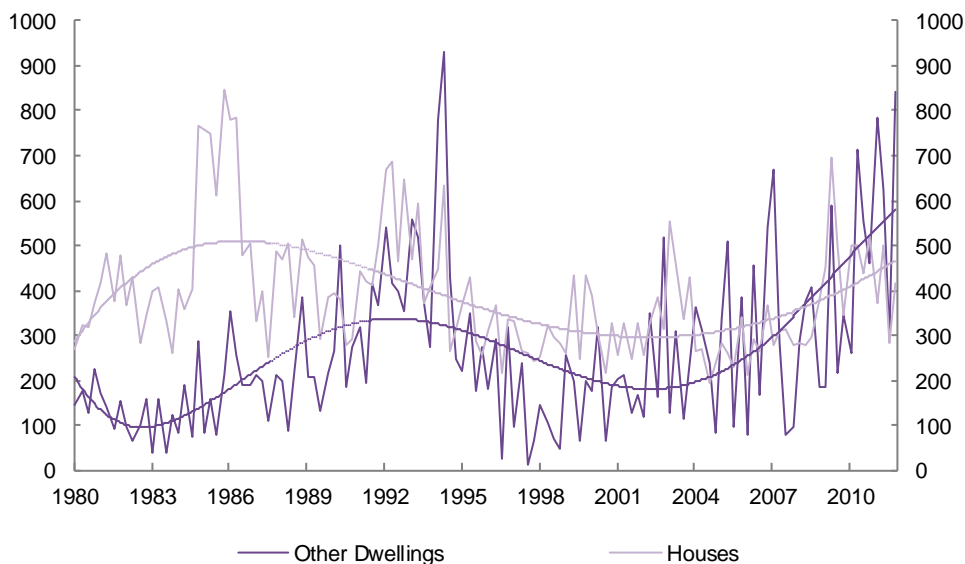
Figure 2.8 Quarterly dwelling completions, Northern Territory: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Northern Territory*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

Figure 2.9 Quarterly dwelling completions, Australian Capital Territory: detached houses and higher-density dwellings



Source: ABS 2012, *Building Activity, Australian Capital Territory*, June quarter 2012, cat no. 8752.0.

Note: Solid lines are actual quarterly dwelling completions and are not adjusted for seasonality. Dotted lines are polynomial trendlines (order 5) based on unadjusted data.

Table 2.4 breaks down the housing stock by type of structure and number of bedrooms. In 2011, the majority (76 per cent) of occupied private dwellings comprised three or four bedrooms. Unsurprisingly, most of these were separate houses, of which 89 per cent had three or four bedrooms. Most flats, units or apartments (82 per cent) have one or two bedrooms. Semi-detached dwellings tend to have two or three bedrooms (84 per cent).

The most significant change in detached housing since 2001 has been the increased proportion with four or more bedrooms: from 32 per cent in 2001 to 36 per cent in 2006 and 39 per cent in 2011. There is anecdotal evidence (see Chapter 3) of a trend in suburban redevelopment that sees larger homes replacing existing smaller houses – for example, knocking down a three bedroom home and building one with four bedrooms on the same block. Growth in the stock of larger homes may also reflect changes in the purchase price of land. High land prices in and around the larger capital cities lead to changes in the type of people that can afford to build in these situations and in the nature of the dwellings they want, and the extension of existing homes to enhance potential capital gains. This is reflected in the fact that lending for alterations and additions to existing housing is around three-quarters of the level of lending for new housing.⁴

⁴ ABS 2012, *Australian System of National Accounts*, cat no. 5204.0.

There are proportionally more semi-detached homes with three or more bedrooms than there were in 2001. In 2001, 42 per cent of semi-detached homes had three bedrooms and this proportion increased to 45 per cent in 2011. In 2001, 5 per cent of semi-detached homes had four bedrooms or more and this increased to 9 per cent in 2011.

The proportion of flats and apartments with three or more bedrooms increased between 2001 and 2011. This may be due to an increase in the prevalence of larger apartments in high-amenity locations. Despite this movement, over 80 per cent of flats and apartments have two or fewer bedrooms — the share did fall over the decade, but they still account for the vast majority of all flats and apartments. An increase in the number of smaller apartments may be expected in the future owing to widespread development of student apartments in inner-city locations. What these data do not show is any change over time in the overall size of dwellings with a particular number of bedrooms. Anecdotal evidence presented in Chapter 3 suggests that the average size of new one- and two-bedroom flats has reduced in recent years.

Table 2.4 Bedrooms in occupied private dwellings (a), 2001 and 2011

Dwelling structure	No. of bedrooms				
	0–1(b)	2	3	4 or more	Total
2001	Per cent				
Separate house	1.2	11.7	54.9	32.2	100.0
Semi-detached, row/terrace, townhouse	8.4	44.7	41.6	5.4	100.0
Flat, unit or apartment	25.7	60.7	12.5	1.1	100.0
Other dwelling	46.5	32.2	15.3	6.0	100.0
Total all dwellings (c) (d)	5.4	20.8	48.1	25.7	100.0
2011					
Separate house	1.3	9.9	49.6	39.2	100.0
Semi-detached, row/terrace, townhouse	7.5	38.3	45.5	8.7	100.0
Flat, unit or apartment	23.5	58.8	16.3	1.4	100.0
Other dwelling	50.1	32.3	14.1	3.4	100.0
Total all dwellings (c) (d)	5.3	19.4	44.4	30.9	100.0

Source: 2001 and 2011 Censuses of Population and Housing.

Note: Dwelling count underlying percentage calculations are based on place of enumeration on Census night.

- (a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.
- (b) Includes 'bedsitter' units and 'studio apartments'.
- (c) Total dwellings excludes 'dwelling structure not stated'.
- (d) Total excludes dwellings where number of bedroom not stated.

In summary, Australia's housing stock has grown by 1.6 per cent a year over the intercensal decade 2001 to 2011. The highest rates of growth have occurred in the so-called resource States (Western Australian and Queensland). While the numbers of apartments and semi-detached forms of housing have grown at

roughly twice the rate of detached houses, there is no sign that these denser forms of housing will dominate the supply of housing for Australians any time soon.

Housing consumption

The previous section of this chapter examined the characteristics of the dwelling stock. This section examines how the population utilises the dwelling stock.

Household formation patterns have changed over the decade to 2011, particularly among younger age groups. Figure 2.10 illustrates this by showing the proportion of people in each age group recorded as a 'household reference person' in the 2001, 2006 and 2011 Censuses.

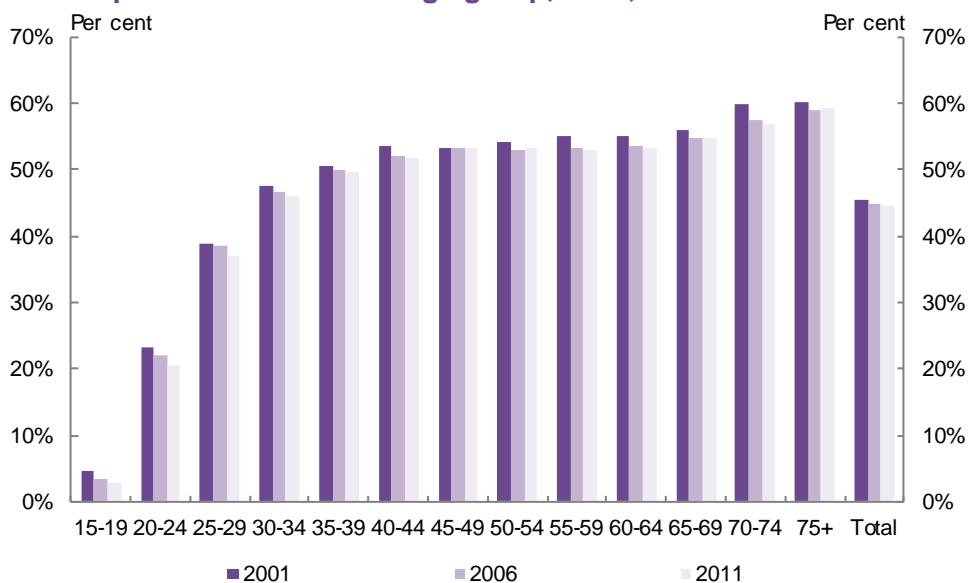
The household reference person is usually the person who fills out the Census form and is the household member used in Census coding as the starting point for identifying the relationships between usual residents of a household. Familial relationships are defined in terms of the relationship between the family reference person and all other family members. The reference person is typically listed as 'Person 1' on the Census form⁵ and must be a usual resident of the dwelling aged 15 or over.

While the ABS advises caution in using this method of categorising households,⁶ changes to the proportions of those in each age group recorded as household reference persons is a strong indicator of household formation patterns across age cohorts.

5 The household reference person will be Person 1 on the form if they meet the eligibility criteria (that is usual resident aged over 15 and present on Census night) and are the most appropriate person within the dwelling. This is determined via their age, marital status and relationships within the household and, in some circumstances, the reference person may end up being coded as someone other than Person 1 on the Census form.

6 The ABS notes that 'this variable is to be used with caution as it is not an indication that a person is any sense a head or leader of the household'.

Figure 2.10 Household reference person, by age, as a proportion of all persons in the same age group, 2001, 2006 and 2011



Source: 2001, 2006 and 2011 Censuses of Population and Housing.

Note: The household reference person is calculated according to place of usual residence. There is one household reference person per occupied dwelling. Household reference persons in second or third families in a household are not counted in this, but are included in the total resident population.

Figure 2.10 shows a decline in the proportion of household reference persons across all age groups except that aged 45–49 years. The downward pattern is especially evident between 2001 and 2006. The decline implies a reduction in the propensity to form new households across all but one of the age categories. There are no age categories with compensating upward adjustments in the proportion of household reference persons. Lower rates of household formation have been observed in younger age groups for some time. The emergence of declining household formation rates across all (or most) age groups would, however, indicate that household formation is declining overall. If so, household growth would slow relative to that of the population and the average number of persons per household would increase. The latter is not yet evident, but it is clear that the century-long downward trend in average household size has become less steep and perhaps flattened despite the continuation of demographic forces that, other things being equal, would continue to drive household size downwards.

The decline in the number of persons per household has slowed sharply since 2001 after many years of steady decline. Some of the technical issues associated with this change and its implications for household formation and demand-supply balance are explored in more detail in Chapter 5 and Appendix 2. A key question for the Council is which sections of the population these changes are most evident in.

Living arrangements

A number of key questions are associated with changes in household formation patterns. These include:

- How has the distribution of different household types changed?
- Are group houses more common?
- Are there more or fewer lone-person households and what age groups are they in?
- Are there more younger people living at home longer and for what periods?

While it is difficult to obtain conclusive answers to all of these questions, the following analysis looks at some key changes over the last decade.

Table 2.5 Private occupied dwellings (a) by household type, 2001–2011

Household type	2001		2011		2001–2011
	'000	Per cent	'000	Per cent	Per cent growth
Couple family with children	2,311.1	34.3	2,512.0	32.4	8.7
Couple family no children	1,722.9	25.5	2,072.9	26.7	20.3
One-parent family	743.2	11.0	868.0	11.2	16.8
Other family household	88.9	1.3	97.7	1.3	10.0
Lone-person household	1,616.2	24.0	1,888.7	24.3	16.9
Group household	262.6	3.9	321.0	4.1	22.3
Total — all household types	6,744.8	100.0	7,760.3	100.0	15.1

Source: 2001 and 2011 Censuses of Population and Housing.

Note: Dwelling counts underlying percentage calculations are place of enumeration on Census night. In 2011, a female was the household reference person in 82 per cent of one-parent family household types.

(a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.

Table 2.5 provides an overview of changes in the types of households in occupied private dwellings. Between 2001 and 2011, the proportion of dwellings occupied by couples with children declined from 34 per cent to 32 per cent. Conversely, the proportion of dwellings occupied by couples with no children increased from 26 per cent to 27 per cent.

Between 2001 and 2011, the number of occupied private dwellings increased by nearly 16 per cent. The number of dwellings occupied by couples without children increased by 20 per cent. In contrast, the number of couples with children

increased by only 9 per cent. The number of dwellings occupied by group households, while still a small minority, increased by 22 per cent to over 320,000.

The proportion of dwellings occupied by a single person changed little (by just 0.3 percentage points to 24.3 per cent of all households) between 2001 and 2011. However, as the Council noted in the 2011 State of Supply Report,⁷ the ageing of Australia's population (notably of the 'Baby Boomers') will result in, among other things, a substantial increase in the proportion of households comprising just one person. The Council's demographic projections indicate that the number of single-person households will increase by nearly 1.5 million (63 per cent) between 2011 and 2030, from about 26 per cent of all households to nearly 32 per cent. This is bound to affect the demand for particular types, styles and locations of housing and the nature of additions to Australia's housing stock in coming years.

Another notable socio-demographic trend has been the tendency for younger adults to stay longer in the parental home. Younger adults may be choosing to live at home longer for a variety of reasons. Greater participation in post-school education, better adaptation of family homes to accommodate adult children and changing attitudes across young people and their parents about privacy, sharing space and facilities and tolerating differences in lifestyle may all be causes or symptoms of this phenomenon. At least some young people will be influenced by a lack of affordable housing options outside of the family home and their parents' lack of resources to assist children to strike out on their own.

Table 2.6 shows the proportion of those aged 15–24 years and 25–34 years living in the parental home and how this has changed from 2001 to 2011. The table separates figures for those born in Australia and those born overseas to account for the substantial increase in the number of overseas students in Australia in 2011 compared with 2001.

7 NHSC 2011, *State of Supply Report 2011*, pp 26-27.

Table 2.6 Living arrangements of persons aged 15–24 years and 25–34 years, by country of birth, 2001-2011

Country of birth	Age group	Living arrangement	2001		2011	
			'000	Per cent	'000	Per cent
Australia	15–24 years	<i>Living in parental home</i>	1,249.7	62.3	1,450.2	65.7
		<i>Living elsewhere</i>	756.9	37.7	755.6	34.3
		Total	2,006.6	100.0	2,205.8	100.0
	25–34 years	<i>Living in parental home</i>	245.0	12.0	255.0	13.3
		<i>Living elsewhere</i>	1,802.1	88.0	1,657.0	86.7
		Total	2,047.1	100.0	1,912.0	100.0
Overseas	15–24 years	<i>Living in parental home</i>	208.7	53.5	241.5	36.6
		<i>Living elsewhere</i>	181.4	46.5	419.2	63.4
		Total	390.1	100.0	660.7	100.0
	25–34 years	<i>Living in parental home</i>	54.7	9.8	72.0	6.8
		<i>Living elsewhere</i>	503.3	90.2	983.1	93.2
		Total	558.0	100.0	1,055.0	100.0

Source: NHSC analysis of 2001 Census of Population and Housing 1 per cent sample file and 2011 Census of Population and Housing.

Note: Person counts are based on place of usual residence and exclude overseas visitors.

The number of 15–24-year-olds born overseas increased from 390,100 in 2001 to 660,700 in 2011 – an increase of almost 70 per cent – and the number of 25–34-year-olds increased from 558,000 to 1,055,000, or close to 90 per cent. Consistent with this, the number of overseas students in Australia increased from around 110,000 in 2001 to around 300,000 in 2011.⁸ Overseas-born young adults and in particular overseas students are less likely than their Australian-born counterparts to live in the parental home. The number of overseas-born young adults has increased as a proportion of the total in this age group over the decade. Overall, the share of all younger adults living in the parental home has actually fallen between 2001 and 2011.

However, the proportion of Australian-born 15–24-year-olds living at home increased from 62 per cent in 2001 to 66 per cent in 2011, with a more modest rise among 25–34-year-olds from 12 per cent to 13 per cent. These changes are significant but not especially marked, although the broad range of ages within each category could be masking some more notable changes.

It is also worth noting that among these younger age groups there is a higher prevalence of renting. This is irrespective of country of birth (see Table 2.11 for more detail).

⁸ Australian Education International, *International student data* <https://aei.gov.au/research/International-Student-Data/Pages/default.aspx> (accessed 01/02/2013).

The marked increase in the number of overseas students may have increased competition for available rental accommodation, potentially influencing housing formation propensities across either or both groups.

Another example of changing living arrangements is the proportion of dwellings occupied by just one person (Table 2.7). There was a 17 per cent increase in the proportion of private dwellings occupied by a lone person between 2001 and 2011, but the proportion of the population living alone remained stable at 11 per cent. Typically, the proportion of people living alone increases with age, and women are more likely to live alone than men. In 2011, over half (55 per cent) of those living alone were female and, among those aged 65 years and over who live alone, 69 per cent were female.

Older people who live alone usually do so following the death of a partner or because of divorce in mid/later life. However, between 2001 and 2011 there was a decrease in the proportion of those aged 65 years and over who live alone, from 26 per cent to 24 per cent. This may reflect the longer survival of older couples owing to longer life expectancy and an increasing likelihood of living into old age, meaning that spouses are widowed at an older age.⁹ Recent improvements in the life expectancy of men are especially important in explaining the longer survival of older couples.

Among younger age groups, the proportion living alone has remained steady among those aged 15–24 year (3 per cent) and declined slightly among those aged 25–34 (8 per cent in 2001 to 7 per cent in 2011).

Again, these changes have significance for service providers but are not dramatic from a housing demand perspective.

Table 2.7 Number and proportion of private dwellings occupied by a lone person, by age, 2001 and 2011

Age of reference person	2001		2011	
	'000	Per cent	'000	Per cent
15–24 years	88.0	3.4	79.4	2.8
25–34 years	221.0	8.1	217.2	7.3
35–44 years	230.4	8.0	231.6	7.6
45–54 years	241.3	9.4	287.8	9.8
55–64 years	229.7	13.1	353.5	14.1
65 years and over	608.9	25.7	719.3	23.9
Total — all ages	1,619.3	10.9	1,888.7	10.9

Source: NHSC analysis of 2001 Census sample file and 2011 Census of Population and Housing.

Note: Person counts are location on Census night.

9 ABS 2009, 'Couples in Australia', in *Australian Social Trends*, March 2009, cat no. 4102.0.

Types of households and dwellings

The Council is also interested in whether there are any significant changes in the mix of household types living in different types of dwelling. Table 2.8 provides data for this purpose.

There was a notable decline (of around 3 percentage points) between 2001 and 2011 in the proportion of couple families, both with and without children, living in separate houses, with a concomitant increase in the proportion living in semi-detached homes and apartments. Nevertheless, detached homes were clearly the dominant choice of accommodation for the 59 per cent of all households in private dwellings that comprise couples with or without children. In 2011, 89 per cent of the former and 78 per cent of the latter lived in separate houses.

Table 2.8 Occupied private dwellings (a) by household type and dwelling structure, 2001–2011

Household type	Year	Dwelling structure				Total (c)
		Separate house	Semi-detached or townhouse	Flat, unit or apartment	Other (b)	
		Per cent				
Couple family with children	2001	92.2	4.0	3.3	0.5	100.0
	2011	89.0	5.9	4.8	0.2	100.0
Couple family with no children	2001	81.2	8.3	9.4	1.2	100.0
	2011	78.2	8.9	12.1	0.8	100.0
One-parent family	2001	79.0	10.6	9.7	0.7	100.0
	2011	79.2	10.5	9.9	0.4	100.0
Lone-person household	2001	55.3	14.8	26.2	2.7	100.0
	2011	57.4	14.9	25.8	1.9	100.0
Group household	2001	55.4	15.8	27.3	1.4	100.0
	2011	55.0	15.4	28.6	0.9	100.0
Other family household	2001	66.1	12.2	20.8	1.0	100.0
	2011	66.3	12.1	21.0	0.6	100.0
Total — all household types	2001	77.5	9.0	12.3	1.3	100.0
	2011	76.9	9.0	12.2	1.2	100.0

Source: NHSC analysis of 2001 Census sample file and 2011 Census of Population and Housing.

Note: Dwelling counts underlying percentage calculations are place of enumeration on Census night.

- (a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.
- (b) 'Other' includes caravan, cabin or houseboat, improvised home, tent or sleepers-out, and house or flat attached to office or shop etc.
- (c) Total excludes dwelling structure not stated.

Housing utilisation

People's circumstances change over time. At any one point, there will be people living in homes they first purchased or rented when they were younger and their family situation was different. The home may continue to satisfy past and present needs in a variety of ways, but in some cases it might be a bit bigger than the household would purchase in their present circumstances.

Council members are often told that the supply of spare bedrooms in Australian dwellings could accommodate a substantial increase in population and that the policy challenge is to encourage people to move on from larger homes and to 'right-size' the homes they live in. Leaving aside questions about the desirability and logistics of such a policy challenge, has the spare bedroom phenomenon increased or reduced in magnitude over the past decade?

While having spare bedrooms indicates a capacity to accommodate more people in reasonable comfort, it does not necessarily mean that dwellings are not being fully utilised. Households may put these 'spare' rooms to various uses (for example, study, office, gymnasium, craft or hobby room, children's playroom, guest bedroom or storeroom). Some may provide each child with a separate bedroom regardless of their age or sex.¹⁰

Table 2.10 describes dwellings categorised by the number of bedrooms they contain and the number of usual residents they accommodate.

The most obvious phenomenon that emerges from the data in Table 2.9 is the substantial and growing prevalence of homes with more bedrooms than usual occupants. In 2011, 59 per cent of three-bedroom homes had fewer than three occupants compared with 55 per cent in 2001, 55 per cent of four-bedroom dwellings had fewer than four occupants (50 per cent in 2001) and 38 per cent of five-bedroom homes had fewer than five occupants (37 per cent in 2001).

This phenomenon is most likely associated with ageing of the population and the associated increased prevalence of 'empty nesters' and widowed spouses who stay on in their former homes until some other occurrence, often their own ill-health, compels them to change. A larger number of bedrooms than is required for usual residents' sleeping arrangements may well suit other aspects of such households' lifestyles, like accommodating visiting family and friends, having a study or library, for storage or for undertaking hobbies. This is supported by research on housing utilisation that found that over 90 per cent of older Australians regarded their home as suitable for their needs and that excess

10 ABS 2012, 'Housing Utilisation', in *Year Book, Australia*, cat no. 1301.0.

bedrooms are utilised to accommodate temporary residents and visitors and to pursue a range of retirement activities.¹¹

There has also been an increase in the number of people living in overcrowded dwellings between 2001 and 2011. More detail is presented in Table 2.12 and Table 2.13.

11 Judd, B, Olsberg, D, Quinn, J, Groenhart, L and Demirbilek, O 2010, *Dwelling, Land and Neighbourhood Use by Older Home Owners*, AHURI Final Report No. 144, AHURI UNSW-UWS Research Centre.

Table 2.9 Occupied private dwellings (a), proportion of total by number of persons usually resident and number of bedrooms, 2011 (per cent)

Number of persons usually resident	Number of bedrooms													
	0 (b)		1		2		3		4		5 or more		Total (c)	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
	Per cent													
One person	76.2	69.9	75.8	72.1	42.3	42.3	18.3	21.0	7.0	8.4	5.9	5.7	23.5	24.3
Two persons	16.4	18.7	20.9	23.9	41.4	40.6	36.7	38.0	24.9	28.1	16.9	17.8	33.4	34.0
Three persons	3.2	5.1	2.1	2.7	10.4	10.8	19.6	18.7	18.5	18.7	14.3	14.9	16.3	16.0
Four persons	2.4	3.4	0.8	0.9	4.5	4.8	17.6	15.7	26.9	26.1	22.0	23.1	16.1	15.7
Five persons or more	1.9	2.9	0.4	0.5	1.5	1.5	7.8	6.6	22.7	18.7	40.9	38.6	10.7	10.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: 2001 and 2011 Censuses of Population and Housing.

Note: Dwelling counts underlying percentage calculations are place of enumeration on Census night.

- (a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.
- (b) Includes 'bedsitter' units and 'studio apartments'.
- (c) Total excludes number of bedrooms not stated.

Tenure

Trends in tenure are of particular significance to the work of the Council because, among other reasons, owners and would-be owners dominate the Australian market for newly-built detached homes. Their demand is responsible for a very sizeable proportion of additional housing stock, and changes in home ownership rates could have implications for the rate of increase in housing supply. Concomitantly, changes in the proportion of households in the rental market could have implications for rates of return from investment in rental property, at least in the short term, and incentives to invest in additional rental stock. At present, additions to housing stock that are designed and built predominantly for rental are more likely to be apartments. Changes in the supply and price of rental housing also have implications for the adequacy of social housing supply and rental subsidy arrangements for lower-income people.

