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REPORT 2008

National Housing Supply Council
State of Supply Report

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Any inquires about or comments on this publication should be directed to:

National Housing Supply Council
Department of Families, Housing, Community Services and Indigenous Affairs
PO Box 7576
Canberra Business Centre, ACT, 2610
Email: <nhsc@fahcsia.gov.au>

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REPORT 2008

National Housing Supply Council
State of Supply Report

The Hon Tanya Plibersek MP
Minister for Housing
Parliament House
CANBERRA ACT 2600

Dear Minister

On behalf of the National Housing Supply Council, I am pleased to present our inaugural report, *State of Supply 2008*. It provides projections of housing demand and supply over the next 20 years and reflects on the adequacy of construction rates and land supply to meet future needs.

This first State of Supply Report draws on available data and the combined knowledge and expertise of the National Housing Supply Council's members and support staff; research from industry organisations and academics, and discussion with a range of people with specific knowledge and experience. The Report is an important step towards establishing robust national information to inform government and industry on emerging trends and likely future scenarios in the demand for and supply of housing in Australia.

In collating and analysing this information, the Report identifies several important housing issues, including the impact on supply and demand of the present global financial crisis, present and projected demand exceeding supply, high housing costs affecting lower income home buyers and tenants, and aspects of urban development, infrastructure, planning and development assessment processes that constrain housing supply and affordability. These issues are of keen policy interest at national, State and local government levels. A further important issue is the quality and consistency of data relating to land and housing supply around Australia.

While aggregated national data is required for assessing high level trends at a whole-of-market level, it is also important to examine what's happening in sub-markets – in different market segments and in smaller geographical units. Parity between supply and demand at national level could mask a mismatch at sub-market level. The Report notes that demand-side pressures on the private rental market, particularly in relation to dwellings affordable to lower income households, have been exacerbated by the decline over the last decade in social housing's share of total dwelling stock. The Council is pleased that the Government's latest Nation Building Plan will make a substantial response to addressing that shortfall.

This first report skims the surface of the housing supply challenges that face Australians in the years to come. There is still a great deal of work for the Council to do to improve data and its analysis, develop better methods of projecting likely trends, and disaggregate national data to provide more specific 'sub-market' assessments of housing supply, such as housing for aged Australians.

This first State of Supply Report is the outcome of the hard work, good thinking and willing engagement of many people, including fellow Council members, staff of the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs, other Australian Government, State and Territory agencies, industry organisations and interested individuals. My sincere thanks go to them all.

I would also like to thank you personally for your active support for, and engagement in, the work of the Council. We look forward to continuing this relationship and making further progress in the year ahead.

Yours sincerely

Dr Owen Donald
Chair, National Housing Supply Council

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Executive Summary

The National Housing Supply Council's first State of Supply Report focuses on:

- projections of underlying demand and of land and housing supply over 20 years from 2008 to 2028
- the gap between housing demand and supply and implications for submarkets, with particular attention on affordability issues for lower income households
- a number of current influences on supply and demand, as well as the need for research to better understand how these impact on the housing market
- discussion of data collection and methodology, including the need for more sophisticated modelling, and the need to improve data collection and analysis, particularly on land supply for residential development.

The Council's information gathering and consultation with the housing industry and State, Territory and local governments took place from mid-2008. This was a period of fundamental change in the economic environment, from a period of high interest rates and sustained high levels of economic growth to the sudden and major disruption of the global financial crisis.

The Council has endeavoured to factor some of the possible effects of the global financial crisis into our projections of housing demand and supply.

Demand

The Council focused on underlying demand for its long-term outlook.

The Council's 20-year outlook of housing demand was based on projections by Professor Peter McDonald and Dr Jeromey Temple[1], using a model that estimates the probable formation of different household types based on various assumptions relating to migration and household transition. Low, medium and high growth scenarios were developed using different assumptions about overseas migration and interstate migration.

1 P McDonald & J Temple, *Projections of housing demand in Australia 2006–2021*, report prepared for NHSC with additional projections to 2028, Australian Demographic and Social Research Institute, The Australian National University, Canberra, August and November 2008.

For this report, the Council has adopted the medium household growth projection, which assumed overseas migration at a set rate of 180,000 per year, with shares to states and territories of overseas and internal migration as used by the Australian Bureau of Statistics (ABS) in its latest medium growth projections.

> McDonald and Temple's medium growth projections suggest that some 3,060,000 additional dwellings will be required in Australia by 2028, corresponding to a projected increase in the number of households from 8,347,000 in 2008 to 11,407,000 in 2028.

State-by-state estimates of households and medium growth projections as at 30 June 2008 and 2028 are as follows:

	Medium growth projections of underlying demand (households)		
State/Territory	**2008**	**2028**	**increase**
New South Wales	2,692,000	3,471,000	779,000
Victoria	2,063,000	2,780,000	717,000
Queensland	1,661,000	2,521,000	860,000
South Australia	661,000	823,000	162,000
Western Australia	853,000	1,272,000	419,000
Tasmania	206,000	249,000	43,000
Northern Territory	77,000	108,000	31,000
Australian Capital Territory	135,000	182,000	47,000
Australia	8,347,000	11,407,000	3,060,000

While the Council has selected the medium growth projection for its depiction of underlying demand, it is also prudent to consider the potential for lower and higher growth rates. In summary, the lower growth scenario projects underlying demand for an extra 2,901,000 dwellings, while the high growth scenario projects underlying demand for an extra 3,489,000 dwellings, over the period 2008 to 2028.

Supply

In assessing the prospects for housing supply, the Council considered the trend in growth of aggregate housing supply and information on capital city land supply for residential development provided by State and Territory planning agencies.

> Based on the trend in growth of aggregate housing supply since 1980, adjusted for losses due to demolition, the net annual growth of housing stock is projected to be 130,000 in 2010, increasing to 142,000 per year in 2028. These projections would see total growth of 2,716,000 dwellings in the period 2008 to 2028.

As the Council establishes more sophisticated modelling capacity, future reports will utilise a range of assumptions relating to construction capacity, market factors and productivity to present a range of supply projections.

It is important to separate consideration of land supply from housing provision as there are many factors influencing the conversion of raw land to completed residential estates, and land identified and zoned for residential development is usually used for a variety of purposes in addition to housing.

The Data Sub-Group, a group of Australian Government, State and Territory government officials, provided the Council with information on potential land supply and lots already undergoing development in broadhectare development areas and major infill development sites in metropolitan areas. However, there are major gaps and inconsistencies in the data. Some of these are due to varying definitions and expectations about the development time frames and housing yield of land identified for residential use. The Council is particularly concerned about the lack of comprehensive information on infill – especially on smaller ad hoc infill capacity – given the emphasis in most States' metropolitan plans on infill development providing as much as 70 per cent of future residential supply.

These data indicate that there is sufficient land supply in the pipeline to provide for 357,000 dwellings to be added to Australia's housing stock in the period 2008–2010. Taking into account available State and Territory estimates of land for development over the next 10 years, there is apparent capacity for an additional 1.3 million dwellings. This compares with medium projected growth of 920,000 households in Australian metropolitan areas over the same period.

The Council stresses that projections beyond two years are speculative, given uncertainty about the actual conversion of land to serviced lots for development as well as potential dwelling yield.

There are a number of factors in the current market that could combine to constrain the rate of development of new housing.

- Tightening of credit for the housing industry in the wake of the global financial crisis has led to the imposition of higher pre-sale requirements for new multi-unit residential developments
- Market conditions – including relatively low rental yields and lower expectations of capital growth that will reduce investor demand – are likely to impact on the timing of developers' plans to bring supply on line. Despite recent increases in real rents, rental yields are still relatively low, with the average yield at or below 4 per cent, compared with around 8 per cent in the 1980s and 6 per cent in the early 1990s
- Relatively high land and construction costs for medium- and high-density dwellings, especially in multi-storey developments, are a factor negatively influencing infill supply in established urban areas
- Similarly, the timing of broadhectare lot construction varies in accordance with economic cycles, industry capacity and changing demand
- Development of land on the urban fringe is being impacted by energy use and environmental considerations
- Planning, zoning, subdivision and development approval processes are often very lengthy, and were identified by stakeholders as a major continuing constraint on supply
- Related to planning and development approval processes are concerns about high and compounding taxes and charges, including developer contributions for hard and soft infrastructure, that increase the price of housing and may delay or preclude development.

The Council found a lack of comprehensive, consistent and independent information available to it for detailed analysis of residential development in metropolitan areas. Areas identified for future attention by the Council and the Australian Government, State and Territory officials' Data Sub-Group include:

- better indicators of lot production such as the number of residential titles issued
- better utilising the range of information held by State and Territory and local governments, including on smaller, ad hoc infill development
- improving the quality and consistency of data holdings on land activities in the pipeline including standard definitions to enable a more informative compilation of a national housing supply picture
- comprehensive analysis of the factors affecting development risk and the relative price of various types of residential development.

The demand–supply gap

A number of industry representatives have recently commented on the perceived gap between dwelling construction activity and the underlying demand for additional housing.

The Council estimates that a minimum of around 85,000 dwellings is the gap (unmet need) in the supply of housing in 2008. This is based on the incidence of homelessness and the low level of vacancy rates in the private rental market.

The Council acknowledges the crudeness of this estimate and also points out that there were some 830,000 vacant dwellings in Australia at the time of the 2006 Census. The Council has assumed that most of these were probably second homes, homes in the process of sale or homes awaiting redevelopment and that there is likely to be limited capacity for absorbing growth in underlying demand within the present level of housing supply. The Council will also be undertaking research to assist it to better understand the reasons why these dwellings were vacant.

The Council compared its medium growth estimate of underlying demand with a medium supply projection based on the ABS long-term trend in completions adjusted for demolitions.

> This comparison showed a cumulative gap by 2028 of 431,000 dwellings. Annually, the shortfall is projected to be 23,000 dwellings in 2010, rising each year by a similar amount until 2016, when the size of the annual gap decreases, consistent with an ageing population.

The greater the gap between underlying housing demand and expected supply, the greater is the likely impact on housing availability and prices. There are two very notable consequences, among many others, of falling housing availability and affordability. The first is the demand-side squeezing of moderate income households – that may otherwise have been able to access home ownership – into private rental, and the progressive squeezing of low income households out of the private rental market or into unaffordable rents. Flowing from this is greater pressure on the supply of social housing. The second is the supply-side market reaction, including increased attractiveness of investment in housing as rents increase, a consequently higher level of production and, in turn, diminution of the gap between demand and supply.

Affordability

The Council's predominant focus on aggregate demand and supply could mask the diversity of circumstances at the submarket level. This diversity has housing type, housing tenure, geographical, demographic and socio-economic dimensions. The Council is especially concerned about lower income households in terms of access, affordability and choice of housing. Many lower income households that cannot access either home ownership or social housing are likely to become long-term tenants in the private rental market.

> Analysis of 2006 Census data – showing the need for an additional 251,000 rental dwellings affordable and available for lower income households – highlights that existing arrangements are failing to adequately provide for lower income households.

Housing affordability for first home buyers generally declined over the decade to 2008. Many would-be purchasers were unable to become home buyers because increases in house prices have enlarged the deposit gap and repayment requirements.

It is difficult to save for a deposit while also paying for private rental accommodation, and many young adults are remaining for longer periods in the parental home or sharing instead of forming independent households.

The number of long-term private renters who cannot move on to home ownership has added to pressure in the private rental market.

Social housing declined from about 400,000 dwellings in 1996 to an estimated 390,000 in 2008. If social housing had maintained its share of total dwelling stock, there would be around 480,000 dwellings in 2008. This, too, has contributed to pressure on the private rental market, and to poor outcomes for lower income households.

Future work

The Council has developed a work program for 2009 and 2010 aimed at improving longer term empirical analysis and forecasting for the annual State of Supply Report and to pursue emerging issues arising from these projections.

Major short-term priorities include:

- standardisation and refined national collation of housing-lot supply data including time frames and dwelling yield information for each step in the development pipeline
- development, testing and application of a macro-economic model of the housing market
- development of a housing cost model to enable comparative locational and dwelling-type analysis of all inputs to the final cost of housing for consumers including raw land costs, lot development costs and charges, and housing production costs.

Other topics for further research that have been identified during the course of the Council's consultations relate to the efficiency of the housing market and include utilisation of vacant dwellings, analysis of housing submarkets including aged households and first home buyers, and focused analysis of supply-and-demand dynamics in housing market hotspots.

Finally, the Council has developed some key indicators of demand, supply and affordability outcomes for lower income households. These indicators, which will be reviewed and developed further in 2009, are intended to provide a benchmark against which future activity in the housing market might be assessed. The Council's preliminary key indicators are discussed in Chapters 4 and 5.

Introduction

CHAPTER 1

Introduction

Role of the National Housing Supply Council

The National Housing Supply Council was established in May 2008 to monitor housing demand, supply and affordability in Australia, and to highlight current and potential future gaps between housing supply and demand from would-be home-owners and renters.

The Council will produce an annual State of Supply Report that examines housing supply needs up to 20 years into the future. These reports are intended to provide information that will assist government and industry to improve housing supply.

In this inaugural report, the Council's focus has been on identifying the national 'state of play' on housing supply and demand. The report also includes trends and issues associated with housing affordability, particularly for lower income households and, following consultation with key stakeholders, outlines areas of focus for the Council's future work program.

There has been no systematic national process for collecting, aggregating and presenting this sort of information since the Indicative Planning Council was discontinued in 1997. As a result, and given the short period since the Council's establishment in May 2008, this first report aims to establish baseline information from readily available data and proposes key indicators that will be monitored over time.

The report includes information on land supply collected from State and Territory planning agencies. It includes estimates of new dwellings that can be constructed through use of broadhectare (greenfield) land and brownfield, redevelopment, infill or dual-occupancy sites, where jurisdictions have provided this information. Subsequent reports will aim to provide more comprehensive data on land supply for urban residential development.

Providing an annual assessment of the balance between housing demand and supply should contribute to knowledge of the dynamics of the home ownership and rental housing markets and thereby contribute to the development of effective policy and practice responses to access and affordability issues in the public and private sectors.

Box 1.1: The National Housing Supply Council's Terms of Reference

The National Housing Supply Council will provide an annual State of Supply Report that forecasts and analyses the adequacy of land supply and construction activity to meet demand and improve affordability over a 20-year forecast period.

The State of Supply Report will provide consistent data on trends and forecasts of housing demand and supply at national, State and Territory and, to the extent feasible, smaller scales.

The Council will:

- adopt consistent national standards in measuring and assessing the supply of land and housing and their relationship with housing demand and affordability
- provide a detailed assessment of trends in land availability, construction activity and housing affordability
- advise on research findings and desirable additional research on housing demand, supply and affordability at regional, State and national levels.

The Council will separately provide relevant policy advice to the Minister for Housing.

The Council's full Terms of Reference are at Appendix 1.

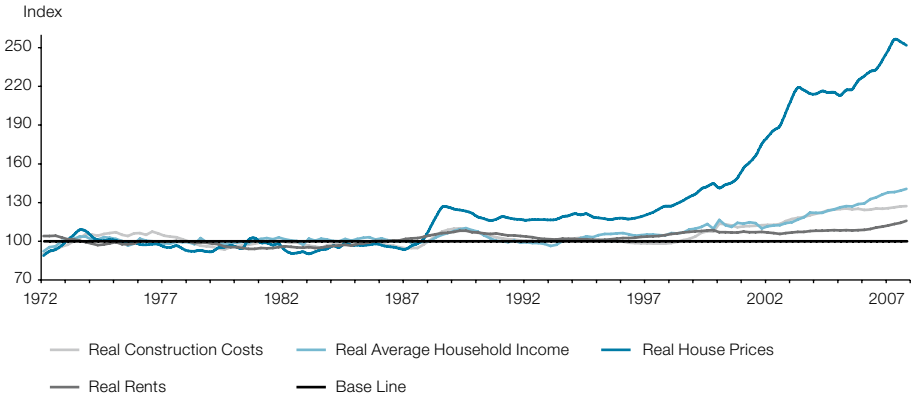
Context

For many years, Australia was comparatively well served by a housing system comprising home ownership for the majority, long-term public housing leased to lower income households (often with provision to buy if and when household circumstances improved) and private rental housing as a transitional tenure on the path to home ownership. However, long-term structural shifts in the economy, society and housing markets have challenged these traditional foundations. Over time, the combination of economically and demographically induced increases in housing demand, and land supply constrained by urban settlement patterns, has contributed to increases in real house prices in Australia (see Figure 1.1). A mismatch between the distribution of household incomes and house prices is also evident. These trends, exacerbated by the recent prolonged episode of increasing housing costs, together with a dwindling supply of 'social housing' (public housing and housing managed by not-for-profit agencies), have resulted in ongoing public concern about housing affordability.

It should be noted that deteriorating housing affordability has not been confined to Australia. In most other economies that are part of the Organisation for Economic Co-operation and Development (OECD), real house prices have fluctuated around an upward trend, at least since 1970.[2]

2 Organisation for Economic Co-operation and Development, *OECD Economic Outlook*, Issue No. 78, December 2005, Chapter 3: Recent house price developments: the role of fundamentals, OECD, Paris, p. 125.

Figure 1.1: Real house prices, household income, rents and construction costs, Australia, 1972–2008



Note: the baseline of 100 is the average of 1972–75.

Source: Adapted from Australian Bureau of Statistics, Reserve Bank of Australia, Real Estate Institute of Australia in: A Richards, 'Some observations on the cost of housing', address to 2008 Economic and Social Outlook Conference, The Melbourne Institute of Applied Economic and Social Research, Melbourne, 27 March 2008, accessed 20 January 2009, <www.rba.gov.au/Speeches/2008/sp_so_270308.html>.

Over the past three decades or so, social change and declining affordability have contributed to declining home ownership among younger households, particularly among low to moderate income aspiring first home buyer households seeking modestly priced starter homes.[3] Census data show that the home ownership rate (outright owners plus buyers) among households in the 25–39 year old age group fell from 65 per cent in 1981 to 57 per cent in 2006.[4] Over the same period, the home ownership rate for households in the younger, 25–34 year old age group fell from 61 per cent to just over 50 per cent.

By 2006–07, in four of the major capitals in Australia, only 30 to 35 per cent of transacted dwellings (houses and apartments) would have been accessible to the median income household in the home-buying (25–39 years) age groups. For Australia as a whole, around 33 per cent of transacted dwellings would have been accessible to households on median income for median young households in 2006–07, compared with a longer run average of around 45 per cent. Accessibility, of course, is much lower for low income households.[5]

3 J Yates, *Housing implications of social, spatial and structural change*, Australian Housing and Urban Research Institute, Final Report no. 22, AHURI, Canberra, July 2002, p. 79, and M Rodrigues, *First home buyers in Australia*, Treasury Economic Roundup, Summer 2003–04, p. 62.

4 J Yates, H Kendig et al., *Sustaining fair shares: the Australian housing system and intergenerational sustainability*, Australian Housing and Urban Research Institute Final Report no. 111, February 2008, p. 32, Table 3.2: 'Current and projected age-specific home ownership rates'.

5 These estimates are taken from an address given by the Head of the Economic Analysis Research Department at the Reserve Bank of Australia (A Richards, 'Some observations on the cost of housing', address to 2008 Economic and Social Outlook Conference, The Melbourne Institute of Applied Economic and Social Research, Melbourne, 27 March 2008, accessed 20 January 2009, <www.rba.gov.au/Speeches/2008/>). They are based on regional estimates of median gross household income for 25–39 year olds from ABS survey data, assumptions of a 10 per cent deposit, borrowing capacity set by representative interest rates, and a repayment capacity based on 30 per cent of gross household income.

The private rental market is often the forced choice for an increasing number of low- and moderate-income households because of:

- rising house prices relative to income (especially in job-rich areas well supplied with urban amenities) and consequent falling home ownership rates among younger households
- decline in the supply of social housing, which has not kept pace with growth in the number of lower income households.

Due to the resulting upward pressure on the private rental sector, private renters as well as home buyer households have experienced increasing access and affordability problems.

Low income households have felt the brunt of these pressures. In 1996, for example, 43 per cent of lower income private renters paid more than 30 per cent of their income in meeting their housing costs. By 2006, this proportion had increased to 60 per cent.[6]

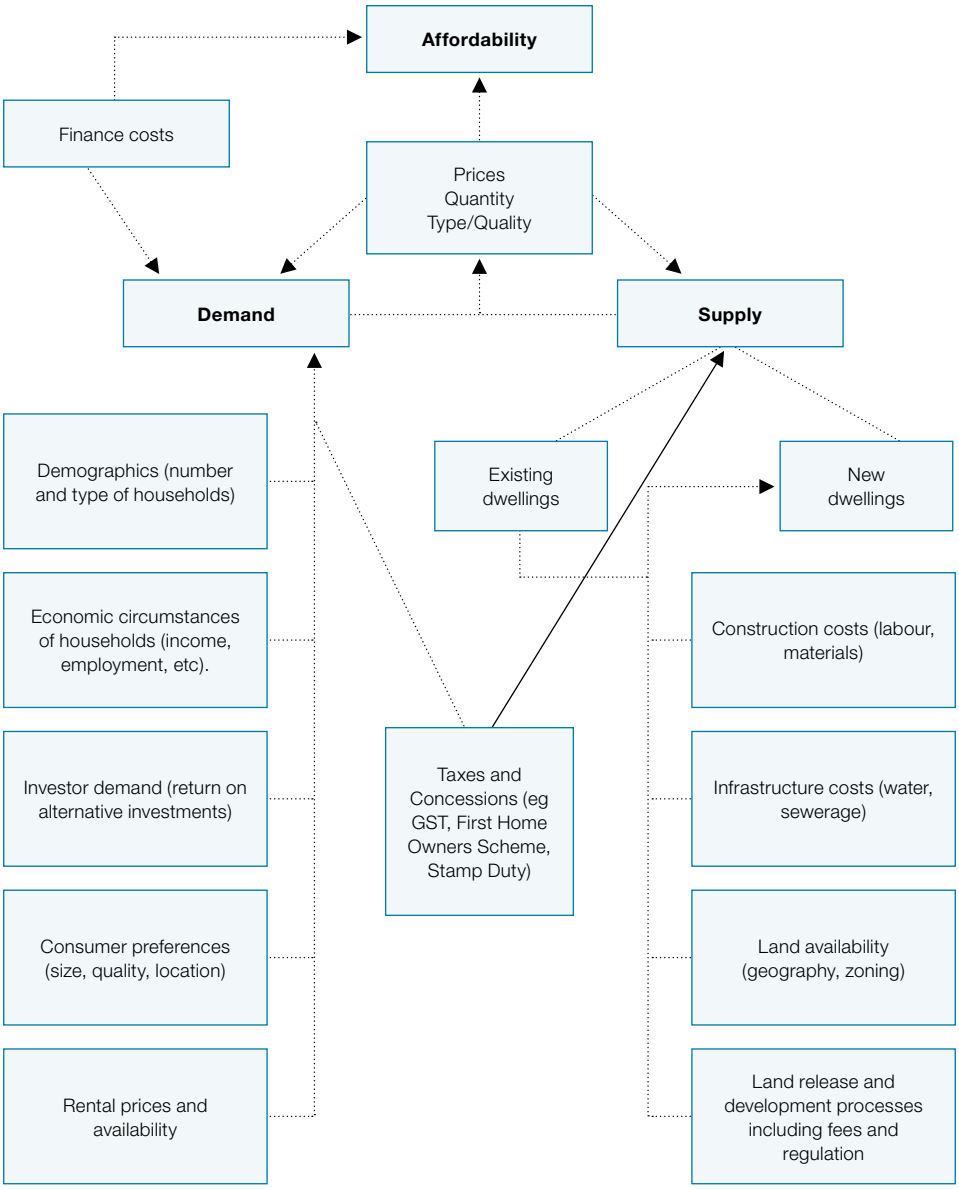
The Council's Terms of Reference provide that, in considering trends and forecasts of housing demand and supply at national and State and Territory levels, the Council will focus particularly on the factors affecting the supply and affordability of housing for families and other households in the lower half of the income distribution. While the Council is concerned with the efficiency and effectiveness of the market in responding to demand across the income and wealth distribution, the Council has drawn particular attention to the circumstances of more disadvantaged consumers. In any adverse market conditions, it is they who are most likely to miss out.

6 National Housing Supply Council estimates based on Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

Factors influencing housing supply and demand: a framework

Figure 1.2 shows the complex set of factors that underpin the relationship between supply and demand, with house prices being the net outcome of the interaction of those various factors.

Figure 1.2: Factors influencing housing supply, demand and affordability



Source: Adapted from Productivity Commission, *First home ownership: inquiry report*, Productivity Commission, Melbourne, 2004, p. 5, viewed 15 January 2009, <www.pc.gov.au/projects/inquiry/housing/docs/finalreport>.

Added to the mix above are a number of factors that impact on the overall efficiency of the supply side of the housing market, including:

- the housing market's structure – that is, the level of competition and barriers to entry at any level in the housing supply 'pipeline'
- finance, land supply and housing construction, and the propensity for innovation across these sectors
- a range of regulatory constraints and requirements.

As data are improved and modelling capacity established, the Council's long-term objective will be to examine systematically the influence of these factors on achieving a well-functioning market—one that responds quickly to changes in demand and enables households to have access to employment and educational opportunities and other services as their needs change.

This report presents demand and supply projections and discusses a number of influences on the responsiveness of supply to changes in demand. It does not, however, present a comprehensive set of influences on supply and does not purport to point to policy priorities to address the gap between demand and supply and its impacts on housing affordability.

Structure of this report

The remainder of this report is structured as follows:

Chapter 2 explores the drivers of underlying and effective demand and presents projections of future underlying demand.

Chapter 3 discusses supply issues, including influences on housing supply, and the outlook for housing production.

Chapter 4 compares the Council's forecasts of housing demand and supply and identifies particular areas of likely future shortfall.

Chapter 5 examines housing affordability in more detail and explores trends for public and private renters and home ownership, including the availability of affordable supply for 'key workers' and other groups.

Chapter 6 highlights the main lessons from the report and outlines how these will shape the Council's future work and role.

Council projections

The Council's projections of underlying demand in Chapter 2, and of land and housing supply in Chapter 3, have a 20-year outlook.

In developing and interpreting the projections, the Council drew on the experience of its individual members and the views of key stakeholders to critically review commissioned research on demand and information from states and territories on the land supply outlook.

Long-range forecasting is error-prone at the best of times; it is especially perilous when trends are interrupted or changed as a result of major changes in the economy or society more generally. In 'normal' times, predicting the rate of immigration – the major variable affecting underlying demand – rests on contestable assumptions, and the accuracy of the forecasts is largely dependent on those assumptions. At present, Australia and the world at large are in the midst of a major financial crisis, the outcomes of which, including for the housing market, are at best uncertain.

Changing economic circumstances could have major effects on the housing market. Effective demand is the product of factors such as employment, the availability and cost of finance, and expectations of the rate of return from alternative investments. These factors also affect the supply side of the housing market. Forecasts on the supply side are also compromised by the lack of consistent and complete data on land supply in the pipeline (particularly infill land), uncertainty about the rate of conversion from raw land to serviced lots and actual dwellings, and the production capacity of the construction industry.

Guide to methodology

A range of approaches could have been used to produce the demand and supply projections for this report. The methodology used in this report, having regard to the availability and accessibility of information in a short time frame, is based on medium- to long-term trends in construction activity (supply projections) and population growth (demand projections).

Other approaches that have been used for such projections include multisectoral econometric modelling, which estimates relationships between key variables and drivers of market activity and cost; microsimulation modelling, which uses microdata sets to simulate the consequences of policy and programs on producers and consumers behaviour; and GIS modelling, which analyses spatial factors.

As outlined in Chapter 6, the Council's future work program includes the development of better and more consistent data on the current state of land and housing supply as well as more sophisticated approaches to modelling and projecting changes in demand and supply over time.

Supply and demand data

The data in this report have a number of time reference periods:

- Data for 2008 are presented as the current status of supply and demand and comprise actual information collected in 2008 (such as supply data on planning for the next two years or construction activity in 2008) or estimates based on the most recently available data
- In examining how supply and demand have changed in recent years, either annual data for the 10-year period to 2008 or, in the case of census data, the last three census periods (1996, 2001 and 2006) are used
- Projections are presented for each of the years 2008–13, 2018 and 2028, with detail in Appendix 2
- Summary data tables at Appendix 2 contain more detailed data on supply and demand aggregated at national level and, where possible, at state level, with capital city and rest-of-state disaggregation. More detailed data tables are available from the NHSC Secretariat and will also be accessible via the National Housing Supply Council web page at <http://www.fahcsia.gov.au/internet/fascinternet.nsf/housing/nhsc.htm>.

The household projections used in this report were developed by Professor McDonald and Dr Temple using the most recent Australian Bureau of Statistics (ABS) population projections, which were released in September 2008 (ABS cat. no. 3222.0). This ABS publication provides an estimate for Australia's population of 20.7 million people as at June 2006, compared with the 2006 Census figure of 19.9 million people. It is likely that some of this discrepancy relates to under-enumeration in the Census.

The ABS has also estimated that there were around 250,000 dwellings, or 2.9 per cent of all dwellings missed by the 2006 Census.[7] Where possible, the information in this report has been based on the most recently released figures. However, for some of the analysis, such as the affordability assessment, census data has been used as it provides much more detailed information on the circumstances of households.

In future reports, the Council intends to examine supply and demand in various 'submarkets' or 'sectors' – such as aged persons' housing, the rental apartment market and the market for medium-density housing. Although somewhat artificial and overlapping in concept, they are worthy of examination because of their looming importance and the different influences upon them.

7 Australian Bureau of Statistics, *Census of Population and Housing – Details of Undercount*, ABS, cat. no. 2940.0, ABS, Canberra, August, 2006.

There is a particular housing 'sector' – housing for Indigenous Australians – that we have not examined separately in this report despite this being an oft-cited disadvantaged sector in which supply shortages, poor housing quality, access difficulties and overcrowding are well documented. While 'mainstream' housing options (the private market and public housing) are major suppliers of housing for Aboriginal and Torres Strait Islander peoples, there is also a range of Indigenous-specific housing options and providers that operate in comparative isolation from other services, especially but not exclusively in remote areas. The Council is conscious of its lack of expertise in this sector, the non-market character of some areas and forms of provision, and the fact that Indigenous housing has been the subject of intensive policy focus at Australian Government and State levels. Our report covers Indigenous housing only to the extent that Indigenous people contribute to the composition of the housing market in general, Indigenous-specific housing is included in social housing numbers and Indigenous people are a significant element of the low income population.[8]

8 In November 2008, the Council of Australian Governments agreed on a new 10-year National Partnership on Remote Indigenous Housing. This partnership will deliver a significant reform package through the provision of an additional $1.94 billion of Commonwealth funding to address overcrowding, homelessness, poor housing conditions and the severe housing shortage in remote Indigenous communities. This brings total investment in remote Indigenous housing to $5.5 billion over 10 years. Key elements of the new reform package are the provision of new housing, major repairs and upgrades of existing houses, an ongoing repairs and maintenance program, and standardised tenancy management and support in line with general public housing principles.
COAG further agreed to a National Indigenous Reform Agreement (NIRA) to close the gap in Indigenous disadvantage with reform proposals to be developed in 2009 to coordinate delivery of services to Indigenous Australians in education, employment, health and housing.
Recent information on Indigenous housing can be obtained from the following sources:
Australian Institute of Health and Welfare, *Indigenous housing indicators 2005–2006*, Indigenous housing series no. 2, cat. no. HOU 168, AIHW, Canberra, 2007.
S Long, P Memmott, Paul & T Seelig, *An audit and review of Australian Indigenous housing research*, Australian Housing and Urban Research Institute, Final Report no. 102, AHURI, Queensland Research Centre, July 2007.

Demand

CHAPTER 2

Demand

Key points

- In June 2008, there were approximately 8.3 million households in Australia.
- Annual growth in the number of households averaged 105,000 in the period 2001 to 2006.
- The average number of persons per household declined from 2.7 in 1996 to 2.6 in 2006.
- There were 8,800 households (16,400 people) sleeping rough and a further 50,500 households living in caravans, cabins or houseboats in 2006.
- Over the next two years (2009 to 2010) in the order of 153,000 households a year are likely to be added to underlying housing demand.
- By 2018, the number of households is projected to grow to 9.9 million – an increase of 1.6 million in the underlying demand for dwellings over the 10-year period from 2008.
- By 2028, the number of households is projected to be 11.4 million – an increase of 3.1 million in the underlying demand for dwellings over the 20-year period from 2008.

Overview

Two aspects of demand for housing may be identified: underlying demand and effective demand. While it is useful to distinguish between them, it should be noted these aspects are related and overlap considerably.

- **Underlying demand** is the 'need' for housing based on the number of households (family units, other groups and individuals) in the population. The level of underlying demand is accordingly driven predominantly by migration and demographic factors. An increase in the number of households may imply the need for an equivalent increase in the number of dwelling completions, although the gross increase needed in housing completions will be larger due to the need to also replace dwellings that have been demolished or are no longer suitable for habitation. It should also be noted that household formation may be affected by the supply of housing in that, for instance, constrained housing supply reduces the rate at which young adults partner and leave the parental home.

- **Effective demand** describes the number, size, type and location of dwellings that owner-occupiers and investors are willing and able to buy in the housing market. It is affected by the full range of market forces – including number of households, incomes, prices, the economic situation, availability of finance and the current supply of dwellings.

This chapter focuses primarily on projections of underlying demand. This is partly because of its importance in assessing the adequacy of supply, but also because of the great difficulty, particularly in the current environment of major change in international economic and financial conditions, of predicting the impacts of economic factors—such as the future availability and cost of finance and consumer confidence—on demand for housing. However, a broader discussion of social and economic factors impacting on both underlying and effective demand is also included in the chapter.

Projections of underlying demand are affected by assumptions about:

- increases in household numbers through natural changes in the population, migration (both overseas and interstate) and household formation
- changes in household preferences (for dwelling types and holiday homes, for instance), which are influenced by a range of social and economic factors.

These assumptions need to be borne in mind when interpreting the results of the projections presented in this report.

Current demand

The starting point for projections of future underlying demand is the current demand for dwellings in Australia. In 2008, there were an estimated 8.3 million occupied private dwellings in Australia. The majority of these were occupied by families (67 per cent). Couples with children occupied 31 per cent of all stock. Three-quarters of the occupied stock were separate houses, 14 per cent were flats, units or apartments, and 9 per cent were semi-detached, row or terrace houses, or town houses (see Table 2.1).

Table 2.1: Occupied dwellings: dwelling structure by household composition ('000 households), 2008

	Family households					Other households			
	Couple family								
Dwelling structure	with no children	with children	Single parent family	Other family	Sub total: family house-holds	Single person	Group	Other (a)	Total
	('000 households)								
Separate house	1,655.8	2,342.4	699.8	64.6	4,762.8	1,084.1	169.4	234.3	6,250.9
Semi-detached, row or terrace house, town-house etc.	176.9	125.6	88.3	11.5	402.4	275.6	46.5	48.1	772.5
Flat, unit or apartment	221.3	99.4	85.4	21.6	427.8	508.3	89.6	157.9	1,183.4
Other dwelling	20.1	10.0	5.2	0.7	36.0	44.5	3.1	56.5	140.0
Total	**2,074.2**	**2,577.4**	**878.7**	**98.6**	**5,629.0**	**1,912.5**	**308.7**	**496.8**	**8,346.7**

(a) Comprises 'Visitors only' and 'Other not classifiable' households.

Source: National Housing Supply Council estimated 2008 household distribution based on the McDonald–Temple medium growth household projection adjusted to reflect the 2006 Census distribution of dwelling structure and household composition (excluding 'not stated'), Australian Bureau of Statistics, *2006 Census Tables*, Australia, 'Dwelling Structure by Household Composition and Family Composition for Time Series: Count of occupied private dwellings', ABS cat. no. 2068.0, ABS, Canberra, 2007.

These 8.3 million households represent the main component of the Council's estimate of underlying demand for housing in 2008.

Projections of demand

Household projections

The Council commissioned Professor Peter McDonald and Dr Jeromey Temple to develop projections of housing demand in capital cities and 'rest of state' for States and Territories of Australia for 2008–2028, using their net transition probability approach. The main reason for commissioning this work was that the Australian Bureau of Statistics' detailed household projections would not be ready in the required time frame for publication of the Council's first report.

The full report of the McDonald–Temple study will be provided on the Council's webpage.[9] This chapter focuses on some of its key results, concentrating on estimates of growth in the total number of households.

Methodology

The household projections begin with 2006 Census data on the population, categorised by sex, single year of age and individual household classification type (HCT) for each locality, adjusted to match the ABS estimated resident population for the particular locality and year. Future projections take into account the sex, age and locality characteristics of individuals and use location-specific estimates of future fertility (based on 2006 data) and mortality (based on 2001–06 data, adjusted by the rate of change in expectation of life derived from the period 1991 to 2006) and a range of assumptions about net annual migration (overseas and interstate). Net transition probabilities that each individual changes their HCT from one year to the next were derived from intercensal data and applied to population projections by sex, age and location. These probabilities are location specific and take account of the effect of migration upon HCT. Household projections were derived by applying the projected HCT categories to population projections on the assumption that the HCT transition probabilities for 2001–2006 remain unchanged throughout the projection period.

Changes in household transition probabilities are likely to occur relatively slowly and will be overshadowed by changes in migration patterns. The McDonald–Temple study provided projections for three different assumptions about overseas migration and one about interstate migration. This chapter focuses on results from the three scenarios based on low, medium and high forecasts of household growth as follows:

- The low household growth scenario assumes that age and sex-specific net migration rates (overseas and interstate) for each region as observed in the period 2001–06 are maintained, with total net overseas migration increasing from around 120,000 a year in 2008 to around 160,000 a year in 2028

9 <http://www.fahcsia.gov.au/internet/facsinternet.nsf/housing/nhsc.htm>

- The medium household growth scenario sets net overseas migration at a constant rate of 180,000 a year from 2008 onwards, with shares to states and territories of overseas migration and rates of interstate migration equated to those used by the most recent ABS medium projection[10]
- The high household growth scenario sets net overseas migration at a constant rate of 230,000 a year from 2008 onwards, with shares to states and territories as per the medium growth scenario.

Overview of results

A recent ministerial announcement[11] with regard to international migration suggests that the medium growth scenario is the most likely in the short term. However, in recognition of the uncertainty associated with the future impact of prevailing economic conditions in Australia and overseas on migration and household growth, the Council considers it prudent to refer also to the low and high household growth scenarios.