Home ownership rates matter for other reasons too. For instance, as noted way back in the 1970s Poverty Inquiry, home ownership means no rental expenses and no mortgage payments (or at least relatively low mortgage payments for the many who purchased some time ago), and can make the difference between being in or out of poverty for people totally or partly dependent on low wages or income support payments.¹² While rent assistance addresses part of this disadvantage for non-home-owners, it requires co-payments by the affected renters and maximum rent assistance payments are capped so that net rental expenses often make a large dent in net disposable income.¹³

Many Australians aspire to home ownership because of the security of residential tenure, because the home is a significant household asset and to minimise housing costs during retirement, when income tends to be lower.¹⁴ Security of tenure in the private rental market is likely to be lower. As home ownership conveys the right of continuous tenure, this may also affect households' stake in the ongoing condition of homes, gardens, neighbourhoods and communities.

Security of tenure is also important to individuals and families because it provides a greater sense of autonomy, certainty and sense of control, which reduces levels of stress and increases family stability. For families with children, security of tenure also means children attend fewer schools and have better educational performance and rates of school completion.¹⁵

12 Australian Commission of Inquiry into Poverty and Henderson, Ronald F, 1975, *Poverty in Australia: First Main Report*.

13 Australian Institute of Health and Welfare 2011, 'Housing Assistance Services', in *Australia's Welfare 2011*, Australia's Welfare series no. 10, cat no. AUS 142.

14 ABS 2008, 'First Home Buyers', in *Australian Social Trends*, cat no. 4102.0.

15 Australian Institute of Family Studies 2011, 'Housing Characteristics and Changes across Waves', in *The Longitudinal Study of Australian Children Annual Statistical Report 2011*.

Tables 2.10 and 2.11 examine changes in tenure rates¹⁶ between 2001 and 2011 across various household types and age groups.¹⁷ They show, first, a decline in the aggregate home ownership rate for all household types of a little over 1 percentage point (from nearly 70 per cent to under 69 per cent) and, second, a very big shift in the proportions of outright ownership (a decline of nearly 9 percentage points to just under 33 per cent) and ownership with a mortgage (an increase of over 7 percentage points to nearly 36 per cent).

The first, apparently less dramatic, change could mark the beginning of a more marked decline in home ownership as the post-WWII Baby Boomer generation (born between 1946 and 1964) passes into retirement and then passes on. When examined by age group (Table 2.11), home ownership has declined substantially across all but the older cohorts and it is evident that the aged and ageing are sustaining Australia's home ownership rate despite the decline in other age groups. However, this may take a few decades to work through, as the higher-than-average rates of home ownership where the household reference person was 45–64 years in 2011 continue to sustain the aggregate rate. But the proportion of renters among younger households with and without children point to an emerging change in the demand for housing, possibly driven by a mix of affordability (income and house price), lifestyle and mobility factors. It seems likely that the trend to lower rates of home ownership and higher rental rates will continue.

Further analysis to disaggregate tenure changes in each household reference age category by household income might help to establish whether marginal home buyers have been pushed into rental by a rising deposit gap or whether lifestyle factors are influencing a decline in home ownership and increase in rental across the income range. Analysis of the data by State and Territory might reveal whether forms of purchase assistance — like Keystart, Western Australia's assistance to obtain a first home loan — and shared equity schemes have a significant impact on rates of home ownership in younger age groups.

Very different factors are likely to be influencing the increased proportion of buyers with a mortgage and substantial decline in outright ownership. These are likely to have been driven by changes in mortgage finance arrangements. With many households significantly ahead on their mortgage repayments,¹⁸ this may also reflect greater use of 'redraw' facilities (home equity withdrawal). The increasingly widespread use of flexible mortgages with redraw facilities, and an increase in refinancing to borrow against increased equity brought about by rapid house price inflation, have enabled existing owners to both increase their recurrent expenditure

16 The Census captures information on occupancy on Census night. However, the ABS notes that it does not represent a comprehensive picture of home ownership and other tenure arrangements in Australia for a number of reasons. While the Census provides a strong indicator of tenure patterns, this caveat should be borne in mind when considering relevant commentary throughout this report.

17 Age groups are defined in this context by the age of the household reference person.

18 Reserve Bank of Australia 2012, *Financial Stability Review*, September 2012.

on things like holidays and extend their wealth by investing in improvements to their own homes, the purchase of rental investment dwellings or other property or shares. So mortgage debts have become bigger and last longer.

There is a wider prevalence of debt among people nearing retirement. In 2011, 7 per cent of households with the reference person aged 65 years and over still had mortgage debt, compared with 3 per cent in 2001. And there is evidence to suggest some households in this age group are using lump sum superannuation to pay down mortgage debt.¹⁹ However, mortgage debt among older households is not a matter for alarm among those whose superannuation and additional investments are sufficient to expunge the mortgage and provide for their continuing income. But it is evident that some will need to sell their home, move to lower-amenity homes in less costly locations and depend on the Age Pension to provide for all or most of their living expenses.²⁰

The data on changes by household type are more equivocal. While the decline in outright ownership is universal across household types and household reference age groups, changes in aggregate home ownership and rental rates are less evenly distributed. It is evident that home ownership has declined somewhat and rental rates have increased among couples with and without children, but the opposite has occurred among lone-parent families, single-person households and households comprising unrelated people (group households). Reasons for these differences may relate to changes in the age structure of the various groups, and to the socio-economic characteristics of permanent migrants and overseas students, but more analysis by age, income, country of birth and amount of time since arrival and settlement in Australia are needed to test these hypotheses. A possible explanation for the decline in home ownership among couples with children — that their ability to meet the higher cost of ownership in 2011 is compromised by child care responsibilities impinging on earnings from employment — is belied by the same decline in ownership among childless couples, although this too requires further analysis.

19 ABS 2011, *Retirement and Retirement Intentions, Australia*, cat no. 6238.0.

20 Yates, J and Bradbury, B, 2010, 'Home ownership as a (crumbling) fourth pillar of social insurance in Australia', *Journal of Housing and the Built Environment* 25: 193—211.

Table 2.10 Tenure type of occupied private dwellings (a), by household composition, 2001 and 2011

Household type	Year	Tenure type					Total (e)
		Owned outright	Owned with a mortgage (b)	Total home ownership (c)	Rented	Other tenure type (d)	
		Per cent					
Couple family with children	2001	36.0	44.6	81.0	17.3	2.0	100.0
	2011	21.7	56.6	78.3	20.5	1.2	100.0
Couple family no children	2001	56.7	23.2	79.8	17.9	2.3	100.0
	2011	47.6	29.9	77.5	20.6	1.9	100.0
One-parent family	2001	28.1	23.4	51.5	46.4	2.0	100.0
	2011	22.8	29.5	52.3	46.3	1.4	100.0
Lone-person household	2001	45.0	14.7	59.7	35.9	4.4	100.0
	2011	40.2	20.1	60.4	36.0	3.9	100.0
Group household	2001	15.0	15.3	30.3	67.3	2.4	100.0
	2011	12.7	19.3	32.0	66.3	2.2	100.0
Other family household	2001	37.6	14.8	52.4	44.1	3.5	100.0
	2011	29.1	23.2	52.3	45.1	2.7	100.0
Total – all household types	2001	41.8	28.2	69.9	27.4	2.7	100.0
	2011	32.9	35.8	68.7	29.3	2.2	100.0

Source: NHSC analysis of 2001 Census 1 per cent sample file and 2011 Census.

Note: Dwelling counts underlying percentage calculations are place of enumeration on Census night.

- (a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.
- (b) Dwellings being purchased under a rent/buy scheme are included in owned with a mortgage.
- (c) Total home ownership includes owned outright and owned with a mortgage.
- (d) Other tenure type includes being occupied rent-free, being occupied under a lifetime tenure scheme, and other tenure type not elsewhere described.
- (e) Total excludes tenure type not stated. Components may not add to total owing to rounding.

Table 2.11 Tenure type of occupied dwellings (a), proportion of total, by age of household reference person (b), 2001 and 2011

Age of household reference person	Year	Tenure type					Total (f)
		Owned outright	Owned with a mortgage (c)	Total home ownership (d)	Rented	Other (e)	
		Per cent					
15–24 years	2001	8.1	15.3	23.4	72.2	4.4	100.0
	2011	6.5	19.5	26.0	71.5	2.5	100.0
25–34 years	2001	11.3	40.0	51.3	45.2	3.5	100.0
	2011	5.1	42.9	48.0	50.2	1.9	100.0
35–44 years	2001	23.3	45.9	69.2	28.4	2.4	100.0
	2011	10.9	54.1	65.0	33.5	1.5	100.0
45–54 years	2001	42.3	35.7	77.9	20.2	1.8	100.0
	2011	24.4	49.7	74.1	24.5	1.4	100.0
55–64 years	2001	66.7	15.9	82.6	15.6	1.9	100.0
	2011	48.7	31.4	80.1	18.5	1.4	100.0
65 years and over	2001	78.5	3.5	82.0	14.4	3.6	100.0
	2011	74.8	7.2	82.0	14.5	3.5	100.0
Total – all age groups	2001	41.8	28.2	70.0	27.2	2.7	100.0
	2011	32.9	35.8	68.7	29.3	2.0	100.0

Source: NHSC analysis of 2001 Census 1 per cent sample file and 2011 Census.

Note: Dwelling counts underlying percentage calculations are place of enumeration on Census night.

- (a) 'Occupied private dwellings' excludes visitor only and other non-classifiable households.
- (b) Household reference person is used here a proxy for the head of the household; the household reference person is generally person 1 on the Census household form. Age of household reference person is used as a proxy to examine home ownership rates by age.
- (c) Owned with a mortgage includes dwellings being purchased under a rent/buy scheme.
- (d) Total home ownership includes owned outright and owned with a mortgage.
- (e) Other tenure type includes being occupied rent-free, being occupied under a lifetime tenure scheme, and other tenure type not elsewhere described.
- (f) Total excludes tenure type not stated. Components may not add to total owing to rounding.

Between 2001 and 2011, across most household reference age groups there was an increase in the proportion of dwellings that are rented (exceptions being where the household reference person was 15-24 years and 65 years and over).

There was a decrease in home ownership between 2001 and 2011 (that is, the proportion of dwellings owned outright and owned with a mortgage) across most age groups, with the exception of those with the reference person aged 15–24 years and those 65 years and over. Home ownership for those aged 15–24 years increased and it remained stable for those aged 65 years and over. However, it should be noted that the increase in home ownership for those aged 15–24 years was partly owing to a decreased propensity for household formation among this age group between 2001 and 2011. More specifically, there were significantly fewer households where the

reference person was of this age (as a share of the total number of people of that age cohort) compared to a decade earlier.

The fall in home ownership was most obvious for those with a reference person aged 25–34 years (51 per cent in 2001 to 48 per cent in 2011), 35–44 years (69 per cent to 65 per cent) and 45–54 years (77 per cent to 74 per cent). As may be expected, there was a corresponding increase in renting for these age groups.

Homelessness and marginal housing

While the majority of the population is able to access adequate housing, the Census provides data to show the number of people experiencing homelessness or living in marginal housing. Between 2001 and 2011, there was an increase in both the number of people who are homeless (Table 2.12) and the number of people living in other marginal housing (Table 2.13). While a myriad of social issues underlie homelessness and the use of marginal housing, the lack of available suitable low-cost housing contributes to people living in these circumstances.

Table 2.12 Homeless persons, 2001 and 2011

Homelessness category	2001	2011
Persons in improvised dwellings, tents or sleeping out	8,946	6,813
Persons in supported accommodation for the homeless	13,420	21,258
Persons staying temporarily with other households	17,880	17,369
Persons staying in boarding houses	21,300	17,721
Persons in other temporary lodging	338	686
Persons living in 'severely' overcrowded dwellings	33,430	41,390
Total homeless persons	95,314	105,237

Source: ABS 2011 Census of Population and Housing: Estimating Homelessness, cat no. 2049.0.

Between 2001 and 2011, there was a substantial increase in the number of people in marginal housing from 68,300 to 78,342. There was also an increase in the number of people living in severely overcrowded dwellings (from 33,340 to 41,390) where the usual residents of the dwelling would need four or more additional bedrooms to accommodate them adequately. This is a particularly stark example of people who cannot access adequate housing. This is investigated in more detail in Chapter 3.

Table 2.13 Persons in other marginal housing, 2001 and 2011

	2001	2011
Persons living in other crowded dwellings	43,665	60,875
Persons who are marginally housed in caravan parks	19,465	12,963
Persons in other improvised dwellings	5,000	4,504
Total persons in other marginal housing	68,300	78,342

Source: ABS 2011 *Census of Population and Housing: Estimating Homelessness*, cat no. 2049.0.

Future work

The analysis in this chapter is a starting point for further investigation by the Council. Future reports will look in more detail at the data and analyse subsequent information released by the ABS. Of particular interest is analysis to determine whether shifts in tenure, household formation and household size differ according to household income or location (categorising areas by housing cost). This will help the Council to identify whether housing supply and affordability are impacting on household formation and housing choices.

The Council may also investigate aspects of the population's mobility. This may involve analysing the characteristics of those who have moved between the last two Censuses, and of those that have moved in the last year. These data were not available in time for inclusion in this report.

There is also interest in more detailed work around where people live and work. This is partly related to infrastructure issues (notably with transport infrastructure) that have recently been included in the Council's expanded terms of reference. Analysis of the linkage between transport infrastructure, housing choices and communications infrastructure (for example, ability to work from home) may help to improve understanding of the housing choices people make.

The Council is also interested in the interaction between internal migration, housing costs, and housing preferences.

Conclusions

The evidence presented in this chapter points to a number of areas where there have been notable changes in the housing circumstances of the Australian population over the last decade. At the most extreme end of the spectrum, there has been an increase in the number of people living in 'severely' overcrowded conditions and other marginal housing. Tenure patterns have changed, with declines in rates of owner occupancy across the population. Couple families with children and couple families without children are the groups that have experienced the largest falls in home ownership. There has also been an increase in the share of those approaching retirement age that still have a mortgage. Many of these changes are likely to have been at least partly driven by the increase in house prices over the decade, making it

harder for people to get onto the housing ladder and having to take out proportionately larger mortgages when they do.

More generally, there has been a decline in the share of people recorded as household reference persons across all ages, implying lower rates of household formation than seen previously. This reduced tendency to form households is part of a marked change and has arrested the long-term decline in average household size at a time when the demographic drivers point to it continuing. There is strong evidence of the most commonly cited example of more young adults, at least among the Australian-born population, staying in the parental home until later in life than previous generations did.

In reality, the impact of housing shortages is likely to be felt most acutely by a relatively small proportion of households in more disadvantaged circumstances, such as with homelessness and overcrowding, lower income households in which reduced opportunities for home ownership and higher rental costs impact on household formation and dwellings choices. There has been an increase in the proportion of families living in smaller dwellings than the past. These do not necessarily represent households falling 'into the housing gap', but may be attributable to the tighter housing situation leading to different housing choices than previous generations made.

Taken in isolation, there are possible reasons for all these changes in the way the Australian population lives beyond a simple housing shortage or affordability issues. Clearly, these will not have been the only drivers of change in all cases. For example, younger people may choose to live at home longer because it is more comfortable to do so than in the past given larger homes and changing social attitudes. However, the Council believes that the evidence supports the existence and impact of a shortage of housing stock, especially lower-priced homes for purchase and rent. It is certainly clear that household formation has changed and that home ownership is declining significantly across all but the aged cohort. Evidence in the Council's *Housing Supply and Affordability — Key Indicators, 2012* also showed that high housing costs relative to income are impacting on a larger proportion of the population. The evidence that circumstances have changed is incontestable.

Chapter 3

Housing research and findings

Overview

The Council recognises the need to consider particular aspects of social and economic change driving changes in demand and supply in more depth by examining certain submarkets such as different regions or population groups and specific issues in increasing supply. The Council has developed a modest but focused program of research to shed light on contemporary and emerging processes and trends that may impact on future housing needs.

In the 2011 State of Supply Report the Council noted the significance of an Australian population that is getting older but remaining active, engaged and healthy should be explored. It noted the importance of understanding the behaviour of current age groups facing retirement in developing an understanding of the impact of ageing. The first of the 'Baby Boom' generation reached the age of 65 in 2011.¹ The first section of this chapter looks at the impact on housing of the ageing of this particular cohort.

Results of an exploratory study of the housing experience of permanent migrants were reported in the 2011 State of Supply Report. In 2012 the Council commissioned a further scoping study on permanent and temporary migration: the dwelling and tenure types and the preferred housing locations of different groups of migrants. The results of this study are examined in the second section of this chapter.

In 2011 the Council also noted that, in the longer run, the impact of housing shortages on access to housing is most likely to affect households in the lower end of the distribution of income and wealth. The impact of housing costs may be felt more widely in households' capacity to save, consumption and locational choices, vulnerability to unemployment, and in a variety of other ways that affect quality of life. To further its knowledge in the area, the Council commissioned a study to examine ways of measuring household responses to changing housing affordability. An overview is presented in the third section of this chapter.

Finally, the Council commissioned a study that looked at how the type of homes being built has changed and the scope for innovation in the residential building industry. Relatively little comprehensive evidence has been collated on how the home-building industry is changing the type of product it produces, and the method for producing it, in response to the decline in housing affordability. The final section of this chapter reports on some of the findings of this scoping study and the Council's reflections on these findings.

1 The term 'Baby Boomer' is used in various ways, often to denote the segment of the population born any time between 1945 and 1965. Here the focus is particularly on the cohort born between 1946 and 1961, with some analysis extending the term to denote an age group up to a 20-year span. Baby Boomers, in this definition, were aged between 50 and 65 in 2011 and in the process of transitioning out of the workforce and into retirement.

All four of these scoping studies are published in full on the Council’s website: www.nhsc.org.au.

Understanding housing and location choices of retiring Australians in the ‘Baby Boom’ generation

Baby Boomers are typically healthier and wealthier than their predecessors and are approaching their latter years thinking, feeling, working and engaging with their families and communities in often quite distinct ways. In terms of their sheer numbers but also through their longevity post retirement — the majority will remain in mobile, active and independent health until their late 70s and early 80s — Baby Boomers will continue to shape and be the mainstream housing market rather than simply representing an interesting demographic cohort or ‘other’ to housing, planning and other policy considerations.²

The first of the ‘Baby Boom’ generation reached the age of 65 in 2011 and will be an important part of the housing market. They represented approximately 18 per cent³ of the population, 25 per cent of the workforce⁴ and 27 per cent of all household reference people⁵ at that Census. Households in this age group are very likely to be assessing their housing needs and options in response to leaving the workforce or their children leaving home.

This section looks at the impacts on housing of the ageing of this particular cohort. It is drawn from a scoping study *Understanding Housing and Location Choices of Retiring Australians in the ‘Baby Boom’ Generation*⁶ undertaken for the Council by the City Futures Research Centre at the University of New South Wales.

Context

Australia’s population is forecast to age. Underlying the long-term ageing trend is the ongoing improvement to life expectancy. However, the proportional growth of the over-55-year-old age group was suppressed in the post-WWII period by a high mortality rate during the war, an increase in the intake of working-age immigrants

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- 2 Pinnegar, S, van den Nouwelant, R, Judd, B and Randolph, B 2012, ‘Understanding housing and location choices of retiring Australians in the “baby boom” generation, A scoping report prepared for the National Housing Supply Council’ City Futures Research Centre, Sydney, pp 4, 28.
 - 3 Census quickstats: person aged 50–64 as a proportion of all persons http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/0?opendocument&navpos=220 (accessed 22/11/2012).
 - 4 Sourced from ABS *2011 Census of Population and Housing*, persons aged 50–64 years as a proportion of all persons employed or looking for work aged 15 and over, all persons by place of usual residence.
 - 5 Sourced from ABS *2011 Census of Population and Housing* counting persons by place of enumeration, five-year age groups (aged 50–64).
 - 6 Pinnegar et al 2012, op cit.

and a high fertility rate (the Baby Boom) between 1946 and 1961 (more than four million Australians were born between 1946 and 1961⁷). This cohort has had an ongoing impact on Australia's population structure, most recently reflected in the bulge in the current 50–65 year age group but also, for example, in the leap in Australia's adult population of almost three million between 1962 and 1972. As this cohort has aged, the proportional growth of the over-55-year-olds has accelerated, matching the fastest rate of population ageing ever seen in Australia.

The working age population is proportionally steady to date, as the proportional growth in over-55-year-olds is offset by a proportional decline in under-20s. As under-20s are much less likely than the over-55s to constitute separate households, this demographic shift places particular pressure on housing supply.

There will be particular challenges and opportunities presented by the population bulge of the Baby Boomers as it pulses through the population distribution curve. Most first world economies are faced with an ageing population and a growing number and proportion of older households and their associated lifecycle concerns – retirement, onset of illness, loss of mobility etc. On top of issues that are tied to this general trajectory, the presence of a bulge adds further policy considerations.⁸

There is also interest as to whether the Baby Boomer generation represents a step change in terms of behaviour and expectations: they are not of added interest simply because of their size as a group but also because they might tread quite different pathways — including housing pathways — from their predecessors.

A number of features might differentiate this age cohort from previous generations of retirees. Compared to previous generations, Baby Boomers are more likely to:

- have culturally and ethnically diverse family heritage, be more educated and be more well-travelled;
- be divorced or separated, have living parents and have fewer children that are more geographically separated from them;
- live longer, be aware of their health and fitness and have access to better surgical and medical expertise but also (by virtue of having survived where previous generations would have died) be more likely to have chronic illness or disability;
- have some private source of retirement funding like superannuation but also be more likely to have left the workforce at a younger age (whether or not they are financially ready to do so); and

7 ABS 2004, *Year Book Australia*, cat no. 1301.0

<http://australia.gov.au/about-australia/australian-story/baby-boomers> (accessed 17/12/2012).

8 Pinnegar et al 2012, op cit, p 8.

- live in a lower-density suburb and be living by themselves.⁹

Baby Boomers could spend one-third of their life in retirement with good health — between, say, 55 and 85 years of age. The spending and lifestyle patterns of this life stage are largely unknown, as are the demands on infrastructure and services. With longer life expectancies and a greater proportion of life to be spent in retirement until a more frail old age is reached, and good health compared to previous generations, the effect could be multiple relocations across the retirement period, with potentially different impacts on housing supply and demand at different periods of the coming decades.

As an analytical tool the scoping study report *Understanding Housing and Location Choices of Retiring Australians in the 'Baby Boom' Generation* develops a typology of housing paths as a starting point for exploring particular factors shaping possible housing directions. It is useful to identify 'types' based on existing tenure, their aspirations for future housing and location and the constraints on their housing and location choices. Further study will be needed to confirm the value of this approach. A limitation of the typology approach is the risk of assuming that households get assigned and locked into one pathway. However, Baby Boomer households' constraints and aspirations are likely to change — in different ways and at different times — throughout retirement and into a more frail old age; thus, many households may well move from one group to another.

The six groups are:

- **Age in place** — This is the group that wants to, and is able to, keep living in the family home.
- **Local adapters** — This is the group that has recently or wants to, and is able to, move out of their current home but keep living in the same area.
- **Scene changers** — This is the group that has recently or wants to, and is able to, move out of their current home and area to somewhere with greater amenity.
- **Constrained retreat** — This is the group that wants to keep living in their current home, or even the same area, but is forced to make compromises due to financial constraints.
- **Increased dependency** — This is the group that wants to stay in their current home but has to make housing or location compromises due to deteriorating health.

9 Hugo, G 2003, 'Australia's ageing population', *Australian Planner* 40: 109–118, p 111.

- **Older renters** — This is the group that has reached retirement without purchasing their own home and will need to retain or find ongoing rental accommodation.

Across the six types, a number will reflect the benefits of choice over constraint (age in place, local adjusters and scene changers) and others inevitably capture the impacts of constraint on less fortunate households (increased dependency, constrained retreat and older renters).¹⁰ The extent to which aspirations or constraints drive housing choice will dictate the locations, typologies, sizes and tenures of housing that are most affected by the retirement of Baby Boomers. The forced movements driven by financial or health constraints are declining, but discretionary movements driven by lifestyle choices are increasing.¹¹ The next section outlines some of the factors that may support or constrain Baby Boomers' housing choices.

Tenure

Although many Baby Boomers are entering retirement in more favourable and comfortable positions than previous generations — assisted by asset wealth tied to the family home — this is not universal. Those owning property in high-demand housing markets in accessible inner-city locations are likely to have seen greater levels of growth over time than those in poorly located and less resilient communities on the urban fringe or in rural areas. There is also a significant group of those approaching retirement that have not purchased their homes and remain in the private rental sector.