The Council is also aware that housing demand may also be affected by changes in non-permanent migration (such as by overseas students and people on temporary work visas staying between three and twelve months) that are not reflected in the above-mentioned estimates. Student and temporary work visa entrants (including business long stay and working holiday makers) increased from 185,000 in 2003 to 314,000 in 2008. This should be noted when interpreting the estimates of underlying demand, which do **not** include temporary entrants.[12]

10 Australian Bureau of Statistics, *Population projections, Australia, 2006 to 2101*, cat. no. 3222.0, ABS, Canberra, 2008.

11 Minister for Immigration and Citizenship, *Ministerial Statement by Senator Chris Evans, Minister for Immigration and Citizenship: Changes to the 2008–09 Skilled Migration Program*, 17 December 2008, accessed 16 January 2009, <http://www.minister.immi.gov.au/media/media-releases/2008/changes-to-2008-09-skilled-migration-program.pdf>.

12 Data on temporary entrants are given in Appendix 2, Table A2.1 (temporary entrants by major visa group present in Australia as at 30 June for the years 1999 to 2008).

Table 2.2 shows the numbers of additional dwellings that would be required to meet projected demand for different household types over the 20-year period from 2008 to 2028 under the medium household growth scenario. Under this scenario, the net number of new dwellings required for Australia as a whole would be 3,060,000 over 20 years, or 153,000 dwellings per year. This corresponds to an increase in the number of households from 8,347,000 in 2008 to 11,407,000 in 2028.

Table 2.2: Projections of national underlying demand by household type ('000 dwellings), 2008–28, medium household growth scenario

Household type	Year, as at 30 June							
	2008	2009	2010	2011	2012	2013	2018	2028
Two-parent families	2,642	2,666	2,691	2,716	2,742	2,767	2,902	3,172
Single-parent families	954	967	980	991	1,002	1,012	1,058	1,181
Couples without children	2,263	2,314	2,365	2,417	2,468	2,518	2,752	3,095
Single-person households	2,160	2,218	2,277	2,337	2,399	2,463	2,807	3,537
Group households	328	334	340	345	351	356	381	423
Total households	**8,347**	**8,499**	**8,652**	**8,807**	**8,962**	**9,118**	**9,900**	**11,407**

Source: NHSC estimates based on McDonald–Temple medium household growth scenario.

Table 2.3 compares demand for additional dwellings on a state and territory basis under the low, medium and high household growth scenarios. It should be noted that these projections are sensitive to assumptions about rates of net overseas and interstate migration. In particular, the assumptions relating to interstate migration in the low growth scenario are different from those incorporated in the medium and high growth projections. This produces the curious outcome that, for instance, household growth and hence dwelling requirements are higher in Melbourne, Brisbane, Balance of Queensland and Balance of Tasmania under the low growth scenario compared with the medium growth scenario. This is the outcome of the differing interstate migration and migrant settlement assumptions noted above. It is also important to recognise that the assumptions are unlikely to apply to all areas over the full projection period.

Table 2.3: Additional households by region for low, medium and high household growth scenarios, 2008–28 as at 30 June

Region	Low growth scenario	Medium growth scenario	High growth scenario
Sydney	295,000	472,000	600,000
Balance of NSW	204,000	307,000	313,000
NSW Total	*500,000*	*779,000*	*913,000*
Melbourne	593,000	581,000	687,000
Balance of Vic.	129,000	136,000	143,000
Vic. Total	*722,000*	*717,000*	*830,000*
Brisbane	425,000	346,000	394,000
Balance of Qld	665,000	515,000	549,000
Qld Total	*1,090,000*	*861,000*	*943,000*
Adelaide	88,000	115,000	142,000
Balance of SA	46,000	47,000	49,000
SA Total	*134,000*	*162,000*	*191,000*
Perth	281,000	319,000	374,000
Balance of WA	77,000	101,000	107,000
WA Total	*357,000*	*419,000*	*481,000*
Hobart	19,000	22,000	24,000
Balance of Tas.	26,000	21,000	23,000
Tas. Total	*45,000*	*43,000*	*46,000*
NT Total	*22,000*	*32,000*	*34,000*
ACT Total	*31,000*	*47,000*	*50,000*
AUSTRALIA	**2,901,000**	**3,060,000**	**3,489,000**
South-east Qld (a)	825,000	631,000	730,000

Note: Figures are rounded to the nearest '000. Numbers may not sum to totals due to this rounding.

(a) South-east Queensland includes the statistical divisions of Brisbane, Gold Coast, Sunshine Coast and West Moreton and Toowoomba Regional Council (Cambooya Shire—Pt A, Crow's Nest Shire—Pt A, Jondaryan Shire—Pt A, Rosalie Shire—Pt A, and Toowoomba City).

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios.

Table 2.4 shows the cumulative increase starting from 30 June 2008 over selected years for each of the three projection scenarios, nationally.

Table 2.4: Cumulative additional households from 2008 under low, medium and high household growth scenarios, selected years

	Low growth scenario	Medium growth scenario	High growth scenario
2010	274,000	305,000	344,000
2013	698,000	771,000	871,000
2018	1,427,000	1,553,000	1,758,000
2023	2,175,000	2,332,000	2,647,000
2028	2,901,000	3,060,000	3,489,000

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios.

The low growth scenario projections assume that age and sex-specific migration rates remain the same as a proportion of the population as they were on average over the period 2001–06. The level of net overseas migration for this period was lower than the levels assumed in the other scenarios; however, rates of migration to south-east Queensland were higher in that period than those assumed in the other scenarios. As a result, this scenario implies a smaller number of additional dwellings for Australia as a whole when compared with other scenarios, but a higher number in south-east Queensland. The main offset is a much smaller number of dwellings required in New South Wales.

Under the low growth scenario, the greatest numbers of additional dwellings would be required in south-east Queensland (41,000 per year) and in Melbourne (30,000 per year). An additional 15,000 dwellings per year would be required in Sydney and 14,000 per year in Perth.

Under the medium growth scenario, a total of 3,060,000 additional dwellings would be required for Australia over 20 years, or 153,000 dwellings per year. The areas with the greatest increases would be south-east Queensland, Melbourne, Sydney and Perth. Compared with the low growth scenario, the medium growth scenario has higher numbers of additional dwellings for all areas except for Melbourne, Balance of Tasmania, Brisbane, south-east Queensland and Balance of Queensland. As discussed above, this relates to the differences between migration patterns observed over the 2001–06 intercensal period used for the low growth scenario and the assumptions relating to international and interstate migration rates and patterns used for the medium and high growth scenarios.

Under the high scenario, a total of 3,489,000 additional dwellings would be required for Australia over 20 years, or 174,000 dwellings per year. Again, the areas with the greatest increases would be south-east Queensland, Melbourne, Sydney and Perth. Compared with the low scenario, the high growth scenario has higher numbers of dwellings required in all locations except for non-metropolitan Tasmania, Brisbane, south-east Queensland, Balance of Queensland and Queensland in general. Again, this relates to differing assumptions with regard to international and interstate migration rates and patterns.

Box 2.1: Expected change in household types between 2008 and 2028 under the medium household growth scenario

The patterns of changes in household type between 2008 and 2028 broadly reflect both population growth and the extent of ageing of the population in a region.

The increase in the projected number of couple families with children is greatest in Brisbane and the Balance of Queensland (both 28 per cent) closely followed by Perth (26 per cent). Households consisting of families with children are projected to grow more rapidly in south-east Queensland than in any other region (31–33 per cent). The projected growth of single-parent families is broadly similar to the growth of two-parent families in most regions.

The number of households consisting of couple families without children is projected to grow much more rapidly than those with children in almost all regions. In the rest of Queensland and in its overlapping south-east Queensland region, the number of households consisting of couples without children is projected to grow by about 50 per cent.

In the age range 25–34, the probability of moving out of 'other' living arrangements (group houses, living alone) into a couple living arrangement increased considerably between 1996–2001 and the 2001–2006 period.

Reflecting the ageing of the population, the number of single-person households grows faster than any other household type in all regions. The projected increase in single-person households is highest in the rest of Western Australia (70 per cent), the Northern Territory (65 per cent) and the Balance of Queensland (64 per cent). Sydney has the smallest increase of all regions for single-person households (31 per cent).

Source: P McDonald & J Temple, *Projections of housing demand in Australia 2006–2021*, report prepared for NHSC with additional projections to 2028, Australian Demographic and Social Research Institute, The Australian National University, Canberra, August and November 2008.

On the assumptions made by McDonald and Temple, the varying levels of migration in the scenarios detailed above change the overall growth of each household type but do not change the distribution of household types within each region. Changing assumptions relating to household transition probabilities, however, does alter the distribution of household types within and between regions. For further information, refer to the full McDonald–Temple report on the Council's webpage.

The final stage in McDonald and Temple's methodology was to attribute dwelling type and tenure to each projected household, assuming that dwelling type and tenure propensities were the same as those observed at the 2006 Census. The Council has not reported these results here because:

- The type of dwellings that different household types will occupy in the future is highly constrained by existing supply and by differential rates of growth in different forms of housing stock
- Housing type and tenure status are likely to be moderated by the full range of factors that influence effective demand.

Factors influencing housing demand

The overview to this chapter drew a distinction between underlying demand and effective demand, with the latter covering a range of factors, often cyclical in nature, that moderate demand expressed in the marketplace, especially in the shorter term. The following paragraphs discuss the drivers of change in both aspects of demand and identify potential interaction effects and implications for interpretation of the demand projections provided above.

Underlying demand

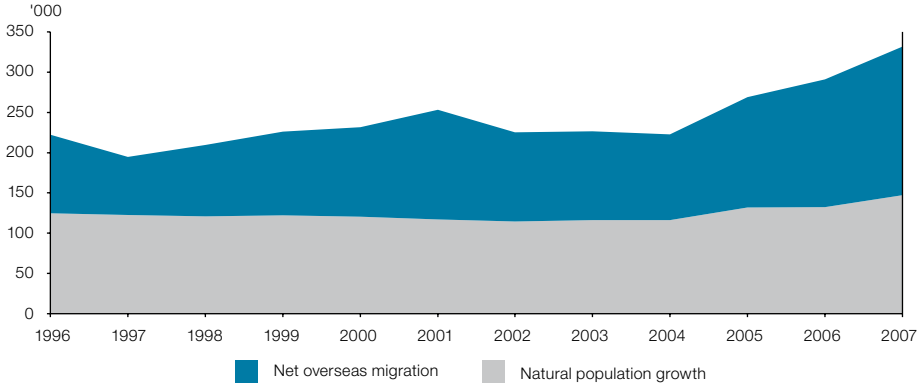
A range of analyses and research indicates that several of the influences on underlying housing demand have changed over time and are likely to continue to change. Examples include:

- changing overseas and interstate migration levels, with settlement patterns often linked to employment opportunities and preferred retirement locations
- regional differences in housing opportunities, along with a mismatch between housing location and labour markets
- delays in household formation linked to, among other things, changes in the duration of education and higher house prices
- people living longer, with a rise in the number of very old people (older than 85 years).

Some of these changes have been consistent and gradual and are likely to have been taken into account reasonably reliably in the projection methodology. A steady decline in household size over a long period, for example, has meant that growth in the number of households has exceeded population growth. The ABS most recent estimates are for a decline from 2.6 people per dwelling in 2001 to about 2.3 people per dwelling in 2026.[13] The link between population growth and household formation is influenced by population ageing, family formation, the birth rate, more people remaining single and young adults remaining in their parents' home for longer.

Other changes, however, are more difficult to take into account. These difficulties can be illustrated by the variation in population growth over the past decade. In the 10 years to 30 June 2007, Australia's population increased by 1.3 per cent a year on average, with just over half of this growth resulting from natural increase and just under half from net overseas migration. In the last two years, Australia's population has grown by 1.5 per cent a year, with migration contributing more to population growth than did natural increase in the year ended 30 June 2007 (see Figure 2.1 and Box 2.2). At a subregional level, variations in interstate migration have equally significant impacts.

Figure 2.1: Net overseas migration and population growth, 1996–2007



Source: Adapted from Australian Bureau of Statistics, *Australian Demographic Trends, March Quarter 2008*, cat. no. 3101, ABS, Canberra, 2008.

13 Australian Bureau of Statistics, *Household and family projections, Australia: projected persons by living arrangements 2001 to 2026*, cat. no. 3236.0.55.004, ABS, Canberra, June 2004.

Box 2.2: Migration influences on population

Overseas migration: Overseas migration is a key driver of the underlying demand for new dwellings. Immigration rates have increased strongly in recent years, from 135,700 in 2000–01 to 213,400 in 2007–08. The Government's increased program for 2008–09 is of a similar order of magnitude. Skill Stream migrants accounted for 43 per cent of all settler arrivals to Australia in 2006–07.

Higher immigration rates have a significant influence on the demand for housing, especially given the large proportion of young adults in population flows.

While demand forecasts usually incorporate longer term migration figures only, housing demand is also affected by the numbers of temporary migrants staying for more than 6 but less than 12 months. These include some, such as those on '457' (temporary work) visas or people working on holiday and student visas, not encompassed in the ABS definition of net overseas migration.

Interstate migration is an important determinant of population growth and distribution across Australia's states and territories. In 2006–07, net interstate migration was a major source of population loss for New South Wales (27,300) and South Australia (3,600).

Over 75 per cent of Australia's population currently lives in three States: New South Wales (33 per cent), Victoria (25 per cent), and Queensland (20 per cent). The remainder lives in Western Australia (10 per cent), South Australia (8 per cent), Tasmania (2 per cent), the Australian Capital Territory (2 per cent) and the Northern Territory (1 per cent).

Interstate migration depends on many factors, such as varying economic opportunities, overseas migration and settlement patterns, and lifestyle choices. According to ABS projections, all of the capital cities will experience larger percentage growth than the respective balance of their states or territories, resulting in a further concentration of Australia's population within the capital cities.

Source: Adapted from Australian Bureau of Statistics, *Migration, Australia, 2006–07*, ABS cat. no. 3412.0, ABS, Canberra, 2008.

Effective demand

Effective demand is the quantity of housing that owner-occupiers and investors are able and willing to buy.

Demand from owner-occupiers

Effective demand is strongly influenced by factors affecting households' capacity to pay for housing. These include the cost and availability of housing finance and growth in incomes and employment. Changes in mortgage interest rates, in particular, are an important driver of fluctuations in demand for new housing. Changes in confidence about the future, including expectations of future capital gains, also affect buyers' willingness to pay for housing.

In combination with the demographic drivers of underlying demand, increased effective demand has been the principal driver of the long-term rise in house prices relative to incomes since the early 1990s. This increased demand, arising from increases in households' capacity to pay for housing, can be attributed to five key factors:

- a long period of growth in incomes and employment and declining unemployment
- a sizeable fall in interest rates, relative to the previous two decades, as low inflation was established
- increased access to credit as a result of financial deregulation and innovation
- the desire by existing households to move up to higher quality and better located housing as their capacity to pay improves
- various fiscal measures implemented by government to assist first home buyers and to contribute to increases in households' capacity to pay for housing.

Box 2.3: Proposed research into socio-economic patterns of housing demand

To gain a greater understanding of the factors leading to changes in demand for housing types and locations and the consequences of such changes, the Council intends to encourage and undertake research and analysis of the socio-economic patterns of housing demand. Some of the questions to be addressed are:

- Where are first home buyers, low income renters and other subgroups able to access affordable dwellings?
- What trade-offs are being made?
- What are the social and economic effects of those choices?

While there are common influences affecting all or most housing markets at any time, housing markets are intrinsically local, with local influences that can lead to very different outcomes from those prevailing elsewhere. The 'housing hotspots' in Appendix 4 illustrate some areas where employment or other location-specific influences on demand generate imbalances relating to housing availability, affordability and construction capacity.

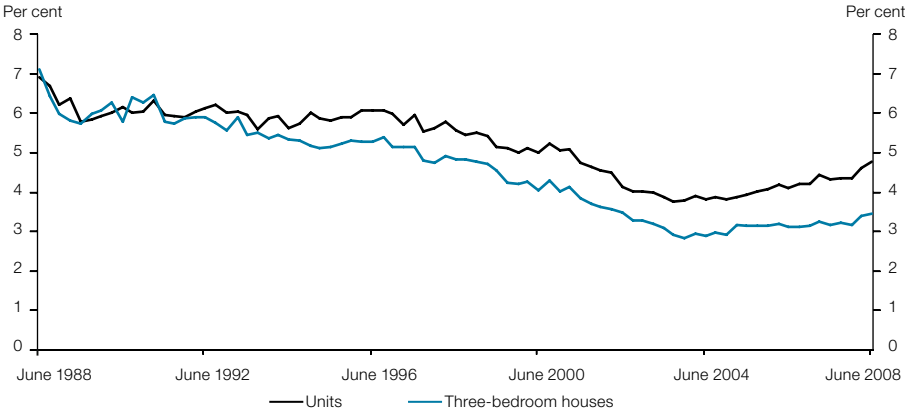
Demand from investors

Effective demand for rental accommodation is channelled indirectly through investors' demand. While higher rental demand should ultimately lead to higher investor demand, other influences are also important, particularly in the short term. These include:

- changes in rental yields
- changes in interest rates that will impact on investors' borrowing costs
- changes in expectations of future capital gains
- changes in the taxation treatment of investment properties and associated charges and levies, such as halving of the rate of tax applicable to capital gains on all investments (including investment properties) held for more than 12 months in 1999, and the introduction of the 'vendor' tax in New South Wales in 2003.

Over the past 20 years, dwelling rents have generally grown more slowly than either incomes or dwelling prices. As a result, rental yields (rental income as a proportion of the dwelling value) have fallen significantly. This trend is consistent with falling yields from a range of assets including bonds and stocks during this period. The average yield across rental houses and units has been around or below 4 per cent since 2001, compared with around 7 per cent in the late 1980s and 6 per cent in the early 1990s (see Figure 2.2). In recent years, however, rents have tended to increase faster than both house prices and incomes.

Figure 2.2: Average rental yields, 1988–2008



Source: Real Estate Institute of Australia unpublished, 2008.

Over the past six years, rental vacancy rates have fallen, suggesting that, despite significant capital gains over the period, total returns on rental housing investment have not been sufficient to ensure that supply keeps pace with demand. Over the past two years, however, very low vacancy rates have caused rent growth to accelerate. The dwelling rent component of the Consumer Price Index—which measures average growth across all rental housing—rose by 8 per cent over the year to June 2008[14]. Rents on new leases have been growing even faster, which suggests that overall rent growth will continue to increase[15].

However, the extent to which investors will be encouraged into the market by rent growth and interest rate reductions is tempered by tighter constraints on the availability of mortgage finance, credit rationing affecting the commencement of multi-unit developments, and the prospect of lower capital growth in the current economic conditions.

14 Australian Bureau of Statistics, *Consumer Price Index, Australia*, 'Table 7. CPI: Group, Sub-group and Expenditure Class, Weighted Average of Eight Capital Cities', cat. no. 6401.0, ABS, Canberra, 2008.

15 Real Estate Institute of Australia, *Real Estate Market Facts, June Quarter 2008*, 'Table 5: Summary of Median Weekly Rents, June Quarter 2008', REIA, Canberra, 2008.

Box: 2.4: Outlook for effective demand

In the near term, it is evident that key drivers of effective demand for new housing —construction costs, the availability of housing finance, and growth in incomes and employment— will be impacted by the global financial crisis. In addition, net immigration has historically shown a strong tendency to vary in response to major cyclical shifts in the economy and the endogenous response of prospective immigrants to the prospect of finding employment.

The implications of the global financial turmoil for the Australian housing market are mixed. On the one hand, housing developers appear to have been adversely affected by the reduced availability of finance, which has especially affected multi-unit developments. However, owner-occupiers have enjoyed significant reductions in mortgage rates and house prices have been soft, contributing to improvements in affordability. Nonetheless, there have been some adverse impacts on availability of finance for would-be buyers. These include the withdrawal of foreign and non-traditional lenders and tighter lending criteria, such as stricter assessment of repayment capacity and lower loan-to-valuation ratios.

Over the medium term, effective demand can be expected to recover with an eventual normalisation of financial conditions. However, future demand might not grow as strongly as it has since the mid-1990s. The expansion of access to credit following financial deregulation, for example, provided a one-off increase in demand that is unlikely to be repeated.

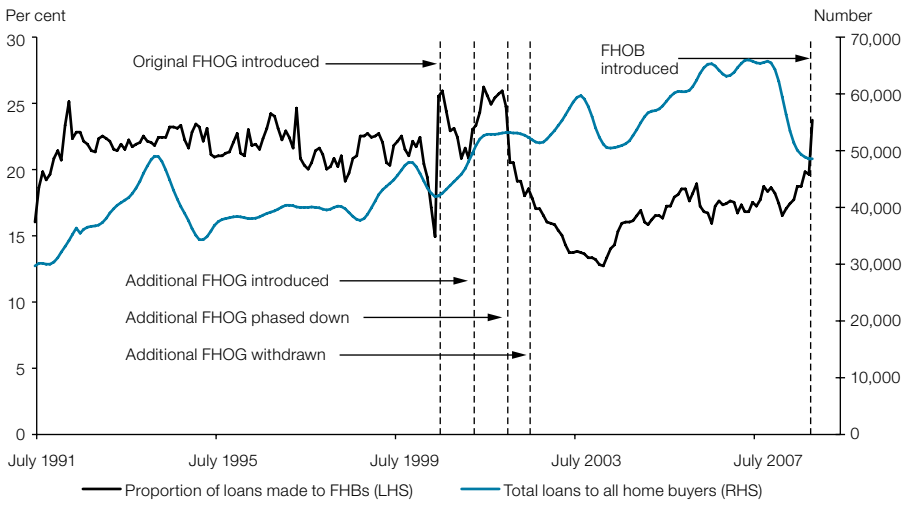
Government assistance measures

Policies at all three levels of government also have an impact on effective demand. There are a number of direct measures to assist people to achieve home ownership, as well as aspects of the taxation regime, that affect expenditure on housing and therefore on demand, house prices and affordability.

The **First Home Owners Grant (FHOG) Scheme** was introduced in 2000 as a $7,000 grant payment to first home buyers. In April 2001, it was doubled to $14,000 before stepping down in two stages to a $7,000 payment for first home purchases from July 2002 (note that the FHOG Scheme is generally 'topped up' by varying levels of state and territory assistance in the form of extra cash grants, stamp duty concessions and the like).

The impact of the FHOG Scheme on demand at the time can be seen in data on the proportion of home loans made to first home buyers, which was around 22 per cent of all home loans between 1992 and 2000 (see Figure 2.3). This proportion rose to 25 per cent on the introduction of the scheme in July 2000, falling back to 20 per cent in early 2001 before being re-energised by the doubling of the grant in April 2001. After decreases to the grant level in January 2002 and July 2002, the proportion of first home buyers dipped to less than 15 per cent and then stabilised at around 17 per cent—substantially below the 1992 to 2000 average.

Figure 2.3: Monthly loans to all home buyers by number and proportion of loans to first home buyers, July 1991–November 2008



Note: FHB: First Home Buyer; FHOG: First Home Owners Grant; FHOB: First Home Owners Boost.

Source: Australian Bureau of Statistics, *Housing finance Australia, November 2008*, cat. no. 5609.0, ABS, Canberra, 2008.

The pattern in Figure 2.3 suggests that the main effect of the FHOG Scheme was to bring forward demand rather than increase it overall.

Box 2.5: Recent assistance measures

First Home Owners Boost

On 14 October 2008, as part of its $10.4 billion Economic Security Strategy to strengthen the Australian economy, the Australian Government announced a First Home Owners Boost (with the same eligibility criteria as for the First Home Owners Grant Scheme), which provided that:

- first home buyers who purchase established homes will have their grant doubled from $7,000 to $14,000
- first home buyers who purchase a newly constructed home will receive an extra $14,000 to take their grant to $21,000
- eligible applicants must buy a home between 14 October 2008 and 30 June 2009.

First Home Saver Accounts

First Home Saver Accounts have been introduced by the present government to assist first home buyers to save larger deposits more quickly through the payment of a 17 per cent Government contribution on the first $5,000 of personal contributions each year, paid directly into individuals' accounts. This means that anyone who contributes $5,000 to their account will receive an $850 deposit from the government. Contributions will not be subject to tax when contributed to a First Home Saver Account, and interest on the account will be taxed at 15 per cent rather than the account holder's marginal rate.

It is difficult to predict the impact of the measures introduced by the Government (see Box 2.5) in the present uncertain and volatile economic situation. Other things being equal, there should be additional demand for dwellings—especially new dwellings—arising from improved capacity to raise a deposit. But other circumstances are not equal, including the cost and availability of debt finance, the likelihood of increased unemployment and restrained economic growth. The Housing Industry Association has reported that new home sales increased in October 2008 but the apartment market has remained subdued.[16]

16 Housing Industry Association, *Rate cut and FHOG spark sales*, media release, Canberra, 27 November 2008.

Taxation and investment

Aspects of the taxation system that influence housing demand have been examined by both the Productivity Commission and the Senate Select Committee on Housing Affordability in Australia.[17] Taxation affects effective demand from both investors and owner-occupiers.

The Productivity Commission Inquiry on First Home Ownership found that negative gearing rules, capital works deductions for buildings, the 1999 change to capital gains tax (CGT) for assets held by individuals and high marginal income rates combined to magnify the attractiveness of investing in residential property during the upswing in prices from the late 1990s, thereby adding to price pressures.[18] In particular, there was strong demand for inner-city apartments (2000–03) as well as apartments and houses in more established areas.[19] It also noted that:

> 'the 1999 change in the basis for levying CGT, being more or less coincident with the decline in returns from equities, has added to the recent housing price boom by encouraging investors to reduce current income in favour of longer term capital gains.'[20]

The Productivity Commission further noted that home owners are advantaged by the exemption of the principal residence from capital gains tax and the non-taxation of imputed rental income, which they saw as 'potentially leading to over-investment in housing'. However, it concluded that:

> 'it is unclear that there would be large gains to the community from changes to promote tax 'neutrality' in relation to owner-occupied housing, given the administrative complexities and compliance costs, and the possible loss of social benefits from home ownership that would follow.'[21]

Further, if the 'tax breaks' currently enjoyed by owner-occupiers were to be removed, consistency with the treatment of other forms of taxable income would require that interest on owner-occupier mortgages be tax-deductible.

The Council recognises the complexity of the tax-transfer system and its effects on the housing market. It is expected that the relationship between taxation and the operation of the housing market will be the subject of consultation and research as part of the Henry Review (Box 2.6). Further reference to this review is included in Chapter 3.

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17 Productivity Commission, *First home ownership: inquiry report*, Productivity Commission, Melbourne, 2004; Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find: Housing affordability in Australia*, Senate Select Committee on Housing Affordability in Australia, Canberra, June 2008.

18 Productivity Commission, *First home ownership: inquiry report*, p. xxiv.

19 Reserve Bank of Australia, Submission to the Productivity Commission Inquiry on First Home Ownership, RBA Occasional Paper no. 16, RBA, Canberra, November 2003, p. 39.

20 Productivity Commission, *First home ownership: inquiry report*, p. 118.

21 Productivity Commission, *First home ownership: inquiry report*, p. xxiv.

Box 2.6: The inquiry into Australia's future tax system

The comprehensive review of Australia's tax system—the Henry Review, announced 11 May 2008—will examine and make recommendations to create a tax structure that will position Australia to deal with the demographic, social, economic and environmental challenges of the 21st century and enhance Australia's economic and social outcomes. The review will consider a range of matters including:

- 3.4. Enhancing the taxation arrangements on consumption (including excise taxes), property (including housing), and other forms of taxation collected primarily by the States.

The review is to make coherent recommendations to enhance overall economic, social and environmental wellbeing, with a particular focus on ensuring there are appropriate incentives including for:

- 4.2. individuals to save and provide for their future, including access to affordable housing.

Government assistance for low income renters

Government–owned and subsidised housing is administered by the states and territories but supported with substantial Australian Government funding through the **National Affordable Housing Agreement (NAHA)**.

The new NAHA, which commenced on 1 January 2009, includes the new Housing Specific Purpose Payment that replaces the Commonwealth State Housing Agreement and the Supported Accommodation Assistance Program (SAAP). More detail on the NAHA is in Chapter 5, Box 5.3.

Commonwealth Rent Assistance (CRA) is a non-taxable income supplement paid to individuals and families who rent in the private rental market and who receive a Commonwealth pension or benefit, or more than the base rate of Family Tax Benefit Part A (FTB A). Commonwealth Rent Assistance is also available to community housing tenants. Commonwealth Rent Assistance is available to eligible customers who pay private rent above minimum thresholds. It is paid at a rate of 75 cents for every dollar above the threshold until a maximum rate is reached. The maximum rates and thresholds vary according to a customer's family situation and the number of children they have.

Further information about the impact of Commonwealth Rent Assistance is included in Chapter 5.

Chapter 3 provides information on the **Commonwealth Housing Affordability Fund** (HAF) and the **National Rental Affordability Scheme** (NRAS).

Supply

CHAPTER 3

Supply

Key points

- The total national supply of occupied and unoccupied dwellings at June 2008 is estimated at approximately 8.9 million.
- Average annual growth in the number of dwellings between 2001 and 2006 was 127,000 dwellings.
- Based on the trend in growth of aggregate housing supply since 1980, adjusted for losses due to demolition, annual net growth in housing supply is projected to be 130,000 in 2010, increasing to 142,000 in 2028.
- The Council estimates that land is available that could, if fully utilised, add an extra 357,000 dwellings to Australia's housing stock over the next two years.
- A substantial amount of additional land is also in the land supply pipeline, but there is considerable uncertainty about the dwelling yield and timing of new construction.
- There has been a decline in social housing's share of the total housing supply. If the number of social housing dwellings as a proportion of the total stock had been maintained at the 1996 level, there would have been an additional 90,000 social housing dwellings in 2008.

Overview

This chapter presents estimates and projections of housing and land supply from several sources and examines factors that influence the efficiency of the supply pipelines in producing housing. This information is then used to assess whether the supply side of the market, as it currently operates, is likely to meet the expected future demand for housing.

Two methods have been used in this report to estimate future supply:

- the trend in growth of aggregate housing supply since 1980
- information provided to the Council by State and Territory planning agencies on the land and dwelling supply pipeline in major cities.

For future reports, the Council intends to develop more robust estimates based on:

- improved data on housing markets and supply factors, including input constraints
- macro- and micro-economic modelling of housing demand and supply
- refinements to the supply-side data collected, using the experience gained in preparing this report and working more closely with planning agencies.

Existing supply

Estimates of dwelling stock

As a starting point for the projections of supply outlined below, the stock of private dwellings in Australia was estimated at 8,860,000 in June 2008 (see Table 3.1). Between 1996 and 2006, the stock of private dwellings grew by 17 per cent, or 1,251,322 dwellings (see Appendix 2, Table A4.2).

Table 3.1: Existing supply, 2008

1	2006 ABS Population Census occupied private dwellings and unoccupied dwellings (rounded to nearest 10,000) adjusted for undercounting	8,606,000 dwellings
	plus	+
2	ABS dwelling completion data for 2007 and 2008 (148,000 + 153,000) (rounded to nearest 10,000)	300,000 dwellings
	minus	–
3	Estimated stock losses in 2007 and 2008 due to demolition (23,000 + 24,000) (rounded to nearest 5,000)	45,000 dwellings
	equals	=
	Total supply in 2008 (rounded to nearest 10,000)	**8,860,000 dwellings**

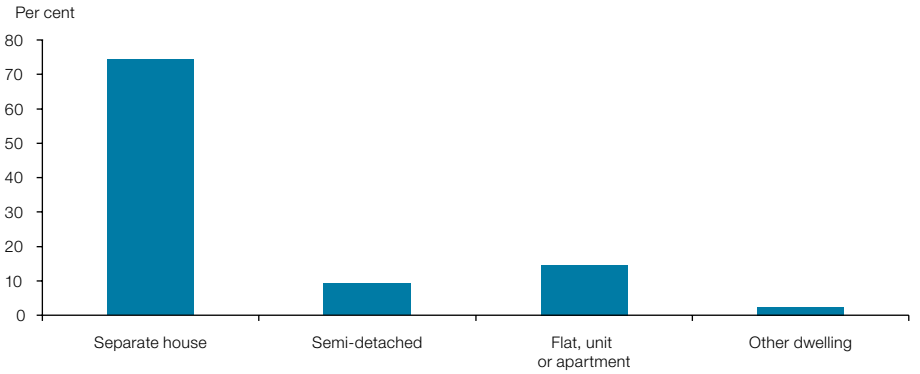
Source: adapted from Australian Bureau of Statistics, *Census of Population and Housing-Details of undercount*, cat. no. 2940.0, ABS, Canberra, 2007;

ABS, *Building Activity, Australia, June 2008*, cat. no. 8752.0, ABS, Canberra, 2008; NHSC estimates.

Characteristics of dwelling stock

Approximately 74 per cent of the housing stock in Australia in 2006 consisted of separate houses (refer Figure 3.1). State and Territory details are shown in Appendix 2, Table A3.5.

Figure 3.1: Total dwellings by dwelling structure, Australia, 2006



Source: adapted from Australian Bureau of Statistics, *2006 Census Tables*, 'Dwelling Structure by Occupied/Unoccupied Dwellings', cat. no. 2068.0, ABS, Canberra, 2007.

Dwelling utilisation and vacant dwellings

Many Australian households occupy dwellings that have spare bedrooms. At the time of the 2006 Census, 85 per cent of single-person households lived in dwellings with two or more bedrooms and more than three-quarters of two-person households (75 per cent) had three or more bedrooms. Nearly one-third of three-person households (32 per cent) had four or more bedrooms. More than a fifth (21 per cent) of three-bedroom dwellings and 7 per cent of dwellings of four or more bedrooms had only one person living in them.[22]

The average number of persons per household declined from 3.1 in 1976, to 2.7 in 1996 and 2.6 in 2006.[23] Over the same 30-year period, the proportion of dwellings with four or more bedrooms increased from about 17 per cent to 28 per cent, and the average number of bedrooms per dwelling rose from 2.7 to 3.0.[24]

The 2006 Census also identified 830,000 vacant dwellings, representing 9.85 per cent of the total dwelling stock. Further discussion of the implications of these vacant dwellings is in Chapter 4.

22 Adapted from Australian Bureau of Statistics, *2006 Census tables*, 'Dwelling Structure and Number of Bedrooms by Number of Persons Usually Resident for Family Households', 'Dwelling Structure and Number of Bedrooms by Number of Persons Usually Resident for Group Households', 'Dwelling Structure and Number of Bedrooms by Number of Persons Usually Resident for Lone Person Households', cat. no. 2068.0, ABS, Canberra, 2007.

23 Australian Bureau of Statistics, *Year Book Australia 2008*, ABS cat. no. 1301.0, ABS, Canberra, 2008; ABS, *2006 Census Community Profile Series: Time Series Profile, Australia*, 'T02: Selected averages and medians for time series', cat. no. 2003.0, ABS, Canberra, 2007.

24 Australian Bureau of Statistics, *Year Book Australia 2008*, ABS cat. no. 1301.0, ABS, Canberra, 2008.

Tenure characteristics and changes in social housing stock

Table 3.2 shows how the relative tenure shares have changed from 1996 to 2006. While the number of occupied dwellings has risen from 6,496,000 in 1996 to 7,596,000 in 2006, home ownership has remained a fairly constant share of the total, rising by less than 1 percentage point. Private rental share has increased from 20.5 to 21.7 per cent. Social housing declined from 5.8 to 5.1 per cent of the occupied housing stock over this period.

Table 3.2: Tenure and landlord type of occupied private dwellings, Australia 1996, 2001, 2006,

	Number			Per cent		
	1996	2001	2006	1996	2001	2006
Fully owned	2,763,586	2,950,600	2,667,941	42.5	41.7	35.1
Being purchased(a)	1,721,866	1,965,164	2,635,586	26.5	27.8	34.7
Subtotal	*4,485,452*	*4,915,765*	*5,303,527*	*69.0*	*69.5*	*69.8*
Renter:						
Private (b)	1,330,505	1,454,968	1,649,777	20.5	20.6	21.7
Social housing (c)	377,530	381,608	385,249	5.8	5.4	5.1
Other renters (d)	232,070	213,575	186,884	3.6	3.0	2.5
Other tenure type(e)	70,515	106,287	70,743	1.1	1.5	0.9
Total	**6,496,072**	**7,072,202**	**7,596,181**	**100.0**	**100.0**	**100.0**

Notes: Data adjusted for tenure 'not stated' in original ABS data. Numbers may not sum to totals due to rounding.

(a) Includes dwellings 'Being purchased under a rent/buy scheme'.

(b) Comprises dwellings being rented from a parent/other relative or other person.

(c) Note that the number of social housing dwellings reported in the Census is an undercount. Social housing numbers stated elsewhere in this report are derived from State and Territory administrative data.

(d) Comprises dwellings being rented through a 'Residential park (includes caravan parks and marinas)', 'Employer-government (includes Defence Housing Authority)' and 'Employer-other employer' (private).

(e) Includes dwellings 'Being occupied under a life tenure scheme'.

Source: Australian Bureau of Statistics, *2006 Census Tables*, Australia, 'Tenure Type and Landlord Type by Dwelling Structure for Time Series: Count of occupied private dwellings', cat. no. 2068.0, ABS, Canberra, 2007.

The proportion of private rental dwellings affordable to low income households has not kept up with overall growth – in 2006, there was an overall shortage of affordable and available private rental housing suitable for low income households in Australia equal to some 251,000 dwellings (see Table 5.1). The supply of rental dwellings affordable to low to moderate income households declined between 1996 and 2006, despite growth of 20 per cent in the number of private rental properties – see Chapter 5 for further discussion.

The social housing stock has also declined as a proportion of total stock. If social housing's share of total dwellings in 2008 had been maintained at 1996 levels, the 2008 estimate of social housing dwellings would have been 484,000 – around 90,000 more than the current 2008 estimate (refer Appendix 2, Table A5.2).

Projections of future supply

Estimates based on dwelling completions

The following supply projections of construction activity are based on the trend line for ABS data on completions over the period 1 July 1980 to 31 December 2007, extrapolated to the projection years presented (see Appendix 2, Table A3.1).

As shown in Table 3.3, in 2007–08 there were an estimated 153,000 new dwellings completed. Based on the trend since 1 July 1980, the number of completions per year is expected to be:

- 155,000 dwellings in 2009–10
- 157,000 dwellings in 2012–13
- 161,000 dwellings in 2017–18
- 169,000 dwellings in 2027–28.