Home ownership

Home ownership, a key foundation enabling ageing in place, is very high among the retiring Baby Boomers. As can be seen from Table 3.1, in 2011 over 40 per cent of households with a 50–64-year-old reference person owned outright and another 36 per cent were paying off a mortgage.¹² Ownership increases in later years;¹³ in 2011 the rate of home ownership is high in the Baby Boomer age group and even

10 Pinnegar et al 2012, op cit. See Figure 4, p 11.

11 Hugo, G 2007, 'Some Spatial Dimensions of Australia's Future Aged Population: A Demographic Perspective', *Ageing 2030 — Creating the Future*, paper commissioned by the New South Wales Department of Ageing, Disability and Home Care as background material for Ageing 2030 — Creating the Future, Parliament House, Sydney, 30–31 October 2007.

12 Analysis of the 2006 Census by Flood and Baker (2010) showed that around 40 per cent of 45–64-year-olds owned outright. See Pinnegar et al 2012, op cit, p 12.

13 Beer, A and Faulkner, D 2009, *21st Century Housing Careers and Australia's Housing Future*, AHURI Final Report No. 128, Australian Housing and Urban Research Institute, Melbourne. Beer and Faulkner (p 111) found 'At ages 55 nearly two thirds of respondents owned their home outright (in comparison to only just over one-third of people aged 45–54 years) with another 22 per cent paying a mortgage'.

higher in the age group preceding them. Just fewer than 80 per cent of households where the reference person is 65–79 owned outright or were paying off a home.

Table 3.1 Household reference person, by age (selected age cohorts), by tenure, 2011

Age of household reference person	Owned outright		Owned with a mortgage		Rented		Total '000
	'000	Per cent	'000	Per cent	'000	Per cent	
35–49 years	323.3	13.8	1,236.2	52.5	720.5	30.6	2,355.6
50–64 years	857.3	40.7	763.2	36.2	413.8	19.7	2,105.6
65–79 years	872.6	70.7	103.4	8.4	178.4	14.5	1,233.5
All ages	2,488.1	32.1	2,692.4	34.7	2,215.3	28.5	7,760.3

Source: NHSC analysis of 2011 Census of Population and Housing.

Note: Counting: persons, location on Census night, 5-year age groups. Numbers rounded to nearest hundred.

Total includes other tenure types such as: 'Being purchased under a rent/buy scheme', 'Occupied rent free', 'Being occupied under a life tenure scheme', 'Other tenure' and 'tenure type not stated'.

As can be seen from Table 3.2, in 2001 almost 60 per cent of households with a 50–64 year-old reference person owned outright and 21 per cent were paying off a mortgage.¹⁴ Ownership in the 50–64 year age group was slightly higher in 2001 than in 2011, suggesting that, while home ownership increases with age, this was more the case for the oldest Baby Boomers and the generation preceding them.

Table 3.2 Household reference person, by age (selected age cohorts), by tenure, 2001

Age of household reference person	Owned outright		Owned with a mortgage		Rented		Total '000
	'000	Per cent	'000	Per cent	'000	Per cent	
35–49 years	586.3	26.8	926.2	42.4	566.7	25.9	2,185.2
50–64 years	961.4	58.4	349.7	21.3	268.9	16.3	1,644.9
65–79 years	804.0	76.8	36.2	3.5	147.9	14.1	1,046.3
All ages	2,754.6	40.9	1,816.7	27.0	1,795.1	26.6	6,736.9

Source: NHSC analysis of ABS 2001 Census one per cent sample file.

Note: Total includes other tenure types such as: 'Being purchased under a rent/buy scheme', 'Occupied rent free', 'Being occupied under a life tenure scheme', 'Other tenure' and 'tenure type not stated'..

14 Analysis of the 2006 Census by Flood and Baker (2010) showed that around 40 per cent of 45–64 year-olds owned outright. See Pinnegar et al 2012, op cit, p 12.

Renters

Previous modelling on housing and ageing undertaken for the Council¹⁵ predicts an increase in relative demand for rental tenure (including in social housing) across Australia. This is based on assumptions that future aged cohorts will undertake similar housing pathways or transitions to their predecessors.

Whilst Baby Boomers are likely to reach retirement as home owners, there will be a significant minority that continues to rely on the rental sector, in both private and social rental properties. Although some older Australians rent by choice, most are in this position due to personal circumstances and financial constraints.¹⁶

Table 3.3, reproduced from the Australian Bureau of Statistics (ABS) 2009–10 Survey of Income and Housing (SIH), indicates the breakdown of housing assistance by age group and compares these figures with those living unassisted in the private rented sector. Although the proportion of Commonwealth Rent Assistance (CRA) recipient households reduces amongst older age groups (and the role of social housing for these age groups increases), the 8 per cent of retirees receiving CRA equates to 188,000 pensioner households. Older CRA recipients are likely to be more represented in certain parts of the major cities than others and thus they represent an important element of local housing market dynamics in those areas.

Table 3.3 Housing assistance type by selected personal characteristics, 2009–2010 (per cent of persons)

Age group	Social housing households	CRA recipient households	Unassisted private renter households
Under 18 years	32	39	20
18–30 years	8	18	35
31–40 years	10	17	23
41–50 years	15	9	13
51–64 years	17	9	8
65+ years	18	8	1

Source: Pinnegar et al 2012, ABS 2009–10 Survey of Income and Housing.

Note: CRA is Commonwealth Rent Assistance.

Renters, including older renters, are significantly more mobile than home owners. One reason for the higher mobility rate is greater difficulty in adapting a rented home to meet changing health circumstances and ability. Home modifications are more

15 See also McDonald, P and Temple, J 2011, *Projections of Housing Demand in Australia, 2009–2039, narrative report prepared for the National Housing Supply Council*. Canberra, available at www.nhsc.org.au.

16 Beer and Faulkner in Pinnegar et al 2012, op cit.

difficult to get approved and to finance (unless government services provide support).¹⁷ Affordability is also likely to contribute to the higher incidence of mobility amongst private renters. One response to decreasing affordability is to move to evermore marginal housing. Mobile and manufactured home communities, boarding houses and hostels remain home to small numbers of older Australians: less than 6 per cent of the survey sample.¹⁸ Commonwealth Rent Assistance can help retirees with no income other than the pension to remain competitive in the rental market; however, the decreasing affordability of market rental in many major cities is affecting older Australians.

Social housing tenants

The second response to chronic insecurity in the rental market among the current generation of older Australians is a greater shift to social housing. In 2004, of renters over 64 years of age, 48.3 per cent were in the social housing sector. The proportion of renters in social housing increases with age to 57.8 per cent of those over 84 years.

The social housing system is unlikely to be able to adequately respond alone to these demands from older renters due to the lack of growth in the sector and the competing claims of other population groups. Older people will continue to be a high proportion of tenants in the social housing system, but it is likely that a steadily increasing proportion of low-income older households will be renting in the market sector.¹⁹

The social housing sector is likely to face three major challenges with retirement of the baby boomers:

- **Overall volume** — The larger population coupled with prevailing proportions of households outside homeownership means that, even as a residual housing option, social housing demand will climb.
- **Suitability of the social housing stock** — Even though more of the existing social housing stock is tenanted by older Australians, it is potentially not well suited to complex needs and limited independence of older Australians. More of the growth in specialised housing will need to come from the not-for-profit sector, including non-profit retirement homes or ‘independent living units’.²⁰ It is also

17 Judd, B, Kavanagh, K, Morris, A et al 2004, *Housing Options and Independent Living: Sustainable Outcomes for Older People who are Homeless*, AHURI Final Report No. 62, Australian Housing and Urban Research Institute, Melbourne.

18 Bridge, C, Davy, L, Judd, B et al 2011, *Age-specific Housing and Care for Low to Moderate Income Older People*, AHURI Final Report No. 174, Australian Housing and Urban Research Institute, Melbourne, pp 10, 41.

19 Jones, A, Bell M, Tilse C et al 2007, *Rental Housing Provision for Older Australians*, AHURI Final Report No. 98, Australian Housing and Urban Research Institute, Melbourne, p viii.

20 McNelis, S 2004, *Independent Living Units: The Forgotten Social Housing Sector*, AHURI Final Report No. 53, Australian Housing and Urban Research Institute, Melbourne.

worth noting that renters, and social housing renters, are more likely to end up in nursing homes.

- **Cost of providing such housing** — Even as the onus shifts away from government housing provision, the need for high levels of subsidy will strain government finances and policy. The low incomes of older social housing tenants, along with their complex needs, will mean that specialised, and therefore expensive, housing will be needed.

Diversity of life experience and family relationships

Households approaching retirement are assessing their housing needs and options at that time — in response to leaving the workforce or their children leaving home — rather than waiting until 65. Of respondents aged 55–64 (in 2006) 41.5 per cent had moved to their current home in the previous 10 years.²¹ Analysis of 2006 Census data found that, while the number is increasing, households in the 45–64-year age bracket were less likely to move house in the intercensal period than those in the population as a whole.²²

This suggests a number of moves precede retirement age and are triggered by changing household structure, such as children leaving home, and partnership changes like separation, divorce or remarriage.

One of the most significant differences between Baby Boomers and previous generations is their family status: the marriages of Baby Boomers are less certain, with separation, divorce and remarriage more common. People who experience separation or widowhood can have financial hardship and disruptions to home ownership aspirations.²³ However, often these household adjustments are not permanent; remarriage can be a path out of the financial constraint that has affected housing choice, particularly for women.

In one study, 82 per cent of renters aged 55 years and over indicated they had previously been in the home ownership market. The reasons for moving represent both voluntary and involuntary factors, with relationship breakdown accounting for over one-quarter of the responses.²⁴

21 Beer and Faulkner 2009, op cit, p 133.

22 Wulff, M, Champion, A and Lobo, M 2010, 'Household diversity and migration in mid-life: understanding residential mobility among 45–64 year olds in Melbourne, Australia', *Population, Space and Place* 16: 307–321, p 313. Mobility indicators in the 2011 Census were not available at the time of writing.

23 Wood, G, Chamberlain, C, Babacan, A et al 2008, *The Implications of Loss of a Partner for Older Private Renters*, AHURI Final Report No. 116, Australian Housing and Urban Research Institute, Melbourne.

24 Beer and Faulkner 2009, op cit, p 112.

Three-quarters of the married, never-divorced men owned a home outright, compared to just 41 per cent of the divorced single men and 58 per cent of the divorced and remarried men.²⁵ Those who were divorced and single were substantially more likely to be renting than the married — 49 per cent of divorced single men were renting compared to just 21 per cent of the divorced and remarried men and 15 per cent of the married, never-divorced men. Those affected by divorce are more likely to reach retirement age still paying off their homes. Although re-partnering may occur, increasing numbers now enter retirement single.

The proportion of older Australians living in retirement homes remains small; however, there is a higher incidence of lone persons than couples in retirement homes: 3 per cent and 1 per cent respectively.²⁶ Whilst historically this is likely due to the death of a partner, the higher incidence of divorces among Baby Boomers could translate into higher proportions living in such complexes. Indeed, retirement villages have been identified as the fastest-growing form of housing for older Australians, albeit from a low base.²⁷

Home and community care packages can delay the need for older Australians, particularly very old Australians, to move into residential care arrangements. The most recent changes to aged care policy, the *Living Longer Living Better* aged care reform package, nearly doubled the number of home care packages.²⁸ As delaying the move into residential care has benefits for the recipient of care and also lowers government aged care costs, it is likely to continue to expand.

However, the number of people with a disability is likely to significantly increase over the next two to three decades. Many of these people will expect to remain living in the community (not in residential care) and will require a range of housing options and housing with care options,²⁹ further increasing demand for such services. The distribution of services is also a key factor, the potential for people to age in their existing community, is limited in poorly serviced remote areas.

25 de Vaus, D, Gray, M, Qu, L et al 2007, *The Consequences of Divorce for Financial Living Standards in Later Life*. AIFS Research Paper No. 38, Australian Institute of Family Studies, Melbourne (analysis of HILDA data pp ix-x).

26 Hugo 2007, op cit.

27 Davy, Bridge, Judd et al 2010, op cit.

28 Australian Government 2012, 'The *Living Longer Living Better* aged care reform package provides \$3.7 billion over five years. It represents the commencement of a 10-year reform program. The reforms give priority to providing more support and care in the home, better access to residential care, more support for those with dementia and strengthening the aged care workforce. They will be progressively implemented from 1 July 2012'.
<http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-aged-care-review-measures-living.htm> (accessed 19/12/2012).

29 Faulkner, D 2007, 'The older population and changing housing careers: Implications for housing provision', *Australasian Journal on Ageing* 26: 152–6, p 153.

The other avenue of support for older Australians continuing to live in the community is informal care provided by a partner or other family member. The options for such support for older Australians will depend on family circumstances, including the relative health of a partner and — particularly in light of higher lone-person households — the geographical proximity of children³⁰ and the capacity of adult children to take on care.

Suitability of housing stock

The spatial plans of Australia's major cities expect the decrease in household size driven by increasing numbers of over-55-year-olds to translate into an increase in demand for smaller housing options. And while this may be true in some circumstances where financial or health constraints dictate a need for such a move, Baby Boomers reaching retirement with financial and health security are less likely to downsize.

Demand for smaller housing in Australia, has not, to date, followed a decrease in household size.³¹ This has mostly been because shrinking household size is not related to a shrinking in household wealth, and wealth is a much more likely trigger for reassessing housing choice. Overcrowding nearly always leads to a residential move, but a surplus of space tends not to be considered a problem because it is easier to adjust to surplus space than to a shortage of space. This general tendency to upward adjustment has generated the perception that older households 'over-consume' housing.³²

One reason that family homes remain suitable for retiring Baby Boomers is the ongoing use of the space. This use of space is partly a reflection of the greater amount of leisure time to spend in the home and garden. There were various cases of 'spare' bedrooms being used as offices, exercise rooms or sewing rooms or for other hobbies and leisure activities.³³

Spare bedrooms are often occupied by guests and temporary residents; having a space for people to stay comfortably was an important means of retaining social connections and realising desired lifestyles. Nearly one-quarter of households housed temporary residents (defined as those staying at least 20 nights per year) — mostly children, grandchildren and other family members but also friends, students and overseas visitors.³⁴

30 Percival, R and Kelly, S 2004, *Who's Going to Care? Informal Care and an Ageing Population*, National Centre for Social and Economic Modelling, University of Canberra.

31 Wulff, M, Healy, E and Reynolds, M 2004, 'Why Don't Small Households Live in Small Dwellings? — Disentangling a Planning Dilemma', *People and Place* 12: 2004, p 68.

32 Judd, B, Olsberg, D, Quinn, J et al 2010, *Dwelling, Land and Neighbourhood Use by Older Home Owners*, AHURI Final Report No. 144, Australian Housing and Urban Research Institute, Melbourne.

33 Judd et al, *ibid*.

34 Judd et al, *ibid*, p 111.

A number of policies prolong the potential for people to age in place. Home modification, to delay the need to relocate, is quite common.³⁵ The potential to modify homes in response to deteriorating mobility and health will depend on two factors: the suitability of the housing and the financial circumstances of the individual. Around one-third of participants in a 2010 study had already modified the home and around 40 per cent considered future modifications likely. Grab rails, bathroom modifications and modifications to stairs were the most common modifications. The same study also found that around half of participants thought they had funding to make the necessary modifications.

Where finances are not a factor, modifications will be a viable option, but support for home modifications, although highly valued, is not well organised.³⁶ The adaptation of the built environment to meet the needs of an ageing population is not limited to the building; it applies equally to the surrounding neighbourhood. Some local authorities are doing better than others in implementing age-friendly neighbourhood design. However, as the number of older people increases this will become increasingly important, particularly in those areas where older people are likely to be more highly concentrated.³⁷

Location

In a 2005 study, two-thirds (64.6 per cent) of respondents indicated that they wanted to stay in their present home and wanted to 'age in place'. Asked about the reasons for remaining in their present home, only one-fifth spoke of emotional attachment to the home itself. Most respondents simply wanted to remain in the same location — pleasure in and familiarity with the area and its facilities were regarded as important factors contributing to people's day-to-day lifestyle.³⁸

Significant numbers of respondents in a 2010 study³⁹ regularly participated in, and more than half felt it was important to be close to: shopping/banking/retail; medical/health; family and friends; sport and recreation activities; community and social clubs; volunteering; and theatre and cultural activities. Other studies also found older households desired a safe neighbourhood and access to facilities, services, major centres and transport.⁴⁰

35 Judd et al, *ibid*.

36 Jones, A, Jonge, D and Phillips, R 2008, *The Role of Home Maintenance and Modification Services in Achieving Health, Community Care and Housing Outcomes in Later Life*, AHURI Final Report No. 123, Australian Housing and Urban Research Institute, Melbourne.

37 Judd et al 2010, *op cit*, p 279.

38 Olsberg, D and Winters, M 2005, *Ageing in Place: Intergenerational and Intrafamilial Housing Transfers and Shifts in Later Life*, AHURI Final Report No. 88, Australian Housing and Urban Research Institute, Melbourne, p 34.

39 Judd et al 2010, pp 213, 217.

40 Kelly, JF, Weidmann, B and Walsh, M 2011, *The Housing We'd Choose*, Grattan Institute, Melbourne.

Access to family and friends remained an important priority in housing choice. Some participants did have distant friends and family, partly explaining the need for a guest room. However, many also identified the ability to socialise with family and friends locally, particularly where technology or travel became less viable options for communicating over longer distances.

Mobility is relatively high among Australians, including older Australians, compared to other parts of the world.⁴¹ And the degree of mobility is growing.⁴²

Retirees in big cities may move to other parts of the same metropolitan area — for example, quasi-rural estates in one direction and well-serviced inner city complexes in the other. This group is likely to want to retain some connection to the community of their working life (including family and friends).

However, retiring Baby Boomers may be more likely to move to a new location than previous generations of retirees. Greater mobility might be partially attributed to fewer family links to a particular location; these are replaced with broader links to formal social services that tend to be less place-specific.⁴³ Baby Boomers are also likely to have been more mobile during their working life, reducing the local anchors that accrue over time. The higher degree of travel also increases the potential connection to more geographically distant communities. ‘Independence, flexibility, consumer and lifestyle choices increasingly take precedence’ in housing choice of retiring Baby Boomers — drivers that were not as dominant in previous generations.⁴⁴

Rural retirees, like farmers, often move to nearby regional centres for the higher amenity and higher levels of servicing as well as lifestyle aspirations — 26 per cent of over-65-year-olds that move to high-growth coastal areas are from country areas and 39 per cent are from capital cities.⁴⁵

There is a perception that holiday home ownership remains a factor in determining the extent or destination of retired movers.⁴⁶ A ‘particular feature ... has been widespread patterns of people taking up more or less full-time residence in their former holiday homes upon retirement’.⁴⁷ Even if Baby Boomers are over-represented amongst those owning holiday homes, it can be estimated that they would represent no more than 1–2 per cent of all households. Assuming that only a

41 Hugo 2007, op cit.

42 Wulff, Champion and Lobo 2010, op cit, pp 307–21.

43 Hugo 2003, op cit.

44 Olsberg and Winters 2005, op cit, p vii.

45 Davis, S and Bartlett, H 2008, ‘Healthy ageing in rural Australia: issues and challenges’, *Australasian Journal on Ageing* 27: 56–60.

46 Burnley, I and Murphy, P 2004, *Sea Change: Movement from Metropolitan to Arcadian Australia*, UNSW Press, Sydney.

47 Hugo 2007, op cit, p 5.

proportion of that 1–2 per cent have primary residence in a major city⁴⁸ and that only a proportion of that intend to permanently relocate to their holiday home upon retirement⁴⁹ then less than 1 per cent may be ‘freed up’ by retiring scene changers. Ownership of an additional property by Baby Boomers appears to be primarily for investment purposes, with only a minority identifying as holiday home owners.⁵⁰

Financial influences

The Baby Boomer cohort also comprises considerable financial diversity. Not all conform to the stereotype of privileged owner occupier enjoying a portfolio of financial assets to help fund a comfortable, leisure-oriented retirement. Many will continue to work long past 65, through choice but also out of necessity – not least given the shocks and uncertainty that can derail well-made financial plans.

There will also be those Baby Boomers who continue to work because they have not had access to the asset-wealth through home ownership, that has long been the assumed welfare policy for Australians to provide support, stability and security in their later years. With many private renters remaining in this tenure at retirement, the role of housing both as asset and shelter as a key determinant in the future trajectories of different ‘types’ of Baby Boomer is crucial.

A key difference between retiring Baby Boomers and previous generations is the shift away from employee pensions to superannuation. The transition, particularly from 1992, when superannuation contributions became compulsory, has significantly affected ongoing income of retirees. Many Baby Boomers, particularly women, only began accruing superannuation later in their careers. Also ‘more 50- to 69-year olds are facing retirement with higher levels of debt than the previous generation; and a large group is leaving the labour force with very little if any superannuation’.⁵¹ Housing wealth may need to be released to enable a comfortable retirement lifestyle.⁵²

Retirees are often prepared to make fairly drastic compromises to lifestyle before drawing down on housing equity, but this might not always be an option. Changing circumstances, like a medical issue or loss of employment, that have reduced income before retirement could precipitate the need to liquidate the equity in the family home. Such a reliance on housing equity could result in people slipping in and out of

48 McKenzie, F, Martin, J and Paris, C 2008, ‘Fiscal Policy and Mobility: The Impact of Multiple Residences on the Provision of Place-Based Service Funding’, *Australasian Journal of Regional Studies* 14: 53-71 (McKenzie et al cite one study where nearly 15 per cent were owned by residents of regional areas).

49 McKenzie et al cite studies where around half intend to do so.

50 Beer and Faulkner 2009, op cit, p 122.

51 Faulkner 2007, op cit.

52 Yates, J and Bradbury, B 2010, ‘Home ownership as a (crumbling) fourth pillar of social insurance in Australia’, *Journal of Housing and the Built Environment* 25: 193–211.

home ownership.⁵³ In older people, at the most extreme, home ownership can then become untenable because workforce participation to support a return to home ownership is limited.

‘Reverse mortgages’ enable retirees to gradually draw down the value of their home through equity in a bank loan. These are not usually taken on as a planned financial strategy but rather as an unexpected change in circumstances; a shortfall between income and living expenses, such as reduced income due to the global financial crisis or late-life divorce; or realising that their income — for example, the Age Pension — is not sufficient to support a modest lifestyle.⁵⁴ There are very low levels of understanding of the workings of such products, or the risks and ongoing costs involved, even among study respondents who had taken out such products.

Downsizing and moving to a cheaper location are other possible strategies for releasing housing wealth. There are a number of financial reasons — including policy-driven financial reasons — that make relocation to cheaper housing less desirable. First, there are the transaction barriers of relocation, including the costs of selling and buying — agent fees, removalist costs and stamp duty. These financial barriers to the relocation itself are often coupled with other barriers like the hassle of moving and stress associated with selling a house.

Second, there are disincentives to having additional wealth outside housing, particularly where relocation results in the release of significant money from a housing asset (that is, where the new house is less valuable than the original house). Means testing of pension entitlements excludes home ownership (for occupation) from the tests (this is offset by pension rates excluding housing costs). Thus, drawing down on that asset could both reduce the incoming pension and, in the case of rental, increase the outgoing living expenses. The ‘current assets test has a significant deterrent effect on people’s willingness to sell their home and move to more appropriate housing, particularly if that would involve renting or other forms of periodic payment for accommodation’.⁵⁵

Conclusions

The decisions of older households should be seen as integral to, and operating within, the broader housing market. Older households already are, and will increasingly become, a key player in mainstream market dynamics and thus understanding residential decisions and behaviours of this cohort infuses much broader

53 Wood, G, Colic-Peisker, V, Berry, M et al 2010, *Asset Poverty and Older Australians’ Transitions onto Housing Assistance Programs*, AHURI Final Report No. 156, Australian Housing and Urban Research Institute, Melbourne.

54 Davy, Bridge, Judd et al 2010, op cit, p 7.

55 Productivity Commission 2011, *Caring for Older Australians*, Inquiry Report 53, Volume 2, p 293 http://www.pc.gov.au/_data/assets/pdf_file/0014/110930/aged-care-volume2.pdf (retrieved on 22 May 2012).

supply/demand considerations. The Baby Boomers, in terms of their sheer numbers but also in longevity post-retirement, will continue to shape the mainstream housing market.

Metropolitan planning frameworks hold out much hope that Baby Boomers — as their children leave the nest and as they retire — will represent an obvious market for smaller properties in well serviced, highly accessible locations and at the same time, they will release family housing in desirable locations in our metropolitan cities. Countering this, the desire to age in place is pervasive.

While it is important to understand how a more ‘efficient’ use of existing housing stock can be encouraged (such as policies that seek to promote and facilitate downsizing), the harder, but perhaps more realistic, issue here is how we might approach the challenges of housing an ageing population without assuming they are going to comply with the efficiency thesis any more than other age cohorts.

Baby Boomer households in retirement, as long as their choices are directed more by choice rather than by constraint, are likely to engage and operate in the housing system and markets much as the rest of the population: in ways that are often inefficient in terms of utilisation and that reflect ‘housing as investment’ alongside ‘housing as shelter’ considerations. They are equally likely to contribute to the messy and ‘sticky’ nature of the market. An understandable desire of many to age in place exemplifies this.

Council perspectives on the study

The scoping study *Understanding Housing and Location Choices of Retiring Australians in the ‘Baby Boom’ Generation* outlines the broad scope of research that has been done and could be done to better plan to meet the housing needs and wants of this cohort. Future studies might consider the implications of Baby Boomers living longer⁵⁶ than the previous generation of older Australians and the pressures this may place on private and social housing. Financial pressures and life events in this cohort may increase the demand for social housing more or less than current trends suggest. There may be more pressures on non-private dwellings because of a higher incidence of disability and dementia.

In future work the Council may consider the extent to which Baby Boomers are seeking to ‘age in place’ as opposed to ‘age in the family home’. There are strong indications that it is the location (place) that is important. Does a preference for ageing in place offer the opportunity for facilitating infill types of development with Baby Boomers as the main occupants, thus freeing up existing family homes for

56 A male currently aged 65 could expect to live a further 19 years and female a further 22 years. (ABS, *Deaths, Australia, 2011*, media release, 8 November 2012, cat no. 3302.0) In 2011, the median age at death was 78.4 years for males and 84.5 years for females (ABS, *Deaths, Australia, 2011*, cat no. 3302.0).

families with children? The greater number of singles in this age cohort and the growth in 'retirement' housing may also suggest the need for new forms of infill housing.

The study notes that the impact of the Baby Boomer cohort retiring to holiday locations may be overstated. However, it also notes the size of the age group and some evidence of a greater willingness to move to a new location, and the likelihood of seeking better amenity and/or more cost-effective housing. In the future the Council may further consider the effect of Baby Boomers' sea change and tree change moves and whether they will in fact free up metropolitan homes.

The Council will continue to explore the implications for housing of an ageing population, in particular recognising the influence of the Baby Boomer cohort on housing markets and future housing needs.

Migration and housing needs

In the 2011 State of Supply Report the Council reported the results of an exploratory study of the housing experience of permanent migrants.⁵⁷

In 2012 the Council commissioned a further study from the Australian Demographic and Social Research Institute at the Australian National University on permanent and temporary migration, the dwelling and tenure types and the preferred housing locations of different groups of migrants. Some of the findings of this study are outlined in this section.

The *Scoping Study of Migration and Housing Needs*⁵⁸ examines the housing characteristics of recently arrived permanent and temporary migrants by their visa category, using data from a number of sources including the 2006 population Census and the 2006 and 2010 General Social Surveys (GSS). Migrant groups examined include overseas students, skilled temporary migrants on the 457 sub-class visa, New Zealand citizens (who migrate without a visa under the Trans-Tasman Agreement), and permanent migrants in the *skilled, family and humanitarian* migration visa categories.

Migrants' household and housing characteristics, including household type, household size, location, housing tenure and housing costs, are examined. Comparisons are made with the Australian-born population where relevant. The study also examines changes in some of these household and housing characteristics with longer residence in Australia.

Housing characteristics of permanent and temporary migrants

Both permanent and temporary migration to Australia increased during the first decade of the 21st century. The number of total permanent migrants nearly doubled during the decade after 2000. Most of the increase came from the large increase in skilled migration, but there were also increases in family and humanitarian migration and in New Zealand citizens coming as permanent migrants.

There are differences in the household and housing characteristics of different groups of permanent and temporary migrants. There are differences in household size, type of household, type of housing and housing tenure among the different visa groups of permanent migrants. Recently arrived humanitarian migrants have larger household sizes and a much higher percentage are renting compared to skilled migrants. Among temporary migrants, overseas student housing characteristics are different from

57 Deloitte Access Economics 2011, *The Housing Aspirations of New Settlers to Australia*, NHSC, Canberra, www.nhsc.org.au.

58 Khoo, SE, McDonald, P, Temple, J and Edgar, B 2012, *Scoping Study of Migration and Housing Needs*, report to the National Housing Supply Council, Department of the Treasury, Australian Government.

those of skilled temporary migrants, although both groups are concentrated in the capital cities and in Sydney and Melbourne in particular.

There were also differences within types of migrants' housing arrangements when analysed by characteristics such as country of origin. For example, overseas students from India have different housing characteristics from students from East and Southeast Asian countries such as China and Malaysia. Skilled temporary migrants' housing arrangements also differed by their demographic and employment characteristics.

Housing characteristics of recently arrived migrants (in 2010)

Less than half of all permanent migrants who arrived during 2006–2010, compared with 75 per cent of temporary migrants, were renting in 2010. Permanent migrants are also more likely to live in houses while temporary migrants are more likely to be in flats. Six per cent of permanent migrants who rent are renting from public housing authorities. They are likely to be humanitarian migrants. A higher proportion of temporary migrants have weekly rent payments of \$500 or more.⁵⁹

A higher proportion of temporary migrants are male, never married, and are in younger age groups than permanent migrants. Therefore, a higher percentage of temporary migrants have no dependent children in their households. A greater proportion of temporary migrants live in group households compared with permanent migrants. These housing characteristics of temporary migrants are likely to be due to the fact that a significant proportion of temporary migrants are overseas students.

Temporary migrants, who are likely to be overseas students, are mostly renters. The 2010 GSS does not include overseas students in residence halls. However, the 2006 Census data show that the percentage of overseas students⁶⁰ living in university residence halls is highest for the students who are recently arrived (14 per cent) and the percentage decreases the longer students reside in Australia. Among students living in private dwellings, over 80 per cent are renting and more than 50 per cent are living in flats. The share that lives in flats decreases with length of time in Australia while the share that lives in separate houses increases. The data also suggests that the longer students live in Australia the less likely they are to be living in group households.

59 2010 General Social Surveys (GSS) data collected by the ABS; dollars are 2010 values.

60 Persons born overseas who are aged at least 18 years, who arrived in the five-year period before the 2006 Census, who are enrolled in full-time study and are not living with a parent are assumed to be temporary migrants on overseas student visas.

Table 3.4 Housing characteristics of permanent and temporary migrants who arrived in 2006–2010

	Permanent residents	Temporary residents		
		All	Full-time students	In skilled occupation
		Per cent		
Tenure type				
Owner occupied — fully owned	9.8	2.5	2.1	0.9
Owner occupied — with a mortgage	40.8	20.7	10.9	21.1
Renter	48.1	74.8	82.1	77.6
Other	1.4	2.0	4.9	0.4
Dwelling structure				
Separate house	61.6	36.3	41.2	27.0
Semi-detached/row	16.3	16.3	15.7	18.3
Flat/apartment	22.1	47.3	42.7	54.7
Number of bedrooms				
1	3.3	8.4	12.0	2.2
2	25.4	33.1	26.8	42.2
3	44.3	44.7	49.3	37.9
4+	27.1	13.9	11.9	17.7
Landlord type (renters only)				
Real estate agent	75.1	60.9	59.2	51.8
Relatives	0.7	1.7	0.4	0.1
Other person	16.1	33.9	35.4	44.4
State/Territory housing	5.7	0.6	0.6	0.1
Other	2.4	2.9	4.4	3.5

Source: Khoo et al 2012, analysis of 2010 General Social Survey (GSS) data.

Note: The GSS population excludes people in non-private dwellings such as university residence halls. Therefore, its sample of temporary migrants would exclude many overseas students. Skilled occupations include the first four major occupational groups.

Over 21 per cent of temporary migrants in skilled occupations are living in a dwelling that they have purchased and 55 per cent are living in flats. Temporary migrants in skilled occupations are more likely than those who are students to have weekly rent payments of \$500 or more.⁶¹

There are few studies focusing on the housing situation of temporary migrants. A survey of temporary migrants on the 457 sub-class visa that was conducted in 2003–04 as part of a larger study showed that most of them (75 per cent) were living in

61 2010 dollar values.

rented housing.⁶² However, 10 per cent had bought a house or flat while 8 per cent were living in accommodation provided by their employers. The remaining 5 per cent were living with relatives or boarding with others. Female survey respondents were less likely than male respondents to be living in employer-provided housing.

The same survey showed that migrants living in owner occupation tended to be older, living with a partner, and had applied or intended to apply for permanent residence in Australia. They were also more likely to be in managerial occupations and to be located in capital cities other than Sydney and Melbourne.

There is an increase in one-person households and a decrease in households with six or more persons the longer migrants live in Australia, but not much change in terms of the number of dependent children in the migrants' household. As observed in other data and studies, the rate of home ownership increases and the percentage in rented housing decreases the longer a migrant has been living in Australia.

Conclusions

Unsurprisingly migrants' household and housing characteristics changed the longer they are resident in Australia. While a high proportion of recent migrants are renters, the proportion that is renting decreases the longer migrants live in Australia, as more migrants become home owners. This is consistent with the findings of earlier studies of the housing characteristics of permanent migrants, including the results published by the Council in 2011. Overseas students also show this transition in housing tenure with duration of residence. Household size also decreases the longer a person has lived in Australia.

The changes in migrants' housing characteristics the longer they live in Australia indicates that the changes are part of the process of adjusting to life in Australia. Changes in migrants' housing characteristics need further analysis in relation to other aspects of migrants' adjustments to life in Australia (such as employment and residence outcomes) to more closely examine the role that housing plays in migrants' adjustment to life in Australia.⁶³

Household responses to changing housing affordability

In 2011 the Council noted that in the longer run, the impact of housing shortages on access to housing is likely to appear at the lower end of the income and wealth distribution. The impact on housing costs may be felt more widely in households' capacity to save, in consumption and locational choices, in vulnerability to

62 Khoo, SE, McDonald, P and Hugo, G 2005, *Temporary Skilled Migrants in Australia: Employment Circumstances and Migration Outcomes*, Department of Immigration and Multicultural and Indigenous Affairs, Canberra.

63 Khoo, McDonald, Temple and Edgar 2012, op cit.

unemployment and in a variety of other ways that affect quality of life. To further its knowledge, the Council commissioned a scoping study on *Household Responses to Declining Affordability*⁶⁴ from the Centre for Housing Urban and Regional Planning at the University of Adelaide.

The study highlighted current knowledge, existing research gaps and research required to fill those gaps. It investigated individual and household responses to declining housing affordability in Australia, focusing on:

- affordability constraints and trade-offs;
- population changes⁶⁵ that might occur in response to poor housing affordability; and
- the extent to which the housing needs of the population unable or unwilling to access the private housing market are met in the non-private housing market.

In future work the Council will continue to consider how to best measure the availability of affordable housing and how the distribution of housing shortages impacts on Australian households.

Measuring housing affordability

The study examined housing affordability in broad terms, considering housing-related living costs including those costs that are affected by choice of location and tenure type. Some of these choices may represent a trade-off, with the direct cost of acquiring a home and the direct cost of access to employment inversely related to the cost of housing.

The report includes a critique of some of the regularly used measures of affordability. It noted a conceptual flaw implicit within current major housing affordability measures — the inability to capture its temporal dimension. For example, the ratio or 30/40 approach (numbers in the bottom 40 per cent of the income distribution paying more than 30 per cent of their income in housing costs) used by the Council⁶⁶ among others, looks at only a point in time. It is likely to hide some of the most vulnerable groups as well as incorrectly classify some individuals who temporarily slip above and below the cut-off. Cross-sectional (or ‘point in time’) assessment is a useful tool for describing and comparing housing affordability at the average population level, but it is unable to provide information about how households react to declining housing affordability.

64 Baker, E, Lester, L, Beer, A and Bunce, D 2012, *Households Responses to Declining Affordability*, NHSC commissioned report, available at www.nhsc.org.au.

65 This term covers the demographic and social changes that might occur, such as changes to household formation patterns.

66 NHSC 2012, *Housing Supply and Affordability – Key Indicators, 2012*, pp 37-49.

The report outlines two distinct pathways for responses to affordability constraints: housing and non-housing adjustment. In the housing response, households may act to reduce their housing expenses by relocating, renegotiating their finance costs or making some other change to the quality or quantity of the housing that they consume. In the non-housing response, households may address their housing affordability constraint by adjusting their non-housing consumption — for example, by reducing their private health insurance coverage or expenditure on food.

The study considers the availability of information that would allow an assessment of how individuals and families in varying circumstances respond to housing affordability pressures. It examines options for exploring whether and how these households trade off the achievement of other aspirations, such as consumption choices; types and styles of housing; employment participation; and locational choice, lifecycle stage and family formation (including the birth of children, propensity to live in group households and whether children leave home to live in a new household).⁶⁷

Affordability and household change

While not undertaking extensive analysis of changes in households that may be impacted by changes to affordability, the scoping study report notes that the relationship between housing affordability and household change is uneven and it does not occur in isolation. Non-housing factors (exogenous influences, such as a loss of employment) also influence both housing affordability and/or changes to household structures. Any analysis of the relationship between changes to household structures and housing affordability is confounded by these inter-relationships and exogenous factors, making it difficult to establish the degree to which housing affordability actually influences change to household types and sizes (and vice versa).⁶⁸

While information can be obtained about associations and changes in proportions from cross-sectional data like the Census (for future reports the Council is currently assessing options for examining the impact of changing housing affordability on living arrangements using the results of the last three Censuses), sophisticated empirical methods are necessary to establish causality: current analysis allows only implied causality.

The study also outlines an econometric model to measure changes in the number of individuals in each household due to multiple influences – including housing affordability stress.⁶⁹

67 Baker et al 2012, op cit.

68 Ibid.

69 See Baker et al 2012, op cit, pp 5–15 and Appendix A, p 52.

The non-private housing market

The extent to which people are accommodated in ‘non-private’ dwellings and whether the proportion and/or type of households that reside in non-private dwellings has changed over time is also examined. The last part of the study report examines whether people who are unable or unwilling to access private dwellings may seek, or be compelled to seek, accommodation in hotels, short-term caravan parks, health facilities or other forms of accommodation that do not conform with the ABS definition of ‘private occupied dwellings’.

No single data source accurately classifies all of the major groups who live in this non-private sector. So the review draws from a number of literature and data sources: analysis on the relatively robust ABS enumeration of non-private dwellings; the population resident in caravans and similar dwellings; and estimates of the homeless population, and what these estimates can tell us about persons living outside the formal housing market.⁷⁰

Non-private dwellings

The study suggests that between 44,000 and 72,000 persons who were enumerated in non-private dwellings in 2006 can be considered as excluded from the private housing market. This number includes a number of individuals (6,647) for whom the type of non-private accommodation was not stated and approximately half of the 63,772 persons in accommodation for the aged or the retired at the 2006 Census.⁷¹

Households resident in non-private dwellings may reflect particular groups who have different characteristics compared to the general population. Some persons with a disability or long-term health condition may be accommodated in non-private dwellings because of the absence of alternative forms of housing.⁷² For example, many persons with a psychiatric disability reside in boarding houses and others with long-term health conditions may live in hostels and nursing homes despite their relative youth.⁷³ Some people with an acquired brain injury live in boarding houses because of the lack of other options.⁷⁴

70 Ibid, p 25.

71 Ibid, p 32.

72 Beer and Faulkner 2009, op cit.

73 Cleary et al 1998, Horan et al 2001, Anderson et al 2003 in Baker et al 2012, op cit.

74 Beer, A, Baker, E, Batterham, D, Mallet, S, Pate, A and Lester, L 2011, *Addressing Homelessness amongst Persons with a Disability: Identifying and Enacting Best Practice*, monograph commissioned by the Department of Families, Housing, Community Services and Indigenous Affairs.

Table 3.5 Categories of non-private dwellings likely to include persons unable to access the market, 2006

Type of non-private dwelling	Persons
Boarding house, private hotel	16,268
Hostel for the disabled	10,496
Hostel for homeless, night shelter, refuge	4,385
Other welfare institution	6,429
Not stated	6,647
Total	44,225

Source: Baker et al 2012, p 31. ABS Census 2006 data.

The study concludes that 44,225 persons were unequivocally resident in non-private dwellings on a permanent basis because of an inability to access the market for conventional dwellings: see Table 3.5 above.

It is also possible that approximately half of the persons living in accommodation for the aged or the retired could also be included in estimates of unmet housing need. In some instances, non-private dwellings represent lower-level care and support for ageing individuals (occupants are not regarded as being self-sufficient and do not provide their own meals). In other instances, however, such arrangements may simply represent a relatively inexpensive form of housing for income-poor and asset-limited older persons.

Caravans and temporary dwellings

Based on an estimate of the proportion of caravan park residents who were non-holiday-makers in 2006,⁷⁵ up to 44 per cent of residents of caravans could be classified as persons who were unable to obtain accommodation in the private housing market.

Caravans and relocatable homes constitute both a desirable lifestyle choice for one group and simultaneously some of the most marginal housing for low-income Australians, who use such accommodation as part of a solution to a pressing housing need.

Many residents in a caravan or similar dwelling on Census night were there by choice, either while travelling around Australia or because they had chosen to retire or live in an attractive and affordable location.

75 Chamberlain, C and MacKenzie, D 2008, *Australian Census Analytic Program: Counting the Homeless 2006*, ABS.

Caravans and re-locatable homes are also affordable housing to many people who are unable to access rental accommodation in the private market or public housing and who have few other housing options.⁷⁶ For some residents, the housing offered is of a last resort and many are accommodated through referral by the Supported Accommodation Assistance Program (SAAP). Levels of residential satisfaction with this type of accommodation are very low, especially for families with children or women escaping domestic violence. These caravan parks also accommodate large numbers of single males, many of whom have complex needs caused through addiction, mental illness or physical disabilities and are described as ‘tertiary homeless’ individuals because under the cultural definition of homelessness a caravan is regarded as temporary accommodation.

The study’s estimate of marginal caravan park residents is higher than those in the most recent ABS publications on homelessness⁷⁷ (not available when this study was completed). The ABS estimates there were over 12,000 such marginal residents in the 2006 Census (this could represent about 15 per cent of caravan park residents in 2006) increasing to nearly 13,000 in the 2011 Census estimates.

Table 3.6 Persons in other marginal housing, 2001, 2006 and 2011

	2001	2006	2011
Persons living in other crowded dwellings	43,665	43,149	60,875
Persons who are marginally housed in caravan parks	19,465	12,444	12,963
Persons in other improvised dwellings	5,000	7,724	4,504
Total persons in other marginal housing	68,300	63,317	78,342

Source: ABS 2012, *2011 Census of Population and Housing: Estimating Homelessness*, Table 2.1.

Homelessness

Although the causes of homeless are more complex than just a lack of housing, the Baker et al study’s analysis of the literature and Census and other data sources suggests that homelessness is a major contributor to the number of persons excluded from the traditional private dwelling market.

The study notes that the *Counting the Homeless*⁷⁸ report classified 105,000 people as homeless in 2006. The ABS has since released the first official estimates of homelessness using its own statistical definition, with 89,728 classified as being homeless on Census Night in 2006 (0.5 per cent of the Australian population).^{79 80}

76 Reed, R and Greenhalgh, E 2004, Nelson, K and Minnerly, J 2008 in Baker et al 2012, op cit.

77 ABS 2012, *2011 Census of Population and Housing: Estimating Homelessness*, Australia, cat no. 2049.0.

78 Chamberlain and MacKenzie 2008, op cit.

79 See ABS 2011, *Methodological Review of Counting the Homeless, 2006*, discussion paper, cat no. 2050.0.55.001.

Table 3.7 ABS estimates of homelessness, persons by homeless operational groups

Homelessness category	2001	2006	2011
Persons in improvised dwellings, tents or sleeping out	8,946	7,247	6,813
Persons in supported accommodation for the homeless	13,420	17,329	21,258
Persons staying temporarily with other households	17,880	17,663	17,369
Persons staying in boarding houses	21,300	15,460	17,721
Persons in other temporary lodging	338	500	686
Persons living in 'severely' overcrowded dwellings	33,430	31,531	41,390
Total homeless persons	95,314	89,728	105,237

Source: ABS 2012, *2011 Census of Population and Housing: Estimating Homelessness*, p 6.

As the ABS notes, most of the increase in homelessness between 2006 and 2011 occurred in the category 'People living in severely crowded dwellings',⁸¹ up from 31,531 in 2006 to 41,390 in 2011.⁸² A category not included in the homelessness count but likely to indicate people excluded from the mainstream housing market is the 'Persons living in other crowded dwellings' category (requiring three extra bedrooms). This has increased dramatically (41 per cent) from 43,149 persons in 2006 to 60,875 in 2011 (see Table 3.6).

Conclusions

The number of persons housed in non-private accommodation in Australia appears to be growing substantially. The extent to which this may be related to housing affordability requires further examination. The scoping study⁸³ concludes that, at the 2006 Census, somewhere between 135,000 and 167,000⁸⁴ persons were unable to meet their housing needs via the conventional housing market. This population was comprised of persons (including some of the aged) enumerated in non-private dwellings, residents in caravan parks who were accommodated in this tenure through necessity rather than choice, and persons who were homeless at the 2006 Census and not included in the other components of this count.

The scoping study suggested a need for detailed analysis of the 2011 Census data to establish the nature and direction of change since 2006. The study also highlighted the need for further analysis of the data and discussion and agreement on definitions to establish the number of individuals living in 'non-market' housing. It gives one example of the potential undercount when estimating unmet housing need

80 ABS 2012, *2011 Census of Population and Housing: Estimating Homelessness*, Australia, cat no. 2049.0, p 5.

81 Severely crowded dwellings are dwellings requiring four more bedrooms to accommodate all the usual residents using the Canadian National Occupancy Standard.

82 ABS 2012, *Census of Population and Housing: Estimating Homelessness*, Australia, cat no. 2049.0, p 6.

83 Baker et al 2012, op cit, p 26.

84 This estimate might change if reconciled with the new ABS (2012) estimates for homelessness in 2006.

depending on the extent to which accommodation in non-private dwellings for the aged or the retired is due to a need for extra care or a lack of other options.

The ABS's recently published analysis of homelessness using 2011 Census data shows a substantial increase in overcrowding but similar numbers of persons in other marginal housing in caravan parks and other insecure tenures. Although the ABS has used different definitions to those of the scoping study commissioned by the Council, this suggests that the number of persons unable to access the mainstream housing market in 2011 is likely to be greater than was estimated for the 2006 Census by the Baker et al scoping study.

Housing supply responses to changes in affordability

Relatively little comprehensive evidence has been collated on how the home building industry is changing the type of product it produces, and the method for producing it, in response to the decline in housing affordability.

The Council commissioned Urbis to conduct research into this and highlight areas for future investigation. The report from the scoping study *Housing Supply Responses to Changes in Affordability*⁸⁵ is published in full on the Council's website. In addition to a literature review, the study includes interviews with stakeholders with a direct interest and experience of the residential construction industry. These stakeholders included builders and developers, industry peak bodies, not-for-profit housing organisations and researchers, of various sizes and with a wide geographic sweep.

The study documents a number of examples of innovative responses by the industry, but it was not possible, based on the number of interviews undertaken, to accurately identify the extent to which these innovations have been adopted. Besides a few truly innovative, world-class projects, evidence of innovation in response to declining housing affordability is somewhat limited. Those in the industry who are responding to declining affordability most commonly do so through reducing dwelling and lot sizes, changing dwelling product and sourcing cheaper or more efficient materials that reduce time (and therefore costs) on site. The bulk of any change that has happened in the building process looks to have been a modification or refining of traditional construction techniques rather wholesale change. Some of the key points on the industry's response to declining affordability are highlighted below.

Dwellings and lot sizes

A reduction in dwelling and lot size was the major area noted by the industry as having changed in recent years. Some stakeholders quoted a reduction in floor space

85 Urbis 2012, *Report to the National Housing Supply Council: Scoping Study into Housing Supply Responses to Change in Affordability*.

in average two-bedroom apartments from over 80 square metres to around 60 square metres over the last decade.

There was a range of explanations for how this reduction has been achieved, including more open-plan living (for example, dining/living rooms and kitchens combined), more one- and two-bedroom homes being built instead of three- and four-bedroom homes, and reduced circulation areas — communal areas such as hallways, lobbies and stairways.

Terrace houses have become more popular and achieve amenity through higher-density development and the provision of adequate community infrastructure such as open space and community centres.