The shorter term projections could prove to be optimistic given present economic circumstances, particularly with regard to the relatively low levels of commencements of multi-unit developments, unfavourable investor sentiment, and credit restrictions in the property development sector.

As shown in Table 3.3, taking demolitions into account, there were an estimated 129,000 net additional dwellings completed (new dwellings less demolitions) in 2007–08. The net additions per year are expected to be:

- 130,000 dwellings in 2009–10
- 132,000 dwellings in 2012–13
- 135,000 dwellings in 2017–18
- 142,000 dwellings in 2027–28.

It is possible that the demolition rate could increase more than this, i.e. by more than in proportion to completions, perhaps in line with the ageing of Australia's housing stock and as infill development accounts for a larger share of housing growth. The Council will consider this for future reports. In the meantime, demolitions are projected to increase in line with completions.

The cumulative impact of this projected building activity on the total supply from 1 July 2008 is estimated to be:

- over the next two years, 308,000 new dwellings (covering the financial years 2008–09 and 2009–10), or 259,000 net of demolitions
- over the next five years, 777,000 new dwellings (by 30 June 2013), or 654,000 net of demolitions
- over the next 10 years, 1,574,000 new dwellings (by 30 June 2018), or 1,324,000 net of demolitions
- over the next 20 years, 3,229,000 new dwellings (by 30 June 2028), or 2,716,000 net of demolitions (Table 3.3).

While the average net increase in dwellings from 1 July 1980 to 31 December 2007 was 136,000 per year, this supply varied from between 105,000 and 162,000 over any one-year period from 1980 to 2007. Adjusted for demolitions, these rates would result in:

- a minimum of 2,091,000 net additional dwellings by 2028 under the low supply scenario (with a trend rate based on the lowest number of net additions in any one year for Australia as a whole between 1980 and 2007)
- a maximum of 3,246,000 net additional dwellings under the high supply scenario (where the trend rate is based on the highest number of net annual additions in one year for Australia as a whole between 1980 and 2007).

The projected total of 2,716,000 net additional dwellings produced under the medium supply scenario is based on a trend rate using the average annual net additions between 1980 and 2007. Table 3.4 provides projections by states and territories based on the lowest, average, and highest trend data for each individual state and territory. The sum of these state and territory figures would not be expected to add to the low, medium, and high trend data for Australia as whole.

Table 3.3: Projections of total dwelling completions and dwelling completions net of demolition under the medium supply projection, Australia, 2008 to 2028 (selected years)

			Cumulative financial years starting 1 July 2008 and ending 30 June of relevant year	
Year	Completions	Net completions (less demolitions)	Completions	Net completions (less demolitions)
		Number of dwellings		
2008	153,000	129,000		
2009	154,000	129,000	154,000	129,000
2010	155,000	130,000	308,000	259,000
2011	155,000	131,000	464,000	390,000
2012	156,000	131,000	620,000	521,000
2013	157,000	132,000	777,000	654,000
2018	161,000	135,000	1,574,000	1,324,000
2023	165,000	139,000	2,392,000	2,011,000
2028	169,000	142,000	3,229,000	2,716,000

Source: Projections are based on dwelling completion trend, 1 July 1980 to 31 December 2007, from Australian Bureau of Statistics, *Building Activity, Australia, December 2007*, cat. no. 8752.0, ABS, Canberra, 2008 and NHSC estimates for completions net of demolitions.

Table 3.4: Net additional dwellings produced between 2008 and 2028, by State and Territory, low, medium and high supply scenarios (completions adjusted for demolitions)

	Low supply	Medium Supply	High supply
NSW	429,000	620,000	787,000
Vic	489,000	741,000	979,000
Qld	484,000	797,000	1,143,000
SA	69,000	124,000	174,000
WA	236,000	380,000	531,000
Tas	10,000	23,000	34,000
NT	3,000	6,000	11,000
ACT	21,000	38,000	63,000

Source: Projections are based on building completion trend and high and low estimates, 1 July 1980 to 31 December 2007, from Australian Bureau of Statistics, *Building Activity, Australia, December 2007*, cat. no. 8752.0, ABS, Canberra, 2008 and NHSC estimates for completions net of demolitions.

This methodology could be further refined and a number of different assumptions on construction capacity or productivity changes used to present a range of other housing supply projections.

The land and housing supply pipeline

In addition to examining the supply of housing by monitoring dwelling completions, it is equally important to examine activity in the preceding stages of the housing and land supply pipeline. The housing and land supply pipeline includes:

- dwellings currently approved or under construction
- land that currently has development approval, with development activity likely in the next two years
- land that has no development approval but has subdivision or division approval, with potential for development activity within two to ten years.

New supply in any given year is primarily the result of development planning and approval processes in previous years. Estimation of the number of lots or dwellings in each stage of the dwelling supply pipeline – and the translation of this into likely dwelling completions in future years – is complex and is not a simple addition of all the elements. For example, there is no guarantee that the land that has development approval or subdivision approval will be developed at all – or, if it is, when this will be. Data from Western Australia indicate that around one-third of lots given subdivision approval, which is generally valid for four years, are not converted to titled lots within this time frame.[25]

25 Western Australian Planning Commission, Land Development Program, *State Lot Activity Supply Report*, quarterly since January 1999, WAPC, <www.wapc.wa.gov.au>; and Thompson, M, *The co-ordination of land release for Perth and Peel*, Report of the Land Release Coordinator, Government of Western Australia, Perth, February 2007, p. 14

Taking into account these limitations, useful estimates of the future supply of dwellings can still be made using data on land supply, planning approvals and construction activity.

Table 3.5 shows estimates of dwelling supply activity in 2008 across states and territories. This table is based on the Australian Bureau of Statistics data on construction activity.

Table 3.5: Dwelling activity by various stages by State and Territory, 2008

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Building Approvals	31,000	43,000	45,000	13,000	24,000	3,000	1,000	2,000	162,000
Commencements	31,000	42,000	44,000	12,000	22,000	3,000	1,000	2,000	157,000
Completions	34,000	40,000	40,000	10,000	23,000	2,000	1,000	3,000	153,000
Completions adjusted for demolition	26,000	33,000	39,000	7,000	19,000	2,000	500	2,000	129,000

Source: Australian Bureau of Statistics, *Building Activity, Australia, June 2008*, cat. no. 8752.0, ABS, Canberra, 2008; ABS, *Building Approvals, Australia, June 2008*, cat. no. 8731.0, ABS, Canberra, 2008; NHSC estimates of completions net of demolitions.

Similar nationally comparable data are not currently available for the land supply pipeline. Timelines for the development of residential lots as well as the terminology and data collections used at different stages of the land development process vary between the states and territories.

Improving national information on the land and dwelling supply pipeline is one of the major priorities of the Council. To achieve this, it will work with the Data Sub-Group to map and develop standard definitions and to improve national measures of key stages in the land development and dwelling supply pipelines. These measures may be in terms of total dwelling potential, the years of land supply this potential represents, and how these numbers have changed since the previous reporting period. To assist examination of activity at a national level, and improve comparability of information, the Council has initially developed a framework for a six-stage generic development pipeline. Details are provided later in this chapter (see Box 3.4).

Further work is also required on the translation of supply potential into actual lot production. This is usually dependent on market conditions and economic factors.

Estimating and monitoring conversion of land supply to housing

There are two sources of land for new housing: undeveloped greenfield (fringe) or broadhectare residential land, and land for redevelopment to achieve higher density within established areas, commonly known as infill. The underlying factors that distinguish the delivery of housing outcomes in broadhectare and infill areas are as follows:

- **Broadhectare development.** The timing of broadhectare lot production is generally cyclical and varies in accordance with economic cycles, industry capacity and underlying demand. The availability and price of land in favoured locations for growth are potential key constraints.
- **Infill development.** As well as the factors identified above, implementation of infill strategies can be affected at the local level by consideration of heritage, infrastructure capacity (such as stormwater drainage, roads and car parking) and local community concerns about population density. For developers, the commercial viability implications of high land and construction costs, particularly for high-density dwellings (including the costs of car parking and any demolition required), are also a consideration.

Expansion of the urban fringe has been restricted in recent times in most cities in order to economise on infrastructure and to further environmental and social sustainability. State governments have strategic planning frameworks governing infill and redevelopment for housing at the metropolitan level, with local governments incorporating such policies into their local plans.

Each jurisdiction has a plan that contains information on current and future land supply activity, although the way in which this information is collected is not nationally consistent. For example, for broadhectare development:

- New South Wales in 2007 reported 7.3 years' supply of rezoned and serviced land (where trunk water and sewer services have been constructed) that provided for a potential 55,000 dwellings or lots by 2009 in the 2007 update of the NSW Metropolitan Development Plan.[26]
- Victoria has identified 92,860 zoned lots in metropolitan Melbourne for future broadhectare lot construction but not all of this land had yet been serviced. According to best estimates in the Urban Development Program Annual Report, there was approximately 7–8 years supply of zoned broadhectare land in 2007.[27] The Victorian Government has recently announced the extension of Melbourne's growth boundary to make more broadhectare land available for development.[28]

26 New South Wales Government Department of Planning, *Metropolitan development program update, 2007*, NSW Government Department of Planning, Sydney, February 2007, p. 7.

27 Victorian Department of Planning and Community Development, *Urban Development Program Annual Report*, Victorian Department of Planning and Community Development, Melbourne, 2007, Table 4.4.

28 Premier of Victoria, *Melbourne @ 5 Million – UGB to be redrawn*, Press release, Melbourne, 2 December ,2008.

In the absence of national administrative planning data, the Council has used the information available to it to develop broad estimates of the likely land release for the eight capital city areas (for Queensland, the south-east Queensland area was used). The methodology is described in more detail in Appendix 3.

Based on this information, there is estimated to be enough land in the latter stages of the land development pipeline to allow for the addition of up to 357,000 new dwellings within the next two years (see Table 3.6).

Table 3.6: Estimate of land release potential (dwelling yield), eight capital cities across Australia by type, 2008

	Time of release				
Total eight capital cities	**<2 years**	**2–5 years**	**5–10 years**	**>10 years**	**Total**
Broadhectare (greenfield) land					
■ Urban density land	131,000	221,000	339,000	432,000	1,123,000
■ Low density land	5,000	13,000	20,000	40,000	80,000
Total	136,000	234,000	359,000	472,000	1,203,000
Redevelopment areas					
■ Major redevelopment (50+ net additional dwellings)	199,000	199,000	136,000	4,000	538,000
■ Minor redevelopment (10–50 net additional dwellings)	22,000	21,000	9,000	2,000	53,000
Total	221,000	220,000	145,000	6,000	591,000
Total dwelling yield	**357,000**	**454,000**	**504,000**	**478,000**	**1,794,000**

Note: This table excludes redevelopment areas with an individual dwelling yield of less than 10 net additional dwellings. Numbers may not sum to totals due to rounding.

Source: Estimates of land supply information provided to NHSC July 2008 (unpublished).

These data also suggest that up to 1.3 million extra dwellings could be provided within the next ten years (see Table 3.7). This estimated land supply encompasses 729,000 broadhectare lots and 586,000 dwellings in redevelopment areas. The number of dwellings that could be built on land that is ready for construction across the eight capital cities over each of the next two years is estimated to be 357,000 dwellings.

There are many obvious caveats on these estimates, especially with regard to the conversion of available land to dwellings. For instance, some or many lots may not be in locations desired by the market in the relevant time frame. Similarly, economic conditions in the short to medium term may mean that development is deferred.

Table 3.7: Estimate of cumulative and average land release potential dwelling yield, eight capital cities across Australia by type, 2008

	Total dwelling yield		
	Over next 2 years	Over next 5 years	Over next 10 years
Cumulative yield over time period			
■ Broad-hectare (greenfield) land	136,000	370,000	729,000
■ Redevelopment areas (10 + net additional dwellings)	221,000	441,000	586,000
Total	**357,000**	**811,000**	**1,315,000**
Average per year			
■ Broad-hectare (greenfield) land	68,000	74,000	72,900
■ Redevelopment areas (10 + net additional dwellings)	110,500	88,200	58,600
Total	**178,500**	**162,200**	**131,500**

Note: This table excludes redevelopment areas with an individual dwelling yield of less than 10 net additional dwellings.
Source: NHSC estimates.

Estimates in Tables 3.6 and 3.7 above exclude small-scale infill activity of less than 10 dwellings on a site, which may be a significant data omission. Some jurisdictions collect data on redevelopments of 5 to 10 dwellings, but only Western Australia fully captures data on small-scale redevelopment (fewer than 5 dwellings per lot). This is an area that warrants further examination, as the Council has been advised that in Western Australia and Victoria small-scale redevelopments and infill projects account for substantial numbers of new dwellings in mature (i.e. 30-year-old) suburbs. A better understanding of the potential to increase housing supply through small-scale infill developments might also help to address concerns – such as those raised as a result of a Residential Development Council report (Box 3.1) – about the ability of major city planning authorities to achieve their urban infill targets.

Box 3.1: Residential Development Council report

A study prepared for the Residential Development Council and Property Council, recently reviewed infill dwelling targets in Sydney, Melbourne, Brisbane, Perth and Adelaide. It looked at historical development trends and identified the need to increase historical levels of multi-unit dwelling supply if infill dwelling targets are to be achieved, noting barriers such as the commercial viability of infill development, feasibility of site aggregation, community opposition and market preference.

Source: Residential Development Council, unpublished, 2008.

The Council recognises significant uncertainty about realisation of the estimates in Tables 3.6 and 3.7 above. As previously described, there are significant delays inherent in the process of transforming raw land into completed residential estates or infill developments. These delays can be increased by the need to address environmental and community amenity concerns, and constraints relating to the cost and availability of finance, labour and dwelling construction materials. In addition, some of the land identified for residential development, may subsequently be set aside for environmental protection purposes or for transport corridors or other community uses. Changes in economic conditions and access to finance add another major source of uncertainty.

The Council is keen to improve confidence in the reliability and comparability of these data and to identify where further research and data development could usefully improve knowledge and understanding of land supply and lot utilisation for residential and related urban development.

An examination of dwelling approval data shows that the relationship between broadhectare and infill development can vary significantly over time. This may reflect the timing of large-scale redevelopment projects as well as demand factors. An example of how the distribution of lot approvals has changed over time is shown for the Perth Metropolitan Region in Table 3.8. This shows that the annual share of infill development has varied between 20 per cent and 43 per cent of total metropolitan residential development over the past decade. Note, however, that there is much less variation in the absolute level of infill development than applies to outer sector development, and that high proportions of infill development correlate with relatively low levels of aggregate growth in housing stock. In other States, especially New South Wales, it is likely that infill is progressively assuming a larger share of metropolitan development[29].

29 New South Wales Department of Planning, *Metropolitan Development Program Update 2007*, Department of Planning, Sydney, 2007, p. 24, accessed 20 January 2008, <http://www.planning.nsw.gov.au/programservices/pdf/mdp_2007_update_bod.pdf>.

Table 3.8: Perth Metropolitan Region final residential lot approvals, 1997–98 to 2007–08

	Inner-middle lots		Outer Sectors lots						
Financial year	Inner-middle	% of Perth Metro	Eastern	North-west	South-east	South-west	Total	% of Perth Metro	Perth Metro Total
1997–98	2,809	42.6	896	1,364	676	848	3,784	57.4	**6,593**
1998–99	3,185	36.1	1,043	2,298	621	1,672	5,634	63.9	**8,819**
1999–2000	3,680	36.6	1,255	2,284	1,359	1,469	6,367	63.4	**10,047**
2000–01	3,084	43.2	891	1,640	655	866	4,052	56.8	**7,136**
2001–02	2,677	29.9	1,136	2,621	953	1,554	6,264	70.1	**8,941**
2002–03	3,258	27.9	1,292	3,311	1,122	2,675	8,400	72.1	**11,658**
2003–04	3,390	25.9	1,784	3,110	1,223	3,595	9,712	74.1	**13,102**
2004–05	3,074	22.6	1,233	4,102	1,538	3,625	10,498	77.4	**13,572**
2005–06	3,182	21.8	1,451	4,402	1,807	3,760	11,420	78.2	**14,602**
2006–07	2,693	19.8	1,941	3,530	2,136	3,277	10,884	80.2	**13,577**
2007–08	2,860	24.6	1,239	2,311	2,693	2,538	8,781	75.4	**11,641**

Note: Excludes 'built' strata lots where a dwelling already exists.

Source: Western Australian Planning Commission, *State Lot Activity report, September 2008*, WAPC, Perth, December 2008.

Influences on supply

A market response to current or projected supply shortages will depend upon the ability of the construction industry and developers to provide appropriate dwellings at accessible prices, by converting raw land into serviced lots or accessing infill opportunities.

It is unlikely that land will be developed and housing built if the cost of that development exceeds the revenue that can be generated from it. The price that people are prepared to pay for new housing will also depend partly on its location in relation to jobs, transport and community services.

Generally, surges in housing demand will push up prices in the short run, but the extent to which affordability problems persist depends on how well the supply of housing can respond over time. As the Productivity Commission has observed, 'even in a best-practice supply chain, it can take several years to bring new land on-stream, to provide the associated infrastructure and to construct new dwellings'.[30]

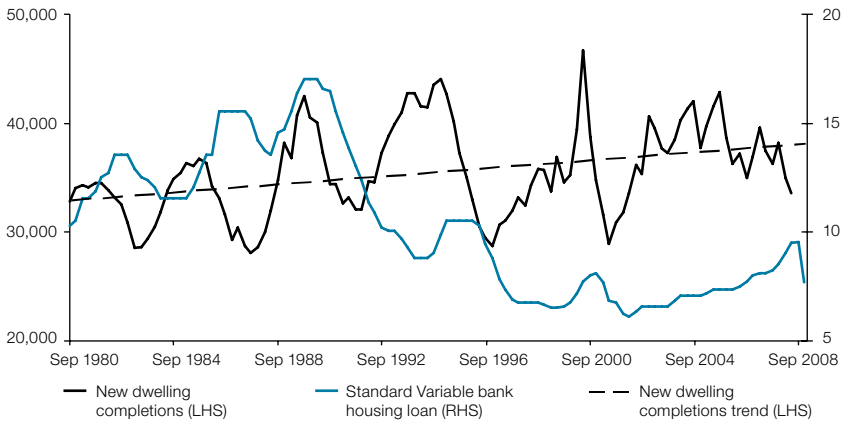
30 Productivity Commission, *First home ownership: inquiry report*, p. 20.

Further obstacles to industry responsiveness in the short to medium term may include: labour shortages, shortages in, and/or high prices for, building materials; strategic and statutory planning processes; developer contributions; other taxes and charges; and lack of knowledge of—or confidence in—consumer preferences.

The cost of, and access to, finance for housing development will also impact on housing supply. Recent moves to tighten credit availability for developers may, for a while, result in developments being reduced in scope and staged over longer periods. In late 2008, developers were reporting that they could not procure construction finance unless 75 per cent of units in their projects were pre-sold. Given that some 65 per cent of apartment sales have historically been made to investors, this means the commencement of construction of new multi-unit developments in 2009 is likely to be heavily dependent upon a resurgence of investor interest.

Box 3.2: Dwelling construction

The figure below shows the cyclical nature of construction activity in terms of its sensitivity to interest rate and monetary policy cycles.



Source: Australian Bureau of Statistics, *Building Activity, Australia, June 2008*, cat. no. 8752.0, ABS, Canberra, 2008; Reserve Bank of Australia, *Indicator Lending Rates*, December 2008, table F5, RBA, Canberra, 2008.

The supply pipeline

This section summarises some aspects of the supply pipeline that can affect the responsiveness of housing supply to demand. These aspects include planning systems and related timing issues, infrastructure provision and charging, and construction costs.

Planning approval processes

The relationship between housing costs and planning regulations, charges and procedural requirements—including the impact of planning controls on the responsiveness of supply—has been raised regularly in the course of inquiries into housing affordability.[31]

The planning system regulates:

- the types of land and locations that may be used for housing development
- the amount or density of housing that may be developed
- the configuration and design of this housing
- the sequencing of development
- the types of services to support development (from utilities to parks to community centres)
- some charges for infrastructure.

It should be noted that planning also encompasses a range of referrals and approvals by local government and other State authorities in regard to matters such as roads, environment, education and infrastructure. At the Commonwealth level, proponents may have to obtain separate approvals for matters of environmental significance under the Environmental Protection and Biodiversity Conservation Act.

Planning, zoning and development approval processes undoubtedly add time and cost to the operation of the housing market. However, the Council acknowledges that there are sound reasons for cost-effective regulation of the private use of land, including to:

- achieve an efficient and accessible urban structure that promotes productivity and social inclusion
- protect environmental quality, cultural heritage and amenity
- facilitate equitable access to services, work, education and recreational opportunities.

31 Inquiries include those by the Department of Community Services and Health, *National Housing Strategy*, AGPS, Canberra, 1991 and, more recently, the Productivity Commission (Productivity Commission, First home ownership) and the Senate Select Committee on Housing Affordability in Australia (Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find*), June 2008.

Box 3.3: Purpose of planning

Planning is intended to manage or prevent negative externalities associated with development activities, such as traffic congestion, that may extend beyond the site of the development itself. It can also facilitate positive externalities such as economies of scale in infrastructure provision, and the provision of public goods such as open space and community infrastructure. The planning system also provides an important mechanism for coordinating the essential shared services needed to support new development.

The planning process also plays a role in ensuring consultation with affected parties with a view to balancing competing interests equitably.

Planning approval processes require due diligence and this takes time. Changing community expectations for high-quality urban environments require rigour and community consultation in planning approval processes. In the context of global environmental concerns, urban planning is now also being charged with reducing dependence on fossil fuels and, where possible, extending forest cover and vegetation to offset emissions, as well as ensuring basic protections against natural hazards.[32]

It is inevitable there are trade-offs that need to be made between the aims and purposes of planning and the objectives of increasing the speed and affordability of changes to housing supply.

Box 3.4 gives a general outline of the development stages that make up the housing supply pipeline, identifying key roles of the major stakeholders.

32 N Gurran et al., *Planning, government charges, and the costs of land and housing*, Australian Housing and Urban Research Institute Position Paper no. 109, AHURI, Sydney, October 2008, pp. 20–1.

Box 3.4: Six stage generic development pipeline for greenfield development and major brownfield redevelopment

(Total elapsed period ranges from 6.25 years to 14.5 years)

1. Strategic identification and designation of new land release area 2–4 years	Stage 1 – The designation by a state or territory planning agency that a parcel of land or an area may have urban development potential is generally by inclusion in an urban growth boundary (Victoria and South Australia) or may be by some other form of designation, such as identification of master planned area in Queensland or urban zoning under a region scheme in Western Australia. This stage may also include preparation of a broad strategic plan for the land. The strategic identification stage is generally initiated by a proponent, but may also be initiated by the state planning agency or local government. Time frames vary widely but can take from two to four years.
2. Gazettal of rezoning/ material change of use 1–3 years	Stage 2 – The rezoning and/or material change of use process is common to most States. Rezoning under local government planning instruments is generally initiated by the proponent. While there may be some expectation of time frame compression of the rezoning process once the land has been identified at Stage 1, rezoning usually takes between one and three years depending on scale and complexity.
3. Negotiation of infrastructure levies and detailed structure planning 1–3 years	Stage 3 – The preparation of a development plan or structure plan comprises more detailed site planning for the land and may include determination of development contributions. In some states, detailed site planning may be a prerequisite for zoning. In most cases, the landowner/developer undertakes the development/ structure planning process with a view to obtaining the necessary approvals from the relevant local government agency. The involvement of a number of State government departments and agencies that are responsible for hard infrastructure (such as roads, water, electricity, sewer and public transport) as well as soft infrastructure (such as schools and health facilities) may have a significant role in determining if, and how quickly, applications proceed.

4. Statutory subdivision and development approval 6 months – 2 years	Stage 4 – In most states and territories, the issue of statutory development/subdivision approvals is the responsibility of the relevant local authority which responds to developer-initiated applications generally on a stage-by-stage basis. These approvals usually relate to road layouts, lot sizes and dimensions and sometimes streetscapes and house designs where integrated housing projects are being developed. This stage may take from six months to two years.
5. Major civil works, servicing of allotments and issue of new titles 1–2 years	Stage 5 – This stage usually commences with the commissioning of engineering designs for the civil construction of the subdivision and the provision of services. The completion and certification of the construction works by approval agencies is usually a condition precedent to the issue of titles to the new residential lots. In general, subdivisions are constructed in stages of around 50 lots and development of a large subdivision may occur over a number of years. Construction is undertaken by the landowner/developer, while state servicing agencies (for example, in relation to water, power, sewerage, roads) may have a major role in the certification process. The design, construction, certification and titling processes may take in aggregate from one to two years.
6. Development approvals and dwelling construction 9–12 months	Stage 6 – This stage covers housing design, approval and construction. This may be undertaken by a lot purchaser or by a developer/builder who intends to offer a house and land package. Most local authorities require development approval for detached housing to deal with setbacks, overlooking, privacy and parking issues. Overall time frames vary widely from as little as nine months to twelve months.

As well as development application or administration fees and any contributions they may make for physical and social infrastructure, developers also incur expenses in participating in the planning process, through staff time and site holding costs while approval is sought. Interest must be paid on these expenses until projects are completed and sold. Extended development delivery time frames can increase risks for investors, given the cyclical nature of demand factors such as immigration and interest rates, and supply factors such as availability of credit. In addition, there is always scope for unforeseen changes in the policy environment that may affect final pricing. Developers may choose to hold land or delay the approvals process for a range of reasons, such as awaiting information on infrastructure developments, project redesign, changed market conditions and decisions about staging land release.

The foregoing does not imply that planning and development approval processes are consistently beyond reproach and cannot be improved. There is well-recognised scope for reducing compliance costs and improving efficiency and effectiveness by, among other things, modern lodgment and processing systems, making outcomes more consistent and predictable by harmonising requirements across State and local government jurisdictions, and reducing opportunities for third party appeals when proposed developments are demonstrably consistent with jurisdictions' precinct development plans.

There have been ongoing efforts to reform planning systems at the State and Territory level. At the national level, the Development Assessment Forum has a primary role.[33] These efforts aim to streamline or rationalise processes in ways that reduce transaction costs and delays without compromising legitimate environmental or heritage goals at the operational and strategic levels.

Reforms to planning administration seek to streamline processes for gaining approvals for development applications – for example, through better coordination of information requirements relating to environmental impact reports, public notification, multiple agency referrals, assessment against planning provisions, and review and appeal mechanisms.

Reforms to planning governance seek consistency and clear separation of responsibilities and powers in the institutional arrangements that govern decisions about permissible development at state and territory and local government levels. Delays can often arise because of unclear or uncertain allocation of decision-making powers among different jurisdictions. For example, when local governments are called upon to make development approval decisions in the metropolitan or regional interest when their mandate is to represent local interests only, protracted disputes and deferrals are sometimes inevitable.

33 Development Assessment Forum was formed in 1998 to recommend ways to streamline development assessment and cut red tape – without sacrificing the quality of the decision making. Membership includes the three spheres of government, the development industry, and related professional associations.

Box 3.5: The Council of Australian Governments' (COAG) reform agenda

In recognition of the desirability of planning and development approval reform under the COAG Business Regulation reform agenda, a ministerial subgroup under local government and planning ministers is overseeing a reform program. Key elements include:

- the national rollout of electronic development assessment systems to streamline development approvals
- performance monitoring of development assessment on a national basis involving the identification of national indicators, a harmonised compliance development code with core elements for approving single residential applications, and the measurement of the economic benefits of reforms
- development of national principles for future planning systems.

The Council sees a need for continuing effort to improve the efficiency of the planning system and acknowledges that planning system changes may well be required to achieve the level of density envisaged by state governments' urban consolidation plans. It was reported to the Council that, in many states, increased densities are being achieved in existing urban areas and that planning instruments are increasingly facilitating provision of increased densities.

Infrastructure provision and charging

All State and Territory jurisdictions have provisions in place to collect contributions towards the site-based, neighbourhood or local level infrastructure required for development to proceed. This covers upfront charges for supplying direct works needed by individual dwellings, such as water and sewerage connections, and 'indirect' infrastructure, such as open space, waterways, pedestrian and cycle paths and other community infrastructure.

The efficient and equitable provision of, and charging for, housing-related infrastructure can promote efficient location decisions by home buyers.

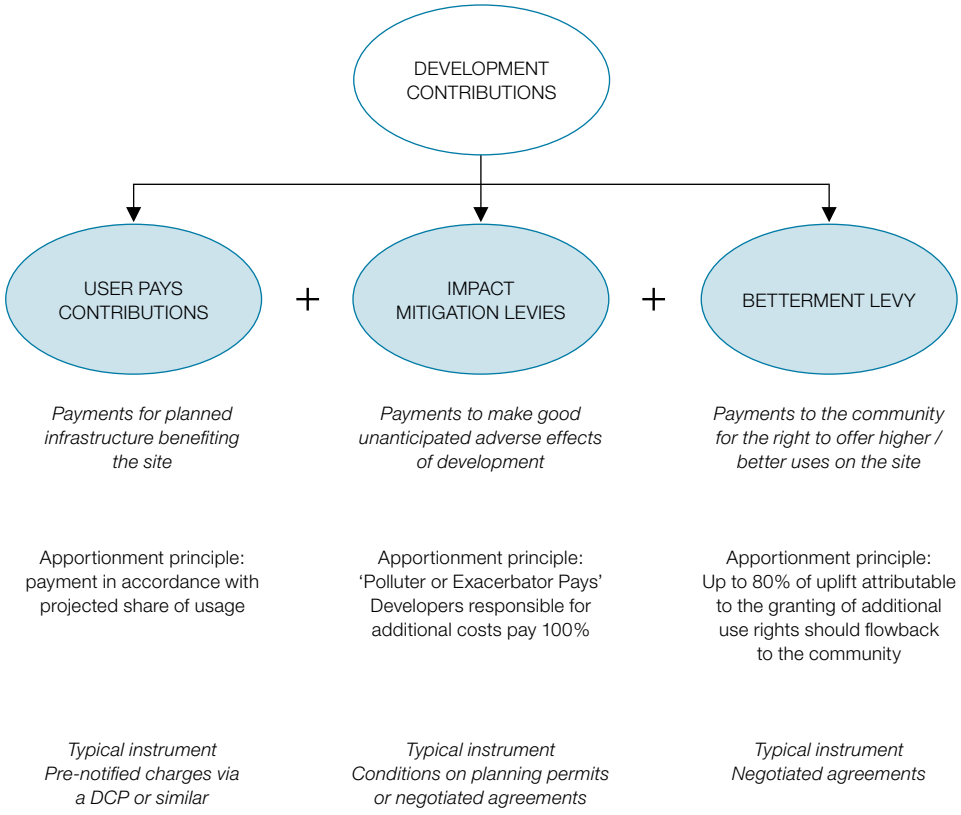
A number of government reports have examined issues relating to the level of infrastructure charges, including differences between states and territories, who should pay and when, and the impact of those charges on supply and housing affordability.[34] These reports contain a range of views, particularly about the equity of infrastructure charges, the extent to which developer charges are passed on to home buyers, and the impact they may have on the development of land and cost of housing in various locations.

34 Productivity Commission, *First home ownership: inquiry report*; Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find*, June 2008.

Infrastructure costs are a substantial component of development and construction costs. The Housing Industry Association, the Property Council of Australia and other bodies have expressed concern that infrastructure charges are too high and that they are being levied on an inappropriate basis. The Housing Industry Association has provided a range of data showing the levels of direct and indirect charges for infrastructure relating to housing provision in a number of states and changes in these over time. This information is provided in Appendix 2 (Tables A3.5A and A3.6) which also includes data from a report by ACIL Tasman for the Urban Development Institute of Australia (UDIA).[35]

Generally, there are three different ways to justify contributions from private developers as part of the planning approval process: user-pays charges, impact mitigation levies, and betterment levies (see Figure 3.2).

Figure 3.2: Overview of development contribution types



Note: DCP = Development Contributions Plan.

Source: SGS Economics and Planning Pty Ltd, Advice to various stakeholders regarding Development Contributions

35 ACIL Tasman, *Landcost: The impact of land costs on housing affordability*, report prepared for the Urban Development Institute of Australia, May 2006.

Recognising the differences in rationale is important in decision making on the nature and application of regulatory principles governing how these contributions should be levied. For instance, it has been argued that:

- developers should pay user charges according to their projected share of beneficial usage of the items, sometimes specified in a contributions plan
- additional impact fees could apply when a development creates unanticipated or unplanned demands on local infrastructure because of its design
- additional betterment levies recognise the uplift in land value created by the scope of the development permitted by the community on a particular site – and could be collected at point of rezoning from sales proceeds.

While infrastructure charges affect the cost of housing throughout Australia, there is much variation among states and territories as to the level of these charges and the extent to which levies and infrastructure provision costs are shared between land sellers, developers, consumers and taxpayers generally. There is currently no national benchmarking of the minimum acceptable standards of infrastructure provision for new residential areas, or agreement about who should pay for this infrastructure.

The Productivity Commission has observed that cross-jurisdiction adherence to some general charging principles would help to promote more efficient and equitable outcomes.[36]

Box 3.6: Research into planning costs

The Australian Housing and Urban Research Institute is currently undertaking a study that will identify the range of government and planning related costs that arise through the residential development process and quantify their relative weight as a proportion of the total cost of development. The study also seeks to determine the extent to which such costs might differ in different regulatory settings.

Source: N Gurran et al., *Planning, government charges, and the costs of land and housing*, Australian Housing and Urban Research Institute, Position Paper no. 109, AHURI, Sydney, October 2008.

36 Productivity Commission, *First home ownership: inquiry report*, 2004, p. 176.

Taxation and other charges

Other government taxes or charges affecting housing in Australia include the goods and services tax (GST) on construction costs and stamp duty on property transactions. The GST (10 per cent) applies to maintenance and renovation expenditure for existing housing, and to land development and new buildings.

States and territories levy stamp duties on the purchase of homes, at varying rates and with varying concessions for first home buyers and in some states for buyers in non-metropolitan locations. In some jurisdictions, there may be further costs associated with property purchase, including transfer fees and mortgage duty.

The Australian Government's review of Australia's future tax system (the Henry Review), which will provide a final report to the Treasurer by the end of 2009, is relevant to both supply and demand. Further information is provided in Chapter 2.

The Council will be interested in the findings and recommendations of this review. Several members of the Council are contributing to the work of the review as individuals or as representatives of organisations.

Construction costs

The determinants of housing affordability on the supply side obviously include construction costs, many of which have risen significantly in recent times.

Recent issues impacting on construction costs include:

- a very tight market for skilled labour in the construction industry during 2008 with competition from the resources sector, commercial construction and major infrastructure projects
- increased interest costs for projects due to delays in construction schedules caused by financiers' higher pre-sale requirements and because of skill shortages
- until recently rising costs of materials, particularly in tradeable commodities such as steel, which is used extensively in multistorey construction
- higher costs of mid- to-high rise multi-unit developments vis-à-vis low-rise housing due to the cost of common areas, lifts and fire escapes, regulatory requirements including occupational health and safety requirements, varying trade union jurisdictions and specialist labour costs, and more complex structural designs and requirements
- meeting the demand for better quality finishes and fit-outs in larger houses in response to changing consumer expectations
- rising fuel costs on construction inputs

- increased environmental requirements (such as five-star energy and resource-use requirements), which impose additional costs at the construction stage (although they may be partly or fully recouped over time)
- the imposition of GST on the supply of new residential property, which has added approximately 9 per cent to the delivered costs of a residential lot and 10 per cent to the construction cost of a typical new house.[37]

Implementation of emission pricing as part of the Carbon Pollution Reduction Scheme will increase the price of goods that are relatively emission intensive, such as concrete or iron and steel and will thus also add to construction costs.

Appendix 2, Table A3.7 provides a comparison of the costs of constructing detached houses, semi-detached dwellings and units by State, capital city, and rest of States where available, from 1995–96 to 2007–08. Information for 2008 is further summarised in Table 3.9 below.

Table 3.9: Average cost ($) per square metre for new detached houses, semi-detached dwellings, and units, by capital city or State or Territory, 2008

City or State or Territory	House	Semi-detached	Unit
Sydney	917	1,173	1,890
Melbourne	933	1,161	2,149
Brisbane	947	1,385	2,313
Adelaide	916	1,402	1,376
Perth	961	1,186	3,907
Tas	955	1,080	951
NT	1,153	1,322	1,666
ACT	1,023	2,115	1,986
Australia	**950**	**1,231**	**2,141**

Source: Australian Bureau of Statistics, *Building Approvals* (data available on request)

37 ACIL Tasman, *Landcost: The impact of land costs on housing affordability*, report prepared for the Urban Development Institute of Australia, May 2006.

There are some curious apparent anomalies in these data, such as the comparably low cost per square metre of units/apartments in Sydney vis-à-vis other locations such as Perth. There are many possible explanations for such variations ranging from data issues like sampling error though to differences in the nature of the housing product across locations in the relevant time period. As they are at present, the data serve principally to illustrate the cost gradient per square metre from detached houses, through semi-detached houses to units/apartments. As noted elsewhere in the report, the Council intends to develop a stronger approach to measuring and modelling the cost of the various components of land and housing development.

Alternative construction and design approaches to reduce housing costs

The Council is aware that individual states and territories are exploring a range of approaches to housing planning, design and construction aimed at reducing overall costs. A few examples are set out below:

- Markedly reduced construction times to cut home building costs are a feature of a current Western Australian Government demonstration housing development known as 'Revolution Road' – with one home being built within 14 days.
- This includes innovative design and construction techniques with alternative materials such as modular panel systems, aerated concrete and lightweight composites. The use of these materials show homebuyers what may be possible in new homes with accelerated completion times and enhanced energy and climate performance. Display homes introduce building design options using passive solar design, WaterWise gardens, grey water and roof water.[38]
- The Queensland Government's Smart Housing initiative promotes good practice in designing, planning and constructing homes to be more socially, environmentally and economically sustainable.[39]
- The Smart Housing initiative incorporates requirements for adaptable designs for new housing to enable the housing to be modified easily in the future to suit the occupant's needs, including making it fully accessible, without requiring structural changes and at a minimal cost.
    - The Green, a small residential caravan park in Greenbank, Brisbane, is progressively replacing onsite caravans with 'smart' kit homes that are resource and cost-efficient and flexible to meet the changing needs of residents.[40]

38 Western Australian Department of Planning and Infrastructure, *Revolution Road: Ideas to change the way we build*, WA DPI, Perth, 2006.