There has also been an increase in garage-top flats and apartments with the option to connect to adjoining dwellings. These have proved attractive in areas near universities, which tend to have many shared households.

Materials and methods

There was evidence that some builders are looking to use cheaper materials to deliver more affordable dwellings. Some interviewees reported that they were buying materials from overseas, particularly from China, although there were challenges noted in establishing regular supply chains. There also remains a sense of national loyalty by some firms who source materials locally.

The greatest potential savings in the production process was said to be in increasing the efficiency of the construction process by reducing waste and downtime. Some builders also reported that they are looking to new materials and methods of construction, including light-weight bricks in preference to traditional clay bricks that are more costly to lay.

There was also some evidence of off-site manufacturing, such as with pre-cast concrete walls and building facades. However, the integration of off-site manufacturing has been slow, partly due to the fragmented nature of the contracting system. There is also a reluctance to produce new and different products because of concerns about whether the market will accept a new style, particularly modular design, and the investment required to train staff to work in a changed environment.

The cost of transportation both from abroad and within the country, and the relatively small scale of Australian markets, was also cited as a significant constraint to transporting modular components.

However, the study notes that some of the larger players are beginning to explore some of these more innovative practices, often looking to Europe and the United States for examples of best practice.

Partnership with government

Several participants in the study identified areas to work with government, at State and federal level, to deliver innovative and affordable housing. It was noted that government often holds prime sites in desirable inner-city areas that are prime for infill development. Several specific examples were noted of partnerships where governments had contributed land to projects and in several cases innovative construction techniques were used.

The study notes a possible role for governments to act as a catalyst for innovation in their own projects, either by leading in their own projects or by requiring innovation in contracts with the private sector. It concludes that, particularly for smaller builders, stimulation for widespread change will need to come from elsewhere. This could potentially include regulation, incentives that support research and training and 'leading by example' in government projects.

Factors influencing affordability and driving innovation

The study noted a wide range of factors attributed by interviewees as contributing to the decline in affordability in recent years. These included the cost of land; the challenge, particularly for smaller players, to raise finance; the complexity and inconsistency of the planning approvals process; difficulties with finding and purchasing affordable land and the costs of holding it; infrastructure levies; and regulation around the building process.

Factors affecting innovation include financing arrangements; the scale of projects; the geographical spread of delivery (smaller being better for market knowledge and consistent regulations); the capacity to engage in training; the capacity for on-site management; the capacity to invest in research and development; and different types of dwellings.

Innovation is regarded as more accessible for larger-scale developers than smaller players for a range of reasons including economies of scale and ability to self-fund (offering greater flexibility than bank borrowings); larger players also tend to have greater research and training capacity.

Innovation may be easier when an organisation operates over a smaller area without jurisdictional differences, such as different legislative requirements.

There is reluctance in the industry to risk producing new and different products that the market might reject, particularly in locations where these product types are relatively uncommon (for example, terrace housing in outer-ring suburbs). There is also an evident gap between trades expertise and the expertise needed for large-scale projects, which may not currently be being effectively met by other construction professionals. This gap is even more significant with the introduction of innovative building methodologies.

Despite limited evidence of widespread adoption at present, the industry is interested in, and open to, innovation. The study found that a number of major players are beginning to explore the opportunities for introducing more pre-fabricated components, module home design and other types of innovation more seriously.

The study suggests scope for future innovation through a 'Centre for Excellence and Innovation' model, where best practice is recognised and the industry can benchmark quality. It also notes that industry recommends greater community education to help home buyers to better understand the benefits of innovative products and different dwelling types that will allow more people into the market.

Conclusions

A number of opportunities to drive innovation are identified in the study, including the following:

- Require the use of innovative construction methods in government projects.
- Address how the current construction industry contracting model works – it is seen as a disincentive to innovation.
- Invest in training to assist the industry to be able to implement innovation, particularly for smaller and medium sized home builders and developers.
- Support research, development and dissemination of new methods and materials.
- Support infill development as a necessary and significant contributor to housing supply in Australian cities.
- Promote innovation by 'leading by example' in government projects.
- Support the 'Centre for Excellence and Innovation' models.
- Develop a broad community education strategy targeting home buyers as well as the industry itself.

Industry responses to addressing declining housing affordability through innovation in construction methods have been limited to date. The most common responses are to reduce dwelling and lot sizes, to introduce changes in dwelling types, and others: to source cheaper materials from overseas and to introduce some limited prefabricated materials (such as concrete walls) that reduce construction time and therefore costs. These changes are primarily focused on refining traditional trade-based methodologies. There are differing challenges faced by smaller and larger builders in adopting new techniques.

Infill is expected to play an increasing role in meeting new demand in future and is often dominated by smaller players, with community opposition to high-rises slowing the approval process. There is scope for further exploring the challenges faced in adopting innovation in infill areas, particularly as smaller and medium-sized home builders and developers are delivering an increasing share of new dwellings in infill areas.

The challenges associated with greenfield development are different and include the consolidation of land holdings, infrastructure provision and the consumer accepting differing dwelling types.

Council perspectives on innovation and housing supply

While appreciating the interesting snapshots that the interviews uncovered, and that the scoping nature of the study meant that the issues uncovered could not be investigated in detail, the Council has some additional observations on innovation in the housing industry in response to changing affordability.

The study notes there is more scope for innovation than is actually occurring, but that reducing lot sizes and dwelling sizes is the most common response to declining affordability. However, the scoping study, while giving examples, did not map the distribution of this change. In general, dwelling sizes, particularly for detached and semi-detached housing, appear to be increasing as a proportion of total stock,⁸⁶ as can be seen in Chapter 2 (Table 2.4 Bedrooms in occupied private dwellings).

There is a view in the Council that a shift to downsizing lots and the type of homes being produced is a significant change in its own right. It could be argued the industry is being structurally downsized as a result of this change. A move away from 'traditional' homes leads to a question of what the buyer profiles are for these products and whether these markets are big enough to sustain sales of both large-scale master-planned communities and small land developments.

Additionally, it is worth noting that medium/high density and infill development tends to be much more capital intensive than greenfield development. For example, substantial funding needs to be invested earlier in the construction process to provide site infrastructure when producing a block of flats in comparison to developing

86 For example, analysis of Census data in National Growth Areas Alliance (NGAA) Local Government Areas shows that, despite the fact that household sizes have not changed a great deal since 2006, houses are getting bigger (more bedrooms), with a smaller proportion of three-bedroom homes (44 per cent compared to 47 per cent in 2006) and larger proportion of four or more bedroom homes (41 per cent compared to 37 per cent in 2006) in the total housing stock. Of the total increase in the housing stock in NGAA areas since 2006, nearly two-thirds of dwellings have had four or more bedrooms. The proportion of all dwellings with one or fewer bedrooms changed 0.1 per cent and the proportion of two-bedroom dwellings remained the same (<http://profile.id.com.au/ngaa/bedrooms>).

individual lots on a greenfield site. At the other end of the process, developers only receive income, or at least the bulk of the sale price, on completion of an entire infill site in the case of apartments in a block being sold. On greenfield sites with lot-by-lot development, the homes can be sold individually as they are completed. This greater use of capital is costly in its own right.

An increasing share of new homes being built as infill requires industry and government to recognise that this often involves a more complex and lengthy delivery model compared to many greenfield locations. This makes the environment more challenging in its own right and it is questionable whether it is reasonable to add further complexity by adopting new construction methods at the same time unless there are demonstrable time or cost savings (and no inherent sales risk). The Council is interested in evaluating the short- and longer-term impact on the industry of this complexity and the scope for innovation in producing new housing.

As the study notes, industry has identified lack of community education as a barrier to innovation in delivering more affordable supply. The Council notes, for example, that with smaller lot sizes one of the ongoing issues that needs to be resolved is ensuring acceptance by local councils that small lots are an acceptable solution to addressing affordability and that, with the appropriate design controls, they can enhance the overall image and streetscape.

One of the key areas impacting on affordability where there may be scope for innovation is in infrastructure provision. Across the country, the divergence between local councils in the standards and requirements for the delivery of services, such as roads, water, sewer, storm water and electricity, can have an additional cost impact. The Council recommends that State and local governments work towards developing an agreed system of infrastructure planning and funding that will be acceptable to government, the development industry and the community. Additionally, the Council would like to see State and local governments working towards uniform engineering codes for all residential developments to ensure consistency and deliver the cost savings required to address the ongoing affordability challenge.

Conclusions and further research

The Council has long noted the need to examine the potential impacts of the ageing of the Australian population on the provision of housing. This need is confirmed in the study on Baby Boomers and in the study on affordability impacts on households, where it is noted that a substantial proportion of older residents may be in non-private dwellings because of affordability problems rather than care needs. Recognising the likelihood that future social and demographic trends will not necessarily reflect past practice, the Council will continue to explore the implications for housing of an ageing population, in particular recognising the influence of the Baby Boomers on housing markets and future housing needs and planning.

The Council will also continue to examine the scope for innovation and improvement in the creation of available and affordable housing supply to meet the changing needs of Australian households.

Chapter 4

Developments in policy and practice

Overview: planning for housing supply and affordability

In this chapter, the term ‘planning’ is a catch-all expression covering the variety of regulatory arrangements and consultative processes — including land use planning and regulation, urban development controls, transport planning, residential development assessment and approval processes, and infrastructure planning, provision and financing — that determine what can be built where, for whom, when and under what circumstances and, in this way, govern the spatial distribution of people, homes and economic activity.

High-quality planning is essential for the efficiency and fairness of urban development generally and of residential settlement patterns. There are so many externalities arising from the development actions of individual land owners that some form of regulation is inevitable and desirable. At the same time there needs to be balance in how those regulatory arrangements affect the various stakeholders, and often the interests of potential future residents are as important — if not more so — than the interests of those most immediately affected. How planning plays out — how well-researched and proven it is; how quickly, consistently and predictably it happens; how focused and relevant it is; and how impacts are distributed over people, places and time — can make a sizeable difference to the quality of the resulting communities and, importantly, to housing supply and affordability.

Over the past four years, the Council has witnessed accelerating growth of policy development and actions on the way planning arrangements affect housing supply and affordability, and a growing focus on and concern about getting the balance right. This has played out in demands for action from industry bodies and government advisers; policy statements at Commonwealth, State and local government level; and a variety of concrete actions. The Productivity Commission’s investigation of planning arrangements, the Council of Australian Governments (COAG) Reform Council’s report on metropolitan planning, and the Housing Supply and Affordability Reform (HSAR) Working Party’s 2012 report to COAG convey the concerns and priorities for action.

While much of the burgeoning activity is still in formative stages — notably the planning reform consultative processes under way in New South Wales, Queensland, and Victoria — other actions have already made an important difference and highlight productive changes that could be applied more generally. For example, the Australian Government has sought and implemented the advice of Infrastructure Australia on substantial government investment in transport and communications infrastructure; most States and Territories have reviewed their capital city strategic plans and incorporated specific actions to improve the supply and affordability of housing; the Queensland Government has changed infrastructure coordination arrangements; several State and Territory governments have implemented independent development assessment panels; all State and local governments are grappling with infrastructure provision and financing; and the South East Queensland Council of

Mayors has supported innovative action to maintain the rigour of development assessment processes while substantially reducing delays and holding costs.

The related need for direct action to enable home ownership in the face of rising land and housing costs and to improve the supply of affordable rental housing has also played out in industry and government circles. Acceptance by government and industry of small allotments and smaller homes has increased widely, based on the success of early experimentation. This has had a profound effect on access to affordable home ownership in many greenfield developments. It has also boosted the development and construction industry's access to what could have been a lost market.

At the national level, the Social Housing Initiative and the National Rental Affordability Scheme have engaged Commonwealth, State and local governments, community housing associations, public housing agencies and private industry in actions to boost the supply of affordable housing. These and other Australian Government programs have been discussed in previous State of Supply reports and will be covered in depth in an upcoming State of Supply report.

State governments' actions to better focus first home owner programs and stamp duty concessions on new supply, and their wider expression and application of affordable housing targets, are also having an effect. In the latter regard, the pioneering efforts of the Australian Capital Territory (ACT) and South Australian governments deserve special mention.

This chapter provides a snapshot of these recent changes in terms of both policy development and what has already been, or soon will be, implemented. It covers a number of reports that present important analysis and evidence as well as recommendations and findings relevant to governments at all levels. Finally the chapter highlights some of the positive reforms being undertaken at the State and Territory and local government levels to address planning issues and improve affordability.

Reforms and reports

Housing Supply and Affordability Reform report

COAG commissioned the HSAR study in April 2010 to examine the housing supply pipeline and government policies that may act as barriers to supply or stimulate demand for housing.

On 30 August 2012, COAG released the HSAR report and agreed to its broad principles and recommendations to enhance housing supply and affordability.

The HSAR report notes that a number of Commonwealth, State and Territory and local government policies and programs have an impact on the demand for and the supply of housing, on housing affordability, and on the attractiveness of housing as an investment asset. It stresses the importance of all levels of government working together on these issues. The responsibilities of the different levels of government are summarised in Table 4.1.

Table 4.1 Current responsibilities and activities of the three tiers of government¹

	Commonwealth	States and Territories	Local government
<u>Macroeconomic stability</u> : a stable housing market is important for macroeconomic stability. The residential property market is three times the size of Australia's annual GDP ²	Policies relating to taxation, population, investment, the financial sector, as well as a range of housing programs		
<u>Competitive markets</u> : a well-functioning housing market — including the removal of distortions — is welfare enhancing	Policies relating to taxation and investment, as well as a range of housing programs	Taxation policies and infrastructure levies	
<u>Housing supply</u> : a flexible supply response — access to appropriate, affordable dwellings located close to employment — should reduce cost pressures and improve productivity	Competitive building and development markets Commonwealth housing programs	Policies relating to planning, zoning, the regulatory environment and taxation, infrastructure levies, as well as the administration and delivery of housing services	Policies relating to building regulations and approvals, urban planning, infrastructure charges, and development assessment processes
<u>Housing affordability</u> : Australians' wellbeing is enhanced if all individuals can afford access to appropriate and secure shelter	Policies that impact directly or indirectly on the demand or supply side of the housing market, including those that influence the costs of dwelling construction or purchase Commonwealth housing programs	Policies that impact directly or indirectly on the demand or supply side of the housing market, including those that influence the costs of dwelling construction or purchase Administration and delivery of housing services as well as the provision of financial assistance to some renters and home buyers	Policies that impact directly or indirectly on the demand or supply side of the housing market, including those that influence the costs of dwelling construction or purchase

1 COAG HSAR Working Party 2012, *Housing Supply and Affordability Reform*, p 9.

2 The Council notes that States and Territories also have macroeconomic responsibilities and that their fiscal settings are important in the management of economic cycles and the strength of the Australian economy.

The HSAR report has particular significance as it represents an agreed approach by the Commonwealth and the States and Territories to address persistent issues. If implemented, the recommendations should help improve housing supply and affordability by:

- helping to ensure more efficient use of existing land and housing stock;
- decreasing the time and expense involved in bringing new dwellings to market by providing greater certainty for developers and reducing their holding costs;
- reducing costs and charges for developers and home buyers; and
- reforming policies that act as barriers to supply or artificially stimulate demand.

Focus of the HSAR report

Most of the issues the HSAR Working Party was directed to examine relate to housing supply rather than affordability. Its review focused particularly on land supply, infrastructure cost recovery, and land use planning and approval processes.

The HSAR report is consistent with analysis of the housing market in previous Council reports in finding that while demographic and macroeconomic factors have driven growth in housing demand, particularly over the last decade, the supply of housing has not responded proportionately to this growing demand. The report identifies evidence of this in:³

- growth in dwelling completions not keeping up with growth in population at a national level;
- real construction costs not driving the escalating housing prices, suggesting that the costs of land and land development are the major supply-side drivers of increasing house prices; and
- a relatively inelastic housing supply market (more inelastic than in comparable countries) that does not respond adequately to higher demand.

The HSAR report's recommendations aim to improve housing supply outcomes across all States and Territories, though the needs for reform vary between jurisdictions.

Key findings

The HSAR report recommends that States and Territories:

3 COAG HSAR Working Party 2012, *Housing Supply and Affordability Reform*, pp 7–8.

- work to improve the efficiency (including the timeframes involved) of referral, development assessment and rezoning processes;
- work towards greater use of code-based frameworks for assessing residential development applications;
- consider the costs and benefits of local councils' regulatory proposals before they are allowed to exceed State planning requirements;
- agree to principles for infrastructure charges to make them more efficient, transparent and accountable, predictable and equitable;
- consider reforms where strata titling arrangements are currently significantly impeding redevelopment (any proposed changes to existing arrangements in a State or Territory would be subject to the Regulatory Impact Statement requirements applying in that jurisdiction);
- continue to share information about how their target regimes, particularly dynamic land targets, are currently being applied in relation to housing supply and land release;
- ensure that planning policy settings regarding diversity in lot size and dwelling mix do not constrain the operation of the housing market (the HSAR Working Party notes that targeted interventions may sometimes be required to support equity outcomes and promote innovation);
- trial the HSAR underutilised land principles to identify underutilised government land that could be used for housing;
- take account of the HSAR Working Party's analysis in any future consideration of the First Home Owners Scheme; and
- transition the National Electronic Development Assessment Reform Steering Committee into the National ePlanning Steering Committee and report to COAG (through the relevant COAG subgroup) — on a National ePlanning Investment Plan by mid-2012.

It also recommends that the Australian Government:

- trial the application of the HSAR underutilised land principles for land held by the Commonwealth; and
- consider whether Commonwealth housing programs could be reformed to improve their efficiency and effectiveness.

Infrastructure charging on residential developments

One of the most important recommendations of the HSAR report concerns the four overarching principles that should govern how infrastructure charges are applied.⁴

Infrastructure charges are fees levied on developers, or purchasers in some instances, by local government as well as some State governments to fund basic infrastructure (such as local roads and water mains) necessary for land development. In some instances, infrastructure charges are also levied for major infrastructure (arterial roads and pumping stations) and social infrastructure (parks and libraries). Local councils are generally empowered through planning and development legislation to collect contributions from developers for infrastructure.

The report states that where infrastructure charges are applied there can be a lack of consistency, transparency and predictability. This in turn could discourage investment in housing and reduce the overall supply of housing, thereby worsening housing affordability.

It recommends that, at a minimum, infrastructure charges should be:

- **efficient** — charges should be for infrastructure required for the proposed development or for servicing a major development;
- **transparent and accountable** — charging regimes should be supported by publicly available information on the infrastructure subject to charges, the methodology used to determine charges, and the expenditure of funds;
- **predictable** — charges should be in line with published methodologies and charging schedules (with clarity around the circumstances in which charges can be modified after agreement); and
- **equitable**— where the benefits of infrastructure provision are shared between developers (land owners), the infrastructure charges levied on the developer should be no higher than the proportional demand their development will place on that infrastructure.

Additionally the HSAR Working Party found that the transparency and certainty of infrastructure charging regimes could be increased through:

- local councils publishing information on publicly accessible websites about infrastructure charging frameworks and arrangements in practice;

4 COAG HSAR Working Party 2012, *Housing Supply and Affordability Reform*, pp 14–15.

Infrastructure charging on residential developments (continued)

- States and Territories making information readily available through a State and Territory-based process on how infrastructure charging frameworks and arrangements operate in practice.

Next steps

The HSAR report provides a reform ‘road map’ for the Commonwealth, the States and Territories and local government. The Council supports the findings of the report and its proposed directions for reform, although it is unclear how and when the States and Territories will implement their HSAR commitments.

That said, there have been encouraging early signs of implementation. The Australian Government Minister for Housing and Homelessness, the Hon Brendan O’Connor MP, has committed to conducting a pilot of the principles for assessing underutilised government land and to continuing to work with State and Territory governments to ensure that the objectives, roles, and responsibilities of each level of government are clearly defined and transparent.⁵ Additionally, a number of States and Territories are already starting to implement changes to the First Home Owners Scheme that are consistent with the HSAR recommendations. These are outlined later in this chapter.

Productivity Commission Benchmarking Report of Australian Business Regulation: Planning, Zoning and Development Assessments

On 16 May 2011 the Productivity Commission released the report of its benchmarking study of States and Territories’ planning and zoning systems. The report covers the impact planning and zoning systems have on business compliance costs, competition and the overall efficiency and effectiveness of the functioning of cities.

The Productivity Commission consulted extensively and sought views from a diverse range of stakeholders including Commonwealth and State and Territory government agencies, local governments, developers and communities.

Key findings

The Productivity Commission found that all jurisdictions suffer increasingly from ‘objectives overload’ leading to a growing number of issues and policy agendas affecting land-use considerations.

5 The Hon Brendan O’Connor MP, ‘COAG Housing Supply and Affordability Reform Report released’, media release, 30 August 2012, <http://brendanoconnor.fahcsia.gov.au/node/100>.

The Productivity Commission also found that councils' ability to make timely and consistent planning decisions is often hampered by inconsistency and ambiguity in States' and Territories' regulatory arrangements. Examples are a lack of clarity in metropolitan strategic plans, and ambiguous signals about planning and development assessment priorities.

The Productivity Commission identified significant differences between jurisdictions in the degree of integration between planning and infrastructure plans, and in how capably States and Territories manage their relationships with local councils.

The report identified a range of leading practice examples of ways to improve planning, zoning and assessment. These include:

- providing clear guidance and targets in strategic plans while allowing flexibility to adjust to changing circumstances and innovation (so long as good engagement, transparency and probity provisions are in place);
- strong community engagement in determining city planning outcomes;
- broad and simple land use controls to reduce red tape, enhance competition, help free up urban land for a range of uses and give a greater role to the market in determining what these uses should be;
- rational and transparent rules for charging infrastructure costs to businesses;
- risk-based and electronic development assessment;
- timeframes for referrals, structure planning and rezoning;
- transparency and accountability, including for alternative rezoning and development assessment processes as well as limited appeal provisions for rezoning decisions;
- limiting anti-competitive objections and appeals and placing controls on their abuse; and
- collecting and publishing data on land supply, development assessment and appeals.

The Productivity Commission concluded that, although each jurisdiction has at least one leading practice, there are opportunities for all jurisdictions to improve their

planning systems so as to reduce burdens on business and costs to the community, increase competition and improve the liveability of cities.⁶

COAG Reform Council review of capital city strategic planning systems

At the end of 2009, COAG agreed to a set of national criteria for capital city strategic planning systems to provide a platform to reshape capital cities. The criteria are aimed at ensuring Australia's cities have strong, transparent and long-term plans to manage population and economic growth, to improve housing affordability, and to address urban congestion, climate change and environmental priorities.

Specifically the criteria state that capital cities' strategic planning systems should:

- be integrated across functions and across government agencies;
- provide for a consistent hierarchy of future-oriented and publicly available plans;
- provide for nationally significant economic infrastructure;
- address nationally significant policy issues, including housing affordability;
- consider and strengthen the networks between capital cities and major regional centres, and other important domestic and international connections;
- provide for planned, sequenced and evidence-based land release and an appropriate balance of infill and greenfield development;
- clearly identify priorities for investment and policy effort by governments, and provide an effective framework for private sector investment and innovation;
- encourage world-class urban design and architecture; and
- provide effective implementation arrangements and supporting mechanisms.

Through 2010 and 2011 the COAG Reform Council was tasked with independently reviewing the consistency of capital city strategic planning systems against the new criteria with the assistance of an expert advisory panel appointed by COAG. The review was released on 2 April 2012.

6 Productivity Commission 2011, *Benchmarking Report of Australian Business Regulation: Planning, Zoning and Development Assessments*, p xviii.

Key findings

Some of the key findings of the review were:

- while all States and Territories have improved their strategic planning systems, no jurisdiction was wholly consistent with the nationally agreed criteria;
- city strategic plans need to be based on a better understanding of whether and how the private sector can implement the desired housing outcomes, and of the impact of government policies on the market;
- a comprehensive and coherent response to housing affordability was lacking across most planning systems;
- it is important that all levels of government continue to collaborate, as no single level holds all the policy responsibilities or expertise on city strategic planning;
- all levels of governments should commit to ongoing engagement with communities, business and all stakeholders in setting, implementing and reviewing city strategic plans; and
- governments need to consider the cumulative impact of the planning, regulatory and taxation arrangements that apply to housing, jobs and infrastructure in capital cities.

Particularly relevant to the Council's work is the COAG Reform Council's finding that housing affordability is not being addressed adequately in any jurisdiction. The COAG Reform Council report states:

‘while housing affordability is arguably one of the most salient issues facing all Australian capital cities, a comprehensive and coherent response to the issue was found wanting across most planning systems. In particular, it was not always clear why governments were pursuing particular actions to address housing affordability in light of the analysis provided. This suggests a stronger evidence-base is required to interrogate the various options available to government in addressing housing affordability’.⁷

7 COAG Reform Council 2012, *Review of Capital City Strategic Planning Systems*, p 48.

Integration of strategic plans

One of the key recommendations of the COAG Reform Council report is that strategic planning systems be integrated across functions and across government agencies. The report identifies the following examples of best practice against this criterion:⁸

- NSW 2021 is a 10-year plan that sets priorities to guide whole-of-government decision making and resource allocation across the State. It contains five strategies, 32 goals and 180 targets to guide policy and budget decision making. Many of the strategies and goals in NSW 2021 have implications for the planning system. This plan is noted as an outstanding example of a good State plan that provides unifying objectives supported by especially clear actions and performance measures.
- The Northern Territory Government's sense of Darwin's strategic position and long-term potential is highlighted as best practice in unifying objectives. The strategic planning system for Darwin contains the Northern Territory Government's clear sense and vision of Darwin's role in the Territory and Australia. This is reflected in the planning system, which also provides a good sense of Darwin's role in the network of capital cities across Australia.
- The Western Australian Planning Commission and the Western Australian Directors General Working Group are noted as good examples of institutional structures for delivering integrated whole-of-government advice on planning to Cabinet. In particular the Planning Commission stood out as an alternative to the typical path of plans through planning departments and Cabinet coordination processes. The Directors General Working Group brings together directors-general from a broad range of different departments to consider advice from the Planning Commission and provide advice to Cabinet through the Ministerial Taskforce on Approvals, Development and Sustainability.

Next steps

On 18 May 2012, COAG's Standing Council on Transport and Infrastructure considered the findings of the review and responded by noting and agreeing to all the recommendations. The Standing Council on Transport and Infrastructure has agreed to undertake further work on cities. Further work for COAG has been flagged in the HSAR report, which notes that the question of whether strategic planning requirements should extend to other high-growth or large-population regions should be addressed.

8 COAG Reform Council 2012, *Review of Capital City Strategic Planning Systems*, p 68.

Given the significance of urban strategic planning for housing supply and affordability, the Council is pleased to see that improvements have been supported by COAG and that progress is being made with implementation.

Additionally the Council notes the COAG Reform Council's findings of the need for a stronger evidence base around housing affordability, and will continue to work with other bodies and stakeholders to achieve this.

State and Territory housing and planning reform

Many State and Territory governments are undertaking significant reforms to address housing supply, affordability and planning issues. This section provides an overview of selected State and Territory reforms over the past couple of years. It also summarises recent changes to first home owner grants across several jurisdictions. However, it does not give an exhaustive list of all changes and reforms.

The Council supports the objectives of the State and Territory reforms in that they improve housing affordability and increase supply but notes that future reforms at State and Territory level need to be consistent with the findings and recommendations of the HSAR report.

Victoria

The Victorian Government announced changes to its planning zones in July 2012, introducing three new residential zones to provide local councils with mechanisms to identify areas planned for new growth (including through increased density) and those that will be protected from higher density development.

The Victorian Government has also commenced a process to develop a new metropolitan planning strategy over the next two years. The strategy will outline Melbourne's development for the next 30 to 40 years. Consultation on the strategy is currently under way.

A simplified framework for local development contribution plans is being developed based on five infrastructure categories: community facilities, open space facilities, transport infrastructure, drainage infrastructure, and public land. Once finalised, the new framework should provide greater clarity and certainty around the levies to be charged.

New South Wales

In July 2012 the New South Wales Government released a Green Paper *A New Planning System for NSW*. It proposes a range of substantial reforms in the context of a number of serious and persistent criticisms of current planning, land release and infrastructure financing arrangements.

The reforms outlined in the Green Paper are intended to put a stronger focus on up-front strategic land use planning while increasing the speed, certainty and predictability of development assessment for approved modes of development in areas approved for development or redevelopment. The proposed reforms would encourage and facilitate intensive up-front community participation at the city strategic planning stage of the development process.

Strategic plans would outline the growth zoning requirements, growth strategies and required supporting infrastructure. Development proposals that are consistent with the strategic plans would be fast-tracked. Land-use zones would be more flexible to enable more innovative developments. The proposed reforms would also seek to make infrastructure charging regimes fairer and more transparent, predictable and efficient.

Many of the proposed reforms are consistent with the Productivity Commission's benchmarking report and with COAG's HSAR report.

The New South Wales Government intends to release a White Paper and draft legislation soon.

Queensland

The Queensland Government conducted stakeholder forums throughout 2012 to discuss targeted planning issues. These forums focused on achievable reforms in relation to plan making, planning tools, development assessment, referrals and dispute resolution. The findings are being used to inform various improvements to the planning and development system. Queensland's *Sustainable Planning and Other Legislation Amendment Act 2012* is one result of the discussions in these forums.

Another major initiative is the commencement of the temporary State planning policy, *Planning for Prosperity*. The policy aims to facilitate economic growth in Queensland by articulating the importance of the agriculture, construction, mining and tourism industries and how they must be considered in the planning process. *Planning for Prosperity* will be in effect for 12 months and inform the development of a new State planning policy. This will replace the current batch of policies and empower local governments to make planning and development decisions in their communities with less State Government involvement.

Leading practice: South East Queensland Council of Mayors planning reforms

The Council has identified the planning reform initiatives driven by the South East Queensland (SEQ) Council of Mayors as leading practice. These initiatives include delivering a comprehensive and integrated electronic development assessment service, reforming the process for residential development applications, and creating standard housing development policies and codes. The reforms were funded initially by the Australian Government's Housing Affordability Fund and then by the SEQ Council of Mayors.

The delivery of an online development assessment system and an improved business process for residential development applications has had substantial benefits including a five-day approval turnaround of low-risk residential development applications in the locations where the reforms were applied. The reform has an overall target of a 75 per cent reduction in timeframes for 95 per cent of all residential applications.

Another outcome of these reforms is that subdivision application timeframes have been reduced from over 350 business days on average to a target of 60 business days, while operational works application timeframes came down from an average of over 50 business days to two business days in the locations where the reforms were applied.

The Council supports these significant reforms to increase the efficiency of the development assessment process through the use of electronic systems and the shift towards code-based assessment.

South Australia

The South Australian Government has implemented the Housing Construction Grant of \$8,500 for the construction or purchase of newly built homes valued up to \$400,000. This grant is noteworthy as it is available to anyone and not limited to first home buyers (it replaces the First Home Bonus Grant, which was only available to first home buyers).

Another measure the South Australian Government is undertaking is a stamp duty concession for apartment purchases in the Adelaide City Council area. Off-the-plan purchases of sub-\$500,000 city apartments will be stamp duty exempt until 30 June 2014 and there will be partial concessions for purchases from 2014 to July 2016. The concession will encourage higher density inner-city living, in line with South Australia's 30-Year Plan for Greater Adelaide and its infill development targets. The concession also aims to help remove impediments that discourage households from downsizing into more appropriate accommodation.

In March 2012 the South Australian Government established the Urban Renewal Authority to provide an integrated approach to urban development. The authority supports innovation in design for infill developments with the aim of creating affordable dwellings that maximise access to transport and infrastructure and relieve pressure on the urban fringe.

Western Australia

Western Australia has recently seen a greater focus on strategic planning, including the implementation of the Western Australian Government's metropolitan strategy for Perth and Peel, *Directions 2031 and Beyond*. This strategy is intended to guide the growth of the metropolitan region over the next 20 years and beyond to 2050. In the context of a rapidly growing population, the strategy provides a framework to address issues such as land use, infrastructure provision, transport and access to jobs, and sustainable urban expansion and infill.

As part of the program to streamline and improve the planning system, the Western Australian Government has introduced development assessment panels, which commenced operations in July 2011. A total of 15 development assessment panels operate across the State: nine in regional centres and six in the metropolitan area. The panels, which comprise a mix of technical experts and local government representatives, determine applications for development approvals in place of the local government authority and, in some cases, the Western Australian Planning Commission. The panels determine development applications that meet certain type and value thresholds. They are intended to provide consistent, accountable, and professional decision making. In the Council's view, this is an exceptionally important innovation.

The Western Australian Government introduced the new Metropolitan Redevelopment Authority through legislation passed in 2011. This authority replaced the former redevelopment authorities established for East Perth, Subiaco, Midland, Armadale, and Central Perth. It is responsible for urban renewal and delivery of residential and commercial infrastructure, and will have a major role in project facilitation.

Australian Capital Territory

The ACT Government is phasing out stamp duty (or duty on conveyance) throughout the Territory and replacing this revenue with increases in the broad-based property tax (essentially local government rates). The first stage of this transition is already implemented, and the aim is to completely phase out stamp duty by 2032. The gradual reduction over a 20-year period is to avoid creating volatility in house prices.

The importance of this reform is that it replaces stamp duty — a volatile form of taxation that acts as an obstacle to the sale of properties and likely flows through to

prices (in a tight market at least) — with a broader, more regular and more certain form of taxation levied on housing wealth.

Northern Territory

The Northern Territory Government has announced a new Government-supported home loan assistance package, HomeBuild Access. The package offers two products: low-deposit loan assistance that has no income or assets eligibility criteria; and means-tested subsidised interest rate loans for low- to moderate-income households buying their first home. Both loan products replace existing programs. They are only available for the construction or purchase of new dwellings up to a maximum price of \$550,000.

First Home Owners Scheme

New South Wales, Queensland and South Australia are now, or will soon be, targeting the First Home Owners Scheme solely at newly constructed dwellings. Consistent with the findings of the HSAR report, new-dwelling purchasers are eligible for a \$15,000 grant, while no grant will be available for the purchase of existing dwellings.

The Council strongly supports these changes as they focus the incentive in a way that increases the housing stock without inflating demand for existing dwellings.

Conclusion

Reforms to planning and development systems are being explored and implemented across the country at all levels of government. The release of a number of reports and proposals for change covering a range of housing supply, affordability and planning issues signals broad recognition of the need for change, the wide array of issues needing to be addressed and the plethora of options that might be employed. All governments embarking on changes to planning and development assessment arrangements have an acute awareness of the importance of action and the political challenges involved.

Importantly, the Commonwealth and the States and Territories have agreed on the broad areas for reform with the release of the HSAR report. However, there is still much work to be done on determining the specific actions to be taken in implementing the reforms.

At the State and Territory level, a significant shift in focus is under way to address issues around the lack of strategic coordination, the efficiency of the development approval process, and the tax and subsidy system.

While the Council supports the reform directions canvassed above, it notes that enactment and implementation are some distance away in many cases. Moreover, a

number of matters need to be addressed that are substantial, interrelated and politically challenging.

It is important that jurisdictions find ways of:

- encouraging denser development that promotes access to jobs and amenity and maximises the use of existing infrastructure;
- ensuring a range of types and styles of housing and neighbourhoods that suit the needs and wishes of residents;
- ensuring access to affordable housing for key workers, retirees and families on lower incomes;
- ensuring adequate finance for the timely provision of infrastructure without burdening home buyers or creating barriers to adequate housing supply;
- involving citizens in strategic planning choices while reducing uncertainty, delay and expense in development assessment and consent arrangements; and
- restructuring measures intended to support housing affordability so that they impact positively on supply without pushing up prices.

There will be elements common to all jurisdictions, but priorities and specific options will vary across States and Territories and local governments. Implementation will demonstrate the need for fine tuning, or even replacement, of some measures and programs. The process of change will, therefore, be complex, iterative and lengthy.

It is obviously important to track and evaluate the reforms as they occur, enabling jurisdictions to share successes, assess relative effectiveness and efficiency, and generalise application of the best processes leading to the best outcomes. Access to relevant and timely data will be essential for whoever is charged with this responsibility or wishes to assess the efficacy of the reforms.

Chapter 5

Methodological issues

Overview

The release of data from the 2011 Census has provided the Council with an opportunity to reassess and evaluate its basis for estimating housing supply and latent or underlying demand as well as the housing shortfall.

While the Census has provided an up-to-date source of information to assess Australia's housing situation, it has also thrown up a wide range of technical questions to consider. This chapter starts with the population estimates that form the basis of estimates of household numbers. It then focuses on the key building block of the analysis of housing demand: household numbers and how these relate to underlying, or latent, demand. Finally it investigates some data-related issues.

The Australian Bureau of Statistics (ABS) made a sizeable downward revision to the estimated number of people living in Australia as at August 2011 from what had been implied from estimates of population growth since the previous Census in 2006. On the methodology currently employed by the Council, this would automatically lead to a reduction in the estimate of the underlying number of households and, consequently, to a downward revision to the Council's estimate of housing shortage. However, questions arise as to whether the revised population estimate can be automatically translated into a revised household estimate.

When published, ABS population estimates will be revised back to 1991¹ and the impact of this adjustment will likely be spread unevenly across the 1991–2011 period. As population estimates and changes feed into the Council's methodology for calculating housing demand at several stages in the process, there are clear challenges in producing consistent historic data. Meanwhile, some of the estimates the Council's methodology links to, such as actual and projected household numbers, are unlikely to be updated.

As a consequence, for its next State of Supply report the Council will evaluate whether, and if so how, recent estimates of the shortfall need to be revised or whether a new methodology should be adopted. This chapter provides an initial analysis of the factors that have contributed to the Council's past estimates of shortage and of the implications of revised population data on these estimates. It then considers how the shortage estimates might be presented to more clearly highlight the assumptions that underpin them. The Council is mindful of taking account of the latest information and, potentially, simplifying how any housing shortfall is measured.

Chapter 2 pointed to a range of areas where the population's housing circumstances have changed. This chapter looks at some of the technical challenges faced by the Council in assessing the balance between housing supply and latent or underlying

1 ABS December 2012, *Australian Demographic Statistics*, June quarter 2012, cat no. 3101.0.

demand. The release of the preliminary results of the 2011 Census raised a range of issues to consider. Some commentators and analysts suggested that the Census showed there is no housing shortfall. The Council does not agree with this assertion, for a variety of reasons outlined in this chapter. From the Council's perspective, the shortfall is based on how many more homes a given population would require if observed past rates of household formation were unchanged. The Census, on the other hand, simply shows how the population occupies the existing stock.

The analysis offers further support to that presented in Chapter 2 for the notion of a housing shortfall by showing how household formation rates have changed in each five-year age group since 2001. These changes have an impact on household size over and above the impact that arises from demographic change. Several commentators have missed this point. They have failed to recognise that demographic change alone would have meant that, other things being equal, average household size would have continued to fall. The fact that it has been relatively stable over the past decade means that there have been changes in the rate of household formation. People of the same age are less likely to form households than a decade ago. Household growth ran above and beyond population and age-related drivers up to 2001. But this turned decisively in the early part of the last decade. In other words, for some reason the rate of household formation slowed from around 2001 to below that which the purely demographic drivers suggested would be the case given the experience of previous decades. The Council contends that this is at least partly due to housing availability.

First, it is important to understand what drives household growth.

Drivers of household growth

Supporting evidence of a housing shortfall can be seen in an analysis of the source of household growth between Censuses. Over the past few decades, the number of households has grown more rapidly than the population. This can be attributed to changes in the age distribution of the population and to changes in the propensity (likelihood) for each age group to form households. Table 5.1 breaks down growth in the number of households between Censuses into three parts: population growth, age structure and other factors (the primary driver of which is a change in the propensity to form households). The analysis is based on the share of households and people from the Census rather than on absolute numbers. This minimises the impact of revisions to population estimates (see later in this chapter).

Table 5.1 Sources of growth in number of households, 1961–66 to 2006–11, Australia (thousand households)

	Growth in households ('000s) from change in			
	Population	Age composition	Other factors	Total
1961–66	317	-84	138	370
1966–71	366	-31	183	519
1971–76	314	1	155	470
1976–81	455	43	30	528
1981–86	450	56	13	519
1986–91	484	87	-95	476
1991–96	367	121	129	616
1996–2001	200	93	170	463
2001–06	484	61	-98	447
2006–11	657	34	-38	653
Total	4,094	381	586	5,061
Relative contribution (per cent)				
1961–66	85.6	-22.8	37.2	100
1966–71	70.7	-5.9	35.2	100
1971–76	66.8	0.2	33.0	100
1976–81	86.1	8.2	5.8	100
1981–86	86.8	10.7	2.5	100
1986–91	101.6	18.3	-19.9	100
1991–96	59.5	19.6	20.9	100
1996–2001	43.2	20.1	36.7	100
2001–06	108.2	13.6	-21.8	100
2006–11	100.6	5.2	-5.8	100
Total	80.9	7.5	11.6	100

Source: Indicative Planning Council (IPC) for the Housing Industry 1993. Subsequent ABS Censuses of Population and Housing. NHSC calculations.

Note: The IPC's method for disaggregating the drivers of household growth is based around household reference persons in each age group, the share of the population in each age cohort and changes to the total population. The population component is calculated from the change in population across all age groups between Censuses and the average ratio of reference people, and share of people in each age cohort, between the two periods. The age component is calculated from the average total population across the two periods, the change in the share of the total population accounted for by each age cohort in the latter period, and the average share of reference people for each cohort across the two periods. The 'other factors' component is based on the average population across the two Censuses, the change in share of reference people for each cohort, and the average share of the population accounted for by each cohort between the two periods. The full description from the IPC can be found in Appendix 2.

Population growth² is the most straightforward source driving the increase in the number of households. This has been the main driver of household growth in Australia for the last 50 years, accounting for over 80 per cent of household growth over the period. Purely by itself — that is, if all other factors remained constant — population growth would have led to a larger increase in the number of households than has actually taken place over the last decade for currently available population estimates. It is important to note that this is not inconsistent with the fact that the number of households has increased at a slightly higher rate than the population as a whole. The age distribution of the population growth is important. To give a simple example, newborn babies do not, in the short term, lead to additional households. However, adult migrant arrivals will, in many cases, form new households.

The second factor is the age structure of the population, which affects the number of households that are formed from a given population, because the likelihood of people forming households, or changing the type of household they live in, varies over their lifetime. An obvious example is that people are more likely to move out of their parental home and form a new household in their twenties than at other times in their life. At the same time their parents are more likely to see the average number of people in their household decline as a result. Any change in the age structure of the population, therefore, can change the number of households associated with a given population.

The ageing of the population in Australia has accounted for 7.5 per cent of household growth over the last 50 years. Older households are more likely to consist of just one person and, as Table 5.2 demonstrates, are more likely to be household references than younger people. Therefore, as the proportion of older people in the population increases, household size will naturally decrease and there will be more households for a given population size.

The final component of household growth is ‘other factors’, which is driven primarily by the rate of household formation within each age group. This is influenced by a range of factors, many of which are likely to be interdependent. They include social trends and cultural choices as well as constraints due to housing affordability and availability. This component identifies whether equivalent groups of people are more or less likely to form households than they did previously.

Analysis of households by age over the last decade shows a lower rate of people recorded as a household ‘reference person’ across most groups, especially among younger cohorts. The household reference person is the household member used in the Census as the starting point for identifying the relationships between usual residents of a household. The rates presented in Table 5.2 are the share of the total population in each age group that are recorded as a household reference person. It is

2 It should be noted that the population component of growth will likely change following revisions to the Estimated Resident Population (ERP). However, this is unlikely to change the fact that it is comfortably the most significant source of household growth.

a measure of the likelihood of forming a household. The reduced likelihood of forming a household at a younger age is one potential adjustment people may make due to a lack of affordable housing.

Table 5.2 Household reference person by age (per cent)

	2001	2006	2011
15–19	4.6	3.6	3.0
20–24	23.1	22.0	20.4
25–29	38.8	38.5	37.2
30–34	47.6	46.5	46.1
35–39	50.7	49.9	49.7
40–44	53.7	52.1	51.8
45–49	53.4	53.1	53.2
50–54	54.3	53.1	53.4
55–59	54.9	53.1	53.1
60–64	55.0	53.7	53.4
65–69	56.0	54.8	54.7
70–74	60.0	57.5	56.9
75+	60.1	59.1	59.3
Total	45.6	44.9	44.7

Source: ABS Censuses of Population and Housing 2001, 2006 and 2011.

Note: The data show the share of people in each age group who are identified as reference person of the first family in a household or as reference person in a non-family household. Reference people in second and third families in a household are excluded as references but included in the total population.

As seen in Table 5.1, over the last 50 years as a whole an increase in the rate of household formation (remembering that this is after the impact of population growth and the changing age structure are accounted for) has contributed around 11 per cent to total household growth. This is perhaps unsurprising. As people became more affluent, they likely used their increased wealth to live in more comfortable circumstances. Over the last decade, however, this component has had a negative impact on household growth. In other words, there has been a decline in the net tendency for new households to form. The only other period where this occurred was between the 1986 and 1991 Censuses. While it is not possible to identify the specific reasons for this with aggregate data, the negative impact of ‘other factors’ offers support to the Council’s contention that insufficient additions to housing supply, notably in the ‘affordable’ segment of the market, has contributed to lower household formation rates.

The negative impact from ‘other factors’ was greater in the period 2001 to 2006 than in 2006 to 2011. This suggests that the housing situation changed from around 2001. There was a clear change in the mixture of drivers of household growth around that time. It provides some support for the Council’s approach in estimating the change in

the balance between supply and underlying demand by starting with a 2001 benchmark of 'equilibrium'.

Underlying or latent demand

The analysis above shows what has driven actual household growth. One of the challenges the Council faces is to assess whether the available housing supply is adequate for, and/or has had an impact on, growth in the number of households.

To do this, the Council first estimates changes in the level of underlying demand. It looks at what household growth would be if past formation patterns had continued — this can be considered as the equivalent of keeping the 'other factors' component in Table 5.1 unchanged, or at least only allowing for it to change at a predetermined rate. This measure of underlying demand can be interpreted as potential or 'latent' demand. It measures a level of demand driven by past household formation trends and by population and age demographics. It does not necessarily represent the effective market demand that is likely to emerge in the form of new purchasers or new renters.

Potential demand will equal market demand only when households can afford to, or are willing to, buy or rent the dwellings that are available in the market. The actual number of households is constrained by the availability of housing.

The Council estimates and projects 'underlying demand' for housing as a means of assessing whether additions to Australia's housing stock are sufficient to meet recent patterns of effective (actual) demand for housing. It is the structural underpinning of housing demand, driven by population growth and the assumption that past household formation patterns continue. It is a measure of demand across the entire housing system. It includes all housing sectors (private, public and not-for-profit) and types of tenure (owner-occupation and rental).

Market demand, on the other hand, is affected by economic factors and can fluctuate cyclically, largely in accordance with variations in housing prices, rents, interest rates, household income, levels of employment and unemployment, and confidence. Measures of market demand tend to exclude non-private housing and/or the public housing sector.

In the short to medium term, estimated underlying or latent demand is primarily demographically driven, but over the long term inevitably it is also influenced by structural changes in the economy, changes in the distribution of income and wealth, urban development patterns, social and cultural change and, indeed, trends in the supply and affordability of housing.

Previous Council reports have included estimates and projections of growth in underlying demand since 2001. These have been based on modelling household net

transition probabilities,³ and applying these to the ABS' Estimated Resident Population (ERP) data and its population projections. Household estimates have been derived by:

1. differentiating household composition and housing consumption patterns by the age and gender of all members of Australian households (also differentiated by state and territory and by capital city and 'rest of state') — these data are taken from the Census;
2. identifying consequent age- and gender-specific 'net probability transitions' for members of the population to move between certain types of households (single person, two related adults, two-parent families with one child and so on) and certain types of housing (owned, privately rented, rented, public rental and other); and
3. applying these transition likelihoods to the known, estimated or projected size and age/gender mix of the population at a later point in time to produce estimates of the number of households in various locations (and in various housing types, although the Council uses the latter sparingly and very carefully).

The resulting estimates of households and housing tenure are a measure of underlying demand for housing. They assume that the demographic and cultural drivers of demand continue to apply as they have done previously as the population grows. The measure can also be interpreted as a measure of housing need ('How many households do we need to accommodate?') although it must be acknowledged that this measure of need presumes a household formation rate determined by the income, wealth and observed housing preferences of the population in the base period.

In arriving at these estimates and projections, some challenging assumptions need to be made in addition to the continuation of household formation and housing consumption patterns. Most notably the Council assumes that migrants (international and interregional) have the same propensities to form households and consume housing as does the Australian population as a whole. For projections, international and interstate migration is also assumed to be sustained at a predetermined level (different assumptions give rise to the high, medium and low scenarios in the State of Supply Report). There is an implicit assumption that other drivers of household formation are all stable (or, more specifically, do not vary from the established trend) within the estimation or projection period.