39 Queensland Government Department of Public Works, *Smart and Sustainable Homes Program, 2004*, Qld DPW, Brisbane, <www.smarthousing.qld.gov.au> accessed December 2008.

40 Queensland Government Department of Public Works, *Smart and Sustainable Homes Program, 2004.*

- A recent waterfront development in Queensland will include a number of smaller more affordable apartments ranging down to about 40 square metres in size.[41]
- In relation to planning reforms, the Australian Capital Territory has introduced a compact housing code for blocks under 250 square metres to help facilitate affordable house and land packages.[42]

The Council considers that it would be valuable to share information on initiatives such as these so that successful innovations can be more widely applied.

Other government interventions

As noted elsewhere in this report, the social housing stock comprised 393,000 dwellings in 2008 and had fallen from 5.8 per cent of the total occupied housing stock in 1996 to 5.1 per cent in 2006.[43] Analysis of data from the 2006 Census also indicated the need for an additional 251,000 rental dwellings to be made available at an affordable cost for low income households[44] (see Table 5.1 for details).

The Australian Government has recently announced some responses to these supply shortages.

Under the new **National Affordable Housing Agreement**, the Australian Government will provide $6.2 billion to the states and territories over 5 years from 1 January 2009 for measures including homelessness, social housing and home ownership.

Additional funding will also be provided by the Australian Government through National Partnership Payments specifically for homelessness ($400 million over 5 years to be matched by the States and Territories); improved housing for Indigenous people in remote communities ($834.6 million over 5 years, $1.94 billion over 10 years); and the construction of new social housing ($400 million over 2 years).

Under the **National Rental Affordability Scheme (NRAS)** the Australian Government is also offering incentives to help to build 50,000 new rental properties across Australia by 2012. The two key elements of this scheme are an annual Australian Government tax offset or payment of $6,000 for each dwelling, and a State or Territory contribution of $2,000 per dwelling per year. Properties will be rented out to eligible households at 20 per cent below market rates.

41 M Hele, 'Hamilton waterfront development includes affordable apartments', *Courier Mail* (Brisbane), 30 October 2008, accessed 1 December 2008 <www.news.com.au/couriermail/story.html>.

42 Australian Capital Territory, *Affordable housing action plan: progress report 2008*, ACT Government, Canberra, 2008, p. 2.

43 Australian Bureau of Statistics, *2006 Census Tables, Australia*, 'Tenure Type and Landlord Type by Dwelling Structure for Time Series: Count of occupied private dwellings', cat. no. 2068.0, ABS, Canberra, 2007.

44 Wulff et al., *Australia's private rental market: changes (2001–2006) in the supply of, and demand for, low rent dwellings*, Australian Housing and Urban Research Institute project no. 50502, forthcoming.

While these measures will not fully address the shortage of affordable housing for low income renters, the Council acknowledges that these initiatives are important first steps towards addressing needs that are not currently being met.

The Australian Government's Housing Affordability Fund, a five-year, $512 million investment, will also address some areas identified earlier in this chapter that represent significant barriers to the supply of affordable housing, namely:

- the 'holding' costs incurred by developers as a result of long planning and approval times, such as interest paid to banks while awaiting development decisions by councils
- infrastructure costs, such as the laying of water pipes, sewerage, transport and the creation of parks.

The fund will assist State, Territory and local governments, in conjunction with the private sector, to address these market barriers and ensure that savings generated are passed on to the new home buyer.

Projections of the demand-supply gap

CHAPTER 4

Projections of the demand–supply gap

Key points

- The gap between total underlying demand and total supply is conservatively estimated to be approximately 85,000 dwellings as at June 2008, taking into account information on homelessness and low vacancy rates in the private rental market.
- Over the five years to 2013, the overall gap is projected to grow to 203,000 dwellings (based on assumptions of medium growth in supply and underlying demand).
- By 2028 the same projection assumptions produce a cumulative gap of 431,000 dwellings.
- These estimates are highly sensitive to assumptions used.

The long-term estimates are unlikely to be realised because, in most conceivable circumstances, a large cumulative gap would cause compensating adjustments in price, and in levels of production and demand that would fully or partially mitigate that deficit.

The obvious exception is in the social housing sector, where a looming gap might bring on some private investment at the margin, but the main response would need to lie with government policy and expenditure.

While the Australian Government has announced policies and program responses to address homelessness and increase construction of both new social housing dwellings and private rental accommodation, these actions will take time to work effectively and will require significant additional capital and recurrent expenditure to address the full extent of the deficit at the lower end of the housing market.

Overview

This chapter examines the apparent gap between housing demand and supply from two perspectives:

- What is the gap between total demand and total supply in 2008
- How the gap may change over time as demand and supply change.

The gap between total demand and total supply in 2008

There are a number of possible indicators of the present gap between supply and demand. In estimating this gap as at June 2008, the Council has selected:

- the number of homeless households sleeping rough
- the number of homeless households sharing accommodation with friends or relatives
- the number of marginal residents of caravan parks[45]
- the difference between the present rental vacancy rate and that required to 'clear' the normal volume of new letting transactions.

Limitations in the availability and quality of data in these and other gap-related areas will be addressed to improve calculations in future reports.

Homeless persons – sleeping rough

The ABS estimates there were 104,700 homeless persons on Census night 2006, of whom 16,400 were 'sleeping rough' (Table 4.1). People who are part of the 'primary homelessness', or 'sleeping rough' group, include those without conventional accommodation – living on the streets and sleeping under bridges or in places like deserted buildings, improvised dwellings or parks. These 16,400 persons represented 8,800 households including 5,500 single person households, 1,400 couples without children and 1,700 families with children.[46]

Table 4.1: Homeless persons – sleeping rough, by State and Territory, 2006

State/ territory	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Homeless persons	3,600	2,300	5,100	900	2,400	400	1,800	100	16,400

Source: C Chamberlain & D MacKenzie, *Counting the homeless 2006*, Tables 6.3, 6.6 and 6.8, cat. no. 2050.0, Australian Bureau of Statistics, Canberra, 2008.

To meet the needs of rough-sleeping households, it is assumed that an additional 8,800 dwellings would have been needed in 2006.

Homeless persons have a diverse range of housing needs and often require other support services. More analysis is needed to establish the most appropriate quantity and type of housing supply responses required to reduce homelessness.

45 The ABS defines marginal residents of caravan parks as people who are renting a caravan at their usual address, with no-one in the dwelling having full-time work of 35 hours or more (C Chamberlain & D MacKenzie, *Counting the homeless 2001*, cat. no. 2050.0, Chapter 7, Australian Bureau of Statistics, Canberra, 2003).

46 See Appendix 2, Table A4.1: Estimated dwelling need of rough sleepers, 2006.

Homeless persons – sharing with friends or relatives

Persons sharing accommodation with friends or relatives are counted as being homeless if they are residing temporarily with other households because they have no accommodation of their own. This group forms part of the ABS classification of **secondary homelessness**.

In 2006, the ABS identified 47,300 persons (35,000 households) in the homeless population sharing accommodation with friends or relatives (Table 4.2).

Table 4.2: Homeless persons – sharing accommodation with friends or relatives, by State and Territory, 2006

State/ Territory	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Homeless persons	10,900	7,400	13,100	3,700	7,900	1,300	2,400	600	47,300

Source: C Chamberlain & D MacKenzie, *Counting the homeless 2006*, cat. no. 2050.0, Tables 6.3, 6.6 and 6.8, Australian Bureau of Statistics, Canberra, 2008.

Homeless persons – marginal residents of caravan parks

The ABS defines marginal residents of caravan parks as people who are renting a caravan at their usual address, with no-one in the dwelling having full-time work of 35 hours or more.[47] The 2006 Census identified 17,500 marginal residents of caravan parks (Table 4.3), noting that this figure had declined from 22,800 persons in 2001. These 17,500 residents comprised 12,500 households.

Table 4.3: Homeless persons – marginal residents of caravan parks, by State and Territory, 2006

State/ Territory	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Homeless persons	5,104	2,789	6,385	748	1,994	162	273	42	17,497

Source: C Chamberlain & D MacKenzie, *Counting the homeless 2006*, Table 8, cat. no. 2050.0, Australian Bureau of Statistics, Canberra, 2008.

47 C Chamberlain & D MacKenzie, *Counting the homeless 2001*, cat. no. 2050.0, Chapter 7, Australian Bureau of Statistics, Canberra, 2003.

Government initiatives in the White Paper on Homelessness

In December 2008, the Australian Government launched its White Paper on homelessness, *The Road Home: A National Approach to Reducing Homelessness*.[48] The White Paper foreshadowed an additional $1.2 billion over four years in new funds to help homeless Australians. It included specific goals to halve overall homelessness by 2020, and to provide support and accommodation to all rough sleepers. While the Council acknowledges the initiatives in the White Paper, for the purpose of assessing the total gap between housing demand and supply, the 2006 figures for homelessness identified above have been used as a component of the gap between housing demand and supply in this report over the full 20-year period of the projections. This approach will be reviewed in the Council's future reports.

Efficient vacancy rate in housing submarkets

The equilibrium vacancy rate for the private rental market is generally acknowledged to be 3 per cent of stock. In relation to private rental, current vacancy rates vary across Australia and only those for capital cities are published regularly.

Table 4.4 provides an estimate of the number of additional vacant dwellings that would be required in the private rental market to reach 3 per cent vacancy in 2008. The capital city vacancy rate is assumed to approximate that for each respective State and Territory. The Council estimates that an additional 26,000 vacant private rental dwellings, mainly in New South Wales and Victoria, would be required in 2008.

48 Australian Government, *The Road Home – A National Approach to Reducing Homelessness*, FaHCSIA, Canberra, December 2008.

Table 4.4: Estimated additional dwellings required to lift private rental vacancy rate to 3%, by State and Territory, June 2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
					(per cent)				
Vacancy rate in June quarter 2008 (a)	1.1	1.0	2.2	1.5	2.8	2.4	0.3	2.0	n.a.
Private renter households: number of dwellings:					('000)				
2005–06 (b)	587	424	383	121	162	34	11	25	1,745
30 June 2008 (c)	619	447	404	127	171	36	11	26	1,841
Estimated vacant dwellings, 30 June 2008 (c):					('000)				
3% level	19	13	12	4	5	1	0 (d)	1	55
Actual	7	4	9	2	5	1	0 (d)	1	29
Shortfall	12	9	3	2	0 (d)	0 (d)	0 (d)	0 (d)	26

Notes:

(a) Source: Real Estate Institute of Australia; vacancy rates for capital cities are applied to States and Territories.

(b) Source: Australian Bureau of Statistics; numbers may not sum to Australian total due to rounding.

(c) Source: NHSC estimate.

(d) Estimate is less than 500 and is rounded to zero.

Source: Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008; Real Estate Institute of Australia, *Real Estate Market Facts, June Quarter 2008*, REIA, Canberra, 2008; NHSC estimates based on McDonald–Temple medium household growth scenario.

The size of the gap in 2008

Table 4.5 summarises the previous sections and shows that in 2008 the estimated size of the gap between demand and supply was a shortfall of 85,000 dwellings.

Table 4.5: Estimated dwelling gap, Australia, June 2008 (rounded to nearest '000)

	Component	Estimated dwelling gap
1	Dwellings required to address homelessness – sleeping rough	9,000
plus		+
2	Dwellings required to address homelessness – staying with friends and relatives	35,000
plus		+
3	Dwellings required to house marginal residents of caravan parks	13,000
plus		+
4	Dwellings required to increase rental vacancy rate to 3%	26,000
equals		=
	Estimated gap	83,000
	Rounded to the nearest 5,000	85,000
	Estimated gap (at June 2008)	**85,000**

An important exclusion from these calculations is an allowance for the number of people who are living in non-private fixed dwellings such as rooming houses, hotels, motels and institutions and have no other residence. Further research is needed to determine what proportion of this group should be included in the demand–supply gap.

A further issue relates to the role that unoccupied dwellings play in relation to gap pressures. The 2006 Census found that there were 830,000 vacant dwellings (9.85 per cent of total stock) see Table 4.6. There is little information available on the utilisation of these vacant dwellings. Specific purposes include vacant stock awaiting sale, demolition or replacement, and holiday homes.

The number of unoccupied dwellings at the 2006 Census had increased significantly from the 718,000 unoccupied dwellings (9.22 per cent of total stock) in 2001. The comparable figure for the 1996 Census was 679,000 unoccupied dwellings, making up 9.47 per cent of the stock. In 1991, there were 598,000 unoccupied dwellings representing 9.26 per cent of the stock (see Appendix 2, Table A4.2).

The proportion of unoccupied dwellings in 2006 also varied significantly between different parts of Australia – for example, the proportion was 4.95 per cent in outer western Sydney and 11.2 per cent for the Gold Coast, supporting the assumption that a large proportion of vacant dwellings are holiday homes. The Council will undertake further research in relation to unoccupied dwellings prior to its next report.

Table 4.6: Occupied and unoccupied dwellings by dwelling structure, 2006

	Occupied dwellings	Unoccupied dwellings	Total dwellings	Unoccupied dwellings as a % of total
Separate house	5,685,388	577,332	6,262,720	9.2
Semi-detached, row or terrace house, townhouse etc. with:				
One storey	441,941	48,190	490,131	9.8
Two or more storeys	260,608	32,281	292,889	11.0
Subtotal	*702,549*	*80,471*	*783,020*	*10.3*
Flat, unit or apartment:				
In a one or two-storey block	545,962	77,489	623,451	12.4
In a three-storey block	251,159	32,853	284,012	11.6
In a four or more storey block	268,873	48,103	316,976	15.2
Attached to a house	10,323	1,778	12,101	14.7
Subtotal	*1,076,317*	*160,223*	*1,236,540*	*13.0*
Other dwelling:				
Caravan, cabin, houseboat	94,813	4,964	99,777	5.0
Improvised home, tent, sleepers out	13,491	3,042	16,533	18.4
Residence attached to a shop, office, etc.	19,036	3,586	22,622	15.9
Subtotal	*127,340*	*11,592*	*138,932*	*8.3*
Total	**7,596,185**	**830,374**	**8,426,559**	**9.9**

Source: Australian Bureau of Statistics, *2006 Census tables, Australia*, 'Dwelling Structure by Occupied/Unoccupied Dwellings', cat. no. 2068.0, ABS, Canberra, 2007.

There are other aspects of housing need that could be considered for inclusion in the definition of the demand–supply gap. One such aspect is overcrowding. The 2006 ABS Survey of Income and Housing identified that 2.8 per cent of Australian households in 2005–06 were overcrowded using the Canadian National Occupancy Standard.[49] Applying updated population projections and assuming this distribution is the same, it is estimated there would be 234,000 overcrowded households in 2008. This includes 42,000 households where two or more bedrooms are needed to avoid overcrowding. Conversely, as shown in Table 4.7, 10 per cent of households occupy dwellings where there are three or more spare bedrooms. Given that overcrowding relates to the number of bedrooms for specific families and the way in which existing stock is utilised (rather than being an issue of overall dwelling numbers), the Council has not included an allowance for overcrowded households in its demand–supply gap estimates.

Table 4.7: Utilisation of dwellings, Australia, 2005–06 and 2008

	2 or more bedrooms needed	1 more bedroom needed	No extra bedrooms needed	1 bedroom spare	2 bedrooms spare	3 or more bedrooms spare	Total
Percentage of households June 2006	0.5	2.3	18.8	36.0	32.0	10.4	100.0
Number of households 2005–06	40,000	182,000	1,490,000	2,853,000	2,536,000	824,000	7,926,000
Number of households June 2008 (estimated)	42,000	192,000	1,569,000	3,005,000	2,671,000	868,000	8,347,000

Note: dwelling utilisation is determined using Canadian National Occupancy Standard. Numbers may not sum to totals due to rounding.

Source: derived from Australian Bureau of Statistics, *Housing Occupancy and Costs, Australia, 2005–06*, Table 14, cat. no. 4130.0.55.001, ABS, Canberra, 2007 and 2008 Council estimates.

Future changes in the demand–supply gap

Estimating the future balance between housing demand and supply is a perilous undertaking because supply and demand influence each other and the emergence of a significant imbalance is likely to stimulate a market response. This dynamic aspect of the market should be borne in mind when interpreting the following projections.

A further hazard in projecting the gap is the prospect of change in economic circumstances and government policies and programs affecting the housing market and homelessness. It is axiomatic that economic cycles, policies and programs will change at some point over the 20-year forecasting period; indeed, we are seeing all three at present.

49 Australian Bureau of Statistics, *Housing Occupancy and Costs, Australia, 2005–06*, Table 14, cat. no. 4130.0.55.001, ABS, Canberra, 2007.

The following projections of the demand–supply gap are derived simply by subtracting the supply projections (Chapter 3) from the demand projections (Chapter 2) taking into account the estimated gap of 85,000 as at June 2008. The 'central' estimate of the gap presented in Table 4.8 compares the medium growth projection of demand with the medium growth projection for supply (i.e. average new dwelling production trend since 1980 adjusted for demolitions).

The value of these projections is simply their capacity to show how the gap between supply and demand would develop in a situation of 'all other things being equal'. This provides a potential springboard for change on the part of housing providers and government policy and programs. Publicity about declining relative supply and deteriorating affordability might have some impact on consumers' aspirations for ownership of larger dwellings.

Medium demand and medium supply

Table 4.8 shows how, under medium supply and medium demand assumptions, the estimated gap of 85,000 in 2008 will change over the next 20 years. Over the two years to 2010, the gap grows by an estimated 46,000 dwellings to be 131,000 dwellings. This is the result of an estimated 259,000 net new dwellings over the period while underlying demand increases by 305,000 households.

After five years, by 2013, the gap grows by an estimated additional 118,000 dwellings to be 203,000 dwellings. By 2018, the gap has increased to 316,000 dwellings and, by 2028, it is 431,000.

Table 4.8: Medium supply and medium demand projections 2008 to 2028 (selected years)

Year	Underlying demand and supply		Annual growth in gap between underlying demand and supply	Cumulative gap (inc 85,000 as at June 2008)
	Medium household growth	Medium supply growth		
	Number of dwellings			
2009	152,000	129,000	23,000	108,000
2010	153,000	130,000	23,000	131,000
2011	155,000	131,000	24,000	155,000
2012	155,000	131,000	24,000	179,000
2013	156,000	132,000	24,000	203,000
2018	156,000	135,000	21,000	316,000
2023	154,000	139,000	15,000	407,000
2028	139,000	142,000	–3,000	431,000

Source: NHSC estimates based on McDonald–Temple medium household growth scenario; NHSC estimates based on trends in dwelling completions; see Appendices 2 and 3 for full details.

Sensitivity of estimates of the gap

These projections are sensitive to the assumptions used. This is illustrated by Table 4.9, which shows underlying demand and dwelling production increases over the five years from 2008 to 2013, and the resultant gap, using different combinations of the three underlying demand scenarios and the three dwelling production scenarios.

For example, the projections of high demand growth and high growth in supply indicate growth in demand over the five-year period of 871,000 additional households and additional supply of 781,000 dwellings, with a gap between the two of 90,000 dwellings. This compares with the low demand and medium supply projection, which indicates for the same period an increase in demand of 698,000 while supply grows by 653,000, leaving a gap of 45,000.

Table 4.9: Gap between underlying demand and dwelling supply, five years (2008 to 2013), using different projection assumptions

Demand projection: Underlying demand		Supply projection: Production of dwellings		
		Low production	Medium production	High production
		Increase over 5 years (2008 to 2013)		
Low household growth	Increase in underlying demand	698,000	698,000	698,000
	Increase in supply	504,000	653,000	781,000
	Size of gap (a)	194,000	45,000	-83,000
Medium household growth	Increase in underlying demand	771,000	771,000	771,000
	Increase in supply	504,000	653,000	781,000
	Size of gap (a)	267,000	118,000	-10,000
High household growth	Increase in underlying demand	871,000	871,000	871,000
	Increase in supply	504,000	653,000	781,000
	Size of gap (a)	367,000	218,000	90,000

(a) Size of gap is measured as the difference in the increase in demand over the increase in supply. A negative value indicates oversupply.

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios; NHSC estimates based on trends in dwelling completions; see Appendices 2 and 3 for full details.

The data in Table 4.9 exclude the estimated 'initial gap' in 2008 (relating to homelessness and private rental vacancy rates). The effect of including this initial gap is shown in Table 4.10, which shows the change in the total gap over the five years 2008 to 2013, using different combinations of the three underlying demand scenarios and the three dwelling production scenarios. For example, a high growth in demand and also supply projection as discussed above would see the overall gap in demand grow from 85,000 dwellings to 175,000 dwellings over the five-year period. This compares with a low demand and medium supply projection, which estimates for the same period an increase in the gap from 85,000 to 130,000.

Table 4.10: Gap between underlying demand and dwelling supply including initial gap, five years (2008 to 2013), using different projection assumptions (a)

Demand projection: Underlying demand		Supply projection: Production of dwellings		
		Low production	Medium production	High production
		Increase over five years (2008 to 2013)		
Low household growth	2008 gap in demand and supply	85,000	85,000	85,000
	Gap between underlying demand and production (from Table 4.9)	194,000	45,000	-83,000
	Total gap	279,000	130,000	2,000
Medium household growth	2008 gap in demand and supply	85,000	85,000	85,000
	Gap between underlying demand and production (from Table 4.9)	267,000	118,000	-10,000
	Total gap	352,000	203,000	75,000
High household growth	2008 gap in demand and supply	85,000	85,000	85,000
	Gap between underlying demand and production (from Table 4.9)	367,000	218,000	90,000
	Total gap	452,000	303,000	175,000

(a) A negative value indicates oversupply.

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios; NHSC estimates based on trends in dwelling completions; see Appendices 2 and 3 for full details.

Tables 4.11 and 4.12 present the same approach as that used in Tables 4.9 and 4.10 but refer to the 20-year rather than the five-year projection period.

Table 4.11 shows, for instance, that high growth projections for demand and supply indicate a growth in demand of 3,489,000 additional households by 2028 and supply growth of 3,246,000 dwellings over this period, with a gap between the two of 243,000 dwellings. This compares with the low demand and medium supply projections, which leave a gap of 185,000.

Table 4.11: Gap between underlying demand and dwelling supply, 20 years (2008 to 2028), using different projection assumptions

Demand projection: Underlying demand		Supply projection: Production of dwellings		
		Low production	Medium production	High production
		Increase over 20 years (2008 to 2028)		
Low household growth	Increase in demand	2,899,000	2,899,000	2,899,000
	Increase in supply	2,090,000	2,714,000	3,246,000
	Size of gap (a)	809,000	185,000	-347,000
Medium household growth	Increase in demand	3,060,000	3,060,000	3,060,000
	Increase in supply	2,090,000	2,714,000	3,246,000
	Size of gap (a)	970,000	346,000	-186,000
High household growth	Increase in demand	3,489,000	3,489,000	3,489,000
	Increase in supply	2,090,000	2,714,000	3,246,000
	Size of gap (a)	1,399,000	775,000	243,000

(a) Size of gap is measured as the difference in the increase in demand over the increase in supply. A negative value indicates oversupply.

Note: There are minor variations in the low and medium supply projections compared with those given elsewhere in this report due to rounding.

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios; NHSC estimates based on trends in dwelling completions; see Appendices 2 and 3 for full details.

The data presented in Table 4.12 include the initial gap relating to homelessness and rental vacancy rates. High growth in demand and supply as discussed above would see the overall gap in demand grow from 85,000 dwellings to 328,000 dwellings over the 20-year period. This compares with a low demand and medium supply projection, which would increase the gap from 85,000 to 270,000.

Table 4.12: Gap between underlying demand and dwelling supply including initial gap, 20 years (2008 to 2028), using different projection assumptions (a)

Demand projection: Underlying demand		Supply projection: Production of dwellings		
		Low production	Medium production	High production
		Increase over 20 years (2008 to 2028)		
Low household growth	2008 gap in demand and supply	85,000	85,000	85,000
	Gap between underlying demand and production (from Table 4.11)	809,000	185,000	-347,000
	Total gap	894,000	270,000	-262,000
Medium household growth	2008 gap in demand and supply	85,000	85,000	85,000
	Gap between underlying demand and production (from Table 4.11)	970,000	346,000	-186,000
	Total gap	1,055,000	431,000	-101,000
High household growth	2008 gap in demand and supply	85,000	85,000	85,000
	Gap between underlying demand and production (from Table 4.11)	1,399,000	775,000	243,000
	Total gap	1,484,000	860,000	328,000

(a) A negative value indicates oversupply.

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios; NHSC estimates based on trends in dwelling completions; see Appendices 2 and 3 for full details.

Other considerations

As discussed above, the projections presented in this chapter are simplistic in the sense that they do not incorporate the interaction of changes in building activity or population growth with factors that underlie the overall level of economic activity.

The projections are based on past trends and thus on past economic activity. Being based in each case on an effective constant level of economic activity and household growth, the projections do not incorporate fluctuations in activity associated with economic cycles. It was observed in Chapter 2 that the medium projection of supply growth could be optimistic in the shorter term in the light of present economic conditions. If this is so, and household growth continues apace, there is a prospect of a wider gap between demand and supply over the next three to five years.

Looming skills shortages in the construction sector threaten to widen the gap over a longer period.

The impact of current or future government policy initiatives responding to housing need have not been factored into the calculations. Apart from other considerations, their impact is difficult to assess at this stage. If effective, the Australian Government's broad-based responses to homelessness and housing affordability should reduce the demand–supply gap. Related State and Territory policy and program responses should also contribute. Again, however, it is too early to assess whether these responses will have a minor or major impact, whether due to funding levels, the appropriateness of program settings, or market reaction to them.

As noted in several places in the report, a more sophisticated approach to projecting demand, supply and the gap between them would be based on modelling the variety of economic factors influencing the balance between housing supply and demand. The development of such modelling capacity will be considered by the Council for future reports.

Key indicators for demand–supply gap

The Council intends to monitor the change in the demand–supply balance and the supply of housing that is affordable to low income households as part of its annual reporting. The Council will undertake further work relating to the baseline for monitoring and reporting in subsequent annual reports.

Two initial measures of the demand and supply balance proposed by the Council are:

- The cumulative difference between annual growth in aggregate demand and supply
- the adequacy of annual construction activity.

Key Indicator 1 – Cumulative difference between aggregate demand and supply

Key Indicator 1 measures the cumulative difference between growth in aggregate demand and supply by calculating the net number of additional dwelling units since base year less the number of additional households since base year.

Growth in aggregate demand is the effective number of additional households since base year as measured by the ABS.

The difference between current year and base year aggregate demand household projections approximates the difference between two point in time measures – one at 30 June of the current year and the other as at 30 June of the base year.

Growth in aggregate supply is the net number of additional units since base year and is measured using the ABS dwelling completions data adjusted using Council estimates of demolitions for the financial years ending 30 June for the years since the base year.

As 2008 is the base year, Key Indicator 1 comprises only the initial gap of 85,000 dwelling units. Derivation of this figure is explained in Table 4.5.

Key Indicator 1 – Cumulative difference between aggregate demand and supply in 2007–08 since base year by capital cities/balance of state, Australia, 2008

	Whole of Australia	Capital cities	Balance of State
Initial supply gap indicated by homelessness and rental vacancy rates	85,000	n.a.	n.a.
Cumulative difference between aggregate demand and supply	85,000	n.a.	n.a.

Source: NHSC estimates of initial gap due to homelessness and inadequate vacancy rates.

Key Indicator 2 – Adequacy of annual construction activity

The adequacy of annual construction activity is measured by the net number of additional units in the last year less net number of additional households in the same year.

Net number of additional units in the last year is measured using the ABS dwelling completions data adjusted using Council estimates of demolitions for the financial year ending 30 June 2008.

Net number of additional households in the last year is the projected annual growth in household numbers using the medium household demand projection for 2008. The difference between 2007 and 2008 household projections approximates the difference between two point-in-time measures – one as at 30 June 2007 and the other as at 30 June 2008.

Using this methodology for the whole of Australia, the cumulative difference in 2007–08 is a supply shortfall of 20,000 – based on additional supply of 129,000 units less number of additional households of 149,000 in 2007–08.

Key Indicator 2 – Adequacy of annual construction activity in 2007–08 since previous year by capital cities/balance of state, Australia, 2008

	Whole of Australia	Capital cities (a)	Balance of state (b)
Additional supply in last year	129,000	74,000	55,000
Number of additional households in last year	149,000	85,000	64,000
Adequacy of annual construction activity	–20,000	–11,000	–9,000

(a) Sydney, Melbourne, Brisbane, Adelaide and Perth only.

(b) Includes Hobart, Darwin and Canberra.

Notes:

Negative numbers in the indicator imply a supply shortfall.

It could be assumed that the 20,000 shortfall for Australia as a whole in 2007–08, when linked to the estimated gap at June 2008 could imply a gap of 65,000 as at June 2007. It needs to be noted that these figures are subject to the qualifications outlined elsewhere in this report.

Source: NHSC estimates based on McDonald–Temple low, medium and high household growth scenarios; NHSC estimates based on trends in dwelling completions; see Appendices 2 and 3 for full details.

Affordability

CHAPTER 5

Affordability

Key points

- Housing affordability for first home buyers and private renters declined over the decade to 2008.
- In 2005–06, there were 280,000 home buyers in so-called 'housing stress'. Of these, 131,000 had housing costs that exceeded 50 per cent of their household income.
- The total social housing stock has declined steadily, from 400,000 dwellings in 1996 to an estimated 390,000 in 2008. If social housing had maintained its share of total dwelling stock, there would be around 480,000 such dwellings.
- In every State capital, vacancy rates in the private rental market have been lower than 3 per cent since 2005, and real rents have increased dramatically in the past two years.
- By 2006, there was a shortfall of more than 250,000 dwellings affordable and available for lower income private renters.
- ABS data indicate that in 2005–06 more than 400,000 lower income private renters were in housing stress. Of these, 156,000 had rents that exceeded 50 per cent of their household income.
- In the decade to 2006, ABS data indicate that the proportion of lower income private renters in housing stress increased from 43 to 60 per cent.

Key elements of affordability

Overview

The high level of aggregation of the state of demand and supply over time can conceal what is happening at a submarket level and the impacts on lower income households in terms of access, affordability and choice. Indeed, one of the primary reasons for concern over the state of supply is the effect that supply has on housing affordability.

One of the consequences of supply gaps such as those identified in Chapter 4 will be a response from the market that is manifested in pressures on house prices and rent levels with resultant housing stress and housing affordability problems concentrated among low income households.

The general upward trend in real house prices experienced in Australia over the past 30–40 years (Figure 1.1) has been driven primarily by the interaction of population growth, increases in household income, and more readily and cheaply available credit, with a relatively inelastic or unresponsive supply of land on which to build housing that provides ready (and affordable) access to employment opportunities or satisfies lifestyle aspirations.

- Greenfield land at the urban fringe or in regional locations is often remote from employment opportunities, particularly if access has to be by public transport.
- Infill development including brownfield land in more accessible locations is in limited supply and is often more expensive to develop (see Chapter 3).

Cyclical variations around the general upward trend in house prices have been driven by factors such as:

- the impact of the cost and availability of finance on borrowing capacity (see Chapter 3)
- fluctuations in demand due to short-term changes in underlying and/or effective demand, in part stemming from policy changes (see Chapter 2)
- short-term fluctuations in dwelling completions, affecting supply (see Chapter 3).

The impacts of these changes at an aggregate level have significant effects on the affordability of housing both for home buyers and for renters.

Measuring housing affordability

For the majority of home buyers, housing affordability refers to the terms on which housing can be purchased. It is typically measured by the ratio of average household income to the income required to meet repayments on the mortgage needed to buy a median-priced dwelling. In broad terms, housing affordability for home buyers declines whenever house prices grow faster than borrowing capacity. For renters, housing affordability refers to the relationship between rents and incomes.

While many households with above-average incomes can afford to spend more than 30 per cent of their income in meeting their housing costs, households in the lower half of the income distribution are likely to have insufficient resources available for their non-housing needs if they spend more than 30 per cent of their income on housing. In the main, it is such households that are constrained in their housing choices and adversely affected by rising housing costs. The proportion of lower income households (in the bottom 40 per cent of the income distribution) paying in excess of 30 per cent of their income for housing, therefore, is in widespread use as an affordability indicator. Such households are defined as being in 'housing stress'.

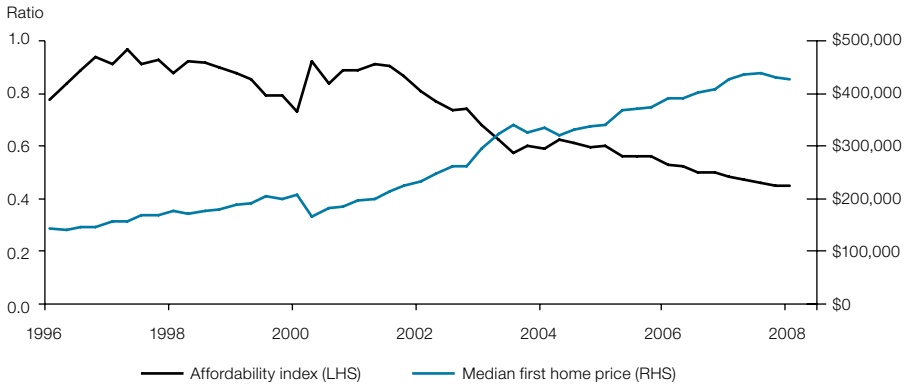
The following sections focus on key affordability issues for first home buyers and renters, with particular emphasis on lower income households as the main groups affected by housing stress. The difficulties faced by households forced to relocate from low-cost to high-cost regions, however, should not be forgotten. More detail on different measures of housing affordability and stress, as well as data on variations in housing stress across different population groups and areas, is presented in Appendix 5: Affordability measures.

Affordability for first home buyers

Over the past decade, rapidly rising house prices have contributed to a significant decline in housing affordability for first home buyers. In 1996, a household with an income equivalent to average weekly earnings and with a 10 per cent deposit almost had sufficient repayment capacity to purchase the median-priced home bought by first home buyers, assuming a maximum debt service ratio of 30 per cent and a 25-year loan at the standard variable bank housing rate. By 2008, however, Housing Industry Association (HIA) data indicated that a household with a total income equivalent to average weekly earnings had less than half of the income needed to purchase the median-priced home bought by first home buyers. Under the same loan terms as in 1996 and with a 10 per cent deposit of $42,400, an annual income of $113,100 was required to service the loan needed to buy the median-priced first home in June 2008.

This decline in affordability is illustrated in Figure 5.1. Broad indicators based on median house prices – such as the HIA's affordability index illustrated in Figure 5.1 – can provide an overview of general affordability trends. Even when they are limited to first home buyer house price data, however, these indicators are highly aggregated and do not necessarily reflect changes in affordability for potential home buyers and particularly for two groups: households with incomes lower than those equivalent to average earnings, and households in high-cost regions. Declining affordability over the decade has made it more difficult for households that, prior to the decline, postponed the decision to buy (possibly for lifestyle reasons) and has meant that many lower income households currently are unable to do so.

Figure 5.1: Housing affordability for first home buyers, 1996–2008



Note: The affordability index is based on the ratio of average weekly ordinary time earnings to the income required to service the mortgage required to buy a median-priced dwelling with a 10 per cent deposit and a maximum debt service ratio of 30 per cent (assuming a 25-year loan at standard variable bank housing interest rates).

Source: Housing Industry Association – Commonwealth Bank, unpublished data on median first home prices, HIA-CB, 2008; Reserve Bank of Australia, *Indicator Lending Rates*, 'Standard variable bank housing loans', Statistical table F5, RBA, Canberra, 2008; RBA, *Labour Costs*, 'full-time adult average weekly ordinary time earnings', Statistical table G6, RBA, Canberra, 2008.

A profile of recent first home buyers is presented in Box 5.1.

Box 5.1: Profile of first home buyers

- There were 135,000 first home buyers in the year to March 2008 – this represents 17.4 per cent of all dwellings financed over this period.
- Almost all (95 per cent) of first home buyers in 2005–06 had a mortgage, compared with 82 per cent in 1995–96.
- Over two-thirds of first home buyer households with a mortgage were couples or couples with children. One-fifth were single persons.
- Home purchase rates are falling among 25–34 year olds.
- The average home loan for first home buyers was $261,000 in September 2008.
- The annual repayment on this average home loan was $26,900 at September 2008 (assuming a 25-year loan at standard variable bank housing interest rates).
- Annual interest on a standard variable loan had risen to an all-time high of $20,100 in March 2008 (in real terms).
- Average weekly disposable income before housing costs in 2005–06 was $1,200 a week ($62,400 per annum).
- Average weekly disposable income after housing costs in 2005–06 was 27 per cent higher than in 1995–96 but was unchanged from 1999–2000 at $800 a week ($41,600 per annum) in real terms.

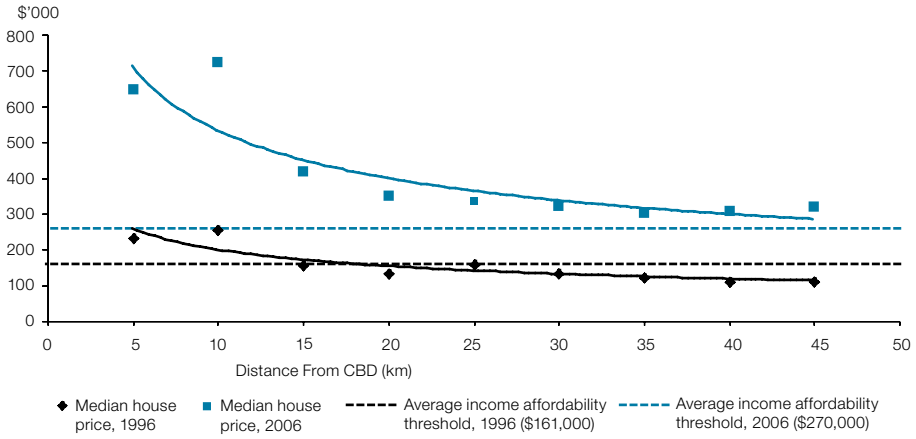
Source: Australian Bureau of Statistics, *Australian social indicators*, cat. no. 4102.0, ABS, Canberra, 2008; Reserve Bank of Australia, *Indicator Lending Rates*, December 2008, table F5, RBA, Canberra, 2008; ABS, *Housing finance Australia*, November 2008, cat. no. 5609.0, ABS, Canberra, 2008.

Supply constraints are among the many reasons why some households might postpone entry into home ownership or choose not to buy when they appear to be able to afford to. Many of the limited number of dwellings that are affordable for aspiring first home buyers in metropolitan regions, for example, are smaller units that may be inappropriate for a young family with children. Alternatively, they may be located on the fringe of the city, where access to employment opportunities is often more constrained. The changing location of dwellings affordable for households with an average income can be seen in the upward shift in house price gradients for Melbourne (Figure 5.2). The constrained access to employment opportunities is shown in Figure 5.3. This also highlights concerns that low income workers who work and live in inner city areas experience significantly greater housing affordability problems compared with those who commute from the fringe, which could have implications for the availability of labour in certain locations and

occupations. There has been some Australian research based on international categories of 'key workers' but this is an area where some more-targeted research could be valuable.[50]

The value placed on the greater amenity of well-located land is reflected in Figure 5.2 in the steepness of the house price gradient. The increased steepness of the gradient in 2006 reflects and highlights the impact of one of the key supply factors that affect housing affordability, that is, the increasing cost of well-located land.

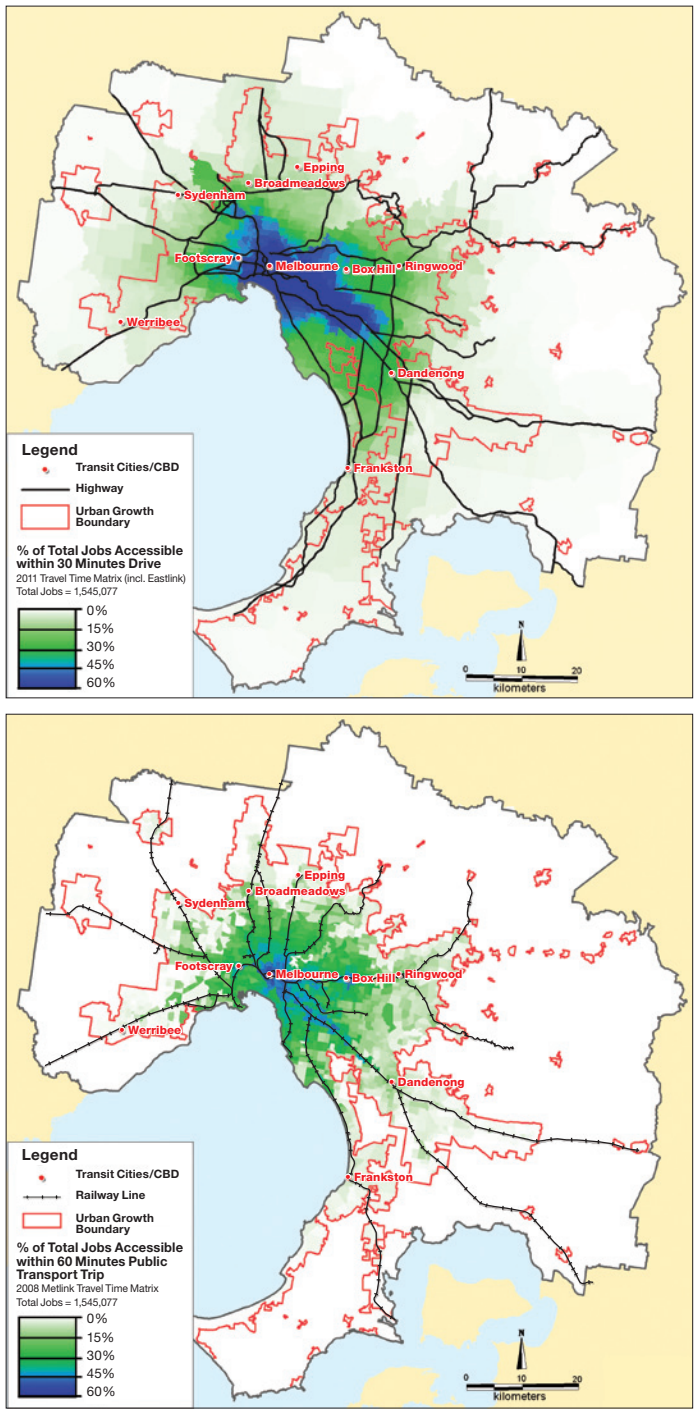
Figure 5.2: Median house price by distance from CBD, Melbourne, 1996 and 2006 (nominal prices)



Source: SGS Economics & Planning Pty Ltd unpublished, 2008, based on: Department of Sustainability and Environment, *A Guide to Property Values: Data and analysis from the Valuer-General Victoria using 2007 property sales information for residential, commercial, industrial and rural property,* DSE, Werribee, 2007; Australian Bureau of Statistics, *1996 Census: Basic Community Profile, Melbourne*, 'B23 Household type by weekly household income', cat. no. 2020.0 ABS, Canberra, 2000; ABS, *2006 Census Tables, Melbourne*, 'Gross household income (weekly) by household composition: count of occupied private dwellings', cat. no. 2068.0, ABS, Canberra, 2007.

50 BankWest, *Key worker housing affordability report*, BankWest Financial Indicator Series, BankWest, Perth, May 2008, <www.bankwest.com.au/Media_Centre/BankWest_Research>. The report tracks housing affordability for five groups of key public sector workers – nurses, teachers, police officers, firefighters and ambulance officers in 540 local government areas across Australia.
The Australian Housing and Urban Research Institute (AHURI) has also published research on housing affordability, occupation and residential location of working households in Sydney, Melbourne and south-east Queensland. See J Yates, B Randolph & D Holloway, *Housing affordability, occupation and location in Australian cities and regions*, Australian Housing and Urban Research Institute Final Report no. 91, AHURI, Sydney, March 2006. The research focused on four 'indicator' occupations – nursing professionals, cleaners, hospitality workers and computing professionals.

Figure 5.3: Total jobs accessible in Melbourne, 2006

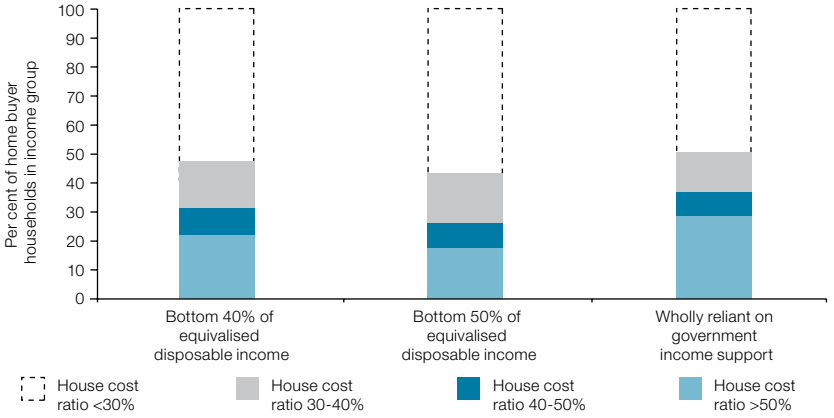


Source: SGS Economics and Planning based on 2006 ABS Census, Journey to work by travel zone. Department of Transport (formerly Department of Infrastructure) Melbourne Integrated Transport model 2011 AM peak car travel line matrix. Metlink Melbourne (public transport times 23 July 2008).

Part of the effect of declining affordability can be seen in the high housing costs faced by lower income households that do choose to become home buyers. Figure 5.4 shows the proportion of home buyer households in the lowest 40 per cent and 50 per cent of the income distribution in 2005–06 with housing costs in excess of 30, 40 and 50 per cent of their gross household income. It also shows the same data for households wholly reliant on government income support.

- Almost 50 per cent of lower income home buyers in the bottom 40 per cent of the income distribution were in housing stress, with housing costs in excess of 30 per cent of their household income.
- Over 20 per cent had housing costs in excess of 50 per cent of their household income.
- Over 40 per cent of home buyers in the lower half of the income distribution had housing costs in excess of 30 per cent of their household income.
- Nearly 30 per cent of home buyers wholly reliant on government income support had housing costs in excess of 50 per cent of their household income.

Figure 5.4: Housing cost outcomes for home buyers, 2005–06



Source: derived from Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

Affordability outcomes for lower income households with high housing costs represent one of the key indicators identified by the Council. These indicators are intended to provide a benchmark against which the future performance of the housing market might be assessed.

The numbers of home buyer households affected are presented under Key Indicator 3.[51]

51 These estimates include approximately 20,000 households with very low reported incomes and with rents in excess of their total income.

Key Indicator 3 – Affordability outcomes for home buyers

This key indicator is the third in the set of six preliminary indicators drafted by the Council to provide a benchmark for further monitoring of housing demand and supply and related affordability outcomes.

- Number of households with equivalised disposable incomes below the 40th or 50th percentiles and paying more than 30 or 50 percent of their income in mortgage and other housing costs.

Proportion of income paid for housing	Income percentile	Whole of Australia	Capital cities (a)	Balance of States (a)
>30	<40	280,000	186,000	91,000
>30	<50	368,000	246,000	118,000
>50	<40	131,000	96,000	34,000
>50	<50	151,000	110,000	40,000

(a) Data do not include ACT and NT.

Source: derived from Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

- Number of households wholly reliant on government income support payments and paying more than 30 or 50 percent of their income in mortgage and other housing costs.

Proportion of income paid for housing	Whole of Australia	Capital cities (a)	Balance of States (a)
>30	31,000	20,000	11,000
>50	17,000	11,000	6,000

(a) Data do not include ACT and NT.

Source: derived from Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

These estimates are indicators of just one of the outcomes of declining affordability for home buyers. They do not reflect the pressures on households with housing costs below 30 per cent of household income but living in inappropriately small dwellings or experiencing high transport costs because their housing is located far from work or essential services.

Affordability issues for renters

Households with a preference for living in a larger dwelling and/or in a location with better access to amenities than they can afford to buy may have the option of renting rather than buying. Other households may have no choice but to seek accommodation in the private rental market. Both types of household add to pressures in the private rental market.

A profile of renters is presented in Box 5.2.

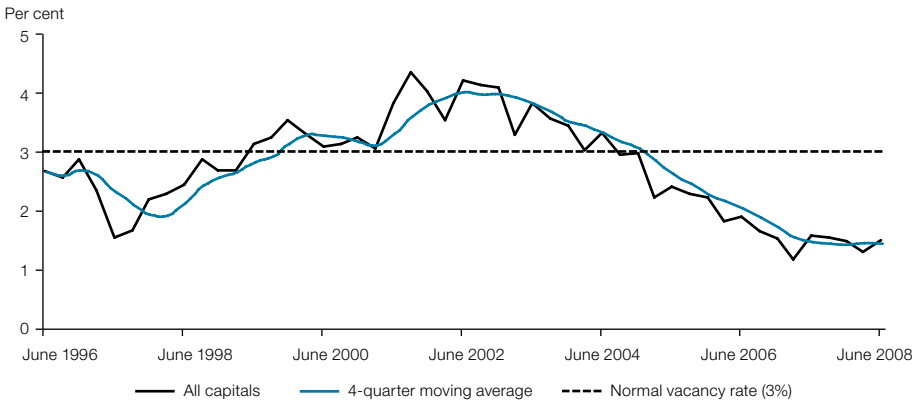
Box 5.2: Profile of renters

- Over 1.7 million households in 2005–06 rented from private landlords.
- Renters comprised 29 per cent of all households in 2005–06, compared with 27 per cent of households in 1995–96.
- Renters tend to be a younger group than owner–occupier households. In 2005–06, the median age for renters (based on the age of the household reference person) was 37 years, which was 15 years younger than the median age for owner–occupier households (52 years).
- In 2006, renters were three times more likely than owner–occupiers to have changed address within the previous 12 months. At the 2006 census, 35 per cent of people who were renting had lived at a different address within the last year, compared with only 10 per cent of owner–occupiers.
- In 2005–06, 32 per cent of all renter households were classified as low income households, and around three-quarters (74 per cent) of these low income renters were renting from a private landlord.
- There were an average of 944,000 individuals and families receiving Commonwealth Rent Assistance during 2007–08.
- The number of social housing dwellings has declined from around 400,000 in 1996 to 390,000 in 2008. Increasingly, social housing dwellings are being allocated to households with low incomes and complex needs.
- About three-quarters of households in social housing in 2005–06 were single persons or single-parent families.

Sources: Australian Bureau of Statistics, *Australian social indicators*, cat. no. 4102.0, ABS, Canberra, 2008; Commonwealth Department of Families, Housing , Community Services and Indigenous Affairs, *Annual Report 2007–2008*, FaHCSIA, Canberra, 2008; Australian Institute of Health and Welfare, *Housing Assistance in Australia 2008*, cat. no. HOU 173, AIHW, Canberra, 2008; AIHW: J Storer & D Wilson, *Who receives priority housing and how long do they stay?*, Bulletin series no. 63, cat. no. AUS 105, AIHW, Canberra, 2008; further sources referenced in Appendix 2, Table 5.2.

In the past decade, the extra demand on private rental housing has occurred at a time when high interest rates, reduced tax rates and increased opportunities for saving through superannuation have impacted on investor interest in the private rental market. Currently, vacancy rates are low (see Figure 5.5) and rents are rising in real terms (see Figure 1.1).

Figure 5.5: Rental vacancy rates, 1996–2008



Source: derived from Real Estate Institute of Australia, *Market Facts*, June Quarter 2008, REIA, Canberra, 2008 and historical data from the *Market Facts* series.

With minor exceptions, vacancy rates have shown a downwards trend since 2002 and, since March 2005, have been lower than 3 per cent in every capital city. Vacancy rates of around 3 per cent are considered the 'industry norm', and represent a good balance between demand and supply. Figure 1.1 shows the growth in real rents since vacancy rates began to decline in 2002.

Lower income renters in the private market

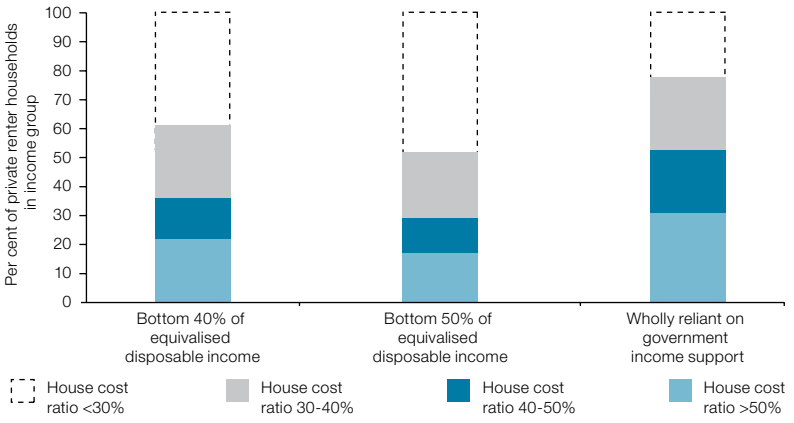
Lower income households have felt the brunt of pressures arising from low vacancy rates and higher rents. The burden on low income households in the private rental market is particularly extreme. For the period 1996 to 2006, ABS data indicate that the proportion of lower income private renter households in housing stress (defined as those in the bottom 40 per cent of the income distribution paying more than 30 per cent of their income towards housing costs) increased from 43 to 61 per cent.

Figure 5.6 shows the equivalent ABS data for private renter households in 2005–06 as shown in Figure 5.4 for home buyers. The data indicate that:

- Over 20 per cent of lower income private renters paid rents in excess of 50 per cent of their household income
- Nearly 80 per cent of private renters wholly reliant on government income support paid rents in excess of 30 per cent of their total household income including Commonwealth Rent Assistance
- Over 30 per cent of private renters wholly reliant on government income support paid rents in excess of 50 per cent of their total household income including Commonwealth Rent Assistance.

These proportions would be lower if rents were defined as net of Commonwealth Rent Assistance, but without adding Commonwealth Rent Assistance to income. This is the methodology that is used by the Productivity Commission in its Annual Report on Government Services. Using this latter approach, Commonwealth Rent Assistance reduced the proportion of recipients assessed to be in housing stress in June 2008 from 66 per cent prior to receiving Commonwealth Rent Assistance to 36 per cent after taking Commonwealth Rent Assistance into account.

Figure 5.6: Housing cost outcomes for private renter households, 2005–06



Source: derived from Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

The number of lower income private renter households with poor affordability outcomes, as identified by using ABS data, is presented below. Because more lower income households are renting privately rather than buying, there are more private renters in housing stress than there are home buyers in housing stress.

- In 2005–06, there were 439,000 households in housing stress in the private rental market. This represents 60 per cent of all lower income private renters (and 23 per cent of all private renter households). This compares with 280,000 (or 48 per cent) of lower income home buyers in housing stress
- By 2045, almost two-thirds of lower income private renters are projected to be in housing stress.[52]

Key Indicator 4 – Affordability outcomes for private renters

- Number of households with equivalised disposable incomes below the 40th or 50th percentiles and paying more than 30 or 50 percent of their income in rent.

Proportion of income paid for housing	Income percentile	Whole of Australia	Capital cities (a)	Balance of States (a)
>30	<40	439,000	270,000	166,000
>30	<50	489,000	307,000	177,000
>50	<40	156,000	106,000	49,000
>50	<50	161,000	111,000	49,000

(a) Data do not include ACT and NT.

Source: derived from Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

- Number of households wholly reliant on government income support payments and paying more than 30 or 50 percent of their income in rent.

Proportion of income paid for housing	Whole of Australia	Capital cities (a)	Balance of States (a)
>30	148,000	81,000	66,000
>50	59,000	41,000	18,000

(a) Data do not include ACT and NT.

Source: derived from Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008.

Much of the reason for high levels of housing stress among private renter households arises because of an inadequate supply of affordable rental dwellings.

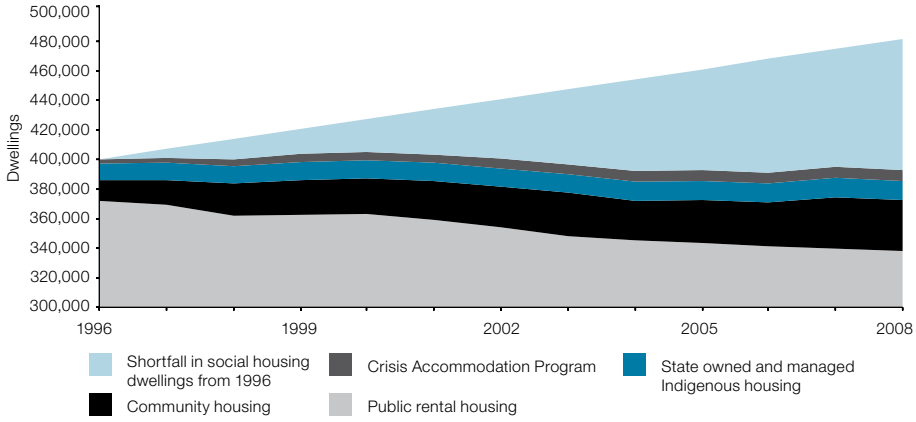
52 J Yates, H Kendig et al., *Sustaining fair shares*, February 2008, p. 54.

Impact of decline in social housing stock on low income renters

In the past, social housing has been a major component of housing supply for low income households. However, in the past decade, this stock has been in decline while demand has been increasing (see Figure 5.7). Social housing includes public rental housing, community housing, State–Owned and Managed Indigenous Housing (SOMIH), and dwellings funded under the Crisis Accommodation Program (CAP). Public rental housing and SOMIH dwellings are owned or leased and managed by the State and Territory housing authorities. Community housing and CAP dwellings are generally managed by non-profit community-based organisations.

As noted in Chapter 3, there was a shortfall of around 90,000 dwellings between the total number of social housing dwellings in 2008 and the number needed to maintain social housing dwellings at the same share of all dwellings as in 1996.

Figure 5.7: Social housing dwellings (number), 1996–2008



Note: An implication could be drawn from this graph that there was no unmet need for social housing in 1996. As at 30 June 1996, however, the *Housing Assistance Act 1989 Annual Report 1995–96* indicated that there were 236,000 applicants on the waiting list for public housing.

Source: 'Social housing shortfall' derived from trend in growth of total dwellings from Australian Bureau of Statistics, *2006 Census Tables, Australia*, 'Dwelling Structure by Occupied/Unoccupied Dwellings, Time Series Statistic', cat. no. 2068.0, ABS, Canberra, 2007; Commonwealth Department of Social Security, *Housing Assistance Act 1989 Annual Report 1995–96*, DSS, Canberra, 1997; further sources referenced in Appendix 2, Table 5.2.

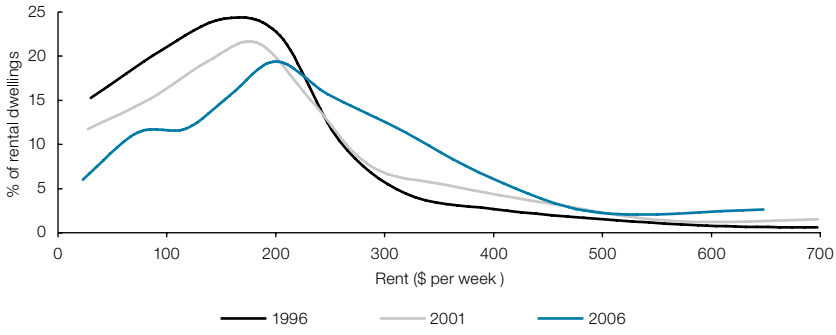
Public housing supply has fallen as a long-term trend. This is due to public housing jurisdictions' deteriorating recurrent financial outcomes, reduced capital allocations by the national and state and territory governments and governments' preference for new social housing to be operated by the not-for-profit sector. The 1996 Commonwealth State Housing Agreement gave priority to targeting public housing to those most in need. Tighter targeting of public housing has meant that a growing number of tenants are on low incomes, have complex needs or are entering public housing at a time of significant crisis in their lives. This is impacting on revenue from public housing rents as well as costs.[53]

Impact of decline in low-rent private rental housing stock on low income renters

A decline in social housing could be mitigated or even desirable if it were accompanied by an increased supply of private rental dwellings that are available and affordable for lower income households by virtue of rents charged and/or rent assistance provided by government. However, there has also been a decline in low-rent private supply (see Figure 5.8):

- The total stock of dwellings in private rental grew between 1996 and 2006, but all of this growth was in dwellings with a rental value of at least $200 per week and most of it was in dwellings with a rental value of at least $300 per week (in 2006 dollars)
- In 2006, there were 236,000 more private rental dwellings than in 1996. However, there were 125,000 fewer dwellings with rents less than $232 per week (in 2006 dollars) than in 1996. In other words, the total supply of dwellings affordable for lower income households fell in absolute as well as relative terms.

Figure 5.8: Distribution of private rental dwellings, Australia, 1996, 2001, 2006



Note: rents are denominated in 2006 dollars.

Sources: Australian Bureau of Statistics, *2006 Census Tables, Australia*, cat. no. 2068.0, ABS, Canberra, 2007; M Wulff et al., *Australia's private rental market: changes (2001–2006) in the supply of, and demand for, low rent dwellings*, Australian Housing and Urban Research Institute project no. 50502, forthcoming; J Yates, M Wulf & M Reynolds, *Changes in the supply of and need for low rent dwellings in the private rental market*, Australian Housing and Urban Research Institute Final Report no. 61, AHURI, Sydney, 2004.

53 J Hall & M Berry, *Public housing: shifting client profiles and public housing revenues*, Australian Housing and Urban Research Institute Final Report no. 108, AHURI, Melbourne, November 2007, p.1.

Between 1996 and 2006, however, real household incomes improved for most households.

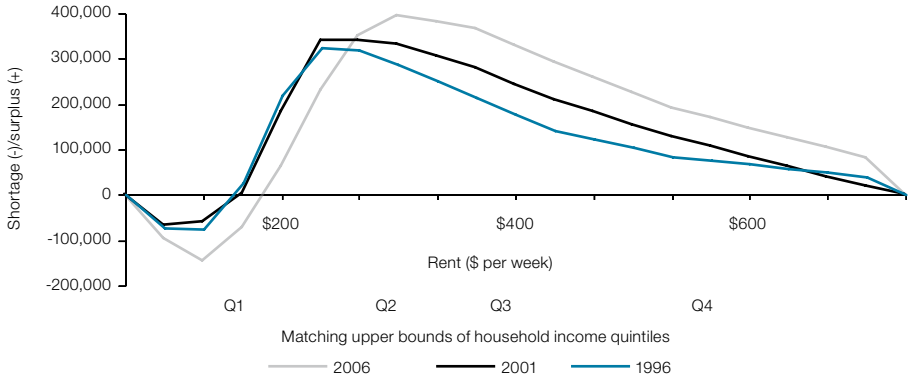
- Between 1996 and 2006, there was an increase in the total number of private renter households with incomes above $1,028 per week (in 2006 dollars) and a decrease in the total number of households with incomes less than this.
- By 2006, there were 32,000 fewer households that could only afford to pay rents of less than $232 per week.

The net effect of the current rent distribution of private rental dwellings and the income distribution of private renters is a significant shortfall in the supply of private rental dwellings that are affordable for lower income households. In 2006 there was:

- an absolute shortage of 146,000 dwellings in the private rental sector with rents below $115 per week (affordable for those with gross household incomes below $20,000 per year and roughly in the first quintile of the income distribution)
- an 'apparent surplus' of 230,000 dwellings with rents below $232 per week (affordable for those with household incomes below $40,000 per year and roughly in the lowest two quintiles of the income distribution). This 'apparent surplus' is discussed in more detail later in this chapter.

As shown in Figure 5.9, these outcomes represent a worsening of the absolute shortage of private rental dwellings that are affordable for low income households in 2006 compared with equivalent estimates for 2001 or 1996.

Figure 5.9: Shortage and/or surplus of affordable private rental dwellings, 1996–2006



Note: Rents are in real terms as at 2006.

Sources: Australian Bureau of Statistics, *2006 Census Tables, Australia*, cat. no. 2068.0, ABS, Canberra, 2007; M Wulff et al., 'Australia's private rental market: changes (2001–2006) in the supply of, and demand for, low rent dwellings', Australian Housing and Urban Research Institute project no. 50502, forthcoming; J Yates, M Wulf & M Reynolds, *Changes in the supply of and need for low rent dwellings in the private rental market*, Australian Housing and Urban Research Institute Final Report no. 61, AHURI, Sydney, 2004.

When low-rent stock is of sufficient quality that higher income households compete with lower income households for it, the process of 'filtering' – which relies on higher income households vacating existing stock when new, higher-quality stock becomes available – fails. When this happens, the low-rent stock that does exist is not available for low income households.

Table 5.1 provides a snapshot of the private rental stock available in 2006. The second-last column gives the shortage in the total number of dwellings affordable for households with a given level of income; the last column presents the shortage in the total number of dwellings that are both affordable and available.

Table 5.1: Affordable and available private rental stock, 2006

Household income ($ per week)	Quintiles (approx.)	Affordable stock (cumulative)	Number of households (cumulative)	Affordable dwelling shortage (-)/ surplus (+) (cumulative)	Affordable and available shortage (-)/ surplus (+) (cumulative)
$0–$256	Q1: Low	19,000	114,000	-95,000	-110,000
$257–$385		91,000	237,000	-146,000	-202,000
$386–$514	Q2: Low-moderate	285,000	356,000	-71,000	-234,000
$515–$642		540,000	477,000	63,000	-246,000
$643–$771		830,000	600,000	230,000	-251,000
$772–$900	Q3: Moderate	1,055,000	704,000	n.a.	n.a.
$901–$1028		1,192,000	798,000	n.a.	n.a.
$1,029–$1,287		1,347,000	979,000	n.a.	n.a.
$1,288–$1,544	Q4: Moderate-high	1,408,000	1,115,000	n.a.	n.a.
$1,545–$1,930		1,439,000	1,247,000	n.a.	n.a.
$1,931–$2,575	Q5: High	1,456,000	1,374,000	n.a.	n.a.
$2,576 +		1,470,000	1,470,000	n.a.	n.a.

Notes:

'Affordable' means rent is less than 30 per cent of household income; 'available' means dwelling is not occupied by a higher income household.

n.a.: not applicable. (Affordability estimates based on a housing stress measure are restricted to the bottom two quintiles.)

Source: M Wulff et al., *'Australia's private rental market: changes (2001–2006) in the supply of, and demand for, low rent dwellings*', Australian Housing and Urban Research Institute project no. 50502, forthcoming.

The following points are noteworthy:

- In 2006, only 91,000 dwellings were affordable for the 237,000 private renters in Australia with incomes in the first income quintile
- Of these, 56,000 dwellings were occupied by households in higher income quintiles. This results in an increase from a shortfall of 146,000 affordable dwellings to a shortfall of 202,000 affordable and available dwellings for those in the lowest quintile
- For the 600,000 private renter households in the lowest two quintiles of the income distribution, there were 830,000 affordable private rental dwellings

- Of the dwellings affordable for lower income private renters in the lowest two quintiles of the income distribution, 481,000 of these were occupied by households in the top three quintiles of the income distribution. This reduced an 'apparent surplus' of 230,000 affordable dwellings to a shortage of 251,000 affordable and available dwellings
- Overall, 58 per cent of all private rental dwellings are not available to households in the bottom two quintiles because they are occupied by households in the top three quintiles.

Higher income households occupying the only dwellings that are affordable for lower income households benefit by having rents that are less than 30 per cent of their household income, and often significantly less. Lower income households that are unable to access affordable housing, either because there is an inadequate total supply or because the limited supply that does exist is rented to those with a higher capacity to pay, are forced into housing stress by virtue of having to pay 30 per cent or more of their income in rent.

Key supply indicators for affordability

In developing key supply indicators for affordability, the Council considered the measures of affordable housing supply established by the US Department of Housing and Urban Development (HUD),[54] which cover not only affordability for households in a particular income range, but also availability and adequacy of that supply. The Council considers that further work is needed to broaden the scope of these indicators to encompass measures of additional variable costs related to housing, such as travel and/or access to employment, housing lifecycle costs (maintenance), utilities, and adequate housing measures relating to quality of construction and current condition.

The estimates below approximate those established by HUD and give simple estimates based on data available from the 2006 Census. More sophisticated estimates will be developed for future reports as suitable data become available.

54 United States Department of Housing and Urban Development, *Affordable housing needs 2005: report to Congress*, US Department of Housing and Urban Development, Office of Policy Development and Research, Washington, DC, May 2007, <www.huduser.org/publications/affhsg/affhsgneeds.html>.

Key Indicator 5 – Affordable housing supply for lower income renters

Shortage of dwellings affordable to households with equivalised disposable incomes below the 40th or 50th percentiles.

Proportion of income paid for housing	Income percentile	Whole of Australia	Capital cities	Balance of States
>30	<40	–230,000	–123,000	–107,000
>30	<50	–394,000	–265,000	–130,000

Note: Negative numbers imply a surplus.

Key Indicator 6 – Affordable and available housing supply for lower income renters

Shortage of dwellings affordable and available to households with equivalised disposable incomes below the 40th or 50th percentiles.

Proportion of income paid for housing	Income percentile	Whole of Australia	Capital cities	Balance of States
>30	<40	250,000	160,000	90,000
>30	<50	310,000	190,000	120,000

Note: Numbers are rounded to the nearest 10,000.

Changing Australian Government policy and programs

Consistent with its election commitments, the Australian Government is implementing a range of measures to address homelessness, increase social housing supply and improve housing affordability for owners and renters. The new National Affordable Housing Agreement is a key initiative.

Box 5.3: National Affordable Housing Agreement

The Australian and State and Territory governments have signed a new National Affordable Housing Agreement to apply from 1 January 2009. The new agreement brings together former Specific Purpose Payment funding for affordable housing and homelessness into a single, overarching housing agreement involving all levels of government. This includes funding previously provided through the Commonwealth State Housing Agreement and the Supported Accommodation Assistance Program. The new agreement will provide $6.2 billion worth of assistance in the first five years.

The new agreement has united all levels of government to undertake reforms in the housing sector, including to: improve integration between the homelessness service system and mainstream services; reduce concentrations of disadvantage that exist in some social housing estates; improve access by Indigenous people to mainstream housing, including home ownership; enhance the capacity and growth of the not-for-profit housing sector; increase capacity to match new housing supply with underlying demand, including as a result of work undertaken by the National Housing Supply Council; and allow for greater efficiency in the supply of housing.

The National Affordable Housing Agreement provides the framework for three new affordable housing National Partnership Agreements that are targeted at social housing, homelessness and remote Indigenous housing. These new agreements will improve housing outcomes for low income families, homeless people and Indigenous Australians living in remote areas. The new agreements incorporate $1.6 billion of new Australian Government investment over five years. This includes $400 million for building new social housing dwellings.

A related important set of initiatives is embodied in the Australian Government's White Paper on homelessness, *The Road Home: A National Approach to Reducing Homelessness*, released in December 2008.[55]

55 Australian Government, *The Road Home – A National Approach to Reducing Homelessness*, Canberra, December 2008.

Conclusions

CHAPTER 6

Conclusions

Key findings are summarised in the Executive Summary, the commencement of each chapter and reinforced in the Council's preliminary key indicators in Chapters 4 and 5 (Key Indicators 1 and 2 on aggregate demand and supply; Key Indicators 3 and 4 on affordability for home buyers and private renters; and Key Indicators 5 and 6 on affordable and available supply for private renters). They are not repeated here. Rather, this short concluding section of the report focuses on the implications of the Council's work to date and on what more the Council needs to do to deliver valuable responses to its Terms of Reference.

Implications of findings to date

As noted in several places in the report, the projections of demand, of supply and of the gap between them are simplistic and unlikely to be realised in the longer term. The housing market is dynamic, as is the economy as a whole, and the emergence of a major gap between effective demand and supply would stimulate market reactions affecting price (affordability) and aggregate supply.

No matter how sophisticated the Council's modelling may become, however, long-range projections are fraught with uncertainty and must have profound margins of error. Twenty-year projections simply serve to illustrate the consequence of proceeding on a certain trajectory rather than provide a likely view of the future. That is a key outcome of the Council's projection work to date – it demonstrates that present levels of production are insufficient to meet Australia's housing needs under a variety of population growth assumptions and that changes are necessary to meet predictable growth in demand.

How much of that remedial action is likely to come from the market itself and how much change might come from government action is not yet known.

Many Australian government jurisdictions are exercised by the need to ensure adequate land supply to accommodate growth while increasing population density and ensuring adequate provision of urban infrastructure. Some States have recently announced initiatives to this end. Infill land supply and constraints on development in established urban areas are likely to be an increasingly significant issue in coming years.

Developers and others are concerned that the increasing cost of land and the burden of taxes and charges associated with development are pricing housing beyond the reach of many who would have been able to buy in previous years, and that this is restraining growth in aggregate housing supply. The Council notes that ensuring an adequate supply

of affordable serviced lots with ready access to jobs, transport and services has proven challenging in several cities. Measures to increase land supply and reduce the cost of urban infrastructure to home buyers would likely stimulate an increase in production and a reduction in the price of new housing.

Planning and development approval processes fulfil important economic and social purposes, but they also extend the time required to deliver housing. They also vary considerably throughout Australia, adding to transaction costs. At the Federal level, in cooperation with States and local governments, action is underway to improve the efficiency of planning and development approval processes.

At least at the lower end of the rental and owner-occupied portions of the market, it is unlikely that the market itself will be able to rectify the supply shortfall, and government policy and programs will be required to meet the gap. The form this takes – whether changes in the nature and incidence of housing-related taxation, measures to address land supply, measures to reduce the cost and improve the delivery of urban infrastructure, further changes in planning and development approvals processes, subsidies for owner-occupancy and investment, and/or direct provision of housing – is a matter for governments at all levels. All are under active consideration by the Australian Government and, State and Territory governments at the present time.

The Council's work to date indicates that action is needed to lift social housing supply and that the supply of affordable private rental housing for lower income households is also inadequate. These are both targets of recent Australian Government initiatives and have also been addressed to some extent by some State governments. The emerging National Affordable Housing Agreement provides an opportunity for governments to increase and coordinate their efforts.

Summary of future research priorities

The National Housing Supply Council has been established at arm's length from government to improve the evidence base for housing policy and provide independent forecasts of the adequacy of construction and land supply to meet future housing needs. The Council is building a research and development program to improve the knowledge base for longer term empirical analysis and forecasting for the State of Supply Report, and to pursue evidence about emerging issues identified through the work of the Council.

The first objective of the research and development program relates to the ongoing requirement for quality data and methods to underpin production of the annual State of Supply Report. Projects envisaged include:

- a macro-economic model of the housing market
- ongoing collection of data and implementation plans from States and Territories in relation to land supply and the dwelling construction pipeline

- ongoing collection of demographic information (household projections, etc.) to support demand projections
- refinement of ongoing indicator measures and definition of associated data collection requirements.

The second research objective relates to the need to draw on expert resources and evidence to fill information gaps identified by the Council as part of drafting the first State of Supply Report.

The following research topics are being considered by the Council:

- Analysis and refinement of housing lot supply data provided by States and Territories, including infill development land with a view to improving land supply projections
- Development, calibration, testing and application of a macro-economic model of the housing market that enables assessment of, among other things, the effect of changing economic circumstances on housing market activity, and vice versa
- Development of a housing cost model built on data pertaining to all inputs to the final cost of housing for consumers. These inputs would include raw land costs, development costs and charges, land holding costs, housing production costs, legal costs for producers and consumers, taxes on producers and consumers, marketing costs, risk premiums, development margins and so on. The Council's objective is to be able to model these inputs across housing types, geographical locations and market conditions
- Analysis of housing submarkets to provide a more detailed assessment of the current situation and likely trends in supply, demand and affordability for particular dwelling types and household types

  Submarkets of particular current interest include:

  - apartments
  - smaller units on the urban fringe
  - aged households
  - first home buyers
- Characteristics of an efficient housing market and an assessment of Australian housing markets against these characteristics – comprising a conceptual theoretical analysis of the elements of an efficient housing market and an empirical assessment of the relative efficiency of various Australian housing markets (compared with one another and with 'world's best practice')

- Detailed assessment of housing market 'hotspots', with analysis of the drivers, costs and other impacts of localised rapid growth in housing demand
- Issues for assessment include the lag between growth in demand and increase in construction activity, how the market otherwise adjusts to increased demand and, in particular, the price, affordability and displacement effects of rapid demand growth
- Analysis of the vacant dwelling stock – including explanations as to why stock may be vacant (e.g. on-the-market, otherwise in the process of turnover, holiday homes, awaiting refurbishment or demolition, long-term unused, etc.)
- Environmental sustainability requirements, costs and benefits – assessment of the current and potential impact of measures to improve environmental sustainability on housing costs, production volumes and affordability, both point-in-time and over the economic life of housing units.