For longer time periods, the latter assumption is obviously untenable. The Council has been consistently explicit about this. Apart from anything else, the emergence of a

3 This methodology has been produced by Professor Peter McDonald and Dr Jeromey Temple at the Australian National University. A detailed technical paper can be found on the Council's website (www.nhsc.org.au).

major and sustained deficit in housing supply will affect prices, housing aspirations and preferences and the distribution of housing wealth, as well as housing-related policies and program settings and other structural factors affecting housing demand. In short, underlying demand and supply would converge in the longer run, most likely due to changes on both the demand and supply sides.

The Council's measure of underlying demand is derived from numbers of people living in all forms of what the ABS calls 'occupied private dwellings'. As defined in the Census, private dwellings include social housing but exclude institutional forms of residence, such as prisons and nursing homes, and various forms of accommodation (such as hotels and serviced apartments) occupied for short periods.

This contrasts with the usual measures of market demand, which focus on the sale (and price trend) of new and established housing for private sale and (less often) on the demand for private rental housing. Market demand for housing has often been described as lacklustre or soft over the past couple of years, on the evidence of the activity and price trends outlined in Chapter 1. These observations are based on the slowdown in private home sales and on flat or declining prices. On the other hand, historically low rental vacancy rates, increasing rents and burgeoning waiting lists for social housing all point to growing demand in the housing segments of those least able to cope.

In contrast the estimation of growth in supply is relatively straightforward, although it is complicated by poor data on losses to housing stock from demolition and uninhabitability and by changes in the prevalence of second-home ownership and other sources of vacancies among existing housing stock.

Council estimates and Census results

A number of commentators questioned the Council's findings following the first-stage release of data from the 2011 Census. Some claimed that underlying demand is lower than the Council's estimates and projections and that the Census count of households (actually, occupied private dwellings) in 2011 is considerably smaller than the Council's estimate of underlying demand.

There are several reasons why direct comparisons of these headline numbers are both inappropriate and misleading, in the Council's view. These can very broadly be split into conceptual, comparability and data reasons and are covered briefly below. Additional detailed technical information can be found in the Appendix 2.

Conceptual issues

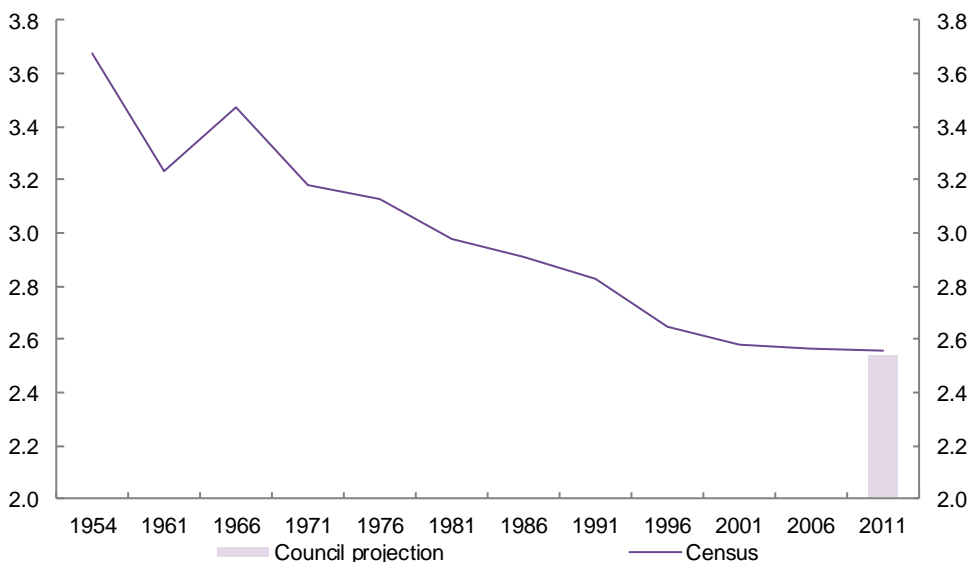
One of the key points to be made is that a housing shortfall is indicated when fewer households have formed than would have been the case if previous trends had continued. If, as the Council believes, a net shortage of available housing has led to

fewer households forming, then the actual number of households will be lower than the Council’s estimate of underlying or latent demand described previously. The unadjusted Census data suggest that household growth from 2006 to 2011 (and 2001 to 2006) was lower than it would have been had longer-term trends in household formation continued through this period.

Consequently differences between Census-based data on the number of households and the Council’s estimates are entirely consistent with, although not necessarily unambiguous evidence of, there being a housing shortfall.

Affordability constraints may have been a contributory factor in short-run changes in household formation patterns. These patterns can be influenced by changes in a wide range of factors such as the economic backdrop, policy, land release and builder innovation and so on. Such factors are examples of where the circularity of the housing system can take hold. Fewer available homes will lead to fewer households recorded as living in them. If this trend is used to derive projected household growth it will lead to a slowing in future underlying demand growth.

Figure 5.1 Average household size over time



Source: ABS 2011 Census of Population and Housing, based on place of usual residence. NHSC projections based on McDonald and Temple model of underlying demand.

Furthermore there has been some misunderstanding and oversimplification of the basis on which changes in average household size have been or should be determined. Census data, based on place of usual residence, reveal that average

household size fell slightly from 2.57 in 2006 to 2.56 in 2011⁴ (see Figure 5.1). The 2006 and 2011 Censuses both reveal a break from the long-term trend of significant declines in household size over the last half-century. The Council's model of underlying demand from 2006 also assumes a larger decline in average household size than actually took place.

The state of the housing market and housing affordability in the period 2006 to 2011 supports a housing-market explanation for the arrested decline in average household size. Higher birth rates have also contributed, as babies will increase the number of people per dwelling but not the number of households for some years.⁵ The analysis of the sources of change in the number of households shown in Table 5.1 indicates that 135,000 fewer households formed in Australia over the period 2001 to 2011 than would have been expected on the basis of population growth and changes in the age structure of the population. Fewer households mean larger households relative to previous trends.

Comparability, measurement and timing challenges

While Census data is undoubtedly the best available source of information, definitions, adjustments, collection and reporting can change over time. It is also reliant on people completing the forms accurately with little incentive to do so.

One of the first points to note is that much of the current Census data, and reporting on it, is based on the raw counts published by the ABS. The Council has not changed its view that it is important to use Censuses as the primary source of benchmark data, but complications arise when comparison is made with historic data compiled on a different basis.

The Census does not record every person in the country, or every dwelling for that matter. There is a significant level of 'undercount'. The ABS addresses this in a Post Enumeration Survey (PES)⁶ that includes a process to identify and survey some of those missed in the original count. Most of the detailed data on housing currently available, however, is based on the raw unadjusted data, and there is yet to be an estimate produced for the total number of dwellings or the total number of households. The ERP is the ABS's estimate of the total number of people usually resident in Australia. This is derived from both the Census and other sources

4 Estimated household size excludes 'Visitors only' and 'Other non-classifiable' households, and is based on a count of all persons enumerated in dwellings on Census Night, including visitors from within Australia. It excludes usual residents who were temporarily absent on Census Night. The ABS also calculates average household size based solely on households where the number of people is known from the place of enumeration data. That methodology produces an average of 2.58 people per household in 2011.

5 The share of the population made up by those under five years old increased over this period from 6.3 per cent to 6.5 per cent. Source: ABS March 2012, *Australian Demographic Statistics*, cat no. 3101.0.

6 ABS June 2012, *2011 Census of Population and Housing: Details of Undercount*, cat no. 2940.0.

(including the PES) and produces a different (higher) population base than the raw Census data for place of usual residence.

Population estimates

A key issue to come out of the PES is that the estimated Australian population at 30 June 2011 is now 294,000 lower than the previously published ERP.

The latest update from the ABS indicates that it intends to revise ERPs back to 1991.⁷ The ABS will revise down estimates between 1991 and 2011 to a better (and lower) estimate of what ERP would have been, had the new and improved methodology been available. Revisions to more recent Census points will be greater than those further back — for example, the 2006 figure will likely be revised down by more than the 1996 data. However, the exact method for calculating the revisions, and therefore the magnitude and distribution (either by age or by State/Territory) of the change in the intervening years, is currently unknown.⁸

Figure 5.2 Population estimates by State, June 2011 (ERP, persons)



Source: ABS 2012, *Australian Demographic Statistics*, December 2011 and September 2011, cat no. 3101.0.

Regionally the largest preliminary adjustment for the June 2011 population was in Queensland, both absolutely in ‘losing’ 106,000 people (Figure 5.2) and proportionately in the reduction of its population by 2.4 per cent (Figure 5.3).

⁷ ABS December 2012, *Australian Demographic Statistics*, June quarter 2012, cat no. 3101.0, ‘Basic Guide to Revisions to Historical Population Estimates in 2013’.

⁸ The ABS has provided an indicative estimate of 240,000 fewer people at 2006, 130,000 fewer at 2001 and 70,000 fewer at 1996.

New South Wales, Victoria and South Australia also had substantial downward adjustments of their ERPs of more than 1 per cent. In contrast, the ERPs in Western Australia and Tasmania were revised very slightly higher, by around 0.1 per cent. The ERPs in the Northern Territory and the Australian Capital Territory were increased by 0.4 per cent and 0.6 per cent respectively.⁹ This could have implications for assessing the balance between housing supply and demand at State and Territory level.

Figure 5.3 Revision to population estimates by State, June 2011 (ERP, per cent difference) (revision from earlier estimate)



Source: NHSC calculations. ABS 2012, *Australian Demographic Statistics*, December 2011 and September 2011, cat no. 3101.0.

Note: The percentage is the revision to ERP as a share of State/Territory revised ERP as at June 2011.

Household numbers

There are particular challenges when it comes to considering how the revised population data feed into the number of households and therefore calibrating underlying and actual demand. The ABS has not yet released estimates of households for June 2011 and is not expected to do so until 2014.

The fact that no dwelling or household estimates will be available for another year appears to have been overlooked by some commentators critiquing the Council in light of the Census. A variety of bases have been used to compare against the Council’s estimates, some of which are not comparable even after accounting for conceptual differences.

For a variety of reasons it is not yet clear how revised population data will impact on the Council’s underlying demand projections and it is equally unclear how they will

⁹ ABS June 2012, *Australian Demographic Statistics*, December 2011, cat no. 3101.0.

affect past estimates of actual numbers of households produced by the ABS or its estimate of the actual number of households for 2011. Any revisions to the number of households and underlying demand are impacted by the likelihood that the scale of adjustments will probably be smaller further back in time. The magnitude of change in population since 2006 is still being finalised by the ABS, partly because the final ERP for June 2011 has not yet been produced, but mainly because the size of the adjustment to the 2006 ERP is currently unknown.

There are additional challenges faced by the Council around the increase in underlying or latent demand between 2001 and 2006, which was based on projected population growth over the period from a 2001 ERP. It is not known whether the final estimates of population growth between 2001 and 2006 will be similar to the projected growth on which the underlying demand figures are based. However, given that the ABS has indicated that the revisions to the ERP will be less for earlier years than they are for later years, the divergences from the Council's earlier estimates are likely to be less significant than those for later estimates.

Dwellings

There are also issues with the interpretation of 2011 Census data in relation to the supply side. Some commentators have not recognised how crucial vacant dwellings are to estimates of supply shortages (and therefore to the Council's analysis).

Overall, these issues significantly complicate attempts to estimate the true number of unoccupied dwellings. This is crucial for any calculation of a housing shortfall, and the share reported in the Census may not be a particularly accurate reflection of reality. The Census count of unoccupied dwellings is based on the dwelling status on Census night. Unlike the analysis of housing characteristics and people on a place of usual residence basis produced by the ABS, there is no adjustment made for usually occupied dwellings being vacant on Census night — for example, people being temporarily away on that night — or for usually vacant dwellings being temporarily occupied.

One possible method for re-estimating the number of unoccupied dwellings is from the difference between the total number of households and the adjusted total dwelling count. This is because the total number of households is estimated using living arrangements reconciled with the total population,¹⁰ whereas the dwellings count is estimated separately. At present it is only possible to do this for 2006; the comparison is made in Table 5.3. The Council estimates that a larger share of dwellings was vacant (and not available for occupation) than the raw Census figures suggest. However, this method cannot overcome the issue of some structures being counted as dwellings if occupied but not when unoccupied.

10 The ABS estimate of the number of households is based on both the total estimated resident population and living arrangement propensities from the Census. The unoccupied dwelling count is based on the share of dwellings recorded as unoccupied.

Table 5.3 Share of unoccupied dwellings at June 2006

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
Total dwellings	2,796,003	2,119,120	1,705,138	694,367	860,243	222,379	76,043	132,551	8,605,844
Households	2,548,057	1,928,617	1,513,021	626,547	776,266	196,052	64,374	126,500	7,780,193
Estimated unoccupied	8.9%	9.0%	11.3%	9.8%	9.8%	11.8%	15.3%	4.6%	9.6%
Census unoccupied	8.8%	9.8%	8.4%	9.6%	9.9%	11.9%	6.2%	6.3%	9.2%

Source: ABS 2007, *2006 Census of Population and Housing*. ABS 2008, *Household and Family Projections, Australia, 2006 to 2031*, cat no. 3236.0. NHSC calculations.

Note: Census unoccupied share is the 2006 PES estimate of unoccupied dwellings counted in the Census. The ABS advises that it is likely to be an underestimate of the number of unoccupied dwellings. Estimated data are calculated from total dwellings estimates (after undercount adjustment) less number of households at June 2006.

While these are only ‘back of the envelope’ calculations, similar shares for 2011 would point to around 40,000 more dwellings being unoccupied than the raw data suggest. Given that many of these dwellings would actually have been in use (being renovated or occupied by a household that is temporarily absent — so recorded as unoccupied when they are usually occupied) as opposed to being available for purchase or rent on Census night, this speculative analysis suggests that in 2011 there were fewer dwellings available for households to occupy as a primary residence, arguably adding to the shortfall. However, this is highly speculative and there are considerable margins of error around this analysis.

Additionally, some commentators point to vacant dwellings as direct evidence against a housing shortfall. This misses a key point in the Council’s analysis that, by and large, these usually vacant dwellings are not available to households who might be considered as in the ‘gap’. Many will already be owned by other people as second/holiday homes, and some may be uninhabitable or awaiting demolition. The location of these dwellings is also important, particularly whether they are located in areas where there are employment opportunities, even if they are available and affordable.

Data consistency and those missed in the Census count

Another factor that should be acknowledged is that the Census results may not be fully adjusted for those missed in the initial count. While the PES does fill in some of the gaps, by definition those in the most extreme situations (such as refugees living with other Australian residents, people living in ‘illegal’ boarding houses (mis)reported as private dwellings or students living in overcrowded rental dwellings), are least likely to be recorded, either in the initial count or in subsequent efforts to contact them.

Changing collection techniques or changes within the undercounted population, means there is a possibility that the characteristics of those ‘missed’ in each Census are different over time — so the raw data may be recorded on a slightly different basis each time. It is also likely that those not counted are in the most extreme housing circumstances. For example, those in illegal boarding houses and/or overcrowded conditions are less likely to be picked up no matter how thorough the follow-up surveys.

Review of existing methodology

As it has acknowledged many times, there are a number of issues with the Council’s current methodology for estimating the housing shortfall above and beyond the specific challenges thrown up by the 2011 Census.

On the supply side the Council must make a number of assumptions about vacancies and demolitions, some of which are based on rather dated information.¹¹

On the demand side there is the issue of the use of a moving base for the rate of household formation (which contributes to estimates of underlying demand), with different sets of trends applied to the periods 2001–06 and 2006–2011. The rather circular nature of estimating underlying housing demand and supply (given that, by definition, the actual number of households equals the actual number of occupied dwellings at any point in time) means the ‘forced’ reconciliation at each Census effectively causes the observed gap to vanish when the snapshot is taken — despite reductions in demand induced by cyclical economic factors, by increases in land and housing prices relative to income, and/or by regulatory issues that directly reduce housing production, as opposed to changes in people’s ‘underlying’ housing choices or aspirations. As a result, the Census snapshot, at least at an aggregate level, cannot account for underlying demand or housing ‘need’.

The Council’s past practice of calculating the gap on a cumulative basis while using changing assumptions about the rate of household formation is similarly problematic, for two reasons.

Firstly it takes no account of the likelihood that some of the change will have been driven by choice and social change rather than by constrained housing supply. For example some adult children may choose to stay in the parental home longer than previous generations (larger homes making it more comfortable, staying in education for longer, and so on) rather than being ‘forced to’ due to housing affordability. Separating these two drivers from each other is a near impossible task, and in reality a combination of both factors will often be in play.

Secondly, the cumulative method does not allow for changes and adaptations to the current housing environment to become ‘embedded’ in the population. The cumulative approach effectively assumes that previously measured underlying or ‘pent up’ demand will remain unmet even if, for whatever reason, the culture of housing consumption has changed over time.

Rather than attempting to predict changes in this propensity over time, as is the current approach, the Council will consider changing its method of estimating underlying demand to one based on people’s propensity to form a household at a selected previous point in time. Under such a method, changes in household formation propensities between the two latest Censuses will provide the basis for estimating household formation rates in the subsequent period between Censuses.

While this is conceptually very similar to the current methodology, it would simplify interpretation of the differences between actual household numbers and projections of underlying demand, and of the emerging differences between underlying demand

11 NHSC 2011, *National Housing Supply Council State of Supply Report 2011*, pp 103–4 and 168–9.

and actual housing production. This approach would estimate what the housing gap would be if households occupied the housing stock in the same way (for example, households comprising people of certain ages have the same average size) as at the selected point in the past. This would be compared with current household formation patterns revealed by the Census every five years.

This change would result in the Council producing a sequence of estimates and projections of underlying demand that differ based on their different starting points (one for each Census year since 2001), rather than a single cumulative series.¹² This would help in demonstrating the timing of changes in household formation propensities. It could also produce a set of estimates and projections of underlying demand from any past Census, and of the cumulative gap between additions to underlying demand and housing production since that time. This would incorporate the latest known propensities for people to be in different household types and housing tenures, and hence the latest known information on how the Australian population has adjusted its housing consumption to the current supply and affordability of housing.

Regardless of whether it changes its methodology, the Council will need to fully assess the implications of the revised population data on its estimates. The magnitude of revisions to historic data is unclear but it is likely that population growth since 2001 has actually been lower than previously stated — as the ABS is likely to revise the 2001 ERP by less than the 294,000 downward revision for 2011.

As the Council's model is based on the cumulative change each year, there are many points in the chain where data revisions will have an impact. At this point the Council assumes that ABS revisions to the past ERP data are unlikely to be followed by revisions to the historic household estimates and/or projections from 2002 to 2006. Post-2006 estimates of household numbers conceivably could be revised. Taking all this into account, it is unlikely that the Council will be able to recreate a time series of estimated underlying demand for housing from 2001 to 2011 that is consistent with revised ERP over the entire period. But it may be able to produce estimates of underlying demand for the total population at 30 June 2011 based on people's propensities to be in certain types of households in 2011, 2006 and 2001.

A final point to consider is the State and Territory distribution of the changes. The Council's modelling of underlying demand is partly driven by historic interstate migration patterns, as well as by the destination of overseas arrivals. Since 2006, Queensland has been overtaken by Western Australia as the state with the fastest

12 This methodology could still allow for high, medium and low scenarios for any projections.

rate of population growth.¹³ The Council will assess these changing dynamics and how they impact on the housing situations across the States and Territories.

In summary, emerging data from the 2011 Census provide an invaluable opportunity to evaluate and validate the Council's methodology for calculating the balance between housing supply and demand. While much of the recent critique of the Council's work appears to be based on misunderstanding of its methodology or on inappropriate comparison of differing datasets, there are still valid reasons to reassess. The Council will continue to evaluate and validate its methods as final Census-based estimates of population and households are produced by the ABS. Adjustments to methodology and reflection on previous estimates will appear in the 2013 State of Supply Report.

13 This is based on revised 2011 data. It is not yet clear what impact the forthcoming revisions to 2006 and earlier data will have, but is unlikely to change what looks to have been a significant change away from Queensland's traditional status as the fastest growing state by population.

Chapter 6

Conclusions

Overview

This report has provided the Council with an opportunity to reflect on updated information from the Census, to present research findings and to note some significant changes in residential planning and housing policy.

The evidence provided by the 2011 Census is, in the Council's view, entirely consistent with the existence of a significant housing shortfall. It is important to remember that the shortfall — while being an aggregate measure of housing undersupply — does not affect everyone equally. The aggregate shortfall flags a range of distributional effects across areas (cities, regions and States) and people with different socio-economic and demographic characteristics.

A housing shortfall may also exacerbate differences among people and places. A sustained shortfall in housing production relative to population growth (the main component of additional underlying demand) 'trickles down' through the distribution of income and wealth. It affects most the people who lose in the competition for available properties. These people may end up renting when they expected to become home owners, not forming a separate household because they cannot find anywhere suitable to live, needing government subsidies to obtain housing, pushing others — or being pushed — out of the private rental market and into social housing, living in unsuitable housing or overcrowded conditions, or becoming literally homeless. If the level of underproduction is substantial, it affects progressively more people who are relatively affluent. If underproduction varies across cities or States, then more 'footloose' economic activity, jobs and people will move from areas of deficit to areas where housing and workforce opportunities are in better supply.

Indications of undersupply

The Council's initial examination of 2011 Census data has neither proved the existence of a major undersupply of housing in Australia nor attempted to explore all of the potential manifestations of such a shortfall. But, along with the research on how households respond to housing affordability, it has demonstrated trends in living arrangements, tenure and household formation that are highly likely to emanate from housing supply and affordability constraints.

It is also important to say that the 2011 Census and the associated downward adjustment of Estimated Resident Population have not overturned the Council's assessment of undersupply or diminished the Council's concerns about levels of housing production.

The increased proportion of people in 'severely overcrowded' conditions, while affecting a relatively small proportion of households, is one of the more extreme trends in housing circumstances indicated by the Census. But it needs further

investigation — it might be a temporary phenomenon, driven perhaps by the straitened circumstances of some recent immigrants. Other trends, like the declining rate of household formation and the decline in home ownership in most age groups, affect the present and future circumstances of much larger numbers of people, but their sources and policy implications also need to be investigated further.

It may be argued that there is no aggregate housing shortfall as such but instead a shortage of suitable and affordable housing for lower-income people. The trends in tenure and housing choices are also consistent with this view. In effect, a household falls into the housing gap when it cannot access a suitable dwelling. The presence of a vacant dwelling that a household cannot access (for example if it cannot afford it, if the dwelling is someone's second home or if it is not in a suitable location) does not change the situation that household faces.

The decline in the home ownership rate is also likely linked to a lack of affordable and available housing for a subset of the population. So too could the slowing rate of decline in average household size when the demographic drivers point to more significant falls. Both of these are marked changes from previous trends and point to a very different pattern of household consumption from the past.

On the other hand, the lengthening period of deficit in housing production relative to both population growth and longer-term trends in household formation suggests that the shortage of affordable housing is not matched by a surplus of more expensive housing and that there is indeed an aggregate shortfall. Australia's experience with housing prices supports this view. While house price movements have moderated, they have not declined markedly by comparison with those in many comparable countries. Moreover, rents have risen and rental vacancy rates are still very tight in many cities and regions.

An aggregate shortage is likely to manifest similarly to a shortage of housing for lower-income people that results from a mismatch of housing prices relative to income, but they are not the same thing and have very different policy implications. Most obviously, an aggregate shortage cannot be resolved simply by redistributing available housing stock. If there is an aggregate shortfall, introducing or increasing demand-side subsidies so that lower-income people can better compete for available dwellings might or might not have an impact on housing production in the long run, but in the short term will flow through to increased prices. This is precisely why the Council is pleased to observe both the recent trend among State governments to restrict first home owner grants to new supply rather than existing dwellings, and the surge in production of social housing arising from the Australian Government's economic stimulus package.

Industry and policy responses

More than ever, Australia's supply challenge is not simply to add to housing stock but also to achieve substantial growth in the supply of affordable rental stock where it is needed most. With a decline in home ownership rates, likely to be exacerbated as the Baby Boomers (who have high ownership rates) move on, pressure on the private rental market is likely to increase in the years to come. The high cost of apartment construction also contributes to the growing challenge of achieving affordable rental housing close to jobs and amenities.

There are positive signs of innovation in the residential development and construction industries to convert latent demand for new affordable owner-occupied housing into effective demand and successful sales. Smaller lot sizes and attractively designed townhouse developments on greenfield sites have reopened at least part of a market that was disappearing due to rising prices and affordability barriers. Lower interest rates and the existence of State government assistance like Western Australia's KeyStart and shared equity schemes have supported that innovation and quite likely enabled it to extend further down the income distribution.