This work is intended to inform the Council's next and subsequent State of Supply reports as well as the advice it provides to government on ways of improving housing supply and affordability.

Appendix 1 Terms of Reference, National Housing Supply Council

Terms of Reference

Rationale

The Commonwealth Government is concerned to improve housing affordability for home buyers and renters. The Government recognises that better information on supply and demand at local, regional, State and national levels could play a valuable role in improving affordability by guiding policy, practice and market behaviour. The Government has established the National Housing Supply Council (the Council) to aggregate and assess data on housing supply and demand and to report to the Minister for Housing on its findings.

The Council of Australian Governments (COAG) supports the establishment of the Council and has agreed to the establishment of a Working Group of State, Territory and Commonwealth officials to ensure data needed by the Council is supplied to it.

Through its various agencies, the Commonwealth has considerable information on the demand side – notably demographic, immigration and household income and expenditure data – as well as some supply side information – such as Australian Bureau of Statistics (ABS) data on housing approvals and commencements and Australian Institute of Health and Welfare (AIHW) data on social housing and responses to homelessness. States and Territories know about the state of land supply, zoning and planning frameworks, and about residential infrastructure requirements and financing. The Council will access and assess these and other data to analyse the balance between demand and supply and help governments at all levels to address housing affordability in an effective and sustainable way. To the extent feasible, the Council will undertake this analysis at both aggregate and disaggregate level.

Role of the National Housing Supply Council

The Council will provide forecasts, analysis and policy advice to the Minister for Housing and publish 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 forecast period. The Council will:

- adopt consistent national standards in measuring and assessing the supply of land and housing and their relationship with housing demand and affordability
- provide a detailed assessment of trends in land availability, construction activity and housing affordability
- identify possible ways of ameliorating obstacles and otherwise improving the supply response
- advise on research findings and desirable additional research on housing demand, supply and affordability at regional, State and national levels.

Accordingly, the Council's State of Supply Report will provide consistent data on trends and forecasts of housing demand and supply at national, State and Territory and local scales. The Report will incorporate assessments of, among other things:

- demographic factors influencing demand such as growth and structure of households, immigration rates and patterns, and the movement of households between cities, regions, State and Territories
- economic factors (cyclical and structural) influencing demand, supply and affordability such as the growth and distribution of household incomes, relative returns from investment in housing, the availability and cost of finance for developers and consumers, business and consumer confidence, and the cost, availability and productivity of land, labour and materials
- development control arrangements – planning and zoning, development assessment, building approval processes, building standards and related market practices – affecting the release of land, development activity and redevelopment potential, including with respect to the variety of different types, sizes, densities and prices of housing
- infrastructure provision and financing
- factors influencing or inhibiting industry innovation in housing and community-building product
- practices and output in the public and not-for-profit housing sectors and at the low cost end of the private rental and home purchase markets.

In considering these matters, the Council will focus particularly on the factors affecting the supply and affordability of housing for families and other households in the lower half of the income distribution as well as on the adequacy of, and movement in cost of, housing supply generally.

In considering housing affordability and factors making housing more or less affordable, the Council will consider the immediate and long run price of housing relative to household incomes. Accordingly, it will attempt to address house and land prices, residential rents, interest rates and other recurrent costs (including of utilities, transport costs and other matters affecting the 'sustainability' of housing in various locations).

The Minister for Housing may request specific advice from the Council.

Modus Operandi

The Council will be supported by a dedicated budget determined by the Minister and a Secretariat in the Commonwealth Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) as well as by the Housing Data Working Group and the presence at all Council meetings of senior ex-officio representatives of the Commonwealth Treasury and FaHCSIA.

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 Australian Bureau of Statistics (ABS), Australian Institute of Health and Welfare (AIHW) and the Australian Housing and Urban Research Institute (AHURI).

In the lead-up to its first report, the Council will meet as often as required to establish standards and procedures, initiate data gathering, analysis, modelling and research, establish a strong working relationship with its Secretariat and progress the inaugural report due by the end of 2008.

In the longer run, the Council aims to meet four times per year at times designed to set the agenda and work programme for the annual State of Supply Report, monitor and guide progress, assist with analysis and the development of findings, consider policy and practice implications and authorise the final report.

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.

Council reports will be presented to the Minister and subsequently published on the internet. They will be the subject of an annual national conference – possibly as part of the National Housing Conference or an industry conference with open attendance – to stimulate discussion, innovation in policy and practice, and continuous improvement in the Council's analysis and advice.

Minutes of meetings will be maintained recording a summary of key discussion points, agreed decisions and actions. Progress reports including the Minutes will be provided to the Minister for Housing after each meeting.

The inaugural State of Supply Report is likely to be 'high level' and less detailed than subsequent reports due to the likely early unavailability of detailed information in all areas of interest and the relatively short time available for the report's production. It will nonetheless provide:

- an assessment of the current balance between housing demand and supply
- likely trends in demand, supply, affordability and their underlying drivers
- an early assessment of major inhibitors and contributors to better balance housing supply and affordability.

Subsequent reports will benefit from richer and more rigorous data, the development of data analysis and modelling for the Council, and additional time for consideration and consultation with other experts.

Members of the National Housing Supply Council

The Council comprises the Chair plus eight members. Appointments to the Council are made by the Minister for Housing in consultation with the Treasurer. The Chair is appointed for up to 3 years and Members for 2 years. The Minister, in consultation with the Chair, will elect 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 the annual State of Supply Report 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, social welfare and community housing, banking and finance, and housing research.

Current members of the Council appointed May 2008 are:

Dr Owen Donald, Chairman	Former Director of Housing, Victoria; former CEO, Australian Housing & Urban Research Institute
Brendan Crotty	Former Managing Director, Australand Property Group
Saul Eslake	Chief Economist, Australia and New Zealand Banking Group Limited
Sue Holliday	Former Director-General of Planning, NSW, former (until April 2008) National President, Planning Institute of Australia
Chris Lamont	Chief Executive, Policy, Housing Industry Association.
Marcus Spiller	Director, SGS Economics and Planning
Marion Thompson	Land Release Coordinator, Urban Development Coordinator, WA Department of Planning and Infrastructure
Stuart Wilson	Managing Director, Wilson Homes, National Industry Skills Committee, Proprietor, Wilson Building Consultants
Dr Judy Yates	Housing Economist, University of Sydney

In addition, the following senior Commonwealth officers attend Council meetings:

Geoff Leeper	Deputy Secretary, FaHCSIA, ex-officio participant observer
David Gruen	Executive Director, Treasury, ex-officio participant observer
Michelle Weston	Head of NHSC Secretariat, FaHCSIA

Appendix 2
Summary data

1. Summary data

Table A1.1: Summary of the main supply and demand projection data used in the report

	Underlying demand			Supply of dwellings		
	Medium household growth projection			Medium trend adjusted for demolition projection		
	Annual increase in underlying demand	Cumulative increase in underlying demand	Total underlying demand	Annual increase in dwelling completions	Total stock at 30 June, occupied dwellings and new additions	Total stock at 30 June Including unoccupied dwellings
		(households)			(dwellings)	
2008	149,000	n.a.	8,347,000	129,000	8,029,000	8,860,000
2009	152,000	152,000	8,499,000	129,000	8,158,000	8,989,000
2010	153,000	305,000	8,652,000	130,000	8,288,000	9,119,000
2011	155,000	460,000	8,807,000	131,000	8,419,000	9,250,000
2012	155,000	615,000	8,962,000	131,000	8,550,000	9,381,000
2013	156,000	771,000	9,118,000	132,000	8,682,000	9,513,000
2014	156,000	927,000	9,274,000	133,000	8,815,000	9,646,000
2015	157,000	1,084,000	9,430,000	133,000	8,948,000	9,779,000
2016	157,000	1,240,000	9,587,000	134,000	9,082,000	9,913,000
2017	157,000	1,397,000	9,744,000	135,000	9,217,000	10,048,000
2018	156,000	1,553,000	9,900,000	135,000	9,352,000	10,183,000
2019	157,000	1,710,000	10,057,000	136,000	9,488,000	10,319,000
2020	156,000	1,866,000	10,213,000	137,000	9,625,000	10,456,000
2021	156,000	2,022,000	10,369,000	137,000	9,762,000	10,593,000
2022	155,000	2,177,000	10,524,000	138,000	9,900,000	10,731,000
2023	154,000	2,332,000	10,678,000	139,000	10,039,000	10,870,000
2024	152,000	2,484,000	10,830,000	139,000	10,178,000	11,009,000
2025	149,000	2,632,000	10,979,000	140,000	10,318,000	11,149,000
2026	145,000	2,778,000	11,125,000	141,000	10,459,000	11,290,000
2027	143,000	2,921,000	11,267,000	142,000	10,601,000	11,432,000
2028	139,000	3,060,000	11,407,000	142,000	10,743,000	11,574,000

Source: National Housing Supply Council estimates based on McDonald–Temple medium household growth scenario; NHSC estimates of net dwelling completions (adjusted for demolitions).

2. Demand data

Table A2.1: Temporary entrants present in Australia as at 30 June, 1999 to 2008

Year	Visa major group	Total
1999	Temporary resident	101,817
	Student	110,638
	Visitor	165,124
	Other temporary entrant/Not stated	65,119
	Total 1999	*442,698*
2000	Temporary resident	118,497
	Student	119,692
	Visitor	178,753
	Other temporary entrant/Not stated	69,234
	Total 2000	*486,176*
2001	Temporary resident	126,151
	Student	136,569
	Visitor	192,811
	Other temporary entrant/Not stated	67,468
	Total 2001	*522,999*
2002	Temporary resident	125,843
	Student	151,146
	Visitor	171,843
	Other temporary entrant/Not stated	69,498
	Total 2002	*518,330*
2003	Temporary resident	130,838
	Student	171,553
	Visitor	165,309
	Other temporary entrant/Not stated	65,919
	Total 2003	*533,619*
2004	Temporary resident	136,383
	Student	177,233
	Student guardian	478
	Visitor	166,153
	Other temporary entrant/Not stated	58,086
	Total 2004	*538,333*

2005	Temporary resident	147,763
	Student	190,272
	Student guardian	1,066
	Visitor	162,183
	Other temporary entrant/Not stated	51,585
	Total 2005	*552,869*
2006	Temporary resident	169,271
	Student	207,823
	Student guardian	1,383
	Visitor	170,439
	Other temporary entrant/Not stated	51,452
	Total 2006	*600,368*
2007	Temporary resident	203,499
	Student	248,500
	Student guardian	2,089
	Visitor	173,601
	Other temporary entrant/Not stated	59,603
	Total 2007	*687,292*
2008	Temporary resident	245,479
	Student	317,897
	Student guardian	3,038
	Visitor	177,974
	Other temporary entrant/Not stated	65,240
	Total 2008	*809,628*

Note: 'Temporary resident' in these tables includes Business Long Stay (457) visas, Working Holiday Maker (417) visas and social, cultural or international relations purposes. 'Visitor' includes business visitors. 'Other temporary entrant' includes bridging visa holders.

Source: Department of Immigration and Citizenship unpublished, 2008.

Table A2.2: Projections of underlying demand based on low, medium and high household growth scenarios: annual increase in underlying demand and total underlying demand projections, Australia, 2008 to 2028

	Annual increase in underlying demand (households)			Total underlying demand (households)		
	Low household growth	Medium household growth	High household growth	Low household growth	Medium household growth	High household growth
2008	133,000	149,000	149,000	8,320,000	8,347,000	8,347,000
2009	136,000	152,000	171,000	8,456,000	8,499,000	8,518,000
2010	138,000	153,000	173,000	8,594,000	8,652,000	8,691,000
2011	140,000	155,000	175,000	8,734,000	8,807,000	8,866,000
2012	141,000	155,000	176,000	8,876,000	8,962,000	9,041,000
2013	143,000	156,000	176,000	9,018,000	9,118,000	9,218,000
2014	143,000	156,000	177,000	9,162,000	9,274,000	9,394,000
2015	145,000	157,000	177,000	9,307,000	9,430,000	9,572,000
2016	146,000	157,000	178,000	9,453,000	9,587,000	9,749,000
2017	147,000	157,000	178,000	9,600,000	9,744,000	9,927,000
2018	147,000	156,000	178,000	9,747,000	9,900,000	10,105,000
2019	148,000	157,000	178,000	9,895,000	10,057,000	10,283,000
2020	149,000	156,000	178,000	10,044,000	10,213,000	10,461,000
2021	150,000	156,000	178,000	10,195,000	10,369,000	10,640,000
2022	150,000	155,000	177,000	10,345,000	10,524,000	10,817,000
2023	151,000	154,000	177,000	10,495,000	10,678,000	10,994,000
2024	149,000	152,000	175,000	10,644,000	10,830,000	11,168,000
2025	147,000	149,000	171,000	10,791,000	10,979,000	11,340,000
2026	145,000	145,000	168,000	10,936,000	11,125,000	11,508,000
2027	143,000	143,000	166,000	11,080,000	11,267,000	11,673,000
2028	141,000	139,000	162,000	11,221,000	11,407,000	11,836,000

Note: Shaded area depicts the main projection series used in the report.

Source: National Housing Supply Council estimates based on McDonald–Temple medium household growth scenario.

Table A2.3: Projections of underlying demand based on *low* household growth, by State and Territory, 2008 to 2028

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
					(households)				
2008	2,676,000	2,058,000	1,669,000	658,000	844,000	206,000	76,000	133,000	8,320,000
2009	2,703,000	2,092,000	1,714,000	665,000	861,000	209,000	77,000	135,000	8,456,000
2010	2,730,000	2,127,000	1,760,000	672,000	878,000	211,000	78,000	137,000	8,594,000
2011	2,758,000	2,162,000	1,808,000	679,000	895,000	214,000	80,000	139,000	8,734,000
2012	2,785,000	2,197,000	1,856,000	686,000	913,000	216,000	81,000	141,000	8,876,000
2013	2,812,000	2,233,000	1,906,000	694,000	930,000	219,000	82,000	142,000	9,018,000
2014	2,839,000	2,269,000	1,957,000	701,000	948,000	221,000	83,000	144,000	9,162,000
2015	2,865,000	2,305,000	2,009,000	708,000	966,000	224,000	84,000	146,000	9,307,000
2016	2,892,000	2,341,000	2,061,000	715,000	984,000	226,000	86,000	148,000	9,453,000
2017	2,918,000	2,378,000	2,115,000	722,000	1,002,000	229,000	87,000	149,000	9,600,000
2018	2,944,000	2,415,000	2,170,000	729,000	1,020,000	231,000	88,000	151,000	9,747,000
2019	2,970,000	2,451,000	2,225,000	736,000	1,038,000	234,000	89,000	152,000	9,895,000
2020	2,996,000	2,488,000	2,282,000	743,000	1,056,000	236,000	90,000	154,000	10,044,000
2021	3,021,000	2,526,000	2,339,000	749,000	1,075,000	238,000	91,000	155,000	10,195,000
2022	3,046,000	2,563,000	2,398,000	756,000	1,093,000	240,000	92,000	157,000	10,345,000
2023	3,070,000	2,600,000	2,457,000	763,000	1,111,000	242,000	93,000	158,000	10,495,000
2024	3,094,000	2,637,000	2,517,000	769,000	1,130,000	244,000	94,000	159,000	10,644,000
2025	3,116,000	2,673,000	2,577,000	775,000	1,148,000	246,000	95,000	161,000	10,791,000
2026	3,137,000	2,709,000	2,638,000	781,000	1,166,000	248,000	96,000	162,000	10,936,000
2027	3,157,000	2,745,000	2,698,000	787,000	1,183,000	250,000	97,000	163,000	11,080,000
2028	3,176,000	2,780,000	2,759,000	792,000	1,201,000	252,000	98,000	164,000	11,221,000

(continued)

Table A2.3: Projections of underlying demand based on *medium* household growth, by State and Territory, 2008 to 2028 (continued)

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
					(households)				
2008	2,692,000	2,063,000	1,661,000	661,000	853,000	206,000	77,000	135,000	8,347,000
2009	2,729,000	2,100,000	1,702,000	670,000	874,000	209,000	78,000	138,000	8,499,000
2010	2,767,000	2,136,000	1,743,000	679,000	895,000	211,000	80,000	140,000	8,652,000
2011	2,807,000	2,172,000	1,785,000	687,000	917,000	214,000	82,000	143,000	8,807,000
2012	2,847,000	2,209,000	1,828,000	696,000	938,000	216,000	83,000	145,000	8,962,000
2013	2,888,000	2,245,000	1,871,000	704,000	959,000	219,000	85,000	148,000	9,118,000
2014	2,928,000	2,281,000	1,914,000	713,000	981,000	221,000	87,000	150,000	9,274,000
2015	2,968,000	2,318,000	1,957,000	721,000	1,002,000	223,000	88,000	153,000	9,430,000
2016	3,009,000	2,354,000	2,001,000	729,000	1,024,000	226,000	90,000	155,000	9,587,000
2017	3,049,000	2,391,000	2,044,000	738,000	1,045,000	228,000	91,000	158,000	9,744,000
2018	3,089,000	2,427,000	2,088,000	746,000	1,066,000	230,000	93,000	160,000	9,900,000
2019	3,130,000	2,464,000	2,132,000	754,000	1,087,000	232,000	94,000	162,000	10,057,000
2020	3,170,000	2,500,000	2,176,000	763,000	1,109,000	235,000	96,000	165,000	10,213,000
2021	3,210,000	2,537,000	2,220,000	771,000	1,130,000	237,000	97,000	167,000	10,369,000
2022	3,250,000	2,573,000	2,264,000	779,000	1,151,000	239,000	99,000	169,000	10,524,000
2023	3,289,000	2,609,000	2,309,000	787,000	1,172,000	241,000	101,000	172,000	10,678,000
2024	3,328,000	2,645,000	2,353,000	795,000	1,192,000	243,000	102,000	174,000	10,830,000
2025	3,365,000	2,679,000	2,396,000	802,000	1,213,000	244,000	104,000	176,000	10,979,000
2026	3,401,000	2,714,000	2,438,000	809,000	1,233,000	246,000	105,000	178,000	11,125,000
2027	3,437,000	2,747,000	2,480,000	816,000	1,252,000	248,000	107,000	180,000	11,267,000
2028	3,471,000	2,780,000	2,521,000	823,000	1,272,000	249,000	108,000	182,000	11,407,000

(continued)

Table A2.3: Projections of underlying demand based on *high* household growth, by State and Territory, 2008 to 2028 (continued)

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
					(households)				
2008	2,692,000	2,063,000	1,661,000	661,000	853,000	206,000	77,000	135,000	8,347,000
2009	2,735,000	2,105,000	1,705,000	671,000	877,000	209,000	79,000	138,000	8,518,000
2010	2,779,000	2,147,000	1,751,000	682,000	901,000	212,000	80,000	140,000	8,691,000
2011	2,825,000	2,188,000	1,796,000	692,000	925,000	214,000	82,000	143,000	8,866,000
2012	2,872,000	2,229,000	1,843,000	701,000	950,000	217,000	84,000	146,000	9,041,000
2013	2,918,000	2,271,000	1,889,000	711,000	974,000	219,000	86,000	148,000	9,218,000
2014	2,965,000	2,313,000	1,937,000	721,000	998,000	222,000	87,000	151,000	9,394,000
2015	3,012,000	2,355,000	1,984,000	731,000	1,023,000	225,000	89,000	153,000	9,572,000
2016	3,059,000	2,397,000	2,031,000	741,000	1,047,000	227,000	91,000	156,000	9,749,000
2017	3,105,000	2,439,000	2,079,000	751,000	1,072,000	230,000	92,000	159,000	9,927,000
2018	3,152,000	2,481,000	2,127,000	761,000	1,096,000	232,000	94,000	161,000	10,105,000
2019	3,200,000	2,524,000	2,175,000	770,000	1,120,000	234,000	96,000	164,000	10,283,000
2020	3,247,000	2,566,000	2,223,000	780,000	1,145,000	237,000	97,000	166,000	10,461,000
2021	3,294,000	2,608,000	2,272,000	790,000	1,169,000	239,000	99,000	169,000	10,640,000
2022	3,340,000	2,650,000	2,320,000	800,000	1,193,000	241,000	101,000	171,000	10,817,000
2023	3,387,000	2,692,000	2,369,000	809,000	1,217,000	243,000	103,000	174,000	10,994,000
2024	3,432,000	2,734,000	2,417,000	818,000	1,241,000	246,000	104,000	176,000	11,168,000
2025	3,477,000	2,775,000	2,464,000	827,000	1,265,000	248,000	106,000	178,000	11,340,000
2026	3,520,000	2,815,000	2,511,000	836,000	1,288,000	249,000	108,000	180,000	11,508,000
2027	3,563,000	2,855,000	2,558,000	844,000	1,311,000	251,000	109,000	183,000	11,673,000
2028	3,604,000	2,893,000	2,603,000	853,000	1,334,000	253,000	111,000	185,000	11,836,000

Source: National Housing Supply Council estimates based on McDonald–Temple low, medium and high household growth projections, 2008.

3. Supply data

Table A3.1: Projections of dwelling completions and net completions (adjusted for demolitions), Australia, 2008 to 2028 as at 30 June

	Projected dwelling completions			Projected net dwelling completions (adjusted for demolitions)		
	Historical low rate projection (a)	Medium trend projection (b)	Historical high rate projection (c)	Historical low rate projection adjusted for demolition rate	Medium trend projection adjusted for demolition rate	Historical high rate projection adjusted for demolition rate
2008	118,000	153,000	183,000	99,000	129,000	154,000
2009	118,000	154,000	184,000	100,000	129,000	155,000
2010	119,000	155,000	185,000	100,000	130,000	155,000
2011	120,000	155,000	186,000	101,000	131,000	156,000
2012	120,000	156,000	187,000	101,000	131,000	157,000
2013	121,000	157,000	188,000	102,000	132,000	158,000
2014	122,000	158,000	189,000	102,000	133,000	159,000
2015	122,000	159,000	190,000	103,000	133,000	159,000
2016	123,000	159,000	191,000	103,000	134,000	160,000
2017	123,000	160,000	192,000	104,000	135,000	161,000
2018	124,000	161,000	193,000	104,000	135,000	162,000
2019	125,000	162,000	193,000	105,000	136,000	163,000
2020	125,000	163,000	194,000	105,000	137,000	164,000
2021	126,000	163,000	195,000	106,000	137,000	164,000
2022	126,000	164,000	196,000	106,000	138,000	165,000
2023	127,000	165,000	197,000	107,000	139,000	166,000
2024	128,000	166,000	198,000	107,000	139,000	167,000
2025	128,000	167,000	199,000	108,000	140,000	168,000
2026	129,000	167,000	200,000	108,000	141,000	168,000
2027	130,000	168,000	201,000	109,000	142,000	169,000
2028	130,000	169,000	202,000	109,000	142,000	170,000

Note: Shaded area depicts the main projection series used in the report.

(a) A level of dwelling completions at a rate similar to the minimum historic annual level of completions over the period 1 July 1980 to 31 December 2007.

(b) Average long-term growth in dwelling completions based on the trend in completions over the period 1 July 1980 to 31 December 2007.

(c) A level of dwelling completions at a rate similar to the maximum historic annual level of completions in over the period 1 July 1980 to 31 December 2007.

Source: Projections are based on Australian Bureau of Statistics, *Building Activity, Australia, December 2007*, cat. no. 8752.0, ABS, Canberra, 2008 and on NHSC estimates for completions net of demolitions. Projection methodology is discussed in Appendix 3.

Table A3.2: Medium trend projection of dwelling completions, by State and Territory, 2006 to 2028

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust
2006	35,000	42,000	39,000	11,000	22,000	3,000	1,000	2,000	154,000
2007	30,000	39,000	39,000	10,000	25,000	2,000	1,000	2,000	148,000
2008	34,000	40,000	40,000	10,000	23,000	2,000	1,000	3,000	153,000
2009	40,000	40,000	38,000	9,000	21,000	2,000	1,000	2,000	154,000
2010	40,000	41,000	38,000	9,000	22,000	2,000	1,000	2,000	155,000
2011	40,000	41,000	39,000	9,000	22,000	2,000	1,000	2,000	155,000
2012	40,000	42,000	39,000	9,000	22,000	2,000	1,000	2,000	156,000
2013	40,000	42,000	39,000	9,000	22,000	2,000	1,000	2,000	157,000
2014	40,000	43,000	39,000	9,000	23,000	2,000	1,000	2,000	158,000
2015	40,000	43,000	40,000	9,000	23,000	2,000	1,000	2,000	159,000
2016	40,000	43,000	40,000	9,000	23,000	2,000	1,000	2,000	159,000
2017	40,000	44,000	40,000	9,000	23,000	2,000	1,000	2,000	160,000
2018	40,000	44,000	40,000	9,000	23,000	1,000	1,000	2,000	161,000
2019	40,000	45,000	41,000	9,000	24,000	1,000	1,000	2,000	162,000
2020	40,000	45,000	41,000	9,000	24,000	1,000	1,000	2,000	163,000
2021	40,000	46,000	41,000	9,000	24,000	1,000	1,000	2,000	163,000
2022	40,000	46,000	41,000	9,000	24,000	1,000	1,000	2,000	164,000
2023	40,000	47,000	42,000	9,000	25,000	1,000	1,000	2,000	165,000
2024	39,000	47,000	42,000	9,000	25,000	1,000	1,000	2,000	166,000
2025	39,000	48,000	42,000	8,000	25,000	1,000	1,000	2,000	167,000
2026	39,000	48,000	42,000	8,000	25,000	1,000	0	2,000	167,000
2027	39,000	49,000	43,000	8,000	26,000	1,000	0	2,000	168,000
2028	39,000	49,000	43,000	8,000	26,000	1,000	0	2,000	169,000

Source: Projections are based on trend data for dwelling completions from Australian Bureau of Statistics, *Building Activity, Australia, December 2007*, cat. no. 8752.0, ABS, Canberra, 2008

Table A3.3: Medium trend projection of dwelling completions, adjusted for demolitions (net completions), by State and Territory, 2006 to 2028

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust
2006	28,000	34,000	38,000	8,000	17,000	2,000	0	2,000	129,000
2007	23,000	32,000	38,000	7,000	20,000	2,000	1,000	2,000	124,000
2008	26,000	33,000	39,000	7,000	19,000	2,000	0	2,000	129,000
2009	31,000	33,000	38,000	6,000	17,000	2,000	0	2,000	129,000
2010	31,000	34,000	38,000	6,000	17,000	2,000	0	2,000	130,000
2011	31,000	34,000	38,000	6,000	18,000	1,000	0	2,000	131,000
2012	31,000	34,000	38,000	6,000	18,000	1,000	0	2,000	131,000
2013	31,000	35,000	39,000	6,000	18,000	1,000	0	2,000	132,000
2014	31,000	35,000	39,000	6,000	18,000	1,000	0	2,000	133,000
2015	31,000	36,000	39,000	6,000	18,000	1,000	0	2,000	133,000
2016	31,000	36,000	39,000	6,000	19,000	1,000	0	2,000	134,000
2017	31,000	36,000	40,000	6,000	19,000	1,000	0	2,000	135,000
2018	31,000	37,000	40,000	6,000	19,000	1,000	0	2,000	135,000
2019	31,000	37,000	40,000	6,000	19,000	1,000	0	2,000	136,000
2020	31,000	38,000	40,000	6,000	19,000	1,000	0	2,000	137,000
2021	31,000	38,000	40,000	6,000	19,000	1,000	0	2,000	137,000
2022	31,000	38,000	41,000	6,000	20,000	1,000	0	2,000	138,000
2023	31,000	39,000	41,000	6,000	20,000	1,000	0	2,000	139,000
2024	31,000	39,000	41,000	6,000	20,000	1,000	0	2,000	139,000
2025	31,000	40,000	41,000	6,000	20,000	1,000	0	2,000	140,000
2026	31,000	40,000	42,000	6,000	20,000	1,000	0	2,000	141,000
2027	31,000	40,000	42,000	6,000	21,000	1,000	0	2,000	142,000
2028	31,000	41,000	42,000	6,000	21,000	1,000	0	2,000	142,000

Source: Projections are based on trend data for dwelling completions from Australian Bureau of Statistics, *Building Activity, Australia, December 2007*, cat. no. 8752.0, ABS, Canberra, 2008 adjusted for NHSC estimates of demolitions (net completions). Projection methodology is discussed in Appendix 3.

Table A3.4: Occupied private dwellings, by dwelling structure and household type, Australia, 2006 (per cent)

	Household type								
	Family households								
	Couple family								
Dwelling structure	without children	with children	One parent family	Other family	Total family	Lone person household	Group household	Other household (a)	Total
Separate house	19.8	28.1	8.4	0.8	57.0	13.0	2.0	2.8	74.8
Semi-detached, row or terrace house, townhouse, etc. with:									
One storey	1.3	0.8	0.6	0.1	2.8	2.4	0.3	0.3	5.8
Two or more storeys	0.8	0.7	0.4	0.1	2.0	0.9	0.3	0.3	3.4
Total semi-detached	*2.1*	*1.5*	*1.1*	*0.1*	*4.8*	*3.3*	*0.6*	*0.6*	*9.2*
Flat, unit or apartment:									
In a one- or two-storey block	1.2	0.6	0.6	0.1	2.5	3.6	0.5	0.7	7.2
In a three-storey block	0.6	0.3	0.2	0.1	1.3	1.3	0.3	0.5	3.3
In a four- or more storey block	0.8	0.3	0.2	0.1	1.3	1.2	0.3	0.8	3.5
Attached to a house	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1
Total flat, unit or apartment	*2.6*	*1.2*	*1.0*	*0.3*	*5.1*	*6.1*	*1.1*	*1.9*	*14.2*
Other dwelling:									
Caravan, cabin, houseboat	0.2	0.0	0.0	0.0	0.3	0.4	0.0	0.6	1.2
Improvised home, tent, sleepers out	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2
House or flat attached to a shop, office, etc.	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.3
Total other dwelling	*0.2*	*0.1*	*0.1*	*0.0*	*0.4*	*0.5*	*0.0*	*0.7*	*1.7*
Total	**24.9**	**30.9**	**10.5**	**1.2**	**67.4**	**22.9**	**3.7**	**6.0**	**100.0**

(a) Comprises 'Visitors only' and 'Other not classifiable' households.

Source: Australian Bureau of Statistics, *2006 Census Tables, Australia*, 'Dwelling Structure by Household Composition and Family Composition for Time Series: Count of occupied private dwellings', ABS cat. no. 2068.0, ABS, Canberra, 2007.

Table A3.5: Occupied private dwellings, by dwelling structure and State and Territory, 2006 (number)

Dwelling structure	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Separate house	1,721,779	1,429,130	1,154,403	482,144	599,069	163,034	43,056	92,151	5,685,386
Semi-detached, row or terrace house, townhouse, etc. with:									
One storey	121,969	123,745	59,739	53,960	62,170	5,937	4,163	10,261	441,944
Two or more storeys	119,381	48,938	53,719	10,786	17,140	1,925	2,351	6,361	260,613
Total semi-detached	*241,350*	*172,683*	*113,458*	*64,746*	*79,310*	*7,862*	*6,514*	*16,622*	*702,557*
Flat, unit or apartment:									
In a one- or two-storey block	163,507	165,366	106,478	47,826	37,708	14,003	5,865	5,136	545,968
In a three-storey block	147,045	39,387	41,280	3,830	11,423	942	2,139	5,049	251,151
In a four- or more storey block	155,292	44,618	47,329	3,934	11,492	792	2,169	3,229	268,866
Attached to a house	4,653	1,877	1,496	580	625	575	105	405	10,322
Total flat, unit or apartment	*470,497*	*251,248*	*196,583*	*56,170*	*61,248*	*16,312*	*10,278*	*13,819*	*1,076,307*
Other dwelling:									
Caravan, cabin, houseboat	23,489	9,392	35,945	4,738	14,939	1,021	5,107	177	94,819
Improvised home, tent, sleepers out	2,980	1,269	4,258	846	2,013	203	1,857	62	13,488
House or flat attached to a shop, office, etc.	8,352	5,230	2,686	921	958	614	248	25	19,034
Total other dwelling	*34,821*	*15,891*	*42,889*	*6,505*	*17,910*	*1,838*	*7,212*	*264*	*127,341*
Not stated	2,007	436	1,188	344	450	22	101	43	4,591
Total	**2,470,454**	**1,869,388**	**1,508,521**	**609,909**	**757,987**	**189,068**	**67,161**	**122,899**	**7,596,182**

Note: 'Australia' includes other territories and does not equal the sum of States and Territories

Source: Australian Bureau of Statistics (ABS), 'Dwelling Type and Dwelling Structure by State/Territory)', retrieved from *CDATA 2006*, cat. no. 2064.0, ABS, Canberra, 2007.

Table A3.5A: Government charges and infrastructure costs for broadhectare developments, Sydney, Melbourne and Brisbane, mid-1980s, mid-1990s and 2007

Sydney	Mid-1980s	Mid-1990s	2007
Section 94 contributions (a)	$3,000	$15,000	$45,000
State infrastructure charges	$0	$0	$33,000
Local government regulations	$2,000	$4,000	$8,000
Compliance costs	$0	$0	$7,500
Stamp duty	$500	$2,500	$6,320
Total charges	**$5,500**	**$21,500**	**$99,820**
Median house price	*$157,275*	*$196,750*	*$591,244*
Proportion of charges to house price	*3.5%*	*10.9%*	*16.9%*
Melbourne	**Mid-1980s**	**Mid-1990s**	**2007**
State infrastructure charges	$0	$1,668	$5,400
Local government regulations	$2,000	$5,412	$15,000
Compliance costs	$0	$0	$6,600
Stamp duty	$500	$900	$2,750
Total charges	**$2,400**	**$7,980**	**$29,750**
Median house price	*$124,435*	*$149,494*	*$440,688*
Proportion of charges to house price	*1.9%*	*5.3%*	*6.8%*
Brisbane	**Mid-1980s**	**Mid-1990s**	**2007**
State infrastructure charges	$0	$1,942	$30,000
Local government regulations	$1,500	$2,580	$4,950
Compliance costs	$0	$0	$6,600
Stamp duty	$300	$750	$1,688
Total charges	**$1,800**	**$5,272**	**$43,238**
Median house price	*$93,063*	*$144,475*	*$516,288*
Proportion of charges to house price	*1.9%*	*3.6%*	*8.4%*

(a) Section 94 contributions are charges paid by developers to fund public amenities and services required as a result of the development.

Source: HIA Economics Group unpublished, 2008.

Table A3.6: Component house and land package costs, Sydney, Melbourne, Brisbane, Adelaide and Perth, 1992, 2002, 2004

	1992		2002		2004	
Sydney	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**
Acquisition	$30,035	38	$73,700	46	$106,500	50
Direct servicing	$13,068	17	$25,250	16	$36,850	17
External and indirect authority requirements	$1,490	2	$2,000	1	$2,850	1
Government taxes and charges	$19,348	25	$31,750	20	$34,467	16
Financial and management costs	$10,725	14	$18,800	12	$22,389	11
Selling costs	$4,236	5	$7,880	5	$9,830	5
Total development costs	$78,902	100	$159,380	100	$212,886	100
Net selling price	$83,000		$191,256		$275,677	
GST (remit ATO)	$0		$11,795		$20,213	
	($)	**(% of package)**	**($)**	**(% of package)**	**($)**	**(% of package)**
Gross land price	$83,000	54	$203,051	60	$275,677	55
House price	$72,000	46	$135,000	40	$226,875	45
House and land package	$155,000	100	$338,051	100	$502,552	100

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Table A3.6: Component house and land package costs, Sydney, Melbourne, Brisbane, Adelaide and Perth, 1992, 2002, 2004 (continued)

	1992		2002		2004	
Melbourne	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**
Acquisition	$8,350	23	$24,040	29	$50,000	41
Direct servicing	$7,625	21	$28,720	35	$34,190	28
External and indirect authority requirements	$1,490	4	$1,640	2	$3,600	3
Government taxes and charges	$9,242	26	$16,535	20	$19,730	16
Financial and management costs	$10,725	30	$4,400	5	$7,200	6
Selling costs	$4,236	12	$7,450	9	$8,560	7
Total development costs	$35,855	100	$82,785	100	$123,280	100
Net selling price	$40,000		$92,000		$133,000	
GST (remit ATO)	$0		$9,200		$13,300	
	($)	**(% of package)**	**($)**	**(% of package)**	**($)**	**(% of package)**
Gross land price	$40,000	38	$101,200	37	$125,750	42
House price	$64,500	62	$175,000	63	$172,519	58
House and land package	$104,500	100	$276,200	100	$298,269	100
Brisbane	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**
Acquisition	$18,052	34	$37,700	43	$84,750	55
Direct servicing	$13,048	24	$22,845	26	$33,675	22
External and indirect authority requirements	$3,466	6	$2,300	3	$0	0
Government taxes and charges	$5,938	11	$11,600	13	$17,650	11
Financial and management costs	$9,100	17	$7,250	8	$8,050	5
Selling costs	$3,960	7	$5,450	6	$10,100	7
Total development costs	$53,564	100	$87,145	100	$154,225	100
Net selling price	$65,000		$107,500		$188,523	
GST (remitted to ATO)	$0		$6,800		$11,477	
	($)	**(% of package)**	**($)**	**(% of package)**	**($)**	**(% of package)**
Gross land price	$65,000	51	$114,300	49	$200,000	51
House price	$61,500	49	$120,000	51	$190,000	49
House and land package	$126,500	100	$234,300	100	$390,000	100

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Table A3.6: Component house and land package costs, Sydney, Melbourne, Brisbane, Adelaide and Perth, 1992, 2002, 2004 (continued)

	1992		2002		2004	
Adelaide	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**
Acquisition	$9,530	32	$15,150	36	n/a	n/a
Direct servicing	$9,780	32	$17,460	42	n/a	n/a
External and indirect authority requirements	$2,464	8	$900	2	n/a	n/a
Government taxes and charges	$1,470	5	$3,000	7	n/a	n/a
Financial and management costs	$4,533	15	$2,550	6	n/a	n/a
Selling costs	$2,395	8	$2,925	7	n/a	n/a
Total development costs	$30,172	100	$41,985	100	n/a	n/a
Net selling price	$33,000		$55,000		n/a	
GST(remit ATO)	$0		$2,600		n/a	
	($)	**(% of package)**	**($)**	**(% of package)**	**($)**	**(% of package)**
Gross land price	$33,000	40	$57,600	32	n/a	n/a
House price	$49,700	60	$120,000	68	n/a	n/a
House and land package	$82,700	100	$177,600	100	n/a	n/a
Perth	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**	**($)**	**(% of land cost)**
Acquisition	$10,050	29	$10,700	20	$10,700	11
Direct servicing	$7,256	21	$20,790	39	$45,724	46
External and indirect authority requirements	$2,735	8	$0	0	$5,976	6
Government taxes and charges	$6,780	20	$9,070	17	$20,800	21
Financial and management costs	$5,588	16	$3,500	7	$7,000	7
Selling costs	$1,690	5	$9,770	18	$9,400	9
Total development costs	$34,099	100	$53,830	100	$99,600	100
Net selling price	$37,000		$64,600		$113,175	
GST (remitted to ATO)	$0		$3,400		$12,575	
	($)	**(% of package)**	**($)**	**(% of package)**	**($)**	**(% of package)**
Gross land price	$37,000	47	$68,000	42	$125,750	42
House price	$41,700	53	$95,399	58	$172,519	58
House and land package	$78,700	100	$163,399	100	$298,269	100

Source: ACIL Tasman, *Landcost: The impact of land costs on housing affordability, 3rd edn*, report prepared for the Urban Development Institute of Australia, May 2006.

Table A3.7: Average cost per square metre of new work for detached houses ($), by region, 1995–96 to 2007–08

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
							($)						
Sydney	527	514	505	516	540	595	641	655	702	776	828	881	917
Balance of NSW	533	526	524	537	551	592	629	647	705	765	792	828	860
Total NSW	*530*	*520*	*514*	*526*	*545*	*594*	*635*	*651*	*704*	*769*	*806*	*851*	*885*
Melbourne	504	513	528	553	596	657	690	733	762	800	828	894	933
Balance of Vic.	504	508	528	552	581	629	671	714	756	779	820	854	888
Total Vic.	*504*	*512*	*528*	*553*	*592*	*649*	*684*	*727*	*760*	*793*	*825*	*881*	*920*
Brisbane	459	460	461	469	492	551	572	612	705	780	836	870	947
Balance of Qld	493	506	521	529	539	583	622	675	755	835	884	944	1,014
Total Qld	*478*	*484*	*492*	*502*	*517*	*566*	*599*	*644*	*732*	*812*	*863*	*915*	*987*
Adelaide	414	411	422	440	472	521	552	590	658	756	842	841	916
Balance of SA	396	415	429	433	448	496	525	578	662	730	793	867	905
Total SA	*407*	*413*	*425*	*437*	*463*	*512*	*542*	*586*	*660*	*742*	*817*	*854*	*911*
Perth	424	437	450	466	496	521	528	561	579	645	741	891	961
Balance of WA	433	478	490	495	522	579	583	607	641	703	813	978	1,092
Total WA	*427*	*448*	*460*	*474*	*504*	*536*	*542*	*573*	*596*	*661*	*762*	*919*	*1,006*
Total Tas.	*469*	*477*	*473*	*498*	*516*	*561*	*620*	*644*	*714*	*841*	*857*	*953*	*955*
Total NT	*558*	*631*	*686*	*737*	*679*	*760*	*690*	*762*	*772*	*886*	*968*	*1,084*	*1,153*
Total ACT	*640*	*628*	*615*	*638*	*610*	*680*	*669*	*682*	*827*	*884*	*881*	*983*	*1,023*
Total Australia	**483**	**489**	**500**	**516**	**543**	**593**	**622**	**657**	**711**	**767**	**820**	**895**	**950**

(Continued next page)

Table A3.7: Average cost per square metre of new work for total semi-detached dwellings ($), by region, 1995–96 to 2007–08 (continued)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
							($)						
Sydney	674	652	610	681	618	669	761	689	809	901	908	1,032	1,173
Balance of NSW	561	564	580	610	608	603	654	734	767	850	950	1,034	1,075
Total NSW	*632*	*618*	*598*	*656*	*614*	*648*	*709*	*705*	*793*	*882*	*925*	*1,032*	*1,129*
Melbourne	624	534	582	643	694	726	821	906	949	906	982	1,117	1,161
Balance of Vic.	771	547	662	613	714	792	847	893	963	958	1,056	1,132	1,121
Total Vic.	*637*	*536*	*588*	*641*	*695*	*731*	*823*	*905*	*951*	*915*	*993*	*1,119*	*1,155*
Brisbane	589	537	577	646	672	690	736	749	952	982	1,116	1,146	1,385
Balance of Qld	557	527	583	558	602	634	730	825	943	994	1,035	1,162	1,307
Total Qld	*571*	*532*	*580*	*603*	*628*	*660*	*732*	*803*	*947*	*988*	*1,069*	*1,155*	*1,344*
Adelaide	486	439	512	648	555	589	700	587	770	936	1,210	1,238	1,402
Balance of SA	516	556	506	585	488	593	673	714	877	897	980	1,076	1,216
Total SA	*495*	*485*	*509*	*627*	*535*	*589*	*694*	*608*	*801*	*915*	*1,135*	*1,182*	*1,342*
Perth	523	558	534	604	630	618	646	692	773	827	1,111	1,270	1,186
Balance of WA	627	702	720	613	727	746	708	767	847	893	1,439	1,514	1,354
Total WA	*542*	*583*	*573*	*606*	*649*	*641*	*662*	*714*	*806*	*840*	*1,217*	*1,340*	*1,238*
Total Tas.	*613*	*664*	*615*	*582*	*751*	*714*	*695*	*885*	*1,215*	*1,144*	*1,253*	*1,042*	*1,080*
Total NT	*723*	*808*	*652*	*665*	*732*	*748*	*651*	*853*	*789*	*855*	*930*	*1,308*	*1,322*
Total ACT	*699*	*776*	*577*	*757*	*773*	*889*	*739*	*932*	*894*	*1,441*	*1,938*	*2,691*	*2,115*
Total Australia	**590**	**566**	**585**	**631**	**654**	**686**	**760**	**803**	**901**	**922**	**1,037**	**1,144**	**1,231**

(Continued next page)

Table A3.7: Average cost per square metre of new work for total flats, units and apartments ($), by region, 1995–96 to 2007–08 (continued)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
							($)						
Sydney	899	882	1,245	972	1,081	1,213	965	880	1,372	1,369	1,550	1,558	1,890
Balance of NSW	762	667	720	824	905	828	874	1,066	1,375	1,063	1,109	1,406	1,345
Total NSW	*864*	*848*	*1,118*	*943*	*1,057*	*1,169*	*946*	*918*	*1,372*	*1,304*	*1,394*	*1,529*	*1,757*
Melbourne	1,223	966	975	1,206	1,153	1,729	2,497	1,563	1,774	1,582	1,733	2,041	2,149
Balance of Vic.	594	649	849	722	877	719	1,934	1,183	1,417	1,270	1,622	2,761	3,224
Total Vic.	*1,182*	*958*	*972*	*1,188*	*1,146*	*1,659*	*2,484*	*1,550*	*1,756*	*1,572*	*1,724*	*2,057*	*2,203*
Brisbane	602	879	954	749	852	1,006	1,241	1,300	1,291	1,632	1,763	1,775	2,313
Balance of Qld	899	767	891	716	911	959	1,132	1,366	1,395	1,696	1,754	1,839	1,808
Total Qld	*760*	*820*	*917*	*729*	*881*	*983*	*1,190*	*1,333*	*1,338*	*1,661*	*1,759*	*1,810*	*2,026*
Adelaide		414		1,190			789	1,019	1,038	755	1,057	1,114	1,376
Balance of SA	541				608	561	650	565	709	5,000	1,011	2,748	1,303
Total SA	*541*	*414*		*1,190*	*608*	*561*	*663*	*770*	*870*	*1,524*	*1,052*	*1,821*	*1,355*
Perth	808	821	797	1,267	1,137	1,105	1,065	1,260	1,120	1,950	1,567	2,390	3,907
Balance of WA		788	813	402	486	1,290	652	810	1,082	1,508	1,603	3,539	1,975
Total WA	*808*	*821*	*799*	*1,235*	*1,047*	*1,107*	*1,035*	*1,062*	*1,113*	*1,882*	*1,570*	*2,476*	*3,445*
Total Tas.	*712*	*945*	*584*	*581*	*1,035*	*920*	*1,349*	*1,454*	*1,619*	*1,003*		*1,096*	*951*
Total NT	*532*	*792*	*741*	*863*	*867*	*690*	*591*	*815*	*1,637*	*782*	*1,426*	*1,238*	*1,666*
Total ACT	*729*	*778*		*778*	*932*	*990*	*1,037*	*772*	*1,314*	*2,394*	*1,851*	*1,713*	*1,986*
Total Australia	**833**	**851**	**978**	**958**	**997**	**1,193**	**1,439**	**1,320**	**1,409**	**1,580**	**1,653**	**1,872**	**2,141**

Source: Australian Bureau of Statistics, *Building Approvals* (data available on request).

4. Demand–supply gap data

Table A4.1: Estimated dwelling need of rough sleepers, 2006

Allocation	2006 Census
Single—1 person per dwelling	5,449
Couple—2 persons per dwelling	1,436
Family with children—1 family per dwelling	1,705
Group household—1 group per dwelling	184
Total dwellings needed	**8,774**

Source: Chamberlain C and McKenzie D, *Australian Census Analytic Program: Counting the Homeless, 2006*, cat. no. 2050.0. ABS, Canberra, 2008.

Table A4.2: Occupied and unoccupied dwellings, 1991, 1996, 2001 and 2006

Year	Occupied dwellings	Unoccupied dwellings	Total dwellings	Unoccupied as a percentage of total dwellings
		Number of private dwellings		%
1991	5,852,518	597,582	6,450,100	9.26
1996	6,496,072	679,165	7,175,237	9.47
2001	7,072,202	717,877	7,790,079	9.22
2006	7,596,182	830,378	8,426,560	9.85

10-year period from 1996 to 2006:	
Increase in total dwellings from 1996 to 2006	1,251,322
Per cent increase in total dwellings from 1996 to 2006	17.43%
Annual growth in stock from 1996 to 2006	125,132

Source: Australian Bureau of Statistics, *2001 Census Time Series Profile, Australia,* 'Table 18: Dwelling structure', cat. no. 2003.0, ABS, Canberra, 2003; ABS, *2006 Census Tables*, 'Dwelling structure by occupied/unoccupied dwellings', cat. no. 2068.0, ABS, Canberra, 2007.

Table A4.3: Projection of demand-supply gap using medium supply and medium household growth projections, 2008 to 2028

Year	Medium supply projection	Medium household growth projection	Gap between underlying demand and dwelling construction	Cumulative gap Including initial gap due to homelessness and vacancy
		Number of dwellings		
2008	129,000	149,000	n.a.	85,000
2009	129,000	152,000	23,000	108,000
2010	130,000	153,000	23,000	131,000
2011	131,000	155,000	24,000	155,000
2012	131,000	155,000	24,000	179,000
2013	132,000	156,000	24,000	203,000
2014	133,000	156,000	23,000	226,000
2015	133,000	157,000	24,000	250,000
2016	134,000	157,000	23,000	273,000
2017	135,000	157,000	22,000	295,000
2018	135,000	156,000	21,000	316,000
2019	136,000	157,000	21,000	337,000
2020	137,000	156,000	19,000	356,000
2021	137,000	156,000	19,000	375,000
2022	138,000	155,000	17,000	392,000
2023	139,000	154,000	15,000	407,000
2024	139,000	152,000	13,000	420,000
2025	140,000	149,000	9,000	429,000
2026	141,000	145,000	4,000	433,000
2027	142,000	143,000	1,000	434,000
2028	142,000	139,000	-3,000	431,000

Source: National Housing Supply Council estimates based on McDonald–Temple medium household growth scenario, 2008; NHSC estimates of net dwelling completions (adjusted for demolitions); NHSC estimates of the initial gap between dwelling supply and demand.

5. Affordability data

Table A5.1: HIA trade contractor price index, by selected capital cities and balances of states, 2003–04 to 2007–08

	2003–04	2004–05	2005–06	2006–07	2007–08
Sydney	124	126	125	129	137
Balance of NSW	106	115	113	116	122
Melbourne	114	117	115	120	125
Balance of Vic.	106	99	100	106	111
Brisbane	112	126	122	125	134
Balance of Qld	109	114	116	124	130
Adelaide	115	116	121	113	120
Balance of SA	102	108	110	110	114
Perth	108	117	121	131	142
Balance of WA	104	132	136	135	139
Average	112	118	120	125	131

Notes:

Data are the average of available data from each financial year. Data are missing for December and March quarters, 2004, and for June quarter, 2008.

The index was set at 100 for September quarter, 2002.

Source: Housing Industry Association unpublished, 2008.

Table A5.2: Social housing dwellings, Australia, 1996 to 2008

	Public rental housing	Community housing	State owned and managed Indigenous housing	Crisis accommodation program	Total
1996 (a)	372,134	13,741	11,119	3,240	400,234
1997 (a)	369,340	16,515	11,820	3,520	401,195
1998 (a)	361,790	21,958	11,855	4,136	399,739
1999 (a)	362,447	23,756	12,009	5,601	403,813
2000 (a)	362,967	24,316	12,162	5,507	404,952
2001 (a)	359,322	25,937	12,343	5,876	403,478
2002 (a)	354,124	27,178	12,579	6,408	400,289
2003 (b)	348,012	29,367	12,563	6,820	396,762
2004 (b)	345,335	26,753	12,725	7,129	391,942
2005 (b)	343,301	29,279	12,860	7,049	392,489
2006 (b)	341,378	29,693	12,893	7,346	391,310
2007 (c)	339,771	34,672	13,098	7,518	395,059
2008 (d)	338,000	35,000	13,000	8,000	393,000

Note: The number of dwellings is at 30 June.

(a) Public rental housing dwelling numbers derived from Australia's Welfare 2003; other dwelling numbers derived from Housing Assistance Act 1996 annual reports.

(b) All dwelling numbers derived from Australia's Welfare 2007.

(c) All dwelling numbers derived from CSHA national data reports.

(d) All dwelling numbers derived from estimates and subject to change.

Source: Australian Institute of Health and Welfare, *Australia's Welfare 2003*, cat. no. AUS 41, AIHW, Canberra, 2003; AIHW, *Australia's Welfare 2007*, cat. no. AUS 93, AIHW, Canberra, 2007; AIHW, *Public Rental Housing 2006–07: Commonwealth State Housing Agreement national data report*, cat. no. HOU 170, AIHW, Canberra, 2008; AIHW, *State owned and managed Indigenous housing 2006–07: Commonwealth State Housing Agreement national data report*, cat. no. HOU 171, AIHW, Canberra, 2008; AIHW, *Community Housing 2006–07: Commonwealth State Housing Agreement national data report*, cat. no. HOU 172, AIHW, Canberra, 2008; AIHW, *Crisis Accommodation Program 2006–07: Commonwealth State Housing Agreement national data report*, cat. no. HOU 174, AIHW, Canberra, 2008; AIHW, preliminary estimates for dwellings at June 2008, personal communication, October 2008; Department of Family and Community Services, *Housing Assistance Act 1996 Annual Report 1996–1997*, FACS, Canberra, 1999; FACS, *Housing Assistance Act 1996 Annual Report 1997–1998*, FACS, Canberra, 2000; FACS, *Housing Assistance Act 1996 Annual Report 1998–1999*, FACS, Canberra, 2001; FACS, *Housing Assistance Act 1996 Annual Report 1999–2000*, FACS, Canberra, 2002; FACS, *Housing Assistance Act 1996 Annual Report 2000–2001*, FACS, Canberra, 2003; FACS, *Housing Assistance Act 1996 Annual Report 2001–2002*, FACS, Canberra, 2003.

Appendix 3
Data sources and methods

The main types of data needed for this report cover the areas identified in the Council's Terms of Reference (Appendix 1) relating to:

> the provision of forecasts and analysis on the adequacy of land supply and construction activity to meet demand and improve affordability over a 20-year forecast period.

This appendix provides information on the data used and the methodology employed in producing the estimates and projections presented in the report. The two major subjects covered are:

- estimates and projections of underlying demand
- estimates and projections of housing and land supply.

The projections of underlying demand (as with any projection) are not predictions or forecasts; rather, they provide an assessment of what would happen to Australia's housing in terms of demand for dwellings if the assumed levels of the components of household change (births, deaths, migration and household formation) were to be realised over the next 20 years. Similarly, the projections of construction activity are based on the assumption that existing trends in dwelling completions will continue.

The major data sources used in the study are:

- 2006 ABS Census data on occupied and unoccupied dwellings
- ABS population projection data
- ABS construction and dwelling activity data
- administrative data from housing and planning agencies
- industry-provided data on costs, affordability and dwelling characteristics.

There are a number of factors that are particularly important to bear in mind when interpreting the results. Areas where the assumptions used are particularly sensitive in terms of their impact on the final outputs are:

- the exclusion of unoccupied dwellings in examining gaps
- the inclusion of demolition adjustment estimates
- the sensitivity of the population demand projections as shown by the changes in demand between the three scenarios presented

- the sensitivity of the land supply and dwelling construction projections used
- the effect of externalities, such as new policy or program outlays and structural change to the social and economic environment since 2006, as these have not been incorporated into the assumptions.

In some sections of the report, the Council was unable to find consistent national data. These issues will be addressed in future reports. In key areas where there was no consistent national data, the Council has produced estimates based on available information, which may affect the quality of results.

In several other sections where information was not generally available, the Council was able to utilise data provided by individual Council members to enhance reporting and analyses in particular areas of interest.

Demand projections

The Council focused on underlying demand for its long-term outlook. The Council's 20-year outlook of housing demand was based on projections by Professor Peter McDonald and Dr Jeromey Temple, using a model that estimates the probable formation of different household types and incorporates various assumptions on migration and household transition. Low-, medium- and high-growth scenarios were developed using different assumptions about overseas migration and interstate migration.

The three underlying demand scenarios in the report provide low, medium and high forecasts of household growth as follows:

- The **low household growth** scenario assumes that age- and sex-specific net migration rates (overseas and interstate) for each region as observed in the period 2001–06 are maintained at a constant proportion of the population, with net overseas migration increasing from around 120,000 in 2008 to around 160,000 in 2028.
- The **medium household growth** scenario sets net overseas migration at a constant rate of 180,000 a year from 2008 onwards, with shares to States and Territories of overseas migration and rates of interstate migration equated to those used by the most recent ABS medium projection.[1]
- The **high household growth** scenario sets net overseas migration at a constant rate of 230,000 a year from 2008 onwards, with shares to States and Territories as per the medium household growth scenario.

More detailed discussions of the methodology are contained in Chapter 2 and the McDonald–Temple report, *Projections of Housing Demand in Australia, 2006–2021*, which is available on the National Housing Supply Council web page <http://www.fahcsia.gov.au/facsinternet.nsf/housing/nhsc.htm>.

1 Australian Bureau of Statistics, *Population Projections, Australia, 2006 to 2101*, cat. no. 3222.0, ABS, Canberra, 2008.

Related State and Territory projections

The demand projections used in the report were compiled using national data and were primarily designed to provide a national picture of demand. While these data can be used to produce State and Territory estimates, they may differ from similar projections undertaken by the State and Territory planning agencies. These planning agencies apply local knowledge and information to produce projections at the jurisdictional and local council levels. Table A1 provides references for further information.

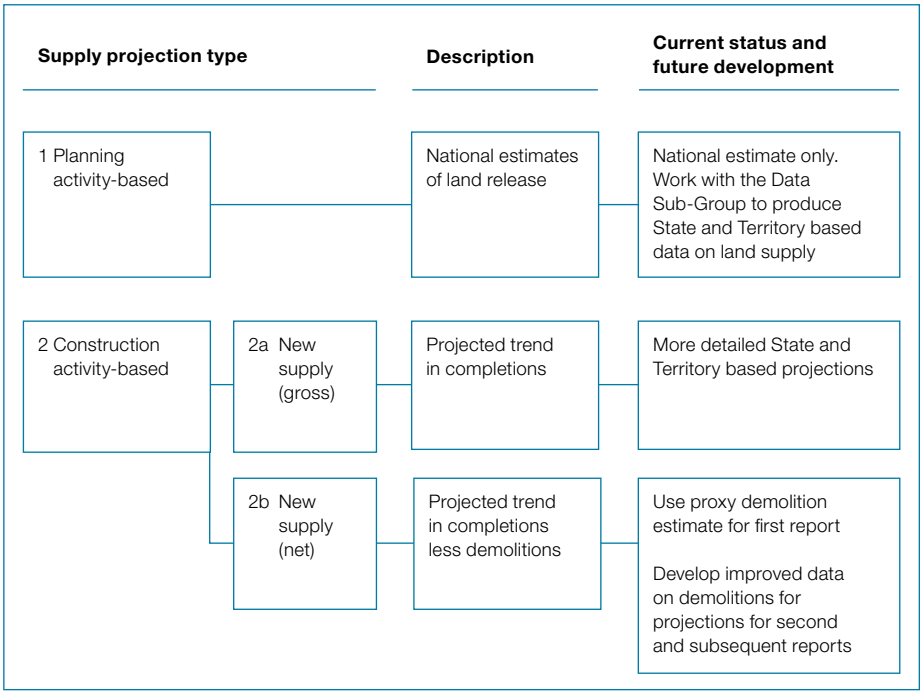
Table A1: Information on relevant State and Territory government demand projections

NSW	Department of Planning, 2008, *New South Wales Household and Dwelling Projections, 2006–2036: 2008 Release*, Department of Planning, Sydney, 2008, <www.planning.nsw.gov.au>
Vic.	Department of Planning and Community Development, *Victoria in Future 2008 – Population Projections*, DPCD, 2008, <www.dpcd.vic.gov.au>
Qld	Department of Infrastructure and Planning, *Queensland's future population, 2008 edition*, 2008, <www.dip.qld.gov.au/population-forecasting/index.php>
SA	Planning SA, *Population projections for South Australia (2001–31) and the State's Statistical Divisions (2001–21)*, Planning SA, 2007, <www.planning.sa.gov.au>
WA	Western Australian Planning Commission, *Western Australia Tomorrow*, WAPC, Perth, 2003, <www.wapc.wa.gov.au/Publications/723.aspx>
ACT	Chief Minister's Department, *Australian Capital Territory population projections: 2002–2032 and beyond*, Chief Minister's Department, Canberra, 2003

Supply projections

In preparing its supply projections, the Council adopted different approaches for dwelling supply and land supply. For dwellings, estimates were based on the trend in dwelling production since 1980, while for land supply, estimates were derived from information on capital city land supply for residential development (Figure A1).

Figure A1: Summary of supply-based estimates and projections



As the Council establishes more sophisticated modelling capacity, future reports will use a range of assumptions related to construction capacity, market factors and productivity to present supply projections.

Estimates based on dwelling completions

New supply (gross)

The supply projections of construction activity are based on the trend line for ABS completions data over the period 1 July 1980 to 31 December 2007, extrapolated to the projection years presented.

The medium supply projections are based on the trend in building completions from 1980 to 2007. The trend was projected for each State and Territory. The completions data were adjusted for the estimated demolition rate in each jurisdiction based on the difference in the increases in dwellings between the Census of 2001 and 2006 compared with the total new dwelling completions over that period.

A low supply trend was estimated using the lowest level of completions in each State and Territory as identified using a moving average annual calculation from the ABS quarterly data from 1980 to 2007. This low level of completions was expressed as a proportion of the average completion rate for the jurisdiction and applied to its trend projection. The data were adjusted for the estimated demolition rate. The low supply projection reflects a situation where construction of private dwellings is severely constrained in a 'realistic' way (this level of completions has happened in the last 27 years).

A high supply trend was estimated using the highest level of completions in each State and Territory as identified using a moving average annual calculation from the ABS quarterly data from 1980 to 2007. This high level of completions was expressed as a proportion of the average completion rate for the jurisdiction and applied to its trend projection. The data were adjusted for the estimated demolition rate. The high supply projection reflects a situation where construction of private dwellings is significantly above average and represents a high level of output that is commensurate with what has actually happened in the last 27 years. The sustainability of such an increase over time would probably require structural change in productivity and/or expansion in capital investment.

New supply (net) – adjusting supply estimates for demolition loss

To adjust the dwelling supply estimates and projections for loss in existing occupied stock due to demolitions, a proxy demolition rate was calculated for Australia and each State and Territory based on the difference in the total dwelling counts (occupied and unoccupied) between the 2001 and 2006 Censuses and the number of completions reported for the same period (see Table A2). This approach can only be considered an interim measure until a more sophisticated methodology for capturing demolition rates is developed.

Table A2: Derivation of a proxy demolition rate to adjust completions data for demolition loss, 2006

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
Dwelling completions (number) (a)									
2001–06	201,139	206,091	180,559	47,174	94,731	10,897	5,044	11,276	756,914
Number of dwellings (census point in time) (b)									
2001	2,571,540	1,914,211	1,482,912	645,944	772,778	208,046	71,976	121,752	7,790,079
2006	2,728,721	2,085,113	1,660,748	679,662	849,006	216,746	74,193	131,375	8,426,559
Difference in number of dwellings between 2001 and 2006 censuses									
	157,181	170,902	177,836	33,718	76,228	8,700	2,217	9,623	636,480
Five-year proxy number of demolitions									
2001–06	43,958	35,189	2,723	13,456	18,503	2,197	2,827	1,653	120,434
One-year proxy number of demolitions									
2001–06	8,792	7,038	545	2,691	3,701	439	565	331	24,087
Proxy demolitions as a proportion of completions (average over five years – 2001–06)									
	22%	17%	2%	29%	20%	20%	56%	15%	16%
Adjustment factor used to adjust total completions data for demolitions									
	78%	83%	98%	71%	80%	80%	44%	85%	84%

Sources:

(a) Australian Bureau of Statistics, *Building Activity, Australia, June 2008*, cat. no. 8752.0, ABS, Canberra, 2008.

(b) Australian Bureau of Statistics, *2006 Census Tables, Australia*, 'Dwelling Structure by Occupied/Unoccupied Dwellings, Time Series Statistic (1996, 2001, 2006 Census Years)', cat. no. 2068.0, ABS, Canberra, 2007.

Estimates of land supply

The Council has attempted to compile national data from State and Territory planning agencies for this first report but has been unable to complete a comprehensive national picture due to a range of data-related issues, discussed below.

The data on land supply vary between States and Territories in terms of the coverage of the data and how it is defined. While each jurisdiction produces information on the amount of land supply at various stages in the supply pipeline, there are underlying differences in the way the data are produced that need to be resolved. For example, different jurisdictions report the estimates of available land in terms of hectares available, dwelling yield or total years of potential supply, and while some jurisdictions measure the total amount available, others measure new supply since the last reporting period. As a result of the problems in comparability in the initial data, the Council has attempted to estimate national land supply data based on a restricted range of data from some jurisdictions. These data provide rough estimates only, and a major task for the second report will be to develop more robust measures.

To obtain estimates for this report, information was gathered for capital cities in five jurisdictions (Victoria, Queensland, South Australia, Northern Territory and Australian Capital Territory) on the potential dwelling yield for:

- broadhectare land (greenfield land) in terms of urban density land and low-density land
- redevelopment areas in terms of major redevelopment (50+ net additional dwellings) and minor redevelopment (10–50 net additional dwellings).

These data were broken up into land to be released over the following time periods:

- within the next two years
- more than two years but less than five
- more than five years but less than 10
- more than 10 years.

While estimates have been produced across these time periods, the Council stresses that projections beyond two years are speculative given uncertainty about the actual conversion of land to marketable lots as well as potential dwelling yield. In addition, the lack of data on redevelopment areas with an individual dwelling yield of less than 10 net additional dwellings is a major exclusion that needs to be borne in mind in interpreting these data.

Table A3 shows the data from the capital cities of the five jurisdictions and the estimated data for all capital cities in Australia based on prorating these data by a factor of 1.558, representing the ratio of dwelling approvals for all jurisdictions to the five jurisdictions' approvals.

Table A3: Estimates of land supply by broadhectare and redevelopment, five jurisdictions and all capital cities, 2008

	<2 years	2–5 years	5–10 years	>10 years	Total
	Estimated distribution of land supply for five jurisdictions' capital cities (a)				
Broadhectare land (greenfield land)					
Urban density land	84,000	142,000	218,000	277,000	721,000
Low-density land	3,000	9,000	13,000	26,000	51,000
Redevelopment areas					
Major redevelopment (50+ net additional dwellings)	128,000	128,000	87,000	3,000	345,000
Minor redevelopment (10–50 net additional dwellings)	14,000	13,000	6,000	1,000	34,000
Total dwelling yield	**229,000**	**291,000**	**323,000**	**307,000**	**1,152,000**
	Estimated distribution of land supply for all Australian capital cities				
Broadhectare land (greenfield land)					
Urban density land	131,000	221,000	339,000	432,000	1,123,000
Low-density land	5,000	13,000	20,000	40,000	80,000
Subtotal	*136,000*	*234,000*	*359,000*	*472,000*	*1,203,000*
Redevelopment areas					
Major redevelopment (50+ net additional dwellings)	199,000	199,000	136,000	4,000	538,000
Minor redevelopment (10–50 net additional dwellings)	22,000	21,000	9,000	2,000	53,000
Subtotal	*221,000*	*220,000*	*145,000*	*6,000*	*591,000*
Total dwelling yield	**357,000**	**454,000**	**504,000**	**478,000**	**1,794,000**

(a) Based on capital city information on land supply for Victoria, Queensland, South Australia, Northern Territory and Australian Capital Territory.

Source: NHSC estimates.

Related state and territory dwelling and land supply projections

The dwelling supply projections used in this report were compiled using national data and were primarily designed to provide a national picture of dwelling supply. While these data are able to produce state and territory estimates, it is important to acknowledge the limitations of the methodology used.

The methodology used in this report to provide a national estimate of potential land supply was not able to adequately take into account the levels of planning activity in all jurisdictions for a variety of reasons relating to comparability and availability of data. To provide a jurisdiction-specific understanding of land supply, readers are advised to examine the relevant planning agency website. Table A4 provides references to relevant reports and websites containing State land supply information.

Table A4: Information on relevant State and Territory government supply projections

NSW	Department of Planning, *Metropolitan Development Program 2007 Update*, Department of Planning, Sydney, 2007, <www.planning.nsw.gov.au>
Vic.	Department of Planning and Community Development, *Urban Development Program Annual Report 2007*, DPCD, Melbourne, 2008, <www.dpcd.vic.gov.au/web14/dvc/dvcmain.nsf>
Qld	Department of Infrastructure and Planning, *Queensland residential land and dwelling activity monitor*, 2008, <www.dip.qld.gov.au/land/residental-land-development-trends.html>
SA	Department of Planning and Local Government, *Planning Strategy for Metropolitan Adelaide (December 2007)*, 2007, <www.planning.sa.gov.au>
WA	Department of Planning and Infrastructure, *Land Development Program – State Lot Activity (June Quarter 2008)*, Western Australian Planning Commission, Perth, 2008, <www.dpi.wa.gov.au/index.asp>
ACT	Chief Minister's Department, *Indicative Residential Land Release Program 2008–09 to 2012–13*, April 2008, <www.cmd.act.gov.au>

Major data limitations

The major data limitations identified in producing this first report are outlined in Table A5.

Table A5: Major data limitations identified in producing the first report

Data area
Treatment of unoccupied dwellings **Issue:** Unoccupied dwellings, while being a significant component of dwelling stock, are not included when examining the supply of dwellings required to meet demand as there is little information on their status. **Approach used:** The Council adopted the generally accepted approach of omitting these dwellings in analysis of the demand–supply gap but noted this omission as a major qualifier on the report estimates and an area requiring urgent work for future reporting.
Demand projections **Issue:** Projections relate only to underlying demand. **Approach used:** The projections used in the report do not attempt to allow for non-demographic factors that contribute to effective demand such as those discussed in Box 2.4 in Chapter 2. The Council will examine these issues in its second report.
Dwelling supply data **Issue:** There are no official data on the annual number of demolitions and how this impacts on supply data. **Approach used:** The Council's methodology was based on estimates using census dwelling counts and dwelling completions data.
Land supply data **Issue:** There are no national data on the land supply pipeline. **Approach used:** The Council's estimate was produced using data on five jurisdictions' capital cities prorated to reflect a national estimate. This has been identified as an area of priority for future work
Demand–supply gap definition **Issue:** There is no standard methodology for measuring the gap between supply and demand. **Approach:** The methodology described in Chapter 4 is only one approach as to how a gap may be calculated. The Council will refine the measurement for future reports.
Housing submarkets and specific submarket gaps **Issue:** Submarket issues such as meeting Indigenous housing demand, the supply of modified housing for people with disabilities, and addressing location-specific need are not examined in this first report. **Approach:** The Council will examine these issues in its second report.

These issues impact on the robustness and reliability of the methodology and estimates in the report. The development of data for future reports will allow for more accurate estimates and a more reliable basis on which projections can be made.

Appendix 4
Housing hotspots

Housing hotspot: Auburn, Western Sydney

General

Auburn has a growing population, with high housing demand and high housing need. Redevelopment of large industrial sites and redevelopment in the town centres (urban infill) is resulting in an increase of density and population. Auburn Local Government Area includes Homebush, the site of the 2000 Sydney Olympics. The impact of development from the Sydney Olympics was reflected in changes to house prices and rents.[i]

Construction activity in Auburn is expected to remain high in the near term, with major projects such as the Auburn health services development and the development of Lidcombe Town Centre. Significant investment is planned for both road and rail network development throughout Western Sydney.[ii]

Auburn Local Government Area is part of the West Central Subregion, a key economic driver of the New South Wales Government's Greater Metropolitan Region Strategy, launched in 2004. In that strategy, the metropolitan area of Sydney is arranged into 10 subregions combining local government areas with similar issues and challenges.

Housing supply issues

Land is limited. Urban infill through redevelopment of industrial sites is promising.

Residential building activity decreased significantly during the March quarter 2008, with falls in both the numbers of dwelling approvals and value of approvals.[iii]

The number of building approvals in Auburn decreased by 59.4 per cent to 52 per cent in the March quarter 2008, due to falls in the number of new house approvals (down 15.2 per cent) and other dwellings (down 84.1 per cent). This represents an annual decline of 22.5 per cent from the level recorded in the March quarter 2007.[iv]

During the period 2007–08, Auburn Local Government Area recorded an increase in median rent for a three-bedroom separate house of 22.6 per cent.[v]

Some statistics:

Population: 87,616 (2001 – 77,228)[vi]

No. of dwellings: 30,280 (2001 – 26,142)

Tenure: 29 per cent owned, 26.6 per cent purchased and 33.5 per cent rented

Type: 60.8 per cent separate houses (2001 – 68.0 per cent)

Median house price has increased by 5.0 per cent to $470,000 in the December quarter 2007.[vii]

Median rents for all dwelling types increased strongly over the levels recorded 12 months previously. Median weekly rental prices for three-bedroom houses remained at $325 in the March quarter 2008.

Median monthly housing loan repayment was $1,680.

Housing affordability issues:

Limited availability of affordable rental housing for those in the lower to moderate income brackets.

Auburn has a significant number of households in receipt of Commonwealth Rent Assistance. Forty-five per cent are considered to be in housing stress. There is a need for more diversity of housing stock, particularly one-bedroom stock to accommodate single-person households and low income earners in the private rental market.

Rental increases in Auburn are considerably higher than those in other local suburbs like Parramatta and Holroyd. There is insufficient affordable rental housing to meet the needs of Auburn residents.

Between 2001 and 2007, the proportion of dwellings affordable for purchase to households at the 40th percentile of median income declined from 14 per cent to 2.2 per cent for households in Auburn. This makes it very difficult for lower income households to purchase housing in the area.

Based on the 2006 Census, 72 per cent of all low and moderate income purchasers in Auburn were in housing stress. This is an increase in 1,270 households from the 2001 Census. The difficulty of purchasing housing in Auburn for lower and moderate income earners shows the lack of affordable housing opportunities.

Public housing represents 3.8 per cent (1,177) of all housing in Auburn, which is a little lower than the average for the greater metropolitan region.[viii]

Notes

i Centre on Housing Rights and Evictions, *The impacts of the Sydney Olympic Games on housing rights: background paper*, Centre on Housing Rights and Evictions, Geneva, 2007, p. 18.

ii New South Wales Office of the Minister for Western Sydney, *LGA profile Auburn*, Parramatta, <www.gws.org.au/imagesDB/webPages/Auburn.pdf>.

iii Auburn Council, *Auburn economic profile, March quarter 2008*, Auburn, <www.auburn.nsw.gov.au> / <www.auburn.nsw.gov.au/page.aspx?id=1348&>.

iv Auburn Council, *Auburn economic profile, March quarter 2008*, Auburn, <www.auburn.nsw.gov.au>.

v Housing New South Wales, *Rent and sales report no. 85*, Rent: September quarter 2008; Sales: June quarter p.3 <http://www.housing.nsw.gov.au/About+Us/Reports+Plans+and+Papers/Rent+and+Sales+Reports/Latest+Issue/> 2008

vi Australian Bureau of Statistics, *2006 Census QuickStats: Auburn (State Electoral Division)*, ABS, Canberra, 25 October 2006.

vii Auburn Council, *Auburn economic profile, March quarter 2008*. Auburn, <www.auburn.nsw.gov.au>.

viii NSW Department of Housing, *Information on Auburn housing market*, Sydney <http://www.housing.nsw.gov.au/NR/rdonlyres/2AEA5A36-47DD-4C14-BDE7-1E0D3694999D/0/InformationonAuburnHousingMarket.doc>.