Similarly, the trend to smaller apartments has also tapped into the demand for well-located dwellings where larger and detached housing is beyond the means of many prospective buyers and renters. Development assessment arrangements and higher costs in the commercial building sector have limited the extent and price competitiveness of these developments in many places. But the former is certainly under review with a view to reducing uncertainty and delay, while urban planning arrangements better define areas in which apartment developments are encouraged and enabled. Given the uncertainties faced by the industry, including the challenging market backdrop and continuing adaptation to the post-GFC financial world, innovation in housing product is increasingly risky but arguably essential to maintain and, hopefully, increase production.

While there has been a significant change in the types of new homes being built, especially in the larger cities, those additions to supply have as yet had a marginal impact on the character of Australia's overall housing stock. But these dwellings are notably different, providing a means of more affordable access to urban jobs and amenities, and there are signs of more to come.

On the policy front, the Council sees positive signs of progress in recognition of, and response to, supply and affordability concerns. As noted above, a number of States and Territories have looked to change planning policies, speed up the development approval process, increase certainty around infrastructure charging and focus first home owner grants and land tax concessions more at new supply. In the main, the Council supports the direction of change as focusing on improving the supply rather than subsidising demand. There have also been welcome signs of a greater understanding of the need to reduce uncertainty, and therefore lessen delays, in the

planning and development assessment systems to help all concerned make better decisions more quickly and consistently. In some jurisdictions there is open acknowledgment of the need to achieve a finer balance between enabling residential redevelopment and respect for the wishes and concerns of the existing residents about the extent and impact of change.

The States and Territories and local government have responsibility for policy and practice in urban planning, development assessment, and arrangements for the provision and financing of infrastructure. Most jurisdictions are exercising strong fiscal restraint and are very keen to reduce rather than increase public debt, especially in the present economic environment, while recognising the desirability of expanded expenditure on infrastructure to support economic activity and population growth. All jurisdictions are now also aware of the impact of high, variable and unpredictable infrastructure charging on the cost of residential development and price of new dwellings. This is a very challenging environment for achieving substantial progress in planning, development assessment and infrastructure delivery.

Future work

Looking ahead, the Council aims to refine its assessment of the adequacy of housing supply, including looking to overcome some of the challenges thrown up by the revisions to, and current uncertainty about, population estimates. It will also need to look more closely at regional analysis. Previous estimates of the balance between housing supply and underlying demand for each State and Territory have included assumptions, driven by past trends, about interstate migration rates and the destination of new arrivals. These trends have changed significantly in many parts of Australia. For instance, between 2006 and 2011, Western Australia overtook Queensland as the State with the fastest rate of population growth.

In addition to addressing data challenges, future work will see the Council taking a stronger interest in urban development patterns and infrastructure. Following a change to its terms of reference, the Council will look in more detail at linkages between housing and infrastructure, including roads and public transport, telecommunications, freight movement, and major facilities like schools and public hospitals. This is an important area of work given the importance of infrastructure provision and financing to many elements of success in new and expanding communities, as well as to those communities that act as conduits or destinations for an expanding population in a growing city. The Council also recognises the challenge of infrastructure maintenance and renewal in all communities, including those with static or declining populations. The interaction between infrastructure provision, housing supply, amenity and affordability will be the primary focus of the Council's work in this area.

Appendix 1 National Housing Supply Council Terms of Reference

Purpose

The National Housing Supply Council (the Council) was established in 2008 to assist the Australian Government improve housing supply and affordability for home buyers and renters. The Council aggregates and assesses data on housing supply and demand to strengthen the evidence base for decision making. It also provides advice and recommendations on options and strategies to improve housing supply and affordability.

Many of the responsibilities for planning rest at the state, territory or local authority level. Reflecting this, the Council will help Governments at all levels to identify and address housing supply and affordability challenges in an effective and sustainable way.

The Council of Australian Governments (COAG) supported the establishment of the Council and agreed to the establishment of a Working Group of state, territory and Australian Government officials to ensure data needed by the Council is supplied to it.

The Council reports to the Minister for Housing.

Responsibilities

The Council will:

- strengthen the evidence basis for decision making by advising the Minister for Housing on the state of the housing market and current developments, including the adequacy of land supply and construction activity to meet demand;
- examine the implications for housing supply of urban planning and infrastructure development, including public and private transport development, and technological change in the communications sector;
- provide advice to the Minister for Housing on options and strategies to improve housing supply and affordability, particularly for lower income households, and
- advise the Minister for Housing on specific issues as requested.

The Council's annual work program will include research activity to support these responsibilities.

The Council aims to develop and maintain strong relationships with representatives of the building and development industries, planning and development control agencies, key policy agencies, and other key interest groups. It also aims to develop strong working relationships with data and research bodies, including the Australian Bureau of Statistics, the Australian Institute of Health and Welfare, and the Australian Housing and Urban Research Institute.

Reporting

The Council will release two reports each year:

- an annual State of Supply Report on the adequacy of land supply and construction activity to meet demand and improve affordability over a 20-year outlook period;
- an annual document reporting on broader housing supply and affordability trends, developments and opportunities; and
- Council reports will be presented to the Minister for Housing and subsequently published. Additional reporting will be determined in consultation with the Minister for Housing.

Frequency of meetings

The Council aims to meet three times per year. As far as is practically possible, the Council will meet in a variety of locations to facilitate the development of strong relations with and the engagement of key interested parties.

Secretariat and budget

The Council is supported by a budget determined by the Minister for Housing, a Secretariat in the Treasury, as well as by the COAG Housing Data Working Group and the presence at all Council meetings of senior ex-officio representatives of relevant Australian Government Departments.

Governance

Minutes of meetings will be maintained recording a summary of key discussion points, agreed decisions and actions. Key outcomes of each meeting will be provided to the Minister for Housing.

The Council will report annually to the Minister for Housing on its progress and outcomes. As part of this reporting, the Council will provide the Minister for Housing with a forward work plan for the next year.

Review

The Council Secretariat will undertake a two-yearly review of the Council’s Terms of Reference.

Membership

Currently the Council comprises the Chair plus eleven members. Appointments to the Council are made by the Minister for Housing in consultation with the Treasurer. Members of the Council will be part-time. The Chair is appointed for up to three years and Members for two years. The Chair and/or members may be reappointed for subsequent terms. The Minister, in consultation with the Chair, will nominate a deputy Chair. The Chair and members will be appointed as individuals and not as a representative of organisations or businesses.

The Chair is responsible for convening and chairing the Council meetings and presenting Council reports to the Minister for Housing.

Members will be appointed for their individual capacity and expertise in an area relevant to the housing industry as set out below. Members are responsible for attending meetings and contributing to the work of the Council by offering insight and guidance based on their expertise.

Sector representation sought in the membership of the Council encompasses the housing, property and building and construction industry, planning and development, infrastructure provision and financing, social welfare and community housing, banking and finance, and housing research.

Current members of the Council are:

Dr Owen Donald, Chair	Member, Advisory Committee on Social Housing and Homelessness, former Director of Housing Victoria, former CEO, Australian Housing & Urban Research Institute
Mr Saul Eslake, Dep Chair	Chief Economist, Bank of America — Merrill Lynch Australia
Ms Janet Buhagiar	Director, Social Policy, NT Government
Ms Dyan Currie	National President, Planning Institute of Australia
Ms Sue Holliday	Managing Director, Strategies for Change Pty Ltd

Professor Graeme Hugo	Australian Research Council Professorial Fellow, University of Adelaide
Mr Mark Hunter	CEO Residential, Stockland
Mr Simon Norris	Former General Manager, Clarendon Homes Queensland
Ms Mary Patetsos	Chair, SA Local Government Grants Commission
Mr Nigel Satterley AM	Managing Director, Satterley Property Group
Ms Ruth Spielman	Executive Officer, National Growth Areas Alliance
Dr Judy Yates	Honorary Associate Professor, University of Sydney

In addition, the following senior Australian Government officers attended Council meetings:

Brenton Thomas	General Manager, Markets Group, Treasury, ex-officio participant observer
Sean Innis	Group Manager, FaHCSIA, ex-officio participant observer

Support to the Council in developing this report was provided by Paul Samter, Grey Robertson, Julia Graczyk, Sean Williams and Anthony Krieg in the Council's Secretariat, based in the Treasury. The Council gratefully acknowledges their invaluable assistance, including with analysis and drafting the report. The findings and views expressed in this report are, however, those of the Council and do not necessarily reflect those of the Government or its agencies, including the Treasury.

Appendix 2 Technical information on household data, the Census and population

This appendix explains some of the technical issues around Census and other relevant data issues mentioned only briefly in Chapter 5. It covers the method for calculating the source of household growth, more detail on average household size and its relevance for the number of households, the revisions to population estimates and how these relate to the number of households, and the dwelling stock estimates derived from the Census.

Indicative Planning Council method for calculating components of household growth (Table 5.1)

The Indicative Planning Council (IPC) devised the following method for breaking down growth in the number of households into three components: that due to change in total population, that due to change in age structure of the population, and that due to change in household formation (referred to as 'other factors' in Chapter 5).

This explanation is adapted from the IPC's *Long-term Projections Report 1993*.

The total number of households (H) may be expressed as:

$$H = P \sum_i p_i h_i$$

Where subscript i refers to age group (that is 15–19, 20–24, ... 75+) and:

P is the total population

p is the proportion of population group i in the total population

h is the ratio of household reference persons of age i to population of age i.

The change in the number of households between any two periods (in this case each Census), t and t-1, may be broken down in the formula:

$$\Delta H = A + B + C$$

Where:

ΔH is change in the number of households between the two periods

A is change due to change in total population

B is change due to change in age structure

C is change due to change in 'other factors' (household formation).

These three components can then be expressed in terms of population and household variables in the following way:

$$A = \Delta P \sum_i h_i^- p_i^-$$

$$B = P^- \sum_i \Delta p_i h_i^-$$

$$C = P^- \sum_i \Delta h_i p_i^-$$

In these formulae, Δ denotes change between two periods, \sum denotes the sum of variables following it for all age groups, and the superscript '-' denotes the average of the two periods. The three formulae exclude a series of covariance terms that are typically very small.

Household size

The fact that the headline average household size essentially stabilised between 2006 and 2011 is significant in its own right. These data are not impacted by the change in the population count explained in Chapter 5 and below, as they are calculated from the raw Census count rather than from the total estimated number of people and households.

At a very high level of analysis of aggregate data it is true that an apparently small increase in average household size would see the shortfall 'disappear'. But this misses a crucial point around the age structure of the population and how it evolves.

The composition of the household population changes over time, specifically as the age profile evolves. Australia's population is ageing. The data in Table 5.2 illustrates how this would typically lead to more people being household heads, and therefore more households. Other things being equal, this should have led to a larger fall in average household size between the 2006 and 2011 Censuses than was actually observed.

That household size has not fallen as much as projected means that, on average and on an age-adjusted basis, the population was living in larger households than in the recent past. This is a clear divergence from the Council's projections. The Council's underlying demand model produces an average household size (for underlying demand in 2011) of 0.02 people per household fewer than the raw Census data suggest — this can be seen in Figure 5.1. This 0.02 difference equates to around 150,000 additional households for the 2011 population. The Council's projected

decline in household size was derived from previous demographic trends, much of it due to an ageing population tending to live in smaller households. The difference between the outcome and projection could be due to a wide range of factors, including social change and some of the assumptions that underpin the model, but may also reflect household formation decisions being affected by more limited choice (that is the supply shortfall).

No official estimate of the number of households is currently available from the Australian Bureau of Statistic (ABS). So it is not possible to fully reconcile the Census data with the final estimate of average number of people per household.

Population estimate

Some degree of error is to be expected each time the ABS rebases the Estimated Resident Population (ERP) after a Census. However, the 2011 intercensal error is much larger than usual.

Using Automated Data Linking (ADL), the Post Enumeration Survey (PES) conducted by the ABS better accounted for people who may previously have been recorded in two places at once. For example, it reduced the risk of recording a fly-in fly-out mine worker both in their normal home and at their place of work, or those otherwise away from their usual residence on Census night or absent in other parts of the country, such as on holiday in another state.

ADL, which was used fully for the first time in the 2011 Census, led to an estimate of nearly 247,000 persons less than the previous PES matching method would have delivered. Other, more typical, revisions associated with movements between the five-yearly Census benchmarks led to the ERP estimate being revised down by a further 47,000 persons, taking the total revision to 294,000 persons.

The latest Census-based estimate is preliminary, and a final estimate will not be available until mid-2013. At the time of writing this report, the ABS had not yet revised the June 2006 ERP, as the new method was not used when estimating the population at that time. The ABS has compiled a 'spliced' population series that effectively blends in the 294,000 over the past five years. This spliced series is effectively a hybrid of the new and old methodologies, phasing in the new over time. But the true impact of the revised methodology on earlier periods is not yet known. This means that the currently available data are not fully comparable pre and post 2006. The ABS notes that it is 'not possible to use the results to produce an alternative 2006 measure'.¹ The ABS is expected to produce revised population estimates back to 1991 in mid-2013. It has suggested indicative changes of 240,000 fewer people in 2006, 130,000 fewer in 2001 and 70,000 fewer in 1996 than the current published estimates.

1 ABS June 2012, *Australian Demographic Statistics* December 2011, cat no. 3101.0, p 68, note 16.

Household numbers

The ABS literature suggests that overestimation of the population does not necessarily lead to a commensurate error in the count of occupied private dwellings, and therefore of 'counted' households. This is because, among other reasons, Census collectors count dwellings better than they do people (houses are generally harder to miss and less likely to be double-counted).

Household estimates ultimately will also include residents absent overseas who have been 'allocated' to the supply of dwellings that were apparently vacant on Census night. As a result, the estimated number of households draws on both the ERP estimates and Census count.

In previous publications, the Council's own estimates of underlying demand have been benchmarked to June 2001. Estimates for 2002 to 2006 are projections based on trends in household formation from the four Censuses up to and including 2001 and a projected population from that point. Post-2006 estimates are based on (revised) trends in household formation between the 2001 and 2006 Censuses, and updated actual population estimates (which, with the release of the 2011 Census are now out-dated). The Council's post-2006 estimates of underlying demand incorporate adjustments to household formation rates that emerged in the period 2001 to 2006, including the downward effect of 'other factors' noted in Chapter 5. On this basis, the estimates of underlying demand after 2006 are discounted relative to those in the period 2001–2006. To the extent that the revised trends in household formation overestimated the actual changes that were observed to have occurred by 2006, the post-2006 estimates therefore include an element of unmet or underlying demand. Without the 2011 household estimates from the ABS it is difficult to know how the relationship between the actual number of households and underlying demand has evolved.

Dwelling estimates and vacancies

In aggregate, the raw Census data suggest that the Council's estimate of 9.29 million dwellings at June 2011 (both occupied and unoccupied) is reasonably accurate. In the absence of data on dwelling undercount for 2011, a simple estimate created by adjusting the 9.1 million dwellings counted on Census night by the ratio of dwelling to population undercount in 2006 (2.9 per cent/2.7 per cent) produces a near-identical figure to the Council's estimate.

But determining how many of these dwellings are actually available to live in is a key part of the puzzle. In theory the number of households should equate to the number of occupied dwellings. Final household estimates are calculated based on usual place of residence — that is after people away from home on Census night are 'reallocated' back to their usual area of residence. As noted, these estimates have not yet been produced by the ABS. However, there is no 'mirror' reallocation of dwellings from an

unoccupied to occupied status. If, for instance, a family is away from home on holiday on Census night they are counted as a household unit, but their usual home would still be recorded as unoccupied in the reported Census data.

In addition, the count of the dwelling stock and its composition are complicated by a range of other factors. Previous estimates of the total dwelling count have not attempted to decipher whether those missed in the initial count and added in from the PES are occupied or not. There are also complications around how some unconventional residencies are calculated — for example, a caravan or tent is counted as a dwelling if there is someone living in it but not if it is empty.

Summary

As explained in Chapter 5, there is a great deal of uncertainty around a number of the key variables the Council uses in estimating the adequacy of housing supply for the resident population. Some of these will become clearer over time, such as the historic revisions to the resident population. However, others will not be and present significant challenges.

The Council will continue to assess how to make the best use of available data to assess the housing situation in future reports.

Glossary

Australian Bureau of Statistics (ABS)

The ABS provides statistics on a wide range of economic, industry, environment and energy, people and regional matters, covering government, business and the community in general.

affordable housing

Housing that is affordable for households on low to moderate incomes, when housing costs are low enough to enable the household to meet other basic long-term living costs. For example, housing costs should be less than 30 per cent of household income for occupants in the bottom 40 per cent of household incomes.

average household size

The average number of people per household in a given area.

Baby Boomers

The term Baby Boomers is used in various ways, often to denote the segment of the population born any time between 1945 and 1965. In this report the focus is particularly on the birth cohort from 1946 to 1961, with some analysis extending the cohort up to the 20-year span.

Census

The Census of Population and Housing, carried out every five years by the Australian Bureau of Statistics. It aims to accurately measure the number of people in Australia on Census night, and to gather information on their key characteristics and the dwellings in which they live. Census 2011 is the most recent Australian Census for which data is available.

Council of Australian Governments (COAG)

COAG is the peak intergovernmental forum in Australia, comprising the Prime Minister, State premiers, Territory chief ministers and the president of the Australian Local Government Association. COAG's role is to initiate, develop and monitor the implementation of policy reforms that are of national significance and require cooperative action by all levels of government.

COAG Reform Council review of capital city strategic planning systems

The COAG Reform Council report was commissioned by COAG to independently review the consistency of capital city strategic planning systems against nine criteria. The report was publicly released on 2 April 2012.

Commonwealth Rent Assistance (CRA)

A non-taxable Commonwealth Government supplementary payment added on to the benefit or family payment of people who rent in the private rental market above applicable rent thresholds.

conversion

Conversions are additional dwellings created by alterations or additions to residential buildings, conversions of non-residential buildings to residential buildings, or construction of non-residential buildings. Throughout this report conversions are taken to be from non-residential buildings to residential buildings — specifically those that add to housing supply but are not counted as a housing ‘completion’.

dwelling approval

Permission to commence construction of a building, such as a building permit issued by local government authorities and other principal certifying authorities, contract let or day labour work authorised by Commonwealth, State/Territory, semi-government and local government authorities, or major building approval in areas not subject to normal administrative approval, for example building on remote mine sites.

dwelling completion

A dwelling is completed when building activity has progressed to the stage where the building can fulfil its intended function.

effective demand

The quantity of housing that owner occupiers, investors and renters are able and willing to buy or rent in the housing market.

equivalised disposal income

Equivalence scales devised to make adjustments to the actual incomes of households in a way that enables analysis of the relative wellbeing of households of different size and composition. For example, it would be expected that a household comprising two people would normally need more income than a one-person household if the two households are to enjoy the same standard of living.

homelessness

A person is homeless if he or she does not have access to adequate housing that is safe and secure. People who are homeless fall into three broad groups — those who are:

- sleeping rough (living on the streets);
- living in temporary accommodation, such as crisis accommodation or with friends or relatives; and
- staying in boarding houses or caravan parks with no secure lease and no private facilities.

household

The household is the basic unit of analysis in this publication. A household consists of one or more people, at least one of whom is at least 15 years of age, usually resident in the same private dwelling. The people in a household may or may not be related. They must live wholly within one dwelling.

household (or family) reference person

The household member used in Census coding as the starting point for identifying the familial and non-familial relationships of usual residents within a household.

On the Census form, people are asked to state their relationship to Person 1. If suitable, Person 1 will then be used as the basis for coding family and relationship details. If Person 1 is not the most appropriate reference person, coders assign a reference person based on age, marital status and relationship considerations. A reference person must be a usual resident of the dwelling aged 15 years and over, and also present on Census Night i.e. not temporarily absent.

household growth scenario

A projection scenario of household growth based on (among other factors) the projected rate of net overseas migration.

housing stress

The condition of households (in the bottom 40 per cent of income distribution) paying more than 30 per cent of their gross income on mortgage or rental repayments.

Housing Supply and Affordability Reform (HSAR) report

The HSAR report was commissioned by COAG in April 2010 to examine the housing supply pipeline and government policies that may act as barriers to supply or that stimulate demand for housing. The report was authored by the HSAR Working Party, which was made up of representatives from each jurisdiction's First Minister and Treasury departments. On 30 August 2012, COAG released its HSAR report and agreed to its recommendations.

lower-income household

A household with income in the bottom 40 per cent of all household income distribution.

National Housing Supply Council (NHSC)

The Council was appointed by the Treasurer and the Minister for Housing and announced by the Prime Minister in May 2008. The Council provides projections, advice and analysis of trends in demand and land availability to measure and assess the supply of land and housing and its relationship with demand to assist the Government in assessing adequacy of supply and future needs for up to 20 years.

infrastructure

The Productivity Commission report (see below) defined infrastructure in general terms as 'physical and organisational structures that support the operation and

functioning of an enterprise or community. Within a community, infrastructure can be separated into categories of economic infrastructure (including water and sewerage, transport, energy distribution and information and communication networks) and social infrastructure (including matters such as schools, police, hospitals and recreation facilities)'. In this report infrastructure generally refers to infrastructure associated with housing and cities such as transport systems, water and sewerage, as well as parks and other recreation spaces.

negative gearing

A taxation arrangement applicable when costs exceed investment income, under which the loss may be deducted from other taxable income.

net overseas migration

A figure calculated from incoming and outgoing passenger movements at Australian ports maintained by the Department of Immigration and Citizenship. A person must have been in Australia for 12 of the previous 16 months to be counted.

net transition probability approach

A statistical approach that projects probable change in household types at the national and sub-national level. This is the approach used by Macdonald and Temple to produce the Council's estimates of underlying housing demand.

non-private dwelling

A non-private dwelling is an establishment that provides a communal type of accommodation. NPDs are classified according to their function. Some examples are hotels, motels, guest houses, jails, religious and charitable institutions, military establishments, hospitals, hostel type accommodation in nursing or retirement villages (not self-contained) and other communal dwellings. Where this type of accommodation includes self-contained units (as provided by hotels, motels, homes for the elderly and guest houses), the units are enumerated as private dwellings depending on the purpose/length of occupancy. Self-contained units within retirement villages are private dwellings.

Performance Benchmarking of Australian Business Regulation: Planning, Zoning and Development Assessments (Productivity Commission report)

The Productivity Commission report was commissioned by COAG in 2009. The report covered the impact planning and zoning systems have on business compliance costs, competition and the overall efficiency and effectiveness of the functioning of cities. The report was released on 16 May 2011.

place of enumeration

The place of enumeration is the place at which a person is counted in the Census — that is where he/she spent Census night, which may not be where he/she usually lives. This count includes people away from their usual residence in another part of the country, and overseas visitors. Overseas visitors to Australia are counted regardless of how long they have been in the country or how long they plan to stay. The count also includes people on board vessels in or between Australian ports, or on

long-distance trains, buses or aircraft. Australian residents temporarily out of the country on Census Night and overseas diplomatic personnel and their families are out of scope and so excluded from Census counts.

place of usual residence

This is the place where a person usually lives. It may or may not be the place where the person was counted on Census night. Each person is required to state his/her address of usual residence on the Census form. In effect the ABS reallocates people away from home on Census night back to their usual residence. The ABS also excludes overseas visitors.

private dwelling

A private dwelling is defined in the Census as a house, a flat, part of a house, or even a room. It can also be a house attached to, or rooms above, a shop or office, an occupied caravan in a caravan park, a boat in a marina, a houseboat, or a tent. A caravan situated on a residential allotment is also classed as a private dwelling as are self-contained units within retirement villages.

Reserve Bank of Australia (RBA)

The RBA is Australia's central bank. It conducts monetary policy, works to maintain a strong financial system and issues the nation's currency.

second home

Often referred to as a holiday home, a second home is a dwelling that is owned by, but not the principal residence of, an individual.

semi-detached, row or terrace house, townhouse

A dwelling that has its own private grounds and no other dwellings above or below but is attached to an adjacent dwelling.

social housing

Rental housing that is provided and/or managed by government or non-government organisations, including public and community housing.

tenure type

The nature of a person's or social group's legal right to occupy a dwelling. Tenure types include owner (fully owned or being purchased with mortgage), renter (private housing or public/community housing), rent free, life tenure scheme, shared equity and rent/buy scheme or other tenure.

underlying (or latent) demand

The need for housing based on the number of households in the population, rather than the demand actually expressed in the market (effective demand).