Housing hotspot: Ballina, New South Wales

General

Ballina on the New South Wales North Coast has experienced rapid growth in the past five years, predominantly in the over-50 age groups due to its appeal as a sea change destination. The Ballina Shire has an ageing population, with one in four people aged 60 or over.[i]

Gentrification of existing housing stock, limited supply due to high levels of holiday home ownership and environmental constraints are some of the factors underlying affordability issues in coastal sea change communities.[ii]

Housing supply issues:

There is a shortage of land available for housing in Ballina. Underlying demand is forecast to increase over the next two year period 2007–08 to 2008–09 due to strong population growth. The growth in demand is generated mainly by new household formation. Over this same period, the Richmond-Tweed statistical division is expected to experience underlying demand of 3,377 new dwellings annually.[iii]

Quarterly dwelling commencements for September 2008 were 455 (244 houses), up from 395 (225 houses) for the June 2008 quarter within the region which includes Richmond Valley-Casino, Kyogle, Byron and Ballina.[iv]

Some statistics

Population: 40,000[v] (Census 2006 – 38,461)[vi]

Number of dwellings: 15,120 (2001 – 14,343)

Tenure: 40 per cent owned, 25 per cent being purchased, and 29 per cent rented

Type: 68 per cent separate houses

Ballina Shire's median weekly household income in 2006 was $779, compared with the national average of $1,027.[vii]

Ballina's average house price increased from $178,000 in 2001 to $369,000 in 2006. The median house price at September 2008 was $385,000, down 4 per cent on the previous quarter; the median price for units was $285,000, down 15 per cent on the previous quarter.[viii]

The median rent as at June 2008 for a three-bedroom house was $350 per week, and for a two-bedroom unit, $250 per week.[ix]

The median mortgage payment was $1,290 per month.

Housing affordability issues

The Urban Development Institute of Australia noted that the level of affordability of home purchase decreased markedly in the period from 2001 to 2006 in the Ballina–Lismore–Tweed area.[x]

The NSW Department of Housing provided the Senate Select Committee with statistics indicating that 79 per cent of very low income households in Ballina are currently under home purchaser stress. In the June quarter of 2007, the NSW Department of Housing estimated that there were no dwellings available for purchase for very low income households. A lack of diversity in the type of housing available also means that young adults seeking to live independently and older 'empty nesters' wanting to move to smaller accommodation are often forced to move away from their communities simply because of the lack of suitable accommodation. In response to these factors contributing to unaffordable housing, the Ballina City Council is encouraging 'adaptable' housing – that is, housing for which the initial design of the building allows the structure of the building to change over time with minor renovations.[xi]

Many types of low-cost accommodation on the coast are under significant threat of redevelopment. It has been suggested that some council policies relating to caravan parks are examples of planning mechanisms that may act against the provision of affordable housing in these local government areas.[xii]

Notes

i Ballina Shire Council, *Homepage website*, accessed 14 January 2009, <www.ballina.nsw.gov.au>.

ii C Squires & N Gurran, 'Planning for affordable housing in coastal sea change communities', paper presented at AHURI National Housing Conference, Perth, 2005, p. 394. <www.nationalhousingconference.org.au/downloads/2005/Refereed/20Squires.pdf>.

iii BIS Shrapnel, *Regional residential building 2008*, NSW, BIS Shrapnel, Sydney, April 2008, p. 29.

iv BIS Shrapnel, *Regional residential building 2008*,Sydney, p. 31.

v Ballina Shire Council, *Homepage website*, <www.ballina.nsw.gov.au>.

vi Australian Bureau of Statistics, *2006 Census quickstats: Ballina (Local Government Area),* ABS, Canberra, 2007.

vii Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find: housing affordability in Australia*, Senate Select Committee on Housing Affordability in Australia, Canberra, June 2008, p. 136.

viii Australian Property Monitors, *Home price guide, 'Suburban snapshot – Ballina'*, Australian Property Monitors, Sydney, <www.homepriceguide.com.au/snapshot/lga/index.cfm?action=view&lga=Ballina>.

ix Housing NSW, *Rent and sales report, issue 84*, Housing NSW, Sydney, June 2008, <www.housing.nsw.gov.au>.

x Urban Development Institute of Australia, *An industry report into affordable home ownership in Australia, August 2007*, Part 2, 'UDIA state reports on housing affordability', UDIA, Canberra, 2007, p. 26.

xi Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find*, p. 102.

xii C Squires & N Gurran, '*Planning for affordable housing in coastal sea change communities*', p. 394.

Housing hotspot: Mackay, Queensland

General

Mackay City has suffered a housing affordability crisis in recent years. Population growth in Mackay City peaked at 1,472 people in the year to June 2004, more than one-third higher than during the five years to June 2001 (909 people). Housing affordability in the Mackay region decreased over the five years to 2006–07. While the demand for new construction averaged 1,650 dwellings per year in the five years to 2006–07, only an average of 1,340 new dwelling commencements were recorded. The rapid expansion of the mining industry and increased deployment of military personnel to the area resulted in a 3.5 per cent growth in population between 2001 and 2006, exacerbating the housing shortage. Between 2001 and 2006, Mackay City ranked second in population growth in local government areas of regional Queensland.[i]

Concerns are being raised about whether the second mining boom will be over by the time a new development plan for the region is implemented.[ii] If strong population growth and low unemployment combined with high rental demand and lower stamp duty rates is maintained, regional Queensland property will remain attractive to both investors and owner-occupiers.[iii] There has been solid growth in many coastal centres, with Mackay among the most outstanding performers.[iv]

Housing supply issues

It has been suggested that government policies have served to limit land supply in favour of high-density housing.[v] In Queensland, unlike in other States, local councils cannot seek developer contributions outside of the immediate area of development.[vi]

Views have been expressed by industry that local development compromised by development delays and arbitrary processes. Issues include land availability for development and land affordability. The imposition of increased state and local government charges and compliance costs added on the development process for flood plain areas (which includes the whole of the Mackay CBD) make development prohibitively expensive and complicated in the area.[vii]

Mackay City approved 1,010 residential lots in the year to March quarter 2008. This was a decrease of 45.2 per cent compared with the same period in 2007, when 1,843 lots were approved.[viii]

Some statistics

Population: 2007 – 109,613[ix] (2006 – 84,890)[x]

(Note: The 2007 figure is based on Queensland's estimated resident population for Mackay Regional Council (the entire Mackay region). The 2006 figure is the Australian Bureau of Statistics 2006 Census figure for the Mackay City local government area only).

No. of dwellings: 33,930[xi]

Tenure: 31 per cent owned, 32.8 per cent being purchased, and 27.4 per cent rented[xii]

Type: 80 per cent separate houses[xiii]

Median house prices in Mackay increased from $142,250 in 2002 to as high as $395,000 in early 2008. Median prices at September 2008 were $350,000 for houses and $330,000 for units.[xiv]

Median rent prices for three-bedroom houses in Mackay increased from $175 per week in 2002 to $360 per week as at March 2008.[xv] The median rent for a two-bedroom unit was $270 per week as at June quarter 2008. The vacancy rate for rental property in Mackay is around 1.5 per cent, which is marginally lower than the average for Queensland.[xvi]

The median mortgage payment is $1,300 per month[xvii, xviii].

Housing in Mackay is rated as 'severely unaffordable'. Increased costs are passed on to the home buyer, which makes the region even more unaffordable for the average person.[xix]

Based on ABS data on occupation, 46.7 per cent of the workforce (employed people aged 15 years and over) in Mackay were technicians and trade workers, machinery operators and drivers, and labourers; 11.5 per cent were professionals; and 12.2 per cent were managers. The median weekly individual income for people aged 15 years and over was $521, compared with $466 for the Australian population.[xx]

Housing affordability issues

Serious constraints on affordability exist, with at least a $100,000 gap between what can be borrowed and the cost of a typical second-hand suburban detached house.[xxi] The rapid expansion in mining has had a cumulative effect on population growth and housing pressures. Median rents have increased by as much as 106 per cent between 2002 and 2008.[xxii]

There are limited housing options, with low vacancy rates for rental accommodation and limited social housing. Households on low and fixed incomes are being forced to relocate to areas with less expensive housing markets. There are difficulties in attracting and retaining workers in essential services and support industries.

Notes

i BIS Shrapnel, *Regional residential building Queensland*, 2008, BIS Shrapnel, Sydney April 2008, pp. 47–9.

ii 'Regional Qld in property boom' [advertisement], *The Mining Advocate*, Currajong, February 2008, p. 9, <www.industryadvocate.com.au/editions/MTA_Feb_08.pdf>.

iii Region's need for speed', *Daily Mercury*, Mackay, Qld, 16 August 2008 <http://www.dailymercury.com.au/story/2008/08/16/apn-regions-need-for/>.

iv 'Regional Qld in property boom', p. 9.

v R Walker, 'Mackay key worker housing beyond reach', Property Council of Australia, Queensland Division, media release, 4 June 2007, <www.propertyoz.com.au/qld/Articale/Resource.aspx?p=21&media=278>.

vi Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find: housing affordability in Australia*, Senate Select Committee on Housing Affordability in Australia, Canberra, June 2008, p. 87.

vii Urban Development Industry Institute of Australia, *Key issues for candidates seeking election to the Mackay Regional Council*, position paper, Urban Development Institute of Australia, Mackay/Whitsunday Branch, Queensland, 12 February 2008, <www.udiaqld.com.au//?pageid=99>.

viii Queensland Department of Infrastructure and Planning, *Total residential land activity fact sheet, March quarter 2008*, Mackay City (based on data as at October 2008), Queensland Department of Infrastructure and Planning, Brisbane, October 2008.

ix Queensland Department of Infrastructure and Planning, *Queensland population update, No 13*, Queensland Department of Infrastructure and Planning, Brisbane, May 2008.

x Australian Bureau of Statistics, *2006 Census QuickStats: Mackay (C) (Local Government Area)*, ABS, Canberra, 2007.

xi Australian Bureau of Statistics *2006 Census QuickStats: Mackay (C) (Local Government Area)*, ABS, Canberra, 2007.

xii Regional Economic Development Corporation, *Mackay and Whitsunday*, Regional Economic Development Corporation, Mackay, June 2008.

xiii Regional Economic Development Corporation, *Mackay and Whitsunday*

xiv Australian Property Monitors, *Home price Guide*, 'Suburb snapshot: Mackay', Australian Property Monitors, Sydney, 2008, <www.homepriceguide.com.au/snapshot/price/index.cfm?action=view&source=apm>.

xv Queensland Department of Housing, 'Rental vacancy rate Queensland urban centres', in *Snapshot of the Australian housing market: rental and home ownership in Australian capital cities*, Queensland's regional centres, Bowen Basin and Mount Isa, Queensland Department of Housing, Brisbane, July 2008.

xvi Queensland Residential Tenancies Authority, *Medium weekly rents, June quarter 2008, Median Weekly Rents – North Queensland*, Queensland Residential Tenancies Authority, Brisbane, 2008, <www.rta.quld.gov.au/median_weekly_rents.cfm>.

xvii Queensland Department of Housing, *Snapshot of the Australian housing market, rental and home ownership in Australian capital cities, Queensland's regional centres, Bowen Basin and Mount Isa*, Queensland Department of Housing, Brisbane, July 2008.

xviii Australian Bureau of Statistics *2006 Census QuickStats: Mackay (C) (Local Government Area)*, ABS, Canberra, 2007.

xix Urban Development Institute of Australia (Queensland), 'Property industry hails amalgamation', media release, Urban Development Institute of Australia, Brisbane, 12 February 2008.

xx Australian Bureau of Statistics *2006 QuickStats: Mackay(C) (Local Government Area)* ,ABS, Canberra, 2007.

xxi Urban Development Institute of Australia, *An industry report into affordable home ownership in Australia, August 2007*, Part 2, 'UDIA state reports on housing affordability', UDIA, Canberra, 2007, p. 12.

xxii Queensland Department of Housing, *Snapshot of the Australian housing market, rental and home ownership in Australian capital cities, Queensland's regional centres, Bowen Basin and Mount Isa*, Queensland Department of Housing, Brisbane, July 2008.

Housing hotspot: Port Hedland, Western Australia

General

In 2008 Port Hedland in Western Australia was predicted to become the world's largest tonnage port over the next decade as a result of a proposed expansion in the production of iron ore[i].

2008 saw significant population pressures in the Pilbara caused by fly-in fly-out workers and short-term contract workers, which increased the resident population from 10 to 25 per cent.

Housing supply issues

Land supply in Port Hedland is severely limited, and planned land releases are affected by the impact of iron ore dust, coastal setbacks to protect from cyclonic storm surge and other environmental issues.[ii] Challenges in delivering new land is further complicated by difficulties in determining long-term town-based housing demand, high infrastructure costs, and dealing with shortages of construction workers and accommodation for those workers.

The Western Australian Planning Commission is working with the Pilbara Industry's Community Council to establish services and approve 'land banks' to deal with the uncertain timing of demand.[iii]

In 2008, Port Hedland had a capital growth rate for property as at March 2008 of over 37 per cent according to Residex statistics.[iv]

Some statistics

Population: The 2008 Western Australian Planning Commission's projections estimated a population of 13,900 in 2008,[v] rising to 14,800 in five years. The Australian Bureau of Statistics' estimate is 13,060 (2006 Census). The Town of Port Hedland estimated the 2006 population to be of the order of 17,000. This was based on 5,219 residences at 2.7 people per dwelling, with an additional 3,000 people living in transient workforce accommodation.

No. of dwellings: 5,262[vi]

Tenure: 10.1 per cent owned, 20.2 per cent being purchased, and 41 per cent rented

Type: 70.3 per cent separate houses

Median house prices in Port Hedland rose from $190,000 in June 2002 to $790,000 in June 2008, and in South Hedland they increased from $132,500 in June 2002 to $484,500 in June 2008.[vii]

In September 2008 the median rent in Port Hedland is $1,050 per week. The vacancy rate was near 0 per cent, with new rental properties snapped up by renters before they are even advertised on the market.[viii]

The median housing repayment per month is $1,083.

Based on ABS data on occupation, half of the workforce (employed people aged 15 years and over) in Port Hedland are technicians and trades workers, machinery operators and drivers, and labourers; 15 per cent are professionals; and nearly 10 per cent are managers.[ix] The income range among these workers in Port Hedland is relatively large. The median individual gross income was about $1,000 a week, and 21 per cent of workers had a weekly income below $600, while 31 per cent had gross income over $1,600 a week, and about 19 per cent had gross income over $2,000 a week.

Housing affordability issues

There is very limited availability of affordable rental housing for those in the lower to moderate income brackets.

The shortage of housing is a particular problem for those with incomes too high to be eligible for state housing and too low to afford to rent or purchase privately. This impacts on young people and families who need access to affordable housing if they are to move into employment and positive pathways for their future in Port Hedland. The housing shortage and high rental prices also have an impact on local business. Unprecedented pressure in the housing market has seen skyrocketing sales prices within the town. This has resulted in home ownership being out of reach for most of the local community, particularly the Indigenous population.[x]

Notes

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Appendix 5
Affordability measures

This appendix examines some of the different approaches used to measure the affordability of housing. In addition to the measures based on Australian Bureau of Statistics (ABS) censuses or surveys that use actual individual household incomes and housing costs, there are a number of imputed affordability measures that use a variety of data sources to examine households' ability to access affordable ownership or rental housing.

It is important to note that 'housing affordability' and 'housing sustainability' are terms that are distinct from 'affordable housing':

- Affordable housing is a term often used to refer specifically to housing that meets the size, facilities and location requirements of low income households (the lowest 40th percentile of the household income distribution) while also being within their financial means
- In some approaches the focus is on the lowest 40 per cent of the income distribution with a mortgage or renting who were spending over 30 per cent of their income on housing – a commonly used benchmark for 'housing stress'
- Some analysts note that while housing affordability is a measure of the difficulty of getting into the housing market, housing stress is a measure of how much renters, purchasers and owners pay for their housing as a proportion of income
- In addition, to determine the cost of housing from a wider community viewpoint, some argue that the level of housing sustainability over the longer term needs to be considered. Other costs related to affordability may need to be taken into account, including:
  - travel time and the social and environmental costs related to accessing work and social and other engagements
  - recurrent costs of operating and maintaining housing
  - the overall cost of infrastructure provision by government and developers.

Housing affordability is typically measured by the ratio of household income to the income required to meet payments on a dwelling. The two most widely used and publicised measures of housing affordability in Australia are:

- the **Real Estate Institute of Australia (REIA) Home Loan Affordability Index (HLAI)** – the ratio of median family income (annualised) to average mortgage repayments (annualised)

  Median family income is based on a historical benchmark from the ABS that is updated each quarter for each jurisdiction using changes in the ABS's estimates of average weekly earnings. Average mortgage repayments are based on the average size of new loans in each quarter for each jurisdiction.

- the **Commonwealth Bank of Australia – Housing Industry Association First Home Buyer Housing Affordability Index (FHAI)** – the ratio of average household disposable income Australia-wide to the 'qualifying' income required for a 'typical' first home loan in each jurisdiction.

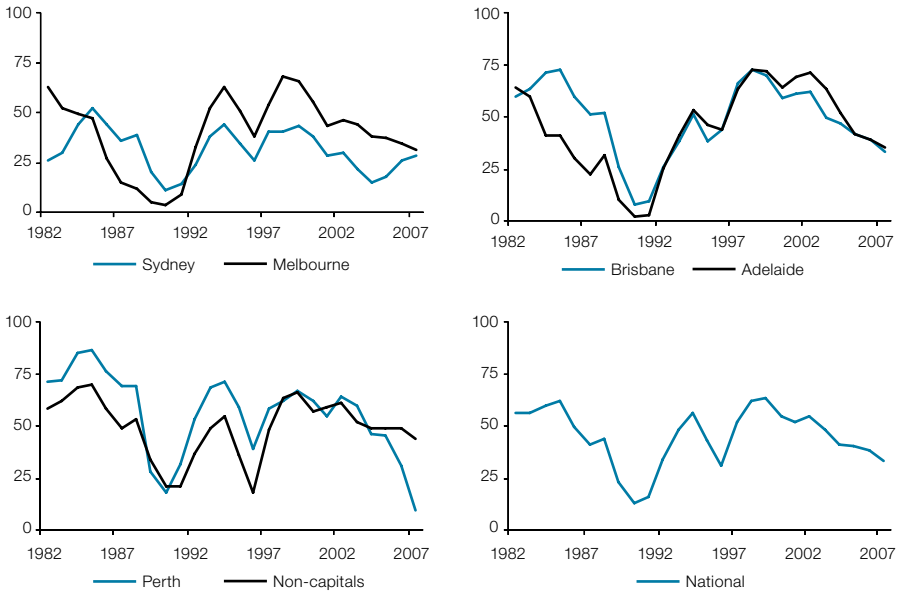
  Qualifying income is calculated on the assumption that repayments on a 25-year loan, for 80 per cent of the price of a 'typical' property purchased by a first home buyer, are equal to 30 per cent of household income. Up until 1988, the price of a typical dwelling purchased by first home buyers was directly estimated from loans approval data. Since that time, it has been based on the 1988 price, indexed by subsequent movements in the market-wide median price.

Although these two indicators are probably the best housing affordability indicators publicly available for Australia, like all the available indicators they have significant limitations in how well they describe the true housing affordability situation across the community. Simple affordability measures such as these based on ratios of housing costs to income do not give any indication of the non-housing outcomes that might be associated with housing stress. While the higher the ratio (of median house price to median annual disposable income) the harder it is to get into the housing market, the measure does not take into account interest rates; and a household does not usually devote its whole household income to paying off the house. In addition, these measures tend to focus on the average income for all households rather than focusing on households in the age groups that are typically looking to purchase homes.

The Reserve Bank of Australia has used an alternative measure of affordability that represents an estimate of the proportion of all dwellings (both houses and apartments) transacted in any year that would have been accessible to a typical household in the prime home-buying years based on certain assumptions about bank lending behaviour. The focus in Figure A2 is on households headed by people aged between 35 and 39 years as potential home buyers. The estimates suggest that in four of the major capitals, around 30 to 35 per cent of transacted dwellings (houses and apartments) would have been accessible to the median household in the home-buying age groups in 2006–07.

Perth was the exception, where only around 10 per cent of dwellings would have been accessible (Figure A2). The Reserve Bank stressed that of course accessibility would have been much lower for many lower income households.

Figure A2: Measures of housing accessibility – proportion of dwellings affordable for median younger households (per cent)



Sources: ABS (SIH); RBA; RP Data as used in Reserve Bank of Australia, Real Estate Institute of Australia in: A Richards, 'Some observations on the cost of housing', address to 2008 Economic and Social Outlook Conference, The Melbourne Institute of Applied Economic and Social Research, Melbourne, 27 March 2008, accessed 20 January 2009, <www.rba.gov.au/Speeches/2008/sp_so_270308.html>.

The UDIA/Matusik Affordability Measure claims to provide a more focused view of housing affordability than other indices by comparing the proportion of the houses sold in a particular region with what the population of that region could actually afford to buy. By assuming the average household was willing to spend 30 per cent of its income on repayments and had managed to save a 10 per cent deposit, the UDIA/Matusik Affordability Measure compares house prices to the size of the loan the average household would be able to service at prevailing interest rates. In its 2007 report into affordable home ownership in Australia,[i] UDIA researched 70 designated population centres in Australia and found that in 2006 over one-quarter of the subject areas (27 per cent) were categorised as unaffordable (less than 15 per cent of houses in the region could be purchased) compared with none in 2001. However, it should be noted that this approach does not work well for regions with very heterogeneous income groups. For example, the UDIA report rates Karratha as one of the more affordable parts

i Urban Development Institute of Australia, *An industry report into affordable home ownership in Australia, August 2007*, Part 2, 'UDIA state reports on housing affordability', UDIA, Canberra, 2007.

of Australia, presumably because mining workers pull up the average income. But as the Senate Select Committee pointed out, for other workers housing is extremely unaffordable in Karratha.[ii]

Finally, in terms of measuring housing stress, a weakness of regarding all households spending over 30 per cent of their income on housing as suffering stress is that households with high incomes can spend more than that proportion, and indeed do so – for example, to pay off their mortgages more quickly while still having income to spend elsewhere. For this reason, the measure has been restricted to households in the lowest 40 per cent of the income distribution, as used in major research such as the Australian Housing and Urban Research Institute's (AHURI's) research into housing affordability for lower income Australians.

Other measures of affordability

Other measures are currently used to both contribute to the explanations of the causes of affordability problems faced at a particular point of time and indicate trends over time. These measures include:

- ratio of median household income to average loan repayments
- ratio of mortgage repayments on a typical loan for households on average full-time male earnings, assuming a 25-year loan and 25 per cent deposit
- supply of low-cost or affordable housing stock available to low income renters
- threshold income, which is defined as the level of income deemed necessary to gain access to the median priced dwelling or one that is some percentage (for example, 75 per cent) of the median
- areas where the median dwelling price is affordable to households whose incomes are in the 40th and 20th income deciles (purchasers).

Each of these measures provides a different way of capturing the changing ability of households to afford home purchase or to access rental. As AHURI research notes, none is necessarily better than the others; they all have different strengths and weaknesses, including overcoming the challenges of data limitations and methodology.[iii] Table A6 summarises the characteristics of each method.

ii Senate Select Committee on Housing Affordability in Australia, *A good house is hard to find: housing affordability in Australia*, Senate Select Committee on Housing Affordability in Australia, Canberra, June 2008, p. 33.

iii Australian Housing and Urban Research Institute, '*Conceptualising and measuring the housing affordability problem*', *National Research Venture 3 background paper 1*, AHURI, Melbourne May 2005.

Table A6: Attributes of other major affordability measures used in Australia

Producer/objective	Data source	Methodology
AMP/Real Estate Institute of Australia Aligns median household income to average loan repayments	Median weekly family income figures are based on ABS Family Income Surveys. Loan repayments are derived from financial institution data	Calculated as ratio of median household income to average loan repayments.
BIS Shrapnel Home Loan Affordability Index Measures access costs for household or individual on average weekly earnings	ABS average weekly earnings per employed male unit Real Estate Institute of Australia (REIA) loan data	Ratio of mortgage repayments on a typical loan (as measured by REIA data) to housing loan to average full-time male earnings, assuming 25-year loan and 25 per cent deposit
Burke & Hayward 2002; Burke 2003 Uses threshold income to measure the amount of income deemed necessary to gain access to the median-priced dwelling	Based on Valuer-General (VG) median price dwelling data	Works back from VG median to calculate the required loan and the income to support the loan
Wood et al. 2004 Identifies areas where median dwelling price is affordable to households whose incomes are in 40th and 20th income deciles (purchasers)	VG median house price data ABS Survey of Income and Income Distribution (1999–2000) for incomes of income units in 20th and 40th deciles	Calculates the degree to which local areas are affordable to low income households
Yates, Wulff and Reynolds 2004 Measures the amount of and changes in low-cost rental stock available to low income households	ABS Census special cross-tabulations	Identifies for nominated rental price ranges the amount of stock available in relation to number of low income households

Source: Australian Housing and Urban Research Institute, *Conceptualising and measuring the housing affordability problem*, *National Research Venture 3 background paper 1*, AHURI, Melbourne, May 2005.

The distribution of mortgage stress

Table A7 presents a Housing Industry Association (HIA) analysis of the distribution of mortgage stress across the population of home purchasers based on the 2006 Census. Using a simple 30 per cent rule, the data show an overall mortgage stress rate of 26.9 per cent for Australia. For the purpose of this analyses 'mortgage stress' is not just limited to households in the bottom two income quintiles. The number would be slightly higher had zero and negative incomes been included. Most analysts recommend that these households be excluded (if not the entire first quintile) due to under-reporting of incomes or the inclusion of business income, which is often volatile and misrepresents a household's spending capabilities.

Table A7: Census 2006 mortgage stress rates

Gross income range ($)	Stress rate (%)	No. of households	Cumulative (%)
1–149	97.4	10,011	1.9
150–249	83.4	17,567	5.1
250–349	75.3	26,314	10.0
350–499	61.5	18,938	13.5
500–649	64.7	74,860	27.4
650–799	53.6	66,009	39.7
800–999	43.4	67,901	52.3
1,000–1,199	33.6	94,282	69.8
1,200–1,399	23.7	39,197	77.0
1,400–1,699	18.7	47,594	85.9
1,700–1,999	13.1	28,159	91.1
2,000–2,499	8.9	20,404	94.9
2,500–2,999	9.1	17,652	98.2
3,000–3,499	6.3	4,920	99.1
3,500–3,999	5.3	2,737	99.6
4,000 or more	5.0	2,210	100.0
Total households in mortgage stress	**26.9**	**538,755**	
Total households with mortgages	*100.0*	*2,003,478*	

Source: HIA analysis of the distribution of mortgage stress.

Stress rates are highest among low income groups; however, the incidence of stress also falls more heavily in middle income groups. Adding the bottom 40 per cent (<$800 per week) income rule reduces household stress to 10.7 per cent, and including up to 60 per cent (<$1,200 per week) increases the rate to 18.8 per cent.

The census numbers are based on August 2006 data, which are considered out of date as it does not incorporate subsequent interest rate and house price changes. The census also misses around 800,000 households that did not report incomes properly. In response to this issue, many analysts prefer to use the *ABS Survey of Income and Housing* for analysis at the national and State level. The ABS survey also provides the ability to simulate the impact of changes, such as interest rate changes, since the Census.

HIA analysis has updated the ABS survey to August 2008 to incorporate income, price and interest rate changes since the survey was taken in 2005–06. Past HIA analysis shows that the stress rates are not significantly different between the census and the survey; however, because the survey has proportionately fewer households with missing values, the number in stress is much higher (Table A8).

Table A8: HIA estimates of mortgage stress by capital cities and rest of state in August 2008

	No. of households	% of mortgagees
Sydney	225,832	40.0
Rest of NSW	93,374	31.5
Melbourne	159,423	31.9
Rest of Vic.	53,755	28.0
Brisbane	75,960	30.2
Rest of Qld	92,299	32.6
Adelaide	39,221	24.3
Rest of SA (a)	14,238	23.2
Perth	79,355	31.0
Rest of WA (a)	15,895	24.6
Tasmania	14,991	22.3
NT (a)	3,510	17.6
ACT (a)	13,036	23.6
Australia	**880,889**	**31.8**

(a) Subject to small sample sizes.

Note: This table does not incorporate the impact of interest rate reductions or house price changes since August 2008.

Source: HIA calculations based on updating the : Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008 to August 2008 values.

Since the August 2006 Census the strong growth in rent costs is well documented and HIA has used the *ABS Survey of Income and Housing* data to model this. Table A9 summarises the rent stress situation as it stood in August 2008 (rents have been assumed to have increased by 10 per cent in real terms).

Table A9: Estimates of rent stress – impact of 10% increase in real rents, August 2008

	January 2006		August 2008		
	Rent stress	%	Rent stress	%	% change
Sydney	121,073	29.1	151,610	36.4	25.2
Rest of NSW	65,697	31.2	73,830	35.0	12.4
Melbourne	112,772	33.3	128,059	37.8	13.6
Rest of Vic.	33,734	33.1	36,632	36.0	8.6
Brisbane	43,481	23.1	53,919	28.6	24.0
Rest of Qld	60,569	25.3	75,063	31.4	23.9
Adelaide	27,182	26.9	29,605	29.2	8.9
Rest of SA (a)	6,554	21.4	7,822	25.5	19.4
Perth	31,798	23.5	37,862	28.0	19.1
Rest of WA (a)	7,830	16.1	11,806	24.3	50.8
Tasmania	9,574	24.6	11,296	29.0	18.0
NT (a)	1,525	10.0	2,317	15.2	51.9
ACT (a)	4,560	16.6	5,956	21.7	30.6
Australia	**526,347**	**27.8**	**625,776**	**33.1**	**18.9**

(a) Subject to small sample sizes for private renters.

Sources: Australian Bureau of Statistics, *Survey of Income and Housing: CURF on CD-ROM/RADL, 2005–06 (Second Edition)*, cat. no. 6541.0.30.001, ABS, Canberra, 2008ABS Survey of Income and Housing 2005–06 and HIA calculations.

Using HIA's latest updates for August 2008, a simple addition of those in mortgage and rent stress implies that there are 1.5 million households paying more than 30 per cent of their gross income on housing. Around 950,000, or 63 per cent, of these households are in the bottom 40 per cent of the income distribution.

Glossary and abbreviations

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.
affordability index	Compiled by the Commonwealth Bank and the Housing Industry Association, the index relates the monthly loan repayment on a typical 25-year mortgage loan covering 80 per cent of the cost of a dwelling of median price paid by first home buyers, to household income.
Australian Housing and Urban Research Institute (AHURI)	A national research organisation, specialising in housing and urban research.
betterment levies	A charge that recognises the uplift in land values created by the scope of the development permitted on a particular site.
broadhectare sites	See *greenfield sites*.
brownfield sites	Development sites typically surrounded by existing built-up areas.
Census	The Census of Population and Housing carried out 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 2006 is the most recent Australian census.
Commonwealth Rent Assistance (CRA)	A non-taxable Commonwealth Government supplementary payment added on to the benefit or family payment of persons who rent in the private rental market above applicable rent thresholds.
Commonwealth State Housing Agreement (CSHA)	A multilateral agreement between the Commonwealth Government and each State and Territory that provided appropriate, affordable and secure housing assistance for those who most needed it, for the duration of their need. The CSHA was replaced by the National Affordable Housing Agreement (NAHA) in January 2009.
community housing	Housing that is managed and sometimes owned by a non-profit community organisation.
Consumer Price Index (CPI)	An Australian Bureau of Statistics measure of price change based on a set basket of goods and services.

Council	See *National Housing Supply Council.*
Council of Australian Governments (COAG)	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.
crisis accommodation	Short-term accommodation for people who are experiencing or are at risk of homelessness, including refuges and shelters.
Crisis Accommodation Program (CAP)	A Commonwealth Government program that provided the funding for dwellings used by governments, churches and other welfare organisations to assist people in actual or impending crisis or homelessness. It is now part of the National Affordable Housing Agreement.
Data Sub-Group (DSG) of the COAG Housing Working Group	A group of Commonwealth, State and Territory government officials established to provide the Council with information on potential land supply and demand.
deposit gap	The amount by which the dwelling price exceeds the amount that a household can borrow.
Development Assessment Forum (DAF)	A partnership between government, industry and professional organisations to streamline development assessments and cut red tape without sacrificing the quality of the decision making. The Forum's membership includes the three spheres of government; Commonwealth, State and Local Government, the development industry and related professional associations.
developer contributions	Usually payments or in-kind works required by state and local governments to contribute toward the provision or upgrade of infrastructure.
dual occupancy	The development of two dwellings on the one allotment of land. Dual occupancy may consist of two dwellings attached to one another (attached dual occupancy) or two separate unattached dwellings (detached dual occupancy).
efficient vacancy rate	A vacancy rate that indicates sufficient turnover of rental properties to accommodate demand from renters. It is generally acknowledged to be 3 per cent of rental stock.
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 single person household if the two households are to enjoy the same standard of living.
FaHCSIA	Australian Government Department of Families, Housing, Community Services and Indigenous Affairs.
financial deregulation	A process that occurred from the mid-1980s with the aim of releasing the previous extensive controls on the financial sector in the interests of promoting competition and flexibility of the finance industry.

first home buyer	A person or couple purchasing their first home in Australia.
First Home Owners Grant (FHOG) scheme	A Commonwealth Government scheme introduced in 2000 giving a lump-sum grant to first home buyers.
First Home Owners Boost (FHOB)	A scheme established by the Commonwealth Government in 2008 providing eligible first home buyers with additional grants of up to $14,000 to purchase their first home.
457 visa / Subclass 457 visa	A visa that forms part of the Skilled Migrant Program. Visas under this program are the most commonly used for employers to sponsor overseas workers to work in Australia on a temporary basis. There are also special arrangements for employers in regional areas across Australia. A 457 visa can be valid from three months to four years.
greenfield sites	Former agricultural or undeveloped natural land on the periphery of towns and cities that has been rezoned for urban development.
Housing Affordability Fund (HAF)	A Commonwealth Government scheme that commenced on 1 July 2008 investing $512 million over five years in infrastructure linked to housing developments.
Henry Review	A review into Australia's future tax system commissioned by the Commonnwealth Government and chaired by Dr Ken Henry, Secretary to the Treasury.
homeless	A person is homeless if he or she does not have access to adequate housing that is safe and secure.
homelessness	People who are homeless fall into three broad groups – that is, those who are: ■ sleeping rough (living on the streets) ■ living in temporary accommodation, such as crisis accommodation or staying with friends or relatives ■ staying in boarding houses or caravan parks with no secure lease and no private facilities.
Housing Industry Association (HIA)	A peak body representing the building, renovating and land development industries, covering residential house and land development and refurbishment, commercial building, manufacture and supply of building products, and financing of property development.
housing infrastructure	Infrastructure, such as a supply of safe drinking water and effective sewerage systems.
housing stress	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 submarket	An independent subset of a larger housing market. For example the rental apartment market, smaller units on the urban fringe, medium density housing, aged persons housing and first home buyers.
HUD	The United States Department of Housing and Urban Development, which has developed measures of affordable housing supply.

impact fees	Fees that apply when a development creates unanticipated or unplanned demands on local infrastructure because of its design.
improvised dwelling	A structure used as a place of residence that does not meet the building requirements to be considered a permanent dwelling. This includes caravans, tin sheds without internal walls, humpies and dongas. Permanent dwellings are buildings designed for people to live in, with fixed walls, a roof and doors.
income support	Commonwealth Government pensions, allowances, supplementary payments, family payments or housing assistance.
Indicative Planning Council (IPC)	The former peak advisory body to the Australian Government on the housing industry outlook. The IPC ceased in 1997.
infill	Infill sites are housing development sites within existing urban areas (as opposed to *greenfield sites*).
interstate migration	The movement of people between States and Territories.
low income household	Households with income in the bottom 10 to 30 per cent of all household income distribution.
lower income household	Households with income in the bottom 10 to 40 per cent of all household income distribution.
multi-unit development	Development that involves building three or more residential buildings on a single lot.
National Affordable Housing Agreement (NAHA)	The National Affordable Housing Agreement replaced the Commonwealth State Housing Agreement and the Supported Accommodation Assistance Program Agreement in 2009. The new agreement encompasses housing and homelessness assistance provided at all levels of government (Commonwealth, State and Territory and local government).
National Housing Supply Council (NHSC)	The National Housing Supply Council was appointed by the Minister for Housing and announced by the Prime Minister in May 2008. The Council will provide forecasts, advice and analysis of trends in land availability and construction rates 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.
National Rental Affordability Scheme (NRAS)	A Commonwealth Government scheme that commenced on 1 July 2008, providing annual incentives to institutional investors and other eligible bodies for ten years to create 50,000 new affordable rental properties rented to low and moderate income families at 20 per cent below market rents.
negative gearing	A taxation arrangement applicable when costs exceed investment income, 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.

net transition probability approach	A statistical tool to provide projections at the national and subnational levels to estimate the probable change in household types.
not-for-profit sector	Community organisations providing a broad range of social services, including in relation to homelessness, education, health, conservation and recreation.
overcrowding	In the housing context, overcrowding occurs when two or more additional bedrooms are required to meet the national standard. The standard used in this report is that as measured by the Canadian National Occupancy Standard.
owner-occupier household	A household in which at least one member owns the dwelling in which they reside, either with or without a housing mortgage on that dwelling.
positive externalities	An economic term used to describe positive effects associated with market activities, such as the proximity to shops and services that comes with development. Externalities can also be negative, e.g. increases in road traffic.
potential dwelling yield	The number of residences that can be added to an existing site or produced in a new housing development
Productivity Commission	The Commonwealth Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians
Property Council of Australia	An independent body which represent the interests of the property sector.
public housing	Housing, other than employee housing that is funded and provided by government directly.
quintile	A proportion of a set of data that has been ranked and divided into five groups, each of which contains an equal number of data items. When persons (or any other units) are ranked from the lowest to the highest on the basis of some characteristic such as their household income, they can then be divided into equal sized groups. When the population is divided into five equally sized groups, the groups are called quintiles.
rental yield	Annual rental income as a proportion of the dwelling value.
residential title	Residential title refers to: ■ the land title that is registered under a Torrens system of registration – the certificate of title for the land; or ■ the last instrument by which title to the land and dwelling was conveyed.
sleeping rough	See *homelessness*.
State Owned and Managed Indigenous Housing (SOMIH)	Housing owned and managed by the State governments and allocated specifically to Indigenous Australians.
social housing	Rental housing that is provided and/or managed by government or non-government organisations including public and community housing.
subdivision	The fragmentation of rural land or rezoning of other land for the purpose of housing development.

Supported Accommodation Assistance Program (SAAP)	A joint Australian and State and Territory government program providing accommodation and support services to people who are homeless or at risk of becoming homeless. This is now incorporated in the National Affordable housing Agreement.
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 housing/ community housing), rent free, life tenure scheme, shared equity or rent/buy scheme.
Urban Development Institute of Australia (UDIA)	A federation of five State associations that aims to promote the urban development industry.
urban fringe	Housing on the urban fringe is geographically distanced from the inner city area and adjacent to non-urban land.

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